Builder's Hardware for aluminium windows and patio doors

Tilt-turn and side hung fittings

Turn handles

Parallel slide and tilt fittings

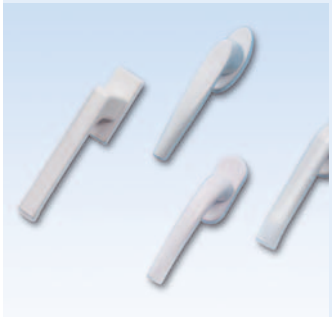
Slide-fold fittings

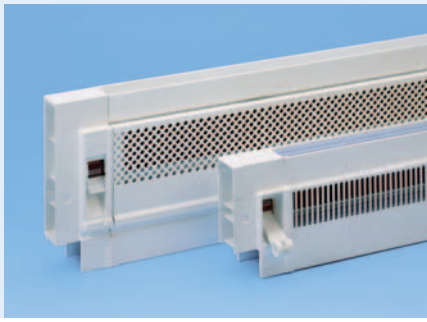
Lift-slide fittings

Horizontal and vertical pivot fittings

Fan-light openers

Ventilators for windows





M

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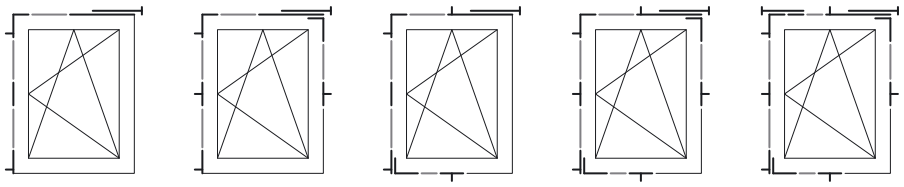
Tilt-turn, first tilt, side hung and tilt sash fittings for aluminium windows and patio doors

Tilt-turn and first tilt windows and patio doors

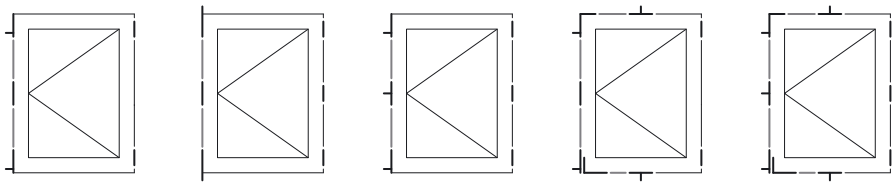
Fitting arrangements and sash sizes for schemes A to E



Tilt-turn and first tilt windows, scheme	**A**	**B**	**C**	**D**	**E**
Middle lock (Dimensions depending on profile system)		vertical	horizontal	vertical horizontal	vertical horizontal Additional stay arm
Tilt-turn and first tilt patio doors, scheme		**B**		**D**	
Middle lock (Dimensions depending on profile system)		vertical		vertical horizontal	

Side hung windows and patio doors

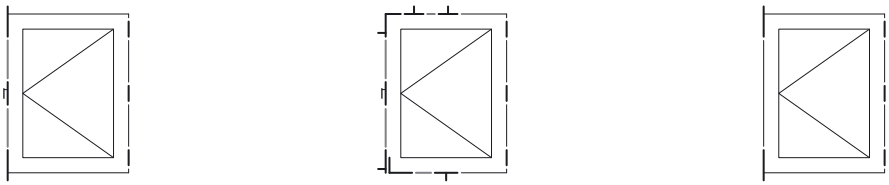
Fitting arrangements and sash sizes for schemes A to D



Side hung windows, scheme	**A**	**A 1**	**B**	**C**	**D**
Middle lock (Dimensions depending on profile system)			vertical	horizontal	vertical horizontal
Middle hinge		Middle hinge	Middle hinge		Middle hinge
Side hung patio doors, scheme			**B**		**D**
Middle lock (Dimensions depending on profile system)			vertical		vertical horizontal
Middle hinge			Middle hinge		Middle hinge

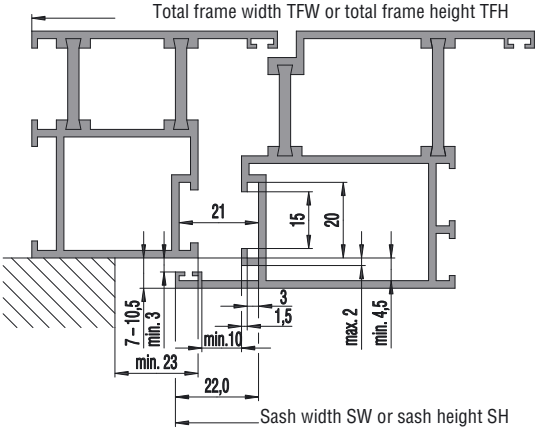
Windows and patio doors with false mullion

Fitting arrangements and sash sizes for schemes G to I

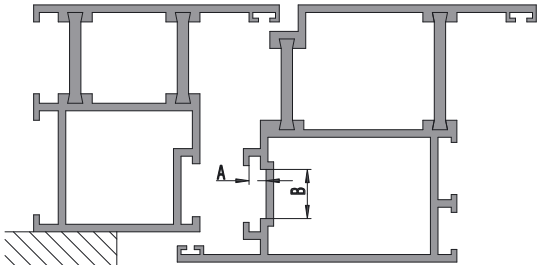


Inactive window sash, scheme	**G**	**H**	**I**
Middle lock Dimensions according to profile		horizontal	
Middle hinge	Middle hinge	Middle hinge	Middle hinge
Inactive patio door sash, scheme	**G**	**H**	**I**
Middle lock Dimensions according to profile		horizontal	
Middle hinge	Middle hinge	Middle hinge	Middle hinge

Assembly dimensions – frame and sash profile



Frame and sash profile
Sash with Euro groove 15/20



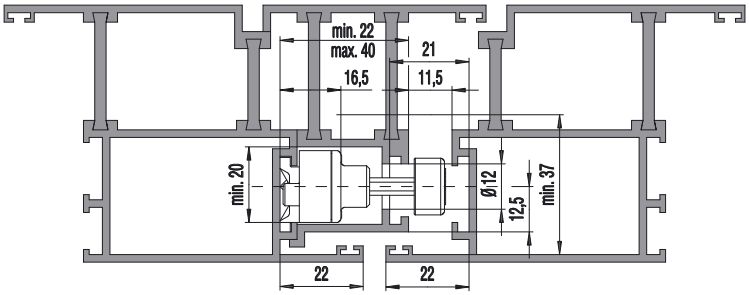
Corner transmissions

6-30889-**00**-0-1 Euro groove 15/20
Deepened Euro groove 15/20 with
dim. A = max. 3,9 mm or dim. B = max. 13 mm

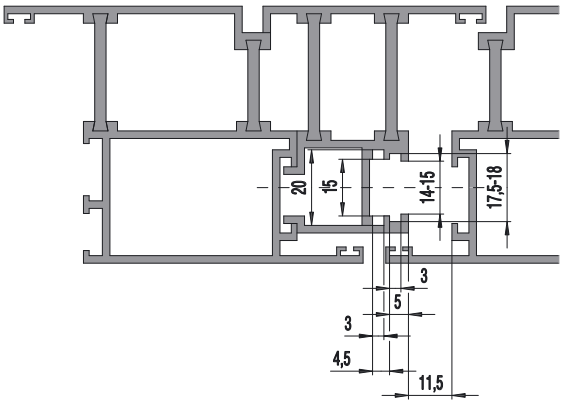
6-30889-**01**-0-1 Deepened Euro groove 15/20 with dim. A = 4,0 up to 5,1 mm

Frame and sash profile
Sash with deepened Euro groove 15/20

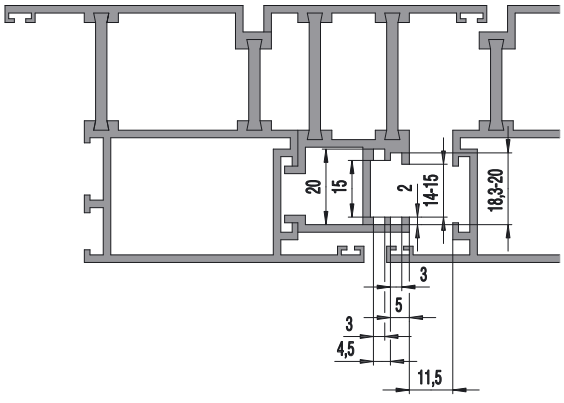
Assembly dimensions – false mullion profile



False mullion profile with single groove for locking plates
Locking with inavctive sash gear or shoot bolts

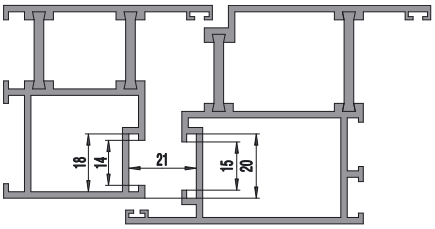


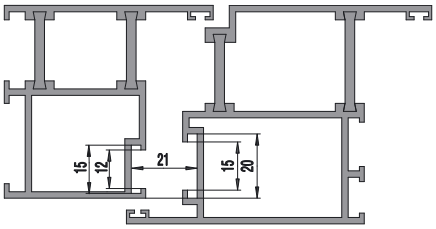
False mullion profile with double groove for locking plates
Locking with rebate shoot bolt or shoot bolts

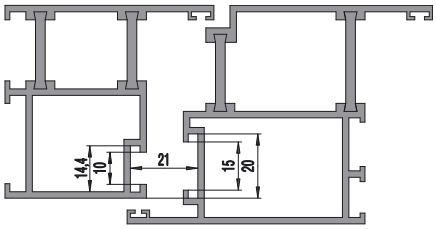


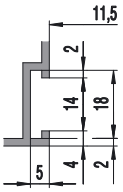
False mullion profile with symmetrical double groove for locking plates
Locking with rebate shoot bolt or shoot bolts

Assembly dimensions – frame grooves

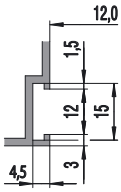




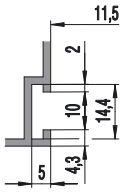




Frame groove 14/18

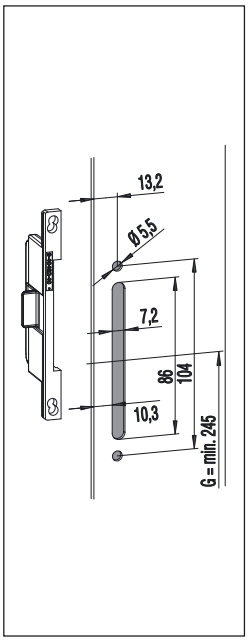


Frame groove 12/15

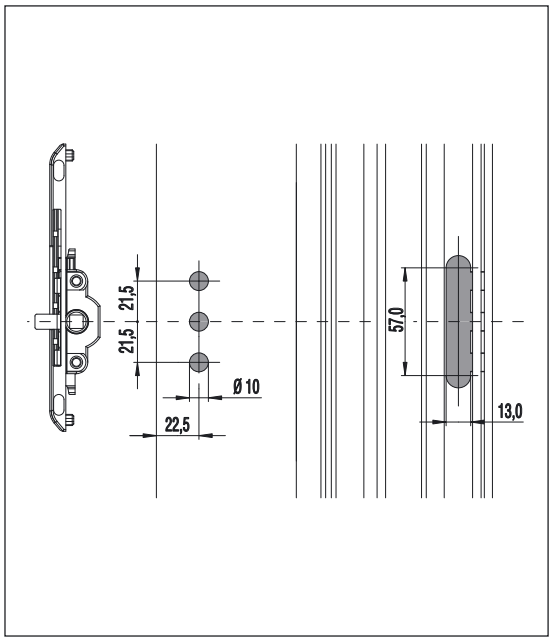


Frame groove 10/14

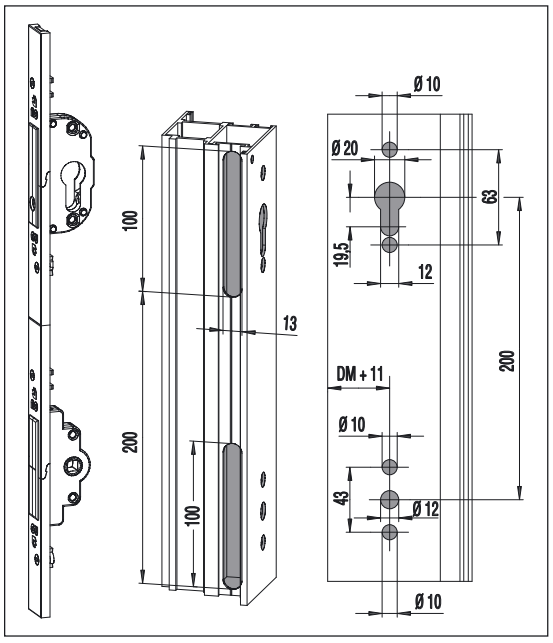
Drilling and milling dimensions



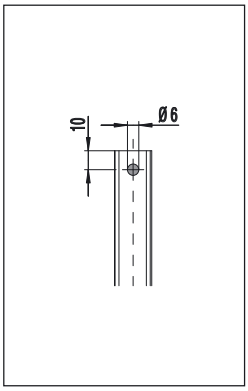
Dimensions for geared handle and WOSD (wrong operation safety device)
Drilling jig 6-25373-01-0-0



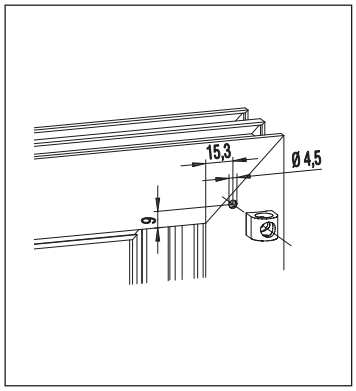
Dimensions for mill-in gears with or without WOSD



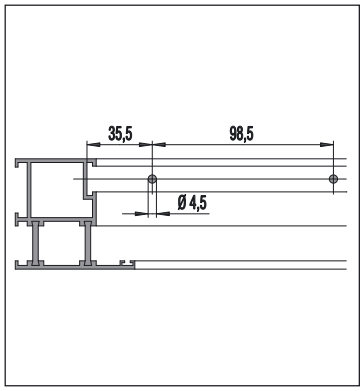
Dimensions for mill-in gears with or without WOSD and lock with cylinder bore
Drilling jig 6-26191-00-0-2



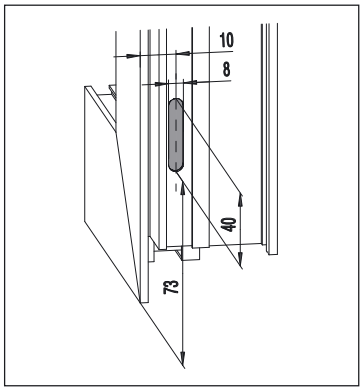
Push rod drill holes



Dimensions for stay arm bearing 130 in frame profiles
Drilling and mounting jig 6-31951-00-0-6



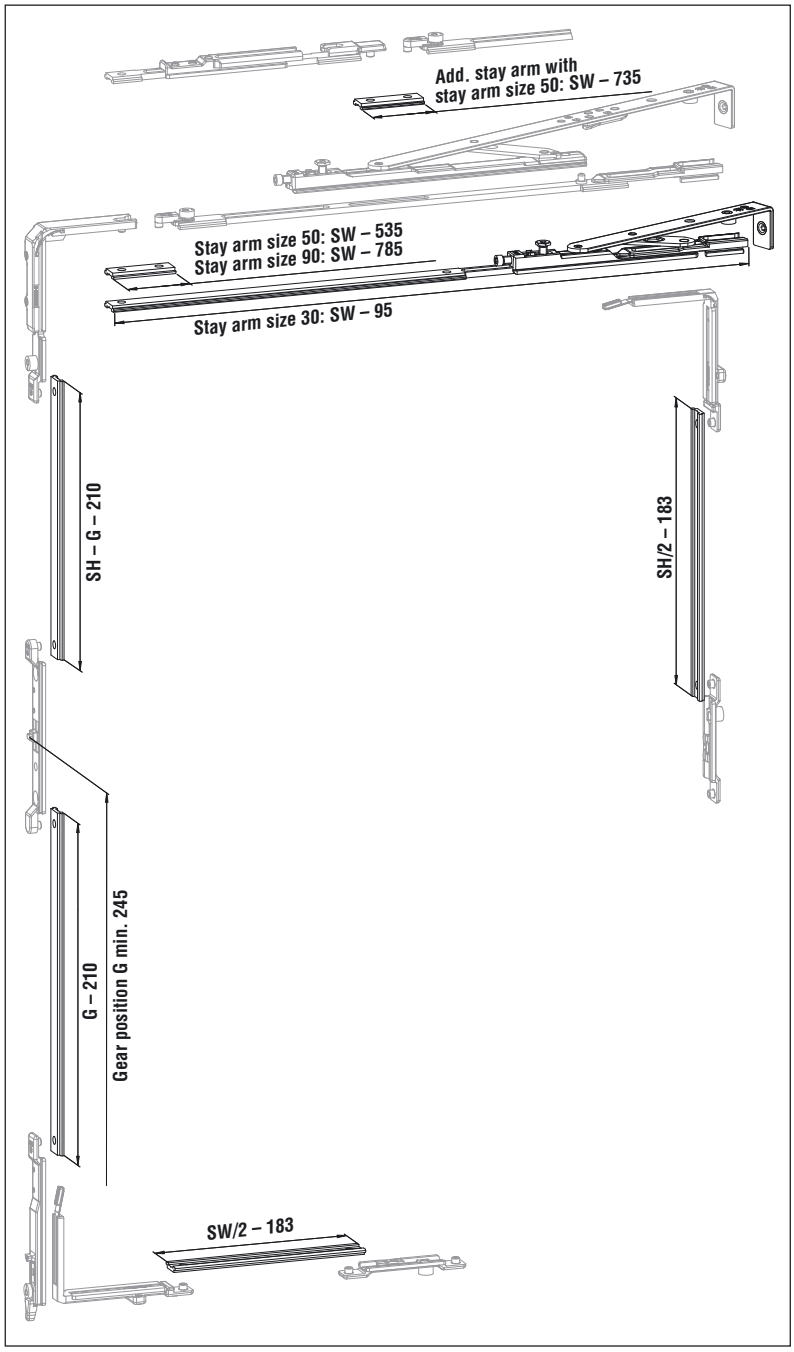
Dimensions for additional stay arm in frame profiles



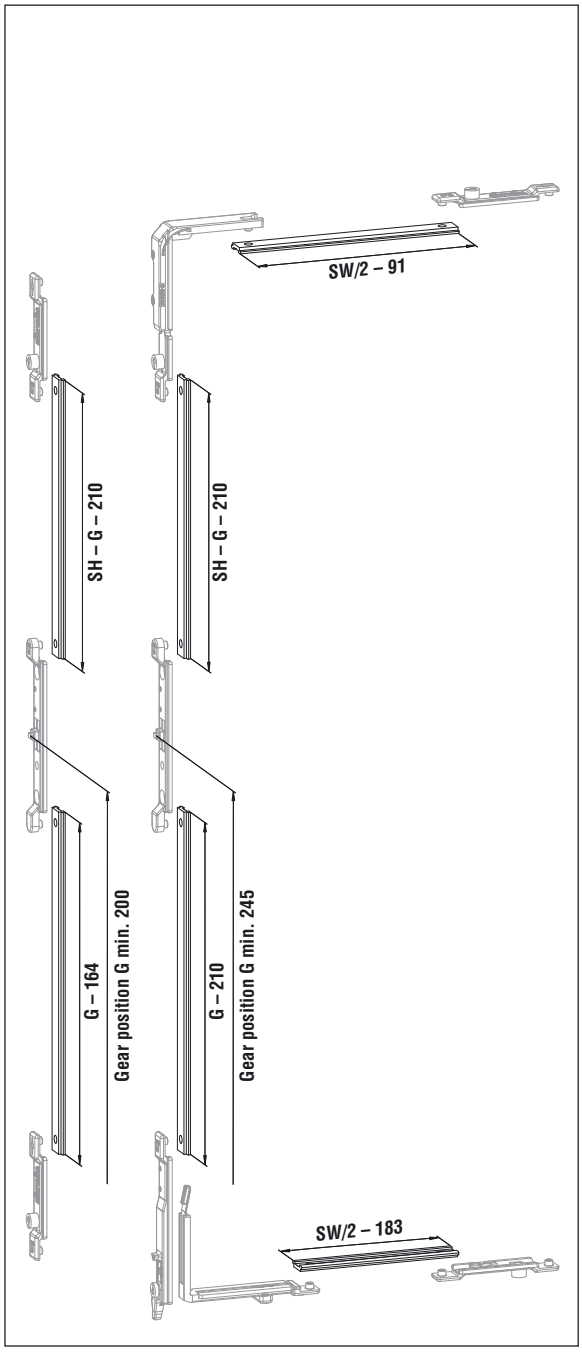
Dimensions for shoot bolts in false mullion profile with single groove

Push rod cutting lengths with 22 mm sash overlap

Tilt-turn and first tilt fittings

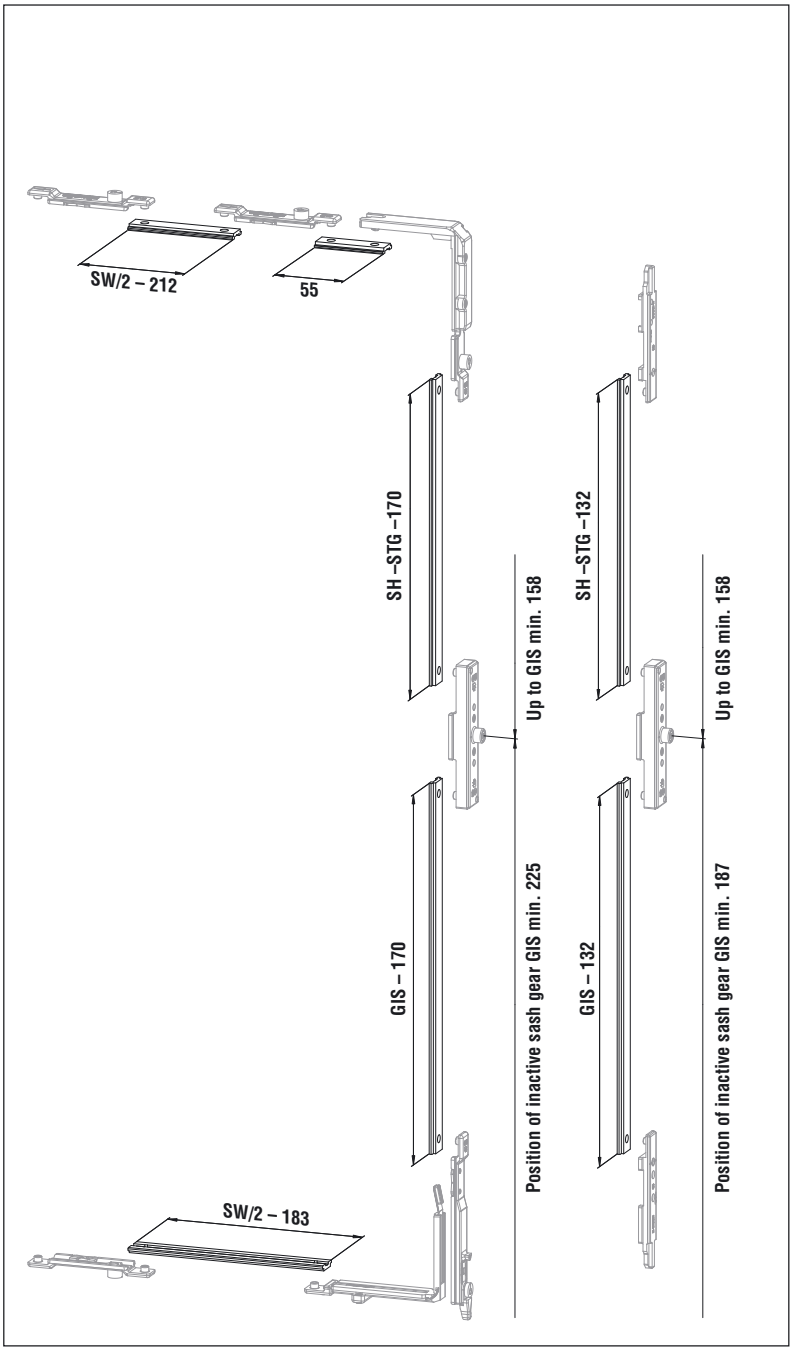


Side hung fittings

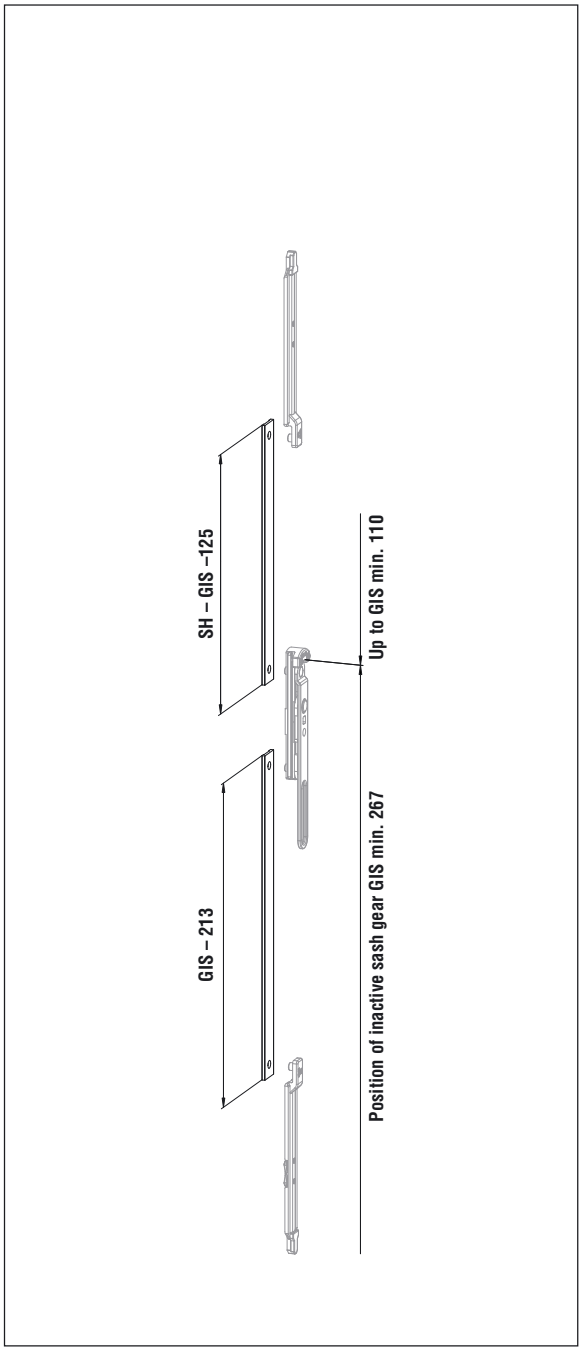


Push rod cutting lengths with 22 mm sash overlap

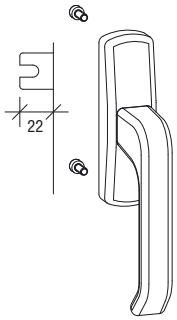
Inactive sash fittings
False mullion profiles with single groove



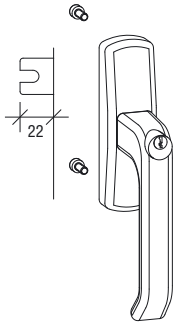
Inactive sash fittings
False mullion profiles with double groove



Geared handles SPACIO
aluminium, painted – 1 carrier fork 22 mm

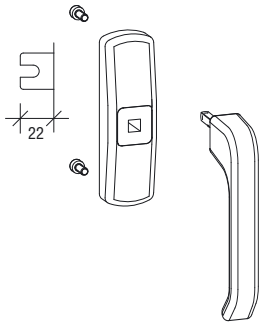


Bag of geared handle
SPACIO – not lockable
2 screws
G-46551-96-0-*



Bag of geared handle
SPACIO – lockable
2 screws, 2 keys
G-46553-96-0-*

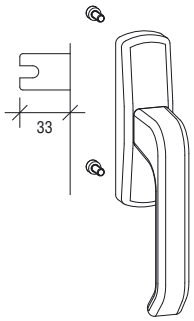
Bag of geared handle
SPACIO – lockable
for first tilt fittings
2 screws, 2 keys
G-46557-96-0-*



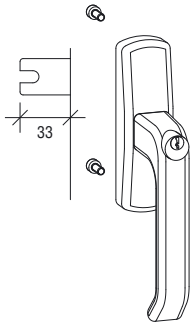
Bag of
geared rosette SPACIO
2 screws
G-46555-96-0-*

Removable handle SPACIO
G-18888-00-0-*

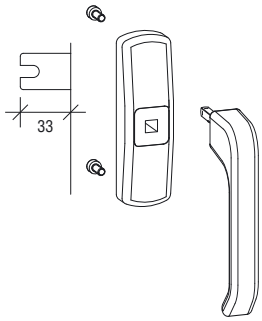
Geared handles SPACIO
aluminium, painted – 1 carrier fork 33 mm



Bag of geared handle
SPACIO – not lockable
2 screws
G-46595-96-0-*



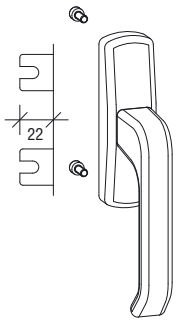
Bag of geared handle
SPACIO – lockable
2 screws, 2 keys
G-46597-96-0-*



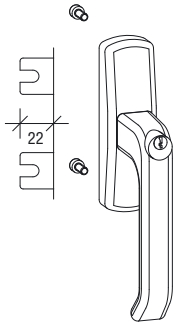
Bag of
geared rosette SPACIO
2 screws
G-46596-96-0-*

Removable handle SPACIO
G-18888-00-0-*

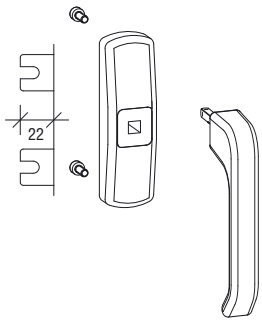
Geared handles SPACIO
aluminium, painted – 2 carrier forks 22 mm – DIN right hand



Bag of geared handle
SPACIO – not lockable
2 screws
G-46552-96-R-*



Bag of geared handle
SPACIO – lockable
2 screws, 2 keys
G-46554-96-R-*

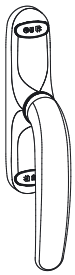


Bag of
geared rosette SPACIO
2 screws
G-46556-96-R-*

Removable handle SPACIO
G-18888-00-0-*

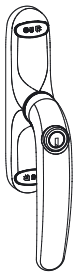
Bag of accessories
Conversion of SPACIO handles with 2 carrier forks to DIN left hand
G-46550-00-L-1

Geared handles ADAGIO-A
powder coated



Geared handle
ADAGIO-A – not lockable

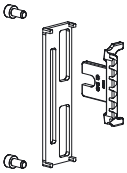
6-31723-00-0-*



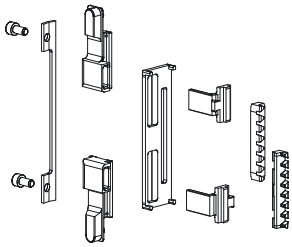
Geared handle
ADAGIO-A – lockable
2 keys
6-31724-00-0-*

Clip – neutral
9-41505-00-0-*

Accessories for ADAGIO-A



Bag of accessories
for 1 carrier fork
22 mm
K-15814-00-0-1



Bag of accessories
for 2 carrier forks
K-15815-00-0-1

Accessories for side hung sashes with geared handle SPACIO

90° limiter
for aluminium rosettes
9-34612-00-0-6

Accessories for geared handles SPACIO and ADAGIO-A

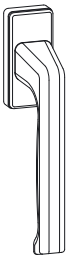
Fixing plate – single
hole centre distance mm

104	**9-41506-00-0-8**

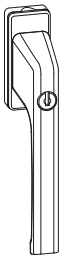
Wrong operation safety device (WOSD) – single
hole centre distance mm

84 and 98	**6-31065-10-0-1**
96 and 104	**6-31065-40-0-1**

Handles DIRIGENT-F for mill-in gears [1]



DIRIGENT-F
Spindle 25 6-28072-25-0-*
Spindle 29 6-28072-29-0-*

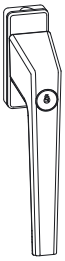


DIRIGENT-F/Z
with push button cylinder, all keys alike
Spindle 29 6-28075-29-0-*

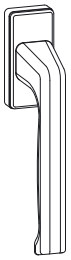
MODENA-F/Z 100 Nm [2]
for security windows and patio doors
Spindle 29 6-34397-29-0-*

DIRIGENT-F/SG
Spindle 50 8-00694-50-0-7

Rosette/F
inside – flat
6-24913-00-0-*



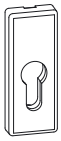
DIRIGENT-F First tilt
Spindle 29 6-31557-29-0-*



DIRIGENT-F
without spindle
6-28072-00-0-*

DIRIGENT-F/AF,
outside – flat
6-25223-00-0-*

DIRIGENT-F/A,
outside
6-25993-00-0-*



Rosette with CB inside
square K-17205-02-0-*
oval K-17204-02-0-*

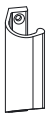
Rosette PZ/A outside
square 9-43605-02-0-*
oval 9-43582-02-0-*

Spindle
FD 56-68 9-26874-56-0-1
FD 69-80 9-26874-69-0-1

Inside/ outside operation
Countersunk screw M 5
FD 50-54 9-13255-60-0-1
FD 55-59 9-13255-65-0-1
FD 60-64 9-13255-70-0-1
FD 65-69 9-13255-75-0-1
FD 70-74 9-13255-80-0-1
FD 75-80 9-13255-85-0-1

Inside operation
Countersunk screw M 5
Spindle 25 9-13255-30-0-1
Spindle 29 9-13255-35-0-1

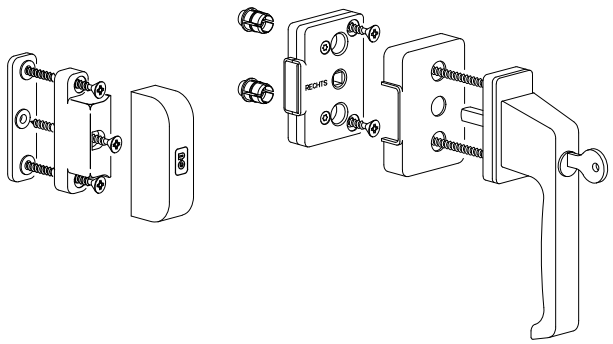
Knob lock
Backset 25 - 50 mm
K-13282-00-0-*



Pull handle outside
9-22921-00-0-*

[1] = More turn handles see part 3 of the present order catalogue.
[2] = Tested to DIN V EN V 1627 for resistance to pull-off and twist-off attempts at 100 Nm.

G.U Face fixed window lock



Box of face fixed window lock with turn handle DIRIGENT F/Z

EV 1	**K-14662-00-0-11**
dark brown	**K-14662-00-0-5**
white	**K-14662-00-0-7**

Contents of box

1 Turn handle DIRIGENT F/Z, lockable
1 Spindle 7 x 75 mm
1 Face fixed lock
1 Cover for face fixed lock
2 Sleeve for Ø 10 mm
2 Sleeve for Ø 12 mm
1 Strike box
1 Cover for strike box
1 Packing 3 mm
1 Packing 4 mm
1 Packing 5 mm
1 Packing 6 mm
7 Spax countersunk screw 5 x 55 mm

JET Slit ventilation catch

Slit ventilation catch

Cover

Catch plate

Fitting requirements JET Slit ventilation catch for aluminium windows

Quantity	Description	PU	Article No.
1	**JET Slit ventilation catch**, with sash overlap	10	K-12223-90-0-*
1	**JET Slit ventilation catch**, without sash overlap	10	K-12216-90-0-*
	Drilling jig	1	6-23861-00-0-0

Working drawing 0-38928

Tilt-turn, first tilt and side hung fittings

Mill-in gears

**Mill-in gear 180°
with WOSD for tilt-turn
and first tilt sashes
Backset 14 mm
6-30534-00-0-1**

**Mill-in gear 180°
without WOSD for side
hung and tilt sashes
Backset 14 mm
6-31280-00-0-1**

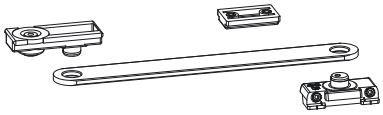
**Mill-in gear 180°
without WOSD for side
hung and tilt sashes
6-25916-**-0-1**

**Mill-in gear 180°
with WOSD for tilt-turn and
first tilt sashes
6-25917-**-0-1**

**Lock
with cylinder bore
6-25918-**-0-1**

**** = Sizes
25, 30, 35, 40, 45, 50**

Limiting stay

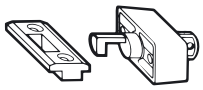


Bag of limiting stay with friction slider

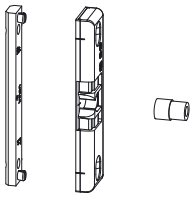
Length	SW mm	PU	Article No.
150 mm	> 260	1	K-17138-15-0-1
250 mm	> 360	1	K-17138-25-0-1

Optional part

Illustration	Description	PU	Article No.
	Adapter ring Ø 6 mm for clip pin to push rod hole Ø 8 mm	1	9-45167-00-0-6



**Bag of blocking lock
screw-on version – with key
K-12968-00-0-*
Working drawing 0-41185**



**Bag of door catch
K-12962-00-0-1**

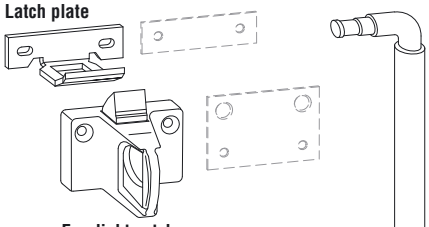
**Locking pin, single
A-02823-00-0-0**

**Carrier pin, single
push rod one-piece
G-14694-00-0-0**

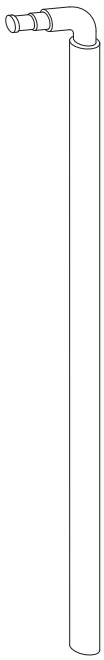
**Carrier pin, single
push rod two-piece
G-11669-00-0-0**

Fan-light catch for narrow sashes

Latch plate



Fan-light catch

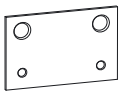


**Operation rod 980 mm
G-12083-10-0-1**

**Bag of fan-light catch
for 6 mm overlap thickness**

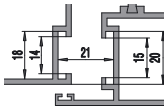
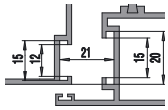
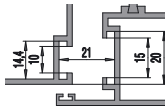
EV 1	**G-18413-00-0-1**
black	**G-18413-00-0-6**
withe	**G-18413-00-0-7**

Packings for bag of fan-light catch [1]

Illustration	Application	Thickness mm	PU	Article No.
	Latch plate	0,5	1	E-12084-05-0-1
		1,0	1	E-12084-10-0-1
		3,0	1	E-12084-30-0-1
	Fan-light catch	0,5	1	E-12071-05-0-1
		1,0	1	E-12071-10-0-1
		3,0	1	E-12071-30-0-1

[1] Not embodied in the bag of fan-light catch.

Locking plates

Description	Gasket pressure	Illustration	Frame groove 14/18	12/15	10/14
					
Tilt locking plate Tilt-turn and side hung sashes clampable	standard + 0,7 mm		6-30964-00-0-1 6-30964-01-0-1	6-30964-00-0-1 6-30964-01-0-1	6-30964-00-0-1 6-30964-01-0-1
Tilt locking plate First tilt sash clampable	standard		6-32287-00-0-1	6-32287-00-0-1	6-32287-00-0-1
Locking plate Frame profiles clampable	standard + 0,7 mm		6-30959-00-0-1 6-30959-01-0-1	6-30959-00-0-1 6-30959-01-0-1	6-30959-00-0-1 6-30959-01-0-1
Locking plate Frame profiles clampable	adjustable		G-11071-00-0-1	G-11800-00-0-1	G-11065-00-0-1
Locking plate for false mullion clampable	standard + 1,5 mm + 3,0 mm		6-30961-00-0-1 G-19658-02-0-1 G-19658-03-0-1	6-30961-00-0-1 G-19658-02-0-1 G-19658-03-0-1	6-30961-00-0-1 G-19658-02-0-1 G-19658-03-0-1
Supporting plate Tilt-turn sash clampable			6-31066-00-0-1	6-31066-00-0-1	6-31066-00-0-1
Wedge for frame First tilt and side hung sashes clampable			6-30998-00-0-1	6-30998-00-0-1	6-30998-00-0-1
Wedge for sash Tilt-turn, first tilt, side hung and inactive sashes clampable			9-40404-00-0-1	9-40404-00-0-1	9-40404-00-0-1

Window friction stay EGO-B, EGO-FL

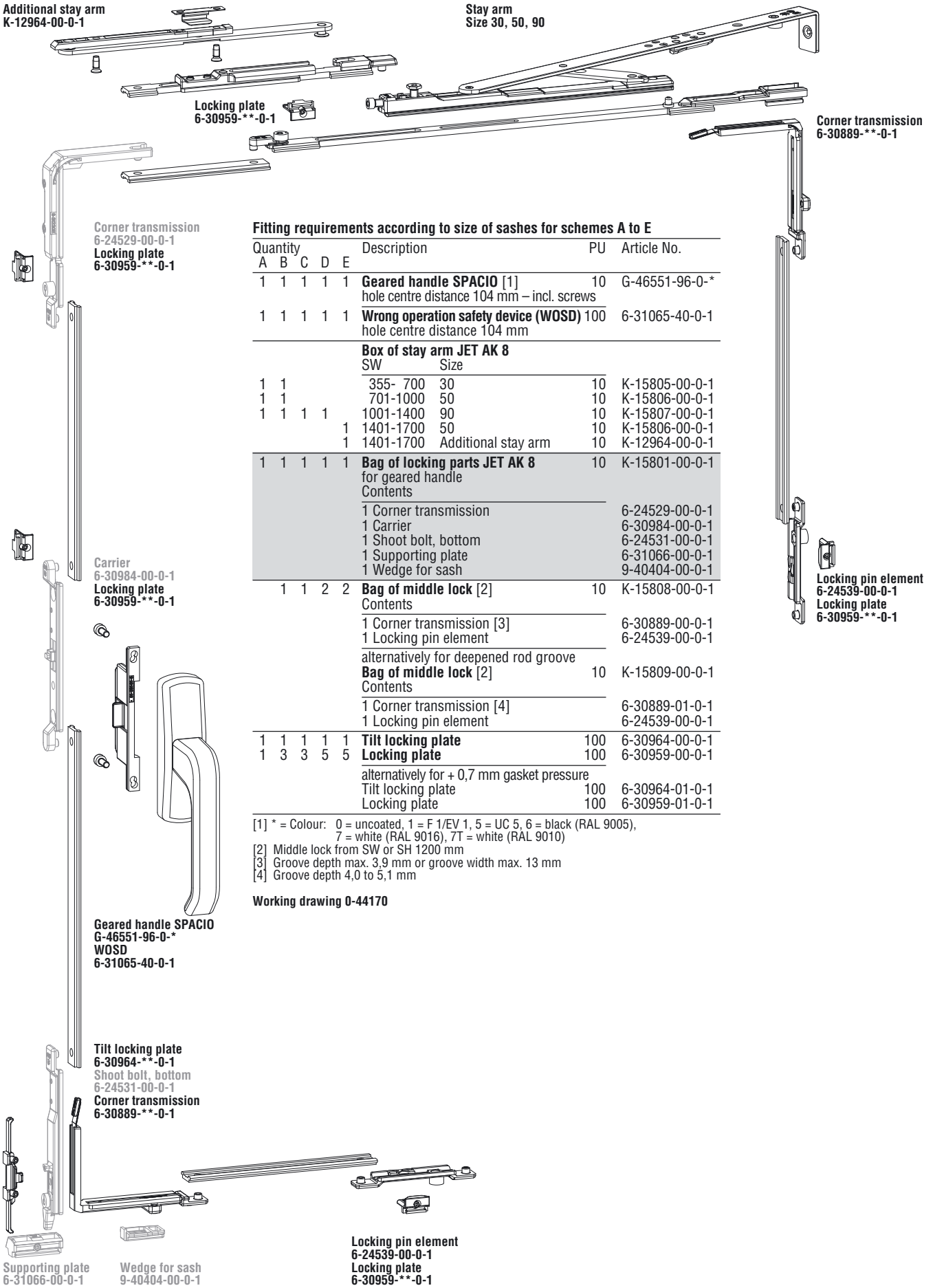
Window friction stay EGO-B, EGO-FL

Description	SWR mm	PU	Article No.
Window friction stay EGO-B with sash restrictor from 5° and max. opening angle 90° for tilt-turn and side hung	500-750 751-	20 20	6-28835-01-0-1 6-28835-00-0-1
Window friction stay EGO-FL max. opening angle 90°, with swing free function up to 85° when opening and constant swing free function when closing the sash, for tilt-turn and side hung sashes	500-750 751-	20 20	6-28730-01-0-1 6-28730-00-0-1

Window friction stay EGO-B, EGO-FL
Bag of profile accessories

Description	PU	Article No.
Profile systems with frame groove 14/18, 12/15, 10/14 and sash groove 15/20 resp. fitting groove 16 mm Akotherm, Alco, Almaco, Alumil, Aluminco Brökelmann Domal Elvial, Erbslöh, Etem, Europa, Exalco Heroal Kawneer, Kubal Menziken Nordall Ponzio Redal, Remy Claeys, Reynolds Sykon Thyssen Schulte, TS-Aluminium VAW	20	K-14686-00-0-1
Profile systems Hartmann, Hueck MKF TKI Schüco	20	K-14684-00-0-1
Profile system Wicona	20	K-14685-00-0-1

Windows and patio doors with geared handle



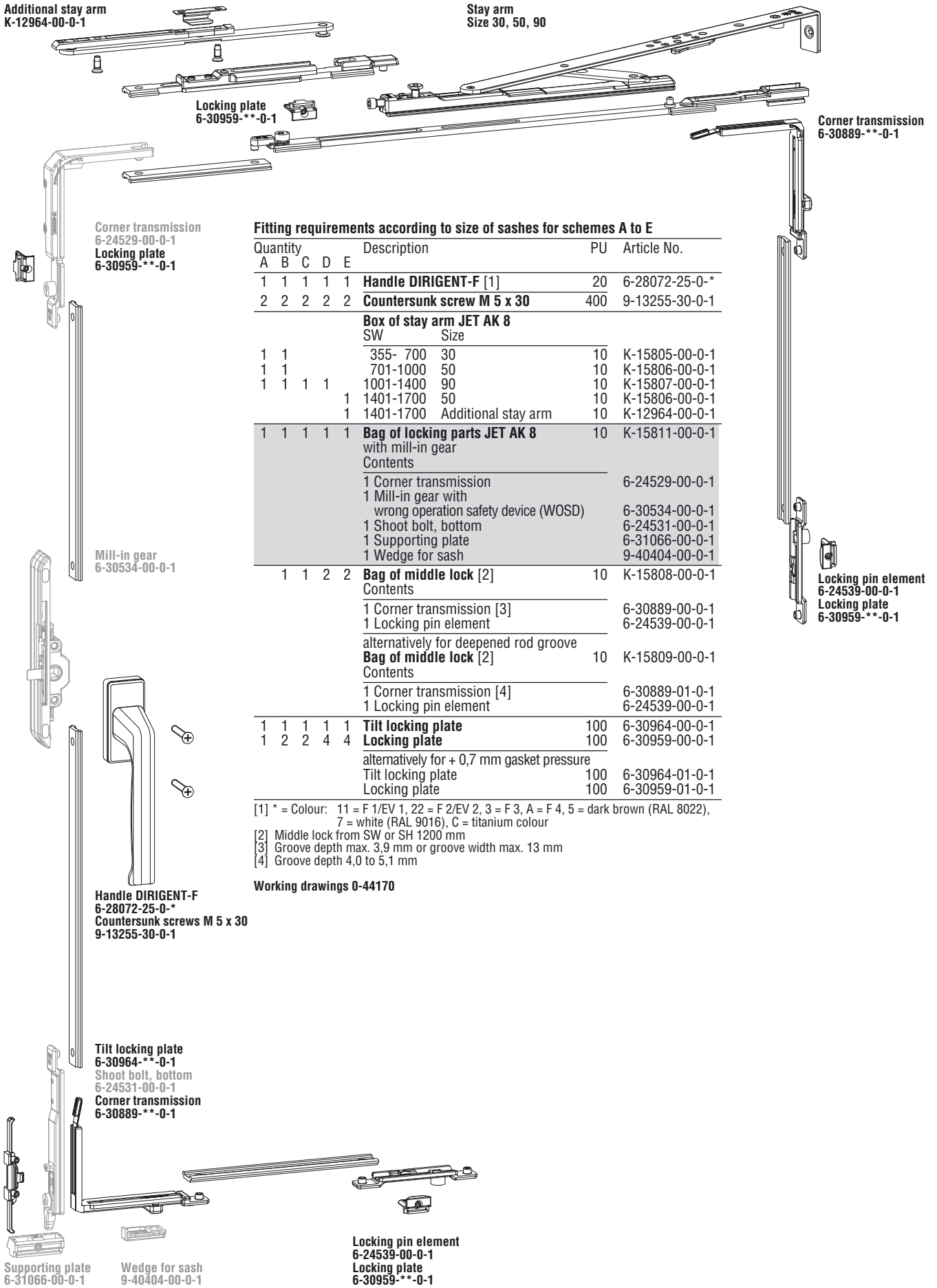
Fitting requirements according to size of sashes for schemes A to E

Quantity A	B	C	D	E	Description	PU	Article No.
1	1	1	1	1	**Geared handle SPACIO** [1] hole centre distance 104 mm – incl. screws	10	G-46551-96-0-*
1	1	1	1	1	**Wrong operation safety device (WOSD)** hole centre distance 104 mm	100	6-31065-40-0-1
					Box of stay arm JET AK 8 SW Size		
1	1				355- 700 30	10	K-15805-00-0-1
1	1				701-1000 50	10	K-15806-00-0-1
1	1	1	1		1001-1400 90	10	K-15807-00-0-1
				1	1401-1700 50	10	K-15806-00-0-1
				1	1401-1700 Additional stay arm	10	K-12964-00-0-1
1	1	1	1	1	**Bag of locking parts JET AK 8** for geared handle Contents	10	K-15801-00-0-1
					1 Corner transmission		6-24529-00-0-1
					1 Carrier		6-30984-00-0-1
					1 Shoot bolt, bottom		6-24531-00-0-1
					1 Supporting plate		6-31066-00-0-1
					1 Wedge for sash		9-40404-00-0-1
	1	1	2	2	**Bag of middle lock** [2] Contents	10	K-15808-00-0-1
					1 Corner transmission [3]		6-30889-00-0-1
					1 Locking pin element		6-24539-00-0-1
					alternatively for deepened rod groove **Bag of middle lock** [2] Contents	10	K-15809-00-0-1
					1 Corner transmission [4]		6-30889-01-0-1
					1 Locking pin element		6-24539-00-0-1
1	1	1	1	1	**Tilt locking plate**	100	6-30964-00-0-1
1	3	3	5	5	**Locking plate**	100	6-30959-00-0-1
					alternatively for + 0,7 mm gasket pressure		
					Tilt locking plate	100	6-30964-01-0-1
					Locking plate	100	6-30959-01-0-1

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 5 = UC 5, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)
[2] Middle lock from SW or SH 1200 mm
[3] Groove depth max. 3,9 mm or groove width max. 13 mm
[4] Groove depth 4,0 to 5,1 mm

Working drawing 0-44170

Windows and patio doors with mill-in gear



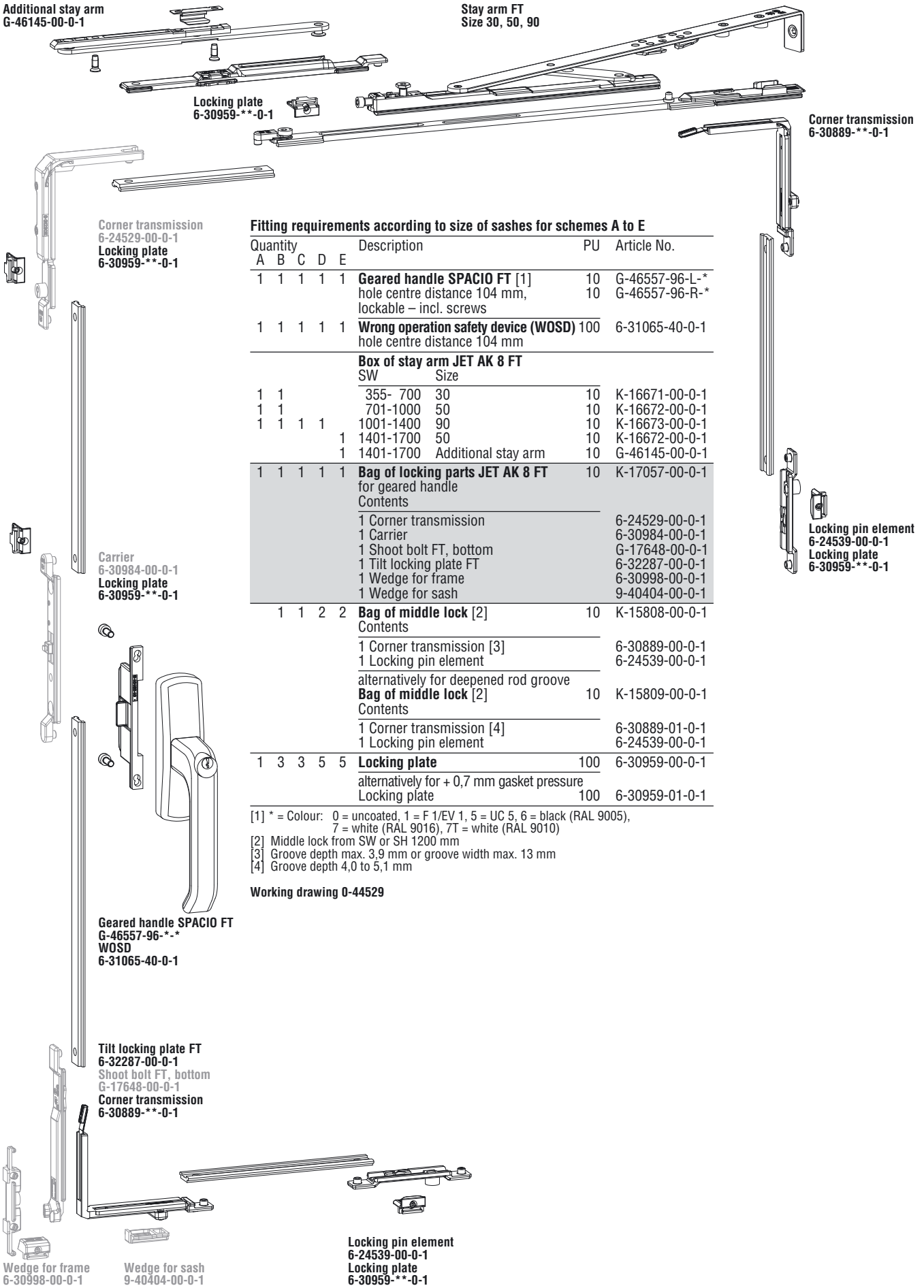
Fitting requirements according to size of sashes for schemes A to E

Quantity A	B	C	D	E	Description	PU	Article No.
1	1	1	1	1	**Handle DIRIGENT-F** [1]	20	6-28072-25-0-*
2	2	2	2	2	**Countersunk screw M 5 x 30**	400	9-13255-30-0-1
					Box of stay arm JET AK 8 SW Size		
1	1				355- 700 30	10	K-15805-00-0-1
1	1				701-1000 50	10	K-15806-00-0-1
1	1	1	1		1001-1400 90	10	K-15807-00-0-1
				1	1401-1700 50	10	K-15806-00-0-1
				1	1401-1700 Additional stay arm	10	K-12964-00-0-1
1	1	1	1	1	**Bag of locking parts JET AK 8** with mill-in gear	10	K-15811-00-0-1
					Contents		
					1 Corner transmission		6-24529-00-0-1
					1 Mill-in gear with wrong operation safety device (WOSD)		6-30534-00-0-1
					1 Shoot bolt, bottom		6-24531-00-0-1
					1 Supporting plate		6-31066-00-0-1
					1 Wedge for sash		9-40404-00-0-1
	1	1	2	2	**Bag of middle lock** [2]	10	K-15808-00-0-1
					Contents		
					1 Corner transmission [3]		6-30889-00-0-1
					1 Locking pin element		6-24539-00-0-1
					alternatively for deepened rod groove		
					Bag of middle lock [2]	10	K-15809-00-0-1
					Contents		
					1 Corner transmission [4]		6-30889-01-0-1
					1 Locking pin element		6-24539-00-0-1
1	1	1	1	1	**Tilt locking plate**	100	6-30964-00-0-1
1	2	2	4	4	**Locking plate**	100	6-30959-00-0-1
					alternatively for + 0,7 mm gasket pressure		
					Tilt locking plate	100	6-30964-01-0-1
					Locking plate	100	6-30959-01-0-1

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4, 5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour
[2] Middle lock from SW or SH 1200 mm
[3] Groove depth max. 3,9 mm or groove width max. 13 mm
[4] Groove depth 4,0 to 5,1 mm

Working drawings 0-44170

Windows and patio doors with geared handle



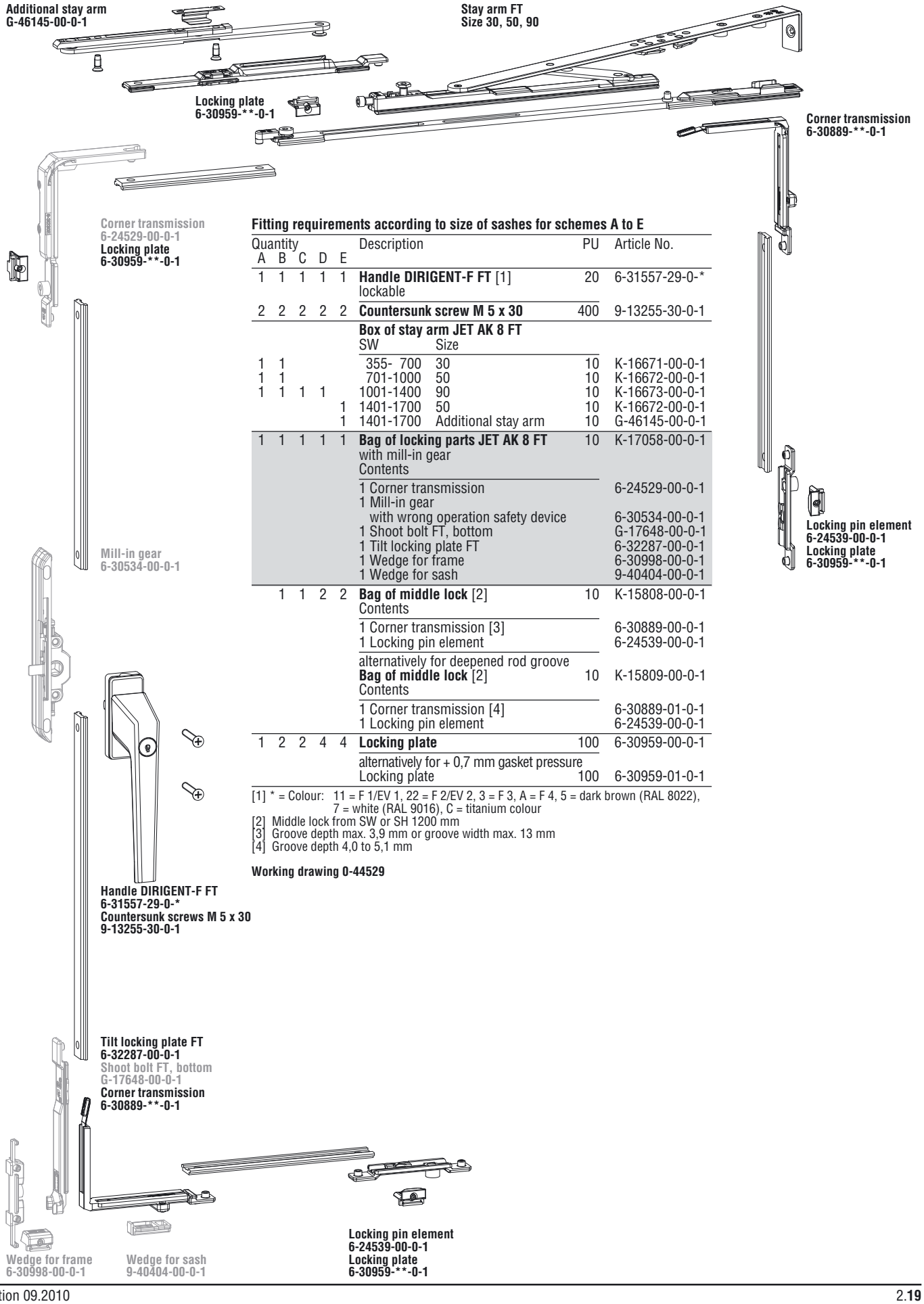
Fitting requirements according to size of sashes for schemes A to E

Quantity A	B	C	D	E	Description	PU	Article No.
1	1	1	1	1	**Geared handle SPACIO FT** [1]	10	G-46557-96-L-*
					hole centre distance 104 mm,	10	G-46557-96-R-*
					lockable – incl. screws		
1	1	1	1	1	**Wrong operation safety device (WOSD)**	100	6-31065-40-0-1
					hole centre distance 104 mm		
					Box of stay arm JET AK 8 FT		
					SW Size		
1	1				355- 700 30	10	K-16671-00-0-1
1	1				701-1000 50	10	K-16672-00-0-1
1	1	1	1		1001-1400 90	10	K-16673-00-0-1
				1	1401-1700 50	10	K-16672-00-0-1
				1	1401-1700 Additional stay arm	10	G-46145-00-0-1
1	1	1	1	1	**Bag of locking parts JET AK 8 FT**	10	K-17057-00-0-1
					for geared handle		
					Contents		
					1 Corner transmission		6-24529-00-0-1
					1 Carrier		6-30984-00-0-1
					1 Shoot bolt FT, bottom		G-17648-00-0-1
					1 Tilt locking plate FT		6-32287-00-0-1
					1 Wedge for frame		6-30998-00-0-1
					1 Wedge for sash		9-40404-00-0-1
	1	1	2	2	**Bag of middle lock** [2]	10	K-15808-00-0-1
					Contents		
					1 Corner transmission [3]		6-30889-00-0-1
					1 Locking pin element		6-24539-00-0-1
					alternatively for deepened rod groove		
					Bag of middle lock [2]	10	K-15809-00-0-1
					Contents		
					1 Corner transmission [4]		6-30889-01-0-1
					1 Locking pin element		6-24539-00-0-1
1	3	3	5	5	**Locking plate**	100	6-30959-00-0-1
					alternatively for + 0,7 mm gasket pressure		
					Locking plate	100	6-30959-01-0-1

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 5 = UC 5, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)
[2] Middle lock from SW or SH 1200 mm
[3] Groove depth max. 3,9 mm or groove width max. 13 mm
[4] Groove depth 4,0 to 5,1 mm

Working drawing 0-44529

Windows and patio doors with mill-in gear



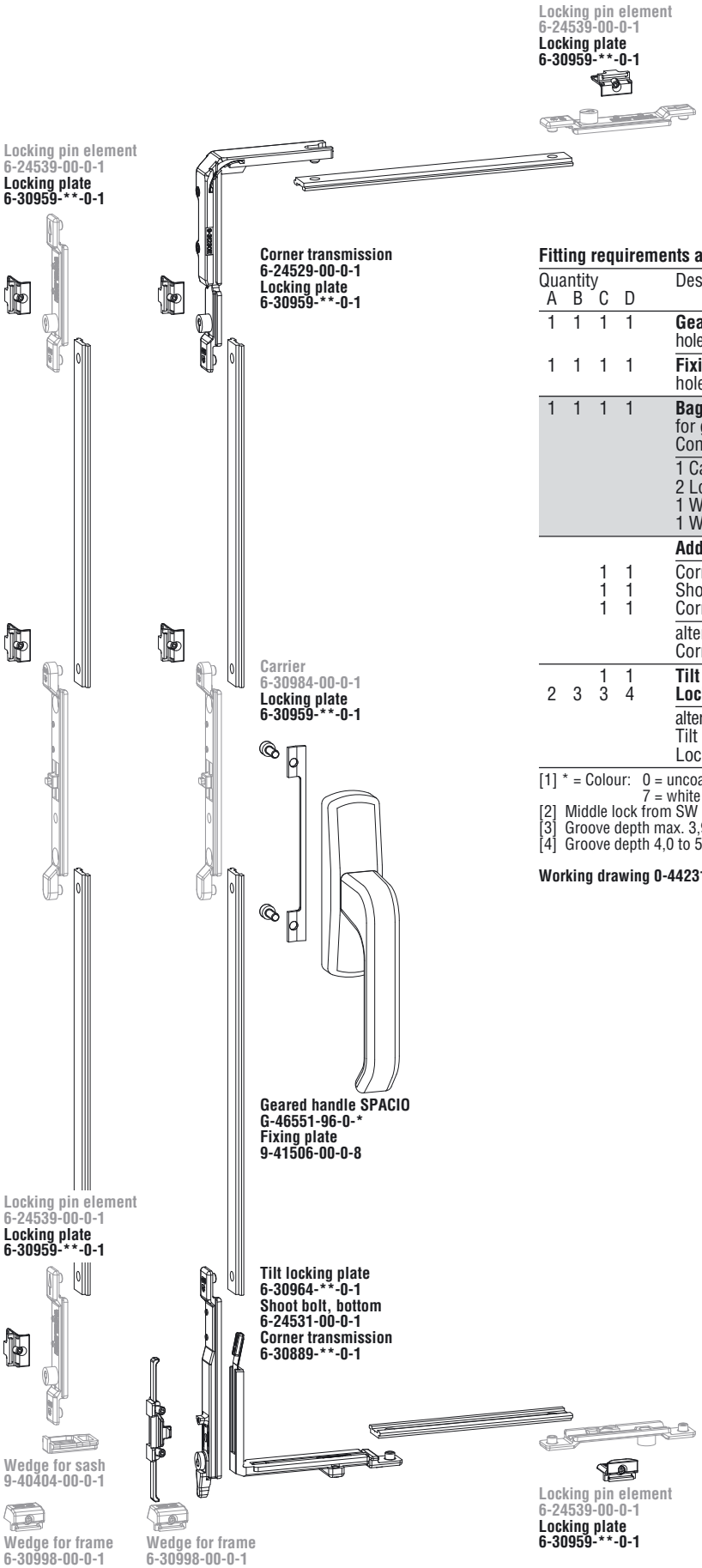
Fitting requirements according to size of sashes for schemes A to E

Quantity A	B	C	D	E	Description	PU	Article No.
1	1	1	1	1	**Handle DIRIGENT-F FT** [1] lockable	20	6-31557-29-0-*
2	2	2	2	2	**Countersunk screw M 5 x 30**	400	9-13255-30-0-1
					Box of stay arm JET AK 8 FT SW Size		
1	1				355- 700 30	10	K-16671-00-0-1
1	1				701-1000 50	10	K-16672-00-0-1
1	1	1	1		1001-1400 90	10	K-16673-00-0-1
				1	1401-1700 50	10	K-16672-00-0-1
				1	1401-1700 Additional stay arm	10	G-46145-00-0-1
1	1	1	1	1	**Bag of locking parts JET AK 8 FT** with mill-in gear	10	K-17058-00-0-1
					Contents		
					1 Corner transmission		6-24529-00-0-1
					1 Mill-in gear with wrong operation safety device		6-30534-00-0-1
					1 Shoot bolt FT, bottom		G-17648-00-0-1
					1 Tilt locking plate FT		6-32287-00-0-1
					1 Wedge for frame		6-30998-00-0-1
					1 Wedge for sash		9-40404-00-0-1
	1	1	2	2	**Bag of middle lock** [2]	10	K-15808-00-0-1
					Contents		
					1 Corner transmission [3]		6-30889-00-0-1
					1 Locking pin element		6-24539-00-0-1
					alternatively for deepened rod groove		
					Bag of middle lock [2]	10	K-15809-00-0-1
					Contents		
					1 Corner transmission [4]		6-30889-01-0-1
					1 Locking pin element		6-24539-00-0-1
1	2	2	4	4	**Locking plate**	100	6-30959-00-0-1
					alternatively for + 0,7 mm gasket pressure		
					Locking plate	100	6-30959-01-0-1

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4, 5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour
[2] Middle lock from SW or SH 1200 mm
[3] Groove depth max. 3,9 mm or groove width max. 13 mm
[4] Groove depth 4,0 to 5,1 mm

Working drawing 0-44529

Windows and patio doors with geared handle



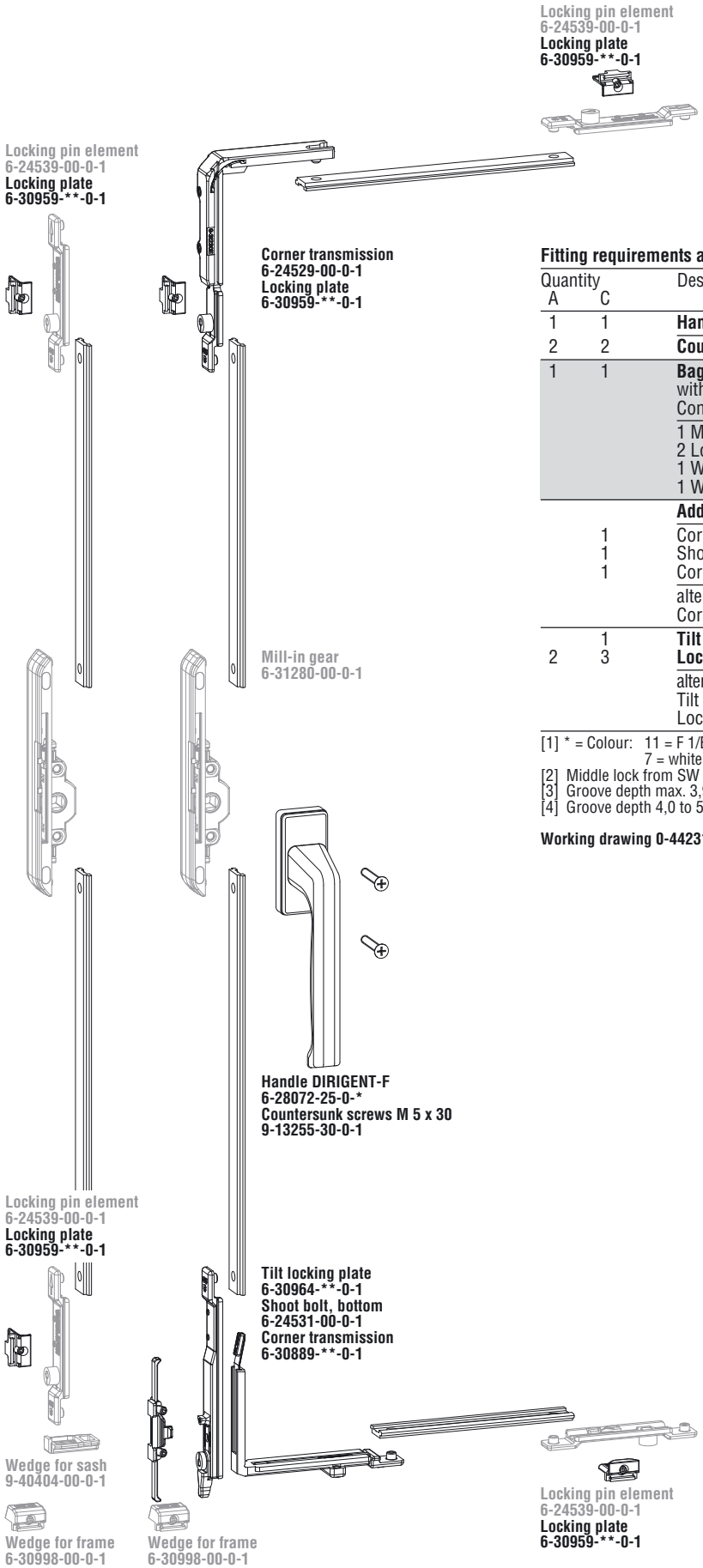
Fitting requirements according to size of sashes for schemes A to D

Quantity A	B	C	D	Description	PU	Article No.
1	1	1	1	**Geared handle SPACIO** [1] hole centre distance 104 mm – with screws	10	G-46551-96-0-*
1	1	1	1	**Fixing plate** hole centre distance 104 mm	50	9-41506-00-0-8
1	1	1	1	**Bag of locking parts DF JET AK 8** for geared handle Contents	10	K-15802-00-0-1
				1 Carrier		6-30984-00-0-1
				2 Locking pin elements		6-24539-00-0-1
				1 Wedge for frame		6-30998-00-0-1
				1 Wedge for sash		9-40404-00-0-1
				Additional parts for middle lock [2]		
		1	1	Corner transmission	100	6-24529-00-0-1
		1	1	Shoot bolt, bottom	100	6-24531-00-0-1
		1	1	Corner transmission [3]	100	6-30889-00-0-1
				alternatively for deepened rod groove Corner transmission [4]	100	6-30889-01-0-1
		1	1	**Tilt locking plate**	100	6-30964-00-0-1
2	3	3	4	**Locking plate**	100	6-30959-00-0-1
				alternatively for + 0,7 mm gasket pressure		
				Tilt locking plate	100	6-30964-01-0-1
				Locking plate	100	6-30959-01-0-1

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 5 = UC 5, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)
[2] Middle lock from SW 1200 mm
[3] Groove depth max. 3,9 mm or groove width max. 13 mm
[4] Groove depth 4,0 to 5,1 mm

Working drawing 0-44231

Windows and patio doors with mill-in gear



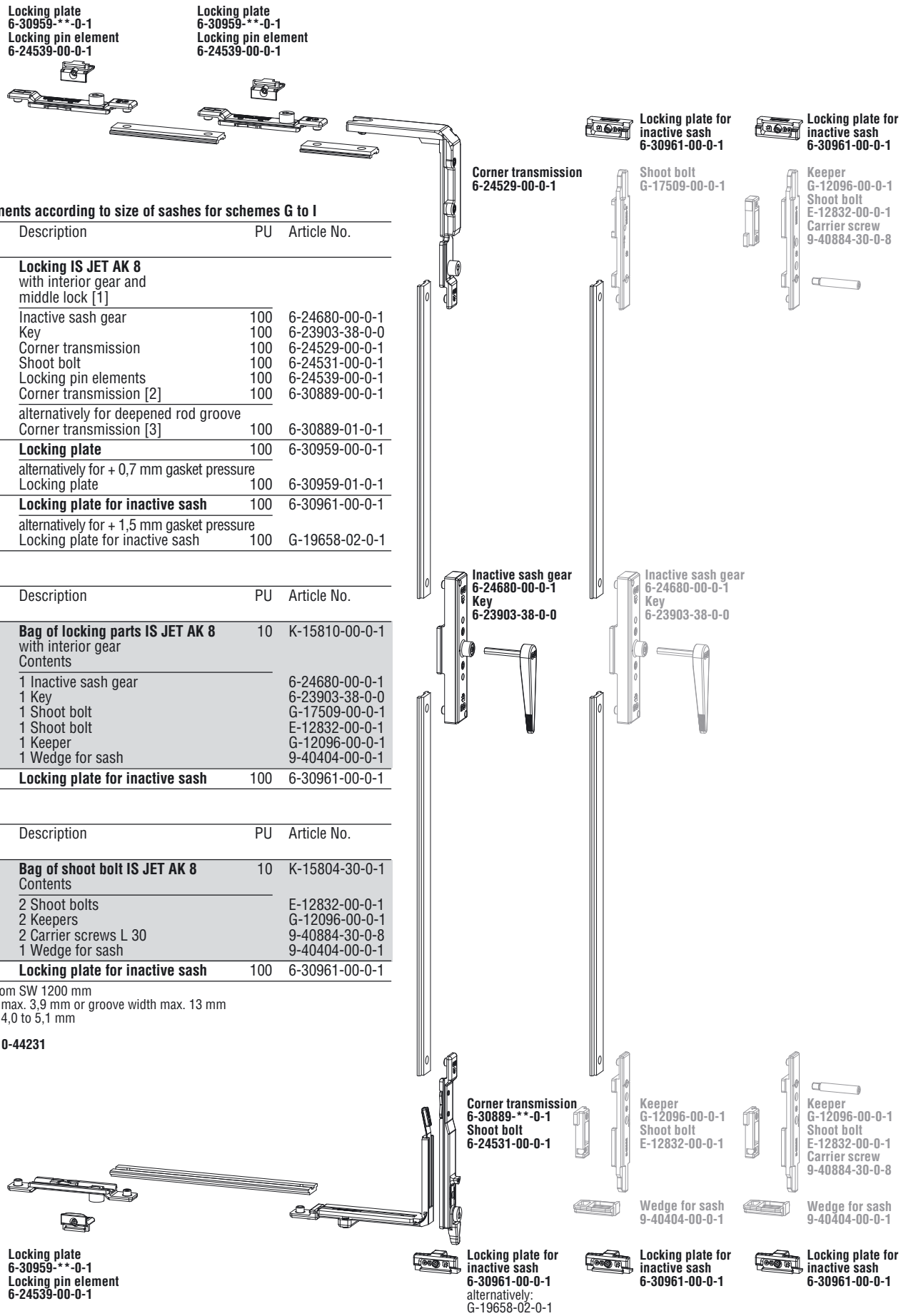
Fitting requirements according to size of sashes for schemes A and C

Quantity A	Quantity C	Description	PU	Article No.
1	1	**Handle DIRIGENT-F** [1]	20	6-28072-25-0-*
2	2	**Countersunk screw M 5 x 30**	400	9-13255-30-0-1
1	1	**Bag of locking parts DF JET AK 8** with mill-in gear	10	K-15812-00-0-1
		Contents		
		1 Mill-in gear		6-31280-00-0-1
		2 Locking pin elements		6-24539-00-0-1
		1 Wedge for frame		6-30998-00-0-1
		1 Wedge for sash		9-40404-00-0-1
		Additional parts for middle lock [2]		
	1	Corner transmission	100	6-24529-00-0-1
	1	Shoot bolt, bottom	100	6-24531-00-0-1
	1	Corner transmission [3]	100	6-30889-00-0-1
		alternatively for deepened rod groove		
		Corner transmission [4]	100	6-30889-01-0-1
	1	**Tilt locking plate**	100	6-30964-00-0-1
2	3	**Locking plate**	100	6-30959-00-0-1
		alternatively for + 0,7 mm gasket pressure		
		Tilt locking plate	100	6-30964-01-0-1
		Locking plate	100	6-30959-01-0-1

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4, 5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour
[2] Middle lock from SW 1200 mm
[3] Groove depth max. 3,9 mm or groove width max. 13 mm
[4] Groove depth 4,0 to 5,1 mm

Working drawing 0-44231

Windows and patio doors with inactive sash gear or shoot bolts – false mullion profile with single groove



Fitting requirements according to size of sashes for schemes G to I

Quantity G H I	Description	PU	Article No.
	Locking IS JET AK 8 with interior gear and middle lock [1]		
1	Inactive sash gear	100	6-24680-00-0-1
1	Key	100	6-23903-38-0-0
1	Corner transmission	100	6-24529-00-0-1
1	Shoot bolt	100	6-24531-00-0-1
3	Locking pin elements	100	6-24539-00-0-1
1	Corner transmission [2]	100	6-30889-00-0-1
	alternatively for deepened rod groove		
	Corner transmission [3]	100	6-30889-01-0-1
3	**Locking plate**	100	6-30959-00-0-1
	alternatively for + 0,7 mm gasket pressure		
	Locking plate	100	6-30959-01-0-1
1	**Locking plate for inactive sash**	100	6-30961-00-0-1
	alternatively for + 1,5 mm gasket pressure		
	Locking plate for inactive sash	100	G-19658-02-0-1

Quantity G H I	Description	PU	Article No.
1	**Bag of locking parts IS JET AK 8** with interior gear	10	K-15810-00-0-1
	Contents		
	1 Inactive sash gear		6-24680-00-0-1
	1 Key		6-23903-38-0-0
	1 Shoot bolt		G-17509-00-0-1
	1 Shoot bolt		E-12832-00-0-1
	1 Keeper		G-12096-00-0-1
	1 Wedge for sash		9-40404-00-0-1
2	**Locking plate for inactive sash**	100	6-30961-00-0-1

Quantity G H I	Description	PU	Article No.
1	**Bag of shoot bolt IS JET AK 8**	10	K-15804-30-0-1
	Contents		
	2 Shoot bolts		E-12832-00-0-1
	2 Keepers		G-12096-00-0-1
	2 Carrier screws L 30		9-40884-30-0-8
	1 Wedge for sash		9-40404-00-0-1
2	**Locking plate for inactive sash**	100	6-30961-00-0-1

[1] Middle lock from SW 1200 mm
[2] Groove depth max. 3,9 mm or groove width max. 13 mm
[3] Groove depth 4,0 to 5,1 mm

Working drawing 0-44231

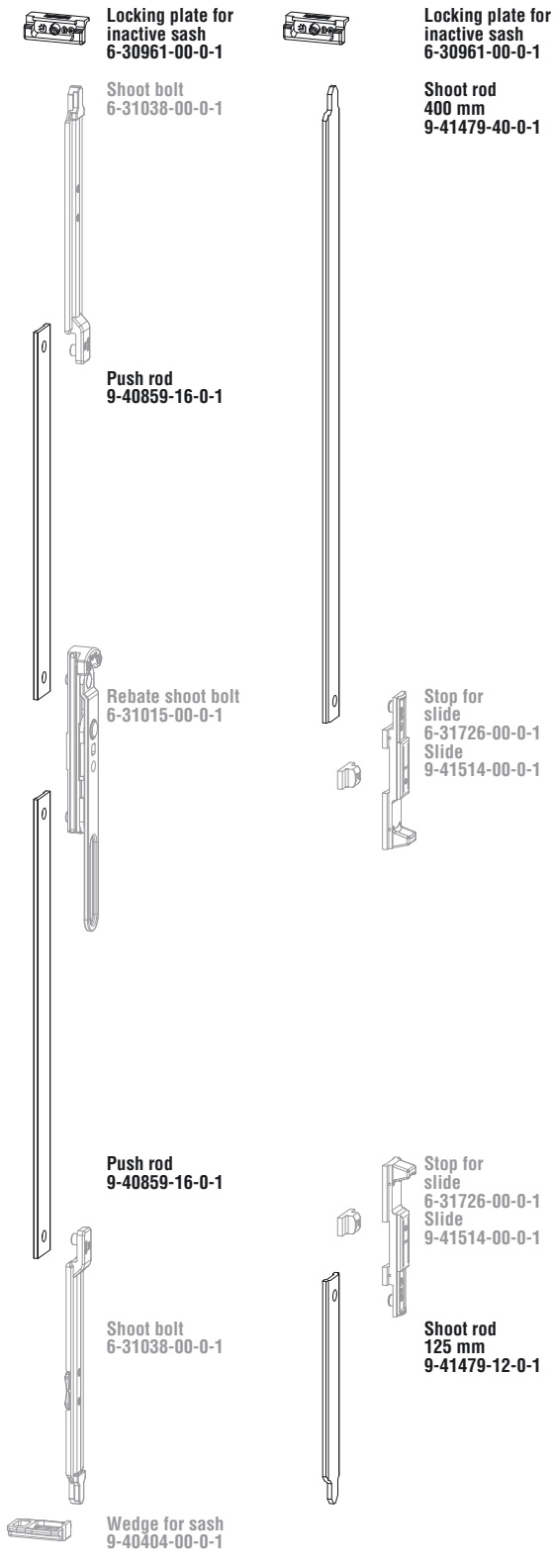
Windows and patio doors with rebate shoot bolt or shoot bolts – false mullion profile with double groove

Fitting requirements for schemes G and I

Quantity G	Quantity I	Description	PU	Article No.
1		**Bag of locking parts IS JET AK 8** with rebate shoot bolt	10	K-15803-00-0-1
		Contents		
		1 Rebate shoot bolt		6-31015-00-0-1
		2 Shoot bolts		6-31038-00-0-1
		1 Wedge for sash		9-40404-00-0-1
2		**Push rod** L = 1600 mm	1	9-40859-16-0-1
2		**Locking plate for inactive sash**	100	6-30961-00-0-1
		alternatively for increased pressure		
		Locking plate + 1,5 mm	100	G-19658-02-0-1
		Locking plate + 3,0 mm	100	G-19658-03-0-1

Quantity G	Quantity I	Description	PU	Article No.
	2	**Box of slide IS JET AK 8** for shoot bolt JET AK 8	50	K-15816-00-0-1
		Contents		
		1 Slide		9-41514-00-0-1
		1 Stop for slide		6-31726-00-0-1
	1	**Bag of shoot rods IS JET AK 8** for slides JET AK 8	20	K-15818-00-0-1
		Contents		
		1 Shoot rod 125 mm		9-41479-12-0-1
		1 Shoot rod 400 mm		9-41479-40-0-1
	2	**Locking plate for inactive sash**	100	6-30961-00-0-1
		alternatively for increased gasket pressure		
		Locking plate + 1,5 mm	100	G-19658-02-0-1
		Locking plate + 3,0 mm	100	G-19658-03-0-1

Working drawing 0-44231

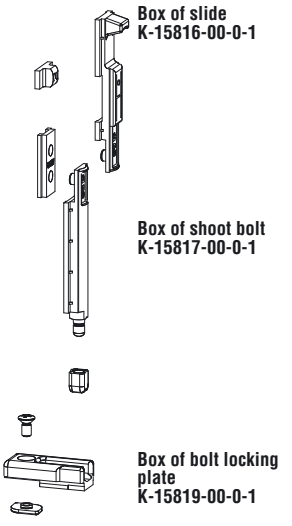


Windows and patio doors with shoot bolts – false mullion profile with double groove
Frame groove 14/18

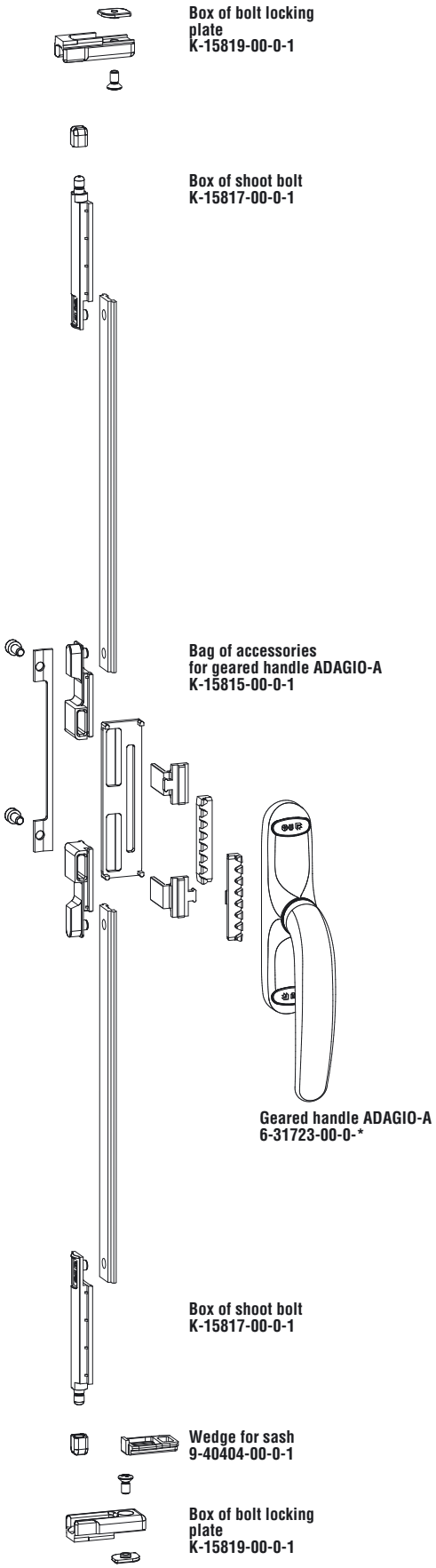
Fitting requirements for schemes I

Quantity I	Description	PU	Article No.
2	**Box of slide IS JET AK 8** for shoot bolt JET AK 8 Contents	50	K-15816-00-0-1
	1 Slide		9-41514-00-0-1
	1 Stop for slide		6-31726-00-0-1
	1 Connecting piece		9-41529-00-0-1
2	**Box of shoot bolt** Contents	50	K-15817-00-0-1
	1 Shoot bolt		6-31727-00-0-1
	1 Eccentric cover		9-41515-00-0-1
2	**Box of bolt locking plate 14/18** Contents	100	K-15819-00-0-1
	1 Bolt locking plate		9-41516-00-0-1
	1 Groove piece		9-41517-00-0-1
	1 Lens head countersunk screw M 5 x 10		9-13369-10-R-1

Working drawing 0-44231



Windows and patio doors with shoot bolts and geared handle
Frame groove 14/18



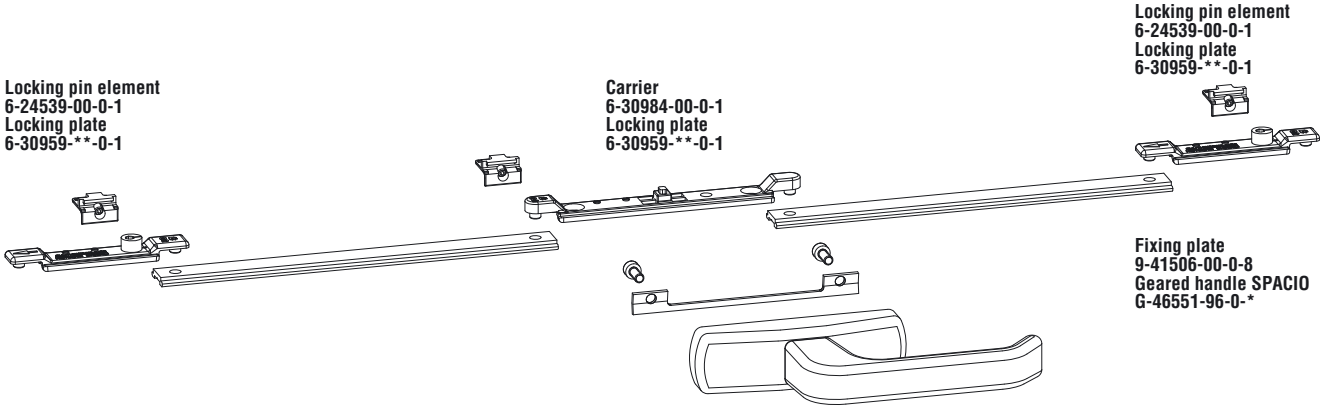
Fitting requirements for schemes A1

Quantity A1	Description	PU	Article No.
1	**Geared handle ADAGIO-A** [1]	50	6-31723-00-0-*
1	**Bag of accessories** incl. screws for ADAGIO-A	50	K-15815-00-0-1
2	**Box of shoot bolt** Contents	50	K-15817-00-0-1
	1 Shoot bolt		6-31727-00-0-1
	1 Eccentric cover		9-41515-00-0-1
2	**Box of bolt locking plate 14/18** Contents	100	K-15819-00-0-1
	1 Bolt locking plate		9-41516-00-0-1
	1 Groove piece		9-41517-00-0-1
	1 Lens head countersunk screw M 5 x 10		9-13369-10-R-1
1	**Wedge for sash**	100	9-40404-00-0-1

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 5 = UC 5, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)

Working drawing 0-44231

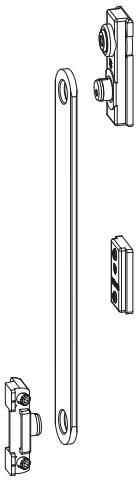
Windows with geared handle



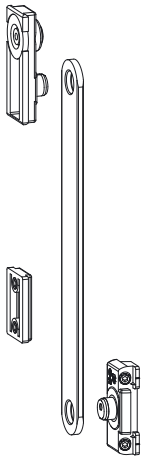
Fitting requirements according to size of sashes

Quantity	Description	PU	Article No.
1	**Geared handle SPACIO** [1] hole centre distance 104 mm – with screws	10	G-46551-96-0-*
1	**Fixing plate** hole centre distance 104 mm	50	9-41506-00-0-8
1	**Carrier**	100	6-30984-00-0-1
2	**Locking pin element**	100	6-24539-00-0-1
3	**Locking plate**	100	6-30959-00-0-1
	alternatively for + 0,7 mm gasket pressure Locking plate	100	6-30959-01-0-1
2	**Bag of limiting stay with friction slider** Stay arm length mm		
	150	1	K-17138-15-0-1
	250	1	K-17138-25-0-1

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 5 = UC 5, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)

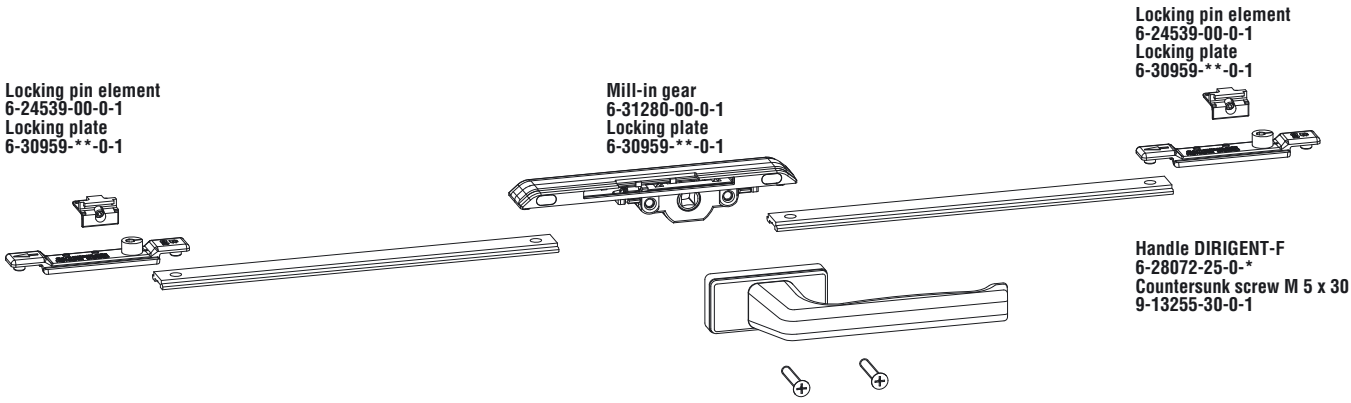


Limiting stay with friction slider



Limiting stay with friction slider

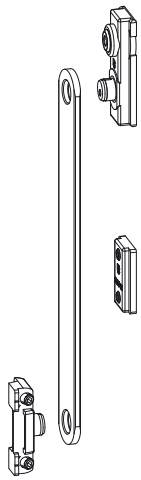
Windows with mill-in gear



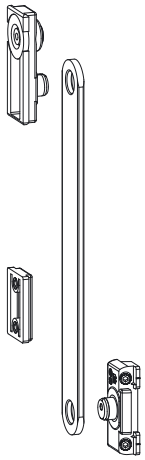
Fitting requirements according to size of sashes

Quantity	Description	PU	Article No.
1	**Handle DIRIGENT-F** [1]	20	6-28072-25-0-*
2	**Countersunk screw M 5 x 30**	400	9-13255-30-0-1
1	**Mill-in gear**	100	6-31280-00-0-1
2	**Locking pin element**	100	6-24539-00-0-1
3	**Locking plate**	100	6-30959-00-0-1
	alternatively for + 0,7 mm gasket pressure Locking plate	100	6-30959-01-0-1
2	**Bag of limiting stay with friction slider** Stay arm length mm		
	150	1	K-17138-15-0-1
	250	1	K-17138-25-0-1

] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4, 5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour



Limiting stay with friction slider



Limiting stay with friction slider

Tilt-turn, first tilt, side hung and inactive sash fittings

Tilt-turn, first tilt, side hung and inactive sashes

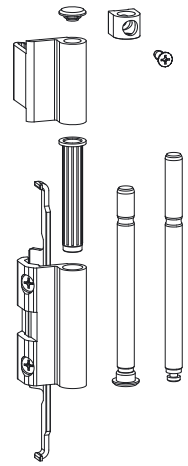
Fitting requirements for schemes A to I

Qty.	Description		PU	Article No.
1	**Bag of hinge side fittings** [1]			
	Frame groove	14/18	10	K-15800-00-0-*
		12/15	10	K-16668-00-0-*
		10/14	10	K-16667-00-0-*
	Contents			
	1 Stay arm bearing [1]			6-30875-00-0-*
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Stay arm hinge [1]			6-31088-00-0-*
	1 Bearing sleeve			9-39805-00-0-6
	2 Covers			9-39807-00-0-6
	1 Corner bearing [1]			9-39812-00-0-*
	1 Casing for corner bearing	14/18		6-30872-00-0-1
		12/15		6-32056-00-0-1
		10/14		6-32055-00-0-1
	1 Corner bearing axle			6-31087-00-0-6
	1 Corner hinge [1]			6-31073-00-0-*
	1 Clamping angle			6-30873-00-0-1
	2 Countersunk screws			9-13489-12-R-8
1	**Bag of additional parts – 130 kg** [1] for sash weight > 80 kg		10	K-16595-00-0-*
	Contents			
	1 Stay arm bearing 130 [1]			9-41710-00-0-*
	1 Stay arm bearing axle 130			9-39809-01-0-6
	1 Countersunk screw M 5 x 16			9-33841-16-R-8

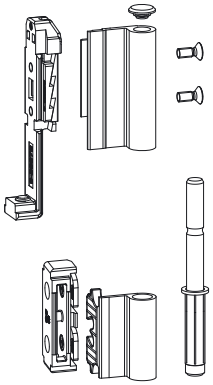
[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)

Stay arm and side hung sash hinge
Cover
Stay arm hinge
Bearing sleeve
Stay arm bearing
Stay arm bearing axle

Additional parts 130 kg
Stay arm bearing 130
Countersunk screw
Stay arm bearing axle 130



Corner bearing
Clamping angle
Cover
Corner hinge
Countersunk screw
Casing for corner bearing
Corner bearing
Corner bearing axle



Side hung and inactive sashes with side hung sash hinge, adjustable

Fitting requirements for schemes A to I

Qty.	Description	PU	Article No.
1	**Side hung sash hinge,** adjustable additional to bag of hinge side K-15800-00-0-*, K-16668-00-0-* and K-16667-00-0-*	10	6-31064-00-0-1

Side hung sash hinge
Side hung sash hinge

Middle hinges for side hung and inactive sashes

Fitting requirements for schemes A to I

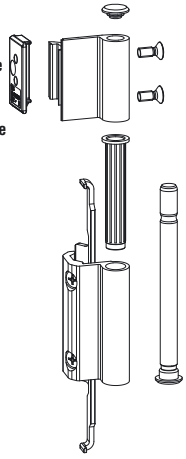
Qty.	Description		PU	Article No.
1	**Bag of middle hinge** [1]		10	K-16897-00-0-*
	Contents			
	1 Stay arm bearing [1]			6-31591-18-0-*
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Side hung sash hinge [1]			6-32249-00-0-*
	1 Clamping plate			9-42376-02-0-1
	1 Bearing sleeve			9-39805-00-0-6
	1 Cover			9-39807-00-0-6
	2 Countersunk screws			9-13489-10-R-8
1	**Bag of concealed middle hinge**			
	Frame groove	14/18	10	G-13529-00-0-1
		12/15	10	G-13528-00-0-1
		10/14	10	G-13527-00-0-1
	Contents			
	1 Rebate cam plate			G-13450-00-0-1
	1 Cam plate	14/18		G-13452-00-0-1
		12/15		G-13453-00-0-1
		10/14		G-13451-00-0-1

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)

Working drawings

Tilt-turn sash	**0-44170**
First tilt sash	**0-44529**
Side hung and inactive sash	**0-44231**

Middle hinge
Clamping plate
Cover
Side hung sash hinge
Countersunk screw
Bearing sleeve
Stay arm bearing
Stay arm bearing axle



Concealed middle hinge
Rebate cam plate
Cam plate

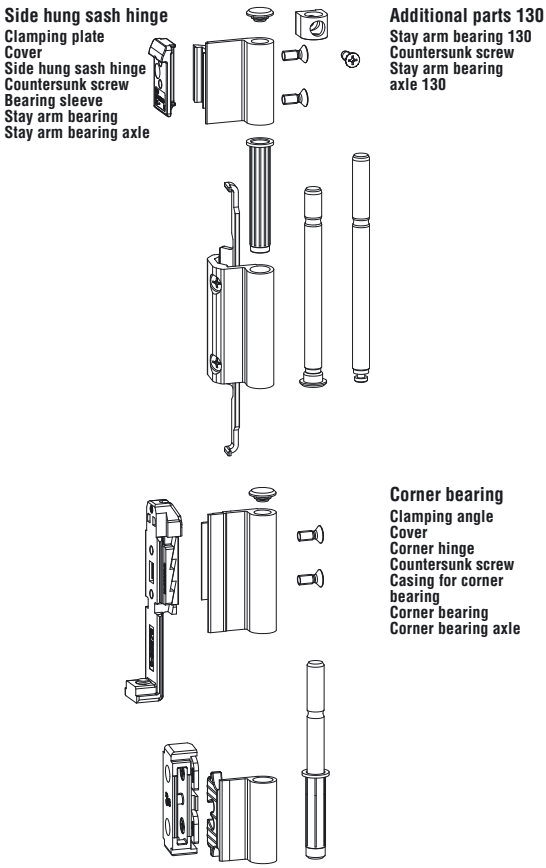
Side hung and inactive sash fittings

Side hung and inactive sashes with clampable side hung sash hinge

Fitting requirements for schemes A to I

Qty.	Description		PU	Article No.
1	**Bag of hinge side** [1]			
	Frame groove	14/18	10	K-17181-00-0-*
		10/14	10	K-17182-00-0-*
	Contents			
	1 Stay arm bearing [1]			6-31591-18-0-*
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Side hung sash hinge [1]			6-32249-00-0-*
	1 Clamping plate			9-42376-01-0-1
	1 Bearing sleeve			9-39805-00-0-6
	2 Covers			9-39807-00-0-6
	1 Corner bearing [1]			9-39812-00-0-*
	1 Casing for corner bearing	14/18		6-30872-00-0-1
		10/14		6-32055-00-0-1
	1 Corner bearing axle			6-31087-00-0-6
	1 Corner hinge [1]			6-31073-00-0-*
	1 Clamping angle			6-30873-00-0-1
	2 Countersunk screw			9-13489-12-R-8
	2 Countersunk screw			9-13489-10-R-8
1	**Bag of additional parts – 130 kg** [1] for sash weight > 80 kg		10	K-16595-00-0-*
	Contents			
	1 Stay arm bearing 130 [1]			9-41710-00-0-*
	1 Stay arm bearing axle 130			9-39809-01-0-6
	1 Countersunk screw M 5 x 16			9-33841-16-R-8

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)



Middle hinges for side hung and inactive sashes with clampable side hung sash hinge

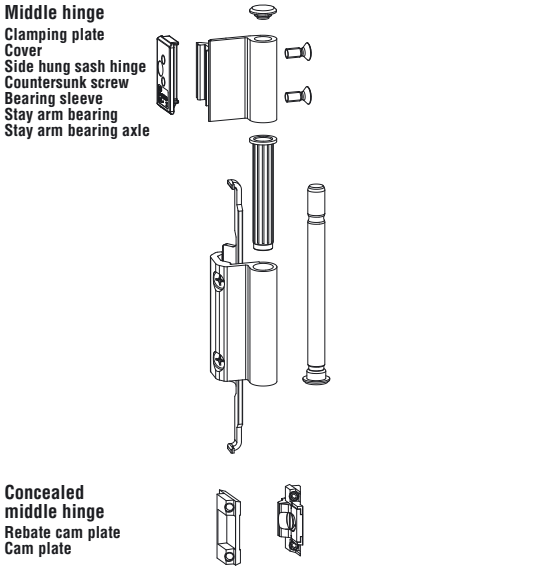
Fitting requirements for schemes A to I

Qty.	Description		PU	Article No.
1	**Bag of middle hinge** [1]		10	K-16897-00-0-*
	Contents			
	1 Stay arm bearing [1]			6-31591-18-0-*
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Side hung sash hinge [1]			6-32249-00-0-*
	1 Clamping plate			9-42376-02-0-1
	1 Bearing sleeve			9-39805-00-0-6
	1 Cover			9-39807-00-0-6
	2 Countersunk screw			9-13489-10-R-8
1	**Bag of concealed middle hinge**			
	Frame groove	14/18	10	G-13529-00-0-1
		12/15	10	G-13528-00-0-1
		10/14	10	G-13527-00-0-1
	Contents			
	1 Rebate cam plate			G-13450-00-0-1
	1 Cam plate	14/18		G-13452-00-0-1
		12/15		G-13453-00-0-1
		10/14		G-13451-00-0-1

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)

Working drawings

Tilt-turn sash	**0-44170**
First tilt sash	**0-44529**
Side hung and inactive sashes	**0-44231**



Optional part

Qty.	Description	PU	Article No.
1	**Bag of bearing sleeves/covers light grey** [1] for all bags of hinge side/middle hinge JET AK 8	1	K-17803-00-0-1
	Contents		
	1 Bearing sleeve		9-39805-00-0-1
	2 Covers		9-39807-00-0-1
	1 Corner bearing sleeve		9-39831-00-0-1
	1 Safety cover		9-39806-00-0-1

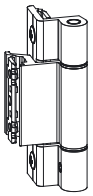
[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)

Side hung, inactive and tilt sash fittings

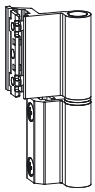
for schemes A to I

Description	PU	Article No.
Bag of axial hinge, 93 mm – 3-part [1] Frame groove 14/18 Sash weigth max. 100 kg (3 hinges) / 80 kg (2 hinges)	50	K-15887-00-0-*
Bag of axial hinge, 93 mm – 2-part [1] Frame groove 14/18 Sash weigth max. 80 kg	50	K-15820-00-0-*
Optional part **Hinge axle, eccentric** for axial hinge, 2-part – gasekt pressure adjustable	50	9-41507-00-0-8

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)



Bag of axial hinge 93 mm – 3-part K-15887-00-0-*



Bag of axial hinge 93 mm – 2-part K-15820-00-0-*

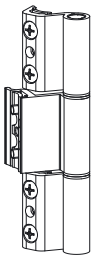
Hinge axle, eccentric for axial hinge, 2-part 9-41507-00-0-8

Side hung, inactive and tilt sash fittings

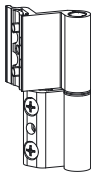
for schemes A to I

Description	PU	Article No.
Bag of axial hinge, 127 mm – 3-part [1] Frame groove 14/18, 12/15, 10/14 Sash weigth max. 80 kg	100	G-46731-00-0-*
Bag of axial hinge, 84 mm – 2-part [1] Frame groove 14/18, 12/15, 10/14 Sash weigth max. 80 kg	10	G-46730-00-0-*

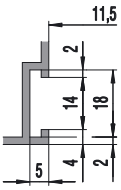
[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 5 = brown (RAL 8022), 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)



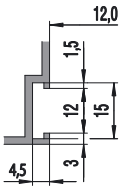
Bag of axial hinge 127 mm – 3-part G-46731-00-0-*



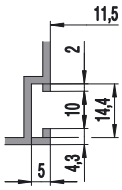
Bag of axial hinge 84 mm – 2-part G-46730-00-0-*



Frame groove 14/18

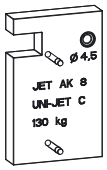


Frame groove 12/15



Frame groove 10/14

JET AK 8

Application	Description	PU	Article No.
Assembly of stay arm bearing 130 kg	**Tilt-turn, first tilt, side hung and tilt sash fittings**		
	Drilling and mounting jig for stay arm bearing 130 kg 9-41710-00-0-1	1	6-31951-00-0-6
Assembly of mill-in gear	**Tilt-turn, first tilt and side hung**		
	Drilling jig for mill-in gear 6-25948, 6-25917 and lock 6-25918	1	6-26191-00-0-2
Profile processing	**Pneumatic cutter for profile processing** Operations: 1. Punching of handle slot and holes 2. Cutting and punching of push rod (holes Ø 6 mm) 3. Punching the aperture to insert the push rod in the profile Technical Data: Dimensions approx. 326 x 302 x 220 mm Cylinder 1750 kg, Ø 200 mm Operating pressure 6 bar Drive manual valve Weight approx. 30 kg	1	6-31957-00-0-0

Projecting top hung window fittings

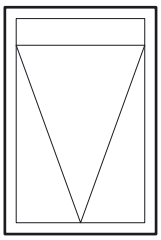
Application

Projecting top hung window fittings are primarily designed for use on metall windows and need to be planned for each project individually. However, they also offer special solutions for PVC, timber, or timber-aluminium composite windows.
Due to the stay arms being designed asymmetrically, the sash very early runs in final closed position so the window is shut safely and weathertight.
The system resists extremely high wind loads on high-rise building façades and provides outstanding tightness against air and water ingress.
The fittings are operated with stylish geared handles coming in various colours.

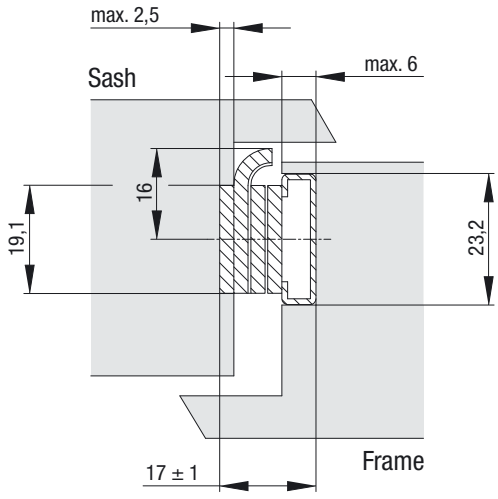
Locking mechanisms

The fittings are concealed in the rebate and operated with a single handle. All locking parts are designed for Euro groove 15/20 mm.
The locking pins on carriers, locking pin elements and corner transmissions are adjustable. Additional option: use of single locking pins for push rods – not adjustable.
Corner transmissions are provided with rust-proof 4-leaf stainless steel springs.

Locking scheme:



Space required for projecting top hung stay



Geared handles SPACIO

The fixings of the geared aluminium handles are concealed. The rosettes are provided with a rugged detent device. Lockable and removable handles as well as handles with extended carrier fork complete the programme.

Standard colours:

uncoated	without surface coating
F 1/EV 1	silver colour
UC 5	dark bronze
black	RAL 9005
white	RAL 9016 or RAL 9010

Materials, surface sealing fer**GU**ard*silver

The fitting parts are made of high quality steel, zinc die-casting or aluminium alloys.
Depending on the material, they are protected against corrosion by surface sealing with fer**GU**ard*silver or by anodisation (aluminium parts).

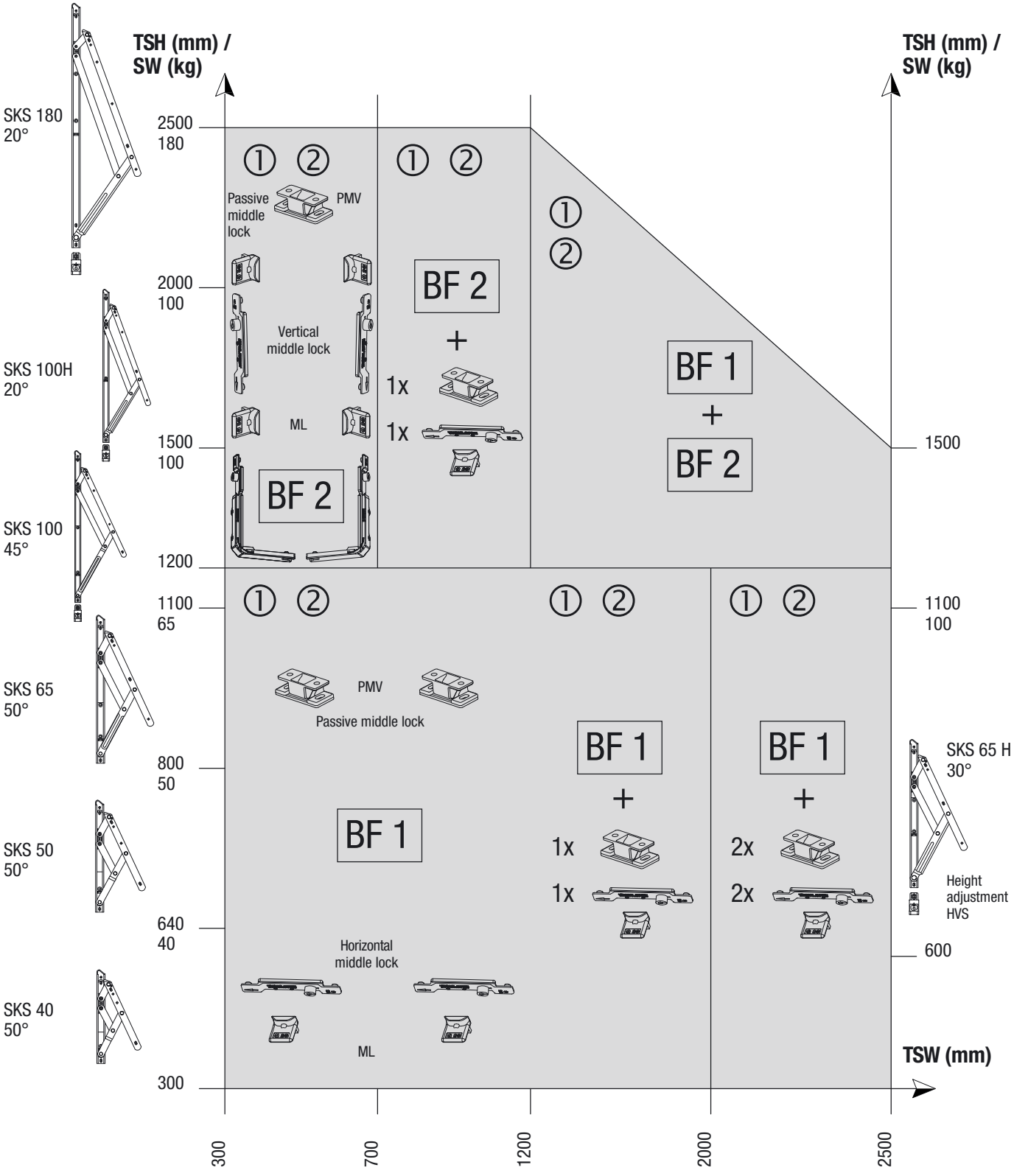
Abbreviations

CB	Cylinder bore
lh	Left hand
PU	Packing unit
rh	Right hand
ST	Sash thickness
TSH	Total sash heigh
TSW	Total sash width
SW	Sash weight

Profile system manufacturers‘ information

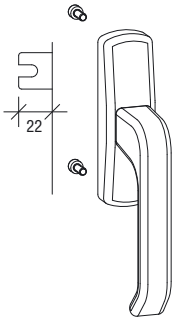
The product guidelines of the profile manufacturers regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. longitudinal expansion) are to be observed.

Application diagram / Fitting requirements

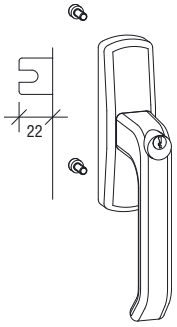


BF 1/2 = Basic fittings 1/2 ① Motor application ② Manual application

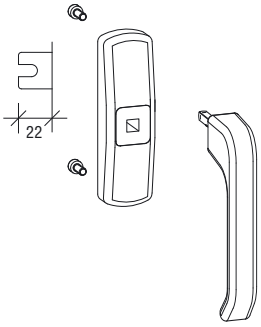
Geared handles SPACIO – single locking direction aluminium, painted – 1 carrier fork 22 mm



Bag of geared handle
SPACIO – not lockable
2 screws
G-46551-96-0-*



Bag of geared handle
SPACIO – lockable
2 screws, 2 keys
G-46553-96-0-*

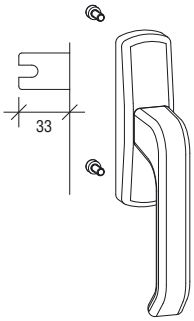


Bag of
geared rosette SPACIO
2 screws
G-46555-96-0-*

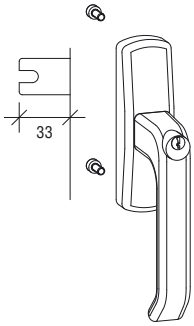
Removable handle SPACIO
G-18888-00-0-*

90° limiter
for aluminium rosettes
9-34612-00-0-6

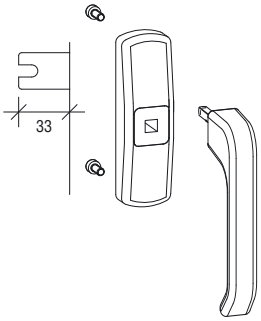
Geared handles SPACIO – single locking direction aluminium, painted – 1 carrier fork 33 mm



Bag of geared handle
SPACIO – not lockable
2 screws
G-46595-96-0-*



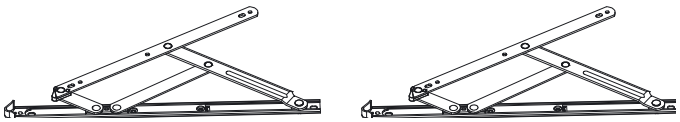
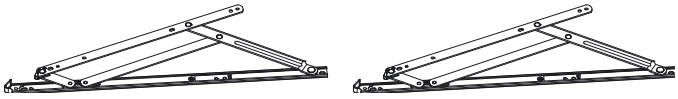
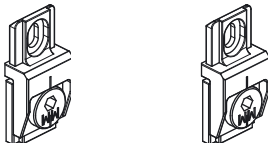
Bag of geared handle
SPACIO – lockable
2 screws, 2 keys
G-46597-96-0-*



Bag of
geared rosette SPACIO
2 screws
G-46596-96-0-*

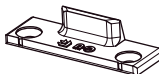
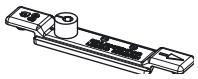
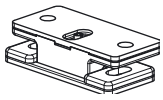
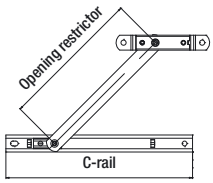
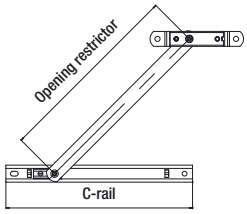
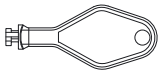
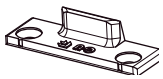
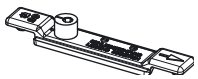
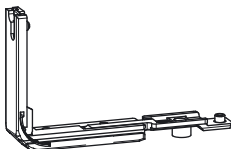
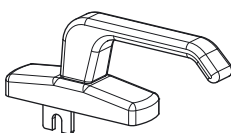
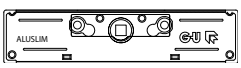
Removable handle SPACIO
G-18888-00-0-*

Projecting top hung stays and vertical adjustment

Description, illustration	Application		DIN	Article No.
Projecting top hung stay SKS 40	Max. sash weight Min. sash height Max. sash height Opening angle	40 kg 267 mm 640 mm 50° ± 2,5°	DIN left hand DIN right hand	9-44762-00-P-8
Projecting top hung stay SKS 50	Max. sash weight Min. sash height Max. sash height Opening angle	50 kg 640 mm 800 mm 50° ± 2,5°	DIN left hand DIN right hand	9-44763-00-P-8
Projecting top hung stay SKS 65	Max. sash weight Min. sash height Max. sash height Opening angle	65 kg 800 mm 1100 mm 50° ± 2,5°	DIN left hand DIN right hand	9-44764-00-P-8
Projecting top hung stay SKS 65 H 	Max. sash weight Min. sash height Max. sash height Opening angle Vertical adjustment	65 kg 600 mm 1100 mm 30° ± 2,5° ± 2 mm	DIN left hand DIN right hand	9-44765-00-P-8
Projecting top hung stay SKS 100	Max. sash weight Min. sash height Max. sash height Opening angle Vertical adjustment	100 kg 1100 mm 1500 mm 45° ± 2,5° ± 2 mm	DIN left hand DIN right hand	9-44766-00-P-8
Projecting top hung stay SKS 100H 	Max. sash weight Min. sash height Max. sash height Opening angle Vertical adjustment	100 kg 1500 mm 2000 mm 20° ± 2,5° ± 2 mm	DIN left hand DIN right hand	9-44767-00-P-8
Projecting top hung stay SKS 180	Max. sash weight Min. sash height Max. sash height Opening angle Vertical adjustment	180 kg 2000 mm 2500 mm 20° ± 2,5° ± 2 mm	DIN left hand DIN right hand	9-44768-00-P-8
Vertical adjusting device HVS [1] 	Vertical adjustment	± 2 mm		9-44769-00-0-1

[1] required for sash weights > 65 kg

Locking elements, opening restrictor, geared handle and gear

Description, application	Consisting of:	Illustration.	Article No.
Horizontal lock (bottom) Min. sash width 600 mm Max. sash width 1500 mm Max. sash height 1500 mm	2 x locking plate (frame)		6-40229-00-0
	2 x locking pin element		6-24539-08-0
Passive middle lock PMV (top)			9-44770-00-0-0
Opening restrictor size 2 lockable Length c-rail 200 mm Length scissors arm 152,4 mm	2 pieces per window		6-C8628-06-0-8
Opening restrictor size 3 lockable Length c-rail 200 mm Length scissors arm 203,2 mm	2 pieces per window		6-C8628-08-0-8
Key			9-C8628-00-0-0
Vertical lock	2 x locking plate (frame)		6-40229-00-0
	2 x locking pin element		6-24539-08-0
	2 x corner transmission		6-24529-08-0
Geared handle SPACIO			G-46551-00-0-1
Gear for concealed mounting Stroke: 25,5 mm			G-19270-01-0-1

Parallel offset window fittings

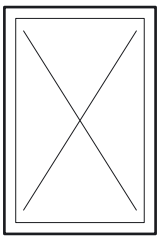
Application

Projecting top hung window fittings are primarily designed for use on metall windows and need to be planned for each project individually. However, they also offer special solutions for PVC, timber, or timber-aluminium composite windows.
The fittings are operated with stylish geared handles coming in various colours.

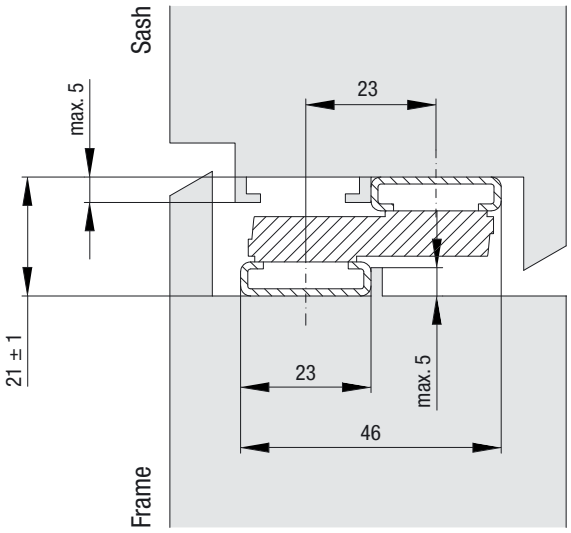
Locking mechanisms

The fittings are concealed in the rebate and operated with a single handle. All locking parts are designed for Euro groove 15/20 mm.
The locking pins on carriers, locking pin elements and corner transmissions are adjustable. Additional option: use of single locking pins for push rods – not adjustable.
Corner transmissions are provided with rust-proof 4-leaf stainless steel springs.

Locking scheme:



Space required for parallel offset window fittings



Geared handles SPACIO

The fixings of the geared aluminium handles are concealed. The rosettes are provided with a rugged detent device. Lockable and removable handles as well as handles with extended carrier fork complete the programme.

Standard colours:

uncoated	without surface coating
F 1/EV 1	silver colour
UC 5	dark bronze
black	RAL 9005
white	RAL 9016 or RAL 9010

Materials, surface sealing fer**GU**ard*silver

The fitting parts are made of high quality steel, zinc die-casting or aluminium alloys.
Depending on the material, they are protected against corrosion by surface sealing with fer**GU**ard*silver or by anodisation (aluminium parts).

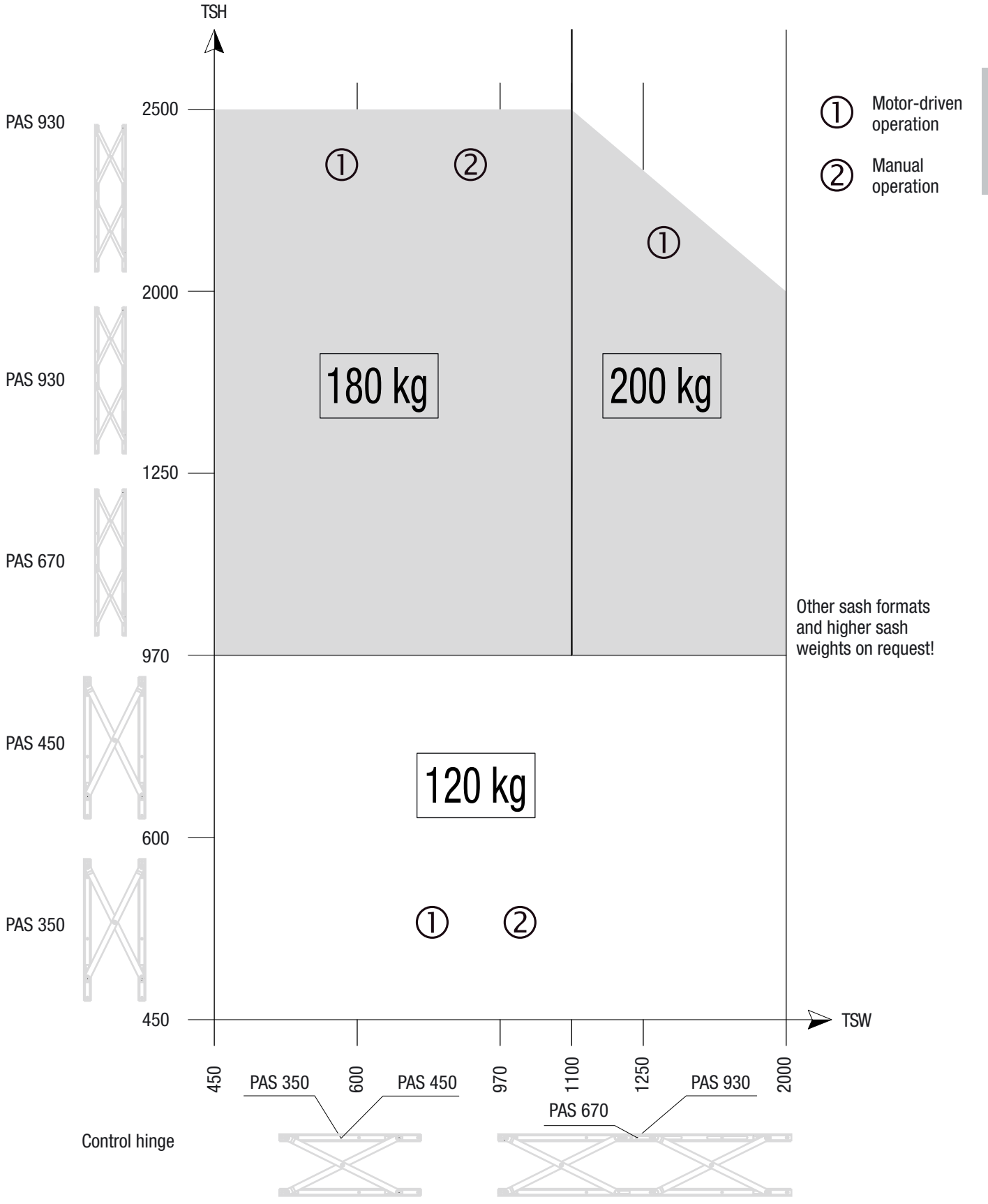
Abbreviations

CB	Cylinder bore
lh	Left hand
PU	Packing unit
rh	Right hand
ST	Sash thickness
TSH	Total sash height
TSW	Total sash width
SW	Sash weight

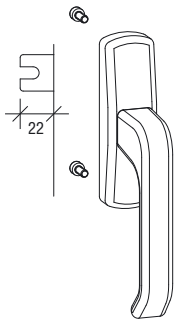
Profile system manufacturers' information

The product guidelines of the profile manufacturers regarding construction, assembly, max. sash dimensions, max. sash weights and material qualities (e.g. longitudinal expansion) are to be observed.

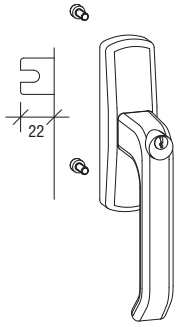
Application diagram / Fitting requirements



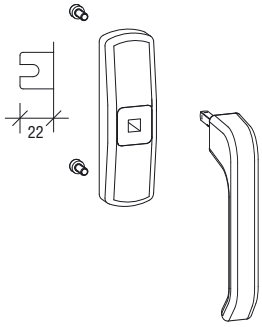
Geared handles SPACIO – single locking direction aluminium, painted – 1 carrier fork 22 mm



Bag of geared handle
SPACIO – not lockable
2 screws
G-46551-96-0-*



Bag of geared handle
SPACIO – lockable
2 screws, 2 keys
G-46553-96-0-*

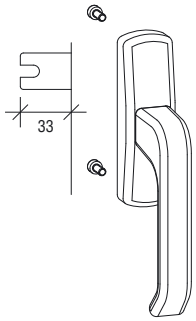


Bag of
geared rosette SPACIO
2 screws
G-46555-96-0-*

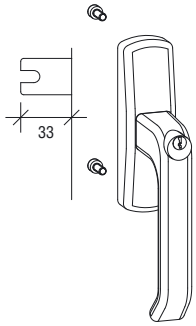
Removable handle SPACIO
G-18888-00-0-*

90° limiter
for aluminium rosettes
9-34612-00-0-6

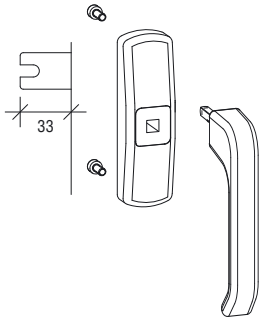
Geared handles SPACIO – single locking direction aluminium, painted – 1 carrier fork 33 mm



Bag of geared handle
SPACIO – not lockable
2 screws
G-46595-96-0-*



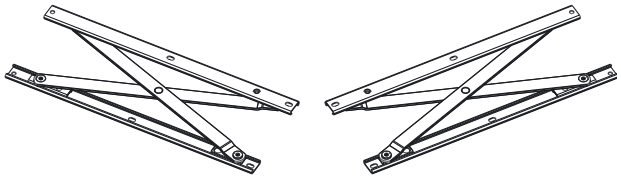
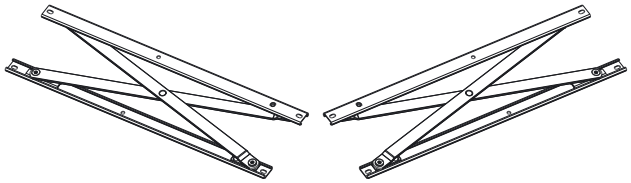
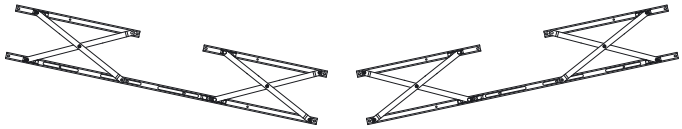
Bag of geared handle
SPACIO – lockable
2 screws, 2 keys
G-46597-96-0-*



Bag of
geared rosette SPACIO
2 screws
G-46596-96-0-*

Removable handle SPACIO
G-18888-00-0-*

Parallel offset stays

Description, illustration	Application		DIN	Article No.
Parallel offset stay PAS 350 	Max. sash weight Min. sash height Max. sash height Opening width man. Opening width mot.	100 kg 380 mm 500 mm 150 mm 180 mm	DIN left hand DIN right hand	6-34810-00-9-8
Parallel offset stay PAS 450 	Max. sash weight Min. sash height Max. sash height Opening width man. Opening width mot.	100 kg 480 mm 720 mm 180 mm 250 mm	DIN left hand DIN right hand	6-34811-00-9-8
Parallel offset stay PAS 670 	Max. sash weight Min. sash height Max. sash height Opening width man. Opening width mot.	200 kg 700 mm 1100 mm 150 mm 180 mm	DIN left hand DIN right hand	6-34812-00-9-8
Parallel offset stay PAS 930 	Max. sash weight Min. sash height Max. sash height Opening width man. Opening width mot.	200 kg 960 mm 2000 mm 180 mm 250 mm	DIN left hand DIN right hand	6-34813-00-9-8
Parallel offset stay PAS 1135 to use gear G-19270-01-0-1 for concealed mounting 	Max. sash weight Min. sash height Max. sash height Opening width man. Opening width mot.	200 kg 1400 mm 2100 mm 150 mm 250 mm	DIN left hand DIN right hand	6-35142-00-9-8

Tilt-turn, first tilt, side hung and tilt sash fittings for aluminium windows and patio doors

Application

Range of applications for tilt-turn and side hung fittings UNI-JET:
– single-sash windows and doors
– double-sash windows and doors without mullion
– single-sash doors, lockable
– double-sash doors, lockable, without mullion

Locking mechanisms with automatic locking pins

UNI-JET locking mechanisms are concealed in the rebate and provide for one handle operation. All locking parts are designed for the standard hardware groove of 16,3 mm width and 2,5 mm depth.

Automatic locking pins of steel
The automatic steel locking pins of gear parts, stay arms, middle locks and corner transmissions are adjustable with Torx and supported with springs compensating for the rebate clearance; the spring travel is 1,2 mm.

Clip connections and couplings
Gears and middle locks as well as stay arm connecting plates and middle locks are clipped together. Push rods are connected via rack coupling toothed on both sides. All locking parts which can be shortened are fixed with the mechanism in turn position (= mounting position); corner transmissions and middle locks are provided with rust-proof 4-leaf stainless steel springs.

UNI-JET tilt-turn stay arms with integrated slit ventilation
As a standard or with optional slit ventilation springs, tilt-turn stay arms allow for additional ventilation positions – more comfort with multi-stage ventilation. The stay arms are provided with an anti-bang safeguard.

The standard locking mechanism UNI-JET: Basic security
As a standard, UNI-JET locking mechanisms come in security class "basic security". For all opening methods, a steel mushroom pin locking plate "Se" is provided at the horizontal bottom towards the gear side. As a result, the protection against lifting attempts is improved in this crucial area.

Burglary-resistant locking mechanisms "Ahs Standard to RAL RG 607/13"
Corner transmissions with 2 automatic locking pins and hinge side middle locks with 1 automatic locking pin near the stay arm bearing fulfill the requirements of "Anti-lift security (Ahs) Standard to RAL RG 607/13". In the corner area of window and door sashes, zinc mushroom pin locking plates are used.

Burglary-resistant locking mechanisms "Ahs Extra to RAL RG 607/13"
Corner transmissions with 2 automatic locking pins and hinge side middle locks with 1 automatic locking pin near the stay arm bearing fulfill the requirements of "Anti-lift security (Ahs) Extra to RAL RG 607/13". In the corner area of window and door sashes, Se mushroom pin locking plates of stainless steel are used as a standard.

Burglary-resistant locking mechanisms "WK 2 to ENV 1627"
Burglary-resistant locking mechanisms „WK 2" fulfill the requirements to ENV 1627, provided mushroom pin locking plates Se of stainless steel are used on all locking points.

Anti-lift security fittings AhS RAL-RG 607/13

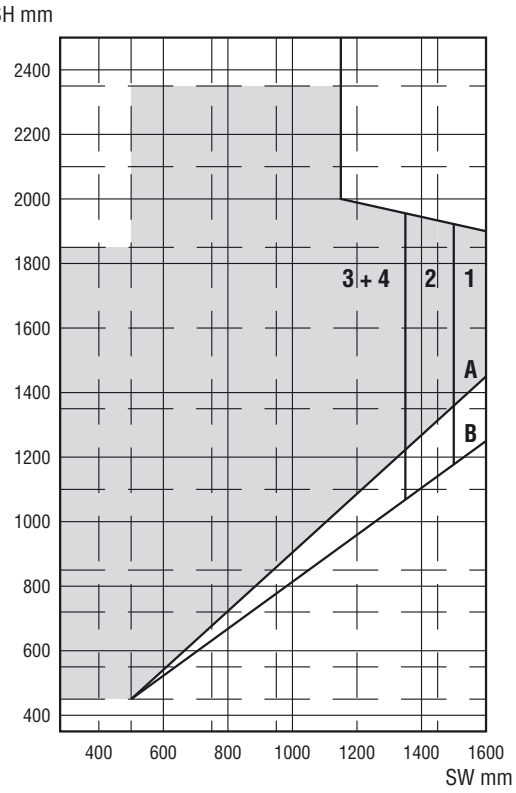
UNI-JET anti-lift fittings to RAL-RG 607/13 are marked "AhS" in the catalogue.

Burglary-resistant windows ENV 1627 – 1630, April 99

UNI-JET tilt-turn and side hung fittings suitable for the installation on burglary-resistant windows to ENV 1627 – resistance classes WK 2 – are marked in the catalogue "Security fittings to ENV 1627 – WK 2".
The ENV 1627 – 1630 test evaluates the burglary-resistant effect of the complete window unit.

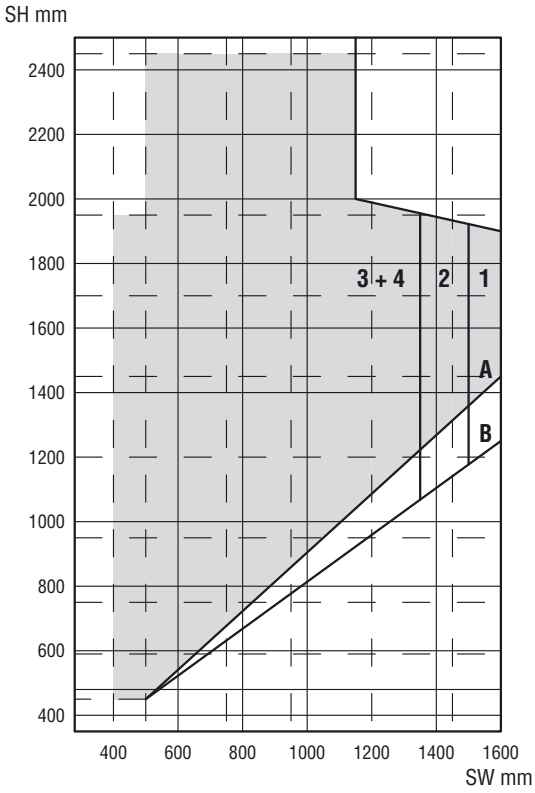
Maximum sash dimensions

Fixed gear position



1 = maximum sash width for stress group 1, DIN EN 12207
2 = maximum sash width for stress group 2, DIN EN 12207
3 + 4 = maximum sash width for stress group 3 + 4, DIN EN 12207

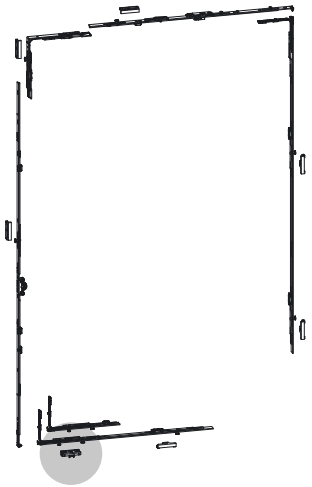
Variable gear position



A = Use according to destination
B = Side hung position only for occasional cleaning purposes
(see DIN EN 12207, table NA.1)
The broken lines represent the grid spacings of the fittings.

Tilt-turn, first tilt, side hung and tilt sash fittings for aluminum windows and patio doors

Locking mechanism "Basic security"



Equipment "Basic security"

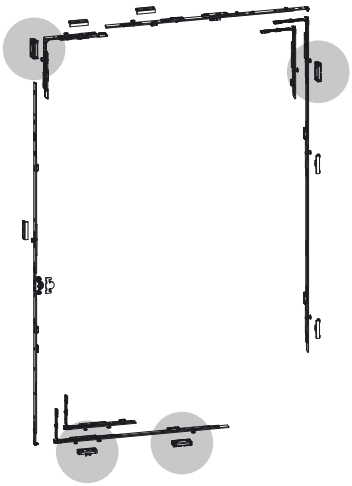
1 Steel mushroom pin locking plate Se for
– tilt function
– standard security for locking mechanisms UNI-JET

– all other locking pins with standard locking plates made of zinc

Standard locking plate made of zinc

Mushroom pin locking plate Se made of steel

Locking mechanism "Ahs Standard" and "Ahs Extra" according to RAL RG 607/13



Equipment "Ahs Standard"

1 Steel mushroom pin locking plate Se for
– tilt function

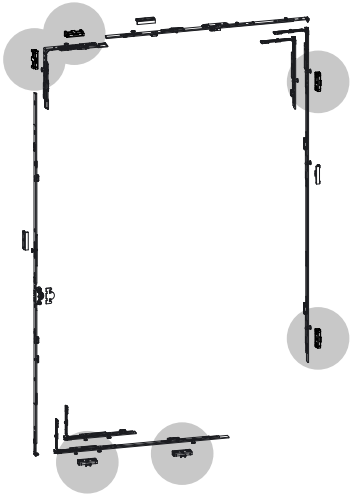
3 Mushroom pin locking plates Ahs made of zinc for
– security "Ahs-Standard" according to RAL RG 607/13

– all other locking pins with standard locking plates made of zinc

Standard locking plate made of zinc

Mushroom pin locking plate Ahs made of zinc

Mushroom pin locking plate Se made of steel



Equipment "Ahs Extra"

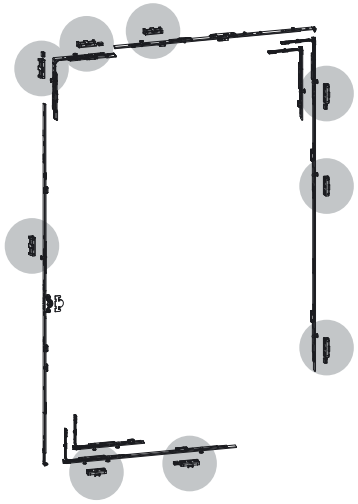
6 Steel mushroom pin locking plates Se for
– tilt function
– security "Ahs-Extra" according to RAL RG 607/13

– all other locking pins with standard locking plates made of zinc

Standard locking plate made of zinc

Mushroom pin locking plate Se made of steel

Locking mechanism "WK 2" according to ENV 1627

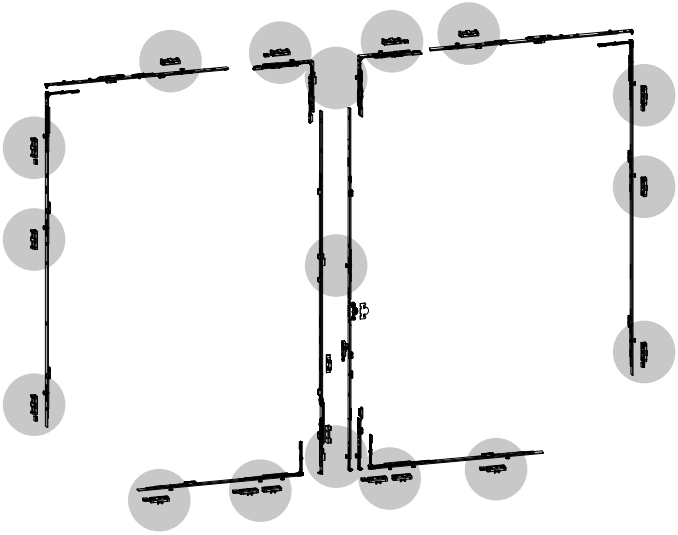


Equipment WK 2 for single and double sash windows

Steel mushroom pin locking plates Se for
– tilt function
– security "WK 2" according to ENV 1627

– all locking pins with mushroom pin locking plates Se made of steel

Mushroom pin locking plate Se made of steel



Tilt-turn, first tilt, side hung and tilt sash fittings for aluminium windows and patio doors

Hinge side hardware

Tilt-turn, first tilt and side hung fittings UNI-JET C
Clampable fittings for windows and patio doors with 12 mm rebate clearance, 16 mm fitting groove on the sash and 14/18, 12/15 or 10/14 groove on the frame.
Corner bearing, stay arm hinge and side hung sash hinge are designed for groove position 9 and 13 mm and for sash overlap 18 and 20 mm. Max. sash weight 80 kg. Vertical adjustment on the corner bearing + 2,5 to - 1,5 mm, horizontal adjustment ± 1 mm. Stay arm adjustable ± 3 mm, gasket pressure adjustable ± 1 mm.

Tilt-turn, first tilt and side hung fittings UNI-JET C-130
Clampable fittings for windows and patio doors with 12 mm rebate clearance, 16 mm fitting groove on the sash and 14/18, 12/15 or 10/14 groove on the frame.
Corner bearing, stay arm hinge and side hung sash hinge are designed for groove position 9 and 13 mm and for sash overlap 18 and 20 mm. With bag of additional parts for sash weights up to 130 kg. Vertical adjustment on the corner bearing + 2,5 to - 1,5 mm, horizontal adjustment ± 1 mm. Stay arm adjustable ± 3 mm, gasket pressure adjustable ± 1 mm.

Tilt-turn and side hung fittings UNI-JET D
Rebate hinge fittings with drill-in hinge or rebate corner hinge and rebate double stay for windows and patio doors with 12 mm rebate clearance up to 100 kg sash weight.
Rebate corner hinge, side hung sash hinge and middle hinge as well as double stay for 9 and 13 mm grooves – 18, 20 and 22 mm sash overlap. Corner bearing 3-way adjustable, symmetric drill pattern for stay arm bearings and corner bearing.

Locking plates and packings

Frame profile specific locking plates and packings according to table (see at the end of this catalogue chapter).

Drilling jigs, assembly tools

Drilling jigs and other tools for hardware assembly are to be found at the end of this catalogue chapter and also in the respective working drawings.

Turn handles DIRIGENT [1]

The handles are made of aluminium with concealed fixings. The rosettes are provided with a rugged detent device and fixed cams. Lockable handles complete the programme.

Standard colours:

F 1/EV 1	silver colour
F 2/EV 2	new silver colour
F 3	gold colour
F 4	light brown
dark brown	dark brown (RAL 8022)
black	black (RAL 9005)
white	white (RAL 9016 or RAL 9010)

[1] More turn handles see part 3 of the present order catalogue.

Materials, surface sealing fer**GU**ard*silver

The fitting parts are made of high quality steel, zinc die-casting or aluminium alloys.
Depending on the material, they are protected against corrosion by surface sealing with fer**GU**ard*silver or by anodisation (aluminium parts).

Standard surface sealing of tilt-turn fittings: fer**GU**ard*silver

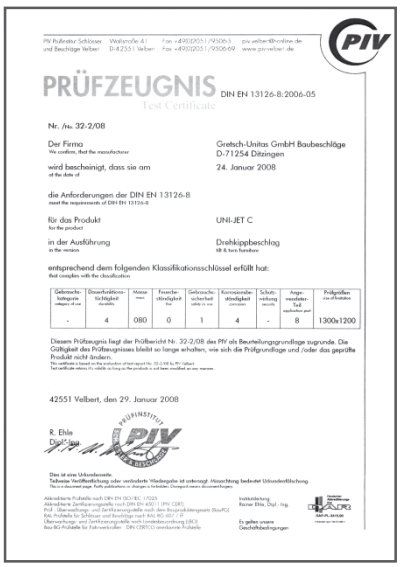
All locking parts of tilt-turn fittings come with the surface sealing fer**GU**ard*silver.

Abbreviations

CB	Cylinder bore
FT	First tilt fittings
G	Fixed gear position
GV	Variable gear position
IS	Inactive sash fittings
lh	Left hand
ML	Middle lock
PU	Packing unit
rh	Right hand
Se	Security fittings
SH	Side hung fittings
ST	Sash thickness
SRH	Sash rebate height
SRW	Sash rebate width
T	Tilt sash
TT	Tilt-turn window or door

Profile system manufacturers' information

It is important to observe the product information issued by the profile system manufacturers, especially information concerning construction and fabrication, maximum sash dimensions and weights and material features such as linear expansion of profiles.



PRÜFZEUGNIS
Test Certificate
DIN EN 13126-8:2006-05

Nr. /ns. 32-2/08

Der Firma
We confirm, that the manufacturer
Gretsch-Unitas GmbH Baubeschläge
D-71254 Ditzingen

wird bescheinigt, dass sie am
at the date of
24. Januar 2008

die Anforderungen der DIN EN 13126-8
meet the requirements of DIN EN 13126-8

für das Produkt
for the product
UNI-JET C

in der Ausführung
in the version
Drehkippbeschlag

entsprechend dem folgenden Klassifikationsschlüssel erfüllt hat:
that complies with the classification

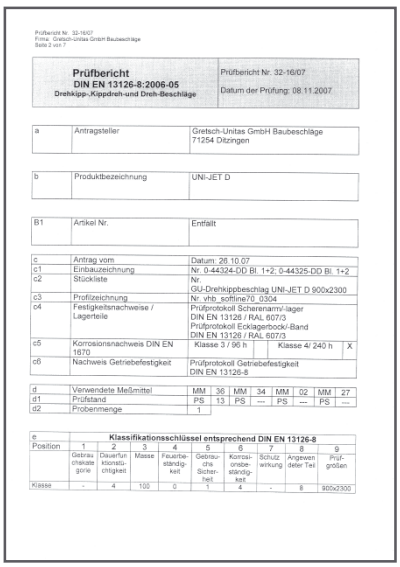
Gebrauchskategorie	Dauerfunktionstüchtigkeit	Masse	Feuerbeständigkeit	Gebrauchssicherheit	Korrosionsbeständigkeit	Schutzwirkung	Angewendete Teilprüfungen	Prüfgrößen
-	4	080	0	1	4	-	8	1300x1200

Diesem Prüfzeugnis liegt der Prüfbericht Nr. 32-2/08 des PIV als Beurteilungsgrundlage zugrunde. Die Gültigkeit des Prüfzeugnisses bleibt so lange erhalten, wie sich die Prüfgrundlage und /oder das geprüfte Produkt nicht ändern.

42551 Velbert, den 29. Januar 2008

R. Ehle

Test certificate UNI-JET C



Prüfbericht
DIN EN 13126-8:2006-05
Drehkipp-,Kippdreh-und Dreh-Beschläge

Prüfbericht Nr. 32-16/07
Datum der Prüfung: 08.11.2007

a	Antragsteller	Gretsch-Unitas GmbH Baubeschläge 71254 Ditzingen
b	Produktbezeichnung	UNI-JET D
B1	Artikel Nr.	Entfällt
c	Antrag vom	Datum: 26.10.07
c1	Einbauzeichnung	Nr. 0-44324-DD Bl. 1+2; 0-44325-DD Bl. 1+2
c2	Stückliste	Nr. GU-Drehkippbeschlag UNI-JET D 900x2300
c3	Profilzeichnung	Nr. vhb_softline70_0304
c4	Festigkeitsnachweise / Lagerteile	Prüfprotokoll Scherenarm/-lager DIN EN 13126 / RAL 607/3 Prüfprotokoll Ecklagerbock/-Band DIN EN 13126 / RAL 607/3
c5	Korrosionsnachweis DIN EN 1670	Klasse 3 / 96 h / Klasse 4/ 240 h X
c6	Nachweis Getriebefestigkeit	Prüfprotokoll Getriebefestigkeit DIN EN 13126-8

d	Verwendete Meßmittel	MM	36	MM	34	MM	02	MM	27
d1	Prüfstand	PS	13	PS	---	PS	---	PS	---
d2	Probenmenge	1							

e — Klassifikationsschlüssel entsprechend DIN EN 13126-8

Position	1	2	3	4	5	6	7	8	9
	Gebrauchskategorie	Dauerfunktionstüchtigkeit	Masse	Feuerbeständigkeit	Gebrauchssicherheit	Korrosionsbeständigkeit	Schutzwirkung	Angewendete Teilprüfungen	Prüfgrößen
Klasse	-	4	100	0	1	4	-	8	900x2300

Test certificate UNI-JET D

Tilt-turn, first tilt, side hung and tilt sash fittings for aluminium windows and patio doors

Application of locking mechanisms

Locking mechanisms for schemes A to E

Resistance class/ Opening method	No. of sashes	Gear Backset 15 mm, Gear position	Gear lockable backset mm	Sash rebate width SRW mm	Sash rebate height SRH mm	Standard working drawing
"Basic security"						
Tilt-turn sash	1	fixed	25 up to 50	280-1600	350-2350	0-44324
Tilt-turn sash	2	fixed	25 up to 50	401-1600	451-2350	0-44324
Side hung sash	1	fixed	25 up to 50	280-1600	451-2350	0-44324
Side hung sash	2	fixed	25 up to 50	280-1600	451-2350	0-44324
Inactive sash	2	fixed		280-1600	470-2350	0-44348
"Ahs Standard RAL RG 607/13"						
Tilt-turn sash	1	fixed	25 up to 50	401-1600	451-2350	0-44324
Tilt-turn sash	2	fixed	25 up to 50	401-1600	451-2350	0-44324
Side hung sash	1	fixed	25 up to 50	401-1600	451-2350	0-44324
Side hung sash	2	fixed	25 up to 50	401-1600	451-2350	0-44324
Inactive sash	2	fixed		401-1600	470-2350	0-44348
"Ahs Extra RAL RG 607/13"						
Tilt-turn sash	1	fixed	25 up to 50	401-1600	451-2350	0-44324
Tilt-turn sash	2	fixed	25 up to 50	401-1600	451-2350	0-44324
Side hung sash	1	fixed	25 up to 50	401-1600	451-2350	0-44324
Side hung sash	2	fixed	25 up to 50	401-1600	451-2350	0-44324
Inactive sash	2	fixed		401-1600	470-2350	0-44348
"WK 2 to ENV 1627"						
Tilt-turn sash	1	fixed	25 up to 50	401-1600	451-2350	0-44324
Tilt-turn sash	2	fixed	25 up to 50	401-1600	451-2350	0-44324
Side hung sash	1	fixed	25 up to 50	401-1600	451-2350	0-44324
Side hung sash	2	fixed	25 up to 50	401-1600	451-2350	0-44324
Inactive sash	2	fixed		401-1600	470-2350	0-44348
"Basic security"						
Tilt-turn sash	1	variable	25 up to 50	401-1600	480-2450	0-44324
Tilt-turn sash	2	variable	25 up to 50	401-1600	480-2450	0-44324
Side hung sash	1	variable	25 up to 50	280-1600	480-2450	0-44324
Side hung sash	2	variable	25 up to 50	280-1600	480-2450	0-44324
Inactive sash	2	variable		280-1600	741-2450	0-44348
"Ahs Standard RAL RG 607/13"						
Tilt-turn sash	1	variable	25 up to 50	401-1600	480-2450	0-44324
Tilt-turn sash	2	variable	25 up to 50	401-1600	480-2450	0-44324
Side hung sash	1	variable	25 up to 50	401-1600	480-2450	0-44324
Side hung sash	2	variable	25 up to 50	401-1600	480-2450	0-44324
Inactive sash	2	variable		401-1600	741-2450	0-44348
"Ahs Extra RAL RG 607/13"						
Tilt-turn sash	1	variable	25 up to 50	401-1600	480-2450	0-44324
Tilt-turn sash	2	variable	25 up to 50	401-1600	480-2450	0-44324
Side hung sash	1	variable	25 up to 50	401-1600	480-2450	0-44324
Side hung sash	2	variable	25 up to 50	401-1600	480-2450	0-44324
Inactive sash	2	variable		401-1600	741-2450	0-44348
"WK 2 to ENV 1627"						
Tilt-turn sash	1	variable	25 up to 50	401-1600	480-2450	0-44324
Tilt-turn sash	2	variable	25 up to 50	401-1600	480-2450	0-44324
Side hung sash	1	variable	25 up to 50	401-1600	480-2450	0-44324
Side hung sash	2	variable	25 up to 50	401-1600	480-2450	0-44324
Inactive sash	2	variable		401-1600	741-2450	0-44348
"Basic security"						
Tilt sash gears	1	variable		591-1950	-1600	0-44396

Tilt-turn, first tilt, side hung and tilt sash fittings for aluminium windows and patio doors

Application of hinge side hardware

Hinge side hardware types

Hinge side/ Opening method	Opening method	Rebate clearance mm	Sash weight max. kg	Space required on hinge side mm	Standard drawing	
UNI-JET C						
Tilt-turn sash	TT	12	80	17	0-44708	
First tilt sash	FT	12	80	17	0-44708	
Side hung sash	SH	12	80	17	0-44708	
Inactive sash	IS	12	80	17	0-44708	
Tilt sash	T	12	80	17		
UNI-JET C-130						
Tilt-turn sash	TT	12	130	17	0-44708	
First tilt sash	FT	12	130	17	0-44708	
Side hung sash	SH	12	130	17	0-44708	
Inactive sash	IS	12	130	17	0-44708	
UNI-JET D						
Tilt-turn sash	TT	12	100	20	0-44325	
Side hung sash	SH	12	100	20	0-44325	
Inactive sash	IS	12	100	20	0-44325	
Tilt sash	T	12	100	20		

Profile systems with 16 mm fitting groove

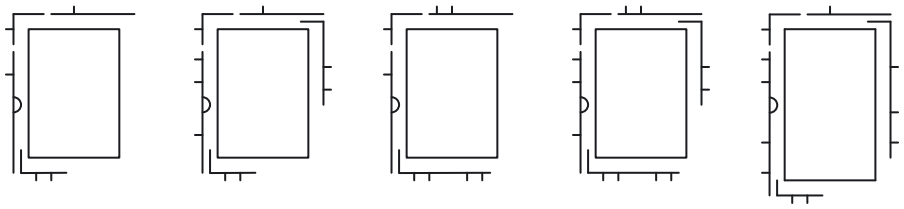
Profile manufacturer	Profile system	Sash overlap mm	Groove position mm	Fitting groove [1] undercut/plane	Frame groove	Frame groove Dim. A	Dim. B
Alco	Alousystem 550	20,0	13,0	U	14/18	1,5	4,0
Almaco		18,0	9,0	U	14/18		
Alumil	M 11000	18,0	9,0	U	14/18	1,5	3,5
	M 11500	18,0	9,0	U	14/18	1,5	3,5
	M 20000	18,0	9,0	U	14/18	1,5	3,5
Aluminco		20,0	9,0	U	14/18	1,5	3,5
Domal	Bright PA70S	18,0	9,0	U	14/18	1,5	3,5
Elvial	4300	18,0	9,0	U	14/18	1,5	4,0
	4600	18,0	9,0	U	14/18	1,5	4,0
	5400	18,0	9,0	U	14/18	1,5	4,0
	5600	18,0	9,0	U	14/18	1,5	4,0
	5700	18,0	9,0	U	14/18	1,5	4,0
Europa	5000	18,0	9,0	U	14/18	1,5	3,5
Etem	E40	20,0	9,0	U	14/18	2,0	4,0
Exalco	Albio 109C	18,0	9,0	U	14/18	1,3	3,9
Heroal	065 / 065i / 065f	18,0	9,0	U	10/14	2,0	4,3
	090 / 090S	18,0	9,0	U	10/14	2,0	4,3
	110 ES	18,0	9,0	U	10/14	2,0	4,3
Kawneer	Kalory	20,0	9,0	U	10/14		4,0
Nordall	78TTF	18,0	9,0	U	14/18	1,5	3,5
Ponzio	Windstop 55TT	18,0	9,0	U	14/18	2,0	4,0
TS-Aluminium	65	18,0	9,0	P	14/18	2,0	4,0

[1] U = undercut, P = plane

Tilt-turn, first tilt, side hung and tilt sash fittings for aluminium windows and patio doors

Tilt-turn windows and patio doors

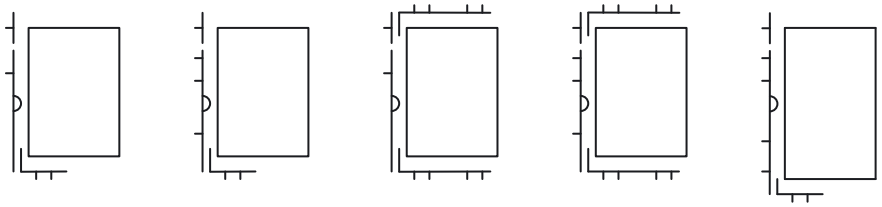
Fitting arrangements and sash sizes for schemes A to E



Fixed gear position, scheme	A	B	C	D	E
SRW (Sash rebate width, mm)	280-1450	280-1450	751-1600	751-1600	501-1200
SRH (Sash rebate height, mm)	350-1100	721-1850	350-1100	721-1850	1851-2350
Variable gear position, scheme	A	B	C	D	E
SRW (Sash rebate width, mm)	401-1450	401-1450	751-1600	751-1600	501-1200
SRH (Sash rebate height, mm)	480-1200	951-1950	480-1200	951-1950	1951-2450

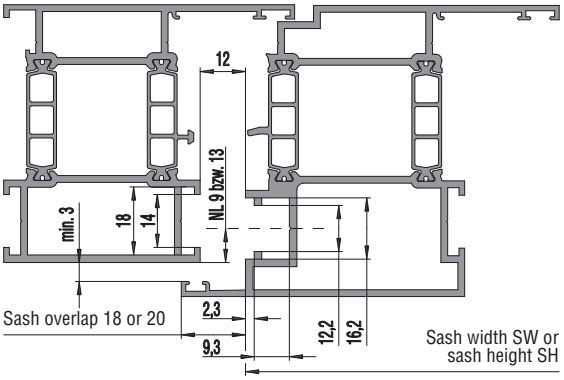
Side hung windows and patio doors

Fitting arrangements and sash sizes for schemes A to E

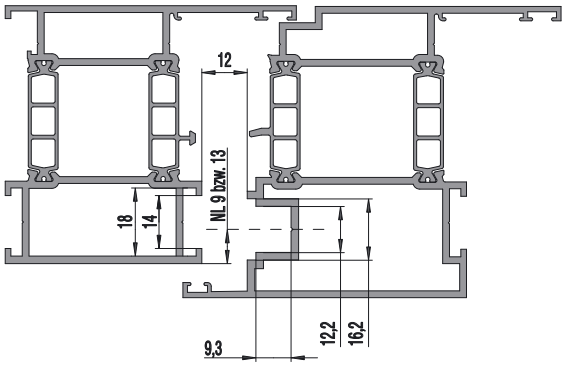


Fixed gear position, scheme	A	B	C	D	E
SRW (Sash rebate width, mm)	280- 750	280- 750	751-1600	751-1600	501-1200
SRH (Sash rebate height, mm)	451-1100	721-1850	451-1100	721-1850	1851-2350
Variable gear position, scheme	A	B	C	D	E
SRW (Sash rebate width, mm)	280- 750	280- 750	751-1600	751-1600	501-1200
SRH (Sash rebate height, mm)	480-1200	951-1950	480-1200	951-1950	1951-2450

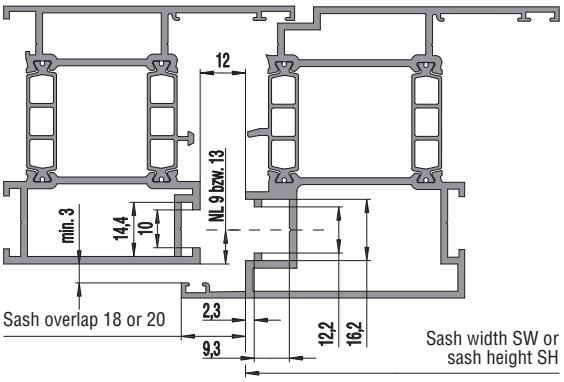
Assembly dimensions – frame and sash profile



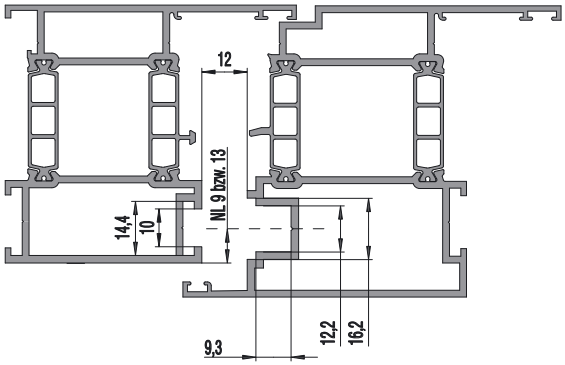
Frame and sash profile
Sash with undercut fitting groove 16 mm – groove position 9 or 13 mm
Frame groove 14/18



Frame and sash profile
Sash with plane fitting groove 16 mm – groove position 9 or 13 mm
Frame groove 14/18

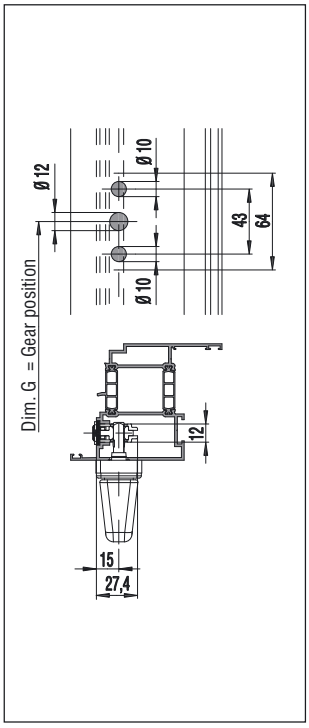


Frame and sash profile
Sashes with undercut fitting groove 16 mm – groove position 9 or 13 mm
Frame groove 10/14

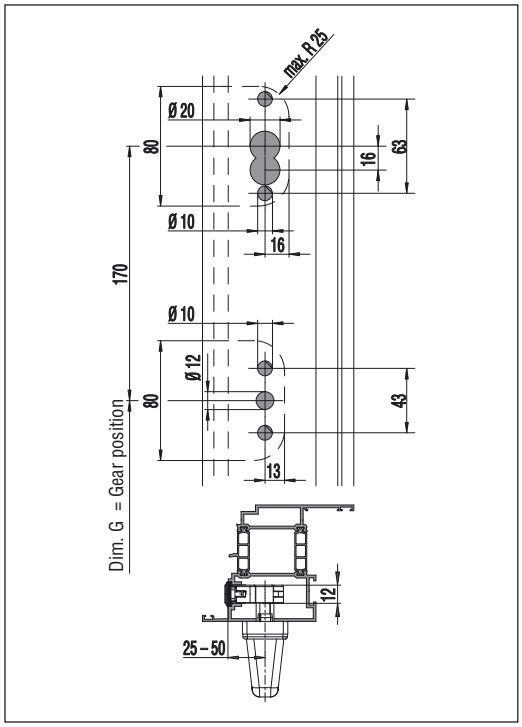


Frame and sash profile
Sashes with plane fitting groove 16 mm – groove position 9 or 13 mm
Frame groove 10/14

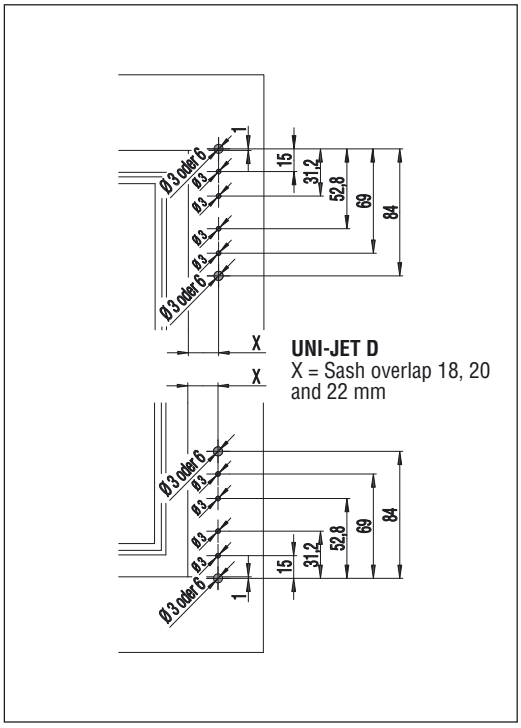
Drilling and milling dimensions



Dimensions for handles
Drilling jig 6-22459-00-0-0
Stop 9-27406-00-0-1

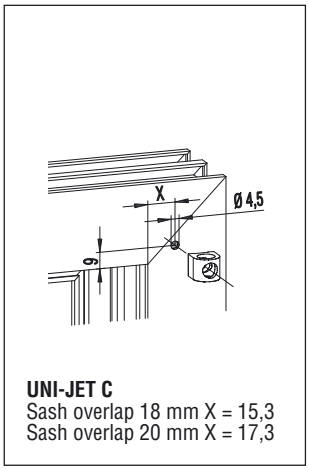


Dimensions for gears AP 25 up to AP 50
Drilling jig with stop 6-25156-00-0-9



UNI-JET D
X = Sash overlap 18, 20 and 22 mm

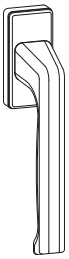
Dimensions for stay arm bearing and corner bearing
Drilling jig, drill Ø 3 mm 6-27412-03-0-0
Drilling jig, drill Ø 3 mm and 6 mm 6-27412-53-0-0



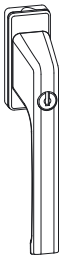
UNI-JET C
Sash overlap 18 mm X = 15,3
Sash overlap 20 mm X = 17,3

Dimensions for stay arm bearing 130 kg
Frame profile
Drilling jig
Sash overlap 18 mm 6-31951-00-0-6
Sash overlap 20 mm 6-33776-00-0-6

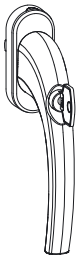
Handles DIRIGENT-F [1]



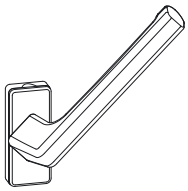
DIRIGENT-F
Spindle 25 6-28072-25-0-*
Spindle 29 6-28072-29-0-*



DIRIGENT-F/Z
with push button cylinder, all keys alike
Spindle 29 6-28075-29-0-*



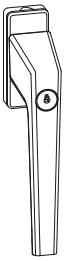
MODENA-F/Z 100 Nm [2]
for security windows and patio doors
Spindle 29 6-34397-29-0-*



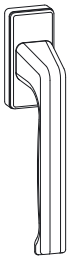
DIRIGENT-F/SP
with 45°position (only D) for slit ventilation
Spindle 29 6-28094-29-0-*

DIRIGENT-F/SG
Spindle 50 8-00694-50-0-7

Rosette/F
inside – flat
6-24913-00-0-*

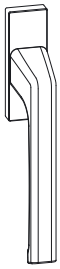


DIRIGENT-F First tilt
Spindle 29 6-31557-29-0-*

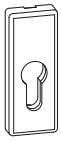


DIRIGENT-F
without spindle
6-28072-00-0-*

DIRIGENT-F/AF,
outside – flat
6-25223-00-0-*



DIRIGENT-F/A,
outside
6-25993-00-0-*



Rosette with CB inside
square K-17205-02-0-*
oval K-17204-02-0-*

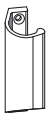
Rosette PZ/A outside
square 9-43605-02-0-*
oval 9-43582-02-0-*

Spindle
FD 56-68 9-26874-56-0-1
FD 69-80 9-26874-69-0-1

Inside/ outside operation
Countersunk screw M 5
FD 50-54 9-13255-60-0-1
FD 55-59 9-13255-65-0-1
FD 60-64 9-13255-70-0-1
FD 65-69 9-13255-75-0-1
FD 70-74 9-13255-80-0-1
FD 75-80 9-13255-85-0-1

Inside operation
Countersunk screw M 5
Spindle 25 9-13255-30-0-1
Spindle 29 9-13255-35-0-1

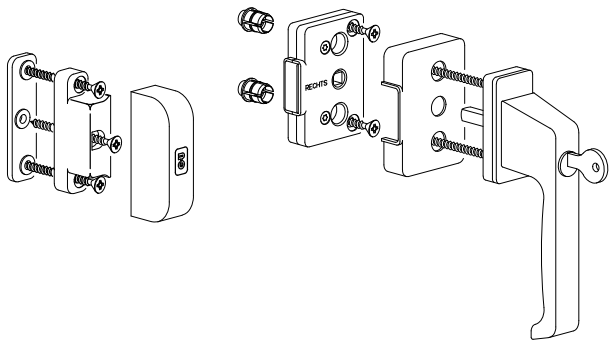
Knob lock
Backset 25 - 50 mm
K-13282-00-0-*



Pull handle outside
9-22921-00-0-*

[1] = More turn handles see part 3 of the present order catalogue.
[2] = Tested to DIN V EN V 1627 for resistance to pull-off and twist-off attempts at 100 Nm.

G.U Face fixed window lock



Box of face fixed window lock with turn handle DIRIGENT F/Z

EV 1	**K-14662-00-0-11**
dark brown	**K-14662-00-0-5**
white	**K-14662-00-0-7**

Contents of box

1 Turn handle DIRIGENT F/Z, lockable
1 Spindle 7 x 75 mm
1 Face fixed lock
1 Cover for face fixed lock
2 Sleeve for Ø 10 mm
2 Sleeve for Ø 12 mm
1 Strike box
1 Cover for strike box
1 Packing 3 mm
1 Packing 4 mm
1 Packing 5 mm
1 Packing 6 mm
7 Spax countersunk screw 5 x 55 mm

JET Slit ventilation catch

Slit ventilation catch

Cover

Catch plate

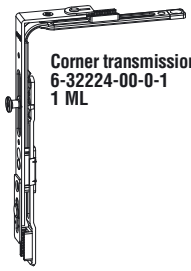
Fitting requirements JET Slit ventilation catch for aluminium windows

Quantity	Description	PU	Article No.
1	**JET Slit ventilation catch**, with sash overlap	10	K-12223-90-0-*
1	**JET Slit ventilation catch**, without sash overlap	10	K-12216-90-0-*
	Drilling jig	1	6-23861-00-0-0

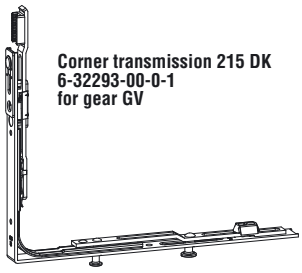
Working drawing 0-38928

Corner transmissions

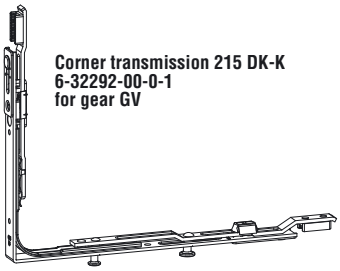
Corner transmission S
6-32238-00-0-1
1 ML



Corner transmission SLK
6-32224-00-0-1
1 ML

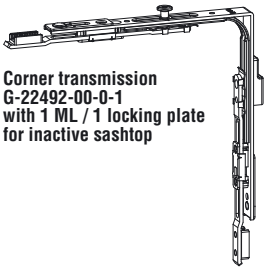


Corner transmission 215 DK
6-32293-00-0-1
for gear GV



Corner transmission 215 DK-K
6-32292-00-0-1
for gear GV

Corner transmission
6-26743-00-0-1
without ML



Corner transmission
G-22492-00-0-1
with 1 ML / 1 locking plate
for inactive sashtop

Wedge
9-41796-00-0-1
for locks and
corner transmissions

Lifting stop 90°
9-33432-00-0-1

Wedge
9-41796-00-0-1
for locks and
corner transmissions

Lifting stop 90°
9-33432-00-0-1

Wrong operation safety device (WOSD), sash positioner, wedge plates

WOSD with stop clip
Groove position 9 mm
lh. 6-31657-09-L-1
rh. 6-31657-09-R-1
Groove position 13 mm
lh. 6-31657-13-L-1
rh. 6-31657-13-R-1

Sash positioner with
WOSD
6-29987-00-0-1

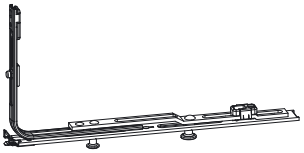
Wedge plate
16 mm fitting groove
9-40477-00-0-1

Wedge plate
Rebate shoot bolt ZH
9-40149-00-0-1

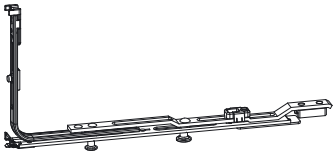
Wedge plate
Frame groove 14/18
9-41776-00-0-1
Frame groove 10/14
9-41775-00-0-1

Optional parts for gears

Bottom lock 116 DK
6-33374-00-0-1

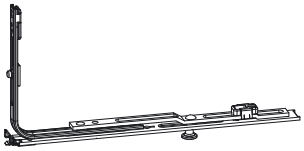


Bottom lock 215 DK
6-32012-00-0-1

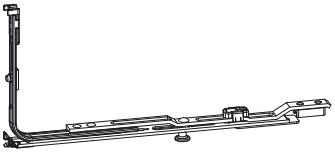


Bottom lock 215 DK-K
6-32013-00-0-1

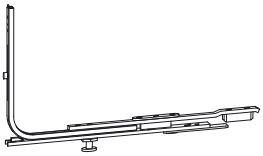
Lifting stop 90°
9-33432-00-0-1



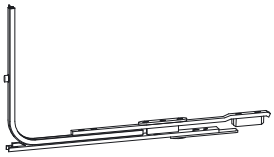
Bottom lock 215
6-32010-00-0-1



Bottom lock 215 K
6-32011-00-0-1



Bottom lock K 160.2 Se
6-28604-00-0-1
Steel mushroom pin



Corner transmission 160
6-26744-00-0-1

Fixing plate 40 mm
9-35697-00-0-1

Fixing plate 80 mm
without wedge 9-39386-00-0-1
with wedge 9-42373-00-0-1

Wedge – ST 68 mm
9-35380-68-0-0

Wedge
9-41796-00-0-1
for locks and
corner transmissions

Wedge plate – rebate clearance 12 mm
6-24201-01-0-1

Optional parts for gears

Gear 15 GK
SRH 1601-1850 mm
Forend 1690 mm
Gear pos. 980 mm
6-33009-00-0-1

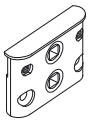
Extension 500
6-32142-00-0-1

Extension 250
8-00625-00-0-1

Extension 500 Se
6-29858-00-0-1
Steel mushroom pin

Extension 500
G-21040-00-0-1

Locking plate
9-30256-00-0-1
alternatively:
Locking plate Se
E-19813-00-0-1



Gear - 5
Overlap mm
15 6-31094-15-0-1
18 6-31094-18-0-1

Countersunk screw
M 5 x 22
9-13255-22-0-1

Extension piece without ML – 90°
6-32624-00-0-1

Extension piece without ML – 180°
6-32303-00-0-1

Extension piece with ML – 90°
6-32104-00-0-1

Extension piece with ML – 180°
6-32105-00-0-1

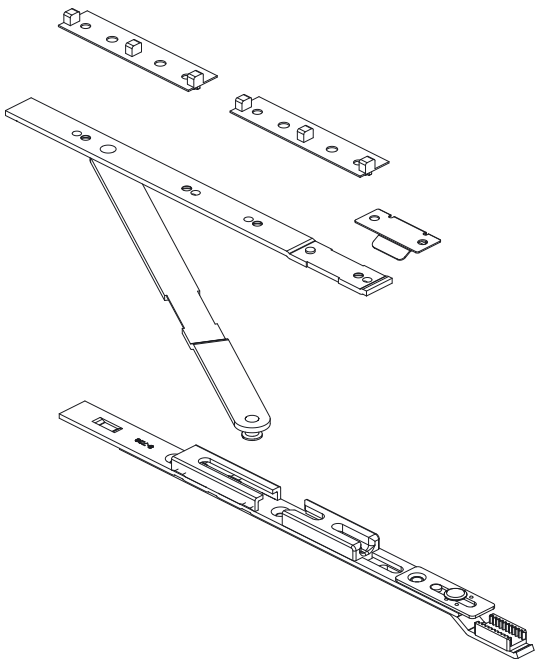
Tilt-locking plate
for frame groove 14/18
9-41778-00-0-1

Extension piece, bottom with tilt function
SRH mm
480- 590 6-32155-01-0-1
591- 950 6-32155-02-0-1
951-2450 6-32155-03-0-1

Rod guide aluminium
0-1198A-00-0-0

Logo clip
E-21062-00-0-6
for gears
(Manufacturer logo on request)

Optional parts for double stay arms



Stay arm connecting plate and additional stay arm for tilt-turn sashes [1] acc. to sash width for schemes A to D – at UNI-JET C with sash weight over 100 kg

Qty. A	B	C	D	Description			PU	Article No.	
				Stay arm / Add. stay arm SRW [1]	Forend	ML		**Stay arm**	**Add. stay arm**
1	1	1	1	1201-1450	1290	1	10	6-31512-10-0-1	8-00734-00-0-1
		1	1	1451-1600	1290	1	10	6-31512-12-0-1	8-00734-00-0-1
1	1	1	1	**Packing** for additional stay arm					
				Groove position 9			100	E-20048-10-0-0	
				Groove position13			100	E-20048-55-0-0	

Stay arm connecting plate and additional stay arm for first tilt sashes [1] acc. to sash width for schemes A to D – at UNI-JET C with sash weight over 100 kg

Qty. A	B	C	D	Description			PU	Article No.	
				Stay arm / Add. stay arm SRW [1]	Forend	ML		**Stay arm**	**Add. stay arm**
1	1	1	1	1201-1450	1290	1	10	6-31512-10-0-1	G-45995-00-0-1
		1	1	1451-1600	1290	1	10	6-31512-12-0-1	G-45995-00-0-1
1	1	1	1	**Packing** for additional stay arm					
				Groove position 9			100	E-20048-10-0-1	
				Groove position13			100	E-20048-55-0-1	

UNI-JET C – Assembly according to working drawing 0-44708
[1] = Generally required: sash rebate width SWR over 1301 mm and sash weight over 100 kg

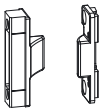
Slit ventilation spring – SRW 500-750 mm – opening width approx. 21 mm
DIN lh 9-42768-33-L-1
DIN rh 9-42768-33-R-1

Slit ventilation spring – SRW 751-1600 mm – opening width approx. 14 and 26 mm
9-41750-63-0-1

Opening restrictor
8-00775-00-0-1

Optional parts for UNI-JET C and D

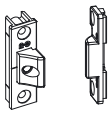
Middle hinges



Middle hinge made of PVC concealed

Groove position 9 Frame groove 14/18
Dim. "B" 3,5 mm K-16598-00-0-1
Dim. "B" 4,0 mm K-16599-00-0-1

Groove position 9 Frame groove 10/14
Dim. "B" 3,5 mm K-17677-00-0-1



Middle hinge concealed, adjustable

Sash part, adjustable 6-34229-00-0-1

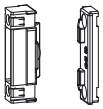
Frame part

Groove position 9 Frame groove 14/18
Dim. "B" 3,5 mm 9-40871-07-0-1
Dim. "B" 4,0 mm 9-40871-08-0-1

Groove position 9 Frame groove 10/14
9-40871-09-0-1

Groove position 13 Frame groove 14/18
Dim. "B" 3,5 mm 9-40565-15-0-1
Dim. "B" 4,0 mm 9-40565-14-0-1

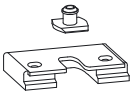
Groove position 13 Frame groove 10/14
9-40565-13-0-1



Middle hinge of zinc concealed, adjustable

Groove position 9, frame groove 14/18
Sash part, adjustable 6-29211-00-0-1
Frame part 9-41959-00-0-1

Optional parts for security fittings



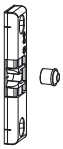
Passive anti-lifting security device

Mushroom pin for rebate clearance:
12 mm 9-32103-00-0-1
13 mm 9-32102-00-0-1

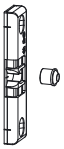
Mushroom pin locking plate
6-25000-00-0-1

Anti-drill escutcheon
9-41749-00-0-0
for gear 15

Door catches



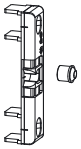
Door catch
Gr. pos. 9 K-17044-00-0-1
1 Door catch
1 Roller



Door catch
Gr. pos. 13 K-17117-00-0-1
1 Door catch
1 Roller

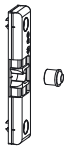
Packing for door catch
Gr. pos. 9 E-20048-10-0-1
Gr. pos. 13 E-20048-55-0-1

Fitting groove 16 mm



Door catch
K-17228-00-0-1
1 Door catch
1 Roller

Rebate shoot bolt ZH



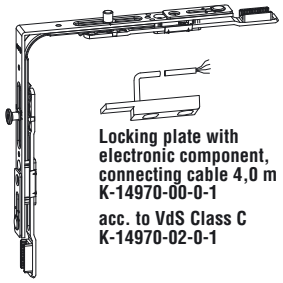
Door catch
K-17229-00-0-1
1 Door catch
1 Roller

Shoot bolts

bottom
6-22916-00-0-1

top
6-22917-00-0-1

Accessories for alarm systems



Locking plate with electronic component, connecting cable 4,0 m
K-14970-00-0-1

acc. to VdS Class C
K-14970-02-0-1

Corner transmission
1 mushroom pin – 1 magnetic pin
6-32093-00-0-1

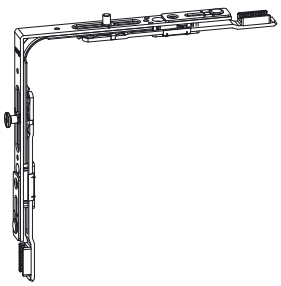
acc. to VdS Class C
6-32093-01-0-1

Extension 500
1 magnetic pin
6-32826-00-0-1

Extension 131
1 magnetic pin
6-33822-00-0-1

Working drawing 0-44518

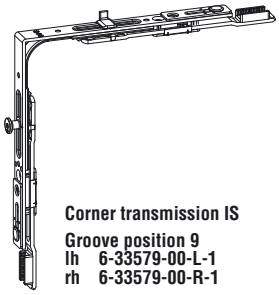
Integrated slit ventilation IS



Corner transmission IS
lh 6-32087-00-L-1
rh 6-32087-00-R-1

Packing
on request

Locking plate IS
lh G-13261-00-L-1
rh G-13261-00-R-1



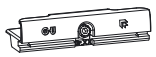
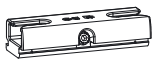
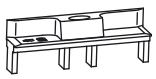
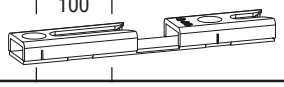
Corner transmission IS

Groove position 9
lh 6-33579-00-L-1
rh 6-33579-00-R-1

Groove position 13
lh 6-33580-00-L-1
rh 6-33580-00-R-1

Locking plate IS
on request

Locking plates

Description	Dim.	Length mm	Illustration	Groove position 9 Frame groove 14/18	Groove position 9 Frame groove 10/14	Groove position 13 Frame groove 14/18	Groove position 13 Frame groove 10/14
Standard locking plate Frame – zinc to clamp	A = 2,0 A = 1,5	55 55		6-32628-00-0-1 6-32628-01-0-1	6-32628-00-0-1 6-32628-01-0-1	6-33278-00-0-1 6-33278-01-0-1	6-33278-00-0-1 6-33278-01-0-1
Standard locking plate Frame – zinc screw-on version	B = 4,0 B = 3,5	55 55 55		9-45219-14-0-1 9-45219-15-0-1	 9-45219-10-0-1		
Mushroom locking plate Se Frame – steel	B = 4,0 B = 3,5	55 55 55		6-27674-48-0-1 6-27674-49-0-1	 6-27674-62-0-1	 6-33398-00-0-1	 6-27831-44-0-1
Mushroom locking plate Ahs Frame – zinc to clamp	B = 4,0 B = 3,5	55 55 55		6-32225-14-0-1 6-32225-15-0-1	 6-32225-10-0-1		
Locking plate for false mullion Fitting groove 16 mm – zinc		55		E-13534-12-0-1	E-13534-12-0-1	E-13534-12-0-1	E-13534-12-0-1
Locking plate for false mullion Se Fitting groove 16 mm – steel		55		6-27831-52-0-1	6-27831-52-0-1	6-27831-52-0-1	6-27831-52-0-1
Locking plate for shoot bolts Frame – zinc to clamp		33		6-30961-00-0-1	6-30961-00-0-1	G-19658-03-0-1	G-19658-03-0-1
Mushroom locking plate Se first tilt Frame – steel Packing		100		6-32668-00-0-1 E-20048-10-0-1	6-32668-00-0-1 E-20048-10-0-1	6-32668-00-0-1 E-20048-55-0-1	6-32668-00-0-1 E-20048-55-0-1

Window friction stay EGO-B, EGO-FL

Window friction stay EGO-B, EGO-FL

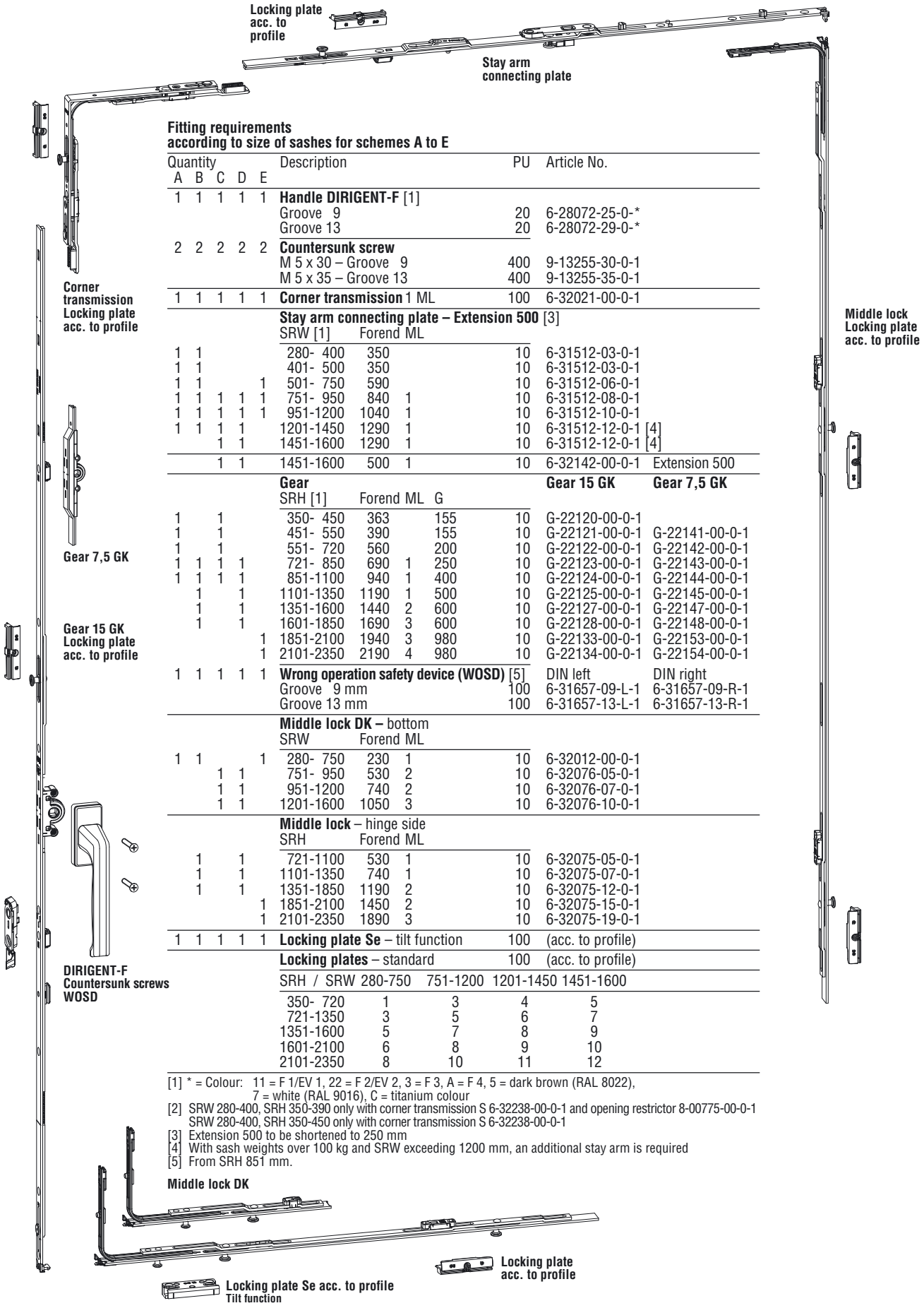
Description	SWR mm	PU	Article No.
Window friction stay EGO-B			
with sash restrictor from 5°	500-750	20	6-28835-01-0-1
and max. opening angle 90°	751-	20	6-28835-00-0-1
for tilt-turn and side hung			
Window friction stay EGO-FL			
max. opening angle 90°,	500-750	20	6-28730-01-0-1
with swing free function up to 85°	751-	20	6-28730-00-0-1
when opening and constant swing free function when closing the sash, for tilt-turn and side hung sashes			

Window friction stay EGO-B, EGO-FL Bag of profile accessories

Description	PU	Article No.
Profile systems with frame groove 14/18, 12/15, 10/14 and sash groove 15/20 resp. fitting groove 16 mm		
Akotherm, Alco, Almaco, Alumil, Aluminco Brökelmann Domal Elvial, Erbslöh, Etem, Europa, Exalco Heroal Kawneer, Kubal Menziken Nordall Ponzio Redal, Remy Claeys, Reynolds Sykon Thyssen Schulte, TS-Aluminium VAW	20	K-14686-00-0-1
Profile systems		
Hartmann, Hueck MKF TKI Schüco	20	K-14684-00-0-1
Profile system		
Wicona	20	K-14685-00-0-1

Fixed gear position, groove position 9 and 13 mm

Basic security



Fitting requirements according to size of sashes for schemes A to E

Quantity A	B	C	D	E	Description	PU	Article No.	
1	1	1	1	1	**Handle DIRIGENT-F** [1]			
					Groove 9	20	6-28072-25-0-*	
					Groove 13	20	6-28072-29-0-*	
2	2	2	2	2	**Countersunk screw**			
					M 5 x 30 – Groove 9	400	9-13255-30-0-1	
					M 5 x 35 – Groove 13	400	9-13255-35-0-1	
1	1	1	1	1	**Corner transmission** 1 ML	100	6-32021-00-0-1	
					Stay arm connecting plate – Extension 500 [3]			
					SRW [1] Forend ML			
1	1				280- 400 350	10	6-31512-03-0-1	
1	1				401- 500 350	10	6-31512-03-0-1	
1	1			1	501- 750 590	10	6-31512-06-0-1	
1	1	1	1	1	751- 950 840 1	10	6-31512-08-0-1	
1	1	1	1	1	951-1200 1040 1	10	6-31512-10-0-1	
1	1	1	1		1201-1450 1290 1	10	6-31512-12-0-1 [4]	
		1	1		1451-1600 1290 1	10	6-31512-12-0-1 [4]	
		1	1		1451-1600 500 1	10	6-32142-00-0-1	Extension 500
					Gear		**Gear 15 GK**	**Gear 7,5 GK**
					SRH [1] Forend ML G			
1		1			350- 450 363 155	10	G-22120-00-0-1	
1		1			451- 550 390 155	10	G-22121-00-0-1	G-22141-00-0-1
1		1			551- 720 560 200	10	G-22122-00-0-1	G-22142-00-0-1
1	1	1	1		721- 850 690 1 250	10	G-22123-00-0-1	G-22143-00-0-1
1	1	1	1		851-1100 940 1 400	10	G-22124-00-0-1	G-22144-00-0-1
	1		1		1101-1350 1190 1 500	10	G-22125-00-0-1	G-22145-00-0-1
	1		1		1351-1600 1440 2 600	10	G-22127-00-0-1	G-22147-00-0-1
	1		1		1601-1850 1690 3 600	10	G-22128-00-0-1	G-22148-00-0-1
				1	1851-2100 1940 3 980	10	G-22133-00-0-1	G-22153-00-0-1
				1	2101-2350 2190 4 980	10	G-22134-00-0-1	G-22154-00-0-1
1	1	1	1	1	**Wrong operation safety device (WOSD)** [5]		DIN left	DIN right
					Groove 9 mm	100	6-31657-09-L-1	6-31657-09-R-1
					Groove 13 mm	100	6-31657-13-L-1	6-31657-13-R-1
					Middle lock DK – bottom			
					SRW Forend ML			
1	1			1	280- 750 230 1	10	6-32012-00-0-1	
		1	1		751- 950 530 2	10	6-32076-05-0-1	
		1	1		951-1200 740 2	10	6-32076-07-0-1	
		1	1		1201-1600 1050 3	10	6-32076-10-0-1	
					Middle lock – hinge side			
					SRH Forend ML			
	1		1		721-1100 530 1	10	6-32075-05-0-1	
	1		1		1101-1350 740 1	10	6-32075-07-0-1	
	1		1		1351-1850 1190 2	10	6-32075-12-0-1	
				1	1851-2100 1450 2	10	6-32075-15-0-1	
				1	2101-2350 1890 3	10	6-32075-19-0-1	
1	1	1	1	1	**Locking plate Se** – tilt function	100	(acc. to profile)	
					Locking plates – standard	100	(acc. to profile)	

SRH / SRW	280-750	751-1200	1201-1450	1451-1600
350- 720	1	3	4	5
721-1350	3	5	6	7
1351-1600	5	7	8	9
1601-2100	6	8	9	10
2101-2350	8	10	11	12

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4, 5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour

[2] SRW 280-400, SRH 350-390 only with corner transmission S 6-32238-00-0-1 and opening restrictor 8-00775-00-0-1
SRW 280-400, SRH 350-450 only with corner transmission S 6-32238-00-0-1

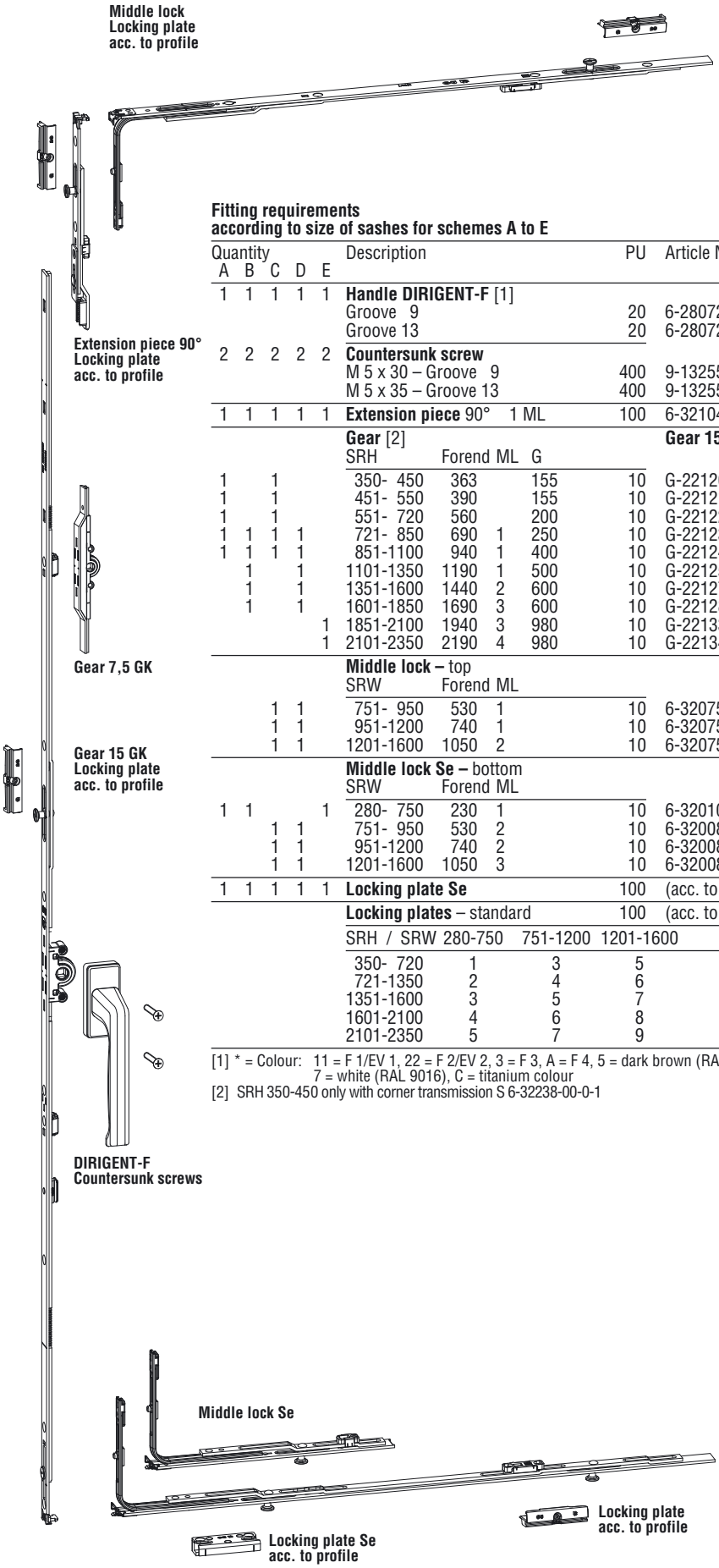
[3] Extension 500 to be shortened to 250 mm

[4] With sash weights over 100 kg and SRW exceeding 1200 mm, an additional stay arm is required

[5] From SRH 851 mm.

Fixed gear position, groove position 9 and 13 mm

Basic security



Fitting requirements
according to size of sashes for schemes A to E

Quantity A	B	C	D	E	Description	PU	Article No.	
1	1	1	1	1	**Handle DIRIGENT-F** [1]			
					Groove 9	20	6-28072-25-0-*	
					Groove 13	20	6-28072-29-0-*	
2	2	2	2	2	**Countersunk screw**			
					M 5 x 30 – Groove 9	400	9-13255-30-0-1	
					M 5 x 35 – Groove 13	400	9-13255-35-0-1	
1	1	1	1	1	**Extension piece** 90° 1 ML	100	6-32104-00-0-1	
					Gear [2] SRH / Forend / ML / G		**Gear 15 GK**	**Gear 7,5 GK**
1		1			350- 450 / 363 / / 155	10	G-22120-00-0-1	
1		1			451- 550 / 390 / / 155	10	G-22121-00-0-1	G-22141-00-0-1
1		1			551- 720 / 560 / / 200	10	G-22122-00-0-1	G-22142-00-0-1
1	1	1	1		721- 850 / 690 / 1 / 250	10	G-22123-00-0-1	G-22143-00-0-1
1	1	1	1		851-1100 / 940 / 1 / 400	10	G-22124-00-0-1	G-22144-00-0-1
	1		1		1101-1350 / 1190 / 1 / 500	10	G-22125-00-0-1	G-22145-00-0-1
	1		1		1351-1600 / 1440 / 2 / 600	10	G-22127-00-0-1	G-22147-00-0-1
	1		1		1601-1850 / 1690 / 3 / 600	10	G-22128-00-0-1	G-22148-00-0-1
				1	1851-2100 / 1940 / 3 / 980	10	G-22133-00-0-1	G-22153-00-0-1
				1	2101-2350 / 2190 / 4 / 980	10	G-22134-00-0-1	G-22154-00-0-1
					Middle lock – top SRW / Forend / ML			
		1	1		751- 950 / 530 / 1	10	6-32075-05-0-1	
		1	1		951-1200 / 740 / 1	10	6-32075-07-0-1	
		1	1		1201-1600 / 1050 / 2	10	6-32075-10-0-1	
					Middle lock Se – bottom SRW / Forend / ML			
1	1			1	280- 750 / 230 / 1	10	6-32010-00-0-1	
		1	1		751- 950 / 530 / 2	10	6-32008-05-0-1	
		1	1		951-1200 / 740 / 2	10	6-32008-07-0-1	
		1	1		1201-1600 / 1050 / 3	10	6-32008-10-0-1	
1	1	1	1	1	**Locking plate Se**	100	(acc. to profile)	
					Locking plates – standard	100	(acc. to profile)	

SRH / SRW	280-750	751-1200	1201-1600
350- 720	1	3	5
721-1350	2	4	6
1351-1600	3	5	7
1601-2100	4	6	8
2101-2350	5	7	9

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4, 5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour

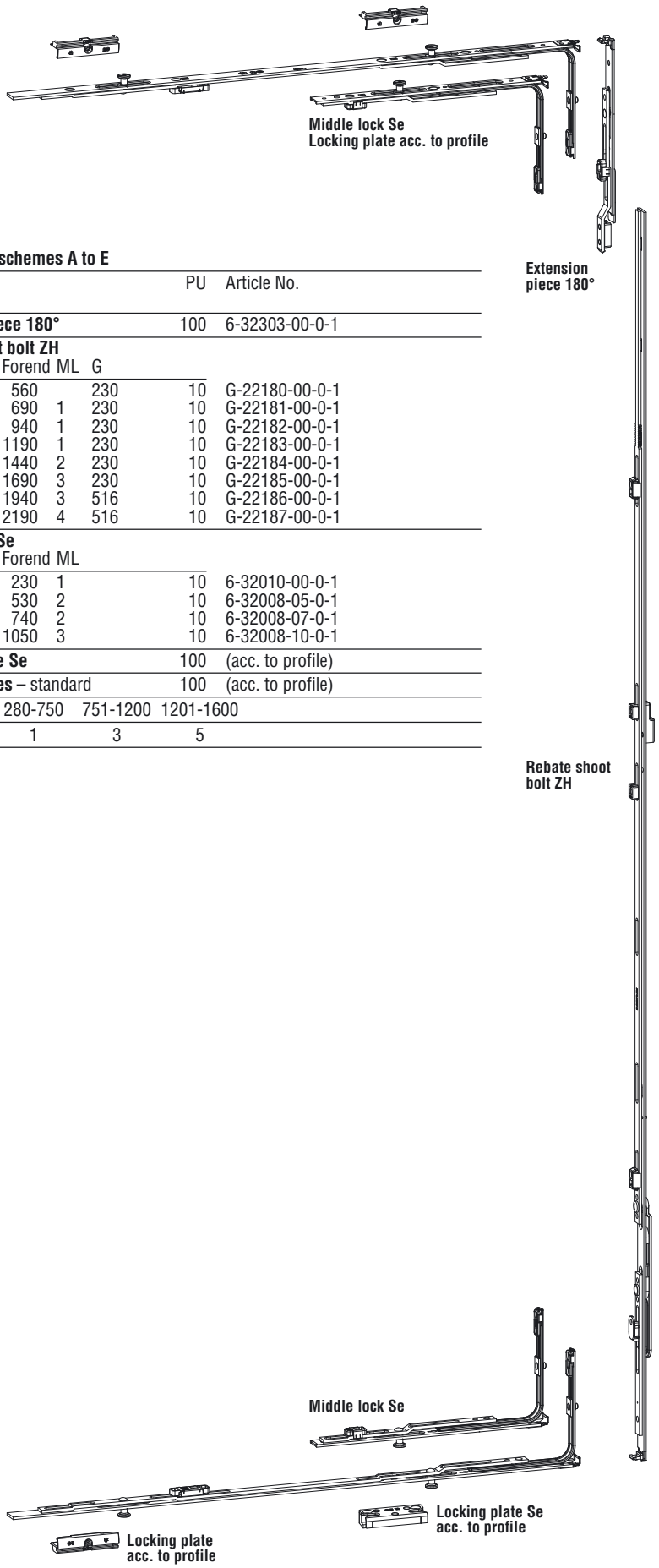
[2] SRH 350-450 only with corner transmission S 6-32238-00-0-1

Fixed gear position, groove position 9 and 13 mm

Basic security

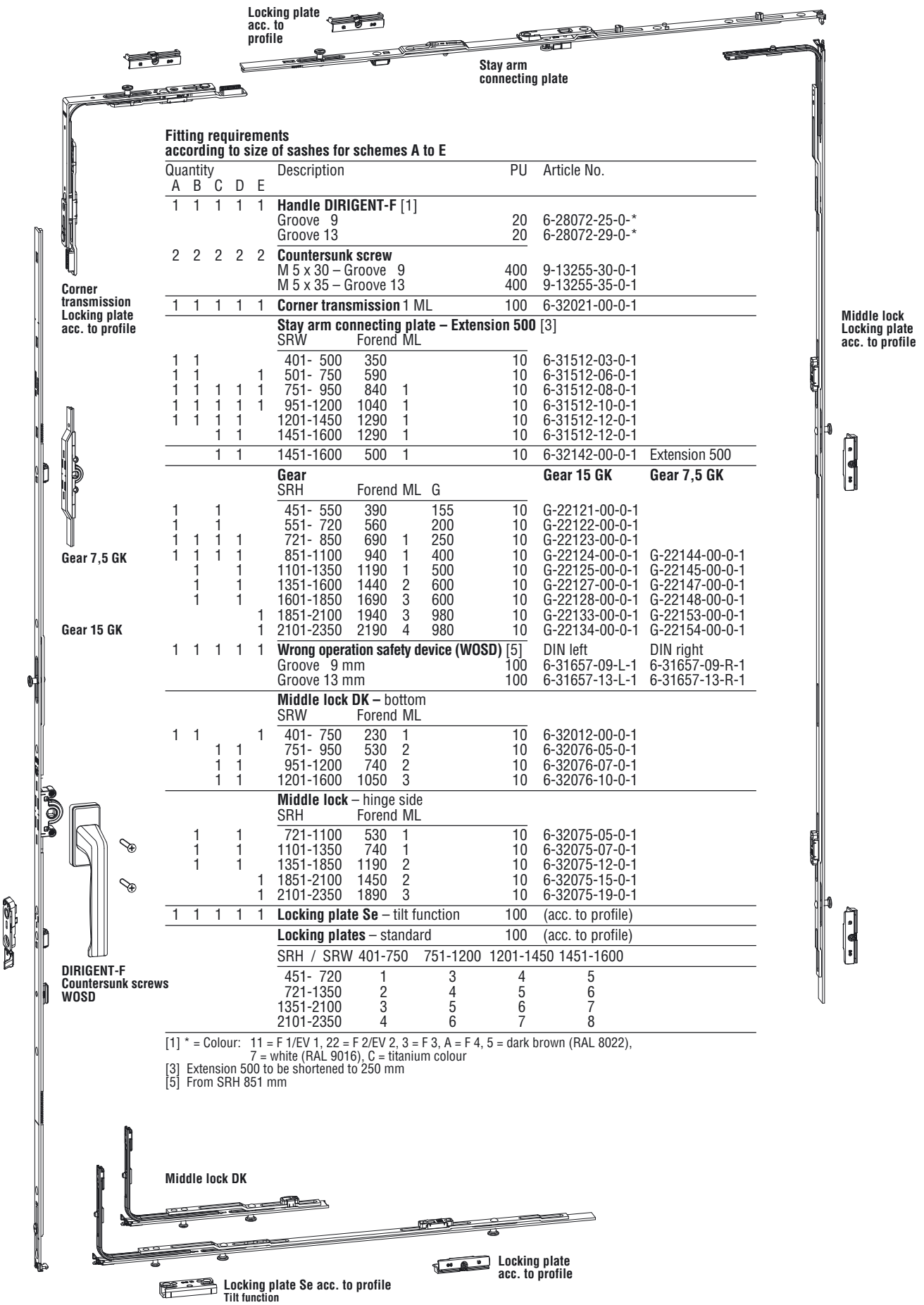
Fitting requirements
according to size of sashes for schemes A to E

Quantity A	B	C	D	E	Description				PU	Article No.
1	1	1	1	1	**Extension piece 180°**				100	6-32303-00-0-1
					Rebate shoot bolt ZH					
					SRH	Forend	ML	G		
1		1			470- 720	560		230	10	G-22180-00-0-1
1	1	1	1		721- 850	690	1	230	10	G-22181-00-0-1
1	1	1	1		851-1100	940	1	230	10	G-22182-00-0-1
	1		1		1101-1350	1190	1	230	10	G-22183-00-0-1
	1		1		1351-1600	1440	2	230	10	G-22184-00-0-1
	1		1		1601-1850	1690	3	230	10	G-22185-00-0-1
				1	1851-2100	1940	3	516	10	G-22186-00-0-1
				1	2101-2350	2190	4	516	10	G-22187-00-0-1
					Middle lock Se					
					SRW	Forend	ML			
2	2			2	280- 750	230	1		10	6-32010-00-0-1
		2	2		751- 950	530	2		10	6-32008-05-0-1
		2	2		951-1200	740	2		10	6-32008-07-0-1
		2	2		1201-1600	1050	3		10	6-32008-10-0-1
1	1	1	1	1	**Locking plate Se**				100	(acc. to profile)
					Locking plates – standard				100	(acc. to profile)
					SRH / SRW	280-750	751-1200	1201-1600		
					470-2350	1	3	5		



Fixed gear position, groove position 9 and 13 mm

Basic security



Fitting requirements according to size of sashes for schemes A to E

Quantity A	B	C	D	E	Description	PU	Article No.	
1	1	1	1	1	**Handle DIRIGENT-F** [1]			
					Groove 9	20	6-28072-25-0-*	
					Groove 13	20	6-28072-29-0-*	
2	2	2	2	2	**Countersunk screw**			
					M 5 x 30 – Groove 9	400	9-13255-30-0-1	
					M 5 x 35 – Groove 13	400	9-13255-35-0-1	
1	1	1	1	1	**Corner transmission** 1 ML	100	6-32021-00-0-1	
					Stay arm connecting plate – Extension 500 [3]			
					SRW Forend ML			
1	1				401- 500 350	10	6-31512-03-0-1	
1	1			1	501- 750 590	10	6-31512-06-0-1	
1	1	1	1	1	751- 950 840 1	10	6-31512-08-0-1	
1	1	1	1	1	951-1200 1040 1	10	6-31512-10-0-1	
1	1	1	1		1201-1450 1290 1	10	6-31512-12-0-1	
		1	1		1451-1600 1290 1	10	6-31512-12-0-1	
		1	1		1451-1600 500 1	10	6-32142-00-0-1	Extension 500
					Gear		**Gear 15 GK**	**Gear 7,5 GK**
					SRH Forend ML G			
1		1			451- 550 390 155	10	G-22121-00-0-1	
1		1			551- 720 560 200	10	G-22122-00-0-1	
1	1	1	1		721- 850 690 1 250	10	G-22123-00-0-1	
1	1	1	1		851-1100 940 1 400	10	G-22124-00-0-1	G-22144-00-0-1
	1		1		1101-1350 1190 1 500	10	G-22125-00-0-1	G-22145-00-0-1
	1		1		1351-1600 1440 2 600	10	G-22127-00-0-1	G-22147-00-0-1
	1		1		1601-1850 1690 3 600	10	G-22128-00-0-1	G-22148-00-0-1
				1	1851-2100 1940 3 980	10	G-22133-00-0-1	G-22153-00-0-1
				1	2101-2350 2190 4 980	10	G-22134-00-0-1	G-22154-00-0-1
1	1	1	1	1	**Wrong operation safety device (WOSD)** [5]		DIN left	DIN right
					Groove 9 mm	100	6-31657-09-L-1	6-31657-09-R-1
					Groove 13 mm	100	6-31657-13-L-1	6-31657-13-R-1
					Middle lock DK – bottom			
					SRW Forend ML			
1	1			1	401- 750 230 1	10	6-32012-00-0-1	
		1	1		751- 950 530 2	10	6-32076-05-0-1	
		1	1		951-1200 740 2	10	6-32076-07-0-1	
		1	1		1201-1600 1050 3	10	6-32076-10-0-1	
					Middle lock – hinge side			
					SRH Forend ML			
	1		1		721-1100 530 1	10	6-32075-05-0-1	
	1		1		1101-1350 740 1	10	6-32075-07-0-1	
	1		1		1351-1850 1190 2	10	6-32075-12-0-1	
				1	1851-2100 1450 2	10	6-32075-15-0-1	
				1	2101-2350 1890 3	10	6-32075-19-0-1	
1	1	1	1	1	**Locking plate Se** – tilt function	100	(acc. to profile)	
					Locking plates – standard	100	(acc. to profile)	

SRH / SRW	401-750	751-1200	1201-1450	1451-1600
451- 720	1	3	4	5
721-1350	2	4	5	6
1351-2100	3	5	6	7
2101-2350	4	6	7	8

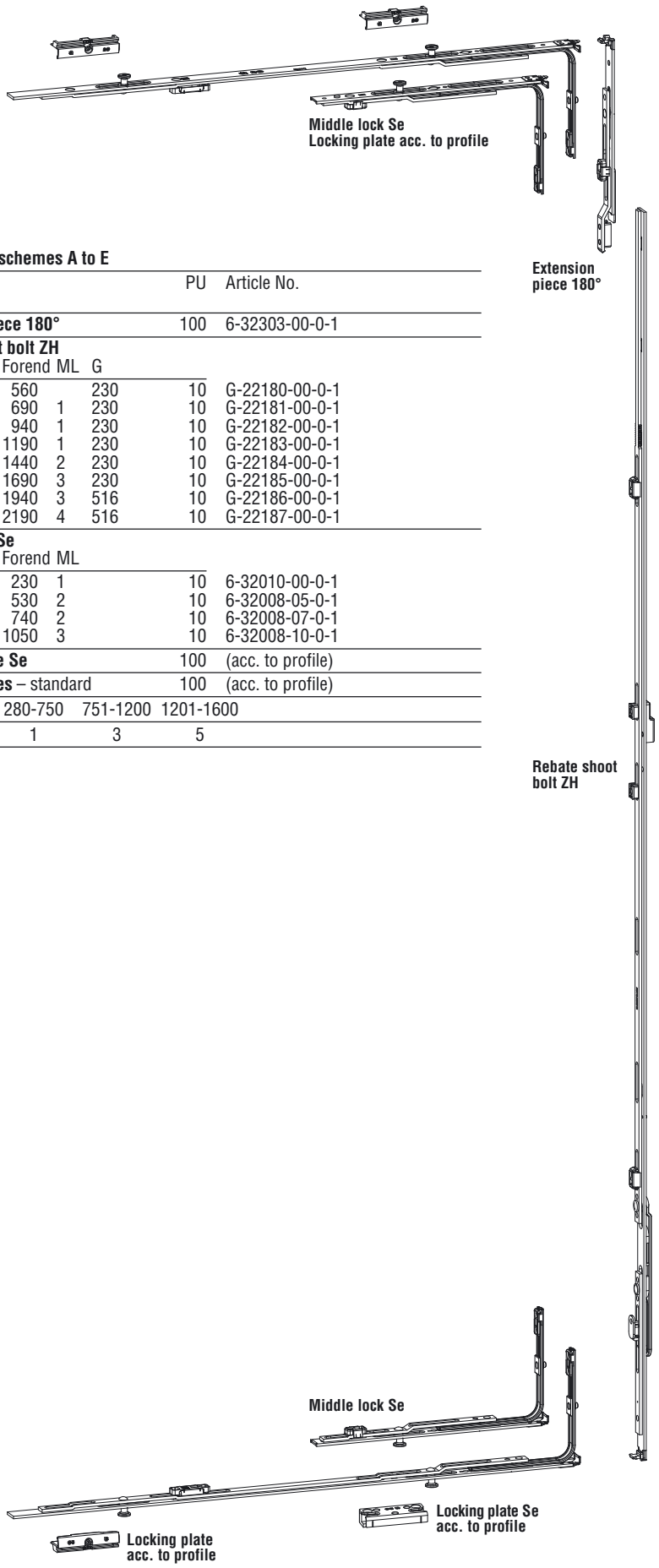
[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4, 5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour
[3] Extension 500 to be shortened to 250 mm
[5] From SRH 851 mm

Fixed gear position, groove position 9 and 13 mm

Basic security

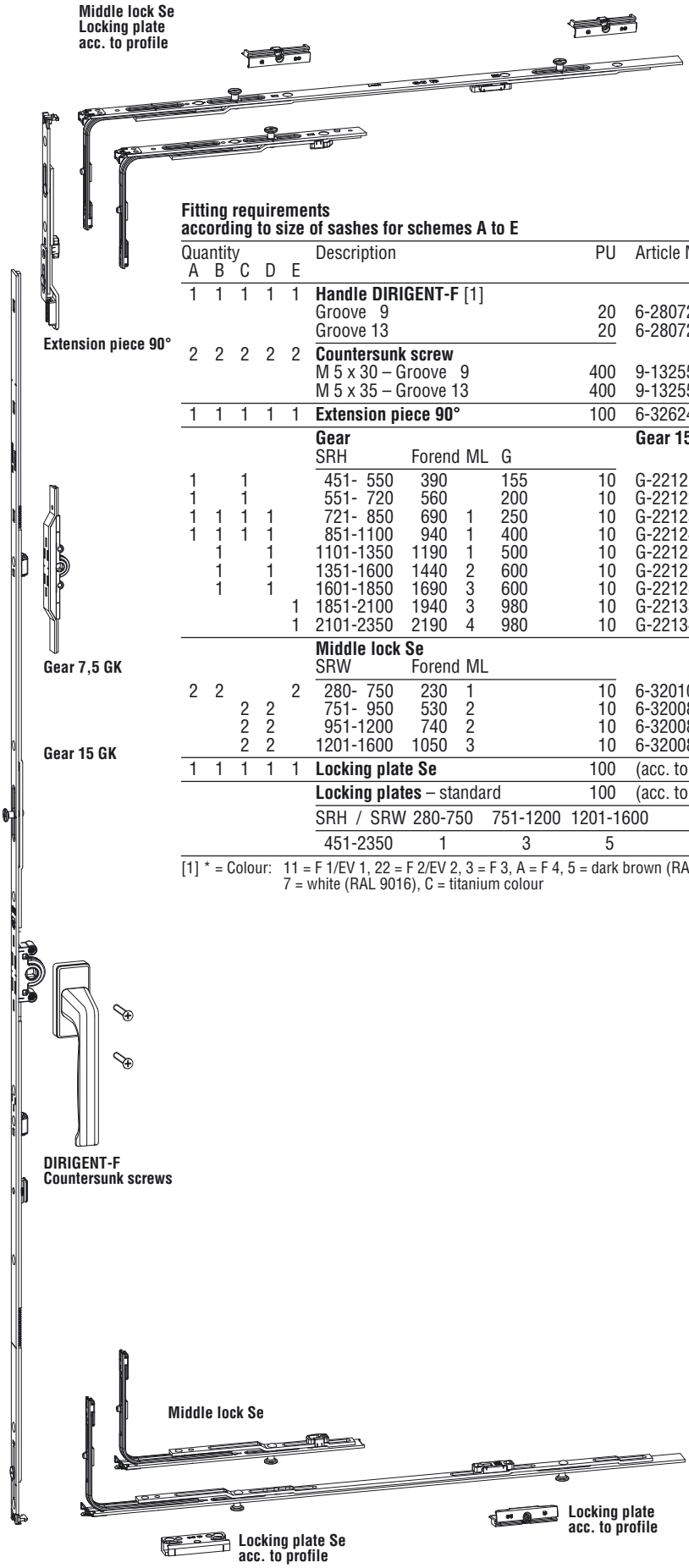
Fitting requirements
according to size of sashes for schemes A to E

Quantity A	B	C	D	E	Description				PU	Article No.
1	1	1	1	1	**Extension piece 180°**				100	6-32303-00-0-1
					Rebate shoot bolt ZH					
					SRH	Forend	ML	G		
1		1			470- 720	560		230	10	G-22180-00-0-1
1	1	1	1		721- 850	690	1	230	10	G-22181-00-0-1
1	1	1	1		851-1100	940	1	230	10	G-22182-00-0-1
	1		1		1101-1350	1190	1	230	10	G-22183-00-0-1
	1		1		1351-1600	1440	2	230	10	G-22184-00-0-1
	1		1		1601-1850	1690	3	230	10	G-22185-00-0-1
				1	1851-2100	1940	3	516	10	G-22186-00-0-1
				1	2101-2350	2190	4	516	10	G-22187-00-0-1
					Middle lock Se					
					SRW	Forend	ML			
2	2			2	280- 750	230	1		10	6-32010-00-0-1
		2	2		751- 950	530	2		10	6-32008-05-0-1
		2	2		951-1200	740	2		10	6-32008-07-0-1
		2	2		1201-1600	1050	3		10	6-32008-10-0-1
1	1	1	1	1	**Locking plate Se**				100	(acc. to profile)
					Locking plates – standard				100	(acc. to profile)
					SRH / SRW	280-750	751-1200	1201-1600		
					470-2350	1	3	5		



Fixed gear position, groove position 9 and 13 mm

Basic security



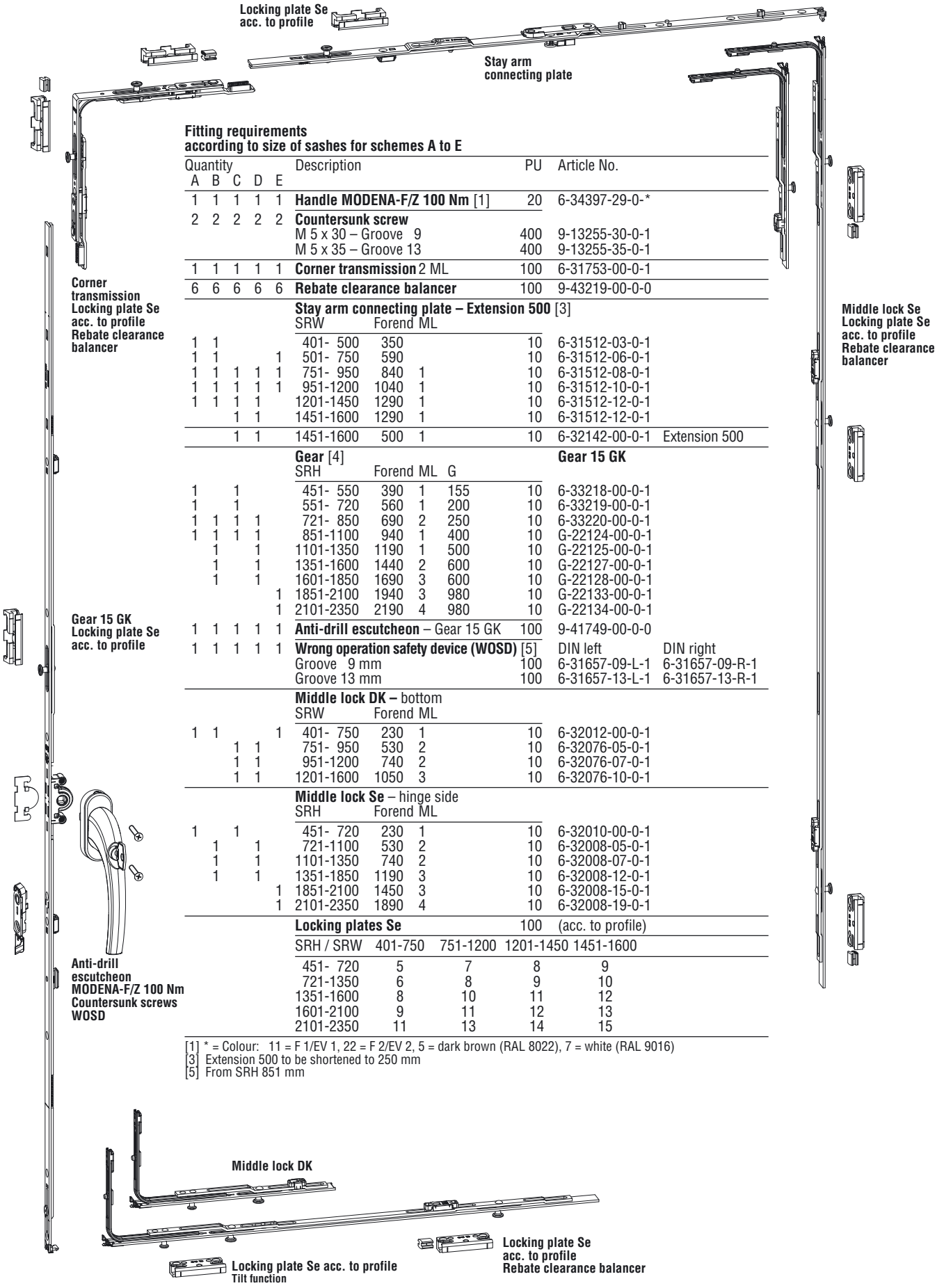
Fitting requirements
according to size of sashes for schemes A to E

Quantity A	B	C	D	E	Description				PU	Article No.	
1	1	1	1	1	**Handle DIRIGENT-F** [1]						
					Groove 9				20	6-28072-25-0-*	
					Groove 13				20	6-28072-29-0-*	
2	2	2	2	2	**Countersunk screw**						
					M 5 x 30 – Groove 9				400	9-13255-30-0-1	
					M 5 x 35 – Groove 13				400	9-13255-35-0-1	
1	1	1	1	1	**Extension piece 90°**				100	6-32624-00-0-1	
					Gear					**Gear 15 GK**	**Gear 7,5 GK**
					SRH	Forend	ML	G			
1		1			451- 550	390		155	10	G-22121-00-0-1	
1		1			551- 720	560		200	10	G-22122-00-0-1	
1	1	1	1		721- 850	690	1	250	10	G-22123-00-0-1	
1	1	1	1		851-1100	940	1	400	10	G-22124-00-0-1	G-22144-00-0-1
	1		1		1101-1350	1190	1	500	10	G-22125-00-0-1	G-22145-00-0-1
	1		1		1351-1600	1440	2	600	10	G-22127-00-0-1	G-22147-00-0-1
	1		1		1601-1850	1690	3	600	10	G-22128-00-0-1	G-22148-00-0-1
				1	1851-2100	1940	3	980	10	G-22133-00-0-1	G-22153-00-0-1
				1	2101-2350	2190	4	980	10	G-22134-00-0-1	G-22154-00-0-1
					Middle lock Se						
					SRW	Forend	ML				
2	2			2	280- 750	230	1		10	6-32010-00-0-1	
		2	2		751- 950	530	2		10	6-32008-05-0-1	
		2	2		951-1200	740	2		10	6-32008-07-0-1	
		2	2		1201-1600	1050	3		10	6-32008-10-0-1	
1	1	1	1	1	**Locking plate Se**				100	(acc. to profile)	
					Locking plates – standard				100	(acc. to profile)	
					SRH / SRW	280-750	751-1200	1201-1600			
					451-2350	1	3	5			

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4, 5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour

Fixed gear position, groove position 9 and 13 mm

WK 2



Fitting requirements according to size of sashes for schemes A to E

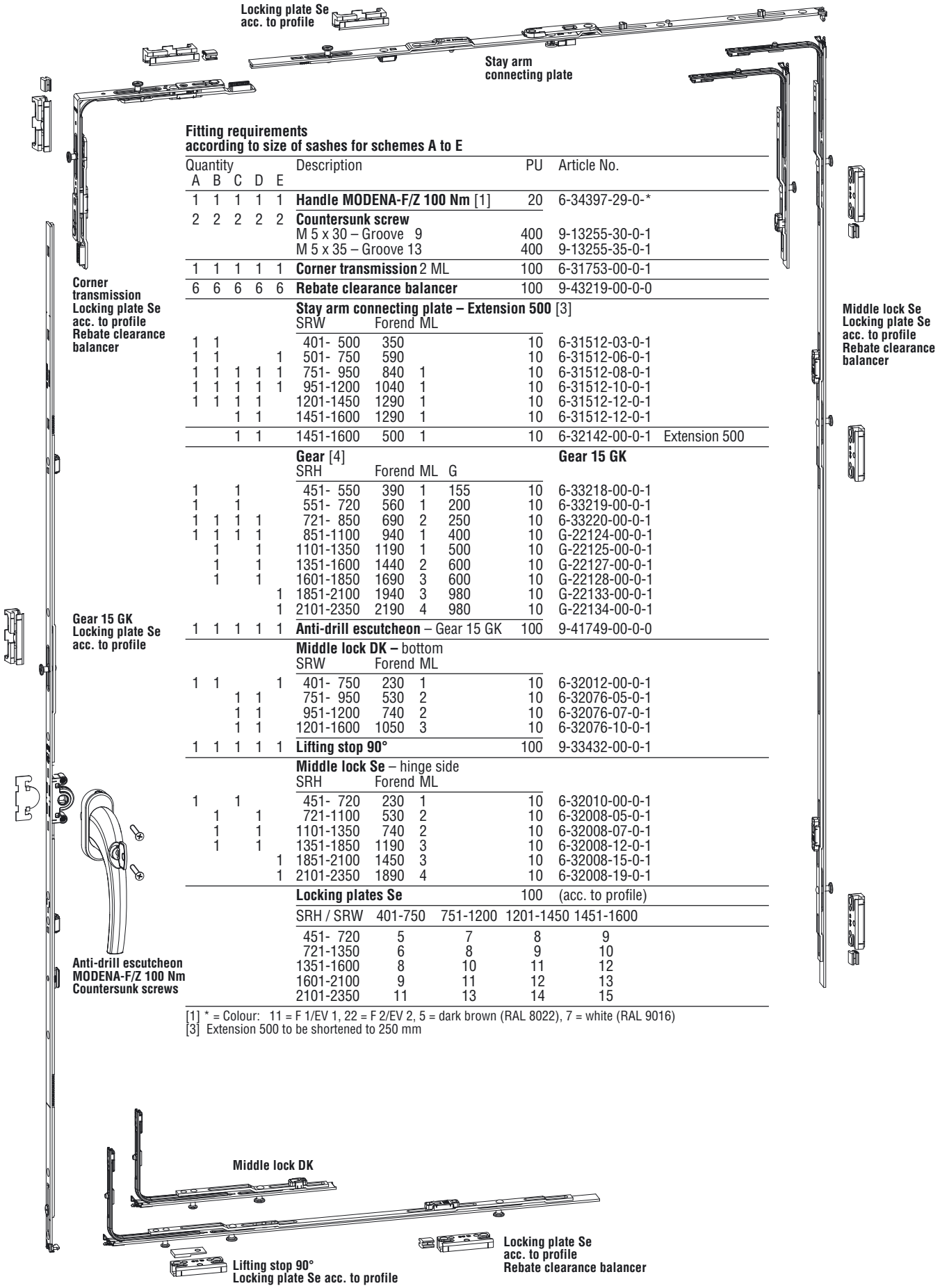
Quantity A	B	C	D	E	Description	PU	Article No.	
1	1	1	1	1	**Handle MODENA-F/Z 100 Nm** [1]	20	6-34397-29-0-*	
2	2	2	2	2	**Countersunk screw**			
					M 5 x 30 – Groove 9	400	9-13255-30-0-1	
					M 5 x 35 – Groove 13	400	9-13255-35-0-1	
1	1	1	1	1	**Corner transmission** 2 ML	100	6-31753-00-0-1	
6	6	6	6	6	**Rebate clearance balancer**	100	9-43219-00-0-0	
					Stay arm connecting plate – Extension 500 [3]			
					SRW / Forend / ML			
1	1				401- 500 / 350	10	6-31512-03-0-1	
1	1			1	501- 750 / 590	10	6-31512-06-0-1	
1	1	1	1	1	751- 950 / 840 / 1	10	6-31512-08-0-1	
1	1	1	1	1	951-1200 / 1040 / 1	10	6-31512-10-0-1	
1	1	1	1		1201-1450 / 1290 / 1	10	6-31512-12-0-1	
		1	1		1451-1600 / 1290 / 1	10	6-31512-12-0-1	
		1	1		1451-1600 / 500 / 1	10	6-32142-00-0-1	Extension 500
					Gear [4]		**Gear 15 GK**	
					SRH / Forend / ML / G			
1		1			451- 550 / 390 / 1 / 155	10	6-33218-00-0-1	
1		1			551- 720 / 560 / 1 / 200	10	6-33219-00-0-1	
1	1	1	1		721- 850 / 690 / 2 / 250	10	6-33220-00-0-1	
1	1	1	1		851-1100 / 940 / 1 / 400	10	G-22124-00-0-1	
	1		1		1101-1350 / 1190 / 1 / 500	10	G-22125-00-0-1	
	1		1		1351-1600 / 1440 / 2 / 600	10	G-22127-00-0-1	
	1		1		1601-1850 / 1690 / 3 / 600	10	G-22128-00-0-1	
				1	1851-2100 / 1940 / 3 / 980	10	G-22133-00-0-1	
				1	2101-2350 / 2190 / 4 / 980	10	G-22134-00-0-1	
1	1	1	1	1	**Anti-drill escutcheon** – Gear 15 GK	100	9-41749-00-0-0	
1	1	1	1	1	**Wrong operation safety device (WOSD)** [5]		DIN left	DIN right
					Groove 9 mm	100	6-31657-09-L-1	6-31657-09-R-1
					Groove 13 mm	100	6-31657-13-L-1	6-31657-13-R-1
					Middle lock DK – bottom			
					SRW / Forend / ML			
1	1			1	401- 750 / 230 / 1	10	6-32012-00-0-1	
		1	1		751- 950 / 530 / 2	10	6-32076-05-0-1	
		1	1		951-1200 / 740 / 2	10	6-32076-07-0-1	
		1	1		1201-1600 / 1050 / 3	10	6-32076-10-0-1	
					Middle lock Se – hinge side			
					SRH / Forend / ML			
1		1			451- 720 / 230 / 1	10	6-32010-00-0-1	
	1		1		721-1100 / 530 / 2	10	6-32008-05-0-1	
	1		1		1101-1350 / 740 / 2	10	6-32008-07-0-1	
	1		1		1351-1850 / 1190 / 3	10	6-32008-12-0-1	
				1	1851-2100 / 1450 / 3	10	6-32008-15-0-1	
				1	2101-2350 / 1890 / 4	10	6-32008-19-0-1	
					Locking plates Se	100	(acc. to profile)	

SRH / SRW	401-750	751-1200	1201-1450	1451-1600
451- 720	5	7	8	9
721-1350	6	8	9	10
1351-1600	8	10	11	12
1601-2100	9	11	12	13
2101-2350	11	13	14	15

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 5 = dark brown (RAL 8022), 7 = white (RAL 9016)
[3] Extension 500 to be shortened to 250 mm
[5] From SRH 851 mm

Fixed gear position, groove position 9 and 13 mm

WK 2



Fitting requirements according to size of sashes for schemes A to E

Quantity A	B	C	D	E	Description	PU	Article No.	
1	1	1	1	1	**Handle MODENA-F/Z 100 Nm** [1]	20	6-34397-29-0-*	
2	2	2	2	2	**Countersunk screw**			
					M 5 x 30 – Groove 9	400	9-13255-30-0-1	
					M 5 x 35 – Groove 13	400	9-13255-35-0-1	
1	1	1	1	1	**Corner transmission** 2 ML	100	6-31753-00-0-1	
6	6	6	6	6	**Rebate clearance balancer**	100	9-43219-00-0-0	

Stay arm connecting plate – Extension 500 [3]

SRW	Forend	ML			
401- 500	350			10	6-31512-03-0-1
501- 750	590			10	6-31512-06-0-1
751- 950	840	1		10	6-31512-08-0-1
951-1200	1040	1		10	6-31512-10-0-1
1201-1450	1290	1		10	6-31512-12-0-1
1451-1600	1290	1		10	6-31512-12-0-1
1451-1600	500	1		10	6-32142-00-0-1 Extension 500

Gear [4] **Gear 15 GK**

SRH	Forend	ML	G		
451- 550	390	1	155	10	6-33218-00-0-1
551- 720	560	1	200	10	6-33219-00-0-1
721- 850	690	2	250	10	6-33220-00-0-1
851-1100	940	1	400	10	G-22124-00-0-1
1101-1350	1190	1	500	10	G-22125-00-0-1
1351-1600	1440	2	600	10	G-22127-00-0-1
1601-1850	1690	3	600	10	G-22128-00-0-1
1851-2100	1940	3	980	10	G-22133-00-0-1
2101-2350	2190	4	980	10	G-22134-00-0-1

1	1	1	1	1	**Anti-drill escutcheon** – Gear 15 GK	100	9-41749-00-0-0

Middle lock DK – bottom

SRW	Forend	ML		
401- 750	230	1	10	6-32012-00-0-1
751- 950	530	2	10	6-32076-05-0-1
951-1200	740	2	10	6-32076-07-0-1
1201-1600	1050	3	10	6-32076-10-0-1

1	1	1	1	1	**Lifting stop 90°**	100	9-33432-00-0-1

Middle lock Se – hinge side

SRH	Forend	ML		
451- 720	230	1	10	6-32010-00-0-1
721-1100	530	2	10	6-32008-05-0-1
1101-1350	740	2	10	6-32008-07-0-1
1351-1850	1190	3	10	6-32008-12-0-1
1851-2100	1450	3	10	6-32008-15-0-1
2101-2350	1890	4	10	6-32008-19-0-1

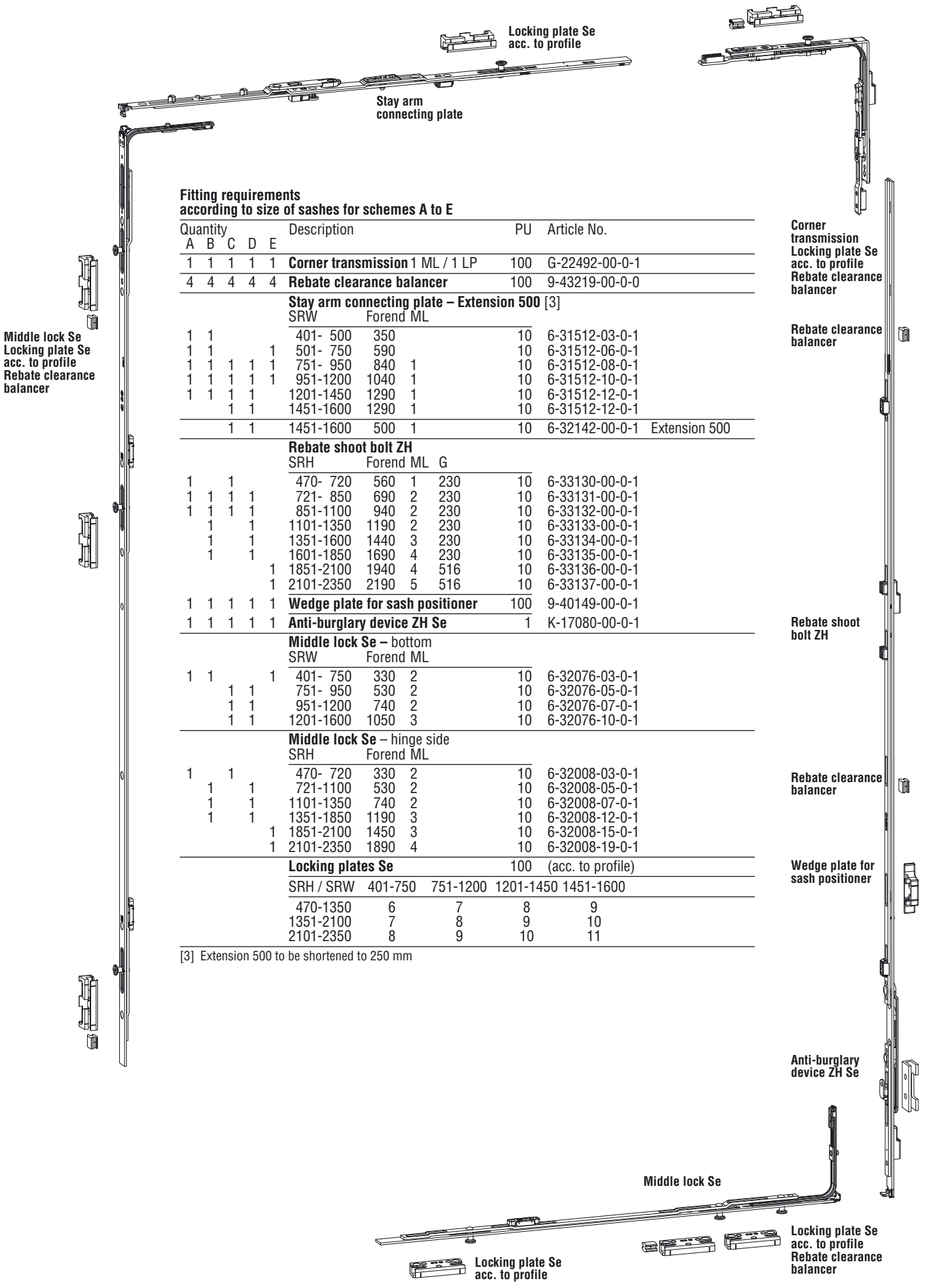
Locking plates Se 100 (acc. to profile)

SRH / SRW	401-750	751-1200	1201-1450	1451-1600
451- 720	5	7	8	9
721-1350	6	8	9	10
1351-1600	8	10	11	12
1601-2100	9	11	12	13
2101-2350	11	13	14	15

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 5 = dark brown (RAL 8022), 7 = white (RAL 9016)
[3] Extension 500 to be shortened to 250 mm

Fixed gear position, groove position 9 and 13 mm

WK 2



Fitting requirements according to size of sashes for schemes A to E

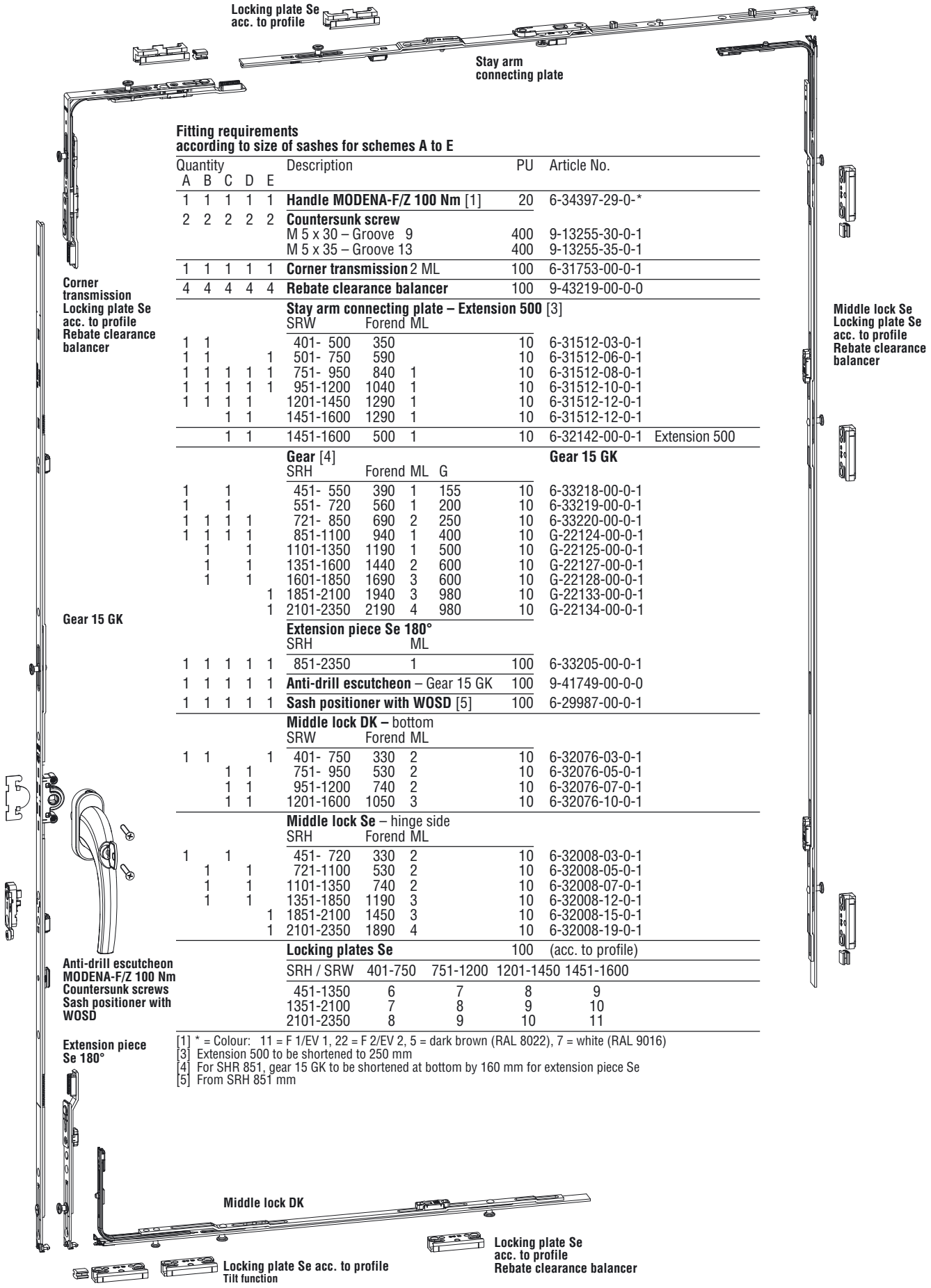
Quantity A	B	C	D	E	Description	PU	Article No.	
1	1	1	1	1	**Corner transmission** 1 ML / 1 LP	100	G-22492-00-0-1	
4	4	4	4	4	**Rebate clearance balancer**	100	9-43219-00-0-0	
					Stay arm connecting plate – Extension 500 [3]			
					SRW / Forend / ML			
1	1				401- 500 / 350	10	6-31512-03-0-1	
1	1			1	501- 750 / 590	10	6-31512-06-0-1	
1	1	1	1	1	751- 950 / 840 / 1	10	6-31512-08-0-1	
1	1	1	1	1	951-1200 / 1040 / 1	10	6-31512-10-0-1	
1	1	1	1		1201-1450 / 1290 / 1	10	6-31512-12-0-1	
		1	1		1451-1600 / 1290 / 1	10	6-31512-12-0-1	
		1	1		1451-1600 / 500 / 1	10	6-32142-00-0-1	Extension 500
					Rebate shoot bolt ZH			
					SRH / Forend / ML / G			
1		1			470- 720 / 560 / 1 / 230	10	6-33130-00-0-1	
1	1	1	1		721- 850 / 690 / 2 / 230	10	6-33131-00-0-1	
1	1	1	1		851-1100 / 940 / 2 / 230	10	6-33132-00-0-1	
	1		1		1101-1350 / 1190 / 2 / 230	10	6-33133-00-0-1	
	1		1		1351-1600 / 1440 / 3 / 230	10	6-33134-00-0-1	
	1		1		1601-1850 / 1690 / 4 / 230	10	6-33135-00-0-1	
				1	1851-2100 / 1940 / 4 / 516	10	6-33136-00-0-1	
				1	2101-2350 / 2190 / 5 / 516	10	6-33137-00-0-1	
1	1	1	1	1	**Wedge plate for sash positioner**	100	9-40149-00-0-1	
1	1	1	1	1	**Anti-burglary device ZH Se**	1	K-17080-00-0-1	
					Middle lock Se – bottom			
					SRW / Forend / ML			
1	1			1	401- 750 / 330 / 2	10	6-32076-03-0-1	
		1	1		751- 950 / 530 / 2	10	6-32076-05-0-1	
		1	1		951-1200 / 740 / 2	10	6-32076-07-0-1	
		1	1		1201-1600 / 1050 / 3	10	6-32076-10-0-1	
					Middle lock Se – hinge side			
					SRH / Forend / ML			
1		1			470- 720 / 330 / 2	10	6-32008-03-0-1	
	1		1		721-1100 / 530 / 2	10	6-32008-05-0-1	
	1		1		1101-1350 / 740 / 2	10	6-32008-07-0-1	
	1		1		1351-1850 / 1190 / 3	10	6-32008-12-0-1	
				1	1851-2100 / 1450 / 3	10	6-32008-15-0-1	
				1	2101-2350 / 1890 / 4	10	6-32008-19-0-1	
					Locking plates Se	100	(acc. to profile)	

SRH / SRW	401-750	751-1200	1201-1450	1451-1600
470-1350	6	7	8	9
1351-2100	7	8	9	10
2101-2350	8	9	10	11

[3] Extension 500 to be shortened to 250 mm

Fixed gear position, groove position 9 and 13 mm

WK 2



Fitting requirements
according to size of sashes for schemes A to E

Quantity A	B	C	D	E	Description	PU	Article No.	
1	1	1	1	1	**Handle MODENA-F/Z 100 Nm** [1]	20	6-34397-29-0-*	
2	2	2	2	2	**Countersunk screw**			
					M 5 x 30 – Groove 9	400	9-13255-30-0-1	
					M 5 x 35 – Groove 13	400	9-13255-35-0-1	
1	1	1	1	1	**Corner transmission** 2 ML	100	6-31753-00-0-1	
4	4	4	4	4	**Rebate clearance balancer**	100	9-43219-00-0-0	

Stay arm connecting plate – Extension 500 [3]

SRW	Forend	ML	PU	Article No.	
401- 500	350		10	6-31512-03-0-1	
501- 750	590		10	6-31512-06-0-1	
751- 950	840	1	10	6-31512-08-0-1	
951-1200	1040	1	10	6-31512-10-0-1	
1201-1450	1290	1	10	6-31512-12-0-1	
1451-1600	1290	1	10	6-31512-12-0-1	
1451-1600	500	1	10	6-32142-00-0-1	Extension 500

Gear [4] **Gear 15 GK**

SRH	Forend	ML	G	PU	Article No.
451- 550	390	1	155	10	6-33218-00-0-1
551- 720	560	1	200	10	6-33219-00-0-1
721- 850	690	2	250	10	6-33220-00-0-1
851-1100	940	1	400	10	G-22124-00-0-1
1101-1350	1190	1	500	10	G-22125-00-0-1
1351-1600	1440	2	600	10	G-22127-00-0-1
1601-1850	1690	3	600	10	G-22128-00-0-1
1851-2100	1940	3	980	10	G-22133-00-0-1
2101-2350	2190	4	980	10	G-22134-00-0-1

Extension piece Se 180°

SRH	ML	PU	Article No.
851-2350	1	100	6-33205-00-0-1

1	1	1	1	1	**Anti-drill escutcheon** – Gear 15 GK	100	9-41749-00-0-0
1	1	1	1	1	**Sash positioner with WOSD** [5]	100	6-29987-00-0-1

Middle lock DK – bottom

SRW	Forend	ML	PU	Article No.
401- 750	330	2	10	6-32076-03-0-1
751- 950	530	2	10	6-32076-05-0-1
951-1200	740	2	10	6-32076-07-0-1
1201-1600	1050	3	10	6-32076-10-0-1

Middle lock Se – hinge side

SRH	Forend	ML	PU	Article No.
451- 720	330	2	10	6-32008-03-0-1
721-1100	530	2	10	6-32008-05-0-1
1101-1350	740	2	10	6-32008-07-0-1
1351-1850	1190	3	10	6-32008-12-0-1
1851-2100	1450	3	10	6-32008-15-0-1
2101-2350	1890	4	10	6-32008-19-0-1

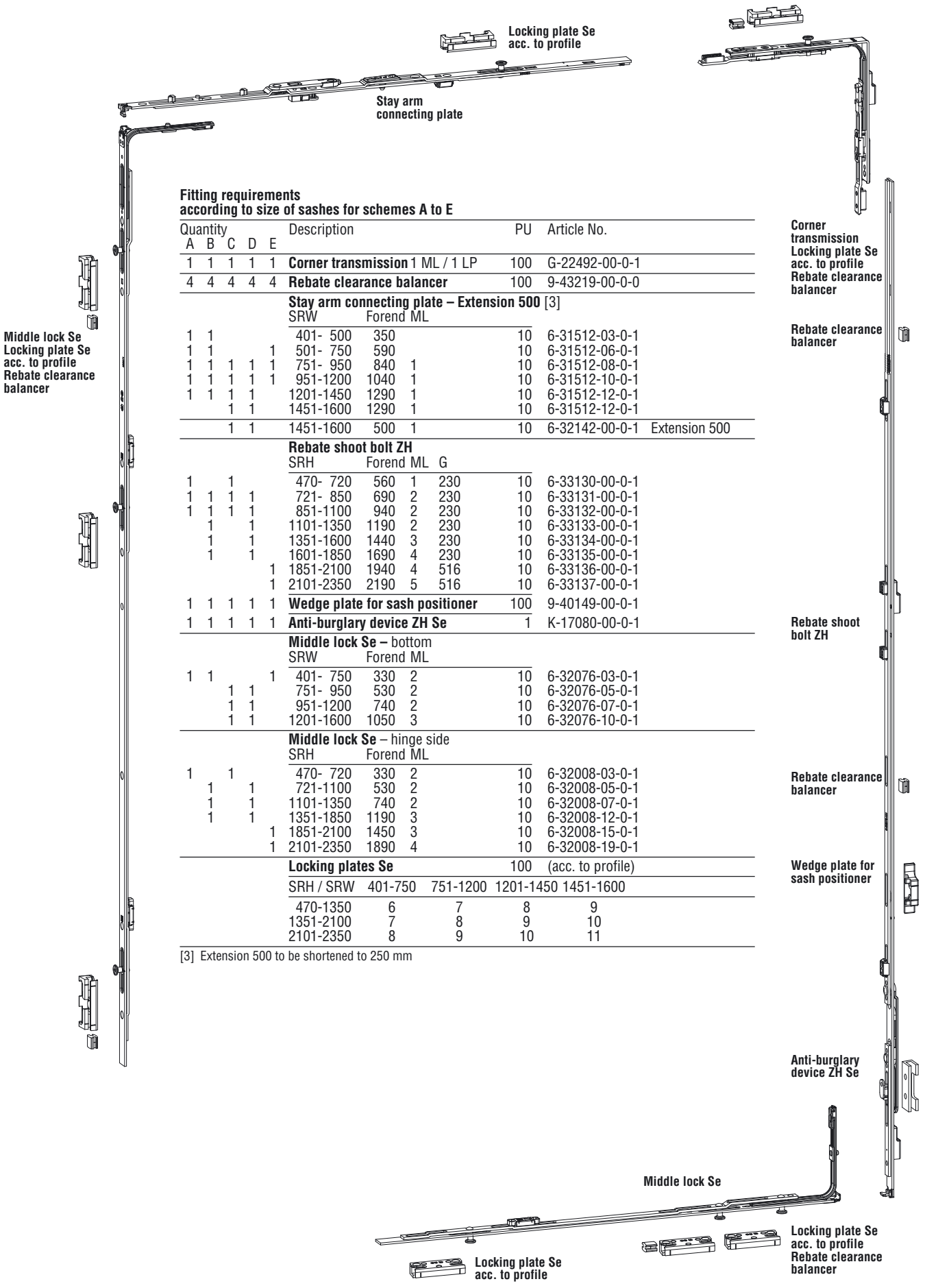
Locking plates Se 100 (acc. to profile)

SRH / SRW	401-750	751-1200	1201-1450	1451-1600
451-1350	6	7	8	9
1351-2100	7	8	9	10
2101-2350	8	9	10	11

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 5 = dark brown (RAL 8022), 7 = white (RAL 9016)
[3] Extension 500 to be shortened to 250 mm
[4] For SHR 851, gear 15 GK to be shortened at bottom by 160 mm for extension piece Se
[5] From SRH 851 mm

Fixed gear position, groove position 9 and 13 mm

WK 2



Fitting requirements according to size of sashes for schemes A to E

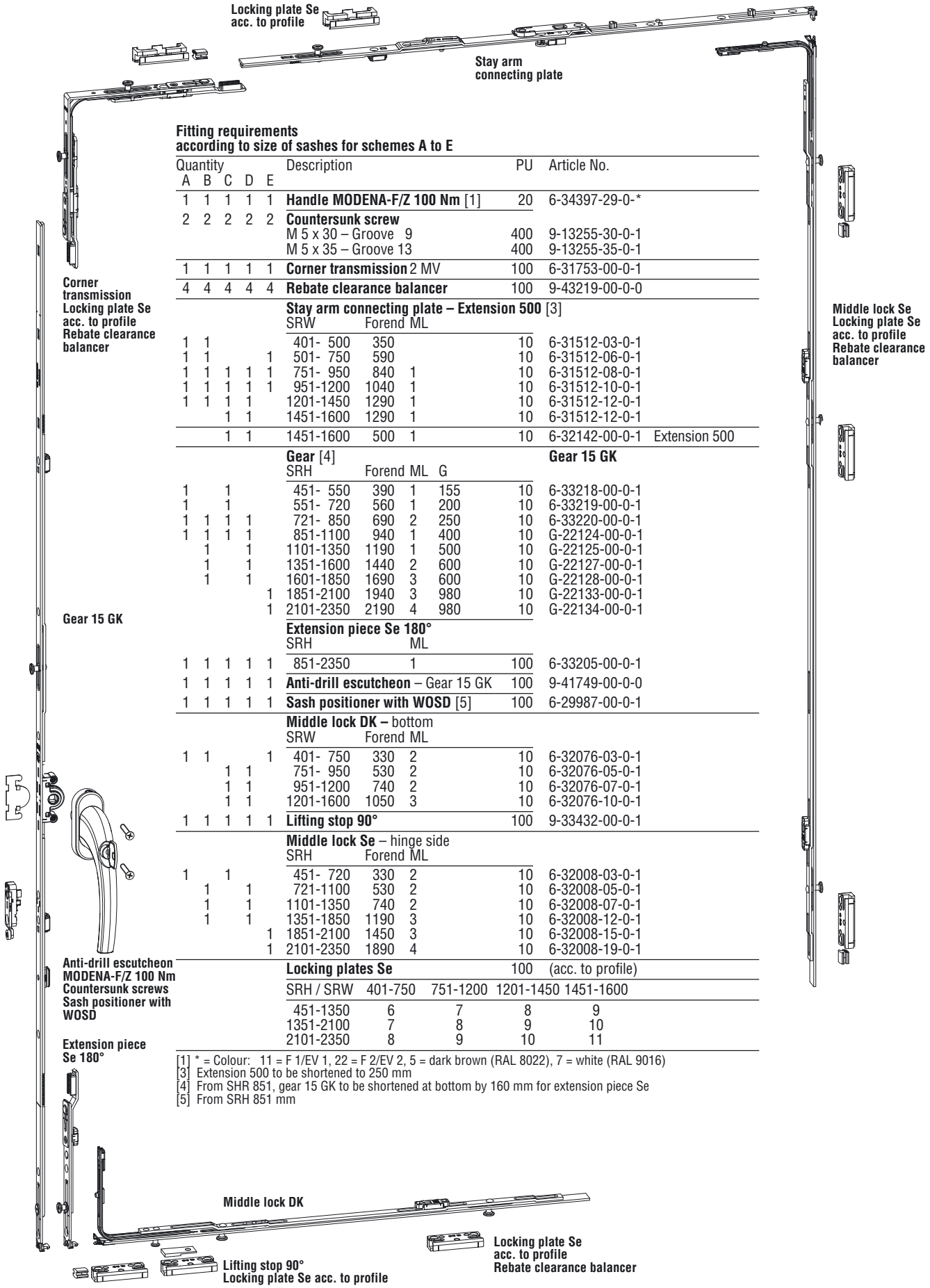
Quantity A	B	C	D	E	Description	PU	Article No.	
1	1	1	1	1	**Corner transmission** 1 ML / 1 LP	100	G-22492-00-0-1	
4	4	4	4	4	**Rebate clearance balancer**	100	9-43219-00-0-0	
					Stay arm connecting plate – Extension 500 [3]			
					SRW Forend ML			
1	1				401- 500 350	10	6-31512-03-0-1	
1	1			1	501- 750 590	10	6-31512-06-0-1	
1	1	1	1	1	751- 950 840 1	10	6-31512-08-0-1	
1	1	1	1	1	951-1200 1040 1	10	6-31512-10-0-1	
1	1	1	1		1201-1450 1290 1	10	6-31512-12-0-1	
		1	1		1451-1600 1290 1	10	6-31512-12-0-1	
		1	1		1451-1600 500 1	10	6-32142-00-0-1	Extension 500
					Rebate shoot bolt ZH			
					SRH Forend ML G			
1		1			470- 720 560 1 230	10	6-33130-00-0-1	
1	1	1	1		721- 850 690 2 230	10	6-33131-00-0-1	
1	1	1	1		851-1100 940 2 230	10	6-33132-00-0-1	
	1		1		1101-1350 1190 2 230	10	6-33133-00-0-1	
	1		1		1351-1600 1440 3 230	10	6-33134-00-0-1	
	1		1		1601-1850 1690 4 230	10	6-33135-00-0-1	
				1	1851-2100 1940 4 516	10	6-33136-00-0-1	
				1	2101-2350 2190 5 516	10	6-33137-00-0-1	
1	1	1	1	1	**Wedge plate for sash positioner**	100	9-40149-00-0-1	
1	1	1	1	1	**Anti-burglary device ZH Se**	1	K-17080-00-0-1	
					Middle lock Se – bottom			
					SRW Forend ML			
1	1			1	401- 750 330 2	10	6-32076-03-0-1	
		1	1		751- 950 530 2	10	6-32076-05-0-1	
		1	1		951-1200 740 2	10	6-32076-07-0-1	
		1	1		1201-1600 1050 3	10	6-32076-10-0-1	
					Middle lock Se – hinge side			
					SRH Forend ML			
1		1			470- 720 330 2	10	6-32008-03-0-1	
	1		1		721-1100 530 2	10	6-32008-05-0-1	
	1		1		1101-1350 740 2	10	6-32008-07-0-1	
	1		1		1351-1850 1190 3	10	6-32008-12-0-1	
				1	1851-2100 1450 3	10	6-32008-15-0-1	
				1	2101-2350 1890 4	10	6-32008-19-0-1	
					Locking plates Se	100	(acc. to profile)	

SRH / SRW	401-750	751-1200	1201-1450	1451-1600
470-1350	6	7	8	9
1351-2100	7	8	9	10
2101-2350	8	9	10	11

[3] Extension 500 to be shortened to 250 mm

Fixed gear position, groove position 9 and 13 mm

WK 2



Fitting requirements
according to size of sashes for schemes A to E

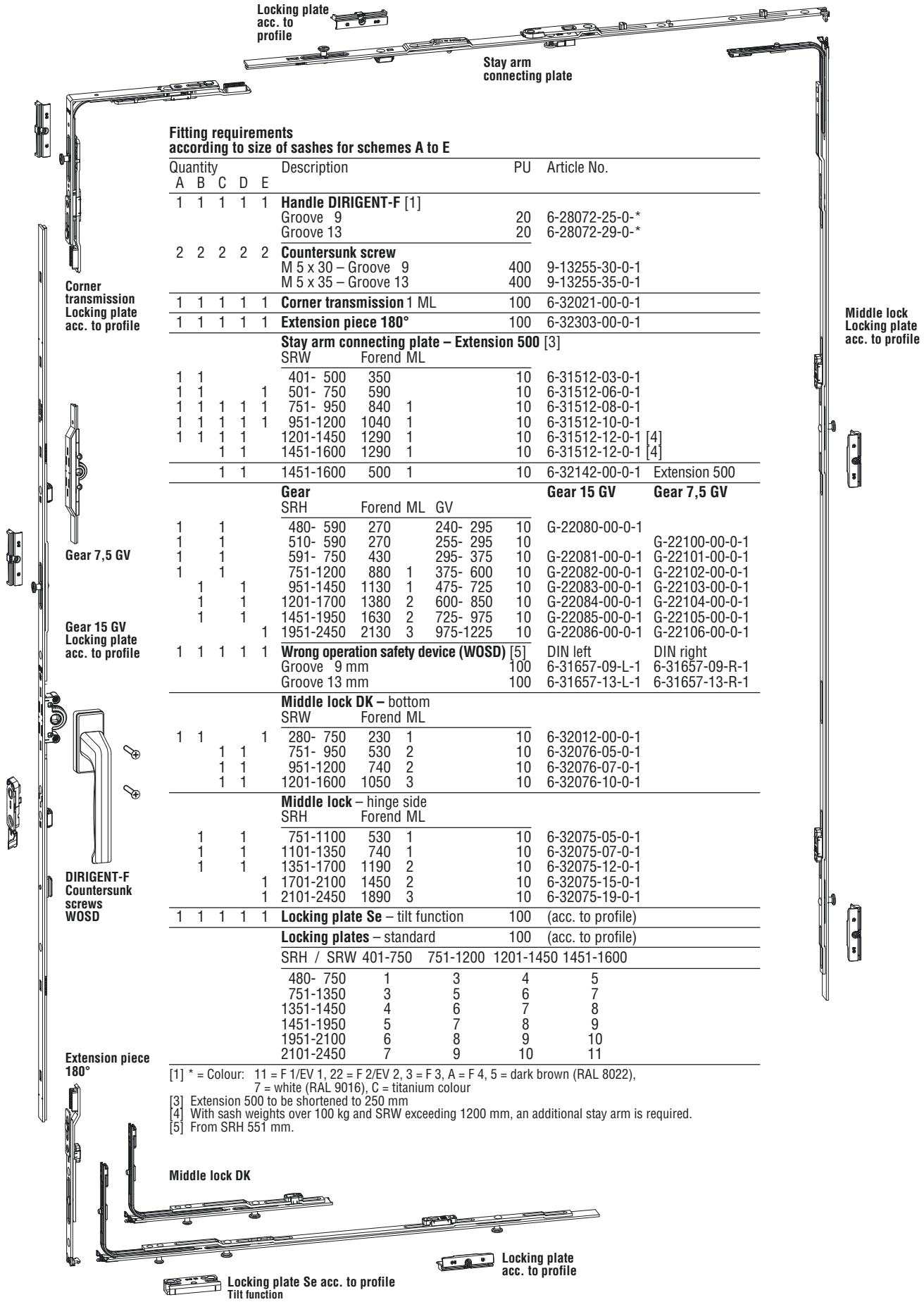
Quantity A	B	C	D	E	Description	PU	Article No.	
1	1	1	1	1	**Handle MODENA-F/Z 100 Nm** [1]	20	6-34397-29-0-*	
2	2	2	2	2	**Countersunk screw**			
					M 5 x 30 – Groove 9	400	9-13255-30-0-1	
					M 5 x 35 – Groove 13	400	9-13255-35-0-1	
1	1	1	1	1	**Corner transmission** 2 MV	100	6-31753-00-0-1	
4	4	4	4	4	**Rebate clearance balancer**	100	9-43219-00-0-0	
					Stay arm connecting plate – Extension 500 [3]			
					SRW Forend ML			
1	1				401- 500 350	10	6-31512-03-0-1	
1	1			1	501- 750 590	10	6-31512-06-0-1	
1	1	1	1	1	751- 950 840 1	10	6-31512-08-0-1	
1	1	1	1	1	951-1200 1040 1	10	6-31512-10-0-1	
1	1	1	1		1201-1450 1290 1	10	6-31512-12-0-1	
		1	1		1451-1600 1290 1	10	6-31512-12-0-1	
		1	1		1451-1600 500 1	10	6-32142-00-0-1	Extension 500
					Gear [4]		**Gear 15 GK**	
					SRH Forend ML G			
1		1			451- 550 390 1 155	10	6-33218-00-0-1	
1		1			551- 720 560 1 200	10	6-33219-00-0-1	
1	1	1	1		721- 850 690 2 250	10	6-33220-00-0-1	
1	1	1	1		851-1100 940 1 400	10	G-22124-00-0-1	
	1		1		1101-1350 1190 1 500	10	G-22125-00-0-1	
	1		1		1351-1600 1440 2 600	10	G-22127-00-0-1	
	1		1		1601-1850 1690 3 600	10	G-22128-00-0-1	
				1	1851-2100 1940 3 980	10	G-22133-00-0-1	
				1	2101-2350 2190 4 980	10	G-22134-00-0-1	
					Extension piece Se 180°			
					SRH ML			
1	1	1	1	1	851-2350 1	100	6-33205-00-0-1	
1	1	1	1	1	**Anti-drill escutcheon** – Gear 15 GK	100	9-41749-00-0-0	
1	1	1	1	1	**Sash positioner with WOSD** [5]	100	6-29987-00-0-1	
					Middle lock DK – bottom			
					SRW Forend ML			
1	1			1	401- 750 330 2	10	6-32076-03-0-1	
		1	1		751- 950 530 2	10	6-32076-05-0-1	
		1	1		951-1200 740 2	10	6-32076-07-0-1	
		1	1		1201-1600 1050 3	10	6-32076-10-0-1	
1	1	1	1	1	**Lifting stop 90°**	100	9-33432-00-0-1	
					Middle lock Se – hinge side			
					SRH Forend ML			
1		1			451- 720 330 2	10	6-32008-03-0-1	
	1		1		721-1100 530 2	10	6-32008-05-0-1	
	1		1		1101-1350 740 2	10	6-32008-07-0-1	
	1		1		1351-1850 1190 3	10	6-32008-12-0-1	
				1	1851-2100 1450 3	10	6-32008-15-0-1	
				1	2101-2350 1890 4	10	6-32008-19-0-1	
					Locking plates Se	100	(acc. to profile)	

SRH / SRW	401-750	751-1200	1201-1450	1451-1600
451-1350	6	7	8	9
1351-2100	7	8	9	10
2101-2350	8	9	10	11

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 5 = dark brown (RAL 8022), 7 = white (RAL 9016)
[3] Extension 500 to be shortened to 250 mm
[4] From SHR 851, gear 15 GK to be shortened at bottom by 160 mm for extension piece Se
[5] From SRH 851 mm

Variable gear position, groove position 9 and 13 mm

Basic security



Fitting requirements according to size of sashes for schemes A to E

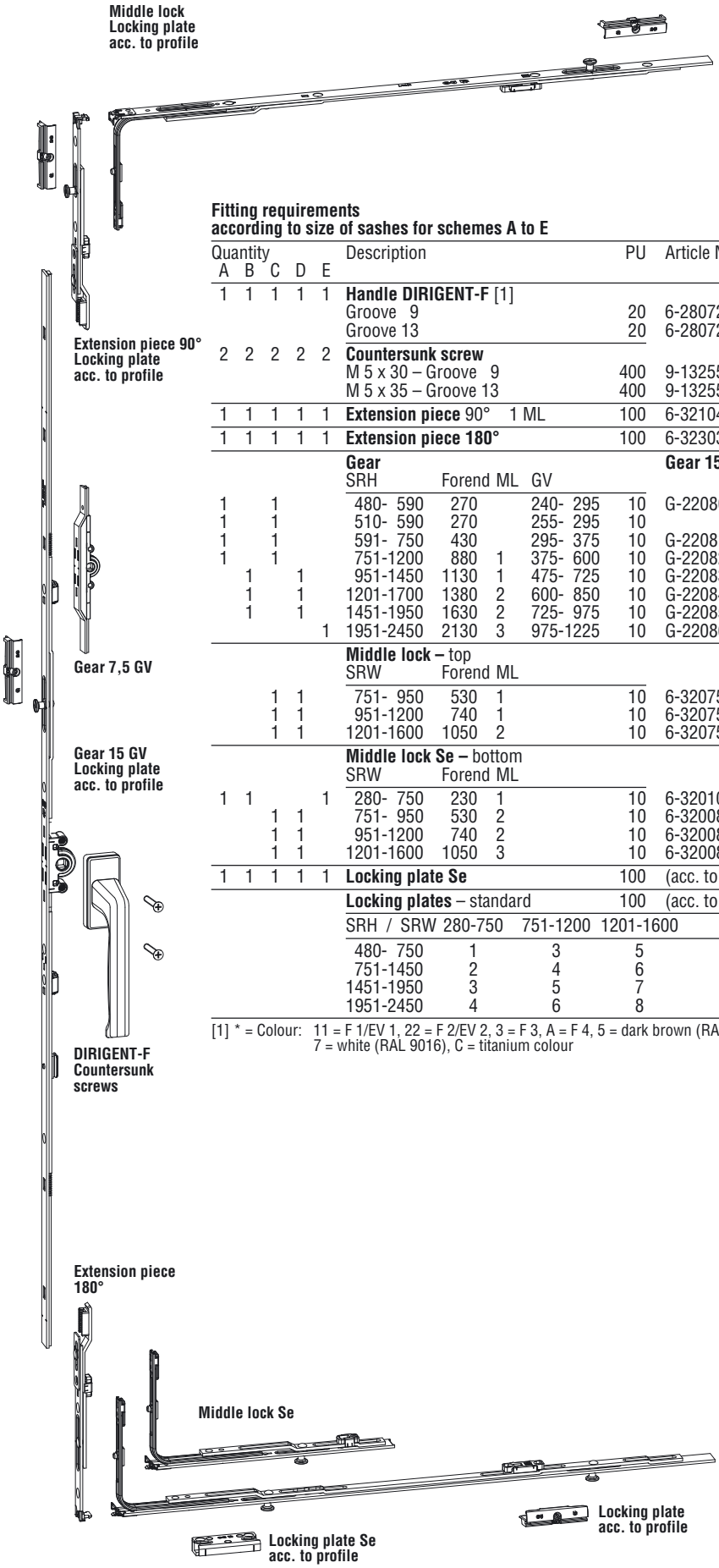
Quantity A	B	C	D	E	Description	PU	Article No.	
1	1	1	1	1	**Handle DIRIGENT-F** [1]			
					Groove 9	20	6-28072-25-0-*	
					Groove 13	20	6-28072-29-0-*	
2	2	2	2	2	**Countersunk screw**			
					M 5 x 30 – Groove 9	400	9-13255-30-0-1	
					M 5 x 35 – Groove 13	400	9-13255-35-0-1	
1	1	1	1	1	**Corner transmission** 1 ML	100	6-32021-00-0-1	
1	1	1	1	1	**Extension piece 180°**	100	6-32303-00-0-1	
					Stay arm connecting plate – Extension 500 [3]			
					SRW Forend ML			
1	1				401- 500 350	10	6-31512-03-0-1	
1	1			1	501- 750 590	10	6-31512-06-0-1	
1	1	1	1	1	751- 950 840 1	10	6-31512-08-0-1	
1	1	1	1	1	951-1200 1040 1	10	6-31512-10-0-1	
1	1	1	1		1201-1450 1290 1	10	6-31512-12-0-1 [4]	
		1	1		1451-1600 1290 1	10	6-31512-12-0-1 [4]	
		1	1		1451-1600 500 1	10	6-32142-00-0-1	Extension 500
					Gear		**Gear 15 GV**	**Gear 7,5 GV**
					SRH Forend ML GV			
1		1			480- 590 270 240- 295	10	G-22080-00-0-1	
1		1			510- 590 270 255- 295	10		G-22100-00-0-1
1		1			591- 750 430 295- 375	10	G-22081-00-0-1	G-22101-00-0-1
1		1			751-1200 880 1 375- 600	10	G-22082-00-0-1	G-22102-00-0-1
	1		1		951-1450 1130 1 475- 725	10	G-22083-00-0-1	G-22103-00-0-1
	1		1		1201-1700 1380 2 600- 850	10	G-22084-00-0-1	G-22104-00-0-1
	1		1		1451-1950 1630 2 725- 975	10	G-22085-00-0-1	G-22105-00-0-1
				1	1951-2450 2130 3 975-1225	10	G-22086-00-0-1	G-22106-00-0-1
1	1	1	1	1	**Wrong operation safety device (WOSD)** [5]		DIN left	DIN right
					Groove 9 mm	100	6-31657-09-L-1	6-31657-09-R-1
					Groove 13 mm	100	6-31657-13-L-1	6-31657-13-R-1
					Middle lock DK – bottom			
					SRW Forend ML			
1	1			1	280- 750 230 1	10	6-32012-00-0-1	
		1	1		751- 950 530 2	10	6-32076-05-0-1	
		1	1		951-1200 740 2	10	6-32076-07-0-1	
		1	1		1201-1600 1050 3	10	6-32076-10-0-1	
					Middle lock – hinge side			
					SRH Forend ML			
	1		1		751-1100 530 1	10	6-32075-05-0-1	
	1		1		1101-1350 740 1	10	6-32075-07-0-1	
	1		1		1351-1700 1190 2	10	6-32075-12-0-1	
				1	1701-2100 1450 2	10	6-32075-15-0-1	
				1	2101-2450 1890 3	10	6-32075-19-0-1	
1	1	1	1	1	**Locking plate Se** – tilt function	100	(acc. to profile)	
					Locking plates – standard	100	(acc. to profile)	

SRH / SRW	401-750	751-1200	1201-1450	1451-1600
480- 750	1	3	4	5
751-1350	3	5	6	7
1351-1450	4	6	7	8
1451-1950	5	7	8	9
1951-2100	6	8	9	10
2101-2450	7	9	10	11

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4, 5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour
[3] Extension 500 to be shortened to 250 mm
[4] With sash weights over 100 kg and SRW exceeding 1200 mm, an additional stay arm is required.
[5] From SRH 551 mm.

Variable gear position, groove position 9 and 13 mm

Basic security



Fitting requirements
according to size of sashes for schemes A to E

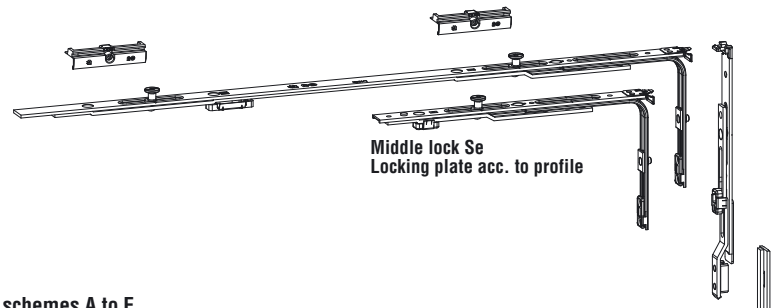
Quantity A	B	C	D	E	Description	PU	Article No.	
1	1	1	1	1	**Handle DIRIGENT-F** [1]			
					Groove 9	20	6-28072-25-0-*	
					Groove 13	20	6-28072-29-0-*	
2	2	2	2	2	**Countersunk screw**			
					M 5 x 30 – Groove 9	400	9-13255-30-0-1	
					M 5 x 35 – Groove 13	400	9-13255-35-0-1	
1	1	1	1	1	**Extension piece** 90° 1 ML	100	6-32104-00-0-1	
1	1	1	1	1	**Extension piece 180°**	100	6-32303-00-0-1	
					Gear		**Gear 15 GV**	**Gear 7,5 GV**
					SRH Forend ML GV			
1		1			480- 590 270 240- 295	10	G-22080-00-0-1	
1		1			510- 590 270 255- 295	10		G-22100-00-0-1
1		1			591- 750 430 295- 375	10	G-22081-00-0-1	G-22101-00-0-1
1		1			751-1200 880 1 375- 600	10	G-22082-00-0-1	G-22102-00-0-1
	1		1		951-1450 1130 1 475- 725	10	G-22083-00-0-1	G-22103-00-0-1
	1		1		1201-1700 1380 2 600- 850	10	G-22084-00-0-1	G-22104-00-0-1
	1		1		1451-1950 1630 2 725- 975	10	G-22085-00-0-1	G-22105-00-0-1
				1	1951-2450 2130 3 975-1225	10	G-22086-00-0-1	G-22106-00-0-1
					Middle lock – top			
					SRW Forend ML			
		1	1		751- 950 530 1	10	6-32075-05-0-1	
		1	1		951-1200 740 1	10	6-32075-07-0-1	
		1	1		1201-1600 1050 2	10	6-32075-10-0-1	
					Middle lock Se – bottom			
					SRW Forend ML			
1	1			1	280- 750 230 1	10	6-32010-00-0-1	
		1	1		751- 950 530 2	10	6-32008-05-0-1	
		1	1		951-1200 740 2	10	6-32008-07-0-1	
		1	1		1201-1600 1050 3	10	6-32008-10-0-1	
1	1	1	1	1	**Locking plate Se**	100	(acc. to profile)	
					Locking plates – standard	100	(acc. to profile)	

SRH / SRW	280-750	751-1200	1201-1600
480- 750	1	3	5
751-1450	2	4	6
1451-1950	3	5	7
1951-2450	4	6	8

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4, 5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour

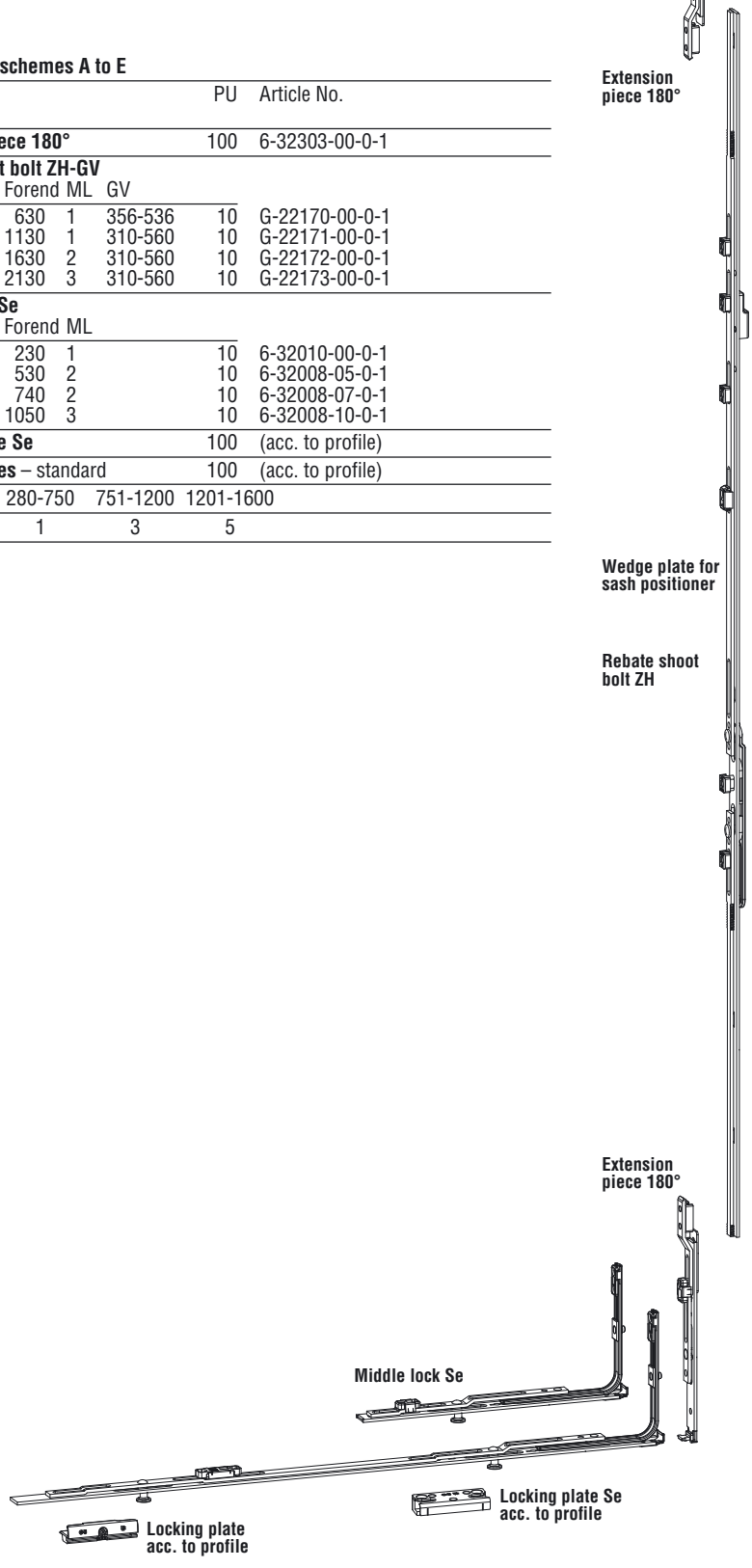
Variable gear position, groove position 9 and 13 mm

Basic security



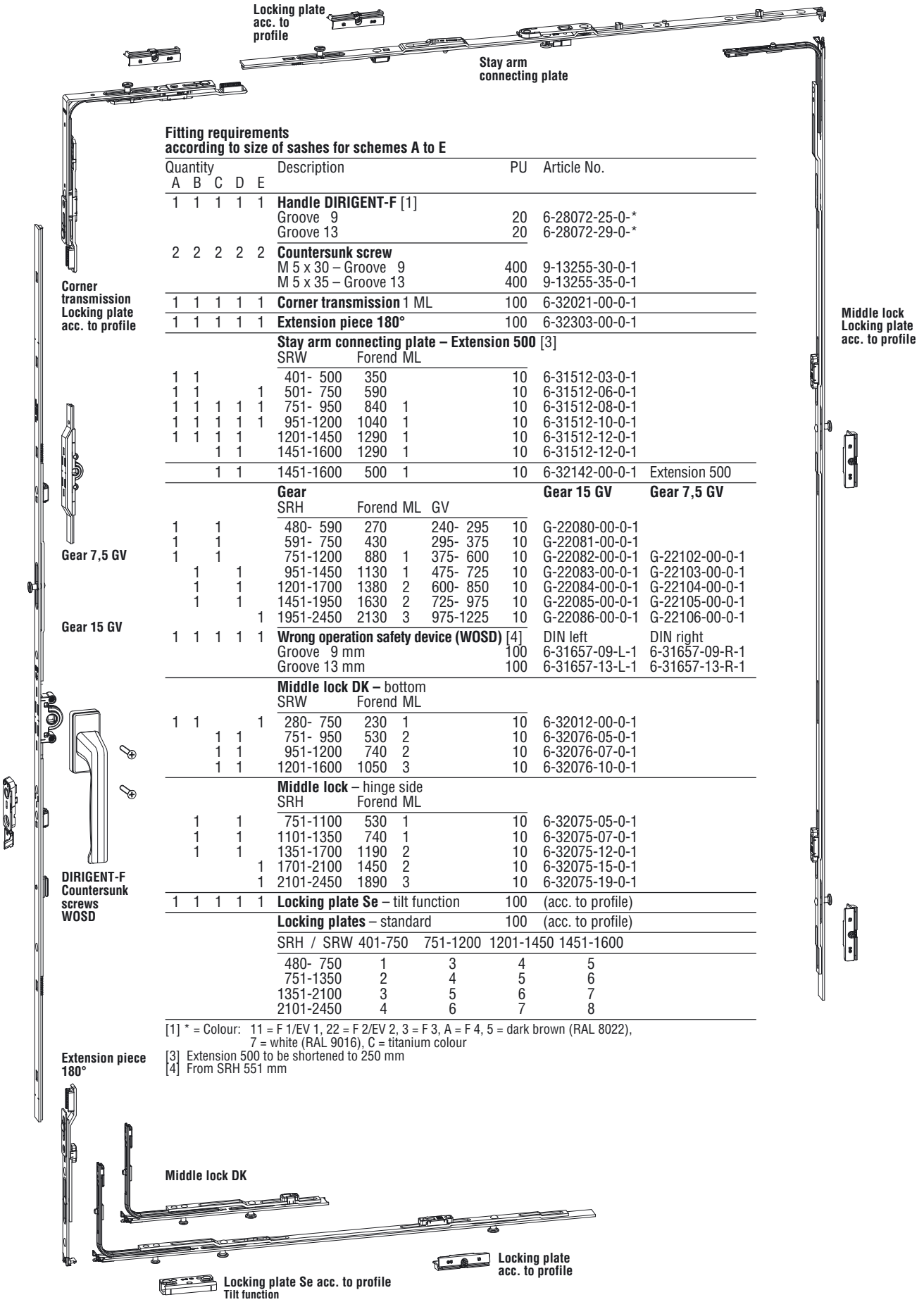
Fitting requirements
according to size of sashes for schemes A to E

Quantity A	B	C	D	E	Description				PU	Article No.
2	2	2	2	2	**Extension piece 180°**				100	6-32303-00-0-1
					Rebate shoot bolt ZH-GV					
					SRH	Forend	ML	GV		
1		1			781- 950	630	1	356-536	10	G-22170-00-0-1
1	1	1	1		951-1450	1130	1	310-560	10	G-22171-00-0-1
1	1	1	1		1451-1950	1630	2	310-560	10	G-22172-00-0-1
	1		1		1951-2450	2130	3	310-560	10	G-22173-00-0-1
					Middle lock Se					
					SRW	Forend	ML			
2	2			2	280- 750	230	1		10	6-32010-00-0-1
		2	2		751- 950	530	2		10	6-32008-05-0-1
		2	2		951-1200	740	2		10	6-32008-07-0-1
		2	2		1201-1600	1050	3		10	6-32008-10-0-1
1	1	1	1	1	**Locking plate Se**				100	(acc. to profile)
					Locking plates – standard				100	(acc. to profile)
					SRH / SRW	280-750	751-1200	1201-1600		
					781-2450	1	3	5		



Variable gear position, groove position 9 and 13 mm

Basic security



Fitting requirements according to size of sashes for schemes A to E

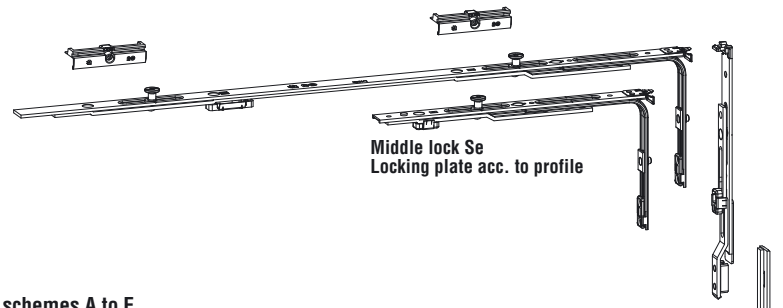
Quantity A	B	C	D	E	Description	PU	Article No.	
1	1	1	1	1	**Handle DIRIGENT-F** [1]			
					Groove 9	20	6-28072-25-0-*	
					Groove 13	20	6-28072-29-0-*	
2	2	2	2	2	**Countersunk screw**			
					M 5 x 30 – Groove 9	400	9-13255-30-0-1	
					M 5 x 35 – Groove 13	400	9-13255-35-0-1	
1	1	1	1	1	**Corner transmission** 1 ML	100	6-32021-00-0-1	
1	1	1	1	1	**Extension piece 180°**	100	6-32303-00-0-1	
					Stay arm connecting plate – Extension 500 [3]			
					SRW Forend ML			
1	1				401- 500 350	10	6-31512-03-0-1	
1	1			1	501- 750 590	10	6-31512-06-0-1	
1	1	1	1	1	751- 950 840 1	10	6-31512-08-0-1	
1	1	1	1	1	951-1200 1040 1	10	6-31512-10-0-1	
1	1	1	1		1201-1450 1290 1	10	6-31512-12-0-1	
		1	1		1451-1600 1290 1	10	6-31512-12-0-1	
		1	1		1451-1600 500 1	10	6-32142-00-0-1	Extension 500
					Gear		**Gear 15 GV**	**Gear 7,5 GV**
					SRH Forend ML GV			
1		1			480- 590 270 240- 295	10	G-22080-00-0-1	
1		1			591- 750 430 295- 375	10	G-22081-00-0-1	
1		1			751-1200 880 1 375- 600	10	G-22082-00-0-1	G-22102-00-0-1
	1		1		951-1450 1130 1 475- 725	10	G-22083-00-0-1	G-22103-00-0-1
	1		1		1201-1700 1380 2 600- 850	10	G-22084-00-0-1	G-22104-00-0-1
	1		1		1451-1950 1630 2 725- 975	10	G-22085-00-0-1	G-22105-00-0-1
				1	1951-2450 2130 3 975-1225	10	G-22086-00-0-1	G-22106-00-0-1
1	1	1	1	1	**Wrong operation safety device (WOSD)** [4]		DIN left	DIN right
					Groove 9 mm	100	6-31657-09-L-1	6-31657-09-R-1
					Groove 13 mm	100	6-31657-13-L-1	6-31657-13-R-1
					Middle lock DK – bottom			
					SRW Forend ML			
1	1			1	280- 750 230 1	10	6-32012-00-0-1	
		1	1		751- 950 530 2	10	6-32076-05-0-1	
		1	1		951-1200 740 2	10	6-32076-07-0-1	
		1	1		1201-1600 1050 3	10	6-32076-10-0-1	
					Middle lock – hinge side			
					SRH Forend ML			
	1		1		751-1100 530 1	10	6-32075-05-0-1	
	1		1		1101-1350 740 1	10	6-32075-07-0-1	
	1		1		1351-1700 1190 2	10	6-32075-12-0-1	
				1	1701-2100 1450 2	10	6-32075-15-0-1	
				1	2101-2450 1890 3	10	6-32075-19-0-1	
1	1	1	1	1	**Locking plate Se** – tilt function	100	(acc. to profile)	
					Locking plates – standard	100	(acc. to profile)	

SRH / SRW	401-750	751-1200	1201-1450	1451-1600
480- 750	1	3	4	5
751-1350	2	4	5	6
1351-2100	3	5	6	7
2101-2450	4	6	7	8

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4, 5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour
[3] Extension 500 to be shortened to 250 mm
[4] From SRH 551 mm

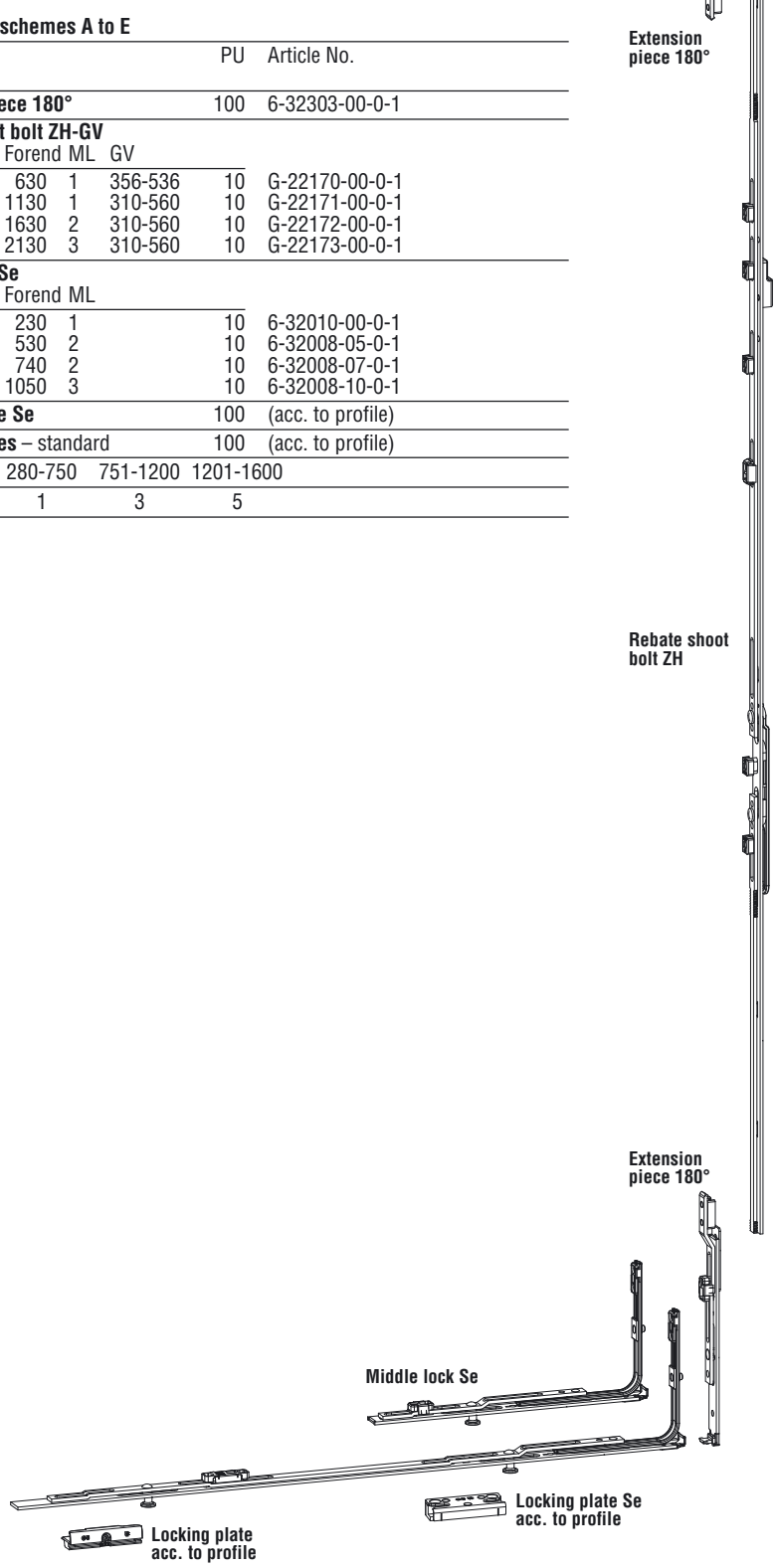
Variable gear position, groove position 9 and 13 mm

Basic security



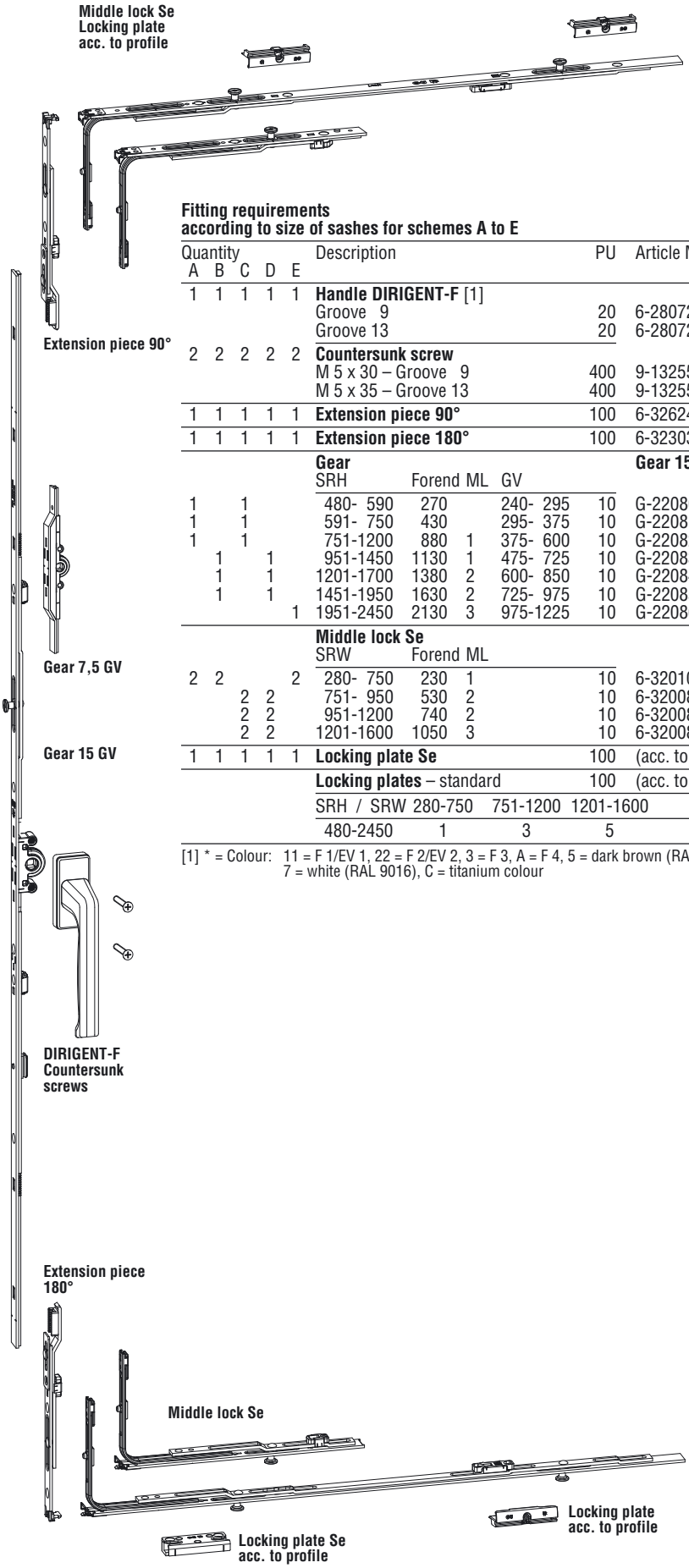
Fitting requirements according to size of sashes for schemes A to E

Quantity A	B	C	D	E	Description				PU	Article No.
2	2	2	2	2	**Extension piece 180°**				100	6-32303-00-0-1
					Rebate shoot bolt ZH-GV					
					SRH	Forend	ML	GV		
1		1			781- 950	630	1	356-536	10	G-22170-00-0-1
1	1	1	1		951-1450	1130	1	310-560	10	G-22171-00-0-1
1	1	1	1		1451-1950	1630	2	310-560	10	G-22172-00-0-1
	1		1		1951-2450	2130	3	310-560	10	G-22173-00-0-1
					Middle lock Se					
					SRW	Forend	ML			
2	2			2	280- 750	230	1		10	6-32010-00-0-1
		2	2		751- 950	530	2		10	6-32008-05-0-1
		2	2		951-1200	740	2		10	6-32008-07-0-1
		2	2		1201-1600	1050	3		10	6-32008-10-0-1
1	1	1	1	1	**Locking plate Se**				100	(acc. to profile)
					Locking plates – standard				100	(acc. to profile)
					SRH / SRW	280-750	751-1200	1201-1600		
					781-2450	1	3	5		



Variable gear position, groove position 9 and 13 mm

Basic security



Fitting requirements
according to size of sashes for schemes A to E

Quantity A	B	C	D	E	Description	PU	Article No.	
1	1	1	1	1	**Handle DIRIGENT-F** [1]			
					Groove 9	20	6-28072-25-0-*	
					Groove 13	20	6-28072-29-0-*	
2	2	2	2	2	**Countersunk screw**			
					M 5 x 30 – Groove 9	400	9-13255-30-0-1	
					M 5 x 35 – Groove 13	400	9-13255-35-0-1	
1	1	1	1	1	**Extension piece 90°**	100	6-32624-00-0-1	
1	1	1	1	1	**Extension piece 180°**	100	6-32303-00-0-1	

					Gear SRH	Forend	ML	GV			**Gear 15 GV**	**Gear 7,5 GV**
1		1			480- 590	270		240- 295	10		G-22080-00-0-1	
1		1			591- 750	430		295- 375	10		G-22081-00-0-1	
1		1			751-1200	880	1	375- 600	10		G-22082-00-0-1	G-22102-00-0-1
	1		1		951-1450	1130	1	475- 725	10		G-22083-00-0-1	G-22103-00-0-1
	1		1		1201-1700	1380	2	600- 850	10		G-22084-00-0-1	G-22104-00-0-1
	1		1		1451-1950	1630	2	725- 975	10		G-22085-00-0-1	G-22105-00-0-1
				1	1951-2450	2130	3	975-1225	10		G-22086-00-0-1	G-22106-00-0-1

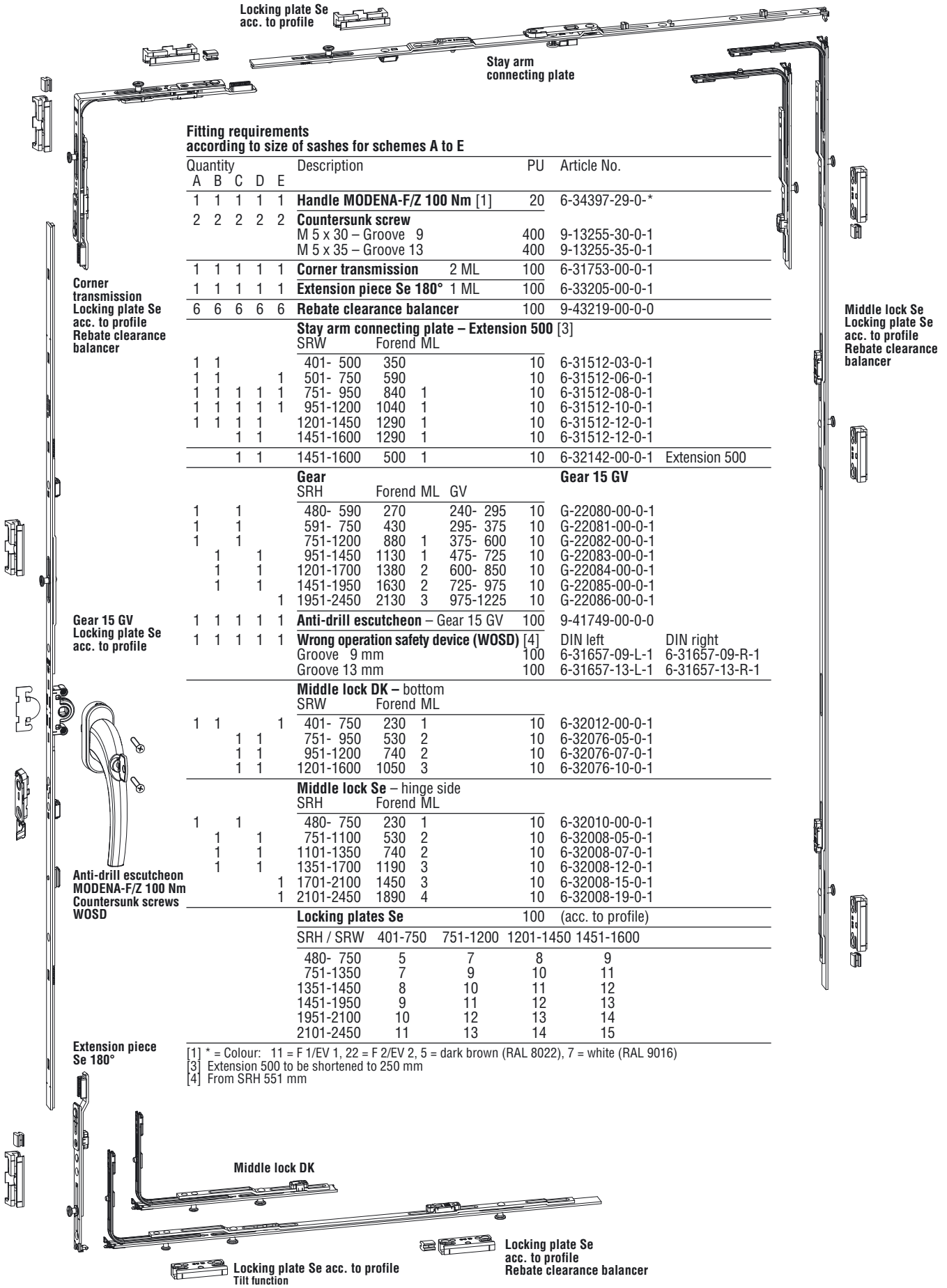
					Middle lock Se SRW	Forend	ML				
2	2			2	280- 750	230	1		10		6-32010-00-0-1
		2	2		751- 950	530	2		10		6-32008-05-0-1
		2	2		951-1200	740	2		10		6-32008-07-0-1
		2	2		1201-1600	1050	3		10		6-32008-10-0-1
1	1	1	1	1	**Locking plate Se**				100		(acc. to profile)
					Locking plates – standard				100		(acc. to profile)

SRH / SRW	280-750	751-1200	1201-1600
480-2450	1	3	5

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4, 5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour

Variable gear position, groove position 9 and 13 mm

WK 2



Fitting requirements according to size of sashes for schemes A to E

Quantity A	B	C	D	E	Description	PU	Article No.	
1	1	1	1	1	**Handle MODENA-F/Z 100 Nm** [1]	20	6-34397-29-0-*	
2	2	2	2	2	**Countersunk screw**			
					M 5 x 30 – Groove 9	400	9-13255-30-0-1	
					M 5 x 35 – Groove 13	400	9-13255-35-0-1	
1	1	1	1	1	**Corner transmission** 2 ML	100	6-31753-00-0-1	
1	1	1	1	1	**Extension piece Se 180°** 1 ML	100	6-33205-00-0-1	
6	6	6	6	6	**Rebate clearance balancer**	100	9-43219-00-0-0	

Stay arm connecting plate – Extension 500 [3]

SRW	Forend	ML	PU	Article No.	
401- 500	350		10	6-31512-03-0-1	
501- 750	590		10	6-31512-06-0-1	
751- 950	840	1	10	6-31512-08-0-1	
951-1200	1040	1	10	6-31512-10-0-1	
1201-1450	1290	1	10	6-31512-12-0-1	
1451-1600	1290	1	10	6-31512-12-0-1	
1451-1600	500	1	10	6-32142-00-0-1	Extension 500

Gear / **Gear 15 GV**

SRH	Forend	ML	GV	PU	Article No.
480- 590	270		240- 295	10	G-22080-00-0-1
591- 750	430		295- 375	10	G-22081-00-0-1
751-1200	880	1	375- 600	10	G-22082-00-0-1
951-1450	1130	1	475- 725	10	G-22083-00-0-1
1201-1700	1380	2	600- 850	10	G-22084-00-0-1
1451-1950	1630	2	725- 975	10	G-22085-00-0-1
1951-2450	2130	3	975-1225	10	G-22086-00-0-1

1	1	1	1	1	**Anti-drill escutcheon** – Gear 15 GV	100	9-41749-00-0-0	
1	1	1	1	1	**Wrong operation safety device (WOSD)** [4]		DIN left	DIN right
					Groove 9 mm	100	6-31657-09-L-1	6-31657-09-R-1
					Groove 13 mm	100	6-31657-13-L-1	6-31657-13-R-1

Middle lock DK – bottom

SRW	Forend	ML	PU	Article No.
401- 750	230	1	10	6-32012-00-0-1
751- 950	530	2	10	6-32076-05-0-1
951-1200	740	2	10	6-32076-07-0-1
1201-1600	1050	3	10	6-32076-10-0-1

Middle lock Se – hinge side

SRH	Forend	ML	PU	Article No.
480- 750	230	1	10	6-32010-00-0-1
751-1100	530	2	10	6-32008-05-0-1
1101-1350	740	2	10	6-32008-07-0-1
1351-1700	1190	3	10	6-32008-12-0-1
1701-2100	1450	3	10	6-32008-15-0-1
2101-2450	1890	4	10	6-32008-19-0-1

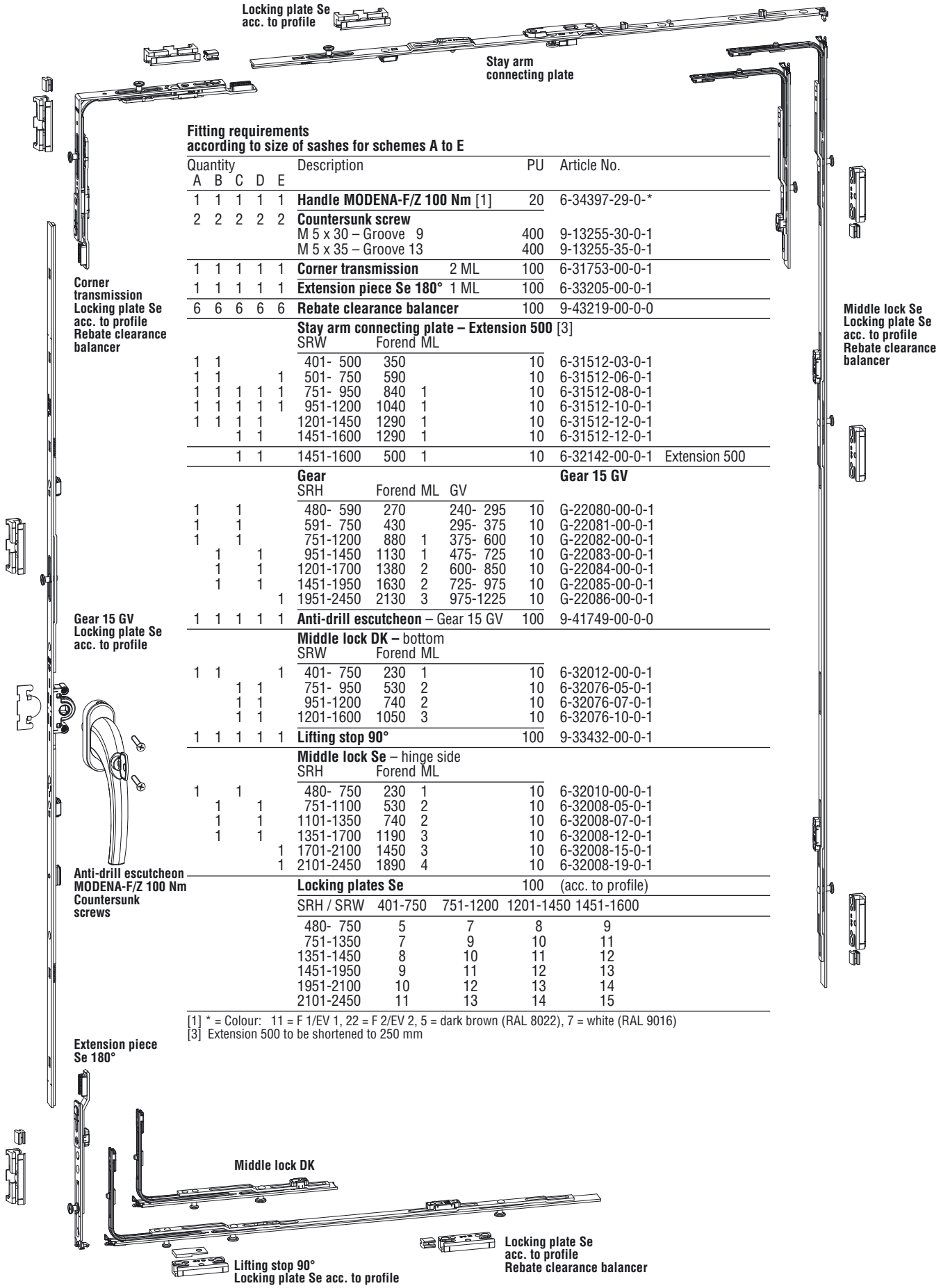
Locking plates Se 100 (acc. to profile)

SRH / SRW	401-750	751-1200	1201-1450	1451-1600
480- 750	5	7	8	9
751-1350	7	9	10	11
1351-1450	8	10	11	12
1451-1950	9	11	12	13
1951-2100	10	12	13	14
2101-2450	11	13	14	15

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 5 = dark brown (RAL 8022), 7 = white (RAL 9016)
[3] Extension 500 to be shortened to 250 mm
[4] From SRH 551 mm

Variable gear position, groove position 9 and 13 mm

WK 2



Fitting requirements
according to size of sashes for schemes A to E

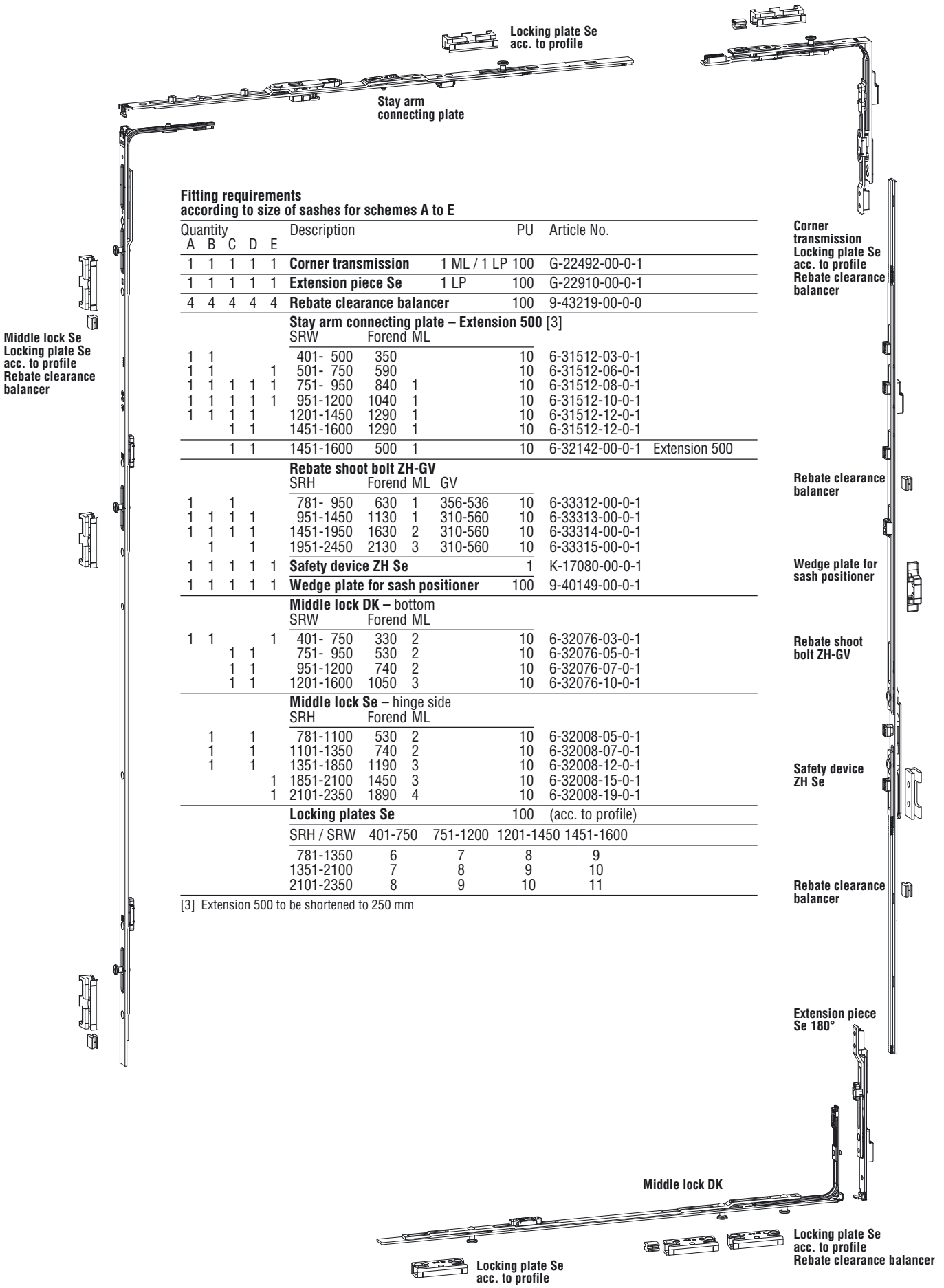
Quantity A	B	C	D	E	Description					PU	Article No.	
1	1	1	1	1	**Handle MODENA-F/Z 100 Nm** [1]					20	6-34397-29-0-*	
2	2	2	2	2	**Countersunk screw**							
					M 5 x 30 – Groove 9					400	9-13255-30-0-1	
					M 5 x 35 – Groove 13					400	9-13255-35-0-1	
1	1	1	1	1	**Corner transmission**	2 ML				100	6-31753-00-0-1	
1	1	1	1	1	**Extension piece Se 180°**	1 ML				100	6-33205-00-0-1	
6	6	6	6	6	**Rebate clearance balancer**					100	9-43219-00-0-0	
					Stay arm connecting plate – Extension 500 [3]							
					SRW	Forend	ML					
1	1				401- 500	350				10	6-31512-03-0-1	
1	1			1	501- 750	590				10	6-31512-06-0-1	
1	1	1	1	1	751- 950	840	1			10	6-31512-08-0-1	
1	1	1	1	1	951-1200	1040	1			10	6-31512-10-0-1	
1	1	1	1		1201-1450	1290	1			10	6-31512-12-0-1	
		1	1		1451-1600	1290	1			10	6-31512-12-0-1	
		1	1		1451-1600	500	1			10	6-32142-00-0-1	Extension 500
					Gear						**Gear 15 GV**	
					SRH	Forend	ML	GV				
1		1			480- 590	270		240- 295		10	G-22080-00-0-1	
1		1			591- 750	430		295- 375		10	G-22081-00-0-1	
1		1			751-1200	880	1	375- 600		10	G-22082-00-0-1	
	1		1		951-1450	1130	1	475- 725		10	G-22083-00-0-1	
	1		1		1201-1700	1380	2	600- 850		10	G-22084-00-0-1	
	1		1		1451-1950	1630	2	725- 975		10	G-22085-00-0-1	
				1	1951-2450	2130	3	975-1225		10	G-22086-00-0-1	
1	1	1	1	1	**Anti-drill escutcheon** – Gear 15 GV					100	9-41749-00-0-0	
					Middle lock DK – bottom							
					SRW	Forend	ML					
1	1			1	401- 750	230	1			10	6-32012-00-0-1	
		1	1		751- 950	530	2			10	6-32076-05-0-1	
		1	1		951-1200	740	2			10	6-32076-07-0-1	
		1	1		1201-1600	1050	3			10	6-32076-10-0-1	
1	1	1	1	1	**Lifting stop 90°**					100	9-33432-00-0-1	
					Middle lock Se – hinge side							
					SRH	Forend	ML					
1		1			480- 750	230	1			10	6-32010-00-0-1	
	1		1		751-1100	530	2			10	6-32008-05-0-1	
	1		1		1101-1350	740	2			10	6-32008-07-0-1	
	1		1		1351-1700	1190	3			10	6-32008-12-0-1	
				1	1701-2100	1450	3			10	6-32008-15-0-1	
				1	2101-2450	1890	4			10	6-32008-19-0-1	

Locking plates Se				100	(acc. to profile)
SRH / SRW	401-750	751-1200	1201-1450	1451-1600	
480- 750	5	7	8	9	
751-1350	7	9	10	11	
1351-1450	8	10	11	12	
1451-1950	9	11	12	13	
1951-2100	10	12	13	14	
2101-2450	11	13	14	15	

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 5 = dark brown (RAL 8022), 7 = white (RAL 9016)
[3] Extension 500 to be shortened to 250 mm

Variable gear position, groove position 9 and 13 mm

WK 2



Fitting requirements according to size of sashes for schemes A to E

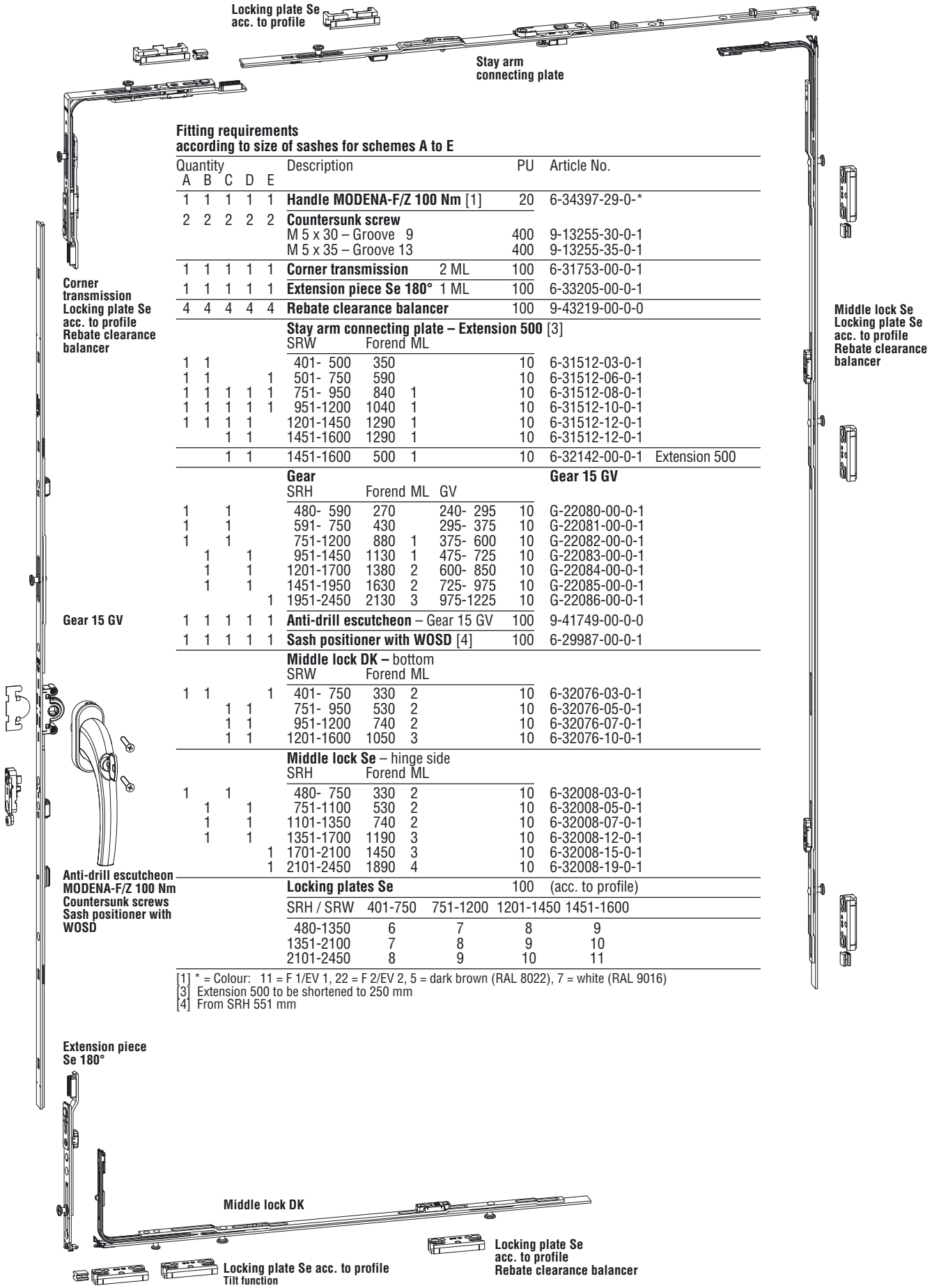
Quantity A	B	C	D	E	Description				PU	Article No.	
1	1	1	1	1	**Corner transmission**			1 ML / 1 LP	100	G-22492-00-0-1	
1	1	1	1	1	**Extension piece Se**			1 LP	100	G-22910-00-0-1	
4	4	4	4	4	**Rebate clearance balancer**				100	9-43219-00-0-0	
					Stay arm connecting plate – Extension 500 [3]						
					SRW	Forend	ML				
1	1				401- 500	350			10	6-31512-03-0-1	
1	1			1	501- 750	590			10	6-31512-06-0-1	
1	1	1	1	1	751- 950	840	1		10	6-31512-08-0-1	
1	1	1	1	1	951-1200	1040	1		10	6-31512-10-0-1	
1	1	1	1		1201-1450	1290	1		10	6-31512-12-0-1	
		1	1		1451-1600	1290	1		10	6-31512-12-0-1	
		1	1		1451-1600	500	1		10	6-32142-00-0-1	Extension 500
					Rebate shoot bolt ZH-GV						
					SRH	Forend	ML	GV			
1		1			781- 950	630	1	356-536	10	6-33312-00-0-1	
1	1	1	1		951-1450	1130	1	310-560	10	6-33313-00-0-1	
1	1	1	1		1451-1950	1630	2	310-560	10	6-33314-00-0-1	
	1		1		1951-2450	2130	3	310-560	10	6-33315-00-0-1	
1	1	1	1	1	**Safety device ZH Se**				1	K-17080-00-0-1	
1	1	1	1	1	**Wedge plate for sash positioner**				100	9-40149-00-0-1	
					Middle lock DK – bottom						
					SRW	Forend	ML				
1	1			1	401- 750	330	2		10	6-32076-03-0-1	
		1	1		751- 950	530	2		10	6-32076-05-0-1	
		1	1		951-1200	740	2		10	6-32076-07-0-1	
		1	1		1201-1600	1050	3		10	6-32076-10-0-1	
					Middle lock Se – hinge side						
					SRH	Forend	ML				
	1		1		781-1100	530	2		10	6-32008-05-0-1	
	1		1		1101-1350	740	2		10	6-32008-07-0-1	
	1		1		1351-1850	1190	3		10	6-32008-12-0-1	
				1	1851-2100	1450	3		10	6-32008-15-0-1	
				1	2101-2350	1890	4		10	6-32008-19-0-1	
					Locking plates Se				100	(acc. to profile)	

SRH / SRW	401-750	751-1200	1201-1450	1451-1600
781-1350	6	7	8	9
1351-2100	7	8	9	10
2101-2350	8	9	10	11

[3] Extension 500 to be shortened to 250 mm

Variable gear position, groove position 9 and 13 mm

WK 2



Fitting requirements according to size of sashes for schemes A to E

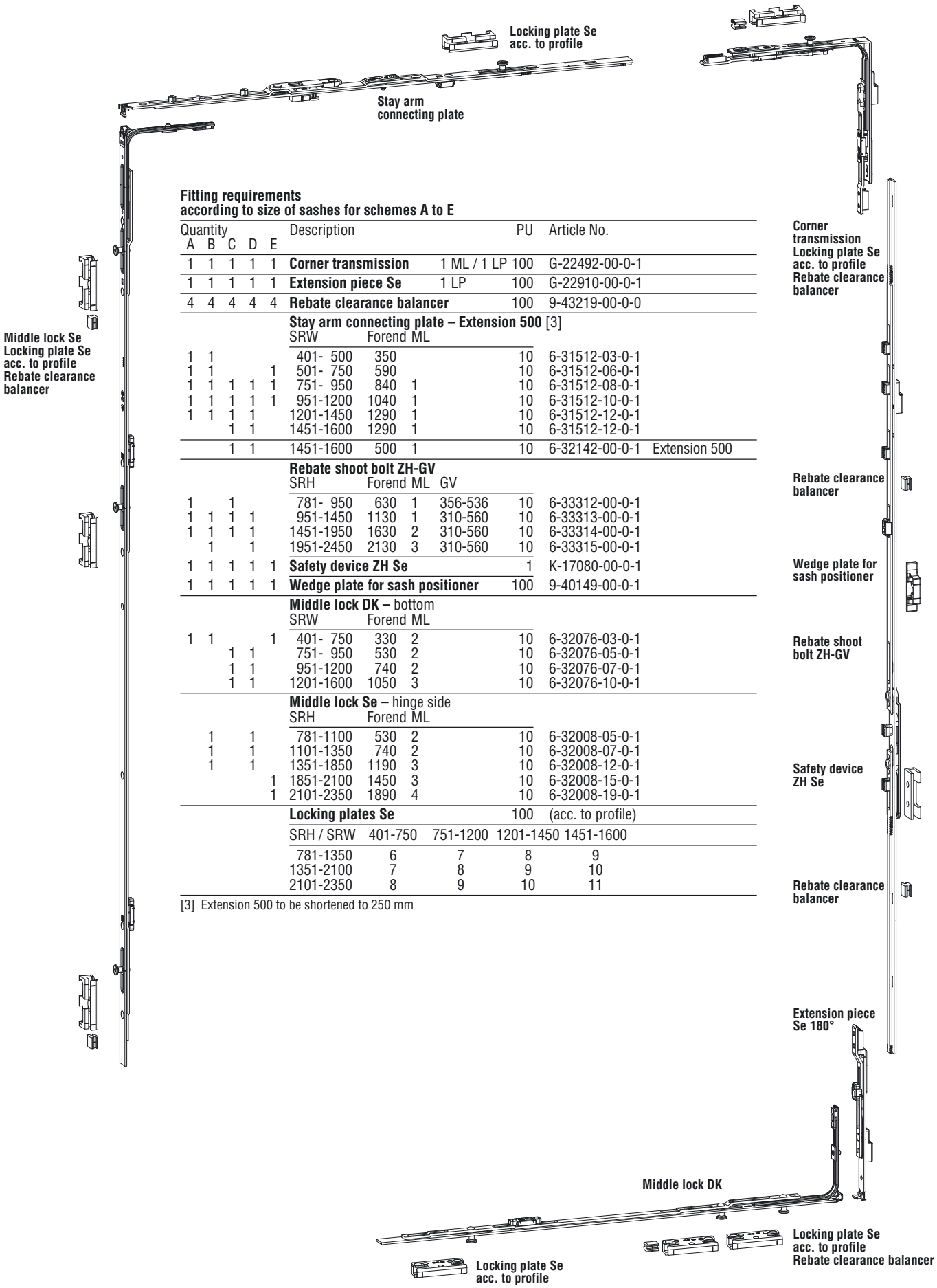
Quantity A	B	C	D	E	Description					PU	Article No.	
1	1	1	1	1	**Handle MODENA-F/Z 100 Nm** [1]					20	6-34397-29-0-*	
2	2	2	2	2	**Countersunk screw**							
					M 5 x 30 – Groove 9					400	9-13255-30-0-1	
					M 5 x 35 – Groove 13					400	9-13255-35-0-1	
1	1	1	1	1	**Corner transmission**	2 ML				100	6-31753-00-0-1	
1	1	1	1	1	**Extension piece Se 180°**	1 ML				100	6-33205-00-0-1	
4	4	4	4	4	**Rebate clearance balancer**					100	9-43219-00-0-0	
					Stay arm connecting plate – Extension 500 [3]							
					SRW	Forend	ML					
1	1				401- 500	350				10	6-31512-03-0-1	
1	1			1	501- 750	590				10	6-31512-06-0-1	
1	1	1	1	1	751- 950	840	1			10	6-31512-08-0-1	
1	1	1	1	1	951-1200	1040	1			10	6-31512-10-0-1	
1	1	1	1		1201-1450	1290	1			10	6-31512-12-0-1	
		1	1		1451-1600	1290	1			10	6-31512-12-0-1	
		1	1		1451-1600	500	1			10	6-32142-00-0-1	Extension 500
					Gear						**Gear 15 GV**	
					SRH	Forend	ML	GV				
1		1			480- 590	270		240- 295		10	G-22080-00-0-1	
1		1			591- 750	430		295- 375		10	G-22081-00-0-1	
1		1			751-1200	880	1	375- 600		10	G-22082-00-0-1	
	1		1		951-1450	1130	1	475- 725		10	G-22083-00-0-1	
	1		1		1201-1700	1380	2	600- 850		10	G-22084-00-0-1	
	1		1		1451-1950	1630	2	725- 975		10	G-22085-00-0-1	
				1	1951-2450	2130	3	975-1225		10	G-22086-00-0-1	
1	1	1	1	1	**Anti-drill escutcheon** – Gear 15 GV					100	9-41749-00-0-0	
1	1	1	1	1	**Sash positioner with WOSD** [4]					100	6-29987-00-0-1	
					Middle lock DK – bottom							
					SRW	Forend	ML					
1	1			1	401- 750	330	2			10	6-32076-03-0-1	
		1	1		751- 950	530	2			10	6-32076-05-0-1	
		1	1		951-1200	740	2			10	6-32076-07-0-1	
		1	1		1201-1600	1050	3			10	6-32076-10-0-1	
					Middle lock Se – hinge side							
					SRH	Forend	ML					
1		1			480- 750	330	2			10	6-32008-03-0-1	
	1		1		751-1100	530	2			10	6-32008-05-0-1	
	1		1		1101-1350	740	2			10	6-32008-07-0-1	
	1		1		1351-1700	1190	3			10	6-32008-12-0-1	
				1	1701-2100	1450	3			10	6-32008-15-0-1	
				1	2101-2450	1890	4			10	6-32008-19-0-1	
					Locking plates Se					100	(acc. to profile)	

SRH / SRW	401-750	751-1200	1201-1450	1451-1600
480-1350	6	7	8	9
1351-2100	7	8	9	10
2101-2450	8	9	10	11

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 5 = dark brown (RAL 8022), 7 = white (RAL 9016)
[3] Extension 500 to be shortened to 250 mm
[4] From SRH 551 mm

Variable gear position, groove position 9 and 13 mm

WK 2



Fitting requirements according to size of sashes for schemes A to E

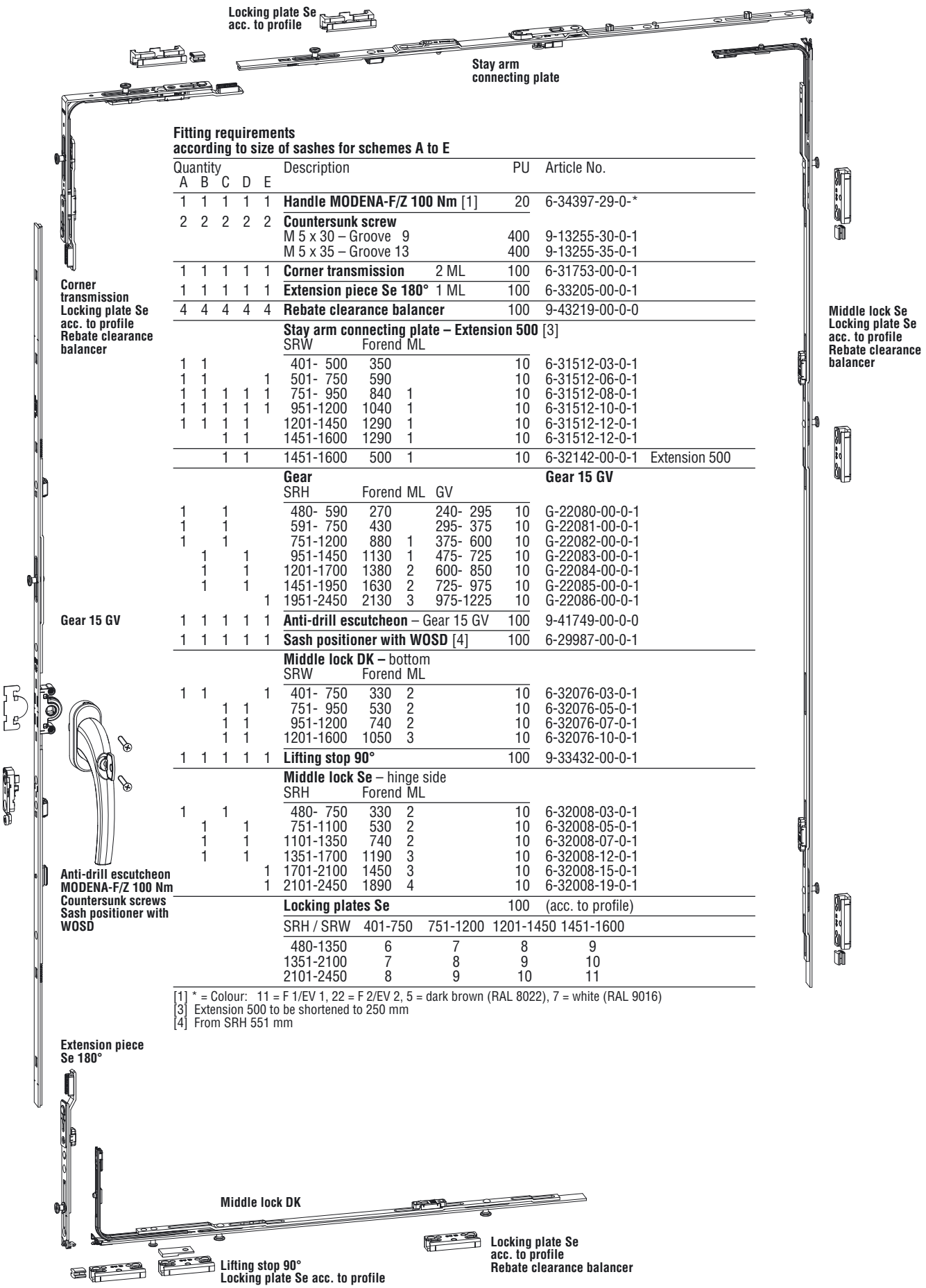
Quantity A	B	C	D	E	Description				PU	Article No.	
1	1	1	1	1	**Corner transmission**			1 ML / 1 LP	100	G-22492-00-0-1	
1	1	1	1	1	**Extension piece Se**			1 LP	100	G-22910-00-0-1	
4	4	4	4	4	**Rebate clearance balancer**				100	9-43219-00-0-0	
					Stay arm connecting plate – Extension 500 [3]						
					SRW	Forend	ML				
1	1				401- 500	350			10	6-31512-03-0-1	
1	1			1	501- 750	590			10	6-31512-06-0-1	
1	1	1	1	1	751- 950	840	1		10	6-31512-08-0-1	
1	1	1	1	1	951-1200	1040	1		10	6-31512-10-0-1	
1	1	1	1		1201-1450	1290	1		10	6-31512-12-0-1	
		1	1		1451-1600	1290	1		10	6-31512-12-0-1	
		1	1		1451-1600	500	1		10	6-32142-00-0-1	Extension 500
					Rebate shoot bolt ZH-GV						
					SRH	Forend	ML	GV			
1		1			781- 950	630	1	356-536	10	6-33312-00-0-1	
1	1	1	1		951-1450	1130	1	310-560	10	6-33313-00-0-1	
1	1	1	1		1451-1950	1630	2	310-560	10	6-33314-00-0-1	
	1		1		1951-2450	2130	3	310-560	10	6-33315-00-0-1	
1	1	1	1	1	**Safety device ZH Se**				1	K-17080-00-0-1	
1	1	1	1	1	**Wedge plate for sash positioner**				100	9-40149-00-0-1	
					Middle lock DK – bottom						
					SRW	Forend	ML				
1	1			1	401- 750	330	2		10	6-32076-03-0-1	
		1	1		751- 950	530	2		10	6-32076-05-0-1	
		1	1		951-1200	740	2		10	6-32076-07-0-1	
		1	1		1201-1600	1050	3		10	6-32076-10-0-1	
					Middle lock Se – hinge side						
					SRH	Forend	ML				
	1		1		781-1100	530	2		10	6-32008-05-0-1	
	1		1		1101-1350	740	2		10	6-32008-07-0-1	
	1		1		1351-1850	1190	3		10	6-32008-12-0-1	
				1	1851-2100	1450	3		10	6-32008-15-0-1	
				1	2101-2350	1890	4		10	6-32008-19-0-1	
					Locking plates Se				100	(acc. to profile)	

SRH / SRW	401-750	751-1200	1201-1450	1451-1600
781-1350	6	7	8	9
1351-2100	7	8	9	10
2101-2350	8	9	10	11

[3] Extension 500 to be shortened to 250 mm

Variable gear position, groove position 9 and 13 mm

WK 2



Fitting requirements
according to size of sashes for schemes A to E

Quantity A	B	C	D	E	Description				PU	Article No.	
1	1	1	1	1	**Handle MODENA-F/Z 100 Nm** [1]				20	6-34397-29-0-*	
2	2	2	2	2	**Countersunk screw**						
					M 5 x 30 – Groove 9				400	9-13255-30-0-1	
					M 5 x 35 – Groove 13				400	9-13255-35-0-1	
1	1	1	1	1	**Corner transmission**	2 ML			100	6-31753-00-0-1	
1	1	1	1	1	**Extension piece Se 180°**	1 ML			100	6-33205-00-0-1	
4	4	4	4	4	**Rebate clearance balancer**				100	9-43219-00-0-0	
					Stay arm connecting plate – Extension 500 [3]						
					SRW	Forend	ML				
1	1				401- 500	350			10	6-31512-03-0-1	
1	1			1	501- 750	590			10	6-31512-06-0-1	
1	1	1	1	1	751- 950	840	1		10	6-31512-08-0-1	
1	1	1	1	1	951-1200	1040	1		10	6-31512-10-0-1	
1	1	1	1		1201-1450	1290	1		10	6-31512-12-0-1	
		1	1		1451-1600	1290	1		10	6-31512-12-0-1	
		1	1		1451-1600	500	1		10	6-32142-00-0-1	Extension 500
					Gear					**Gear 15 GV**	
					SRH	Forend	ML	GV			
1		1			480- 590	270		240- 295	10	G-22080-00-0-1	
1		1			591- 750	430		295- 375	10	G-22081-00-0-1	
1		1			751-1200	880	1	375- 600	10	G-22082-00-0-1	
	1		1		951-1450	1130	1	475- 725	10	G-22083-00-0-1	
	1		1		1201-1700	1380	2	600- 850	10	G-22084-00-0-1	
	1		1		1451-1950	1630	2	725- 975	10	G-22085-00-0-1	
				1	1951-2450	2130	3	975-1225	10	G-22086-00-0-1	
1	1	1	1	1	**Anti-drill escutcheon** – Gear 15 GV				100	9-41749-00-0-0	
1	1	1	1	1	**Sash positioner with WOSD** [4]				100	6-29987-00-0-1	
					Middle lock DK – bottom						
					SRW	Forend	ML				
1	1			1	401- 750	330	2		10	6-32076-03-0-1	
		1	1		751- 950	530	2		10	6-32076-05-0-1	
		1	1		951-1200	740	2		10	6-32076-07-0-1	
		1	1		1201-1600	1050	3		10	6-32076-10-0-1	
1	1	1	1	1	**Lifting stop 90°**				100	9-33432-00-0-1	
					Middle lock Se – hinge side						
					SRH	Forend	ML				
1		1			480- 750	330	2		10	6-32008-03-0-1	
	1		1		751-1100	530	2		10	6-32008-05-0-1	
	1		1		1101-1350	740	2		10	6-32008-07-0-1	
	1		1		1351-1700	1190	3		10	6-32008-12-0-1	
				1	1701-2100	1450	3		10	6-32008-15-0-1	
				1	2101-2450	1890	4		10	6-32008-19-0-1	

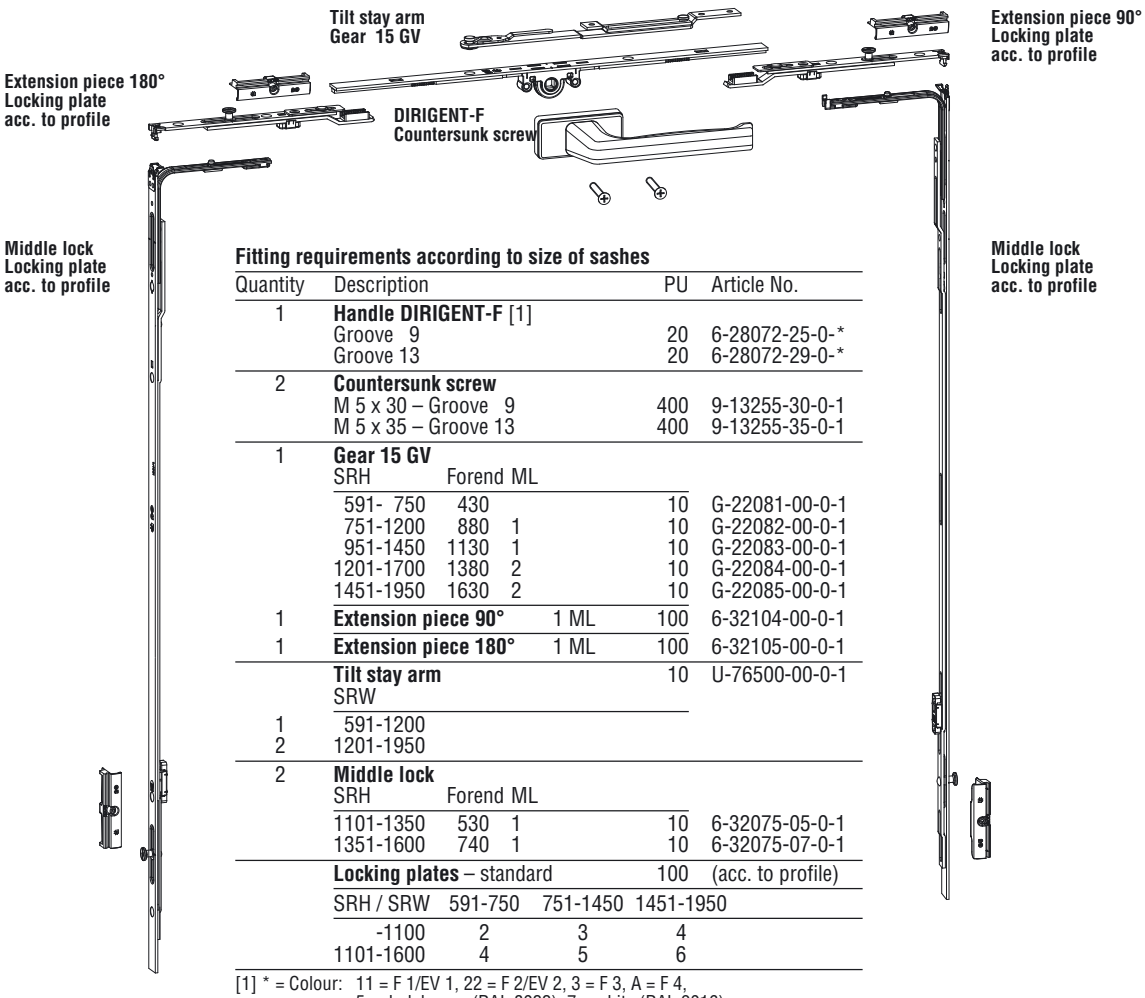
Locking plates Se 100 (acc. to profile)

SRH / SRW	401-750	751-1200	1201-1450	1451-1600
480-1350	6	7	8	9
1351-2100	7	8	9	10
2101-2450	8	9	10	11

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 5 = dark brown (RAL 8022), 7 = white (RAL 9016)
[3] Extension 500 to be shortened to 250 mm
[4] From SRH 551 mm

Variable gear position, groove position 9 and 13 mm

Basic security



Fitting requirements according to size of sashes

Quantity	Description			PU	Article No.
1	**Handle DIRIGENT-F** [1]				
	Groove 9			20	6-28072-25-0-*
	Groove 13			20	6-28072-29-0-*
2	**Countersunk screw**				
	M 5 x 30 – Groove 9			400	9-13255-30-0-1
	M 5 x 35 – Groove 13			400	9-13255-35-0-1
1	**Gear 15 GV**				
	SRH	Forend	ML		
	591- 750	430		10	G-22081-00-0-1
	751-1200	880	1	10	G-22082-00-0-1
	951-1450	1130	1	10	G-22083-00-0-1
	1201-1700	1380	2	10	G-22084-00-0-1
	1451-1950	1630	2	10	G-22085-00-0-1
1	**Extension piece 90°**		1 ML	100	6-32104-00-0-1
1	**Extension piece 180°**		1 ML	100	6-32105-00-0-1
	Tilt stay arm			10	U-76500-00-0-1
	SRW				
1	591-1200				
2	1201-1950				
2	**Middle lock**				
	SRH	Forend	ML		
	1101-1350	530	1	10	6-32075-05-0-1
	1351-1600	740	1	10	6-32075-07-0-1
	Locking plates – standard			100	(acc. to profile)

SRH / SRW	591-750	751-1450	1451-1950
-1100	2	3	4
1101-1600	4	5	6

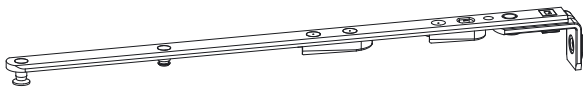
[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4,
5 = dark brown (RAL 8022), 7 = white (RAL 9016),
C = titanium painted

Tilt-turn, first tilt, side hung, inactive and tilt sashes – for sash with undercut fitting groove 16 mm

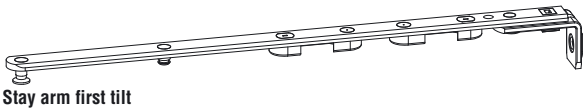
Tilt-turn, first tilt, side hung and inactive sashes

Fitting requirements for schemes A to E

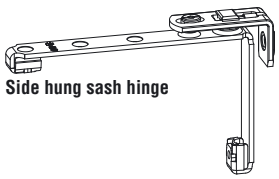
Qty.	Description		PU	Article No.
1	**Stay arm tilt-turn**			
	SRW			
	280- 500		10	6-31518-03-0-1
	501- 750		10	6-31518-06-0-1
	751-1200		10	6-31518-08-0-1
	1201-1600		10	6-31518-12-0-1
1	**Stay arm first tilt**			
	SRW			
	280- 500		10	6-33777-03-0-1
	501- 750		10	6-33777-06-0-1
	751-1200		10	6-33777-08-0-1
	1201-1600		10	6-33777-12-0-1
1	**Side hung sash hinge**		10	6-31519-00-0-1



Stay arm tilt-turn



Stay arm first tilt



Side hung sash hinge

Tilt-turn, first tilt, side hung, inactive and tilt sashes

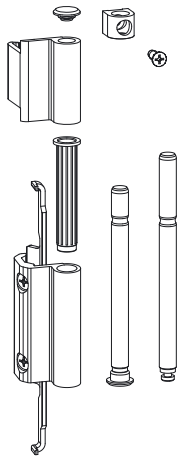
Fitting requirements for schemes A to E

Qty.	Description		PU	Article No.
1	**Bag of hinge side** [1]			
	for sash with undercut fitting groove 16 mm			
	Groove 9	Sash overlap 18	10	K-17125-18-0-*
	Frame groove 14 / 18	Sash overlap 20	10	K-17125-20-0-*
	Groove 9	Sash overlap 18	10	K-17506-18-0-*
	Frame groove 10 / 14	Sash overlap 20	10	K-17506-20-0-*
	Contents			
	1 Stay arm bearing [1]	Sash overlap 18		6-31591-18-0-*
		Sash overlap 20		6-31591-20-0-*
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Stay arm hinge [1]	Sash overlap 18		6-31592-18-0-*
		Sash overlap 20		6-31592-20-0-*
	1 Bearing sleeve			9-39805-00-0-6
	2 Covers			9-39807-00-0-6
	1 Corner bearing [1]	Sash overlap 18		9-39812-00-0-*
		Sash overlap 20		9-43356-00-0-*
	1 Corner bearing case	Frame groove 14/18		6-30872-00-0-1
		Frame groove 10/14		6-32055-00-0-1
	1 Corner bearing axle			6-31087-00-0-6
	1 Corner hinge [1]	Sash overlap 18		6-31575-18-0-*
		Sash overlap 20		6-31575-20-0-*
	1 Clamping angle			6-33462-00-0-1
	2 Countersunk screws			9-13489-12-R-8
	1 Bearing sleeve 130	Sash weight > 80 kg		9-43545-00-0-1
1	**Bag of additional parts – 130 kg** [1]		1	K-16595-00-0-*
	Contents			
	1 Stay arm bearing 130 [1]			9-41710-00-0-*
	1 Stay arm bearing axle 130			9-39809-01-0-6
	1 Countersunk screw M 5 x 16			9-33841-16-R-8
1	**Bag of middle hinge** [1]			
	for sash with undercut fitting groove 16 mm			
	Groove 9	Sash overlap 18	10	K-17216-18-0-*
		Sash overlap 20	10	K-17216-20-0-*
	Contents			
	1 Bearing hinge [1]	Sash overlap 18		6-33727-18-0-*
		Sash overlap 20		6-33727-20-0-*
	1 Middle hinge [1]	Sash overlap 18		6-33751-18-0-*
		Sash overlap 20		6-33751-20-0-*
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Bearing sleeve			9-39805-00-0-6
	1 Cover			9-39807-00-0-6
1	**Bag of tilt sash hinge**[1]			
	for sash with undercut fitting groove 16 mm			
	Groove 9	Sash overlap 18	10	K-17212-18-0-*
		Sash overlap 20	10	K-17212-20-0-*
	Contents			
	1 Bearing hinge [1]	Sash overlap 18		6-33727-18-0-*
		Sash overlap 20		6-33727-20-0-*
	1 Middle hinge [1]	Sash overlap 18		6-33749-18-0-*
		Sash overlap 20		6-33749-20-0-*
	1 Clamping plate			6-33728-00-0-1
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Bearing sleeve			9-39805-00-0-6
	1 Cover			9-39807-00-0-6
	2 Raised countersunk head screw M 5 x 16			9-13489-16-R-8

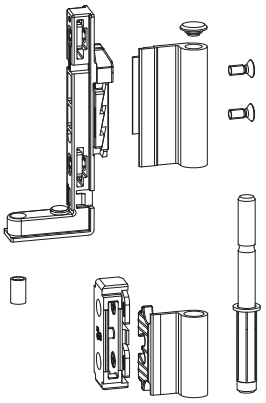
[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)

Stay arm tilt-turn and first tilt
Cover
Stay arm hinge
Bearing sleeve
Stay arm bearing
Stay arm bearing axle

Additional parts 130 kg
Stay arm bearing 130
Countersunk screw
Stay arm bearing axle 130



Corner bearing
Clamping angle/Support angle
Cover
Corner hinge
Countersunk screw
Bearing sleeve 130
Corner bearing case
Corner bearing
Corner bearing axle



Optional part

Qty.	Description		PU	Article No.
1	**Bag of bearing sleeves/covers light grey** [1] for all bags of hinge side/middle hinge UNI-JET C		1	K-17803-00-0-1
	Contents			
	1 Bearing sleeve			9-39805-00-0-1
	2 Covers			9-39807-00-0-1
	1 Corner bearing sleeve			9-39831-00-0-1
	1 Safety cover			9-39806-00-0-1

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)

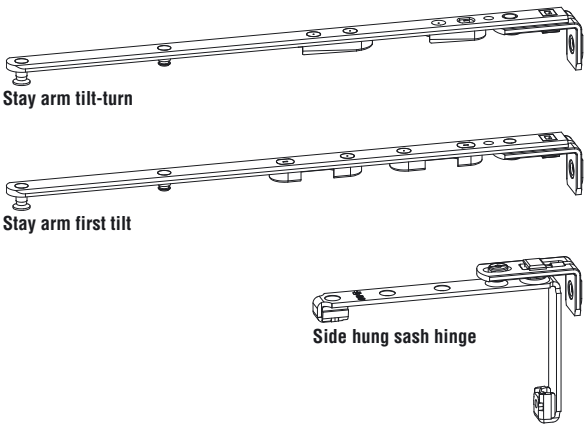
Working drawing 0-44708

Tilt-turn, first tilt, side hung, inactive and tilt sashes – for sash with plane fitting groove 16 mm

Tilt-turn, first tilt, side hung and inactive sashes

Fitting requirements for schemes A to E

Qty.	Description		PU	Article No.
1	**Stay arm tilt-turn** SRW			
	280- 500		10	6-31518-03-0-1
	501- 750		10	6-31518-06-0-1
	751-1200		10	6-31518-08-0-1
	1201-1600		10	6-31518-12-0-1
1	**Stay arm first tilt** SRW			
	280- 500		10	6-33777-03-0-1
	501- 750		10	6-33777-06-0-1
	751-1200		10	6-33777-08-0-1
	1201-1600		10	6-33777-12-0-1
1	**Side hung sash hinge**		10	6-31519-00-0-1

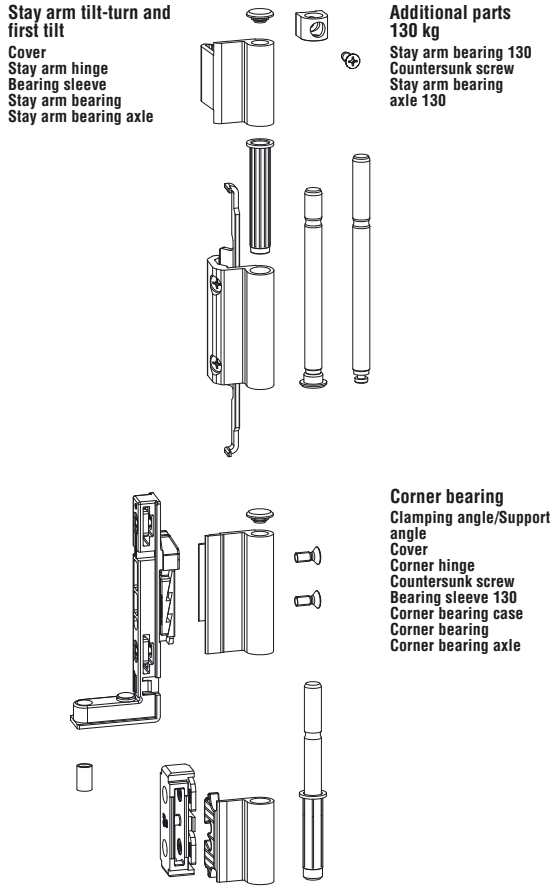


Tilt-turn, first tilt, side hung, inactive and tilt sashes

Fitting requirements for schemes A to E

Qty.	Description		PU	Article No.
1	**Bag of hinge side** [1] **for sash with plane fitting groove 16 mm**			
	Groove 9	Sash overlap 18	10	K-17126-18-0-*
	Frame groove 14 / 18	Sash overlap 20	10	K-17126-20-0-*
	Groove 9	Sash overlap 18	10	K-17507-18-0-*
	Frame groove 10 / 14	Sash overlap 20	10	K-17507-20-0-*
	Contents			
	1 Stay arm bearing [1]	Sash overlap 18		6-31591-18-0-*
		Sash overlap 20		6-31591-20-0-*
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Stay arm hinge [1]	Sash overlap 18		6-31592-18-0-*
		Sash overlap 20		6-31592-20-0-*
	1 Bearing sleeve			9-39805-00-0-6
	2 Covers			9-39807-00-0-6
	1 Corner bearing [1]	Sash overlap 18		9-39812-00-0-*
		Sash overlap 20		9-43356-00-0-*
	1 Corner bearing case	Frame groove 14/18		6-30872-00-0-1
		Frame groove 10/14		6-32055-00-0-1
	1 Corner bearing axle			6-31087-00-0-6
	1 Corner hinge [1]	Sash overlap 18		6-31575-18-0-*
		Sash overlap 20		6-31575-20-0-*
	1 Support angle			6-33463-00-0-1
	2 Countersunk screws			9-13489-12-R-8
	1 Bearing sleeve 130	Sash weight > 80 kg		9-43545-00-0-1
1	**Bag of additional parts – 130 kg** [1]		1	K-16595-00-0-*
	Contents			
	1 Stay arm bearing 130 [1]			9-41710-00-0-*
	1 Stay arm bearing axle 130			9-39809-01-0-6
	1 Countersunk screw M 5 x 16			9-33841-16-R-8
1	**Bag of middle hinge** [1] **for sash with plane fitting groove 16 mm**			
	Groove 9	Sash overlap 18	10	K-17217-18-0-*
		Sash overlap 20	10	K-17217-20-0-*
	Contents			
	1 Bearing hinge [1]	Sash overlap 18		6-33727-18-0-*
		Sash overlap 20		6-33727-20-0-*
	1 Middle hinge [1]	Sash overlap 18		6-33752-18-0-*
		Sash overlap 20		6-33752-20-0-*
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Bearing sleeve			9-39805-00-0-6
	1 Cover			9-39807-00-0-6
1	**Bag of tilt sash hinge**[1] **for sash with plane fitting groove 16 mm**			
	Groove 9	Sash overlap 18	10	K-17213-18-0-*
		Sash overlap 20	10	K-17213-20-0-*
	Contents			
	1 Bearing hinge [1]	Sash overlap 18		6-33727-18-0-*
		Sash overlap 20		6-33727-20-0-*
	1 Middle hinge [1]	Sash overlap 18		6-33749-18-0-*
		Sash overlap 20		6-33749-20-0-*
	1 Screw plate			6-33729-00-0-1
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Bearing sleeve			9-39805-00-0-6
	1 Cover			9-39807-00-0-6
	2 Raised countersunk head screw M 5 x 16			9-13489-16-R-8

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)



Optional part

Qty.	Description	PU	Article No.
1	**Bag of bearing sleeves/covers light grey** [1] for all bags of hinge side/middle hinge UNI-JET C	1	K-17803-00-0-1
	Contents		
	1 Bearing sleeve		9-39805-00-0-1
	2 Covers		9-39807-00-0-1
	1 Corner bearing sleeve		9-39831-00-0-1
	1 Safety cover		9-39806-00-0-1

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)

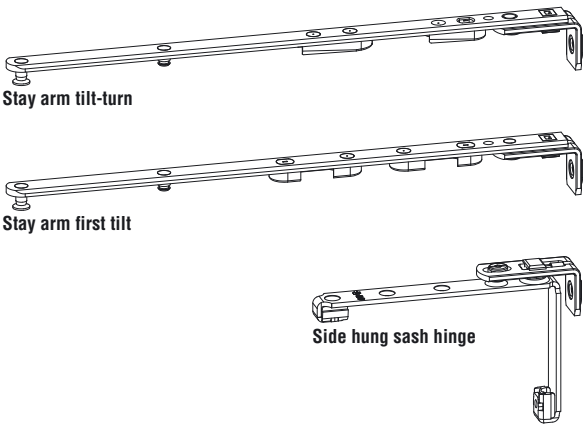
Working drawing 0-44708

Tilt-turn, first tilt, side hung, inactive and tilt sashes – for sash with undercut fitting groove 16 mm

Tilt-turn, first tilt, side hung and inactive sashes

Fitting requirements for schemes A to E

Qty.	Description		PU	Article No.
1	**Stay arm tilt-turn** SRW			
	280- 500		10	6-31518-03-0-1
	501- 750		10	6-31518-06-0-1
	751-1200		10	6-31518-08-0-1
	1201-1600		10	6-31518-12-0-1
1	**Stay arm first tilt** FFB			
	280- 500		10	6-33777-03-0-1
	501- 750		10	6-33777-06-0-1
	751-1200		10	6-33777-08-0-1
	1201-1600		10	6-33777-12-0-1
1	**Side hung sash hinge**		10	6-31519-00-0-1

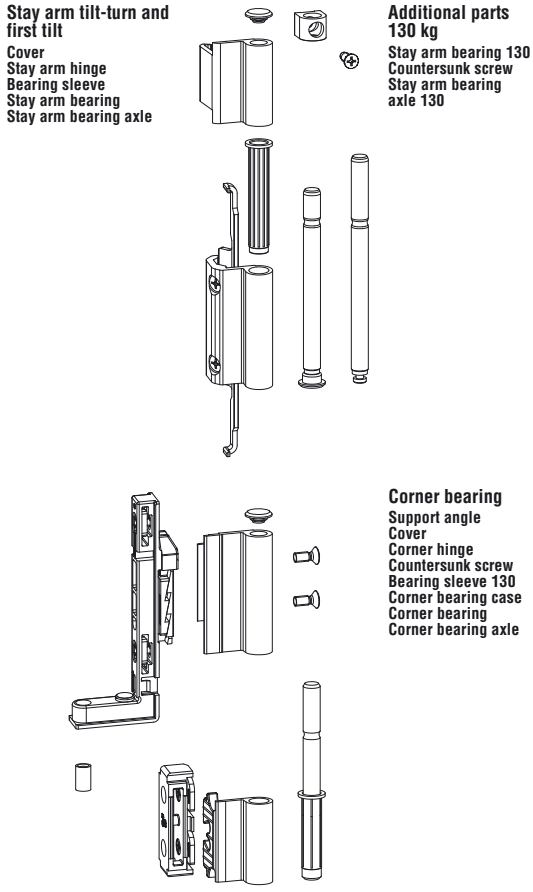


Tilt-turn, first tilt, side hung, inactive and tilt sashes

Fitting requirements for schemes A to E

Qty.	Description		PU	Article No.
1	**Bag of hinge side** [1] **for sash with plane fitting groove 16 mm**			
	Groove 13	Sash overlap 18	10	K-17127-18-0-*
	Frame groove 14 / 18	Sash overlap 20	10	K-17127-20-0-*
	Groove 13	Sash overlap 18	10	K-17508-18-0-*
	Frame groove 10 / 14			
	Contents			
	1 Stay arm bearing [1]	Sash overlap 18		6-31591-18-0-*
		Sash overlap 20		6-31591-20-0-*
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Stay arm hinge [1]	Sash overlap 18		6-33433-18-0-*
		Sash overlap 20		6-33433-20-0-*
	1 Bearing sleeve			9-39805-00-0-6
	2 Covers			9-39807-00-0-6
	1 Corner bearing [1]	Sash overlap 18		9-39812-00-0-*
		Sash overlap 20		9-43356-00-0-*
	1 Corner bearing case	Frame groove 14/18		6-30872-00-0-1
		Frame groove 10/14		6-32055-00-0-1
	1 Corner bearing axle			6-31087-00-0-6
	1 Corner hinge [1]	Sash overlap 18		6-33432-18-0-*
		Sash overlap 20		6-33432-20-0-*
	1 Clamping angle			6-33462-00-0-1
	2 Countersunk screws			9-13489-12-R-8
	1 Bearing sleeve 130	Sash weight > 80 kg		9-43545-00-0-1
1	**Bag of additional parts 130 kg** [1]		1	K-16595-00-0-*
	Contents			
	1 Stay arm bearing 130 [1]			9-41710-00-0-*
	1 Stay arm bearing axle 130			9-39809-01-0-6
	1 Countersunk screw M 5 x 16			9-33841-16-R-8
1	**Bag of middle hinge** [1] **for sash with undercut fitting groove 16 mm**			
	Groove 13	Sash overlap 18	10	K-17218-18-0-*
		Sash overlap 20	10	K-17218-20-0-*
	Contents			
	1 Bearing hinge [1]	Sash overlap 18		6-33727-18-0-*
		Sash overlap 20		6-33727-20-0-*
	1 Middle hinge [1]	Sash overlap 18		6-33806-18-0-*
		Sash overlap 20		6-33806-20-0-*
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Bearing sleeve			9-39805-00-0-6
	1 Cover			9-39807-00-0-6
1	**Bag of tilt sash hinge**[1] **for sash with undercut fitting groove 16 mm**			
	Groove 13	Sash overlap 18	10	K-17214-18-0-*
		Sash overlap 20	10	K-17214-20-0-*
	Contents			
	1 Bearing hinge [1]	Sash overlap 18		6-33727-18-0-*
		Sash overlap 20		6-33727-20-0-*
	1 Middle hinge [1]	Sash overlap 18		6-33750-18-0-*
		Sash overlap 20		6-33750-20-0-*
	1 Clamping plate			6-33728-00-0-1
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Bearing sleeve			9-39805-00-0-6
	1 Cover			9-39807-00-0-6
	2 Raised countersunk head screw M 5 x 16			9-13489-16-R-8

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)



Optional part

Qty.	Description	PU	Article No.
1	**Bag of bearing sleeves/covers light grey** [1] for all bags of hinge side/middle hinge UNI-JET C	1	K-17803-00-0-1
	Contents		
	1 Bearing sleeve		9-39805-00-0-1
	2 Covers		9-39807-00-0-1
	1 Corner bearing sleeve		9-39831-00-0-1
	1 Safety cover		9-39806-00-0-1

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)

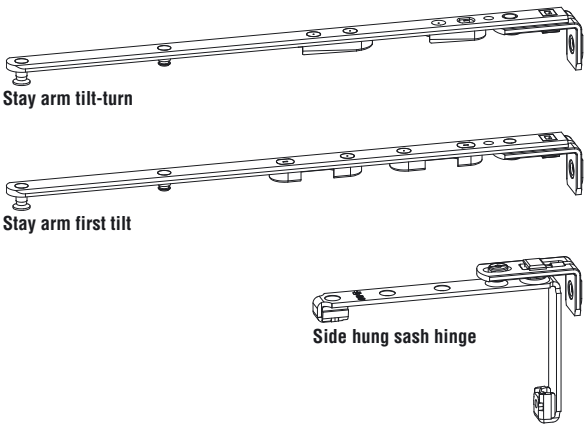
Working drawing 0-44708

Tilt-turn, first tilt, side hung, inactive and tilt sashes – for sash with plane fitting groove 16 mm

Tilt-turn, first tilt, side hung and inactive sashes

Fitting requirements for schemes A to E

Qty.	Description	PU	Article No.
1	**Stay arm tilt-turn** SRW		
	280- 500	10	6-31518-03-0-1
	501- 750	10	6-31518-06-0-1
	751-1200	10	6-31518-08-0-1
	1201-1600	10	6-31518-12-0-1
1	**Stay arm first tilt** FFB		
	280- 500	10	6-33777-03-0-1
	501- 750	10	6-33777-06-0-1
	751-1200	10	6-33777-08-0-1
	1201-1600	10	6-33777-12-0-1
1	**Side hung sash hinge**	10	6-31519-00-0-1

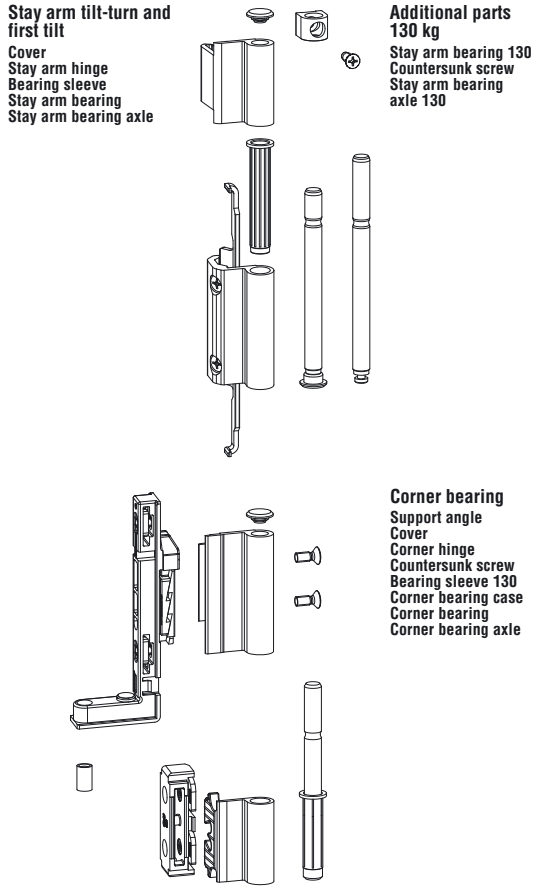


Tilt-turn, first tilt, side hung, inactive and tilt sashes

Fitting requirements for schemes A to E

Qty.	Description		PU	Article No.
1	**Bag of hinge side** [1] **for sash with plane fitting groove 16 mm**			
	Groove 13 Frame groove 14 / 18	Sash overlap 20	10	K-17128-20-0-*
	Groove 13	Sash overlap 18	10	K-17509-18-0-*
	Frame groove 10 / 14	Sash overlap 20	10	K-17509-20-0-*
	Contents			
	1 Stay arm bearing [1]	Sash overlap 18		6-31591-18-0-*
		Sash overlap 20		6-31591-20-0-*
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Stay arm hinge [1]	Sash overlap 18		6-33433-18-0-*
		Sash overlap 20		6-33433-20-0-*
	1 Bearing sleeve			9-39805-00-0-6
	2 Covers			9-39807-00-0-6
	1 Corner bearing [1]	Sash overlap 18		9-39812-00-0-*
		Sash overlap 20		9-43356-00-0-*
	1 Corner bearing case	Frame groove 14/18		6-30872-00-0-1
		Frame groove 10/14		6-32055-00-0-1
	1 Corner bearing axle			6-31087-00-0-6
	1 Corner hinge [1]	Sash overlap 18		6-33432-18-0-*
		Sash overlap 20		6-33432-20-0-*
	1 Support angle			6-33463-00-0-1
	2 Countersunk screws			9-13489-12-R-8
	1 Bearing sleeve 130	Sash weight > 80 kg		9-43545-00-0-1
1	**Bag of additional parts 130 kg** [1]		1	K-16595-00-0-*
	Contents			
	1 Stay arm bearing 130 [1]			9-41710-00-0-*
	1 Stay arm bearing axle 130			9-39809-01-0-6
	1 Countersunk screw M 5 x 16			9-33841-16-R-8
1	**Bag of middle hinge** [1] **for sash with plane fitting groove 16 mm**			
	Groove 13	Sash overlap 18	10	K-17219-18-0-*
		Sash overlap 20	10	K-17219-20-0-*
	Contents			
	1 Bearing hinge [1]	Sash overlap 18		6-33727-18-0-*
		Sash overlap 20		6-33727-20-0-*
	1 Middle hinge [1]	Sash overlap 18		6-33807-18-0-*
		Sash overlap 20		6-33807-20-0-*
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Bearing sleeve			9-39805-00-0-6
	1 Cover			9-39807-00-0-6
1	**Bag of tilt sash hinge**[1] **for sash with plane fitting groove 16 mm**			
	Groove 13	Sash overlap 18	10	K-17215-18-0-*
		Sash overlap 20	10	K-17215-20-0-*
	Contents			
	1 Bearing hinge [1]	Sash overlap 18		6-33727-18-0-*
		Sash overlap 20		6-33727-20-0-*
	1 Middle hinge [1]	Sash overlap 18		6-33750-18-0-*
		Sash overlap 20		6-33750-20-0-*
	1 Screw plate			6-33729-00-0-1
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Bearing sleeve			9-39805-00-0-6
	1 Cover			9-39807-00-0-6
	2 Raised countersunk head screw M 5 x 16			9-13489-16-R-8

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)



Optional part

Qty.	Description	PU	Article No.
1	**Bag of bearing sleeves/covers light grey** [1] for all bags of hinge side/middle hinge UNI-JET C	1	K-17803-00-0-1
	Contents		
	1 Bearing sleeve		9-39805-00-0-1
	2 Covers		9-39807-00-0-1
	1 Corner bearing sleeve		9-39831-00-0-1
	1 Safety cover		9-39806-00-0-1

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)

Working drawing 0-44708

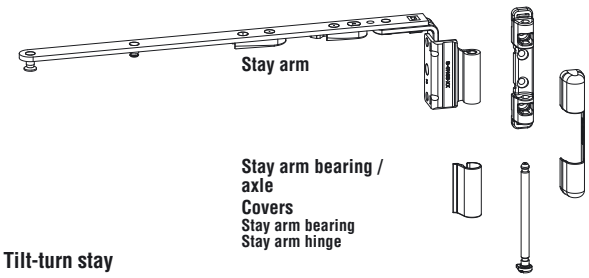
Tilt-turn, side hung, inactive and tilt sashes

Tilt-turn sash

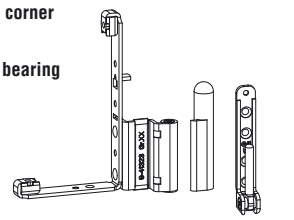
Fitting requirements for schemes A to E

Qty.	Description		PU	Article No.
1	**Stay arm** [2][3]			
	SRW			
	280- 500		10	6-32970-**-*-1
	501- 750		10	6-32971-**-*-1
	751-1200		10	6-32972-**-*-1
	1201-1600		10	6-32973-**-*-1
1	**Stay arm bearing**	Ø 3, L = 2,5	100	6-31636-03-0-1
	with supporting pins	Ø 6, L = 2,5	100	6-31636-06-0-1
1	**Cover** for stay arm bearing [1]		100	9-41653-00-0-*
1	**Cover** for stay arm hinge [1]		100	9-41695-00-0-*
1	**Rebate corner hinge** without brake [2][3]		100	6-31521-**-*-1
1	**Corner bearing** [1]	Ø 3, L = 2,5	100	6-28743-03-0-*
	with supporting pins	Ø 6, L = 22	100	6-28742-22-0-*
1	**Cover** for rebate hinge [1][3]		100	9-40487-00-*-*
1	**Cover** for corner bearing [1]		100	9-35461-00-0-*

[1] * Colour: 1 = EV 1, 3 = F 3, 5 = brown (RAL 8022), 6 = black (RAL 9005), 7 = white (RAL 9016), 8 = stainless steel colour
[2] ** Size 18, 20 or 22 according to sash overlap
[3] * L = DIN left, R = DIN right



Tilt-turn stay



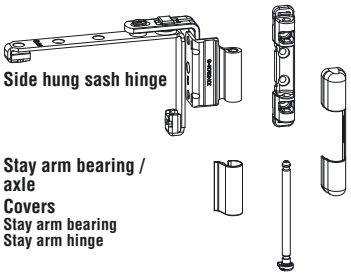
Corner bearing

Side hung and inactive sash

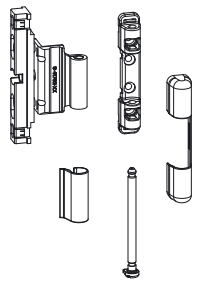
Fitting requirements for schemes A to E

Qty.	Description		PU	Article No.
1	**Side hung sash hinge** [2]		100	6-31852-**-0-1
1	**Stay arm bearing**	Ø 3, L = 2,5	100	6-31636-03-0-1
	with supporting pins	Ø 6, L = 2,5	100	6-31636-06-0-1
1	**Cover** for stay arm bearing [1]		100	9-41653-00-0-*
1	**Cover** for stay arm hinge [1]		100	9-41695-00-0-*
1	**Middle hinge** [2]			
	from SRH 1101 mm		100	6-31854-**-0-1
1	**Stay arm bearing**	Ø 3, L = 2,5	100	6-31636-03-0-1
	with supporting pins	Ø 6, L = 2,5	100	6-31636-06-0-1
1	**Bag of covers** [1]		20	K-16791-00-0-*
1	**Rebate corner hinge** without brake [2][3]		100	6-31521-**-*-1
1	**Corner bearing** [1]	Ø 3, L = 2,5	100	6-28743-03-0-*
	with supporting pins	Ø 6, L = 22	100	6-28742-22-0-*
1	**Cover** for rebate hinge [1][3]		100	9-40487-00-*-*
1	**Cover** for corner bearing [1]		100	9-35461-00-0-*

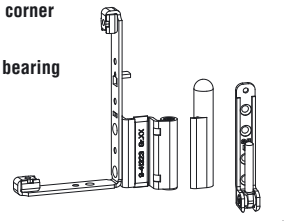
[1] * Colour: 1 = EV 1, 3 = F 3, 5 = brown (RAL 8022), 6 = black (RAL 9005), 7 = white (RAL 9016), 8 = stainless steel colour
[2] ** Size 18, 20 or 22 according to sash overlap
[3] * L = DIN left, R = DIN right



Side hung sash hinge



Middle hinge



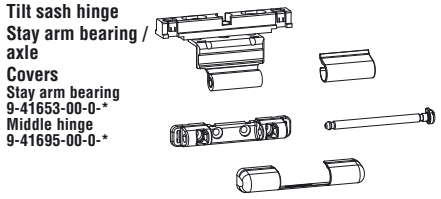
Corner bearing

Tilt sash

Fitting requirements

Qty.	Description		PU	Article No.
	Tilt sash hinge [2]		100	6-31847-**-0-1
	Stay arm bearing	Ø 3, L = 2,5	100	6-31636-03-0-1
	with supporting pins	Ø 6, L = 2,5	100	6-31636-06-0-1
	Bag of covers [1]		20	K-16791-00-0-*
	SRW			
2	591-1200			
3	1201-1950			

[1] * Colour: 1 = EV 1, 3 = F 3, 5 = brown (RAL 8022), 6 = black (RAL 9005), 7 = white (RAL 9016), 8 = stainless steel colour
[2] ** Size 18, 20 or 22 according to sash overlap



Tilt sash hinge

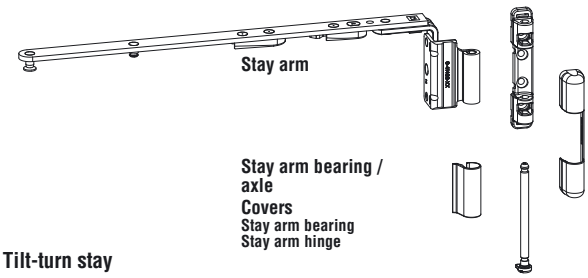
Tilt-turn, side hung, inactive and tilt sashes

Tilt-turn sash

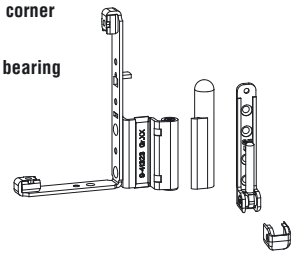
Fitting requirements for schemes A to E

Qty.	Description	PU	Article No.
1	**Stay arm** [2][3]		
	SRW		
	280- 500	10	6-34185-**-*-1
	501- 750	10	6-34186-**-*-1
	751-1200	10	6-34187-**-*-1
	1201-1600	10	6-34188-**-*-1
1	**Stay arm bearing** Ø 3, L = 2,5	100	6-31636-03-0-1
	with supporting pins Ø 6, L = 2,5	100	6-31636-06-0-1
1	**Cover** for stay arm bearing [1]	100	9-41653-00-0-*
1	**Cover** for stay arm hinge [1]	100	9-41695-00-0-*
1	**Rebate corner hinge** without brake [2][3]	100	6-31522-**-*-1
1	**Corner bearing** [1] Ø 3, L = 2,5	100	6-28743-03-0-*
	with supporting pins Ø 6, L = 22	100	6-28742-22-0-*
1	**Cover** for rebate hinge [1][3]	100	9-40487-00-*-*
1	**Cover** for corner bearing [1]	100	9-35461-00-0-*

[1] * Colour: 1 = EV 1, 3 = F 3, 5 = brown (RAL 8022), 6 = black (RAL 9005), 7 = white (RAL 9016), 8 = stainless steel colour
[2] ** Size 18, 20 or 22 according to sash overlap
[3] * L = DIN left, R = DIN right



Tilt-turn stay



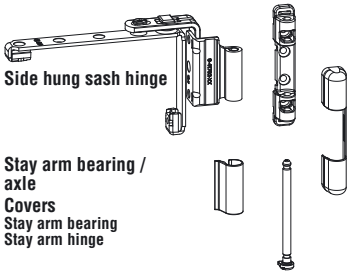
Corner bearing

Side hung and inactive sash

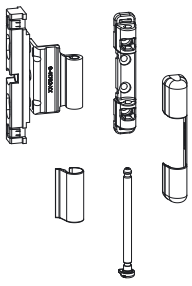
Fitting requirements for schemes A to E

Qty.	Description	PU	Article No.
1	**Side hung sash hinge** [2]	100	6-31853-**-0-1
1	**Stay arm bearing** Ø 3, L = 2,5	100	6-31636-03-0-1
	with supporting pins Ø 6, L = 2,5	100	6-31636-06-0-1
1	**Cover** for stay arm bearing [1]	100	9-41653-00-0-*
1	**Cover** for stay arm hinge [1]	100	9-41695-00-0-*
1	**Middle hinge** [2]		
	from SRH 1101 mm	100	6-31855-**-0-1
1	**Stay arm bearing** Ø 3, L = 2,5	100	6-31636-03-0-1
	with supporting pins Ø 6, L = 2,5	100	6-31636-06-0-1
1	**Bag of covers** [1]	20	K-16791-00-0-*
1	**Rebate corner hinge** without brake [2][3]	100	6-31522-**-*-1
1	**Corner bearing** [1] Ø 3, L = 2,5	100	6-28743-03-0-*
	with supporting pins Ø 6, L = 22	100	6-28742-22-0-*
1	**Cover** for rebate hinge [1][3]	100	9-40487-00-*-*
1	**Cover** for corner bearing [1]	100	9-35461-00-0-*

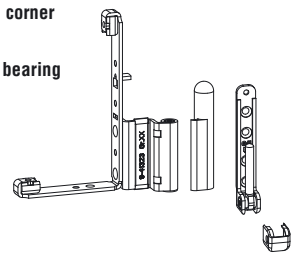
[1] * Colour: 1 = EV 1, 3 = F 3, 5 = brown (RAL 8022), 6 = black (RAL 9005), 7 = white (RAL 9016), 8 = stainless steel colour
[2] ** Size 18, 20 or 22 according to sash overlap
[3] * L = DIN left, R = DIN right



Side hung sash hinge



Middle hinge



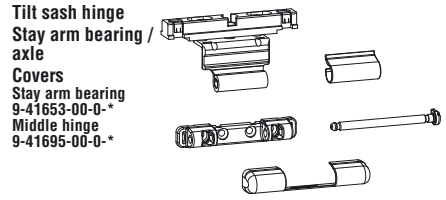
Corner bearing

Tilt sash

Fitting requirements

Qty.	Description	PU	Article No.
	Tilt sash hinge [2]	100	6-31848-**-0-1
	Stay arm bearing Ø 3, L = 2,5	100	6-31636-03-0-1
	with supporting pins Ø 6, L = 2,5	100	6-31636-06-0-1
	Bag of covers [1]	20	K-16791-00-0-*
	SRW		
2	591-1200		
3	1201-1950		

[1] * Colour: 1 = EV 1, 3 = F 3, 5 = brown (RAL 8022), 6 = black (RAL 9005), 7 = white (RAL 9016), 8 = stainless steel colour
[2] ** Size 18, 20 or 22 according to sash overlap



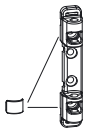
Tilt sash hinge

Optional parts for hinge side UNI-JET D

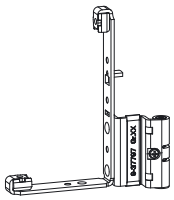
Description		PU	Article No. DIN left	DIN right
Axle		10	6-31840-00-0-1	6-31840-00-0-1
Screw hole cover [1]		100	9-41874-00-0-*	9-41874-00-0-*
Rebate corner hinge [2]	Groove 9	100	6-28740-**-L-1	6-28740-**-R-1
with brake	Groove 13	100	6-28741-**-L-1	6-28741-**-R-1
Cover for rebate hinge [1]		100	9-37725-00-L-*	9-37725-00-R-*
Cover for rebate corner hinge [1]		100	9-42796-00-0-*	9-42796-00-0-*

[1] * Colour: 1 = EV 1, 5 = brown (RAL 8022), 7 = white (RAL 9016)
[2] ** Size 18, 20 or 22 according to sash overlap

Axle

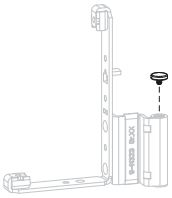


Screw hole cover [1]



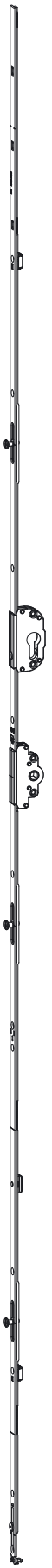
Rebate corner hinge with brake [2]

Cover – rebate hinge [1]



Cover for rebate corner hinge [1]

Fixed and variable gear position, backset 25 – 50 mm



Gear AP 25 GK – AP 50 GK

Gear AP 25 GV – AP 50 GV

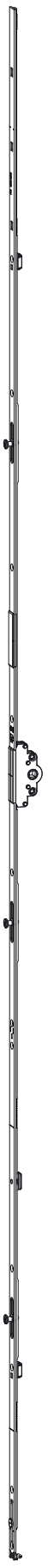
Gear AP 25 GK – AP 50 GK

Description				PU	Article No.
Gear AP 25 GK, lockable					
Backset 25, fixed gear position					
SRH	Forend	G	ML		
1851-2100	1940	980	3	10	G-22315-25-0-1
2101-2350	2190	980	4	10	G-22316-25-0-1
Gear AP 30 GK, lockable					
Backset 30, fixed gear position					
SRH	Forend	G	ML		
1851-2100	1940	980	3	10	G-22315-30-0-1
2101-2350	2190	980	4	10	G-22316-30-0-1
Gear AP 35 GK, lockable					
Backset 35, fixed gear position					
SRH	Forend	G	ML		
1851-2100	1940	980	3	10	G-22315-35-0-1
2101-2350	2190	980	4	10	G-22316-35-0-1
Gear AP 40 GK, lockable					
Backset 40, fixed gear position					
SRH	Forend	G	ML		
1851-2100	1940	980	3	10	G-22315-40-0-1
2101-2350	2190	980	4	10	G-22316-40-0-1
Gear AP 45 GK, lockable					
Backset 45, fixed gear position					
SRH	Forend	G	ML		
1851-2100	1940	980	3	10	G-22315-45-0-1
2101-2350	2190	980	4	10	G-22316-45-0-1
Gear AP 50 GK, lockable					
Backset 50, fixed gear position					
SRH	Forend	G	ML		
1851-2100	1940	980	3	10	G-22315-50-0-1
2101-2350	2190	980	4	10	G-22316-50-0-1

Gear AP 25 GV – AP 50 GV

Description				PU	Article No.
Gear AP 25 GV, lockable					
Backset 25, variable gear position					
SRH	Forend	GV	ML		
951-1450	1130	475- 725	1	10	G-22330-25-0-1
1451-1950	1630	725- 975	2	10	G-22331-25-0-1
1951-2450	2130	975-1225	3	10	G-22332-25-0-1
Gear AP 30 GV, lockable					
Backset 30, variable gear position					
SRH	Forend	GV	ML		
951-1450	1130	475- 725	1	10	G-22330-30-0-1
1451-1950	1630	725- 975	2	10	G-22331-30-0-1
1951-2450	2130	975-1225	3	10	G-22332-30-0-1
Gear AP 35 GV, lockable					
Backset 35, variable gear position					
SRH	Forend	GV	ML		
951-1450	1130	475- 725	1	10	G-22330-35-0-1
1451-1950	1630	725- 975	2	10	G-22331-35-0-1
1951-2450	2130	975-1225	3	10	G-22332-35-0-1
Gear AP 40 GV, lockable					
Backset 40, variable gear position					
SRH	Forend	GV	ML		
951-1450	1130	475- 725	1	10	G-22330-40-0-1
1451-1950	1630	725- 975	2	10	G-22331-40-0-1
1951-2450	2130	975-1225	3	10	G-22332-40-0-1
Gear AP 45 GV, lockable					
Backset 45, variable gear position					
SRH	Forend	GV	ML		
951-1450	1130	475- 725	1	10	G-22330-45-0-1
1451-1950	1630	725- 975	2	10	G-22331-45-0-1
1951-2450	2130	975-1225	3	10	G-22332-45-0-1
Gear AP 50 GV, lockable					
Backset 50, variable gear position					
SRH	Forend	GV	ML		
951-1450	1130	475- 725	1	10	G-22330-50-0-1
1451-1950	1630	725- 975	2	10	G-22331-50-0-1
1951-2450	2130	975-1225	3	10	G-22332-50-0-1

Fixed gear position, backset 25 – 50 mm



Gear 25 GK – 50 GK

Gear 25 GK – 50 GK

Description				PU	Article No.
Gear 25 GK, non-lockable **Backset 25, fixed gear position**					
SRH	Forend	G	ML		
851-1100	940	400	1	10	G-22790-25-0-1
1101-1350	1190	500	1	10	G-22791-25-0-1
1351-1600	1440	600	2	10	G-22792-25-0-1
1601-1850	1690	600	3	10	G-22793-25-0-1
1851-2100	1940	980	3	10	G-22321-25-0-1
2101-2350	2190	980	4	10	G-22322-25-0-1
Gear 30 GK, non-lockable **Backset 30, fixed gear position**					
SRH	Forend	G	ML		
851-1100	940	400	1	10	G-22790-30-0-1
1101-1350	1190	500	1	10	G-22791-30-0-1
1351-1600	1440	600	2	10	G-22792-30-0-1
1601-1850	1690	600	3	10	G-22793-30-0-1
1851-2100	1940	980	3	10	G-22321-30-0-1
2101-2350	2190	980	4	10	G-22322-30-0-1
Gear 35 GK, non-lockable **Backset 35, fixed gear position**					
SRH	Forend	G	ML		
851-1100	940	400	1	10	G-22790-35-0-1
1101-1350	1190	500	1	10	G-22791-35-0-1
1351-1600	1440	600	2	10	G-22792-35-0-1
1601-1850	1690	600	3	10	G-22793-35-0-1
1851-2100	1940	980	3	10	G-22321-35-0-1
2101-2350	2190	980	4	10	G-22322-35-0-1
Gear 40 GK, non-lockable **Backset 40, fixed gear position**					
SRH	Forend	G	ML		
851-1100	940	400	1	10	G-22790-40-0-1
1101-1350	1190	500	1	10	G-22791-40-0-1
1351-1600	1440	600	2	10	G-22792-40-0-1
1601-1850	1690	600	3	10	G-22793-40-0-1
1851-2100	1940	980	3	10	G-22321-40-0-1
2101-2350	2190	980	4	10	G-22322-40-0-1
Gear 45 GK, non-lockable **Backset 45, fixed gear position**					
SRH	Forend	G	ML		
851-1100	940	400	1	10	G-22790-45-0-1
1101-1350	1190	500	1	10	G-22791-45-0-1
1351-1600	1440	600	2	10	G-22792-45-0-1
1601-1850	1690	600	3	10	G-22793-45-0-1
1851-2100	1940	980	3	10	G-22321-45-0-1
2101-2350	2190	980	4	10	G-22322-45-0-1
Gear 50 GK, non-lockable **Backset 50, fixed gear position**					
SRH	Forend	G	ML		
851-1100	940	400	1	10	G-22790-50-0-1
1101-1350	1190	500	1	10	G-22791-50-0-1
1351-1600	1440	600	2	10	G-22792-50-0-1
1601-1850	1690	600	3	10	G-22793-50-0-1
1851-2100	1940	980	3	10	G-22321-50-0-1
2101-2350	2190	980	4	10	G-22322-50-0-1

Gear 25 GK – 50 GK

Gear 25 GV – 50 GV, non-lockable

Variable gear position, backset 25 – 50 mm

Gear 25 GV – 50 GV

Gear 25 GV – 50 GV

Description				PU	Article No.
Gear 25 GV, non-lockable					
Backset 25, variable gear position					
SRH	Forend	GV	ML		
576- 950	630	288- 475		10	G-22343-25-0-1
951-1450	1130	475- 725	1	10	G-22344-25-0-1
1451-1950	1630	725- 975	2	10	G-22345-25-0-1
1951-2450	2130	975-1225	3	10	G-22346-25-0-1
Gear 30 GV, non-lockable					
Backset 30, variable gear position					
SRH	Forend	GV	ML		
576- 950	630	288- 475		10	G-22343-30-0-1
951-1450	1130	475- 725	1	10	G-22344-30-0-1
1451-1950	1630	725- 975	2	10	G-22345-30-0-1
1951-2450	2130	975-1225	3	10	G-22346-30-0-1
Gear 35 GV, non-lockable					
Backset 35, variable gear position					
SRH	Forend	GV	ML		
576- 950	630	288- 475		10	G-22343-35-0-1
951-1450	1130	475- 725	1	10	G-22344-35-0-1
1451-1950	1630	725- 975	2	10	G-22345-35-0-1
1951-2450	2130	975-1225	3	10	G-22346-35-0-1
Gear 40 GV, non-lockable					
Backset 40, variable gear position					
SRH	Forend	GV	ML		
576- 950	630	288- 475		10	G-22343-40-0-1
951-1450	1130	475- 725	1	10	G-22344-40-0-1
1451-1950	1630	725- 975	2	10	G-22345-40-0-1
1951-2450	2130	975-1225	3	10	G-22346-40-0-1
Gear 45 GV, non-lockable					
Backset 45, variable gear position					
SRH	Forend	GV	ML		
576- 950	630	288- 475		10	G-22343-45-0-1
951-1450	1130	475- 725	1	10	G-22344-45-0-1
1451-1950	1630	725- 975	2	10	G-22345-45-0-1
1951-2450	2130	975-1225	3	10	G-22346-45-0-1
Gear 50 GV, non-lockable					
Backset 50, variable gear position					
SRH	Forend	GV	ML		
576- 950	630	288- 475		10	G-22343-50-0-1
951-1450	1130	475- 725	1	10	G-22344-50-0-1
1451-1950	1630	725- 975	2	10	G-22345-50-0-1
1951-2450	2130	975-1225	3	10	G-22346-50-0-1

Inactive sash gear 30 GK, non-lockable

Fixed gear position, backset 30 mm

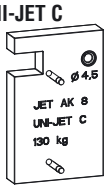
Inactive sash gear 30 GK

Inactive sash gear 30 GK

Description			PU	Article No.
Inactive sash gear 30 GK, non-lockable **Backset 30, fixed gear position**				
SRH	Forend	G		
551- 720	560	200	10	G-22190-00-0-1
721- 850	690	250	10	G-22191-00-0-1
851-1100	940	400	10	G-22192-00-0-1
1101-1350	1190	500	10	G-22193-00-0-1
1351-1600	1440	600	10	G-22194-00-0-1
1601-1850	1690	600	10	G-22195-00-0-1
1851-2100	1940	980	10	G-22196-00-0-1
2101-2350	2190	980	10	G-22197-00-0-1

Inactive sash gear 30 GK

UNI-JET C and D

Application	Description	PU	Article No.
Assembly of stay arm bearing 130 kg	**Tilt-turn, first tilt, side hung and tilt sash fittings**		
UNI-JET C 	Drilling and mounting jig for stay arm bearing 130 kg 9-41710-00-0-1		
	Sash overlap 18 mm	1	6-31951-00-0-6
	Sash overlap 20 mm	1	6-33776-00-0-6
Assembly of corner and stay arm bearings	Drilling jig for corner bearing and stay arm bearing, drill Ø 3 mm	1	6-27412-03-0-0
UNI-JET D	Drilling jig for corner bearing and stay arm bearing, drill Ø 3 and 6 mm	1	6-27412-53-0-0
Assembly of locking plates UNI-JET C and D	1 set of positioning jigs for locking plates, fixed gear position length of locking plate 55 mm	1	6-32644-00-0-0
	1 set of positioning jigs for locking plates, variable gear position length of locking plate 55 mm	1	6-32645-00-0-0
Assembly of turn handles UNI-JET C and D	Drilling jig for turn handle	1	6-22459-00-0-0
	Stop for 6-22459 – fixed gear position	1	9-27406-00-0-1
	Drilling jig with stop for gear AP 25 up to AP 50	1	6-25156-00-0-9

Contents

Finish

Available colours, product information 3.3

DIRIGENT

Turn handles for windows 3.4

ADAGIO

Turn handles for windows 3.6

MODENA

Turn handles for windows 3.8

SOPRANO

Turn handles for windows 3.9

SAN REMO

Turn handles for windows 3.10

Accessories

Face fixed window lock 3.11

Rosettes and spindles
for windows and patio doors 3.12

silver

champagne

gold

light brown

dark brown

white

titanium painted

Colours

The turn handles DIRIGENT, ADAGIO, MODENA, SOPRANO and SAN REMO are made from aluminium with painted or powder coated finish. The handles are available in the following standard colours (with matching rosettes):

- F 1/EV 1, silver
- F 2/EV 2, champagne
- F 3, gold
- F 4, light brown
- dark brown (RAL 8022 matt)
- white (RAL 9016)
- titanium painted

Illustration: handle type DIRIGENT

Available colours	**Standard types Quantities**				
	DIRIGENT	ADAGIO	MODENA	SOPRANO	SAN REMO
silver	20	20	100*	20	20
champagne	20	20	20	–	20
gold colour	20	20	20	–	20
light brown	20	20	20	–	20
dark brown	20	20	20	20	20
white	20	100*	100*	20	20
titanium	20	20	20	–	20

*Packing unit (lockable types: PU = 20)

Example:
Order number 6-28072-29-0-7

6-28072-				= Article number
-	-00	-	-	= without spindle
-	-29	-	-	= spindle length 29 mm
-	-33	-	-	= spindle length 33 mm
-	-38	-	-	= spindle length 38 mm
-	-43	-	-	= spindle length 43 mm
-	-	-0	-	= usable on both sides
-	-	-L	-	= DIN left
-	-	-R	-	= DIN right
-	-	-	-11	= F 1/EV 1, silver
-	-	-	-22	= F 2/EV 2, champagne
-	-	-	-3	= F 3, gold colour
-	-	-	-A	= F 4, light brown
-	-	-	-5	= dark brown (RAL 8022)
-	-	-	-7	= white (RAL 9016)
-	-	-	-C	= titanium painted

Turn handles for windows

The turn handles DIRIGENT captivate by their clear shape. Elegance and functionality are the main features of the DIRIGENT design.

The programme comprises inside and outside handles made from aluminium for timber, PVC and aluminium windows and balcony doors.

DIRIGENT-F DIRIGENT-F/Z

Standard types

Description	Variant	Order number
DIRIGENT-F	inside [1]	6-28072-* *-0-*
DIRIGENT-F/Z	inside, with locking cylinder [1]	6-28075-* *-0-*
DIRIGENT-F/F	inside, flat	6-28101-00-0-*
DIRIGENT-F/H	inside, high	6-28102-00-0-*
DIRIGENT-F/A	outside	6-25993-00-0-*

[1] also without spindle

Special types

Description	Variant	Order number
DIRIGENT-F/SP	inside, 45° stop	6-28094-* *-0-*
DIRIGENT-F/KD	inside, with childproof safety button	6-30268-* *-0-*
DIRIGENT-F/CHK	inside, with Swiss type night lock	6-28096-00-0-*
DIRIGENT-F/SG	inside, removable	8-00694-50-0-7
DIRIGENT first tilt	inside, first tilt,	6-25993-00-0-*
	lockable	6-31557-* *-0-*
DIRIGENT-F/AF	outside, flat	6-25223-00-0-*

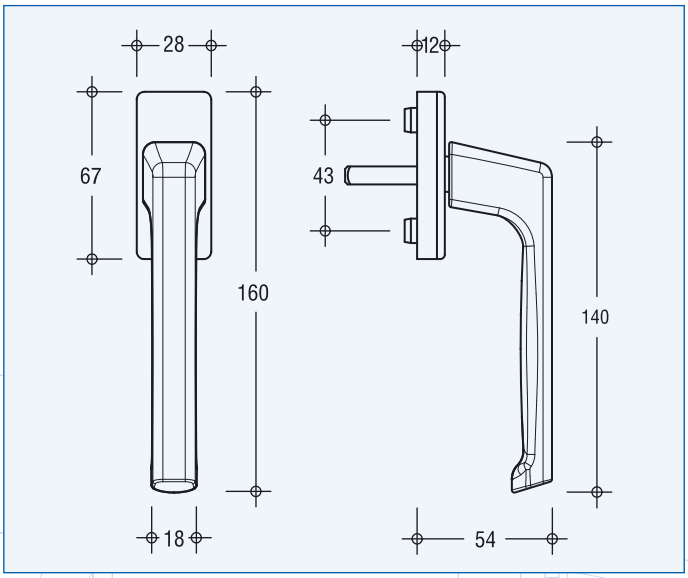
Cranked inside handles for outward opening windows and balcony doors (side hung)

Description	Variant	Order number
DIRIGENT-F/GF-LS	crank for DIN left, flat	6-28105-00-0-*
DIRIGENT-F/GF-RS	crank for DIN right, flat	6-28106-00-0-*

Cranked outside handles for inward opening windows and balcony doors (side hung)

Description	Variant	Order number
DIRIGENT-F/AGF-LS	crank for DIN left, flat	6-27350-00-0-*
DIRIGENT-F/AGF-RS	crank for DIN right, flat	6-27349-00-0-*

* Spindle length and colours see page 3.3

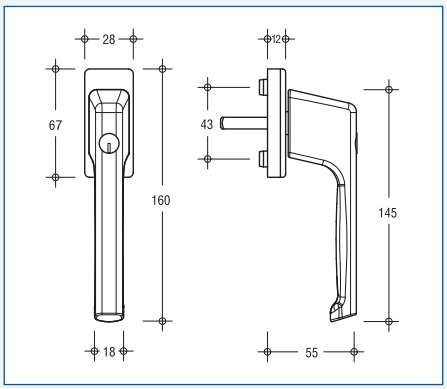


DIRIGENT-F, DIRIGENT-F/SP

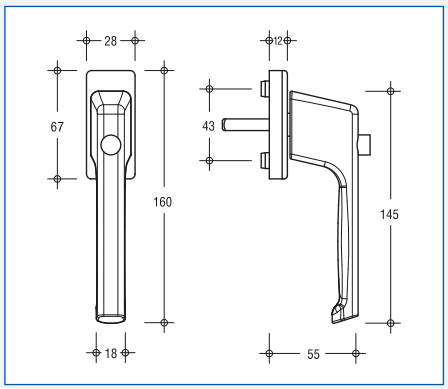
Technical data

Inside rosette	28 x 67 mm
Detent	90° or 90° and 45° with F/SP
Positioning plugs	Ø 10 mm
Length of pos. plugs	5 mm
Square spindle	fixed, 7 x 29, 7 x 33, 7 x 38 or 7 x 43 mm
Differ	F/Z keyed alike
Rosette cover	turnable
Fixing	concealed

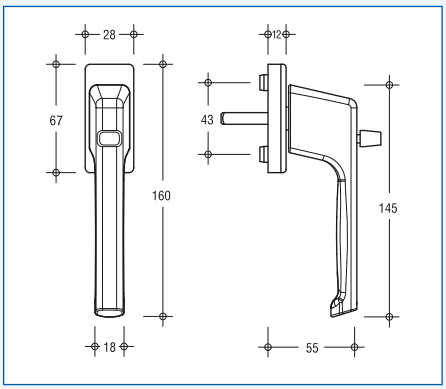
Dimensions of special types



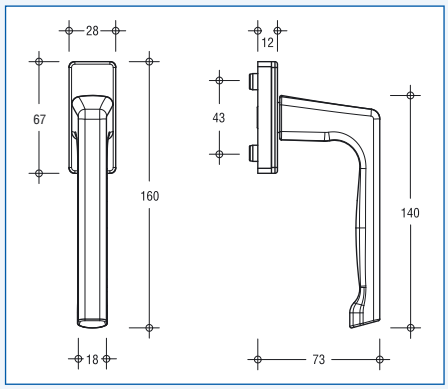
DIRIGENT-F/Z



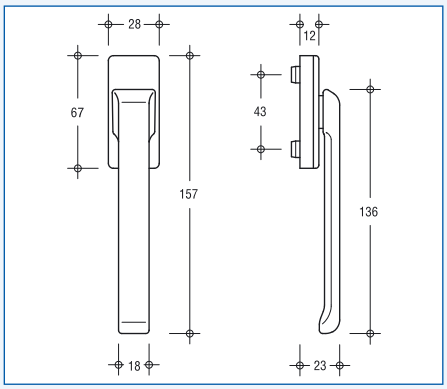
DIRIGENT-F/KD



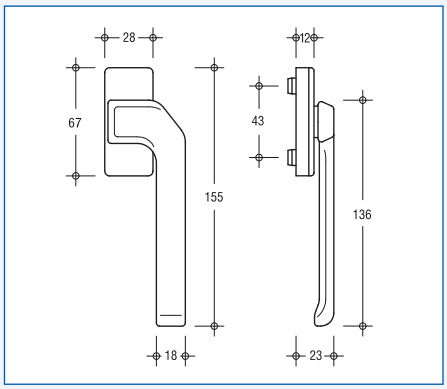
DIRIGENT-F/CHK



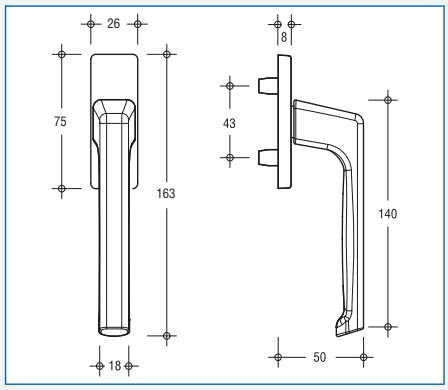
DIRIGENT-F/H



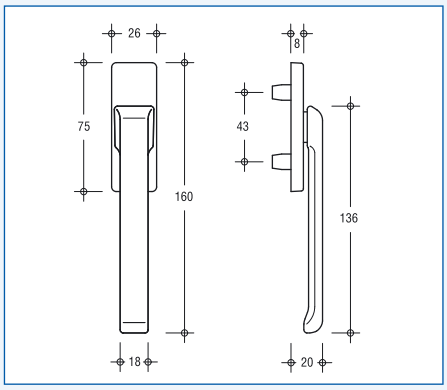
DIRIGENT-F/F



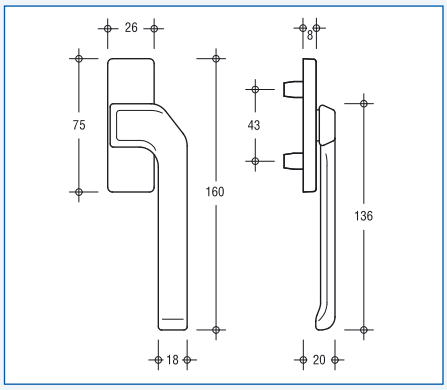
DIRIGENT-F/GF (illustrated: DIN left)



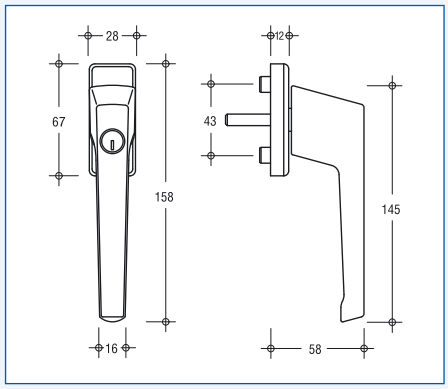
DIRIGENT-F/A



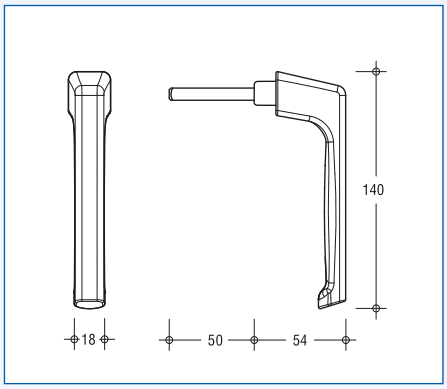
DIRIGENT-F/AF



DIRIGENT-F/AGF (illustrated: DIN left)



DIRIGENT first tilt



DIRIGENT-F/SG

Turn handles for windows

Round and soft shapes are the dominant features of the ADAGIO window handle design. They are operated with ease and feel comfortable.

The programme comprises handles made from aluminium for timber, PVC and aluminium windows and balcony doors.

ADAGIO-F ADAGIO-F/Z

Standard types

Description	Variant	Order number
ADAGIO-F	inside [1]	6-29548-* *-0-*
ADAGIO-F/Z	inside, with locking cylinder	6-29549-* *-0-*

[1] also without spindle

Special types

Description	Variant	Order number
ADAGIO-F/KD	inside, with childproof safety button	6-29890-* *-0-*
ADAGIO-F/SP	inside, 45° stop	6-31803-* *-0-*

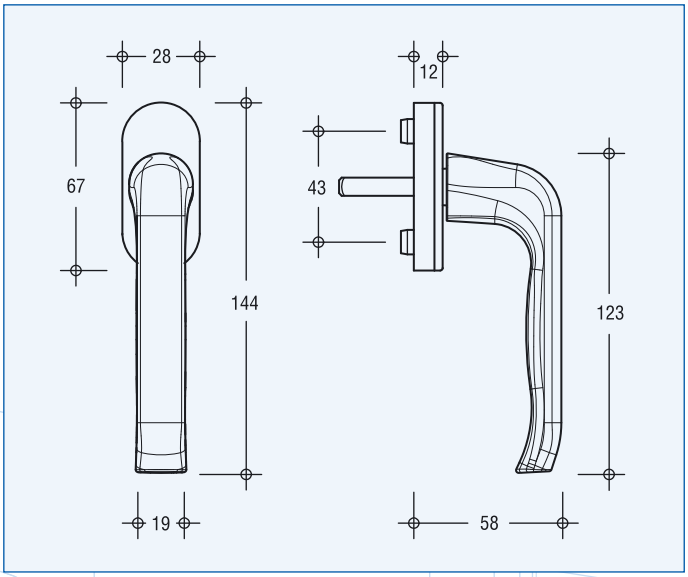
Cranked inside handles for outward opening windows and balcony doors (side hung)

Description	Variant	Order number
ADAGIO-F/G-LS	crank DIN left, square rosette	6-31323-00-0-*
ADAGIO-F/G-RS	crank DIN right, square rosette	6-31221-00-0-*
ADAGIO-F/G-LS	crank DIN left, round rosette	6-33636-00-0-*
ADAGIO-F/G-RS	crank DIN right, round rosette	6-33637-00-0-*
ADAGIO-F/G 24-LS	crank DIN left, round rosette	6-31441-38-0-*
ADAGIO-F/G 24-RS	crank DIN right, round rosette	6-31442-38-0-*
ADAGIO-F/GZ-LS	crank DIN left, round rosette	6-33451-00-0-*
ADAGIO-F/GZ-RS with looking cylinder	crank DIN right, round rosette	6-33452-00-0-*

Cranked outside handles for inward opening windows and balcony doors (side hung)

Description	Variant	Order number
ADAGIO-F/AG-LS	crank DIN left, square rosette	6-32411-00-0-*
ADAGIO-F/AG-RS	crank DIN right, square rosette	6-32412-00-0-*
ADAGIO-F/AG-LS	crank DIN left, round rosette	6-33634-00-0-*
ADAGIO-F/AG-RS	crank DIN right, round rosette	6-33635-00-0-*

* Spindle length and colours see page 3.3

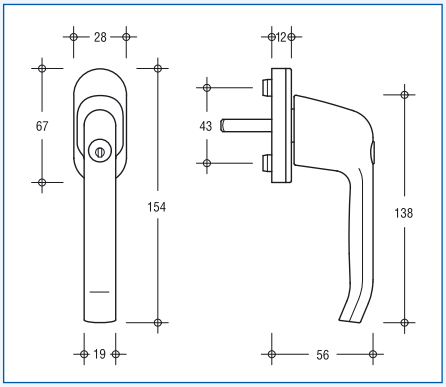


ADAGIO-F, ADAGIO-F/SP

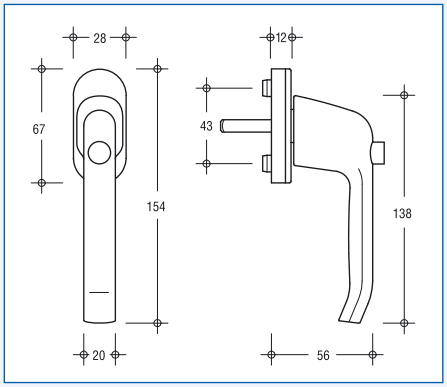
Technical data

Inside rosette	28 x 67 mm (rounded)
Detent	90° or 90° and 45° F/SP
Positioning plugs	Ø 10 mm
Length of pos. plugs	5 mm
Square spindle	fixed, 7 x 29, 7 x 33, 7 x 38 or 7 x 43 mm
Differ	F/Z keyed alike
Rosette cover	turnable
Fixing	concealed

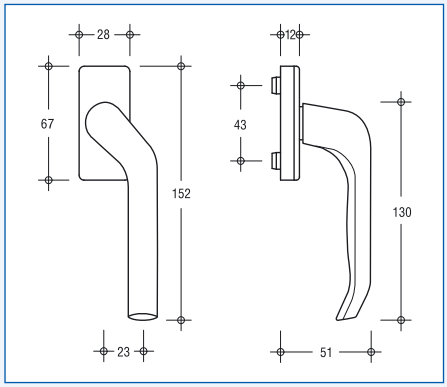
Dimensions of special types



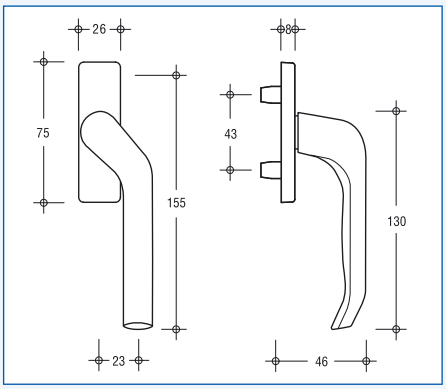
ADAGIO-F/Z



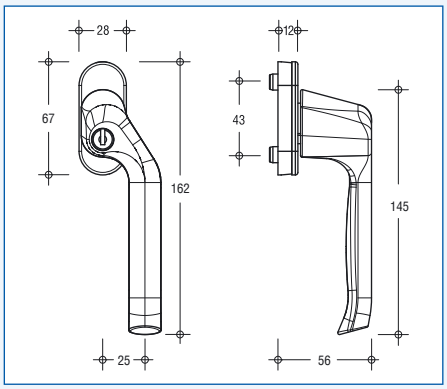
ADAGIO-F/KD



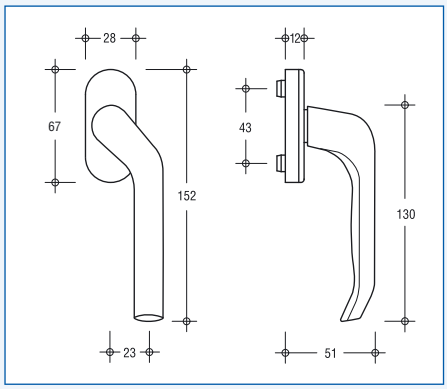
ADAGIO-F/G (illustrated: DIN left)



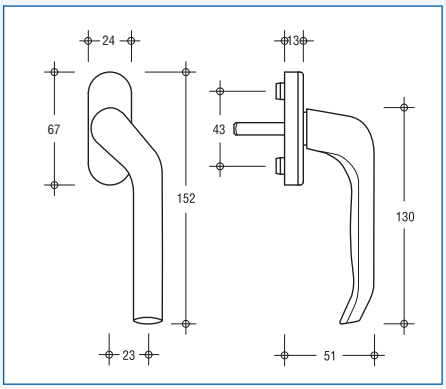
ADAGIO-F/AG (illustrated: DIN left)



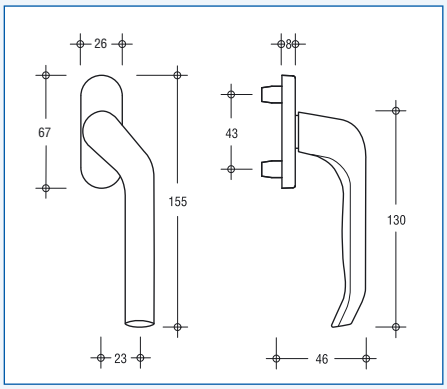
ADAGIO-F/GZ (illustrated: DIN left)



ADAGIO-F/G (illustrated: DIN left)



ADAGIO-F/G 24 (illustrated: DIN left)



ADAGIO-F/AG (illustrated: DIN left)

Turn handles for windows

The aesthetic design of the MODENA window handles is characterised by its rounded shape. Great ease of use is guaranteed.

The programme comprises inside handles made from aluminium for timber, PVC and aluminum windows and balcony doors.

MODENA-F MODENA-F/Z

Standard types

Description	Variant	Order number
MODENA-F	inside	6-31977-* *-0-*
MODENA-F/Z	inside, with locking cylinder	6-31978-* *-0-*

Special types

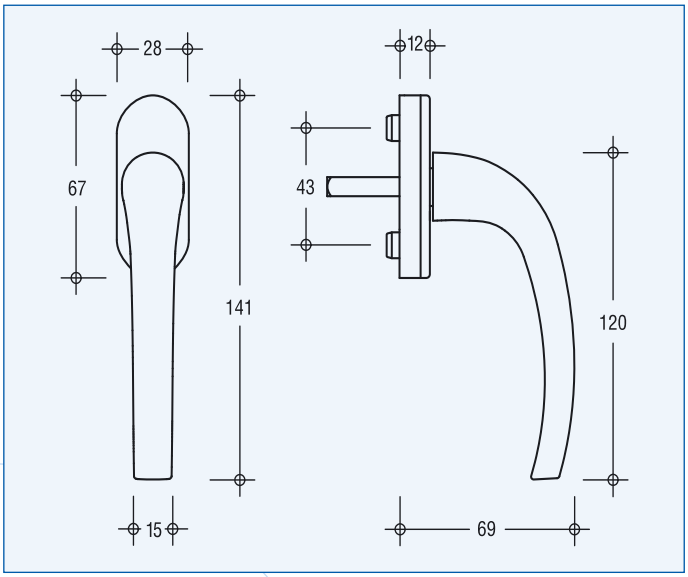
Description	Variant	Order number
MODENA-F/SP	inside, 45° stop	6-32319-* *-0-*
MODENA-F/Z 100 Nm [1]	inside, with locking cylinder	6-34397-* *-0-*

* Spindle length and colours see page 3.3

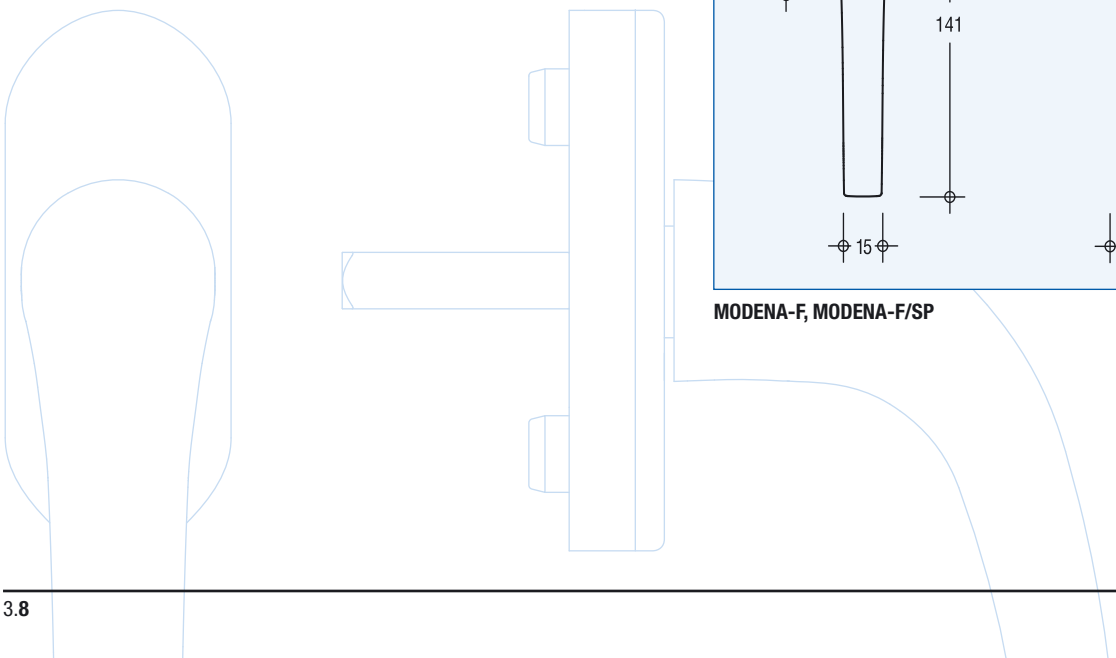
[1] Tested to ENV 1627 against tear-off and twist-off with 100 Nm

Technical data

Inside rosette	28 x 67 mm
Detent	90° or 90° and 45° F/SP
Positioning plugs	Ø 10 mm
Length of pos. plugs	5 mm
Square spindle	fixed, 7 x 29, 7 x 33 or 7 x 38 mm
Differ	F/Z keyed alike
Rosette cover	turnable
Fixing	concealed



MODENA-F, MODENA-F/SP



Turn handles for windows

The range of window handles is rounded off by the modernly designed SOPRANO model. The handle is ergonomically shaped and captures by its simple elegance.

Variants : interior handles of aluminium for timber, PVC and aluminium windows and patio doors.

Standard variants		
Description	Variant	Order no.
SOPRANO-F	inside	U-71984-* *-0-*
SOPRANO-F/Z	inside, with locking cylinder	U-71987-* *-0-*

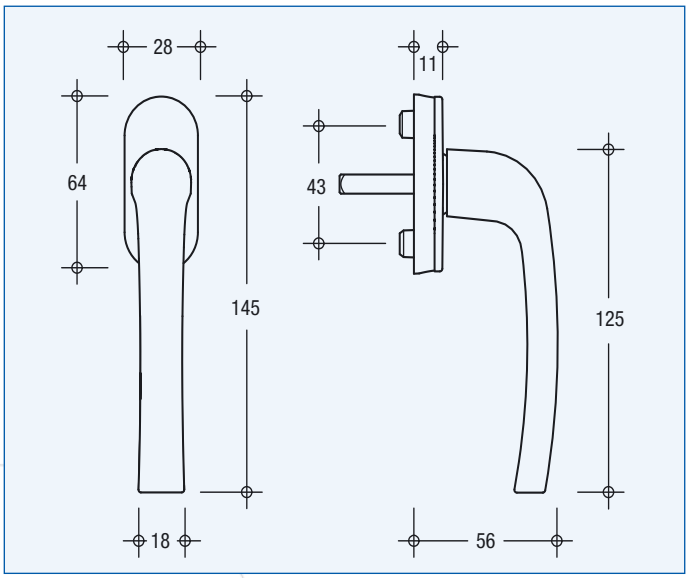
Special variant		
Description	Variant	Order no.
SOPRANO-F/SP	interior, with 45° detent	U-71970-* *-0-*

Colours: silver, brown (RAL 8022 matt), white (RAL 9016)
Order references: * = finish, ** = spindle length
**Spindle length see page 3.3

SOPRANO-F SOPRANO-F/Z

Technical data

Inside rosette	28 x 64 mm
Detent	90°; 90° and 45° F/SP
Positioning plugs	Ø 10 mm
Length of pos. plugs	5 mm
Square spindle	fixed, 7 x 29, 7 x 33 or 7 x 38 mm
Differ	F/Z keyed alike
Rosette cover	turnable
Fixings	concealed



SOPRANO-F, SOPRANO-F/SP

Turn handles for windows

A straight line but still soft design feature the window handles SAN REMO – they easily fit in the hand and provide comfortable operation.

The programme comprises inside handles made from aluminium for timber, PVC and aluminum windows and balcony doors.

Standard types

Description	Variant	Order number
SAN REMO-F	inside	G-21608-* *-0-*
SAN REMO-F/Z	inside, with locking cylinder	G-21609-* *-0-*

Sonderausführungen

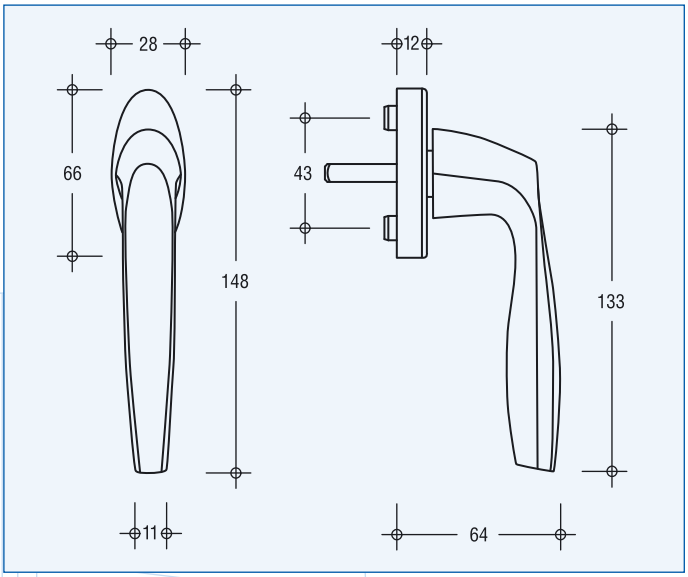
Descripton	Variant	Order number
SAN REMO-F/SP	inside, 45° detent	6-32363-* *-0-*

** Spindle length see page 3.3

SAN REMO-F SAN REMO-F/Z

Technical data

Inside rosette	28 x 66 mm
Detent	90° or 90° and 45° F/SP
Positioning plugs	Ø 10 mm
Length of pos. plugs	5 mm
Square spindle	fixed, 7 x 29, 7 x 33 or 7 x 38 mm
Differ	F/Z keyed alike
Rosette cover	turnable
Fixing	concealed



SAN REMO-F, SAN REMO-F/SP

Face fixed window lock

Upgradable security for tilt-turn and side hung windows

The easily mounted locking device is an efficient protection against burglary. Even if the window is broken or the frame drilled, it is impossible to turn the locked handle to open the sash from outside.

The metal deadbolt throws into the rugged keeper (throw of 18 mm), thus preventing the sash from being lifted and forced open. The combination of lockable turn handle and face fixed lock offers high resistance against burglars.

In addition to the central locking mechanism of the window, the face fixed lock provides an extra locking point. The device can be retrofitted on tilt-turn and side hung windows with 15 mm backset gear. The adaptation to various overlap thicknesses is achieved with packers.

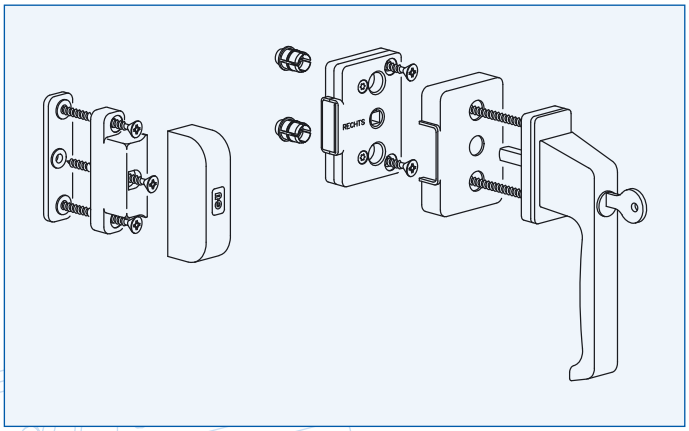
The mounting is simple: the face fixed lock is fastened to the sash with screws right underneath the handle, the keeper is positioned on the frame accordingly and fixed with screws. Instructions are supplied with the product.

Lateral space requirement

- Timber windows with 4 mm rebate clearance: 26 mm
- Timber windows with Euro rebate: 23 mm
- PVC windows with 20 and 22 mm overlap width: 22 mm

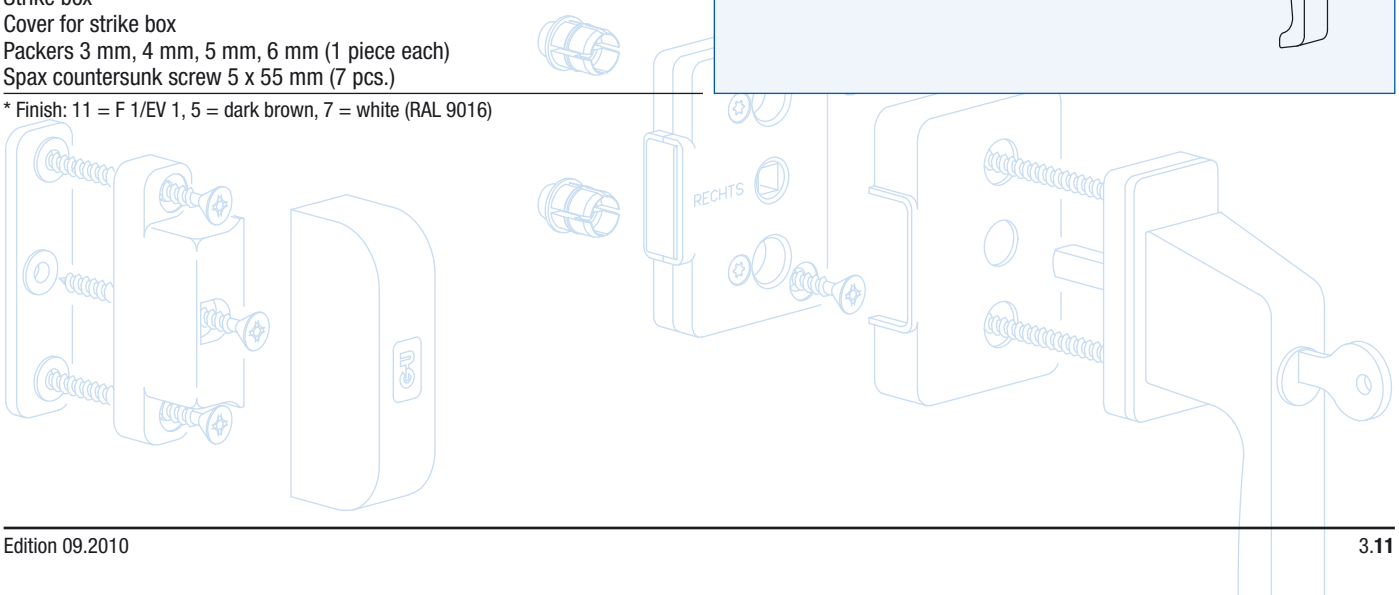
Execution

Description	Variant	Order number
Box Face fixed window lock	with turn handle DIRIGENT F/Z	K-14662-00-0-*



Contents of box:
Turn handle DIRIGENT F/Z, lockable
Spindle 7 x 75 mm
Face fixed lock
Cover for face fixed lock
Sleeve for Ø 10 mm and 12 mm (2 pcs. each)
Strike box
Cover for strike box
Packers 3 mm, 4 mm, 5 mm, 6 mm (1 piece each)
Spax countersunk screw 5 x 55 mm (7 pcs.)

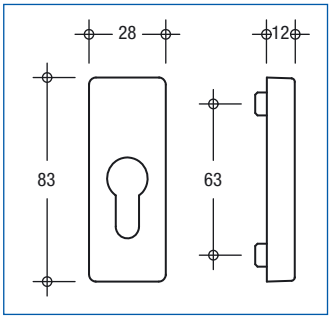
* Finish: 11 = F 1/EV 1, 5 = dark brown, 7 = white (RAL 9016)



Rosettes and spindles for windows and patio doors

Rosette PZ, Rosette RZ (Swiss round cylinder)
inside, with cylinder bore and Ø 10 mm positioning plugs

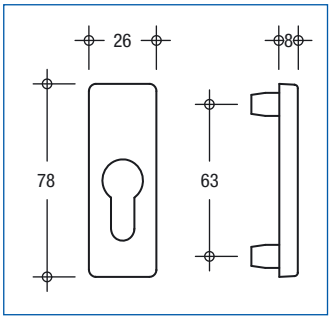
PU	Description	Order number
20 pcs.	Rosette PZ, square	K-17205-02-0-*
20 pcs.	Rosette PZ, oval	K-17204-02-0-*
20 pcs.	Rosette RZ, square	K-17205-03-0-*
20 pcs.	Rosette RZ, oval	K-17204-03-0*



Rosette PZ, square

Rosette PZ/A, Rosette RZ/A (Swiss round cylinder)
outside, with cylinder bore and Ø 10 mm positioning plugs

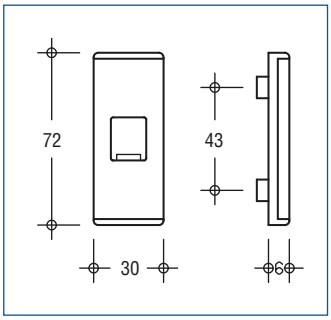
PU	Description	Order number
20 pcs.	Rosette PZ/A, square	9-43605-02-0-*
20 pcs.	Rosette PZ/A, oval	9-43582-02-0-*
20 pcs.	Rosette RZ/A, square	9-43605-03-0-*
20 pcs.	Rosette RZ/A, oval	9-43582-03-0-*



Rosette PZ, square

Removable rosette F
inside – flat, with slide shutter for removable handle

PU	Description	Order number
20 pcs.	Removable rosette F	6-24913-00-0-*

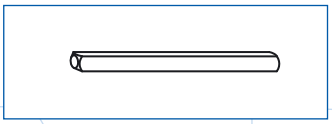


Adapter sleeve
to extend the positioning plug Ø from 10 to 12 mm

Description	Order number
Adapter sleeve	9-40496-00-0-0

Square spindles 7 mm

PU	Spindle length	Sash thickness	Order number
20 pcs.	70 mm		9-26874-16-0-1
20 pcs.	118 mm	56 – 68 mm	9-26874-56-0-1
100 pcs.	131 mm	69 – 80 mm	9-26874-69-0-1
20 pcs.	143 mm	81 – 92 mm	9-26874-81-0-1

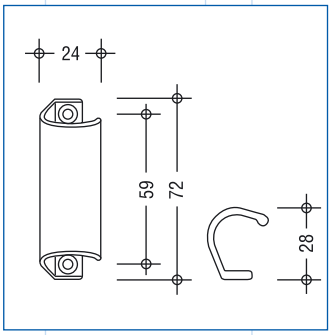


Fixed pull

PU	Description	Order number
50 pcs.	Fixed pull	9-22921-00-0-*

Countersunk screw M5 for turn handle fastening

PU	Count. screw	Inside operation, for spindle length	Order number
400 pcs.	M5 x 40	29 and 33 mm	9-13255-40
1 pc.	M5 x 50	38 mm	9-13255-50
		Operation on both sides for sash thickness	
400 pcs.	M5 x 60	50 – 54 mm	9-13255-60
400 pcs.	M5 x 65	55 – 59 mm	9-13255-65
400 pcs.	M5 x 70	60 – 64 mm	9-13255-70
400 pcs.	M5 x 75	65 – 69 mm	9-13255-75
400 pcs.	M5 x 80	70 – 74 mm	9-13255-80
400 pcs.	M5 x 85	75 – 80 mm	9-13255-85



Product group

B

Parallel slide and tilt fittings slide-fold fittings

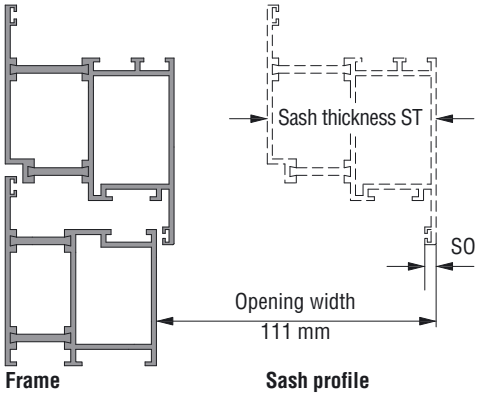
Abbreviations

lh	left hand
ML	Middle lock
PU	Packing unit
PZ	Profile cylinder
rh	right hand
Se	Security fittings
SH	Sash height
SW	Sash width
ST	Sash thickness

Profile system manufacturers' information

It is important to observe the product information issued by the profile system manufacturers, especially information concerning construction and fabrication, maximum sash dimensions and weights and material features such as linear expansion of profiles.

Dimension "Opening width"

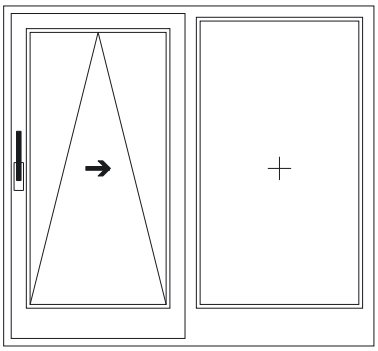


Maximum sash thickness ST

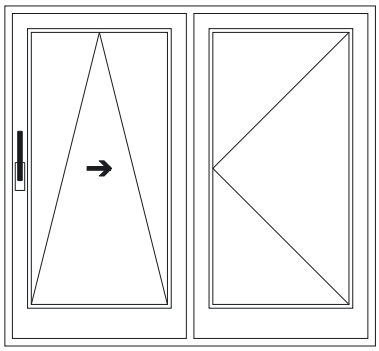
Side part as fixed glazing = 108 mm
Side part as side hung sash = 108 mm – thickness of sash overlap SO

Parallel slide and tilt fittings
for aluminium windows and patio doors

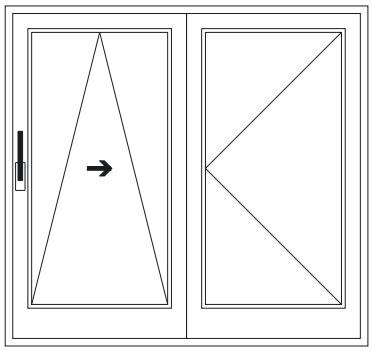
Sash arrangement according to schemes A to K



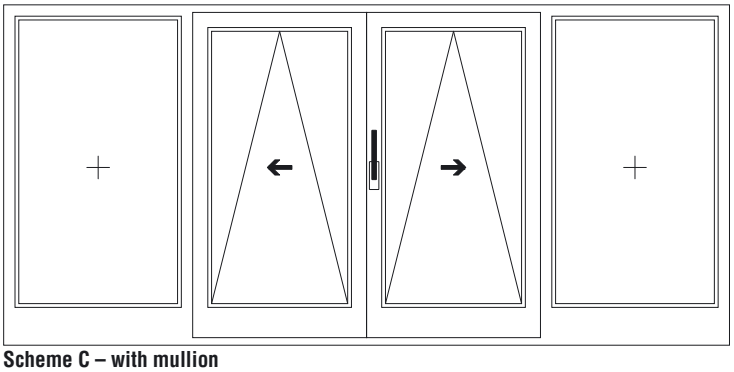
Scheme A – with mullion
1 parallel slide and tilt door, 1 fixed glazing
Drawing shows handle position lh



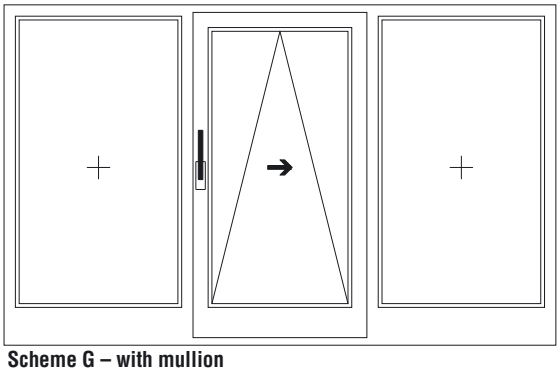
Scheme A – with mullion [1]
1 parallel slide and tilt door, 1 side hung door
Drawing shows handle position lh



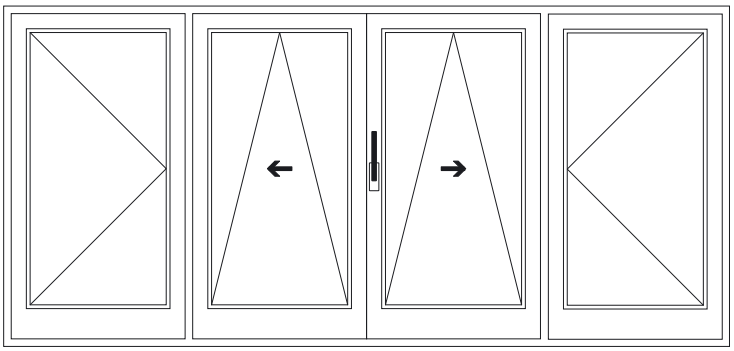
Scheme D – without mullion [2]
1 parallel slide and tilt door, 1 side hung door. Drawing shows handle position lh



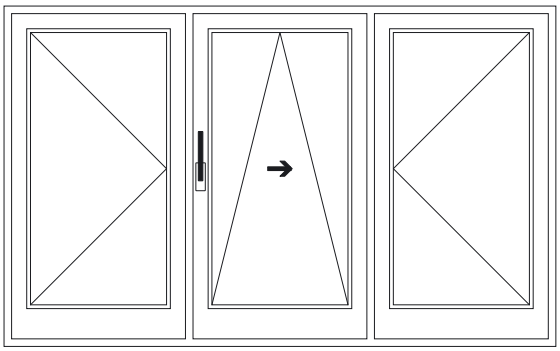
Scheme C – with mullion
2 parallel slide and tilt doors, 2 fixed glazings
Drawing shows first opening sash with handle position lh



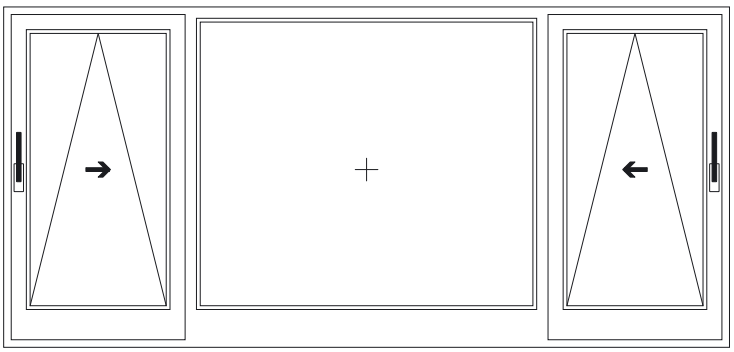
Scheme G – with mullion
1 parallel slide and tilt door, 2 fixed glazings
Drawing shows handle position lh



Scheme C – with mullion [1]
2 parallel slide and tilt doors, 2 side hung doors
Drawing shows first opening sash with handle position lh



Scheme G – with mullion [1]
1 parallel slide and tilt door, 2 side hung doors
Drawing shows handle position lh



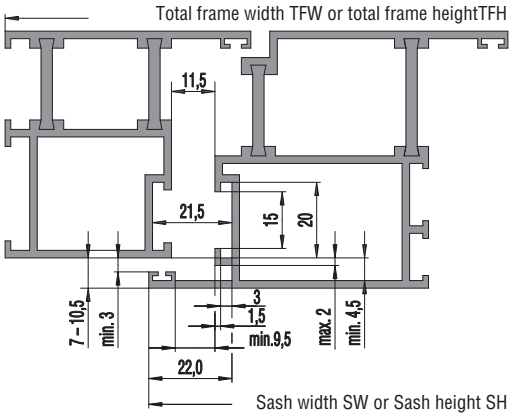
Scheme K – with mullion
2 parallel slide and tilt doors, 1 fixed glazing
Drawing shows handle position lh and handle position rh

Legend:

[1] Schemes A, C and G with side hung sash:
Side hung sash fittings JET AK 8with handle DIRIGENT-F/SG 8-00694-33-0-7 and rosette/F, inside – flat 6-24913-00-0-*, locking plates according to profile.

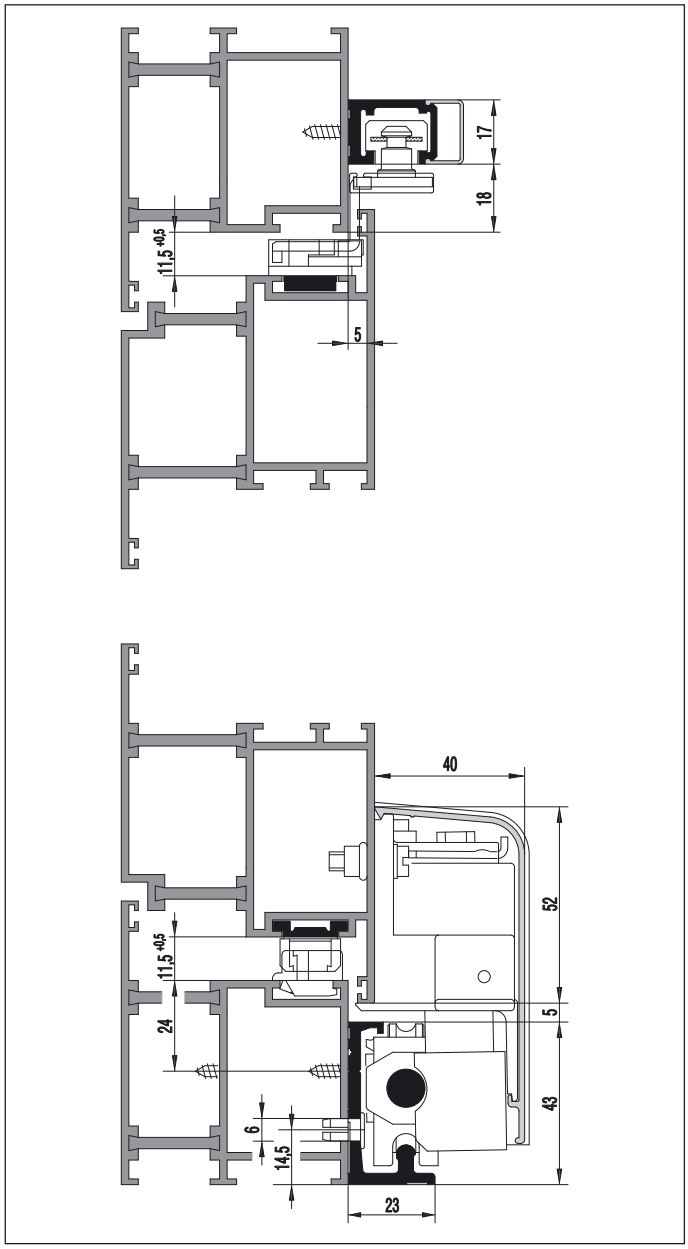
[2] Scheme D:
Side hung sash with rebate shoot bolt, locking plates according to profile.

Assembly dimensions – frame and sash profile

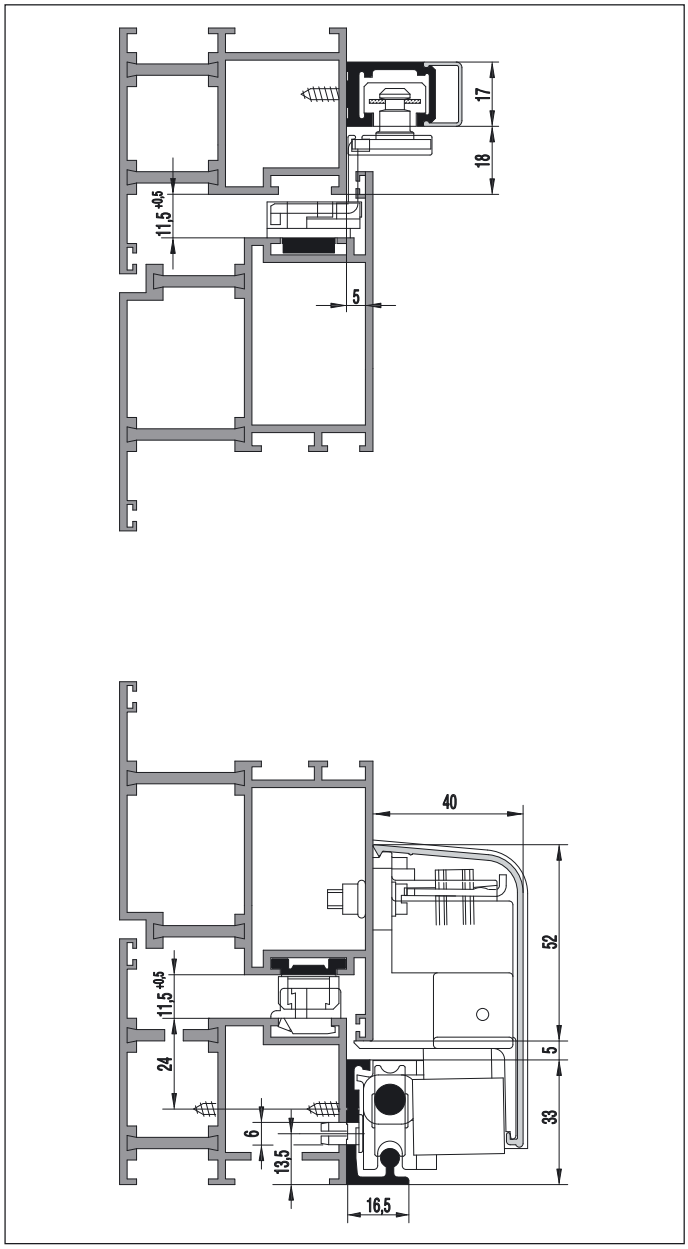


Frame and sash profile
Sash with Euro groove 15/20

Assembly dimensions – gliding rails, running rails, runners

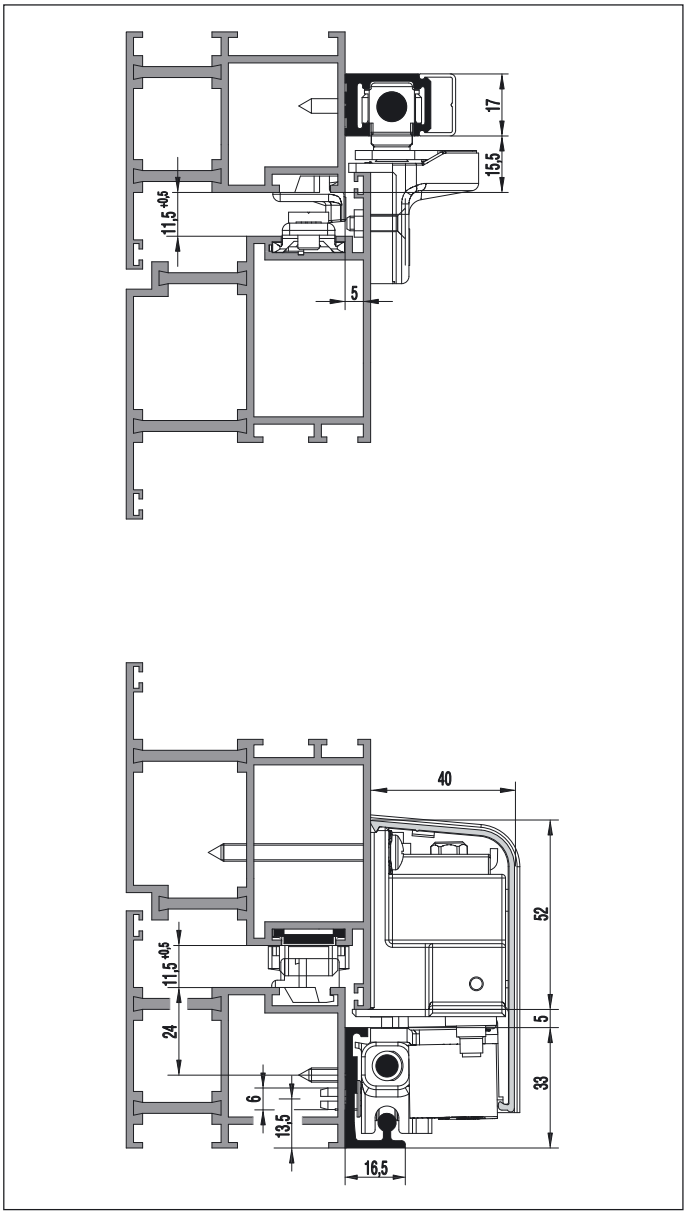


Parallel slide and tilt fittings G.U-968/200 mZ

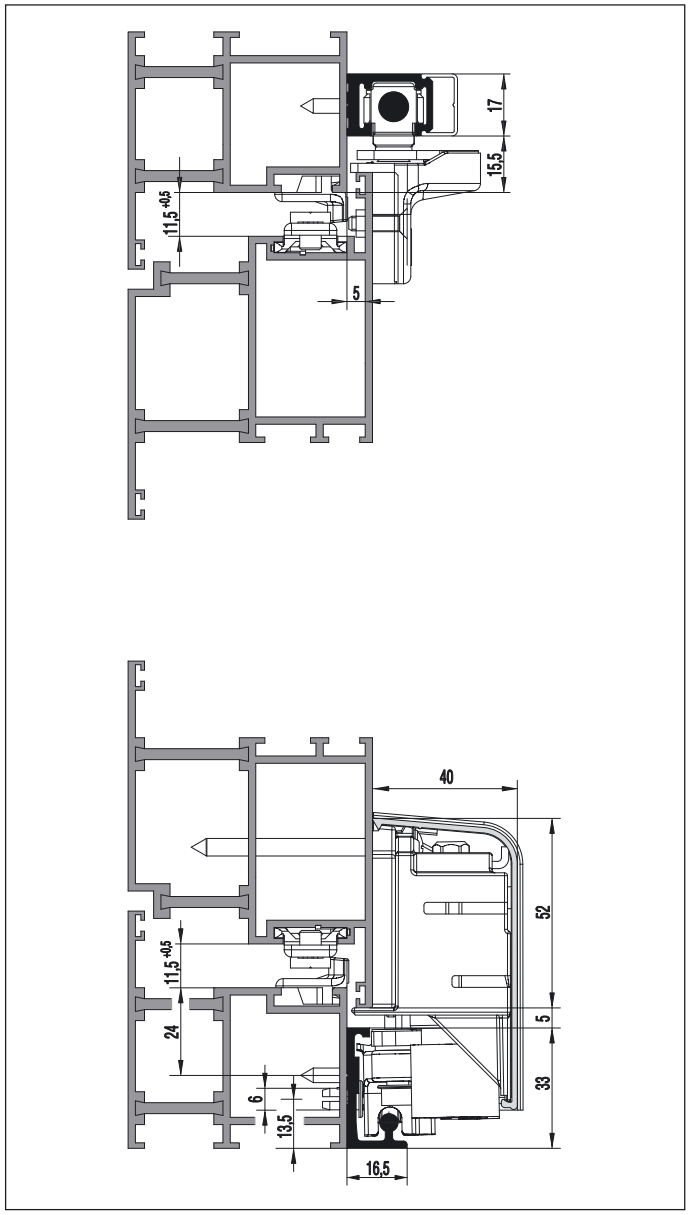


Parallel slide and tilt fittings G.U-968/150 mZ

Assembly dimensions – gliding rails, running rails, runners

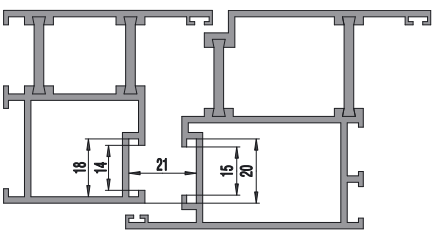


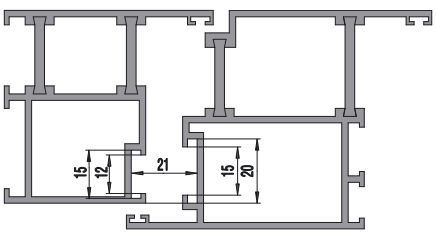
Parallel slide and tilt fittings G.U-968/150 oZ

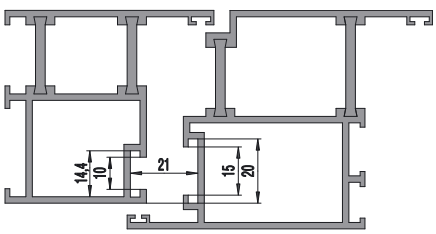


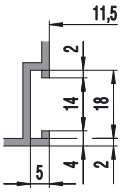
Parallel slide and tilt fittings G.U-90 oZ

Assembly dimensions – frame grooves

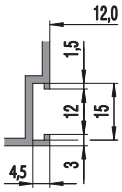




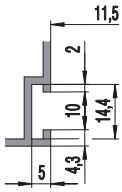




Frame groove 14/18

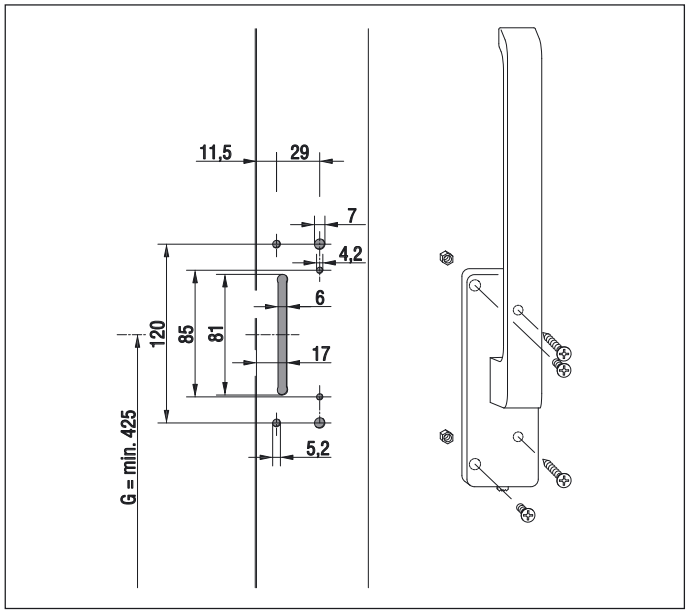


Frame groove 12/15

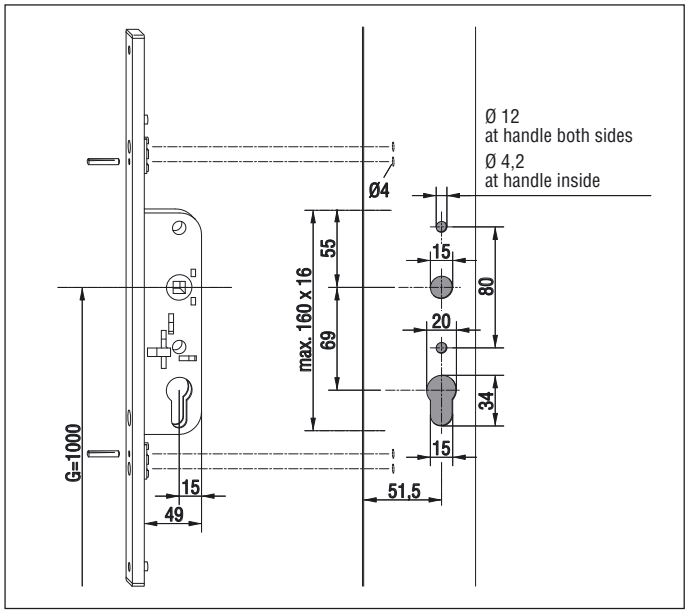


Frame groove 10/14

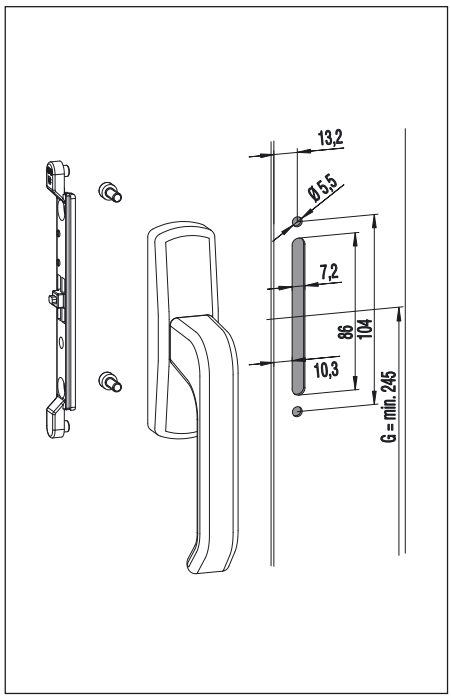
Drilling and milling dimensions geared handles and handles



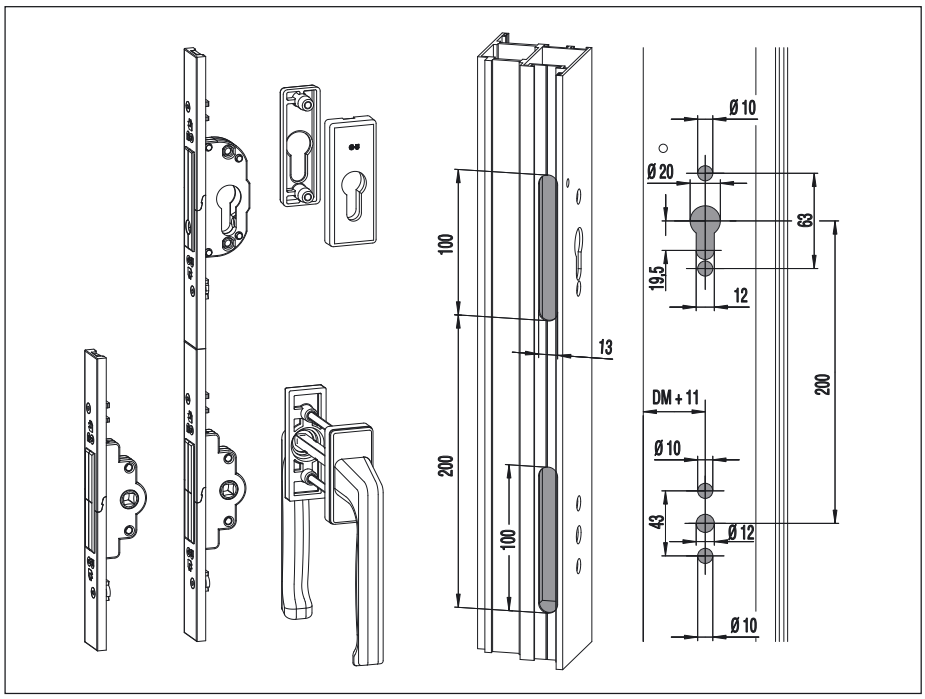
Drilling and milling dimensions for geared handle – Parallel slide and tilt locking mechanism G.U-mZ
Drilling jig 6-28894-00-0-0



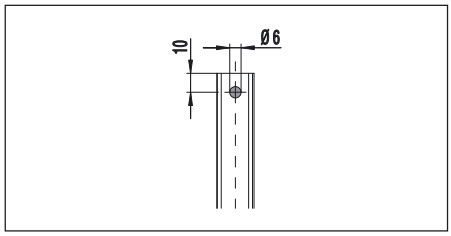
Drilling and milling dimensions for lockable gear – Parallel slide and tilt locking mechanism G.U-mZ
Drilling jig 9-27272-01-0-0



Drilling and milling dimensions for geared handle – Parallel slide and tilt locking mechanisms G.U-150 oZ and G.U-90 oZ
Drilling jig 6-25373-01-0-0

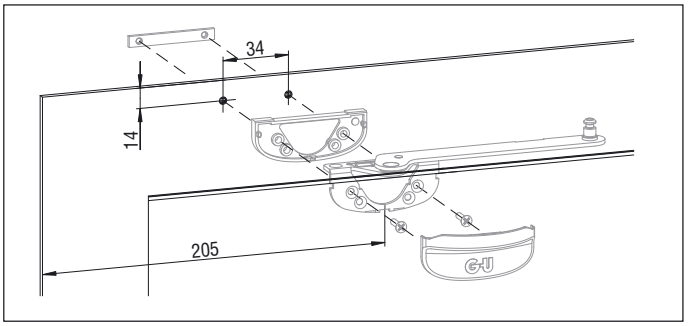


Drilling and milling dimensions for mill-in gear and lock with cylinder bore – Parallel slide and tilt locking mechanisms G.U-150 oZ and G.U-90 oZ
Drilling jig 6-26191-00-0-2

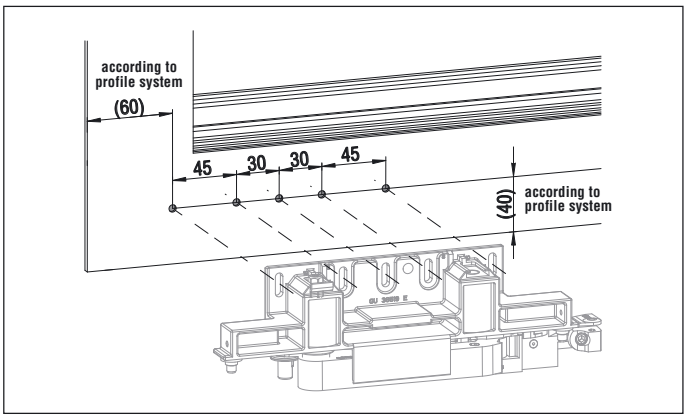


Push rod drill holes

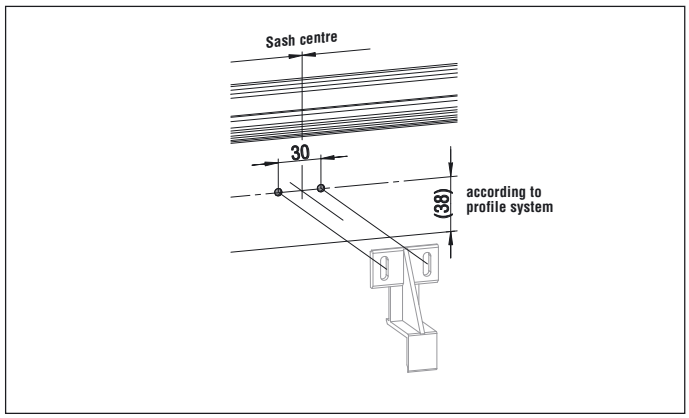
Drilling and milling dimensions for stays, runners and supports



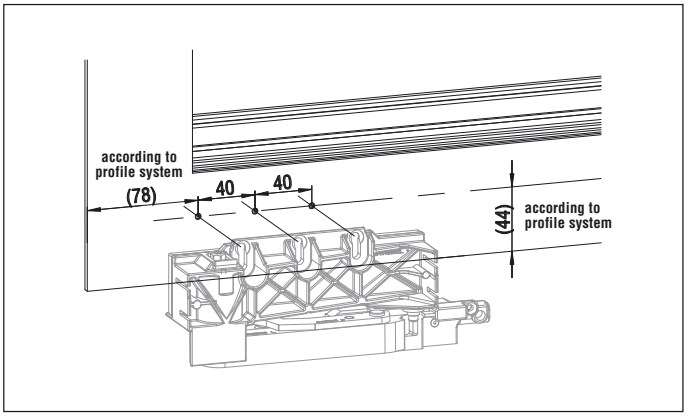
Drilling dimensions for stay –
Parallel slide and tilt locking mechanisms G.U-150 oZ and G.U-90 oZ



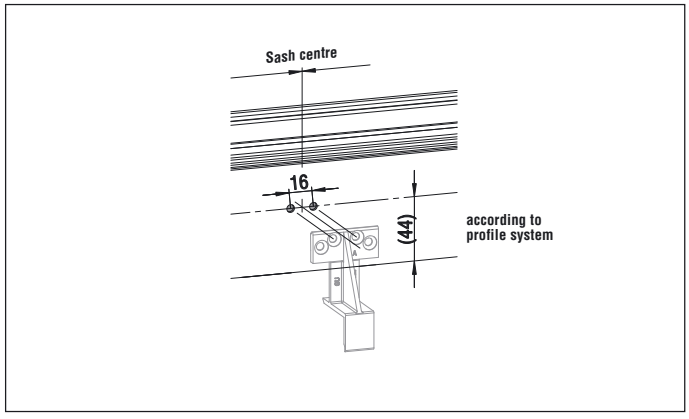
Drilling dimensions for runners –
Parallel slide and tilt locking mechanisms G.U-968/200 and G.U-968/150
Drilling jig 6-33342-00-0-0



Drilling dimensions for supports –
Parallel slide and tilt locking mechanisms G.U-968/200 and G.U-968/150
Drilling jig 6-33342-00-0-0

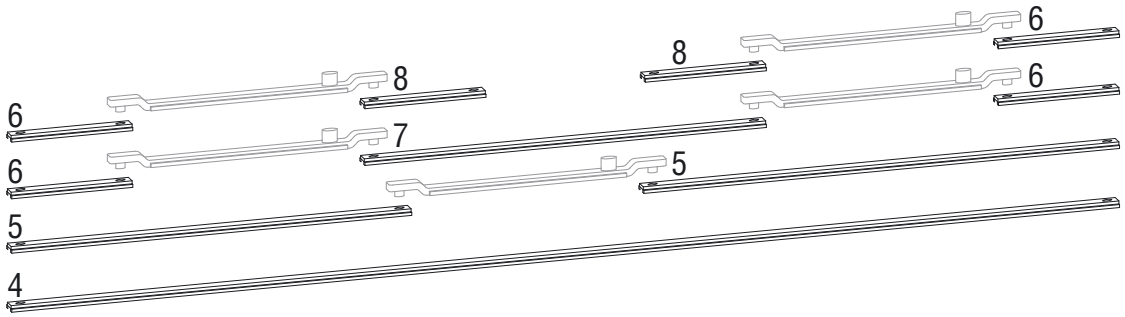


Drilling dimensions for runners –
Parallel slide and tilt locking mechanisms G.U-90
Drilling jig 9-30424-00-0-0



Drilling dimensions for supports –
Parallel slide and tilt locking mechanisms G.U-90
Drilling jig 9-30424-00-0-0

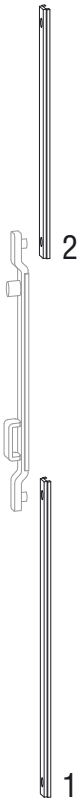
Quantity per sash and push rod cutting lengths with 22 mm sash overlap – G.U-968/200 mZ

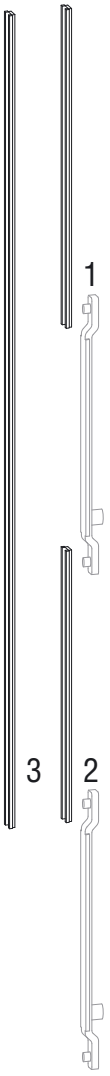


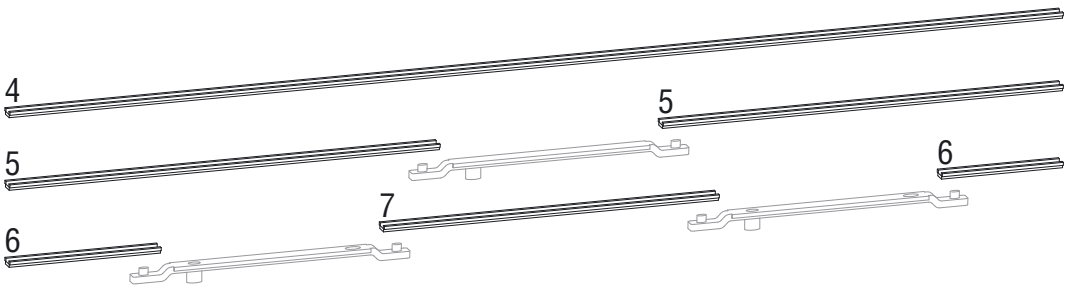
Push rods

Quantity per sash and cutting lengths for G.U-968/200 mZ

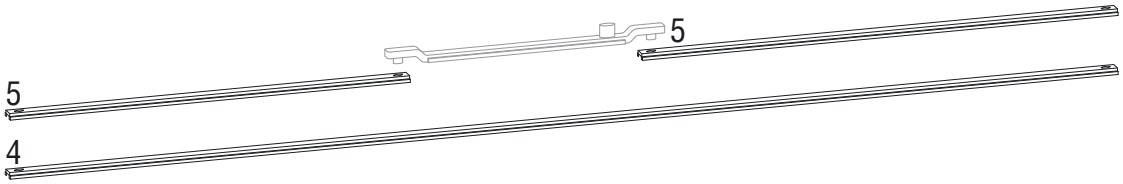
No.	Sash height SH Computation formula	Sash width SW Quantity per sash			
	895 - 1200	**740-1200**	**1201-1600**	**1601-1850**	**1851-2000**
1	L = G – 388	1	1	1	1
2	L = SH – G – 433	1	1	1	1
3	L = SH – 665	1	1	1	1
4	L = SW – 700	2	–	–	–
5	L = SW/2 – 428	–	4	–	–
6	L = 72	–	–	4	4
7	L = SW – 1156	–	–	2	1
8	L = SW/2 – 1502	–	–	–	2
	1201 - 2400	**740-1200**	**1201-1600**	**1601-1850**	**1851-2000**
1	L = G – 388	2	2	2	2
2	L = SH – G – 433	2	2	2	2
4	L = SW – 700	2	–	–	–
5	L = SW/2 – 428	–	4	–	–
6	L = 72	–	–	4	4
7	L = SW – 1156	–	–	2	1
8	L = SW/2 – 1502	–	–	–	2







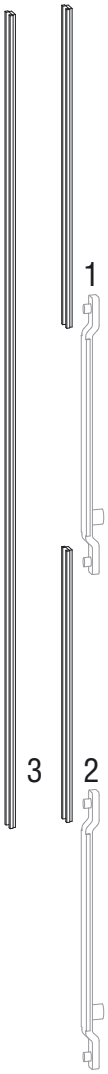
Quantity per sash and push rod cutting lengths with 22 mm sash overlap – G.U-968/150 mZ

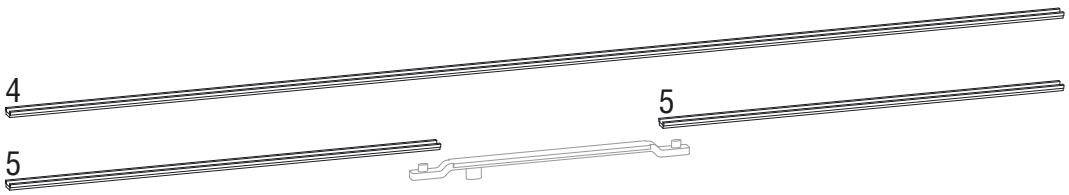


Push rods

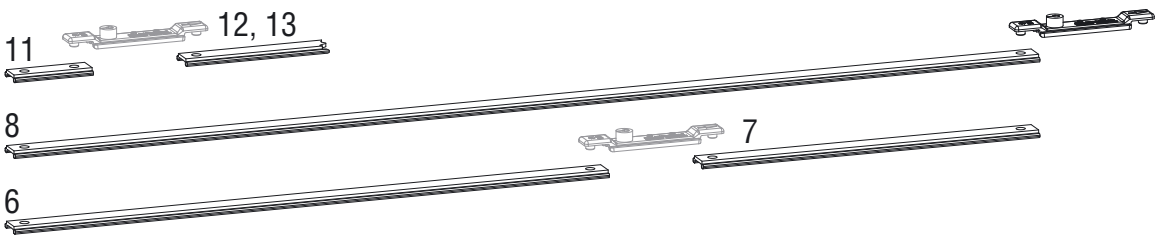
Quantity per sash and cutting lengths for G.U-968/150 mZ

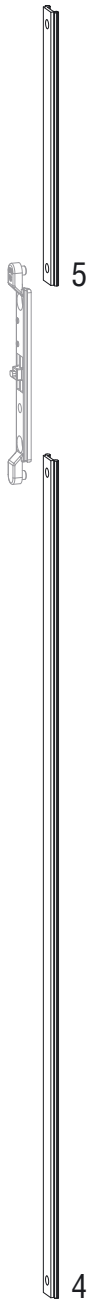
No.	**Sash height SH** Computation formula	**Sash width SW** Quantity per sash		
	895 - 1200	**740-1200**	**1201-1600**	
1	L = G – 388	1	1	
2	L = SH – G – 433	1	1	
3	L = SH – 665	1	1	
4	L = SW – 700	2	–	
5	L = SW/2 – 428	–	4	
	1201 - 2400	**740-1200**	**1201-1600**	
1	L = G – 388	2	2	
2	L = SH – G – 433	2	2	
4	L = SW – 700	2	–	
5	L = SW/2 – 428	–	4	





Quantity per sash and push rod cutting lengths with 22 mm sash overlap – G.U-968/150 oZ

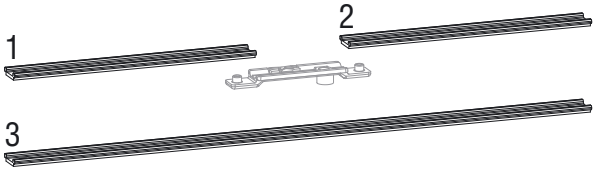




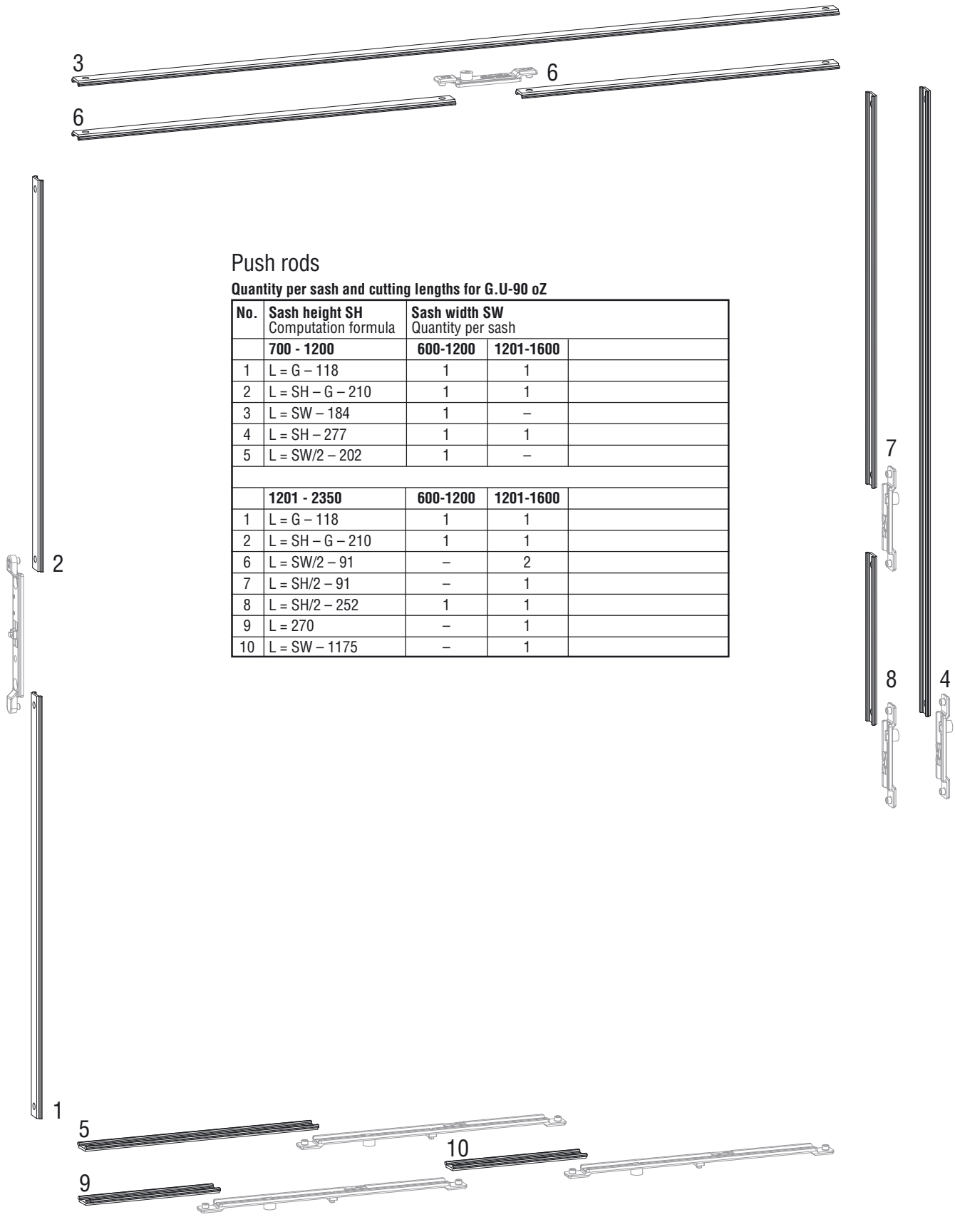
Push rods

Quantity per sash and cutting lengths for G.U-968/150 oZ

No.	Sash height SH Computation formula	Sash width SW Quantity per sash		
	730 - 1200	**600-1200**	**1201-1600**	
1	L = SW/2 – 366	–	1	
2	L = SW/2 – 237	–	1	
3	L = SW – 536	1	–	
4	L = G – 115	1	1	
5	L = SH – G – 393	1	1	
6	L = SW/2 – 88	–	1	
7	L = SW/2 – 186	–	1	
8	L = SW– 207	1	–	
11	L = 55	1	1	Scheme C
12	L = SW/2 – 199	–	1	Scheme C instead of 6
13	L = SW – 318	1	–	Scheme C instead of 8
	1201 - 2400	**600-1200**	**1201-1600**	
1	L = SW/2 – 366	–	1	
2	L = SW/2 – 237	–	1	
3	L = SW – 536	1	–	
4	L = G – 115	1	1	
5	L = SH – G – 393	1	1	
6	L = SW/2 – 88	–	1	
7	L = SW/2 – 186	–	1	
8	L = SW – 207	1	–	
9	L = SH/2 – 88	1	1	
11	L = 55	1	1	Scheme C
12	L = SW/2 – 199	–	1	Scheme C instead of 6
13	L = SW – 318	1	–	Scheme C instead of 8



Quantity per sash and push rod cutting lengths with 22 mm sash overlap – G.U-90 oZ



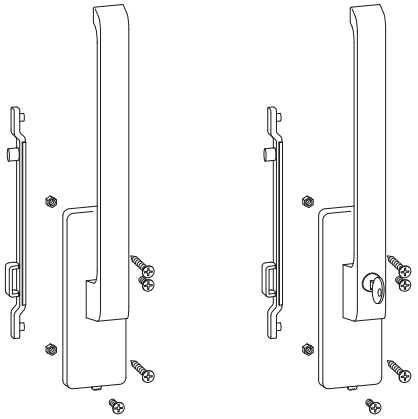
Push rods

Quantity per sash and cutting lengths for G.U-90 oZ

No.	**Sash height SH** Computation formula	**Sash width SW** Quantity per sash		
	700 - 1200	**600-1200**	**1201-1600**	
1	L = G – 118	1	1	
2	L = SH – G – 210	1	1	
3	L = SW – 184	1	–	
4	L = SH – 277	1	1	
5	L = SW/2 – 202	1	–	
	1201 - 2350	**600-1200**	**1201-1600**	
1	L = G – 118	1	1	
2	L = SH – G – 210	1	1	
6	L = SW/2 – 91	–	2	
7	L = SH/2 – 91	–	1	
8	L = SH/2 – 252	1	1	
9	L = 270	–	1	
10	L = SW – 1175	–	1	

Geared handles and handles for windows and patio doors, accessories
Parallel slide and tilt locking mechanisms G.U-mZ

Geared handles DIRIGENT – Aluminium



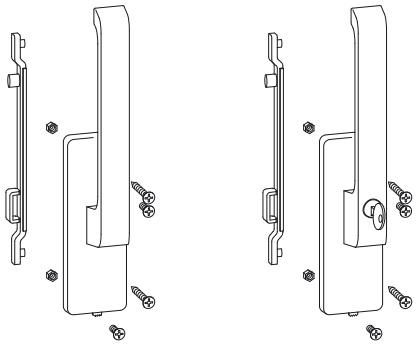
Contents:
1 geared handle
1 carrier
2 countersunk sheet metal screw 4,8x32
2 countersunk screw M 5 x 25
2 hex-nut M 5

Handle length 240 mm

Box of geared handle G.U-mZ DIRIGENT with anti-lockout device

		lockable – keyed alike	
Euro groove 15/20		**Euro groove 15/20**	
handle pos. lh	**K-14712-00-L-***	**handle pos. lh**	**K-14711-00-L-***
handle pos. rh	**K-14712-00-R-***	**handle pos. rh**	**K-14711-00-R-***
Profile system Hartmann		**Profile system Hartmann**	
handle pos. lh	**K-15042-00-L-***	**handle pos. lh**	**K-15043-00-L-***
handle pos. rh	**K-15042-00-R-***	**handle pos. rh**	**K-15043-00-R-***
Profile system Hueck		**Profile system Hueck**	
handle pos. lh	**K-15046-00-L-***	**handle pos. lh**	**K-15047-00-L-***
handle pos. rh	**K-15046-00-R-***	**handle pos. rh**	**K-15047-00-R-***

Geared handles G.U-mZ for windows



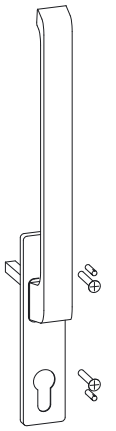
Contents:
1 geared handle
1 carrier
2 countersunk sheet metal screw 4,8x32
2 countersunk screw M 5 x 25
2 hex-nut M 5

Handle length 180 mm

Box of geared handle G.U-mZ DIRIGENT with anti-lockout device

		lockable – keyed alike	
Euro groove 15/20		**Euro groove 15/20**	
handle pos. lh	**K-17460-00-L-***	**handle pos. lh**	**K-17459-00-L-***
handle pos. rh	**K-17460-00-R-***	**handle pos. rh**	**K-17459-00-R-***

Handle DIRIGENT inside – Aluminium



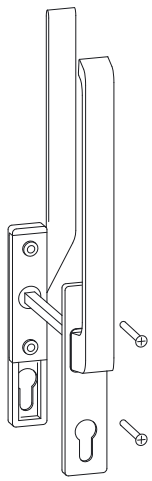
Contents:
1 handle inside
2 positioning pin

Handle length 240 mm

Bag of handle inside G.U-mZ DIRIGENT with cylinder bore

with cams	**6-24622-00-0-***
without cams	**6-24623-00-0-***

Handles DIRIGENT for operation from both sides – Aluminium

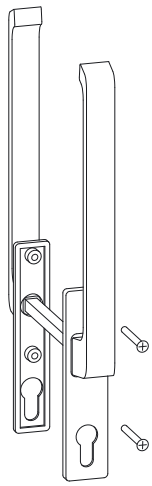


Contents:
1 handle for operation from both sides
2 countersunk screw M 6 x 75

Handle length 240 mm

Bag of handle for operation from both sides G.U-mZ, projection 20 mm DIRIGENT with cylinder bore and cams

K-13167-00-0-*



Contents:
1 handle for operation from both sides
2 countersunk screw M 6 x 75

Handle length 240 mm

Bag of handle for operation from both sides G.U-mZ, projection 30 mm DIRIGENT with cylinder bore and cams

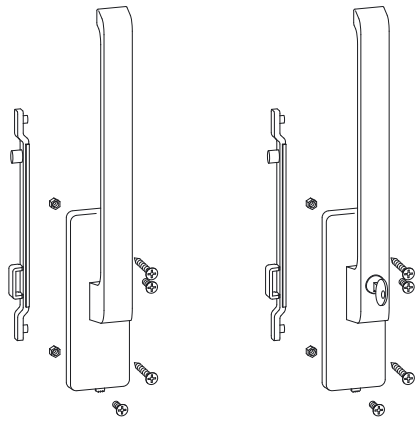
K-12919-00-0-*

Countersunk screw DIN 965 for operation from both sides

ST		
-60 mm	**M 6 x 75**	**9-13274-75-0-1**
61-65 mm	**M 6 x 80**	**9-13274-80-0-1**
66-70 mm	**M 6 x 85**	**9-13274-85-0-1**
71-78 mm	**M 6 x 90**	**9-13274-90-0-1**

Geared handles and handles for windows and patio doors, accessories
Parallel slide and tilt locking mechanisms G.U-mZ

Geared handles DIRIGENT – Stainless steel



Contents:
1 geared handle
1 carrier
2 countersunk sheet metal screw 4,8x32
2 countersunk screw M 5 x 25
2 hex-nut M 5

Handle length 240 mm

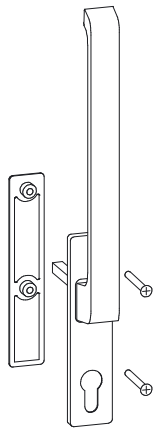
Box of geared handle G.U-mZ
DIRIGENT with anti-lockout device

Euro groove 15/20	
handle pos. lh	K-17242-00-L-8
handle pos. rh	K-17242-00-R-8

lockable – keyed alike

Euro groove 15/20	
handle pos. lh	K-17245-00-L-8
handle pos. rh	K-17245-00-R-8

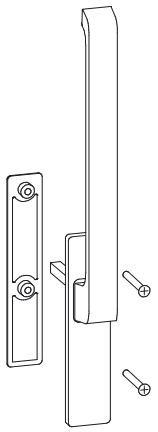
Handle DIRIGENT inside and dummy plate outside – Stainless steel



Contents:
1 handle inside
1 dummy plate outside
2 countersunk screws M 6 x 75

Handle length 240 mm

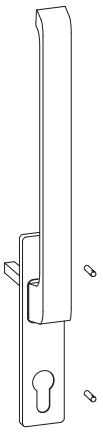
Bag of handle inside G.U-mZ
DIRIGENT with cylinder bore and cams
K-16925-00-0-8



Contents:
1 handle inside
1 dummy plate outside
2 countersunk screws M 6 x 75

Handle length 240 mm

Bag of handle inside G.U-mZ
DIRIGENT without cylinder bore, with cams
K-16924-00-0-8



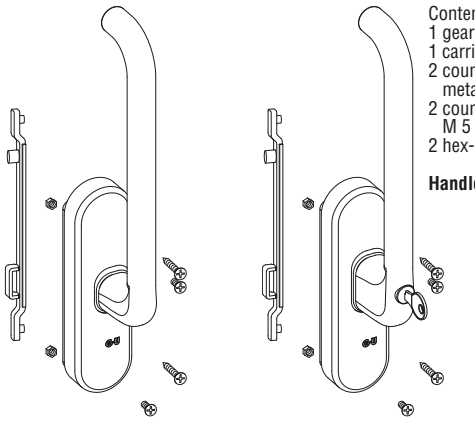
Contents:
1 handle inside
2 positioning pins 4 x 20

Handle length 240 mm

Bag of handle inside G.U-mZ
DIRIGENT with cylinder bore, without cams
K-16923-00-0-8

Geared handles and handles for windows and patio doors, accessories
Parallel slide and tilt locking mechanisms G.U-mZ

Geared handles RONDO – Stainless steel



Contents:
1 geared handle
1 carrier
2 countersunk sheet metal screw 4,8x32
2 countersunk screw M 5 x 25
2 hex-nut M 5

Handle length 240 mm

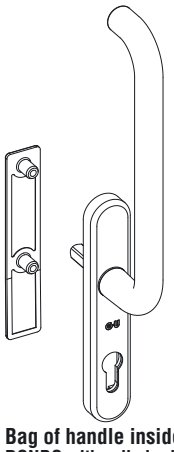
Box of geared handle G.U-mZ
RONDO with anti-lockout device

Euro groove 15/20	
handle pos. lh	K-17247-00-L-8
handle pos. rh	K-17247-00-R-8

lockable – keyed alike

Euro groove 15/20	
handle pos. lh	K-17250-00-L-8
handle pos. rh	K-17250-00-R-8

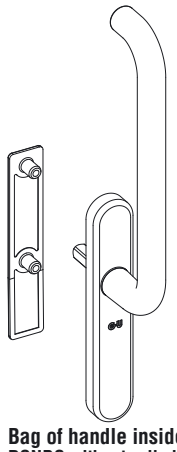
Handle RONDO inside and dummy plate outside – Stainless steel



Contents:
1 handle inside
1 dummy plate outside
2 countersunk screws M 6 x 75

Handle length 240 mm

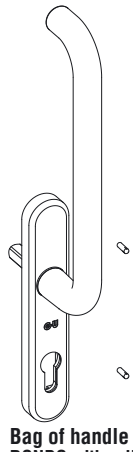
Bag of handle inside G.U-mZ
RONDO with cylinder bore and cams
K-16928-00-0-8



Contents:
1 handle inside
1 dummy plate outside
2 countersunk screws M 6 x 75

Handle length 240 mm

Bag of handle inside G.U-mZ
RONDO without cylinder bore, with cams
K-16927-00-0-8

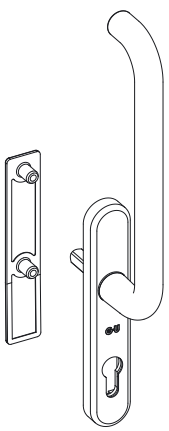


Contents:
1 handle inside
2 positioning pins 4 x 20

Handle length 240 mm

Bag of handle inside G.U-mZ
RONDO with cylinder bore, without cams
K-16926-00-0-8

Handle RONDO inside – Stainless steel / dummy plate outside – Aluminium

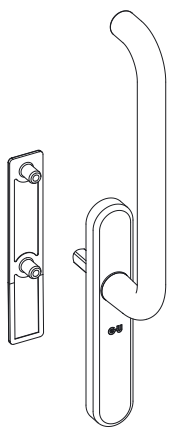


Contents:
1 handle inside
1 dummy plate outside
2 countersunk screws M 6 x 75

Handle length 240 mm

Bag of handle inside G.U-mZ
RONDO with cylinder bore and cams
K-17207-00-0-* [1]

[1] *= Colour dummy plate: 1 = EV 1, 5 = UC 5, 7 = white



Contents:
1 handle inside
1 dummy plate outside
2 countersunk screws M 6 x 75

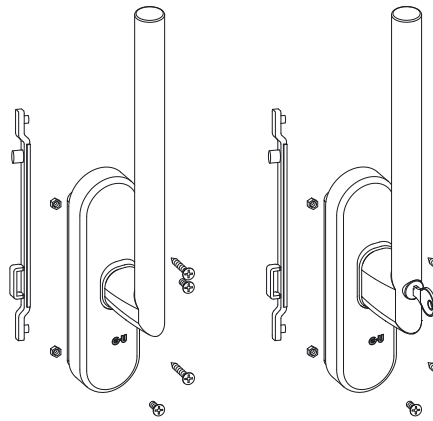
Handle length 240 mm

Bag of handle inside G.U-mZ
RONDO without cylinder bore, with cams
K-17206-00-0-* [1]

[1] *= Colour dummy plate: 1 = EV 1, 5 = UC 5, 7 = white

Geared handles and handles for windows and patio doors, accessories
Parallel slide and tilt locking mechanisms G.U-mZ

Geared handles FORTE – Stainless steel



Contents:
1 geared handle
1 carrier
2 countersunk sheet metal screw 4,8x32
2 countersunk screw M 5 x 25
2 hex-nut M 5

Handle length 240 mm

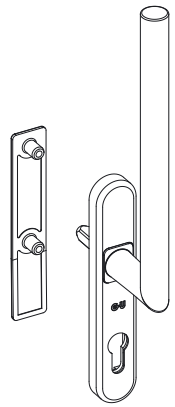
Box of geared handle G.U-mZ FORTE with anti-lockout device

Euro groove 15/20
handle pos. lh K-17253-00-L-8
handle pos. rh K-17253-00-R-8

lockable – keyed alike

Euro groove 15/20
handle pos. lh K-17256-00-L-8
handle pos. rh K-17256-00-R-8

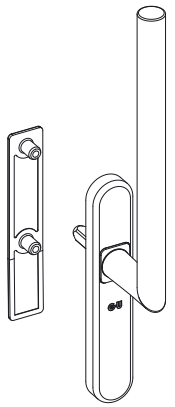
Handle FORTE inside and dummy plate outside – Stainless steel



Contents:
1 handle inside
1 dummy plate outside
2 countersunk screws M 6 x 75

Handle length 240 mm

Bag of handle inside G.U-mZ
FORTE with cylinder bore and cams
K-17049-00-0-8



Contents:
1 handle inside
1 dummy plate outside
2 countersunk screws M 6 x 75

Handle length 240 mm

Bag of handle inside G.U-mZ
FORTE without cylinder bore, with cams
K-17048-00-0-8

Dummy plate outside – Stainless steel

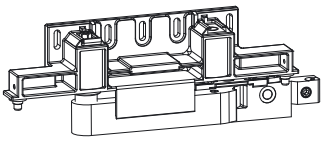
Dummy plate outside
9-42833-00-0-8

Dummy plate outside – Aluminium

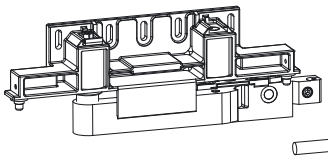
Dummy plate outside
9-30489-00-0-* [1]

[1] *= Colour dummy plate: 1 = EV 1, 5 = UC 5, 7 = white

Parallel slide and tilt fittings G.U-966/200 mZ
Tandem runner for sashes with heavy glazing



Rod **Runner T, front**



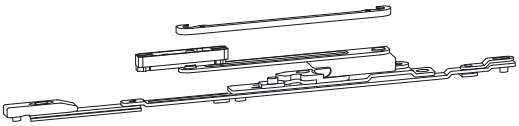
Runner T, rear **Rod**

Box of runners G.U-968/200 T
for aluminium windows

Handle pos. lh	**K-15509-00-L-0**	**PU 1**
Handle pos. rh	**K-15509-00-R-0**	**PU 1**

Inhalt:
1 runner G.U-968/200 T, front
1 runner G.U-968/200 T, rear
2 rods, Ø 10 mm

Parallel slide and tilt fittings G.U-968/200 mZ
Box of middle stay G.U-mZ for sash rebate widths 1851 to 2000 mm



Middle stay G.U-mZ with stay arm glider and cover

Fitting requirements standard version

Middle stay G.U-mZ	
Handle pos. lh	6-29349-02-L-8
Handle pos. rh	6-29349-02-R-8
Stay arm glider	6-22755-00-0-0
Cover for middle stay	9-35573-00-0-*

Fitting requirements profile system Hartmann

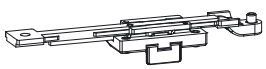
Middle stay G.U-mZ	
Handle pos. lh	6-29349-04-L-8
Handle pos. rh	6-29349-04-R-8
Stay arm glider	6-22755-00-0-0
Cover for middle stay	9-35573-00-0-*

Fitting requirements profile system Hueck

Middle stay G.U-mZ	
Handle pos. lh	6-29349-03-L-8
Handle pos. rh	6-29349-03-R-8
Stay arm glider	6-22755-00-0-0
Cover for middle stay	9-35573-00-0-*

Parallel slide and tilt locking mechanisms G.U-mZ

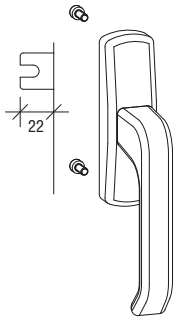
Stop P 1225
6-30388-00-0-6



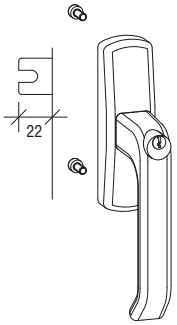
Bag of wrong operation safety device

Profile system	Article No.	Drill Ø mm
Euro gr. 15/20	K-17192-01-0-1	5,2
Euro gr. 15/20	K-17192-02-0-1	6,0
Hueck	K-17192-03-0-1	8,0
Schüco	K-17192-08-0-1	11,0
Wicona	K-17192-09-0-1	

Geared handles SPACIO
aluminium, painted – 1 carrier fork 22 mm

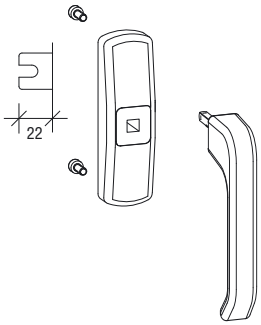


Bag of geared handle SPACIO – not lockable
2 screws
G-46551-96-0-*



Bag of geared handle SPACIO – lockable
2 screws, 2 keys
G-46553-96-0-*

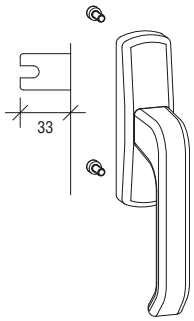
Bag of geared handle SPACIO – lockable for first tilt fittings
2 screws, 2 keys
G-46557-96-0-*



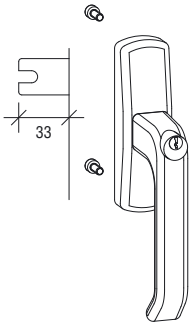
Bag of geared rosette SPACIO
2 screws
G-46555-96-0-*

Removable handle SPACIO
G-18888-00-0-*

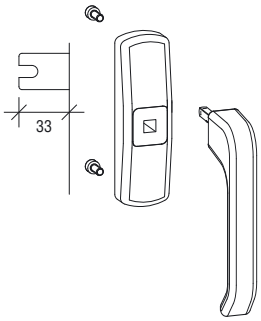
Geared handles SPACIO
aluminium, painted – 1 carrier fork 33 mm



Bag of geared handle SPACIO – not lockable
2 screws
G-46595-96-0-*



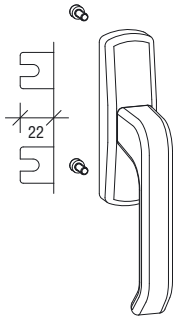
Bag of geared handle SPACIO – lockable
2 screws, 2 keys
G-46597-96-0-*



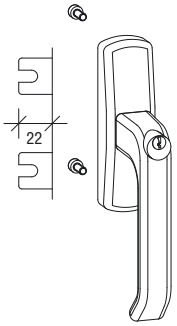
Bag of geared rosette SPACIO
2 screws
G-46596-96-0-*

Removable handle SPACIO
G-18888-00-0-*

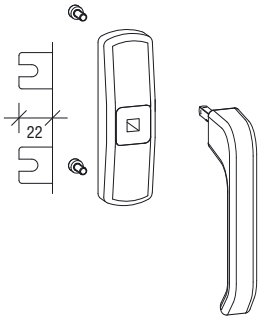
Geared handles SPACIO
aluminium, painted – 2 carrier forks 22 mm – DIN right hand



Bag of geared handle SPACIO – not lockable
2 screws
G-46552-96-R-*



Bag of geared handle SPACIO – lockable
2 screws, 2 keys
G-46554-96-R-*

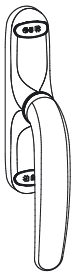


Bag of geared rosette SPACIO
2 screws
G-46556-96-R-*

Removable handle SPACIO
G-18888-00-0-*

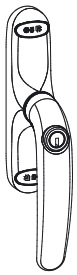
Bag of accessories
Conversion of SPACIO handles with 2 carrier forks to DIN left hand
G-46550-00-L-1

Geared handles ADAGIO-A
powder coated



Geared handle ADAGIO-A – not lockable

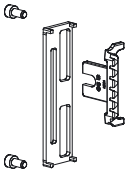
6-31723-00-0-*



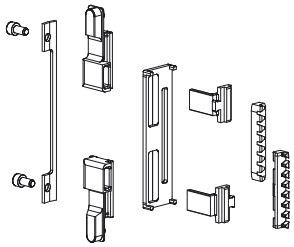
Geared handle ADAGIO-A – lockable
2 keys
6-31724-00-0-*

Clip – neutral
9-41505-00-0-*

Accessories for ADAGIO-A



Bag of accessories for 1 carrier fork 22 mm
K-15814-00-0-1



Bag of accessories for 2 carrier forks
K-15815-00-0-1

Accessories for side hung sashes with geared handle SPACIO

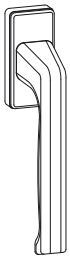
90° limiter for aluminium rosettes
9-34612-00-0-6

Accessories for geared handles SPACIO and ADAGIO-A

Fixing plate – single
hole centre distance mm

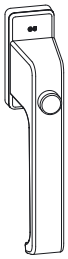
104	**9-41506-00-0-8**

Handles DIRIGENT-F for mill-in gears [1]

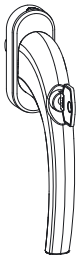


DIRIGENT-F
Spindle 25 6-28072-25-0-*
Spindle 29 6-28072-29-0-*

DIRIGENT-F/Z
with push button cylinder,
all keys alike
Spindle 29 6-28075-29-0-*



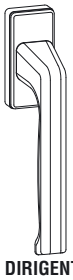
DIRIGENT-F
with anti-lockout device
Spindle 29 6-25384-00-0-*



MODENA-F/Z 100 Nm [2]
for security windows
and patio doors
Spindle 29 6-34397-29-0-*

DIRIGENT-F/SG
Spindle 50 8-00694-50-0-7

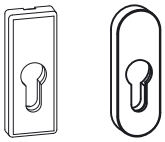
Rosette/F inside – flat
6-24913-00-0-*



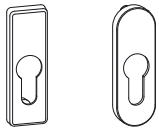
DIRIGENT-F
inside – without spindle
6-28072-00-0-*

DIRIGENT-F/AF,
outside – flat
6-25223-00-0-*

DIRIGENT-F/A,
outside
6-25993-00-0-*



Rosette with CB inside
square K-17205-02-0-*
oval K-17204-02-0-*



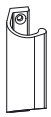
Rosette PZ/A outside
square 9-43605-02-0-*
oval 9-43582-02-0-*

Spindle
ST 56-68 9-26874-56-0-1
ST 69-80 9-26874-69-0-1

Inside/ outside operation
Countersunk screw M 5
ST 50-54 9-13255-60-0-1
ST 55-59 9-13255-65-0-1
ST 60-64 9-13255-70-0-1
ST 65-69 9-13255-75-0-1
ST 70-74 9-13255-80-0-1
ST 75-80 9-13255-85-0-1

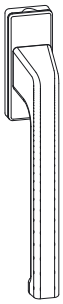
Inside operation
Countersunk screw M 5
Spindle 25 9-13255-30-0-1
Spindle 29 9-13255-35-0-1

Knob lock
Backset 25 - 50 mm
K-13282-00-0-*

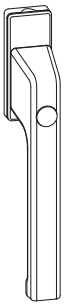


Pull handle outside
9-22921-00-0-*

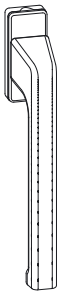
[1] = More turn handles see part 3 of the present order catalogue.
[2] = Tested to DIN V EN V 1627 for resistance to pull-off and twist-off attempts at 100 Nm.



DIRIGENT-HL
elongated
Rosette 32 x 81 mm
Spindle 25 6-31382-25-0-*
Spindle 29 6-31382-29-0-*



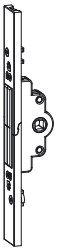
DIRIGENT-HL
elongated
Rosette 32 x 81 mm
push button cylinder
Spindle 30 6-31383-30-0-*



DIRIGENT-HL
elongated
Rosette 28 x 67 mm
Spindle 33 6-32629-33-0-*

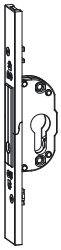
Mill-in gears

Mill-in gear 180°
Backset 14 mm
6-31280-00-0-1



Mill-in gear 180°

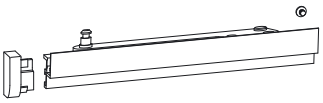
6-25916--0-1**



Lock
with cylinder bore
6-25918--0-1**

** = Sizes**
25, 30, 35, 40, 45, 50

Stay G.U-oZ – adjustable



End cap
left 9-34517-00-L-*
right 9-34517-00-R-*

Stay G.U-oZ – adjustable
6-26274--0-1**
Screw , nut

Cover rail P 1481
9-34520--0-***

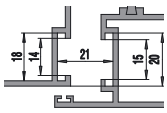
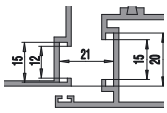
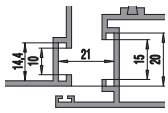
Fitting requirements according to size of sashes for schemes A to K

Quantity A	C	D	G	K	Description	PU	Article No.
1	2	1	1	2	**Bag of stay G.U-oZ** [1]		
					Contents		
					1 Stay G.U-oZ, adjustable 1 Bag of Screws 1 Cover rail P 1481 1 End cap for P 1481, left 1 End cap for P 1481, right		
					SW		
					600- 850	1	K-14132-20-0-*
					851-1100	1	K-14132-25-0-*
					1101-1350	1	K-14132-30-0-*
					1351-1600	1	K-14132-35-0-*

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)

Working drawing
G.U-968/150 oZ 0-43981

Positioning and locking plates according to frame groove – Euro groove 15/20

Description	Gasket pressure	Illustration	**Frame groove 14/18** 	**12/15** 	**10/14** 
Locking plate Frame profiles clampable	standard + 0,7 mm		6-30959-00-0-1 6-30959-01-0-1	6-30959-00-0-1 6-30959-01-0-1	6-30959-00-0-1 6-30959-01-0-1
Locking plate Frame profiles clampable	adjustable		G-11071-00-0-1	G-11800-00-0-1	G-11065-00-0-1
Positioning plate Frame profiles			6-25587-03-0-1	6-25587-02-0-1	6-25587-01-0-1

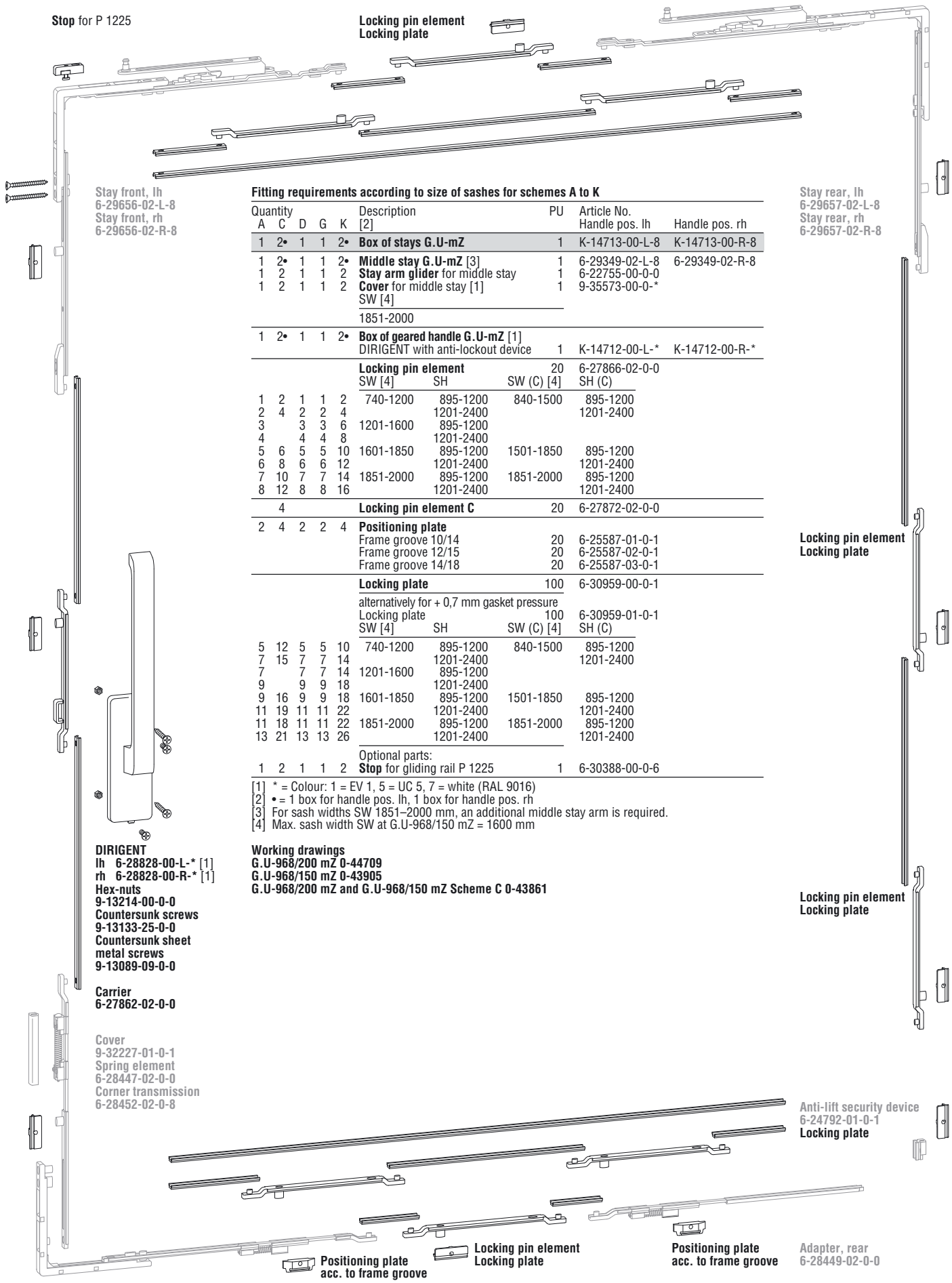
Positioning and locking plates according to profile system – G.U-968/200 mZ

Profile systems Aluminium	Sash profile	Frame profile	Mullion profile		Working drawing G.U-968/200 mZ	Positioning plate	Locking plate	Wrong operation safety device (WOSD)
Akotherm AT 730	2551	2502			0-44709-1	6-25587-02-0-1	6-28734-12-0-1	K-17192-02-0-1
Alcoa RT 67/RT 72	770 145/146	770 006/090			0-43865-1	6-25587-01-0-1	6-28734-10-0-1	K-17192-01-0-1
Aliplast Imperial	IP023	IP012			0-44709-1	6-25587-03-0-1	6-28734-14-0-1	K-17192-02-0-1
Aliplast Visoline	VL 21	VL 18	VL 26		0-44709-1	6-25587-03-0-1	6-28734-14-0-1	K-17192-02-0-1
Graute-Therm 80					0-44709-1	6-25587-01-0-1	6-28734-10-0-1	K-17192-02-0-1
Hartmann Systherm 72E					0-43827-2	9-29990-05-0-1	9-30146-05-0-1	
Heroal Serie 065	9302	9324			0-44709-1	6-25587-01-0-1	6-28734-10-0-1	K-17192-02-0-1
Hueck 1.0						6-25071-00-0-1		K-17192-03-0-1
Klauke	78145	78010			0-44709-1	6-25587-03-0-1	G-15059-00-0-1	K-17192-02-0-1
Reynaers					0-44709-1	6-25587-03-0-1	6-28734-14-0-1	
Sykon Sykotherm 64	6332	6329	6331		0-44709-1	6-25587-01-0-1	6-28734-10-0-1	K-17192-02-0-1
Wicona Wicline 65/77						6-25587-04-0-1		K-17192-09-0-1

Positioning and locking plates according to profile system – G.U-968/150 oZ, G.U-90 oZ

Profile systems Aluminium	Sash profile	Frame profile	Mullion profile	False mullion profile	Working drawing G.U-968/150 oZ	Positioning plate	Locking plate adjustable clampable	Locking plate fix clampable
Alcan Serie Contact	4002 D	4002 D	4029 F		F-41949-1	9-29990-24-0-1	G-11800-00-0-1	6-30959-00-0-1
Alcoa RT 620	717 833	717 833	717 845			9-29990-23-0-1		
Alisol 3	V 63215	V 63215	V 63207		0-41081-2	6-25587-03-0-1	G-11071-00-0-1	6-30959-00-0-1
Alsec 2000 Serie 59	46960-85	46960-85	52533-73		0-42657-2	6-25587-03-0-1	G-11071-00-0-1	6-30959-00-0-1
Alu A.M.C. GN 50	50/230	50/230				6-25587-03-0-1	G-11071-00-0-1	6-30959-00-0-1
Bug 90	831 614	831 614			0-42236-2	6-25587-01-0-1	G-11065-00-0-1	6-30959-00-0-1
Egybel	901 010	901 010	901 042	901 080		6-25587-03-0-1	G-11071-00-0-1	6-30959-00-0-1
EurAl Serie 65	161 100	161 100				6-25587-03-0-1	G-11071-00-0-1	6-30959-00-0-1
Forster (Stahl)	505.665	505.665			0-41041-1	9-30163-18-0-1		9-30147-00-0-1
Hueck 2.1	556 103	556 103				6-25071-00-0-1		
Metra Serie 65	165 130	165 130				6-25587-06-0-1		6-28734-13-0-1
MKF TKI 602	602-01-015	602-01-015	602-03-002			6-25071-00-0-1		
Pechiney	N 113311	N 113311	N 113320	N 113352	0-42763-1	6-25587-01-0-1	G-15067-00-0-1	6-30959-00-0-1
Philippi 2000						6-25597-03-0-1	G-15059-00-0-1	
Reynaers						6-25587-03-0-1	G-11071-00-0-1	6-30959-00-0-1
SAPA-Ekonal i70	42003	42003	42531		0-41062-1	9-29990-24-0-1	G-11800-00-0-1	6-30959-00-0-1
Schüco Royal 64w	104 610	104 610	104 620		0-42562-1	9-29990-03-0-1		9-30146-03-0-1
Schüco Royal S 65/ S 55	166 030	166 030	166 070		0-43290-1	9-29990-03-0-1		9-30146-03-0-1
Sidal nc 60 S	863	863	878		0-41777-4	9-29990-24-0-1	G-11800-00-0-1	6-30959-00-0-1
SMS Serie 46000	46493	46493	46511			6-25587-01-0-1	G-11065-00-0-1	6-30959-00-0-1
Systemes (F)					0-42578-4	9-29990-14-0-1	G-15095-00-0-1	6-30959-00-0-1
Wernal System 6000					0-40937-4	9-29990-14-0-1	G-11071-00-0-1	6-30959-00-0-1
Wicline 60					0-42863-1	6-25587-04-0-1		
Wicona Wicline 77/65	1011202	1011202	1011301	1011350	0-44115-1	6-33442-00-0-1		

Doors and windows with geared handle inside for sash profiles with euro groove 15/20 mm



Fitting requirements according to size of sashes for schemes A to K

Quantity A	C	D	G	K	Description [2]	PU	Article No. Handle pos. lh	Handle pos. rh
1	2•	1	1	2•	**Box of stays G.U-mZ**	1	K-14713-00-L-8	K-14713-00-R-8
1	2•	1	1	2•	**Middle stay G.U-mZ** [3]	1	6-29349-02-L-8	6-29349-02-R-8
1	2	1	1	2	**Stay arm glider** for middle stay	1	6-22755-00-0-0	
1	2	1	1	2	**Cover** for middle stay [1]	1	9-35573-00-0-*	
					SW [4]			
					1851-2000			
1	2•	1	1	2•	**Box of geared handle G.U-mZ** [1] DIRIGENT with anti-lockout device	1	K-14712-00-L-*	K-14712-00-R-*
					Locking pin element	20	6-27866-02-0-0	

SW [4]					SH		SW (C) [4]	SH (C)
1	2	1	1	2	740-1200	895-1200	840-1500	895-1200
2	4	2	2	4		1201-2400		1201-2400
3		3	3	6	1201-1600	895-1200		
4		4	4	8		1201-2400		
5	6	5	5	10	1601-1850	895-1200	1501-1850	895-1200
6	8	6	6	12		1201-2400		1201-2400
7	10	7	7	14	1851-2000	895-1200	1851-2000	895-1200
8	12	8	8	16		1201-2400		1201-2400

	4				**Locking pin element C**	20	6-27872-02-0-0
2	4	2	2	4	**Positioning plate**		
					Frame groove 10/14	20	6-25587-01-0-1
					Frame groove 12/15	20	6-25587-02-0-1
					Frame groove 14/18	20	6-25587-03-0-1
					Locking plate	100	6-30959-00-0-1
					alternatively for + 0,7 mm gasket pressure		
					Locking plate	100	6-30959-01-0-1

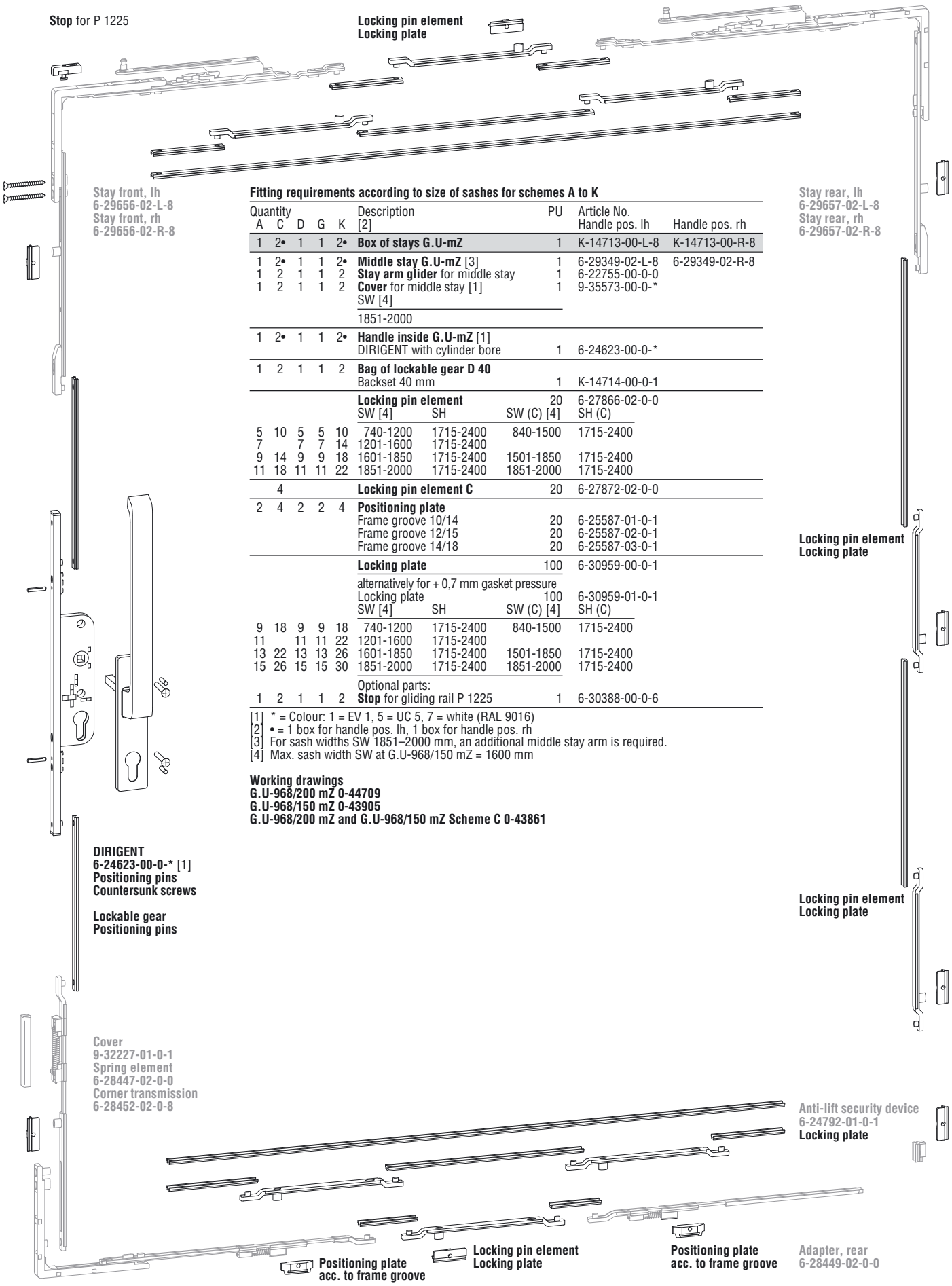
SW [4]					SH		SW (C) [4]	SH (C)
5	12	5	5	10	740-1200	895-1200	840-1500	895-1200
7	15	7	7	14		1201-2400		1201-2400
7		7	7	14	1201-1600	895-1200		
9		9	9	18		1201-2400		
9	16	9	9	18	1601-1850	895-1200	1501-1850	895-1200
11	19	11	11	22		1201-2400		1201-2400
11	18	11	11	22	1851-2000	895-1200	1851-2000	895-1200
13	21	13	13	26		1201-2400		1201-2400

					Optional parts:		
1	2	1	1	2	**Stop** for gliding rail P 1225	1	6-30388-00-0-6

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[2] • = 1 box for handle pos. lh, 1 box for handle pos. rh
[3] For sash widths SW 1851–2000 mm, an additional middle stay arm is required.
[4] Max. sash width SW at G.U-968/150 mZ = 1600 mm

Working drawings
G.U-968/200 mZ 0-44709
G.U-968/150 mZ 0-43905
G.U-968/200 mZ and G.U-968/150 mZ Scheme C 0-43861

Doors and windows with lockable gear, for sash profiles with euro groove 15/20 mm



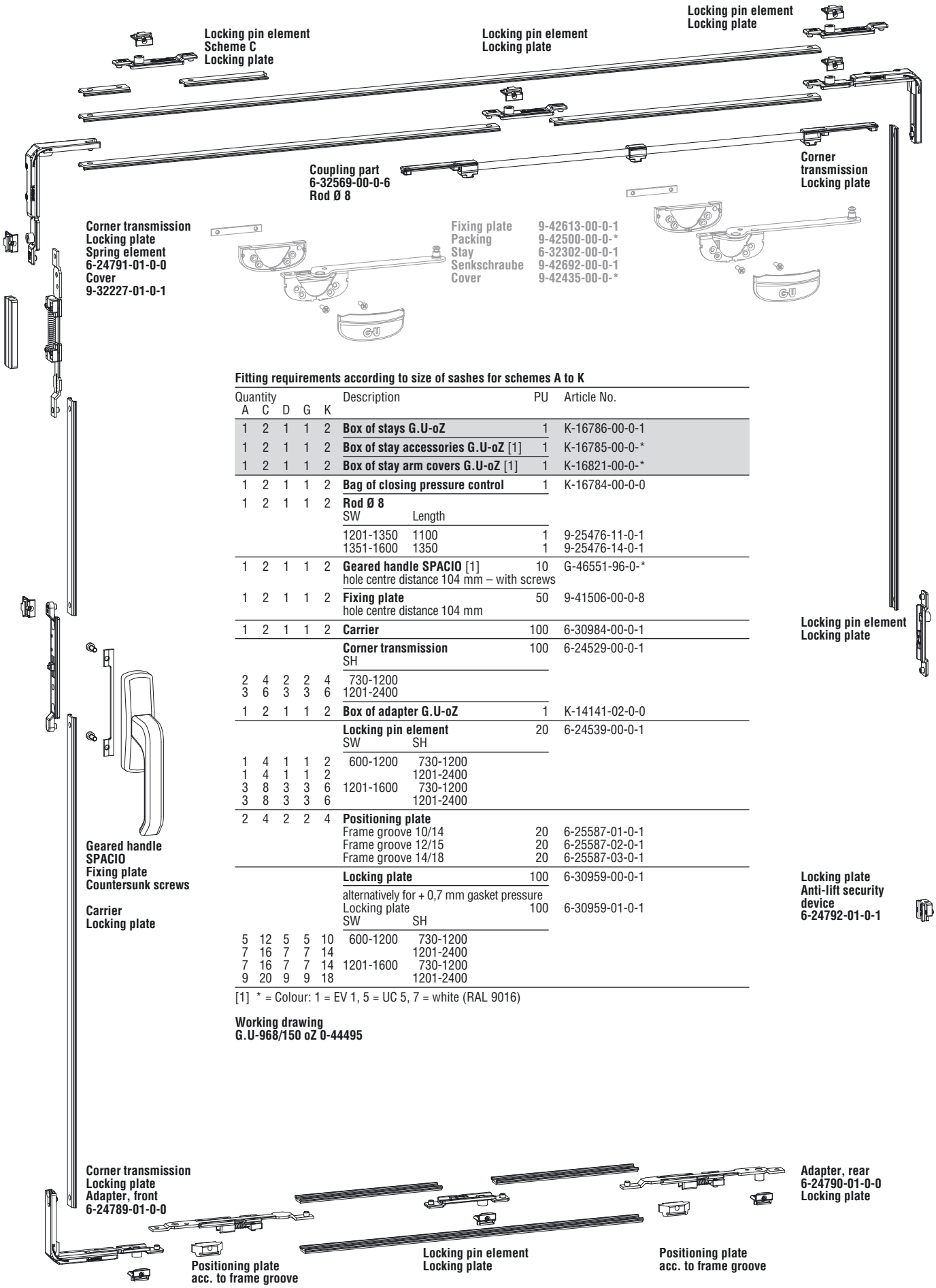
Fitting requirements according to size of sashes for schemes A to K

Quantity A	C	D	G	K	Description [2]	PU	Article No. Handle pos. lh	Handle pos. rh
1	2•	1	1	2•	**Box of stays G.U-mZ**	1	K-14713-00-L-8	K-14713-00-R-8
1	2•	1	1	2•	**Middle stay G.U-mZ** [3]	1	6-29349-02-L-8	6-29349-02-R-8
1	2	1	1	2	**Stay arm glider** for middle stay	1	6-22755-00-0-0	
1	2	1	1	2	**Cover** for middle stay [1]	1	9-35573-00-0-*	
					SW [4]			
					1851-2000			
1	2•	1	1	2•	**Handle inside G.U-mZ** [1] DIRIGENT with cylinder bore	1	6-24623-00-0-*	
1	2	1	1	2	**Bag of lockable gear D 40** Backset 40 mm	1	K-14714-00-0-1	
					Locking pin element	20	6-27866-02-0-0	
					SW [4] SH	SW (C) [4]	SH (C)	
5	10	5	5	10	740-1200 1715-2400	840-1500	1715-2400	
7		7	7	14	1201-1600 1715-2400			
9	14	9	9	18	1601-1850 1715-2400	1501-1850	1715-2400	
11	18	11	11	22	1851-2000 1715-2400	1851-2000	1715-2400	
	4				**Locking pin element C**	20	6-27872-02-0-0	
2	4	2	2	4	**Positioning plate**			
					Frame groove 10/14	20	6-25587-01-0-1	
					Frame groove 12/15	20	6-25587-02-0-1	
					Frame groove 14/18	20	6-25587-03-0-1	
					Locking plate	100	6-30959-00-0-1	
					alternatively for + 0,7 mm gasket pressure			
					Locking plate	100	6-30959-01-0-1	
					SW [4] SH	SW (C) [4]	SH (C)	
9	18	9	9	18	740-1200 1715-2400	840-1500	1715-2400	
11		11	11	22	1201-1600 1715-2400			
13	22	13	13	26	1601-1850 1715-2400	1501-1850	1715-2400	
15	26	15	15	30	1851-2000 1715-2400	1851-2000	1715-2400	
					Optional parts:			
1	2	1	1	2	**Stop** for gliding rail P 1225	1	6-30388-00-0-6	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[2] • = 1 box for handle pos. lh, 1 box for handle pos. rh
[3] For sash widths SW 1851–2000 mm, an additional middle stay arm is required.
[4] Max. sash width SW at G.U-968/150 mZ = 1600 mm

Working drawings
G.U-968/200 mZ 0-44709
G.U-968/150 mZ 0-43905
G.U-968/200 mZ and G.U-968/150 mZ Scheme C 0-43861

Doors and windows with geared handle inside for sash profiles with euro groove 15/20 mm



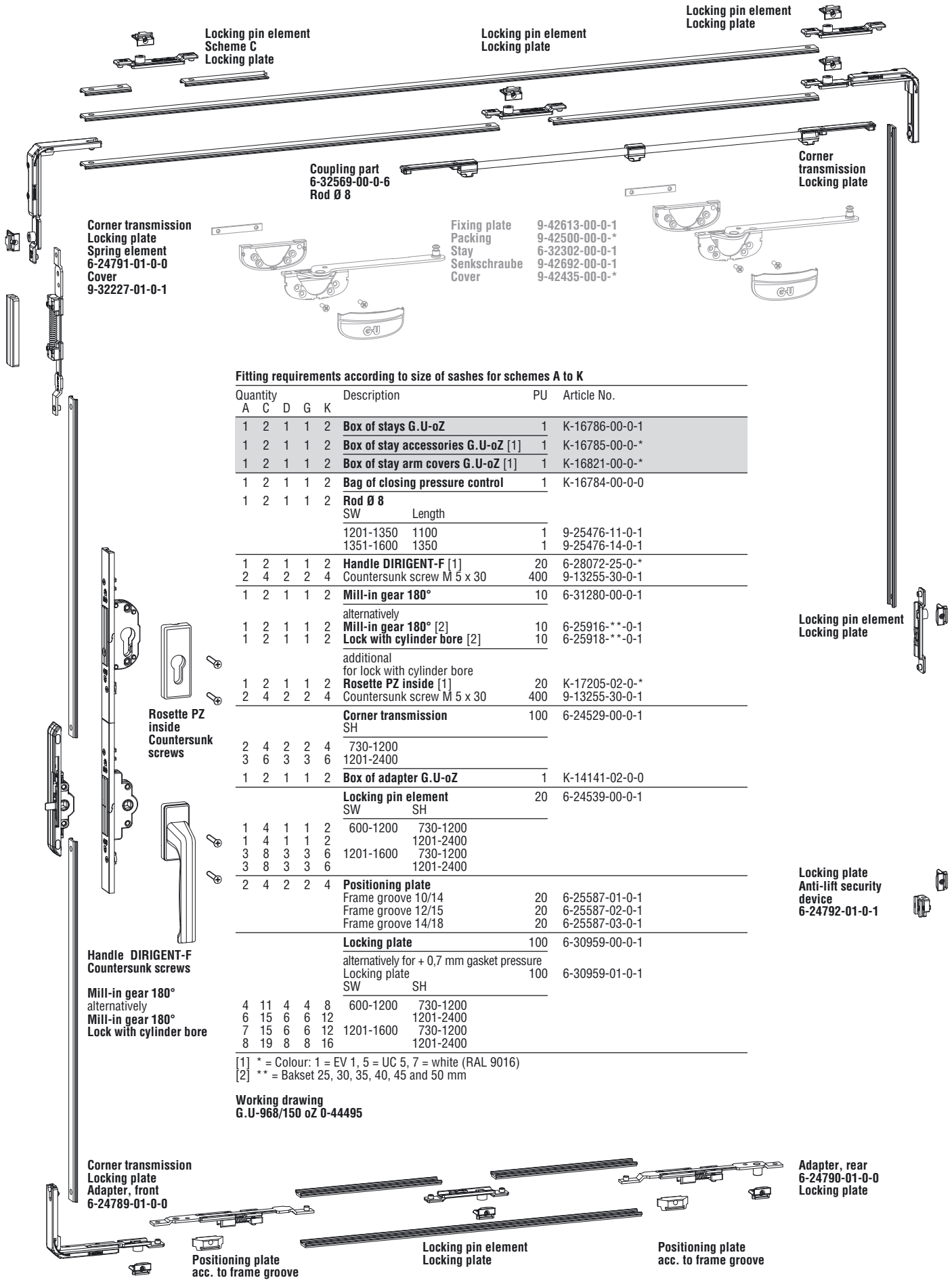
Fitting requirements according to size of sashes for schemes A to K

Quantity A	C	D	G	K	Description	PU	Article No.
1	2	1	1	2	**Box of stays G.U-oZ**	1	K-16786-00-0-1
1	2	1	1	2	**Box of stay accessories G.U-oZ** [1]	1	K-16785-00-0-*
1	2	1	1	2	**Box of stay arm covers G.U-oZ** [1]	1	K-16821-00-0-*
1	2	1	1	2	**Bag of closing pressure control**	1	K-16784-00-0-0
1	2	1	1	2	**Rod Ø 8**		
					SW Length		
					1201-1350 1100	1	9-25476-11-0-1
					1351-1600 1350	1	9-25476-14-0-1
1	2	1	1	2	**Geared handle SPACIO** [1]	10	G-46551-96-0-*
					hole centre distance 104 mm – with screws		
1	2	1	1	2	**Fixing plate**	50	9-41506-00-0-8
					hole centre distance 104 mm		
1	2	1	1	2	**Carrier**	100	6-30984-00-0-1
					Corner transmission	100	6-24529-00-0-1
					SH		
2	4	2	2	4	730-1200		
3	6	3	3	6	1201-2400		
1	2	1	1	2	**Box of adapter G.U-oZ**	1	K-14141-02-0-0
					Locking pin element	20	6-24539-00-0-1
					SW SH		
1	4	1	1	2	600-1200 730-1200		
1	4	1	1	2	1201-2400		
3	8	3	3	6	1201-1600 730-1200		
3	8	3	3	6	1201-2400		
2	4	2	2	4	**Positioning plate**		
					Frame groove 10/14	20	6-25587-01-0-1
					Frame groove 12/15	20	6-25587-02-0-1
					Frame groove 14/18	20	6-25587-03-0-1
					Locking plate	100	6-30959-00-0-1
					alternatively for + 0,7 mm gasket pressure		
					Locking plate	100	6-30959-01-0-1
					SW SH		
5	12	5	5	10	600-1200 730-1200		
7	16	7	7	14	1201-2400		
7	16	7	7	14	1201-1600 730-1200		
9	20	9	9	18	1201-2400		

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)

Working drawing
G.U-968/150 oZ 0-44495

Doors and windows with mill-in gear and lock with cylinder bore, for sash profiles with euro groove 15/20 mm



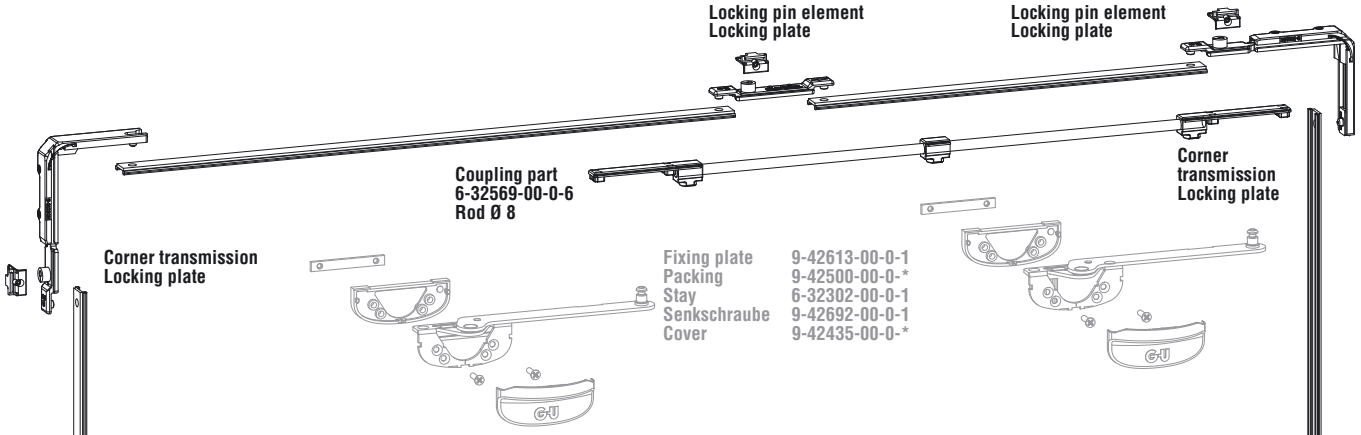
Fitting requirements according to size of sashes for schemes A to K

Quantity A	C	D	G	K	Description	PU	Article No.
1	2	1	1	2	**Box of stays G.U-oZ**	1	K-16786-00-0-1
1	2	1	1	2	**Box of stay accessories G.U-oZ** [1]	1	K-16785-00-0-*
1	2	1	1	2	**Box of stay arm covers G.U-oZ** [1]	1	K-16821-00-0-*
1	2	1	1	2	**Bag of closing pressure control**	1	K-16784-00-0-0
1	2	1	1	2	**Rod Ø 8**		
					SW Length		
					1201-1350 1100	1	9-25476-11-0-1
					1351-1600 1350	1	9-25476-14-0-1
1	2	1	1	2	**Handle DIRIGENT-F** [1]	20	6-28072-25-0-*
2	4	2	2	4	Countersunk screw M 5 x 30	400	9-13255-30-0-1
1	2	1	1	2	**Mill-in gear 180°**	10	6-31280-00-0-1
					alternatively		
1	2	1	1	2	**Mill-in gear 180°** [2]	10	6-25916-**-0-1
1	2	1	1	2	**Lock with cylinder bore** [2]	10	6-25918-**-0-1
					additional for lock with cylinder bore		
1	2	1	1	2	**Rosette PZ inside** [1]	20	K-17205-02-0-*
2	4	2	2	4	Countersunk screw M 5 x 30	400	9-13255-30-0-1
					Corner transmission	100	6-24529-00-0-1
					SH		
2	4	2	2	4	730-1200		
3	6	3	3	6	1201-2400		
1	2	1	1	2	**Box of adapter G.U-oZ**	1	K-14141-02-0-0
					Locking pin element	20	6-24539-00-0-1
					SW SH		
1	4	1	1	2	600-1200 730-1200		
1	4	1	1	2	1201-2400		
3	8	3	3	6	1201-1600 730-1200		
3	8	3	3	6	1201-2400		
2	4	2	2	4	**Positioning plate**		
					Frame groove 10/14	20	6-25587-01-0-1
					Frame groove 12/15	20	6-25587-02-0-1
					Frame groove 14/18	20	6-25587-03-0-1
					Locking plate	100	6-30959-00-0-1
					alternatively for + 0,7 mm gasket pressure		
					Locking plate	100	6-30959-01-0-1
					SW SH		
4	11	4	4	8	600-1200 730-1200		
6	15	6	6	12	1201-2400		
7	15	6	6	12	1201-1600 730-1200		
8	19	8	8	16	1201-2400		

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[2] ** = Bakset 25, 30, 35, 40, 45 and 50 mm

Working drawing
G.U-968/150 oZ 0-44495

Doors and windows with geared handle inside for sash profiles with euro groove 15/20 mm

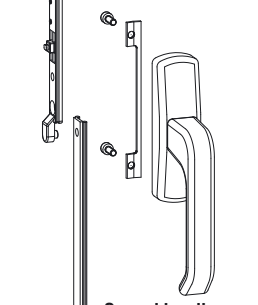


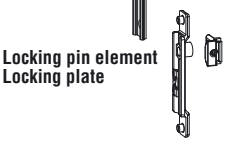
Fitting requirements according to size of sashes for schemes A to K

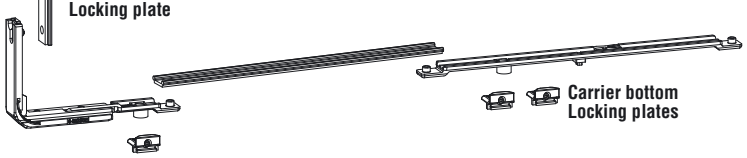
Quantity A	C	D	G	K	Description	PU	Article No.
1	2	1	1	2	**Box of stays G.U-oZ**	1	K-16786-00-0-1
1	2	1	1	2	**Box of stay accessories G.U-oZ** [1]	1	K-16785-00-0-*
1	2	1	1	2	**Box of stay arm covers G.U-oZ** [1]	1	K-16821-00-0-*
1	2	1	1	2	**Bag of closing pressure control**	1	K-16784-00-0-0
1	2	1	1	2	**Rod Ø 8**		
					SW Length		
					1201-1350 1100	1	9-25476-11-0-1
					1351-1600 1350	1	9-25476-14-0-1
1	2	1	1	2	**Geared handle SPACIO** [1] hole centre distance 104 mm – with screws	10	G-46551-96-0-*
1	2	1	1	2	**Fixing plate** hole centre distance 104 mm	50	9-41506-00-0-8
1	2	1	1	2	**Carrier**	100	6-30984-00-0-1
3	6	3	3	6	**Corner transmission**	100	6-24529-00-0-1
					Carrier bottom	100	6-24528-00-0-1
					SW		
1	2	1	1	2	600-1200		
2	4	2	2	4	1201-1600		
					Locking pin element	20	6-24539-00-0-1
					SW SH		
1	2	1	1	2	600-1200 700-1200		
2	4	2	2	4	1201-2400		
2	4	2	2	4	1201-1600 700-1200		
3	6	3	3	6	1201-2400		
					Locking plate	100	6-30959-00-0-1
					alternatively for + 0,7 mm gasket pressure		
					Locking plate	100	6-30959-01-0-1
					SW SH		
7	13	7	7	14	600-1200 700-1200		
9	16	9	9	18	1201-2400		
10	19	10	10	20	1201-1600 700-1200		
12	22	12	12	24	1201-2400		

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)

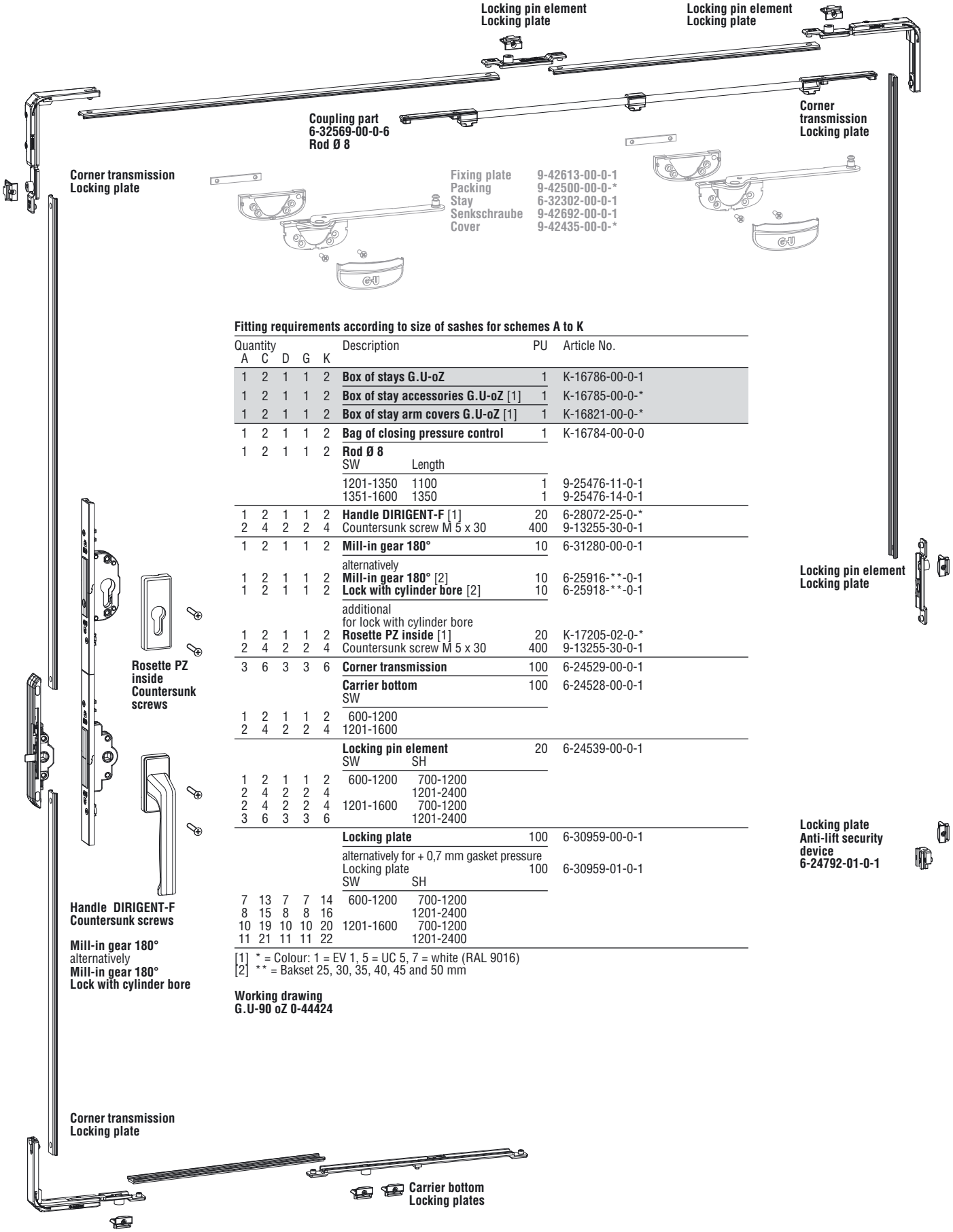
Working drawing
G.U-90 oZ 0-44424







Doors and windows with mill-in gear and lock with cylinder bore, for sash profiles with euro groove 15/20 mm



Fitting requirements according to size of sashes for schemes A to K

Quantity A	C	D	G	K	Description	PU	Article No.
1	2	1	1	2	**Box of stays G.U-oZ**	1	K-16786-00-0-1
1	2	1	1	2	**Box of stay accessories G.U-oZ** [1]	1	K-16785-00-0-*
1	2	1	1	2	**Box of stay arm covers G.U-oZ** [1]	1	K-16821-00-0-*
1	2	1	1	2	**Bag of closing pressure control**	1	K-16784-00-0-0
1	2	1	1	2	**Rod Ø 8**		
					SW Length		
					1201-1350 1100	1	9-25476-11-0-1
					1351-1600 1350	1	9-25476-14-0-1
1	2	1	1	2	**Handle DIRIGENT-F** [1]	20	6-28072-25-0-*
2	4	2	2	4	Countersunk screw M 5 x 30	400	9-13255-30-0-1
1	2	1	1	2	**Mill-in gear 180°**	10	6-31280-00-0-1
					alternatively		
1	2	1	1	2	**Mill-in gear 180°** [2]	10	6-25916-**-0-1
1	2	1	1	2	**Lock with cylinder bore** [2]	10	6-25918-**-0-1
					additional for lock with cylinder bore		
1	2	1	1	2	**Rosette PZ inside** [1]	20	K-17205-02-0-*
2	4	2	2	4	Countersunk screw M 5 x 30	400	9-13255-30-0-1
3	6	3	3	6	**Corner transmission**	100	6-24529-00-0-1
					Carrier bottom	100	6-24528-00-0-1
					SW		
1	2	1	1	2	600-1200		
2	4	2	2	4	1201-1600		
					Locking pin element	20	6-24539-00-0-1
					SW SH		
1	2	1	1	2	600-1200 700-1200		
2	4	2	2	4	1201-2400		
2	4	2	2	4	1201-1600 700-1200		
3	6	3	3	6	1201-2400		
					Locking plate	100	6-30959-00-0-1
					alternatively for + 0,7 mm gasket pressure		
					Locking plate	100	6-30959-01-0-1
					SW SH		
7	13	7	7	14	600-1200 700-1200		
8	15	8	8	16	1201-2400		
10	19	10	10	20	1201-1600 700-1200		
11	21	11	11	22	1201-2400		

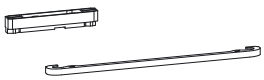
[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[2] ** = Bakset 25, 30, 35, 40, 45 and 50 mm

Working drawing
G.U-90 oZ 0-44424

Doors and windows with sash width SW up to 2000 mm and sash weight up to 200 kg – euro groove 15/20 mm

End cap 9-34523-00-0-*
Gliding rail P 1225
Cover rail P 1480

Stay arm glider 6-22755-00-0-0
Stay arm cover 9-35573-00-0-*



Gliding rail P 1225
End cap 9-34523-00-0-*
Cover rail P 1480

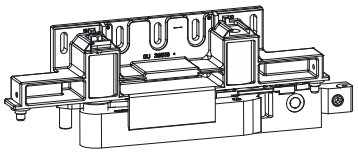
Fitting requirements according to size of sashes for schemes A to K

Quantity A	C	D	G	K	Description [2]	PU	Article No. Handle pos. lh	Handle pos. rh
1	2•	1	1	2•	**Box of runners G.U-968/200** Contents	1	K-15268-00-L-0	K-15268-00-R-0
					1 Runner, front 1 Runner, rear			
		1			**Positioning pin D** for control part	1	9-39897-00-0-1	
1	2	1	1	2	**Bag of profiles G.U-968/200** [1] Contents			
					1 Rod Ø 10 mm 1 Gliding rail P 1225 1 Running rail P 1213 1 Cover rail P 1480 1 Cover rail P 1603 1 Box of accessories			
					SW			
					740- 850	1	K-15269-20-0-*	
					851-1100	1	K-15269-25-0-*	
					1101-1350	1	K-15269-30-0-*	
					1351-1600	1	K-15269-35-0-*	
					1601-1850	1	K-15269-40-0-*	
					1851-2000	1	K-15269-45-0-*	

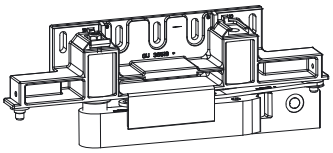
[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[2] • = 1 box for handle pos. lh, 1 box for handle pos. rh

Note for G.U-968/200 mZ:
For sashes with heavy glazing, tandem runners are required.

Working drawings
G.U-968/200 mZ 0-44709
G.U-968/200 mZ Scheme C 0-43861

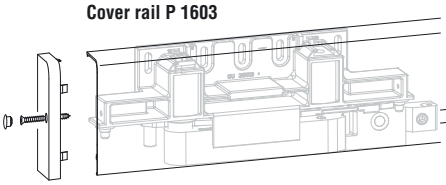


Runner, front lh 6-32332-00-L-0
rh 6-32332-00-R-0



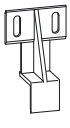
Runner, rear lh 6-29557-00-L-0
rh 6-29557-00-R-0

Cover rail P 1603



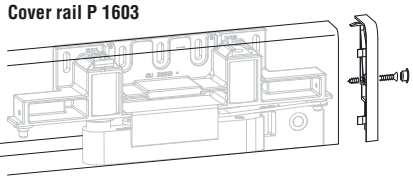
Cover 9-26687-00-0-*
Countersunk screw 9-13151-38-0-0
End cap 9-38520-00-L-*

Support
9-38527-00-0-0



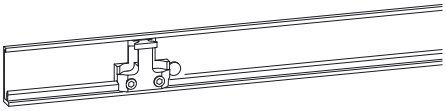
Rod Ø 10 mm
Guide 6-29750-00-0-1

Cover rail P 1603



End cap 9-38520-00-R-*
Countersunk screw 9-13151-38-0-0
Cover 9-26687-00-0-*

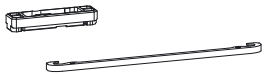
Running rail P 1213
Spring-loaded buffer 6-29564-00-0-*



Running rail P 1213
Control part 6-33328-00-0-*
Positioning pin D for control part

Doors and windows with sash width SW up to 1600 mm and sash weight up to 150 kg – euro groove 15/20 mm

End cap 9-34523-00-0-*
Gliding rail P 1225
Cover rail P 1480



Stay arm glider 6-22755-00-0-0
Stay arm cover 9-35573-00-0-*

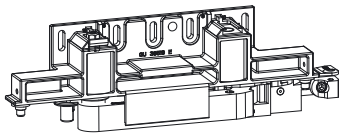
Gliding rail P 1225
End cap 9-34523-00-0-*
Cover rail P 1480

Fitting requirements according to size of sashes for schemes A to K

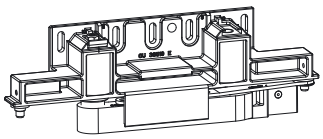
Quantity A	C	D	G	K	Description [2]	PU	Article No. Handle pos. lh	Handle pos. rh
1	2•	1	1	2•	**Box of runners G.U-968/200**	1	K-15278-00-L-0	K-15278-00-R-0
					Contents			
					1 Runner, front 1 Runner, rear			
		1			**Positioning pin D** for control part	1	9-39897-00-0-1	
1	2	1	1	2	**Bag of profiles G.U-968/150** [1]			
					Contents			
					1 Rod Ø 8 mm 1 Gliding rail P 1225 1 Running rail P 1300 1 Cover rail P 1480 1 Cover rail P 1608 1 Box of accessories			
					SW			
					600- 850	1	K-15279-20-0-*	
					851-1100	1	K-15279-25-0-*	
					1101-1350	1	K-15279-30-0-*	
					1351-1600	1	K-15279-35-0-*	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[2] • = 1 box for handle pos. lh, 1 box for handle pos. rh

Working drawings
G.U-968/150 mZ 0-43905
G.U-968/150 mZ Scheme C 0-43861
G.U-968/150 oZ 0-44495

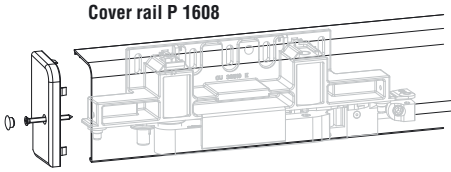


Runner, front lh 6-32545-00-L-0
rh 6-32545-00-R-0

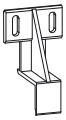


Runner, rear lh 6-29561-00-L-0
rh 6-29561-00-R-0

Cover rail P 1608



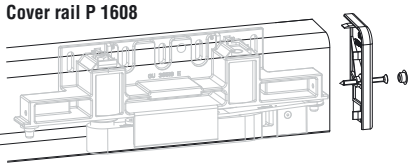
Cover 9-26687-00-0-*
Countersunk screw 9-13151-38-0-0
End cap 9-38543-00-L-*



Support
9-38527-00-0-0

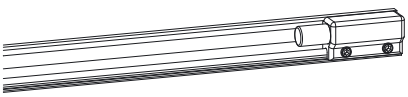
Rod Ø 8 mm
Guide 6-24764-00-0-1

Cover rail P 1608



End cap 9-38543-00-R-*
Countersunk screw 9-13151-38-0-0
Cover 9-26687-00-0-*

Running rail P 1300
Control part 6-33329-00-0-*
Positioning pin D for control part



Running rail P 1300
Spring-loaded buffer 6-29565-00-0-*

Doors and windows with sash width SW up to 1600 mm and sash weight up to 90 kg – euro groove 15/20 mm

End cap **9-34523-00-0-***
Gliding rail **P 1225**
Cover rail **P 1480**

Stay arm glider **6-22755-00-0-0**

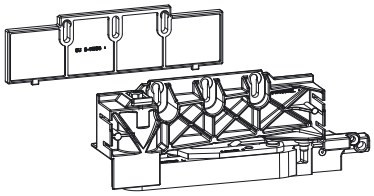
Gliding rail **P 1225**
End cap **9-34523-00-0-***
Cover rail **P 1480**

Fitting requirements according to size of sashes for schemes A to K

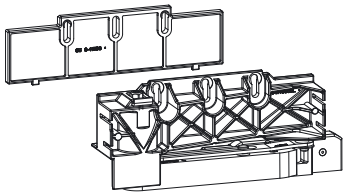
Quantity A	C	D	G	K	Description [2]	PU	Article No. Handle pos. lh	Handle pos. rh
1	2•	1	1	2•	**Box of runners G.U-90**	1	K-16656-00-L-0	K-16656-00-R-0
					Contents			
					1 Runner, front 1 Runner, rear			
1	2	1	1	2	**Bag of packings G.U-90**	1	K-16657-00-0-6	
					Contents			
					2 Packings runner 2 Adapter sleeves for end caps 2 ABC Spax screws			
		1			**Positioning pin D** for control part	1	9-39897-00-0-1	
1	2	1	1	2	**Bag of profiles G.U-968/150** [1]			
					Contents			
					1 Rod Ø 8 mm 1 Gliding rail P 1225 1 Running rail P 1300 1 Cover rail P 1480 1 Cover rail P 1608 1 Box of accessories			
					SW			
					600- 850	1	K-15279-20-0-*	
					851-1100	1	K-15279-25-0-*	
					1101-1350	1	K-15279-30-0-*	
					1351-1600	1	K-15279-35-0-*	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[2] • = 1 box for handle pos. lh, 1 box for handle pos. rh

Working drawing
G.U-90 oZ 0-44424

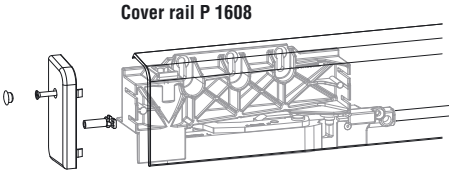


Packing runner **9-41596-00-0-6**
Runner, front lh **6-32546-00-L-0**
rh **6-32546-00-R-0**



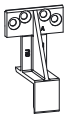
Packing runner **9-41596-00-0-6**
Runner, rear lh **6-31759-00-L-0**
rh **6-31759-00-R-0**

Cover rail P 1608



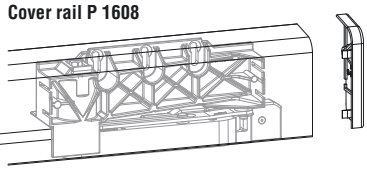
Cover **9-26687-00-0-***
ABC Spax screw **H-00109-20-0-3**
End cap **9-38543-00-L-***
Adapter sleeve **9-41597-01-0-6**

Support
9-38527-00-0-0



Rod **Ø 8 mm**
Guide **6-24764-00-0-1**

Cover rail P 1608



Adapter sleeve **9-41597-01-0-6**
End cap **9-38543-00-R-***
ABC Spax screw **H-00109-20-0-3**
Cover **9-26687-00-0-***

Running rail **P 1300**
Control part **6-33329-00-0-***
Positioning pin D for control part

Running rail **P 1300**
Spring-loaded buffer **6-29565-00-0-***

Parallel slide and tilt fittings G.U-968/200 mZ, G.U-968/150 mZ, G.U-968/150 oZ, G.U-90 oZ

Application	Description	PU	Article No.
G.U-968/200 mZ, G.U-968/150 mZ	**Aluminium windows and patio doors**		
Assembly of handles	Drilling jig for geared handle	1	6-28894-00-0-0
	Drilling jig for handle inside and handle both sides	1	6-24025-00-0-1
	Stop for drilling jigs 6-28894 and 6-24025	1	9-27406-00-0-1
	Drilling jig for lockable gear D 40 – euro groove 15/20 and Hueck	1	9-27272-01-0-0
Assembly of runners, stays, gliding and running rail	Drilling jig for runners and support	1	6-33342-00-0-0
	Drilling jig for corner transmission and stay – euro groove 15/20 and Hueck	1	6-28336-02-0-1
	Drilling jig for corner transmission and stay – Hartmann	1	6-28336-04-0-1
	Drilling jig for gliding and running rail	1	6-24696-00-0-1
	Drilling jig for stop pin (control part scheme D)	1	6-30447-00-0-0
	Positioning jig for gliding rail	1	6-23246-00-0-0
	Positioning jig for running rail	1	6-23241-00-0-0
G.U-968/150 oZ	**Aluminium windows and patio doors**		
Assembly of handles	Drilling jig for geared handle	1	6-25373-01-0-0
	Drilling jig for mill-in gear	1	6-26191-00-0-0
Assembly of runners, stays, gliding and running rail	Drilling jig for runners and support	1	6-33342-00-0-0
	Drilling jig for gliding and running rail	1	6-24696-00-0-1
	Drilling jig for stop pin (control part scheme D)	1	6-30447-00-0-0
	Positioning jig for gliding rail	1	6-23246-00-0-0
	Positioning jig for running rail	1	6-23241-00-0-0
G.U-90 oZ	**Aluminium windows and patio doors**		
Assembly of handles	Drilling jig for geared handle	1	6-25373-01-0-0
	Drilling jig for mill-in gear	1	6-26191-00-0-0
Assembly of runners, stays, gliding and running rail	Drilling jig for runners and support	1	9-30424-00-0-0
	Drilling jig for gliding and running rail	1	6-24696-00-0-1
	Drilling jig for stop pin (control part scheme D)	1	6-30447-00-0-0
	Positioning jig for gliding rail	1	6-23246-00-0-0
	Positioning jig for running rail	1	6-23241-00-0-0

Parallel slide and tilt fittings for aluminium windows and patio doors

Application

Range of applications for G.U parallel slide and tilt fittings:
– Parallel slide and tilt patio doors with 2 to 4 sashes
– Parallel slide and tilt windows with 2 to 4 sashes
each with running and gliding rails.

Locking mechanisms

Parallel slide and tilt locking mechanisms G.U-mZ
The locking mechanism G.U-mZ features one handle operation, forced control and an opening movement of 111 mm. Gear side with centre piece for geared handle or lockable gear with 30, 40, 45 or 50 mm backset prepared for the installation of a profile cylinder.
All locking parts are designed for fitting groove 16 mm. The locking pins of locking mechanism, stay arms and corner transmissions are adjustable. The clampable locking plates are adjustable to allow for optimum gasket pressure. From sash widths over 1101 mm and sash heights over 1371 mm , middle locks are used. Stay arms and corner transmissions are provided with rust-proof 4-leaf stainless steel springs.
G.U-968/200 mZ SRW 720-2000 mm [1], SRH 820-2370 mm
G.U-968/150 mZ SRW 720-1600 mm, SRH 820-2370 mm

Parallel slide and tilt locking mechanisms G.U-150 oZ and G.U-90 oZ
The locking mechanisms G.U-150 oZ and G.U-90 oZ feature one handle operation, forced control and an opening movement of 118 mm. Gear with 15 mm backset for handle DIRIGENT [2] or lockable gears with 25 to 50 mm backset prepared for the installation of a profile cylinder.
All locking parts are designed for fitting groove 16 mm. The locking pins of locking mechanism, stay arms and corner transmissions are adjustable. The clampable locking plates are adjustable to allow for optimum gasket pressure. From sash widths over 851 mm and sash heights over 751 mm , middle locks are used. Stay arms and corner transmissions are provided with rust-proof 4-leaf stainless steel springs.
SRW 640-1600 mm, SRH 700-2350 mm

Runners, profiles and accessories

Parallel slide and tilt fittings G.U-968/200
Parallel slide and tilt fittings with 4-wheel carriages and clamp fixed connecting rods for windows and patio doors with sash widths SW up to 2000 mm and sash weight up to 200 kg. Wheels made of fabric reinforced laminated plastic with ball bearing. Tandem runner for sashes with heavy glazing.
G.U-968/200 mZ Sash weight up to 200 kg

Parallel slide and tilt fittings G.U-968/150
Parallel slide and tilt fittings with 4-wheel carriages and clamp fixed connecting rods for windows and patio doors with sash widths SW up to 1600 mm and sash weight up to 150 or 130 kg. Wheels made of fabric reinforced laminated plastic with ball bearing.
G.U-968/150 mZ Sash weight up to 150 kg
G.U-968/150 oZ Sash weight up to 130 kg

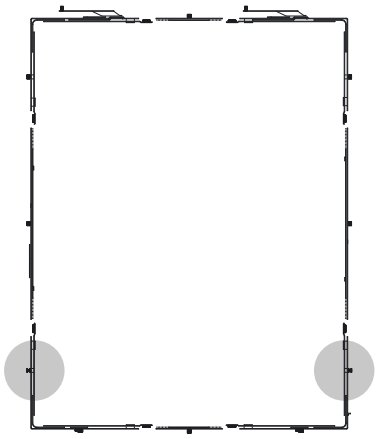
Parallel slide and tilt fittings G.U-90
Parallel slide and tilt fittings with 4-wheel carriages and clamp fixed connecting rods for windows and patio doors with sash widths SW up to 1600 mm and sash weight up to 90 kg. Wheels made of fabric reinforced laminated plastic with ball bearing.
G.U-90 oZ Sash weight up to 90 kg

Positioning plates, locking plates

Frame profile specific positioning plates and locking plates according to table (see at the end of this catalogue chapter).

Drilling jigs, positioning jigs

Drilling jigs and other tools for hardware assembly are to be found at the end of this catalogue chapter and also in the respective working drawings.



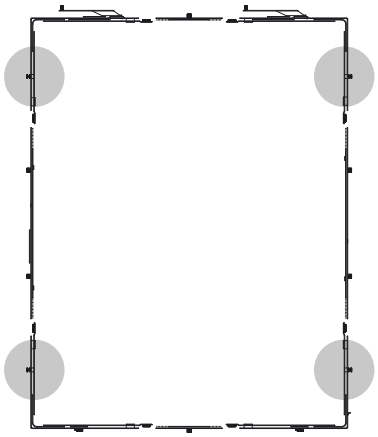
Locking mechanisms G.U-mZ

Basic security

2 Steel mushroom pin locking plates for corner transmissions
– standard security for PST locking mechanisms
– all other locking pins with standard locking plates made of zinc

Standard locking plates made of zinc

Mushroom pin locking plates Se made of steel

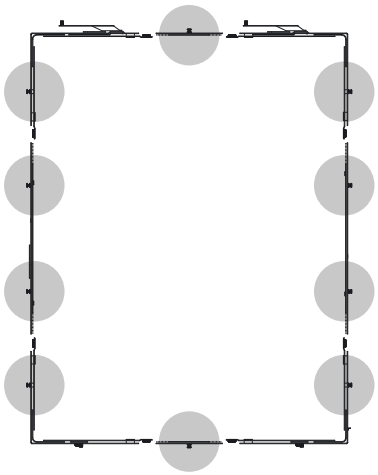


Enhanced basic security

4 Steel mushroom pin locking plates Se for corner transmissions and stays
– additional security for PST locking mechanisms
– all other locking pins with standard locking plates made of zinc

Standard locking plates made of zinc

Mushroom pin locking plates Se made of steel



Tested security WK 2

All locking pins on corner transmissions, stays and centre pieces or gears with mushroom pin steel locking plates Se.
– Security "WK 2" to ENV 1627

Mushroom pin locking plates Se made of steel

[1] For SRW 1851-2000 mm, an middle stay arm is required.
[2] More turn handles see part 3 of the present order catalogue.

Parallel slide and tilt fittings for aluminium windows and patio doors

Turn handles DIRIGENT [1]

The handles are made of aluminium with concealed fixings. The rosettes have a robust retention feature and fixed cams. Lockable handles complete the programme.

Standard colours:

F 1/EV 1	silver colour	**dark brown**	dark brown (RAL 8022)
F 2/EV 2	new silver colour	**black**	black (RAL 9005)
F 3	gold colour	**white**	white (RAL 9016 or RAL 9010)
F 4	light brown		

[1] More turn handles see part 3 of the present order catalogue.

Standard handles

Standard version for parallel slide and tilt fittings G.U-966/200 mZ and G.U-966/150 mZ: geared handle with anti-lockout device;
standard version for parallel slide and tilt fittings G.U-966/150 oZ and G.U-90 oZ: turn handle DIRIGENT-F.

Running rails P 1213, P 1300, P 1585, P 1664

Aluminium running rails, suitable for use with parallel slide and tilt sashes with standard and special fittings.

Gliding rail P 1225

Aluminium gliding rail for parallel slide and tilt sashes (top guide), with stop on request.

Standard colours

Parallel slide and tilt fittings are supplied in the following standard colours:

EV 1	Visible aluminium parts anodized EV 1, cover profiles grey
UC 3	Visible aluminium parts anodized middle bronze, cover profiles middle brown
UC 5	Visible aluminium parts anodized dark bronze, cover profiles dark brown
white	Visible aluminium parts anodized EV 1, cover profiles white

Further colours and finishes on request.

Materials, surface sealing fer**GU**ard*silver

The fitting parts are made of high quality steel, zinc die-casting or aluminium alloys.
Depending on the material, they are protected against corrosion by surface sealing with fer**GU**ard*silver or by anodisation (aluminium parts).

Standard surface sealing of parallel slide and tilt fittings: fer**GU**ard*silver

All locking components of parallel slide and tilt fittings come with the surface sealing fer**GU**ard*silver.

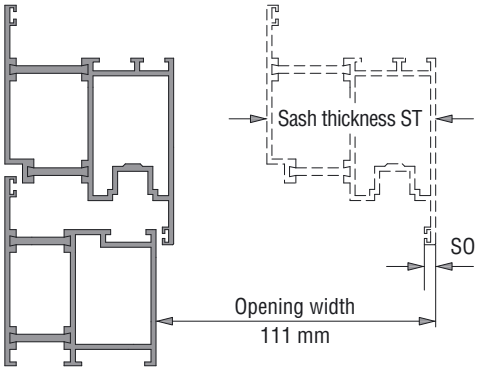
Abbreviations

lh	left hand	ML	Middle lock
PU	Packing unit	PZ	Profile cylinder
rh	right hand	Se	Security fittings
SRH	Sash rebate height	SRW	Sash rebate width
ST	Sash thickness		

Profile system manufacturers' information

It is important to observe the product information issued by the profile system manufacturers, especially information concerning construction and fabrication, maximum sash dimensions and weights and material features such as linear expansion of profiles.

Dimension "Opening width"



Frame **Sash profile**

Maximum sash thickness ST

Side part as fixed glazing = 115 mm
Side part as side hung sash = 115 mm – thickness of sash overlap SO

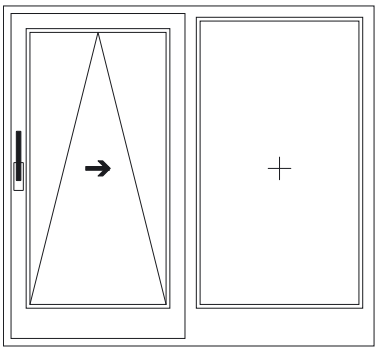
Profile systems with 16 mm fitting groove

Profile manufacturer	Profile system	Sash overlap mm	Groove position mm	Fitting groove [1] undercut/plane	Frame groove	Frame groove Dim. A	Frame groove Dim. B
Alco	Alousystem 550	20,0	13,0	U	14/18	1,5	4,0
Almaco		18,0	9,0	U	14/18		
Alumil	M 11000	18,0	9,0	U	14/18	1,5	3,5
	M 11500	18,0	9,0	U	14/18	1,5	3,5
	M 20000	18,0	9,0	U	14/18	1,5	3,5
Aluminco		20,0	9,0	U	14/18	1,5	3,5
Domal	Bright PA70S	18,0	9,0	U	14/18	1,5	3,5
Elvial	4300	18,0	9,0	U	14/18	1,5	4,0
	4600	18,0	9,0	U	14/18	1,5	4,0
	5400	18,0	9,0	U	14/18	1,5	4,0
	5600	18,0	9,0	U	14/18	1,5	4,0
	5700	18,0	9,0	U	14/18	1,5	4,0
Europa	5000	18,0	9,0	U	14/18	1,5	3,5
Etem	E40	20,0	9,0	U	14/18	2,0	4,0
Exalco	Albio 109C	18,0	9,0	U	14/18	1,3	3,9
Heroal	065 / 065i / 065f	18,0	9,0	U	10/14	2,0	4,3
	090 / 090S	18,0	9,0	U	10/14	2,0	4,3
	110 ES	18,0	9,0	U	10/14	2,0	4,3
Kawneer	Kalory	20,0	9,0	U	10/14		4,0
Nordall	78TTF	18,0	9,0	U	14/18	1,5	3,5
Ponzio	Windstop 55TT	18,0	9,0	U	14/18	2,0	4,0
TS-Aluminium	65	18,0	9,0	P	14/18	2,0	4,0

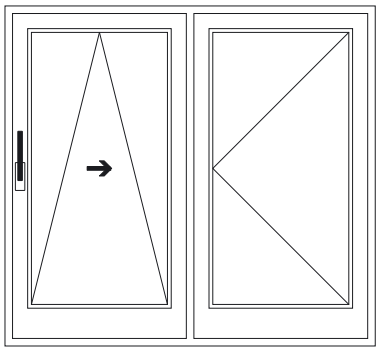
[1] U = undercut, P = plane

Parallel slide and tilt fittings for aluminium windows and patio doors

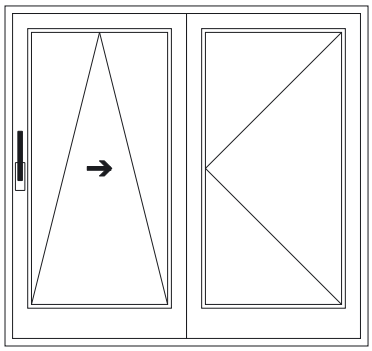
Sash arrangement according to schemes A to K



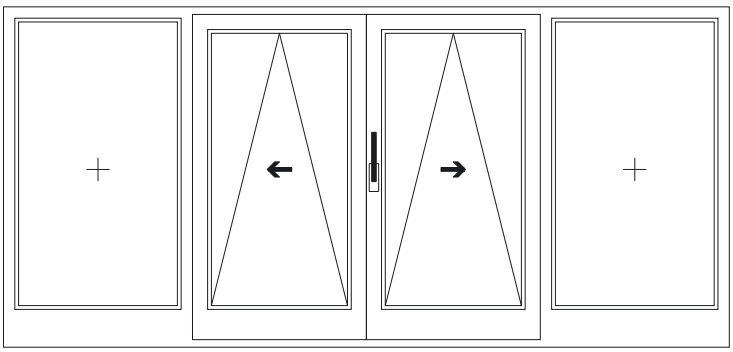
Scheme A – with mullion
1 parallel slide and tilt door, 1 fixed glazing
Drawing shows handle position lh



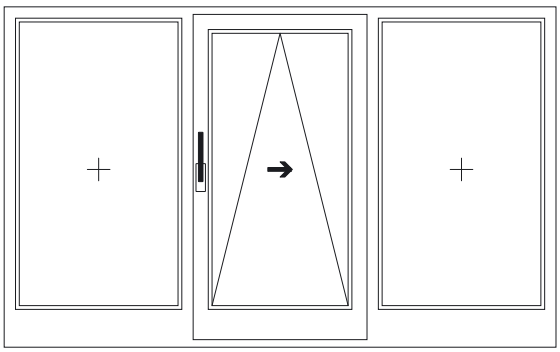
Scheme A – with mullion [1]
1 parallel slide and tilt door, 1 side hung door
Drawing shows handle position lh



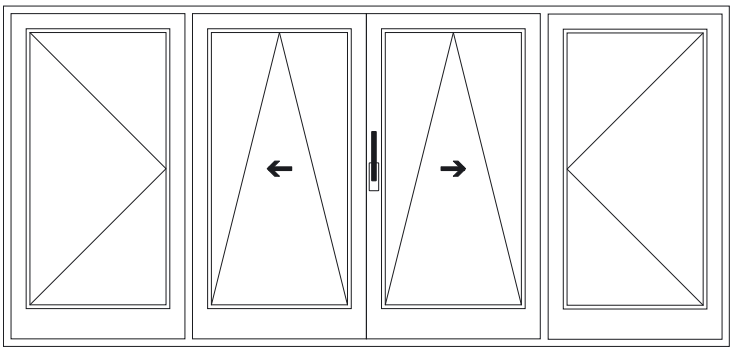
Scheme D – without mullion [2]
1 parallel slide and tilt door, 1 side hung door. Drawing shows handle position lh



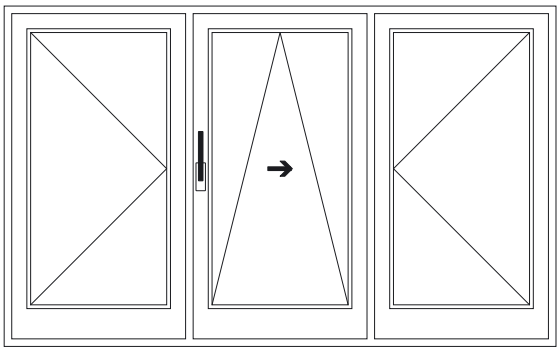
Scheme C – with mullion
2 parallel slide and tilt doors, 2 fixed glazings
Drawing shows first opening sash with handle position lh



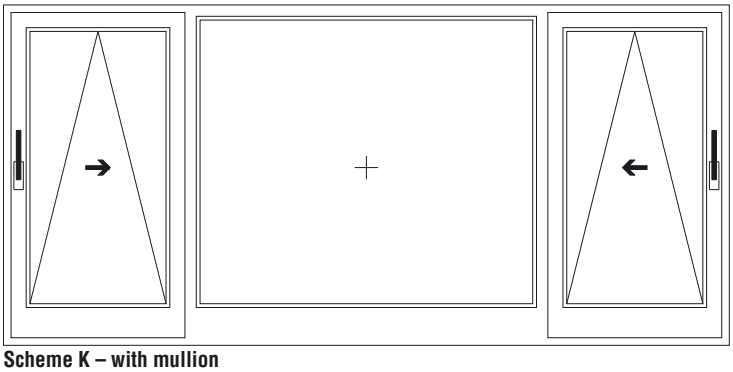
Scheme G – with mullion
1 parallel slide and tilt door, 2 fixed glazings
Drawing shows handle position lh



Scheme C – with mullion [1]
2 parallel slide and tilt doors, 2 side hung doors
Drawing shows first opening sash with handle position lh



Scheme G – with mullion [1]
1 parallel slide and tilt door, 2 side hung doors
Drawing shows handle position lh



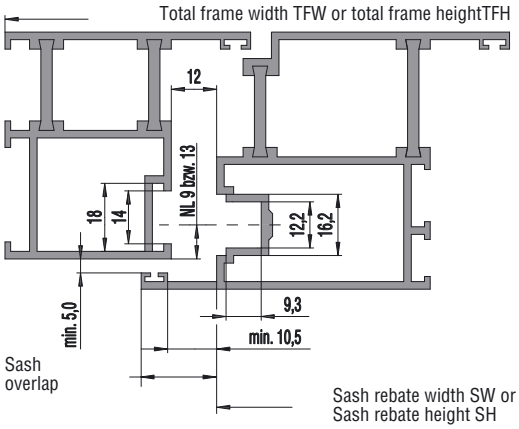
Scheme K – with mullion
2 parallel slide and tilt doors, 1 fixed glazing
Drawing shows handle position lh and handle position rh

Legend:

[1] Schemes A, C and G with side hung sash:
Side hung sash fittings JET AK 8with handle DIRIGENT-F/SG 8-00694-33-0-7 and rosette/F, inside – flat 6-24913-00-0-*, locking plates according to profile.

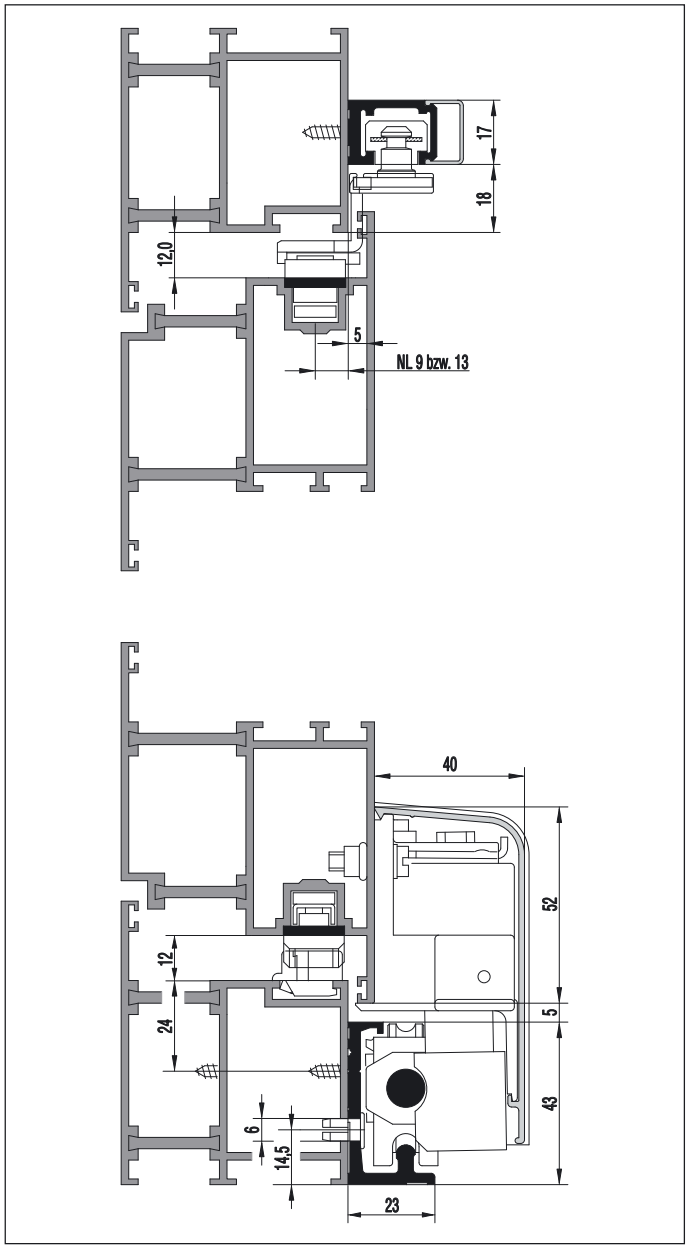
[2] Scheme D:
Side hung sash with rebate shoot bolt, locking plates according to profile.

Assembly dimensions – frame and sash profile

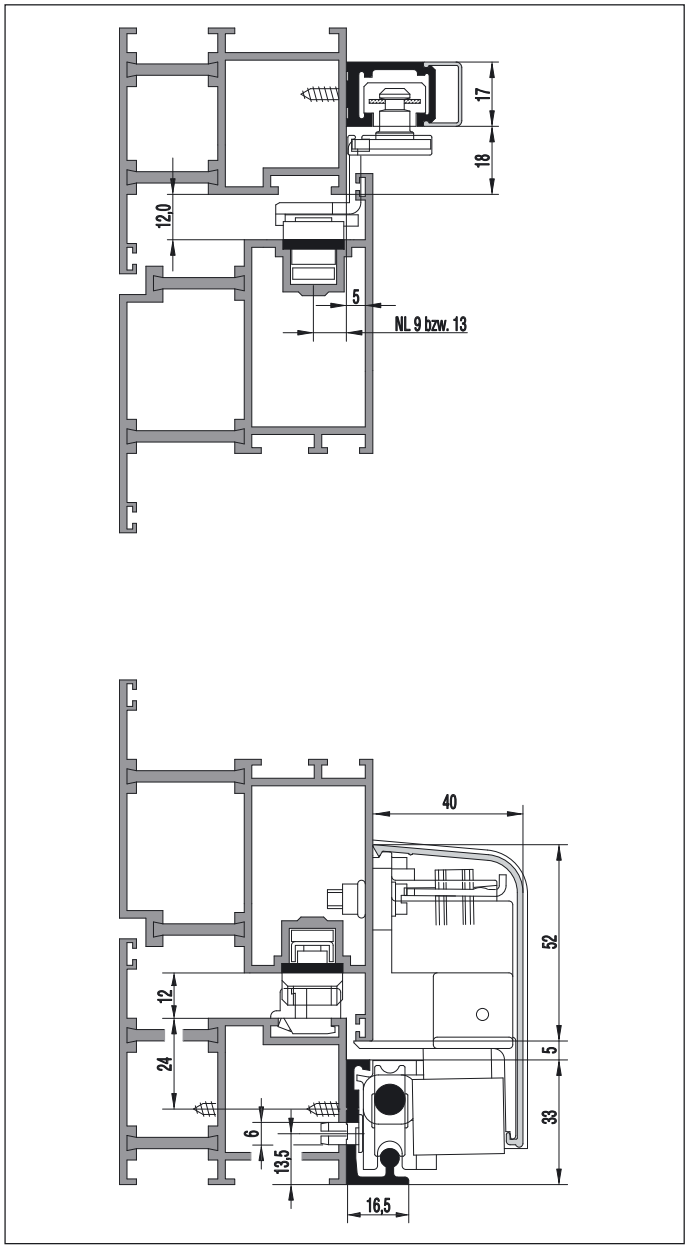


Frame and sash profile
Sash with fitting groove 16 mm – groove position 9 or 13 mm

Assembly dimensions – gliding rails, running rails, runners

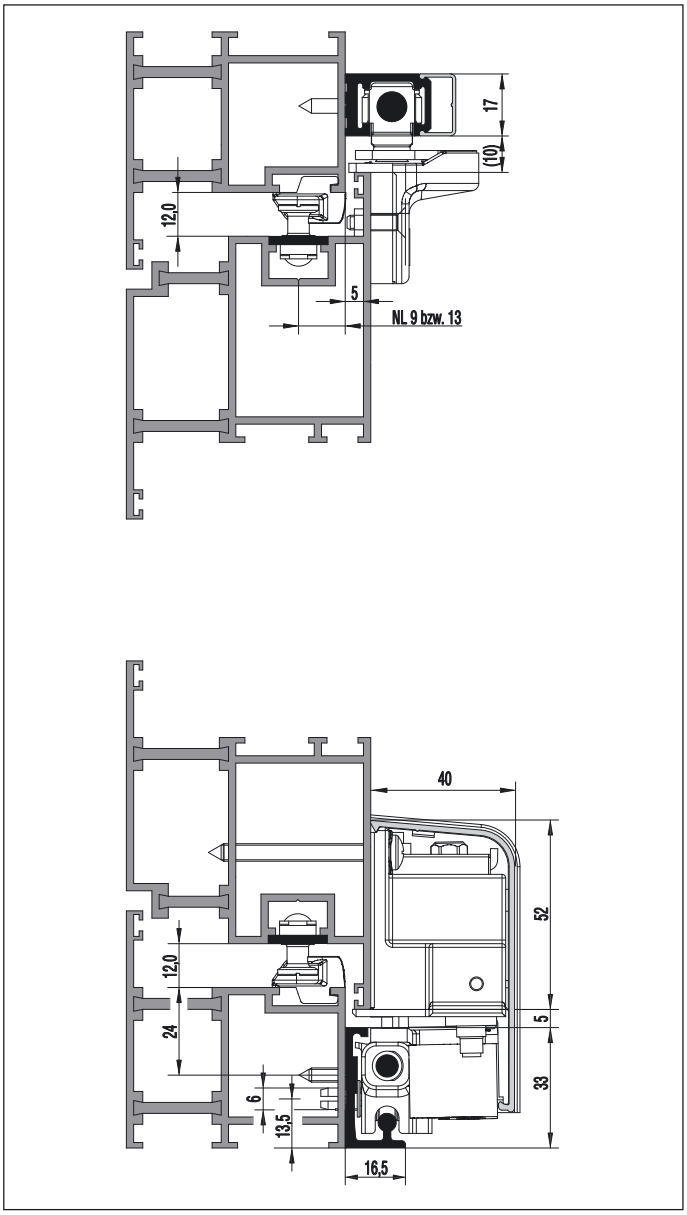


Parallel slide and tilt fittings G.U-968/200 mZ

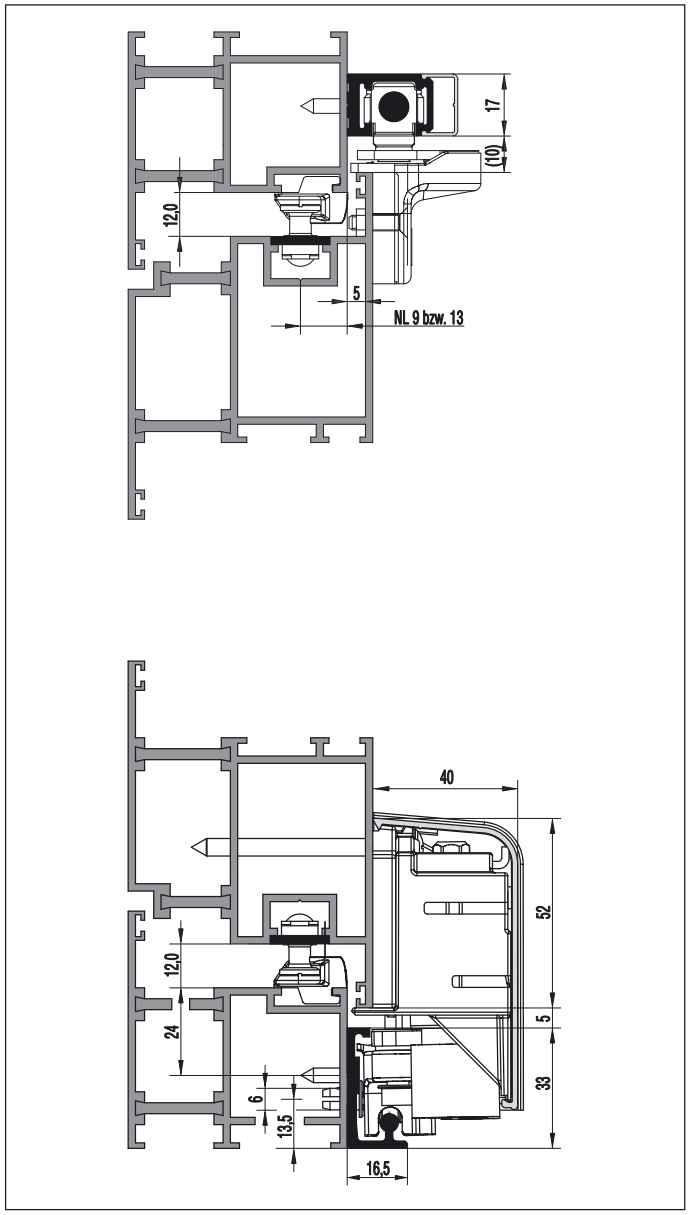


Parallel slide and tilt fittings G.U-968/150 mZ

Assembly dimensions – gliding rails, running rails, runners

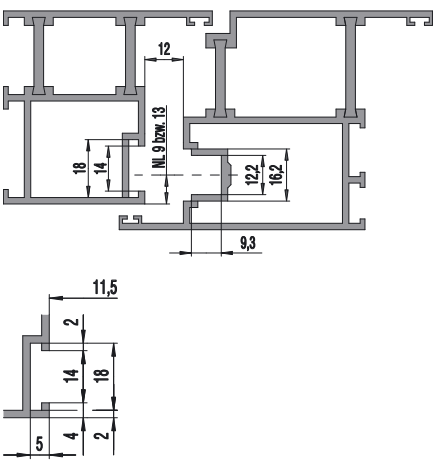


Parallel slide and tilt fittings G.U-968/150 oZ

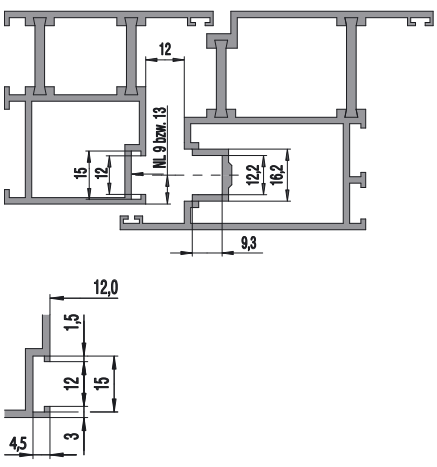


Parallel slide and tilt fittings G.U-90 oZ

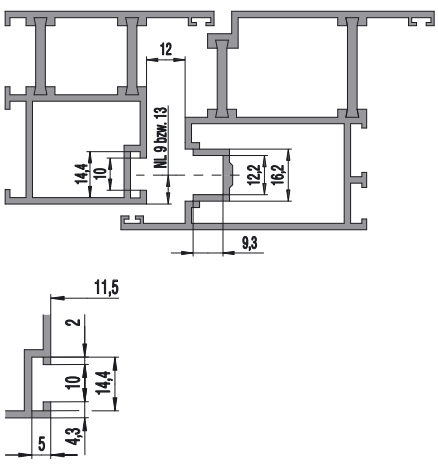
Assembly dimensions – frame grooves



Frame groove 14/18

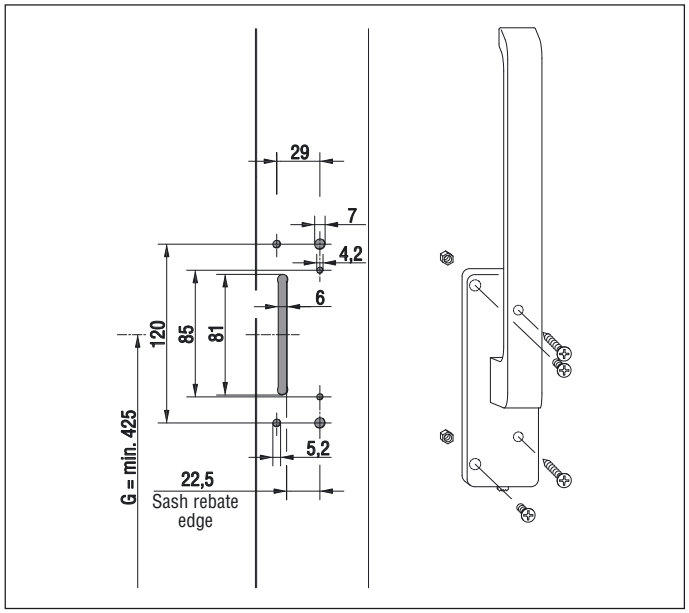


Frame groove 12/15

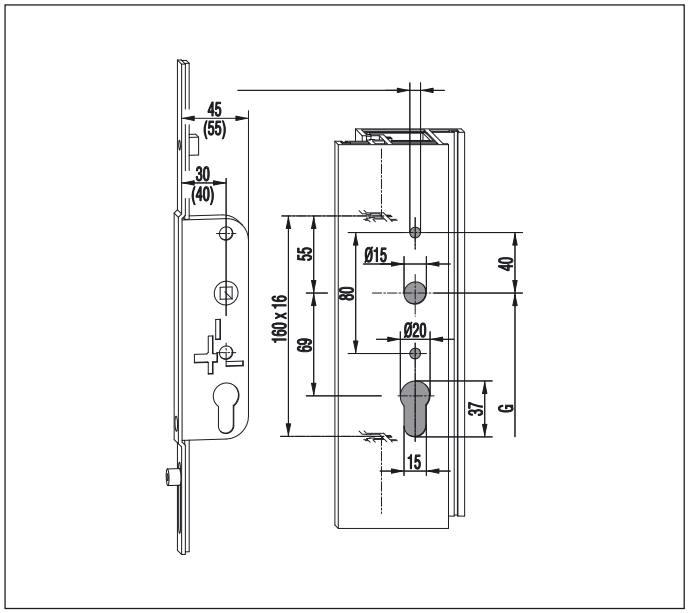


Frame groove 10/14

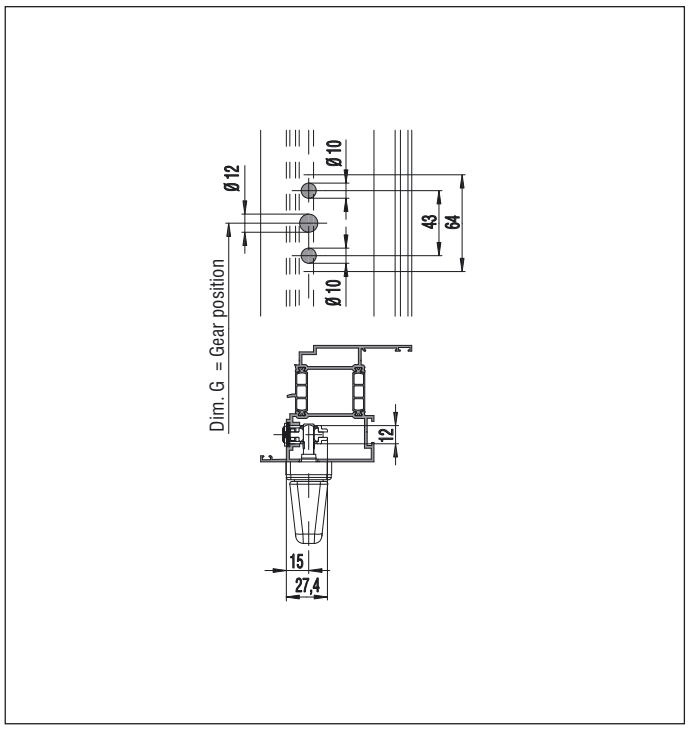
Drilling and milling dimensions geared handles and handles



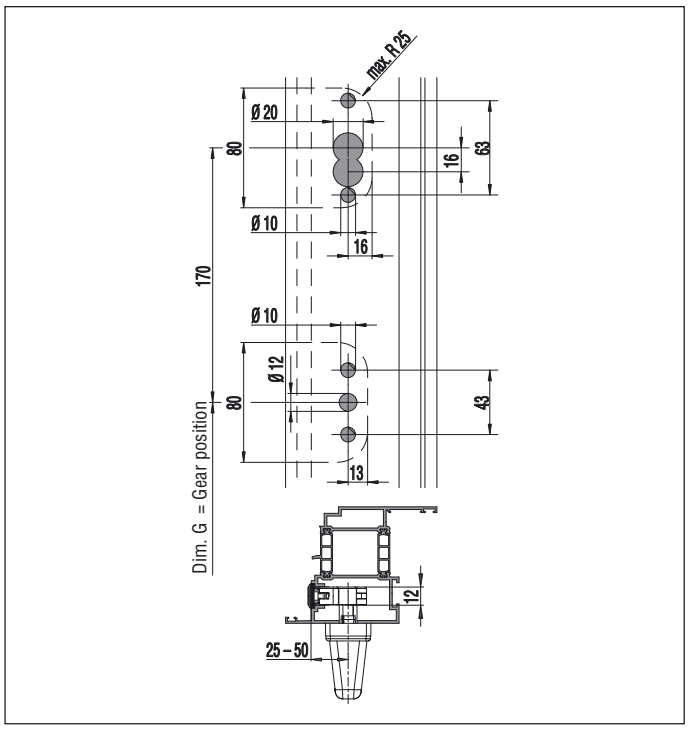
Drilling and milling dimensions for geared handle –
Parallel slide and tilt locking mechanism G.U-mZ
Drilling jig 6-24697-00-0-0



Drilling and milling dimensions for lockable gear –
Parallel slide and tilt locking mechanism G.U-mZ
Drilling jig 6-25745-00-0-0

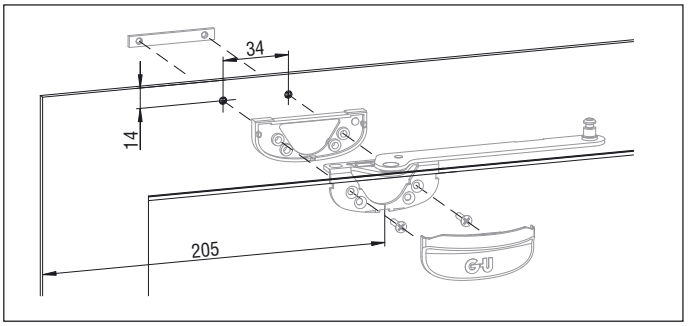


Drilling dimensions for handle DIRIGENT –
Parallel slide and tilt locking mechanisms G.U-150 oZ and G.U-90 oZ
Drilling jig 6-22459-00-0-0
Stop 9-27406-00-0-1

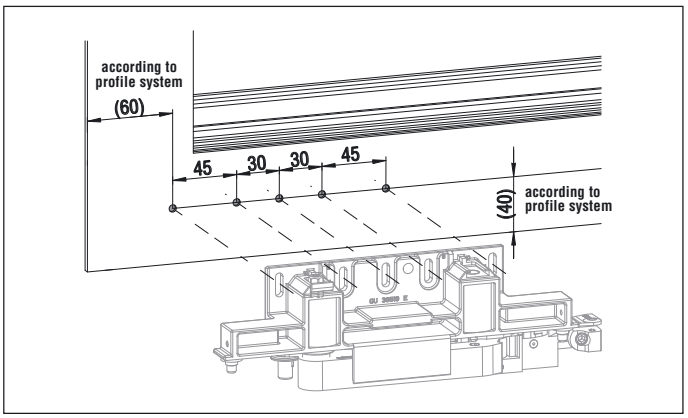


Drilling and milling dimensions for gear AP 25 to AP 50 –
Parallel slide and tilt locking mechanisms G.U-150 oZ and G.U-90 oZ
Drilling jig with stop 6-25156-00-0-9

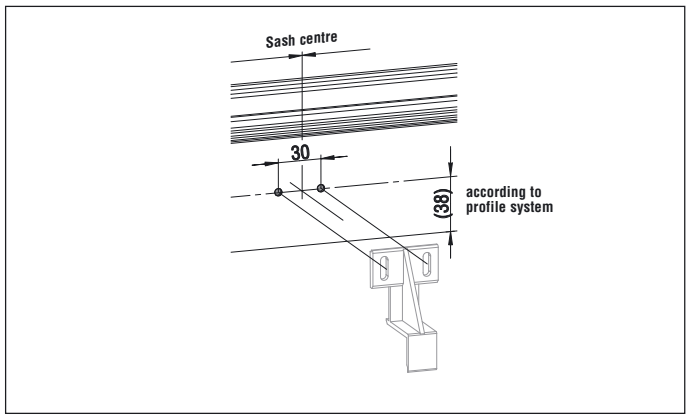
Drilling and milling dimensions for stays, runners and supports



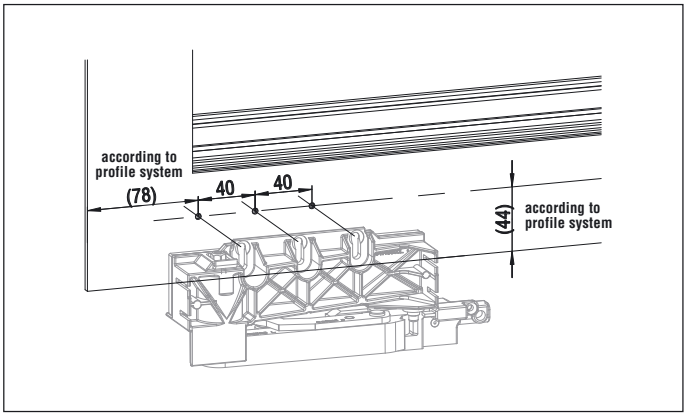
Drilling dimensions for stay –
Parallel slide and tilt locking mechanisms G.U-150 oZ and G.U-90 oZ



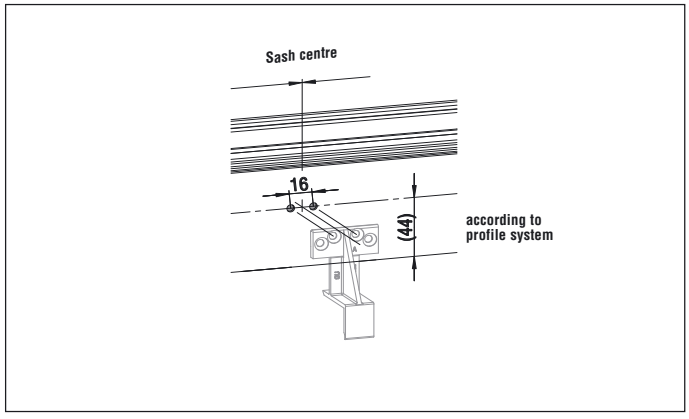
Drilling dimensions for runners –
Parallel slide and tilt locking mechanisms G.U-968/200 and G.U-968/150
Drilling jig 6-33342-00-0-0



Drilling dimensions for supports –
Parallel slide and tilt locking mechanisms G.U-968/200 and G.U-968/150
Drilling jig 6-33342-00-0-0



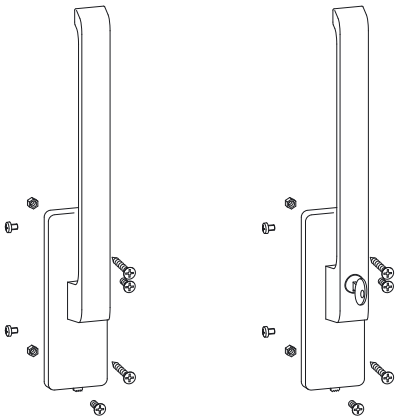
Drilling dimensions for runners –
Parallel slide and tilt locking mechanisms G.U-90
Drilling jig 9-30424-00-0-0



Drilling dimensions for supports –
Parallel slide and tilt locking mechanisms G.U-90
Drilling jig 9-30424-00-0-0

Geared handles and handles for windows and patio doors, accessories
Parallel slide and tilt locking mechanisms G.U-mZ

Geared handles DIRIGENT – Aluminium



Contents:
1 geared handle
2 countersunk sheet metal screw 4,8x32
2 countersunk screws M 5 x 25
2 hex-nut M 5
2 fillister head screws

Handle length 240 mm

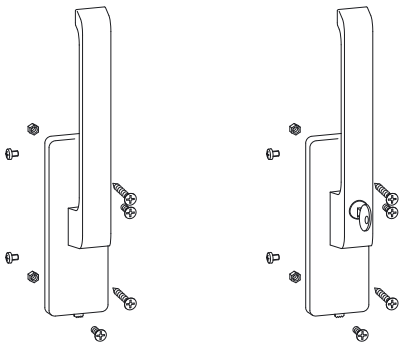
Box of geared handle G.U-mZ DIRIGENT with anti-lockout device

Fitting groove 16 mm
handle pos. lh K-13089-00-L-*
handle pos. rh K-13089-00-R-*

lockable – keyed alike

Fitting groove 16 mm
handle pos. lh K-14286-00-L-*
handle pos. rh K-14286-00-R-*

Geared handles G.U-mZ for windows



Contents:
1 geared handle
2 countersunk sheet metal screw 4,8x32
2 countersunk screws M 5 x 25
2 hex-nut M 5
2 fillister head screws

Handle length 240 mm

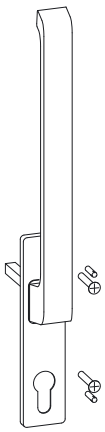
Box of geared handle G.U-mZ DIRIGENT with anti-lockout device

Fitting groove 16 mm
handle pos. lh K-17461-00-L-*
handle pos. rh K-17461-00-R-*

lockable – keyed alike

Fitting groove 16 mm
handle pos. lh K-17462-02-L-*
handle pos. rh K-17462-02-R-*

Handle DIRIGENT inside – Aluminium

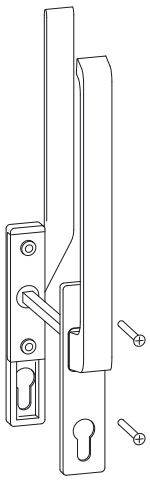


Contents:
1 handle inside
2 positioning pins

Handle length 240 mm

Bag of handle inside G.U-mZ DIRIGENT with cylinder bore
with cams 6-24622-00-0-*
without cams 6-24623-00-0-*

Handles DIRIGENT for operation from both sides – Aluminium

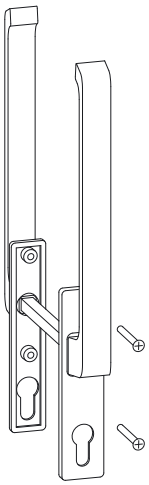


Contents:
1 handle for operation from both sides
2 countersunk screw M 6 x 75

Handle length 240 mm

Bag of handle for operation from both sides G.U-mZ, projection 20 mm DIRIGENT with cylinder bore and cams

K-13167-00-0-*



Contents:
1 handle for operation from both sides
2 countersunk screw M 6 x 75

Handle length 240 mm

Bag of handle for operation from both sides G.U-mZ, projection 30 mm DIRIGENT with cylinder bore and cams

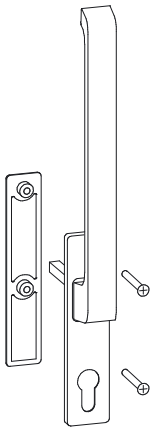
K-12919-00-0-*

Countersunk screw DIN 965 for operation from both sides

ST
-60 mm M 6 x 75 9-13274-75-0-1
61-65 mm M 6 x 80 9-13274-80-0-1
66-70 mm M 6 x 85 9-13274-85-0-1
71-78 mm M 6 x 90 9-13274-90-0-1

Geared handles and handles for windows and patio doors, accessories
Parallel slide and tilt locking mechanisms G.U-mZ

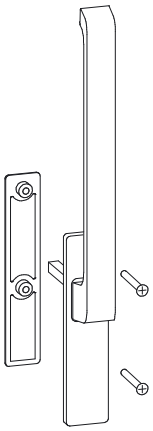
Handle DIRIGENT inside and dummy plate outside – Stainless steel



Contents:
1 handle inside
1 dummy plate outside
2 countersunk screws M 6 x 75

Handle length 240 mm

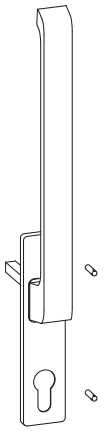
Bag of handle inside G.U-mZ
DIRIGENT with cylinder bore and cams
K-16925-00-0-8



Contents:
1 handle inside
1 dummy plate outside
2 countersunk screws M 6 x 75

Handle length 240 mm

Bag of handle inside G.U-mZ
DIRIGENT without cylinder bore, with cams
K-16924-00-0-8



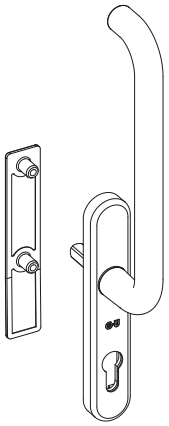
Contents:
1 handle inside
2 positioning pins 4 x 20

Handle length 240 mm

Bag of handle inside G.U-mZ
DIRIGENT with cylinder bore, without cams
K-16923-00-0-8

Geared handles and handles for windows and patio doors, accessories
Parallel slide and tilt locking mechanisms G.U-mZ

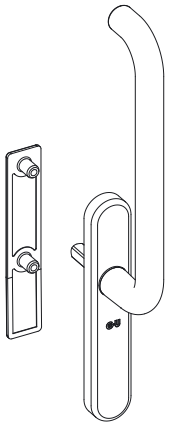
Handle RONDO inside and dummy plate outside – Stainless steel



Contents:
1 handle inside
1 dummy plate outside
2 countersunk screws M 6 x 75

Handle length 240 mm

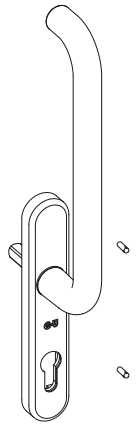
Bag of handle inside G.U-mZ
RONDO with cylinder bore and cams
K-16928-00-0-8



Contents:
1 handle inside
1 dummy plate outside
2 countersunk screws M 6 x 75

Handle length 240 mm

Bag of handle inside G.U-mZ
RONDO without cylinder bore, with cams
K-16927-00-0-8

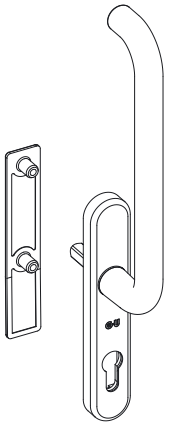


Contents:
1 handle inside
2 positioning pins 4 x 20

Handle length 240 mm

Bag of handle inside G.U-mZ
RONDO with cylinder bore, without cams
K-16926-00-0-8

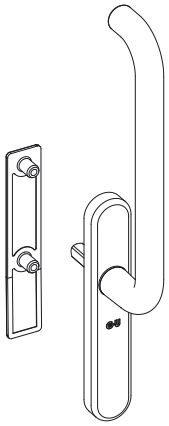
Handle RONDO inside – Stainless steel / dummy plate outside – Aluminium



Contents:
1 handle inside
1 dummy plate outside
2 countersunk screws M 6 x 75

Handle length 240 mm

Bag of handle inside G.U-mZ
RONDO with cylinder bore and cams
K-17207-00-0-* [1]



Contents:
1 handle inside
1 dummy plate outside
2 countersunk screws M 6 x 75

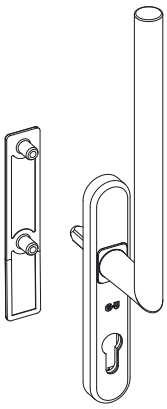
Handle length 240 mm

Bag of handle inside G.U-mZ
RONDO without cylinder bore, with cams
K-17206-00-0-* [1]

[1] *= Colour dummy plate: 1 = EV 1, 5 = UC 5, 7 = white

Geared handles and handles for windows and patio doors, accessories
Parallel slide and tilt locking mechanisms G.U-mZ

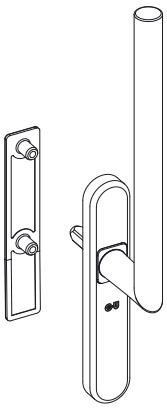
Handle FORTE inside and dummy plate outside – Stainless steel



Contents:
1 handle inside
1 dummy plate outside
2 countersunk screws M 6 x 75

Handle length 240 mm

Bag of handle inside G.U-mZ
FORTE with cylinder bore and cams
K-17049-00-0-8



Contents:
1 handle inside
1 dummy plate outside
2 countersunk screws M 6 x 75

Handle length 240 mm

Bag of handle inside G.U-mZ
FORTE without cylinder bore, with cams
K-17048-00-0-8

Dummy plate outside – Stainless steel

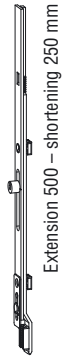
Dummy plate outside
9-42833-00-0-8

Dummy plate outside – Aluminium

Dummy plate outside
9-30489-00-0-*

[1] *= Colour dummy plate: 1 = EV 1, 5 = UC 5, 7 = white

Parallel slide and tilt locking mechanisms G.U-mZ

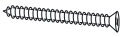


Extension 500
6-24969-00-0-1

Extension 500
with mushroom pin
6-29159-00-0-1

Extension 250
6-24737-00-0-1

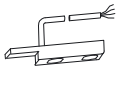
Centre piece, horizontal
SRW 851-1100 = 1 ML
6-23516-01-0-1



Spax countersunk screw
4 x 16 9-13246-16 PU 100
4 x 30 9-13246-30 PU 100
5 x 40 9-13295-40 PU 100

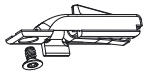
Locking plate Scheme C/ZH
False mullion with rebate clearance
12 mm 9-31960-00-0-1 PU 100
16 mm 9-32063-00-0-1 PU 100
Countersunk screw
9-13281-10-R-1 PU 400

Locking plate Se Scheme C/ZH
False mullion with rebate clearance
12 mm E-19813-00-0-1 PU 100
16 mm 9-39211-00-0-1 PU 100
Countersunk screw
9-13281-10-R-1 PU 400



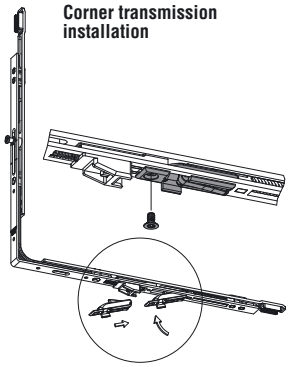
1 locking plate
6-28659-01-0-1
with electronic component,
1 alarm pin
6-29460-00-0-0

Bag of magnetic switch for monitoring of locking state
Cable length
4,0 m K-15161-00-0-0
10,0 m K-15161-10-0-0
AD 0-44518



Bag of
wrong operation
safety device
DIN lh K-17060-00-L-1
DIN rh K-17060-00-R-1
AD 0-44747

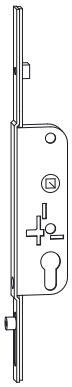
Corner transmission installation



Stop P 1225
6-30388-00-0-6

Protective cap for rebate lever
9-34300-00-0-9

Gears, lockable – forend with locking pin



Gear 25, lockable – backset 25 mm

SRH	Forend	ML	G	PU	Article No.
820- 960	431		440	10	6-31497-01-0-1
961-1120	590		500	10	6-31497-02-0-1
1121-1370	840		500	10	6-31497-03-0-1
1371-1620	1090	1	600	10	6-31497-04-0-1
1621-1870	1340	1	600	10	6-31497-05-0-1
1621-1870	1340	1	980	10	6-31497-55-0-1
1871-2120	1590	2	980	10	6-31497-06-0-1
2121-2370	1840	2	980	10	6-31497-07-0-1

Gears for large sash profiles and aluminium-timber constructions

Gear 35, lockable – backset 35 mm

SRH	Forend	ML	G	PU	Article No.
1621-1870	1340	1	980	10	6-30932-55-0-1
1871-2120	1590	2	980	10	6-30932-06-0-1

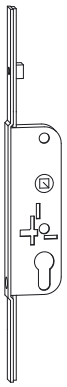
Gear 45, lockable – backset 45 mm

SRH	Forend	ML	G	PU	Article No.
1621-1870	1340	1	980	10	6-30391-55-0-1
1871-2120	1590	2	980	10	6-30391-06-0-1

Gear 50, lockable – backset 50 mm

SRH	Forend	ML	G	PU	Article No.
1621-1870	1340	1	980	10	6-30392-55-0-1
1871-2120	1590	2	980	10	6-30392-06-0-1

Gears, lockable – forend without locking pin, prepared for assembly of locking plates



Gear 30, lockable – backset 30 mm

SRH	Forend	ML	G	PU	Article No.
1371-1620	1090		600	10	6-29881-04-0-1
1621-1870	1340		980	10	6-29881-55-0-1

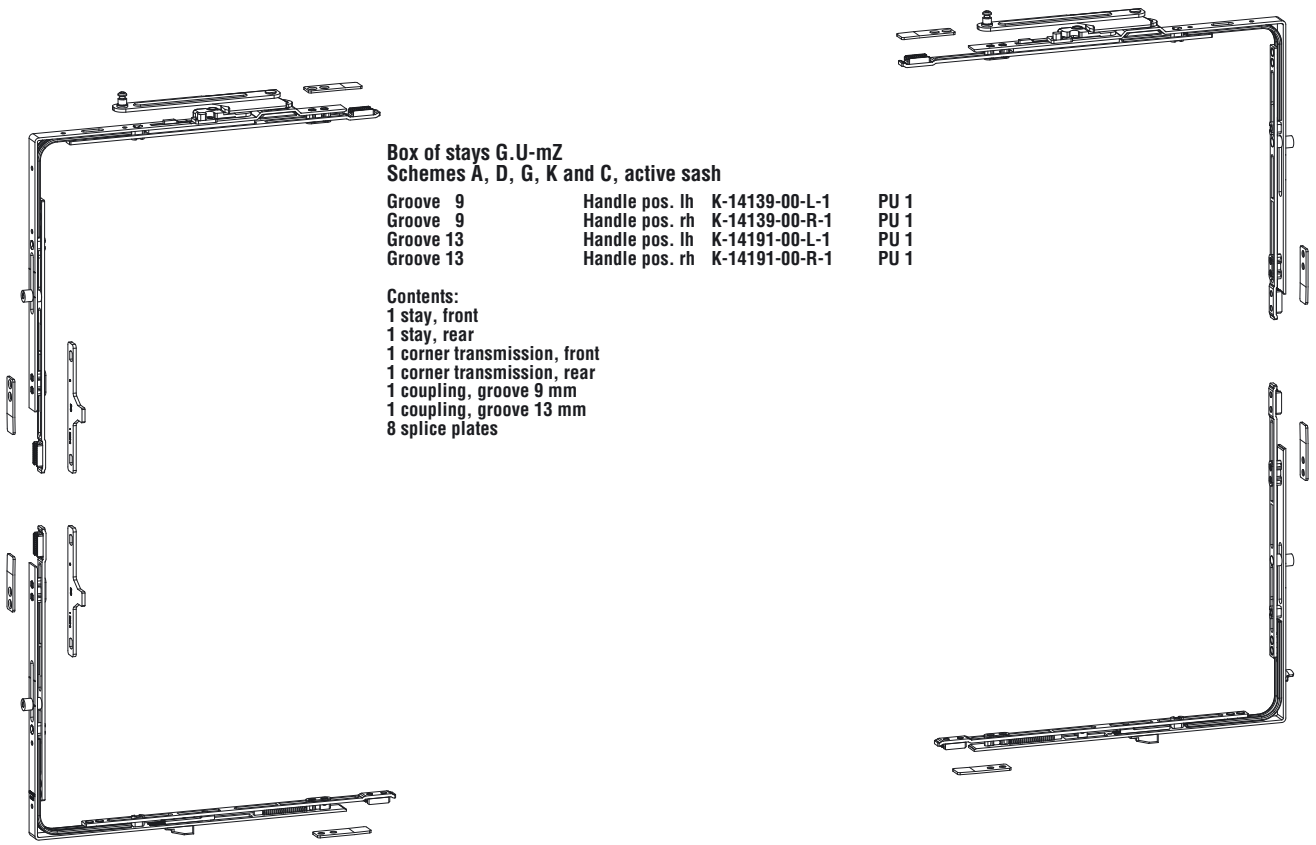
Gear 40, lockable – backset 40 mm

SRH	Forend	ML	G	PU	Article No.
1371-1620	1090		600	10	6-29880-04-0-1
1621-1870	1340		980	10	6-29880-55-0-1

Gear 50, lockable – backset 50 mm

SRH	Forend	ML	G	PU	Article No.
1371-1620	1090		600	10	6-32576-04-0-1
1621-1870	1340		980	10	6-32576-55-0-1

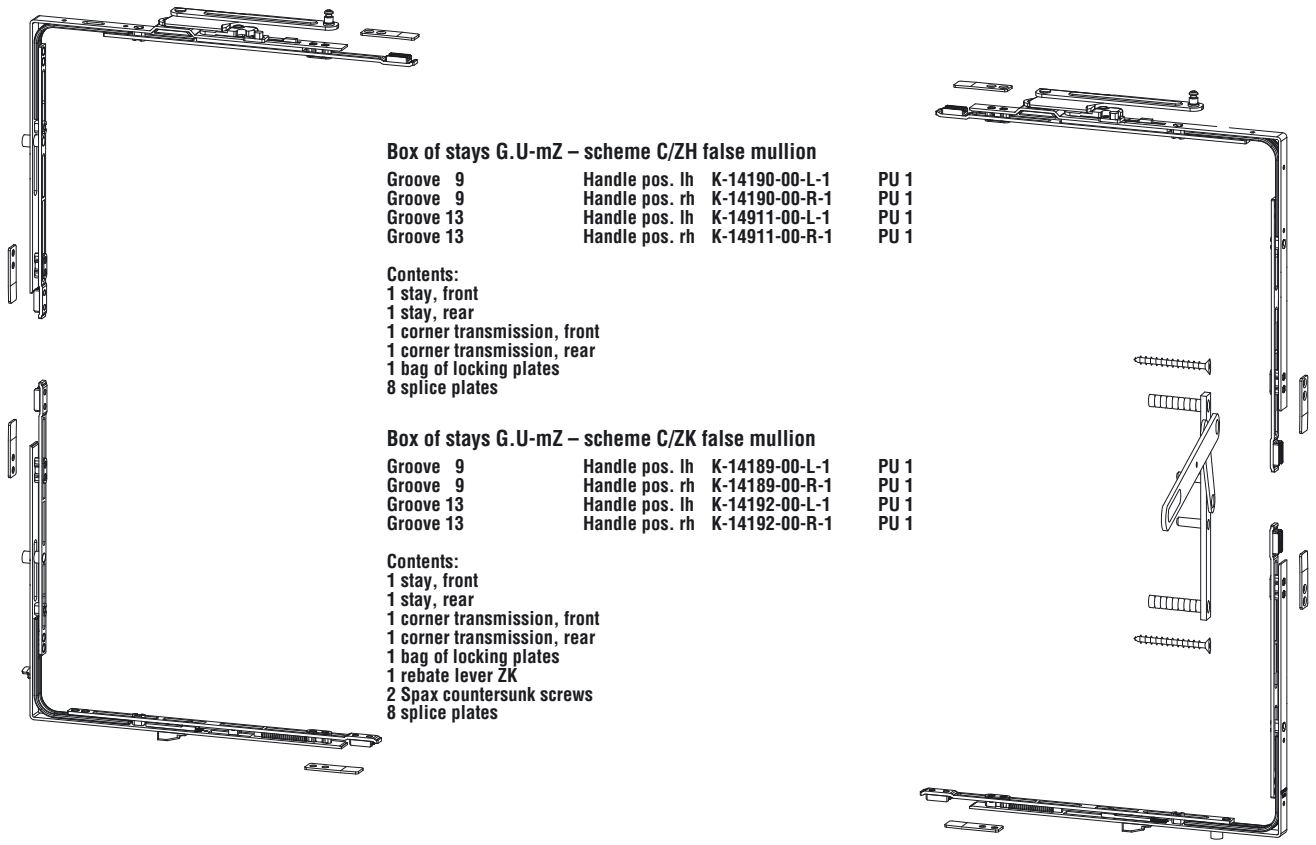
Parallel slide and tilt locking mechanisms G.U-mZ
Box of stays G.U-mZ – corner transmissions with round locking pin



Box of stays G.U-mZ
Schemes A, D, G, K and C, active sash

Groove 9	Handle pos. lh	K-14139-00-L-1	PU 1
Groove 9	Handle pos. rh	K-14139-00-R-1	PU 1
Groove 13	Handle pos. lh	K-14191-00-L-1	PU 1
Groove 13	Handle pos. rh	K-14191-00-R-1	PU 1

Contents:
1 stay, front
1 stay, rear
1 corner transmission, front
1 corner transmission, rear
1 coupling, groove 9 mm
1 coupling, groove 13 mm
8 splice plates



Box of stays G.U-mZ – scheme C/ZH false mullion

Groove 9	Handle pos. lh	K-14190-00-L-1	PU 1
Groove 9	Handle pos. rh	K-14190-00-R-1	PU 1
Groove 13	Handle pos. lh	K-14911-00-L-1	PU 1
Groove 13	Handle pos. rh	K-14911-00-R-1	PU 1

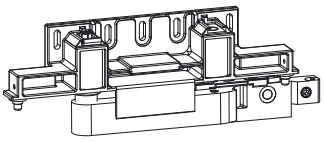
Contents:
1 stay, front
1 stay, rear
1 corner transmission, front
1 corner transmission, rear
1 bag of locking plates
8 splice plates

Box of stays G.U-mZ – scheme C/ZK false mullion

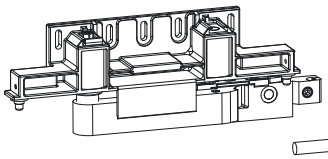
Groove 9	Handle pos. lh	K-14189-00-L-1	PU 1
Groove 9	Handle pos. rh	K-14189-00-R-1	PU 1
Groove 13	Handle pos. lh	K-14192-00-L-1	PU 1
Groove 13	Handle pos. rh	K-14192-00-R-1	PU 1

Contents:
1 stay, front
1 stay, rear
1 corner transmission, front
1 corner transmission, rear
1 bag of locking plates
1 rebate lever ZK
2 Spax countersunk screws
8 splice plates

Parallel slide and tilt fittings G.U-968/200 mZ
Tandem runner for sashes with heavy glazing



Rod **Runner T, front**



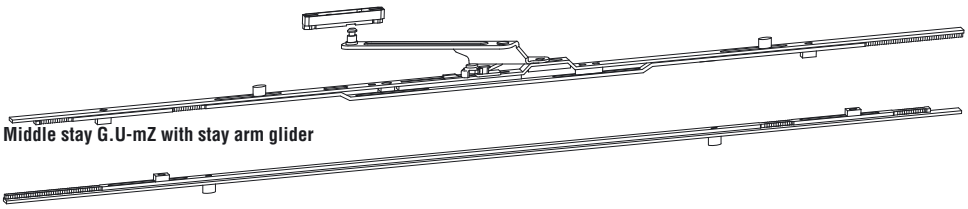
Runner T, rear **Rod**

Box of runners G.U-968/200 T
for aluminium doors

Handle pos. lh	**K-15509-00-L-0**	**PU 1**
Handle pos. rh	**K-15509-00-R-0**	**PU 1**

Contents:
1 runner G.U-968/200 T, front
1 runner G.U-968/200 T, rear
2 rods, Ø 10 mm

Parallel slide and tilt locking mechanisms G.U-mZ
Box of middle stay G.U-mZ for sash rebate widths SRW from 1851 to 2000 mm



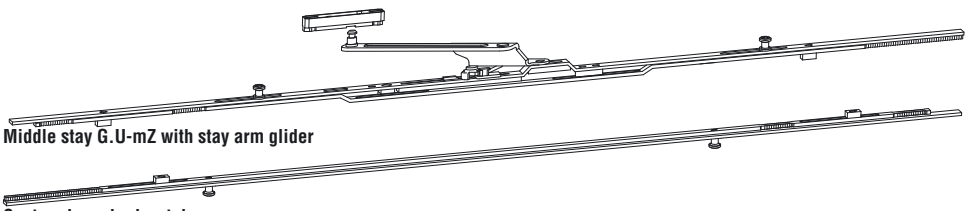
Middle stay G.U-mZ with stay arm glider

Centre piece, horizontal

Box of middle stay G.U-mZ
Basic security and enhanced basic security

Groove 9 mm	**Handle pos. lh**	**K-15486-00-L-1**	**PU 1**
	Handle pos. rh	**K-15486-00-R-1**	**PU 1**
Groove 13 mm	**Handle pos. lh**	**K-15487-00-L-1**	**PU 1**
	Handle pos. rh	**K-15487-00-R-1**	**PU 1**

Contents:
1 middle stay G.U-mZ with stay arm glider
1 centre piece, horizontal



Middle stay G.U-mZ with stay arm glider

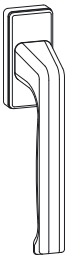
Centre piece, horizontal

Box of middle stay G.U-mZ
WK 2

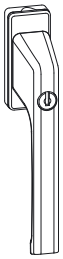
Groove 9 mm	**Handle pos. lh**	**K-15488-00-L-1**	**PU 1**
	Handle pos. rh	**K-15488-00-R-1**	**PU 1**
Groove 13 mm	**Handle pos. lh**	**K-15489-00-L-1**	**PU 1**
	Handle pos. rh	**K-15489-00-R-1**	**PU 1**

Contents:
1 middle stay G.U-mZ with stay arm glider
1 centre piece, horizontal

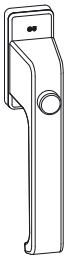
Handles DIRIGENT-F [1]



DIRIGENT-F
Spindle 25 6-28072-25-0-*
Spindle 29 6-28072-29-0-*



DIRIGENT-F/Z
with push button cylinder, all keys alike
Spindle 29 6-28075-29-0-*

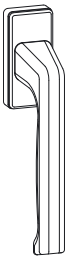


DIRIGENT-F
with anti-lockout device
Spindle 29 6-25384-00-0-*

MODENA-F/Z 100 Nm [2]
for security windows and patio doors
Spindle 29 6-34397-29-0-*

DIRIGENT-F/SG
Spindle 50 8-00694-50-0-7

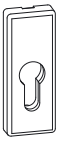
Rosette/F inside – flat
6-24913-00-0-*



DIRIGENT-F
inside – without spindle
6-28072-00-0-*

DIRIGENT-F/AF,
outside – flat
6-25223-00-00-*

DIRIGENT-F/A,
outside
6-25993-00-0-*



Rosette with CB inside
square K-17205-02-0-*
oval K-17204-02-0-*

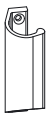
Rosette PZ/A outside
square 9-43605-02-0-*
oval 9-43582-02-0-*

Spindle
ST 56-68 9-26874-56-0-1
ST 69-80 9-26874-69-0-1

Inside/ outside operation
Countersunk screw M 5
ST 50-54 9-13255-60-0-1
ST 55-59 9-13255-65-0-1
ST 60-64 9-13255-70-0-1
ST 65-69 9-13255-75-0-1
ST 70-74 9-13255-80-0-1
ST 75-80 9-13255-85-0-1

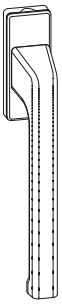
Inside operation
Countersunk screw M 5
Spindle 25 9-13255-30-0-1
Spindle 29 9-13255-35-0-1

Knob lock
Backset 25 - 50 mm
K-13282-00-0-*

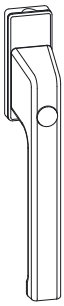


Pull handle outside
9-22921-00-0-*

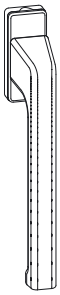
[1] = More turn handles see part 3 of the present order catalogue.
[2] = Tested to DIN V EN V 1627 for resistance to pull-off and twist-off attempts at 100 Nm.



DIRIGENT-HL
elongated
Rosette 32 x 81 mm
Spindle 25 6-31382-25-0-*
Spindle 29 6-31382-29-0-*



DIRIGENT-HL
elongated
Rosette 32 x 81 mm
push button cylinder
Spindle 30 6-31383-30-0-*



DIRIGENT-HL
elongated
Rosette 28 x 67 mm
Spindle 33 6-32629-33-0-*

Stay G.U-oZ – adjustable

End cap

Stay G.U-oZ – adjustable
Screw , nut

Cover rail P 1481

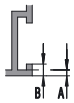
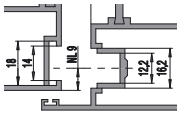
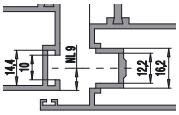
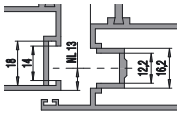
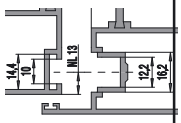
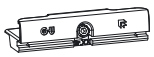
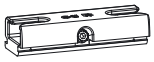
Fitting requirements according to size of sashes for schemes A to K

Quantity A	C	D	G	K	Description		PU	Article No.
1	2	1	1	2	**Stay G.U-oZ – adjustable**			
					SRW			
					600- 850		1	6-26274-05-0-1
					851-1100		1	6-26274-08-0-1
					1101-1350		1	6-26274-10-0-1
					1351-1600		1	6-26274-13-0-1
1	2	1	1	2	**Bag of Screws**		1	K-13068-00-0-1
1	2	1	1	2	**Cover rail P 1481** [1]			
					SRW	Length		
					600- 850	840	1	9-34520-08-0-*
					851-1100	1090	1	9-34520-11-0-*
					1101-1350	1340	1	9-34520-13-0-*
					1351-1600	1590	1	9-34520-16-0-*
					Lagerlänge	5000	1	9-34520-50-0-*
1	2	1	1	2	**End cap** [1]			
					lh		1	9-34517-00-L-*
					rh		1	9-34517-00-R-*

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)

Working drawing
G.U-968/150 oZ 0-43981

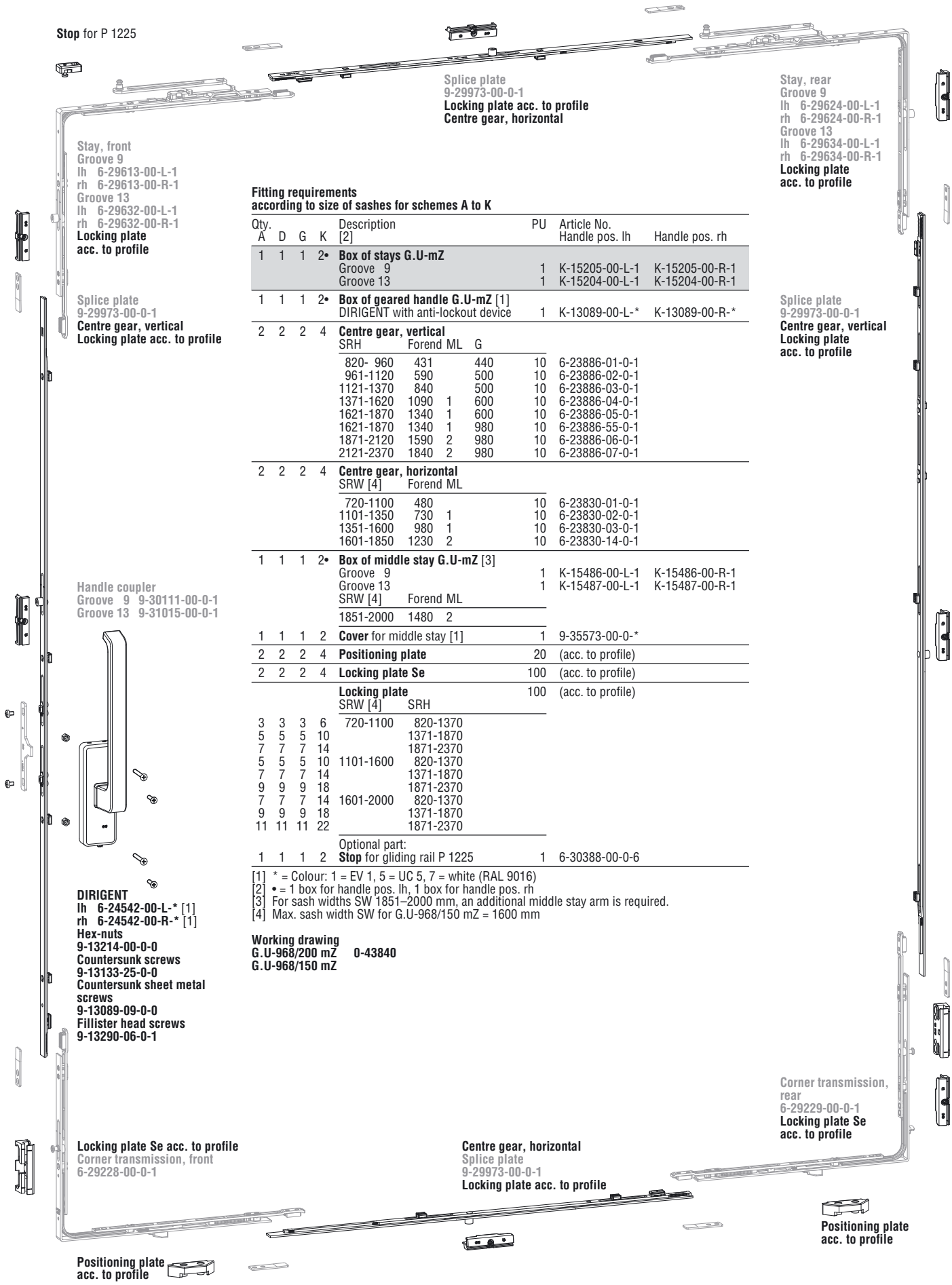
Positioning and locking plates according to frame groove – Fitting groove 16 mm

Description	Dim.	Length mm	Illustration	**Groove 9** **Frame groove** **14/18**	**10/14**	**Groove 13** **Frame groove** **14/18**	**10/14**
							
Locking plates – standard Frame profiles – zinc clampable	A = 2,0 A = 1,5	55 55		6-32628-00-0-1 6-32628-01-0-1	6-32628-00-0-1 6-32628-01-0-1	6-33278-00-0-1 6-33278-01-0-1	6-33278-00-0-1 6-33278-01-0-1
Standard locking plate Frame – zinc screw-on version	B = 4,0 B = 3,5	55 55 55		9-45219-14-0-1 9-45219-15-0-1	 9-45219-10-0-1		
Locking plates Se – mushroom Frame profiles – steel	B = 4,0 B = 3,5	55 55 55		6-27674-48-0-1 6-27674-49-0-1	 6-27674-62-0-1	 6-33398-00-0-1	 6-27831-44-0-1
Locking plates Ahs – mushroom Frame profiles – zinc clampable	B = 4,0 B = 3,5	55 55 55		6-32225-14-0-1 6-32225-15-0-1	 6-32225-10-0-1		
Positioning plates Frame profiles	 A = 2,0 A = 1,5			6-25587-03-0-1	6-25587-01-0-1	 6-33442-00-0-1 6-33442-01-0-1	 6-33442-00-0-1 6-33442-01-0-1

4

with geared handle inside, groove position 9 and 13

Basic security



Fitting requirements
according to size of sashes for schemes A to K

Qty. A	D	G	K	Description [2]	PU	Article No. Handle pos. lh	Handle pos. rh
1	1	1	2•	**Box of stays G.U-mZ**			
				Groove 9	1	K-15205-00-L-1	K-15205-00-R-1
				Groove 13	1	K-15204-00-L-1	K-15204-00-R-1
1	1	1	2•	**Box of geared handle G.U-mZ** [1]			
				DIRIGENT with anti-lockout device	1	K-13089-00-L-*	K-13089-00-R-*
2	2	2	4	**Centre gear, vertical**			

SRH	Forend	ML	G			
820- 960	431		440	10	6-23886-01-0-1	
961-1120	590		500	10	6-23886-02-0-1	
1121-1370	840		500	10	6-23886-03-0-1	
1371-1620	1090	1	600	10	6-23886-04-0-1	
1621-1870	1340	1	600	10	6-23886-05-0-1	
1621-1870	1340	1	980	10	6-23886-55-0-1	
1871-2120	1590	2	980	10	6-23886-06-0-1	
2121-2370	1840	2	980	10	6-23886-07-0-1	

2	2	2	4	**Centre gear, horizontal**			

SRW [4]	Forend	ML			
720-1100	480		10	6-23830-01-0-1	
1101-1350	730	1	10	6-23830-02-0-1	
1351-1600	980	1	10	6-23830-03-0-1	
1601-1850	1230	2	10	6-23830-14-0-1	

1	1	1	2•	**Box of middle stay G.U-mZ** [3]			
				Groove 9	1	K-15486-00-L-1	K-15486-00-R-1
				Groove 13	1	K-15487-00-L-1	K-15487-00-R-1

SRW [4]	Forend	ML			
1851-2000	1480	2			

1	1	1	2	**Cover** for middle stay [1]	1	9-35573-00-0-*	
2	2	2	4	**Positioning plate**	20	(acc. to profile)	
2	2	2	4	**Locking plate Se**	100	(acc. to profile)	
				Locking plate	100	(acc. to profile)	

A	D	G	K	SRW [4]	SRH
3	3	3	6	720-1100	820-1370
5	5	5	10		1371-1870
7	7	7	14		1871-2370
5	5	5	10	1101-1600	820-1370
7	7	7	14		1371-1870
9	9	9	18		1871-2370
7	7	7	14	1601-2000	820-1370
9	9	9	18		1371-1870
11	11	11	22		1871-2370

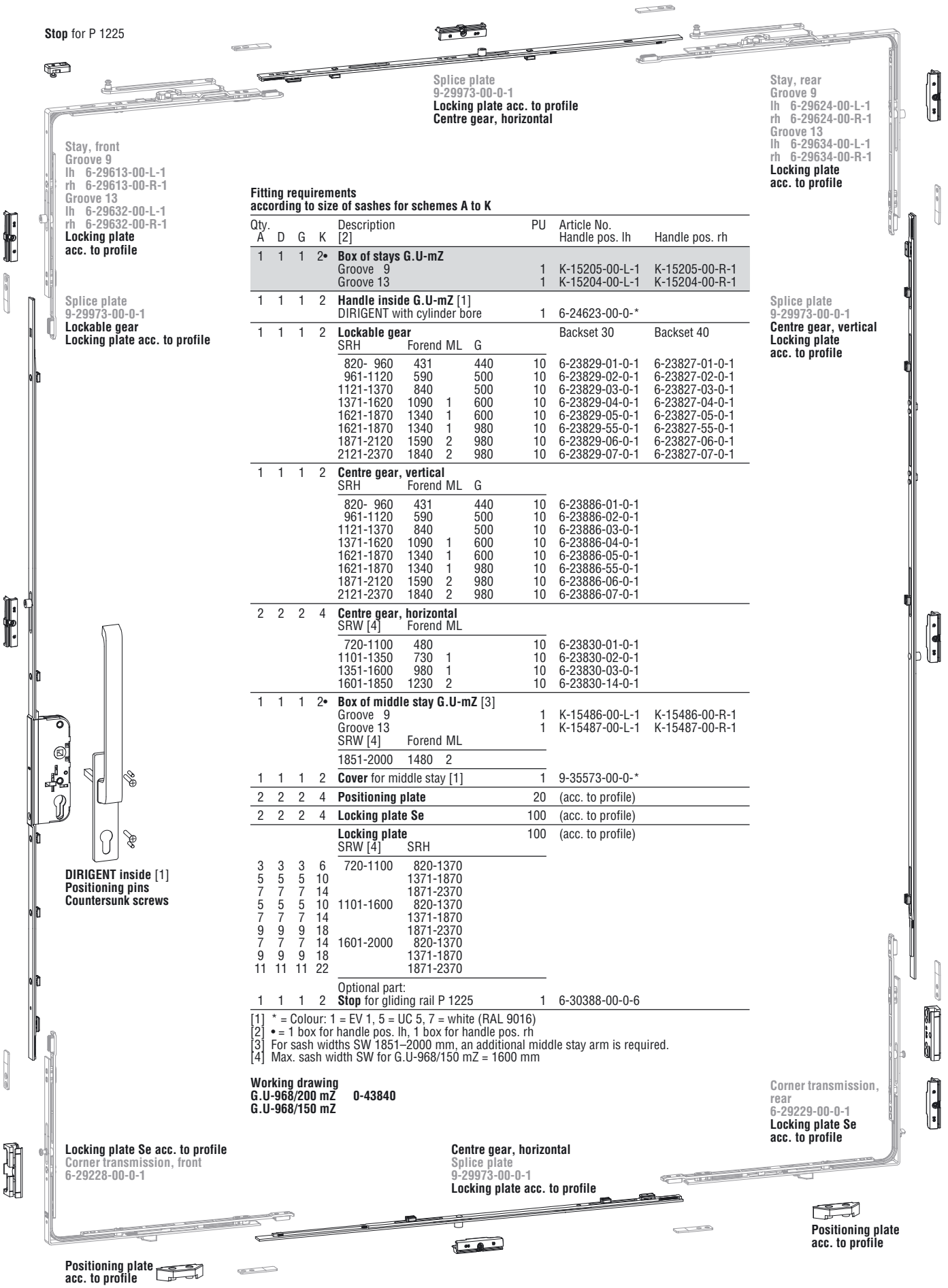
				Optional part:			
1	1	1	2	**Stop** for gliding rail P 1225	1	6-30388-00-0-6	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[2] • = 1 box for handle pos. lh, 1 box for handle pos. rh
[3] For sash widths SW 1851–2000 mm, an additional middle stay arm is required.
[4] Max. sash width SW for G.U-968/150 mZ = 1600 mm

Working drawing
G.U-968/200 mZ 0-43840
G.U-968/150 mZ

with lockable gear, groove position 9 and 13

Basic security



Fitting requirements
according to size of sashes for schemes A to K

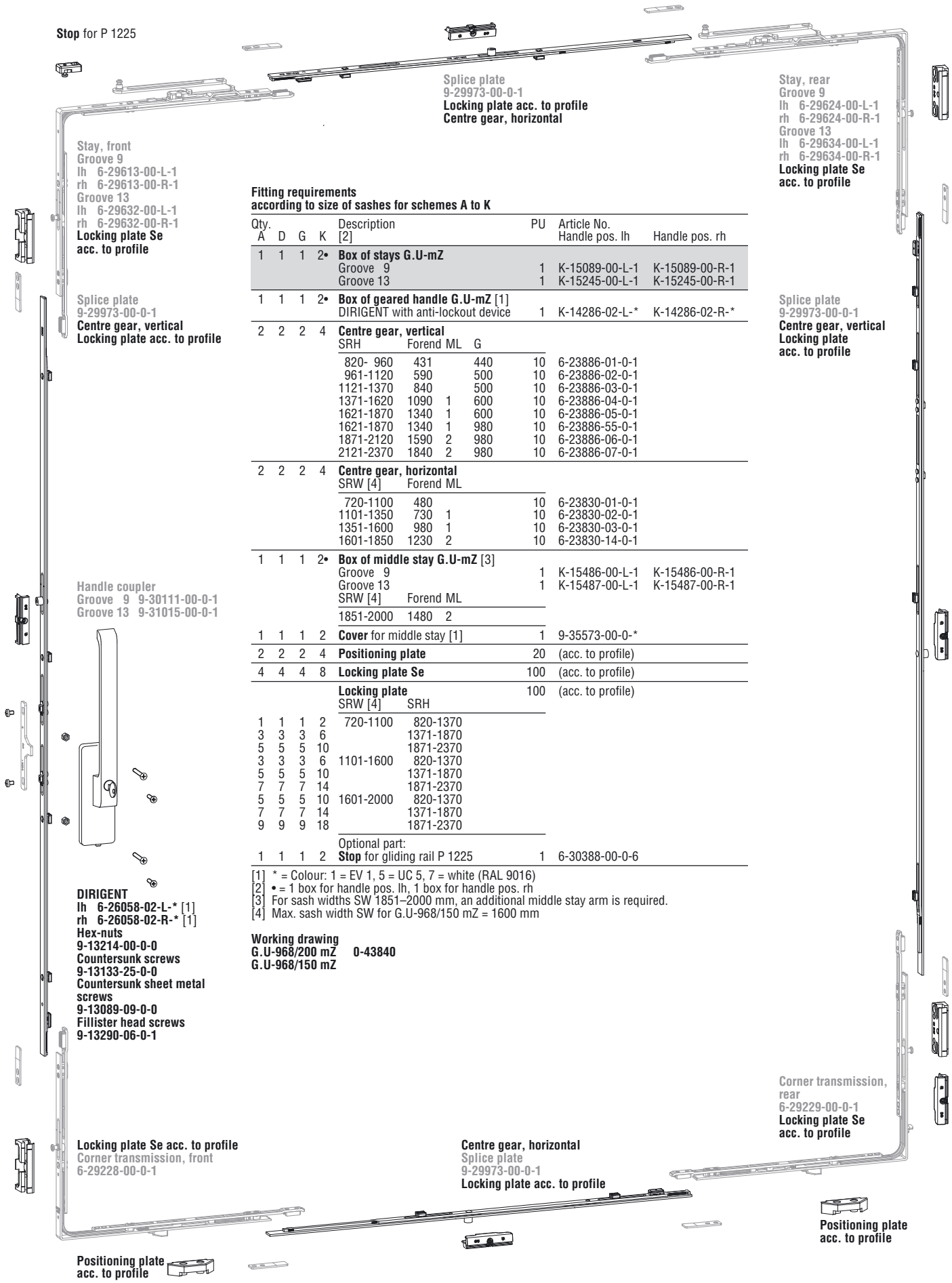
Qty. A	D	G	K	Description [2]				PU	Article No. Handle pos. lh	Handle pos. rh
1	1	1	2•	**Box of stays G.U-mZ**						
				Groove 9				1	K-15205-00-L-1	K-15205-00-R-1
				Groove 13				1	K-15204-00-L-1	K-15204-00-R-1
1	1	1	2	**Handle inside G.U-mZ** [1]						
				DIRIGENT with cylinder bore				1	6-24623-00-0-*	
1	1	1	2	**Lockable gear**					Backset 30	Backset 40
				SRH	Forend	ML	G			
				820- 960	431		440	10	6-23829-01-0-1	6-23827-01-0-1
				961-1120	590		500	10	6-23829-02-0-1	6-23827-02-0-1
				1121-1370	840		500	10	6-23829-03-0-1	6-23827-03-0-1
				1371-1620	1090	1	600	10	6-23829-04-0-1	6-23827-04-0-1
				1621-1870	1340	1	600	10	6-23829-05-0-1	6-23827-05-0-1
				1621-1870	1340	1	980	10	6-23829-55-0-1	6-23827-55-0-1
				1871-2120	1590	2	980	10	6-23829-06-0-1	6-23827-06-0-1
				2121-2370	1840	2	980	10	6-23829-07-0-1	6-23827-07-0-1
1	1	1	2	**Centre gear, vertical**						
				SRH	Forend	ML	G			
				820- 960	431		440	10	6-23886-01-0-1	
				961-1120	590		500	10	6-23886-02-0-1	
				1121-1370	840		500	10	6-23886-03-0-1	
				1371-1620	1090	1	600	10	6-23886-04-0-1	
				1621-1870	1340	1	600	10	6-23886-05-0-1	
				1621-1870	1340	1	980	10	6-23886-55-0-1	
				1871-2120	1590	2	980	10	6-23886-06-0-1	
				2121-2370	1840	2	980	10	6-23886-07-0-1	
2	2	2	4	**Centre gear, horizontal**						
				SRW [4]	Forend	ML				
				720-1100	480			10	6-23830-01-0-1	
				1101-1350	730	1		10	6-23830-02-0-1	
				1351-1600	980	1		10	6-23830-03-0-1	
				1601-1850	1230	2		10	6-23830-14-0-1	
1	1	1	2•	**Box of middle stay G.U-mZ** [3]						
				Groove 9				1	K-15486-00-L-1	K-15486-00-R-1
				Groove 13				1	K-15487-00-L-1	K-15487-00-R-1
				SRW [4]	Forend	ML				
				1851-2000	1480	2				
1	1	1	2	**Cover** for middle stay [1]				1	9-35573-00-0-*	
2	2	2	4	**Positioning plate**				20	(acc. to profile)	
2	2	2	4	**Locking plate Se**				100	(acc. to profile)	
				Locking plate				100	(acc. to profile)	
				SRW [4]	SRH					
3	3	3	6	720-1100	820-1370					
5	5	5	10		1371-1870					
7	7	7	14		1871-2370					
5	5	5	10	1101-1600	820-1370					
7	7	7	14		1371-1870					
9	9	9	18		1871-2370					
7	7	7	14	1601-2000	820-1370					
9	9	9	18		1371-1870					
11	11	11	22		1871-2370					
				Optional part:						
1	1	1	2	**Stop** for gliding rail P 1225				1	6-30388-00-0-6	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[2] • = 1 box for handle pos. lh, 1 box for handle pos. rh
[3] For sash widths SW 1851–2000 mm, an additional middle stay arm is required.
[4] Max. sash width SW for G.U-968/150 mZ = 1600 mm

Working drawing
G.U-968/200 mZ 0-43840
G.U-968/150 mZ

with geared handle inside, groove position 9 and 13

Enhanced basic security



Fitting requirements
according to size of sashes for schemes A to K

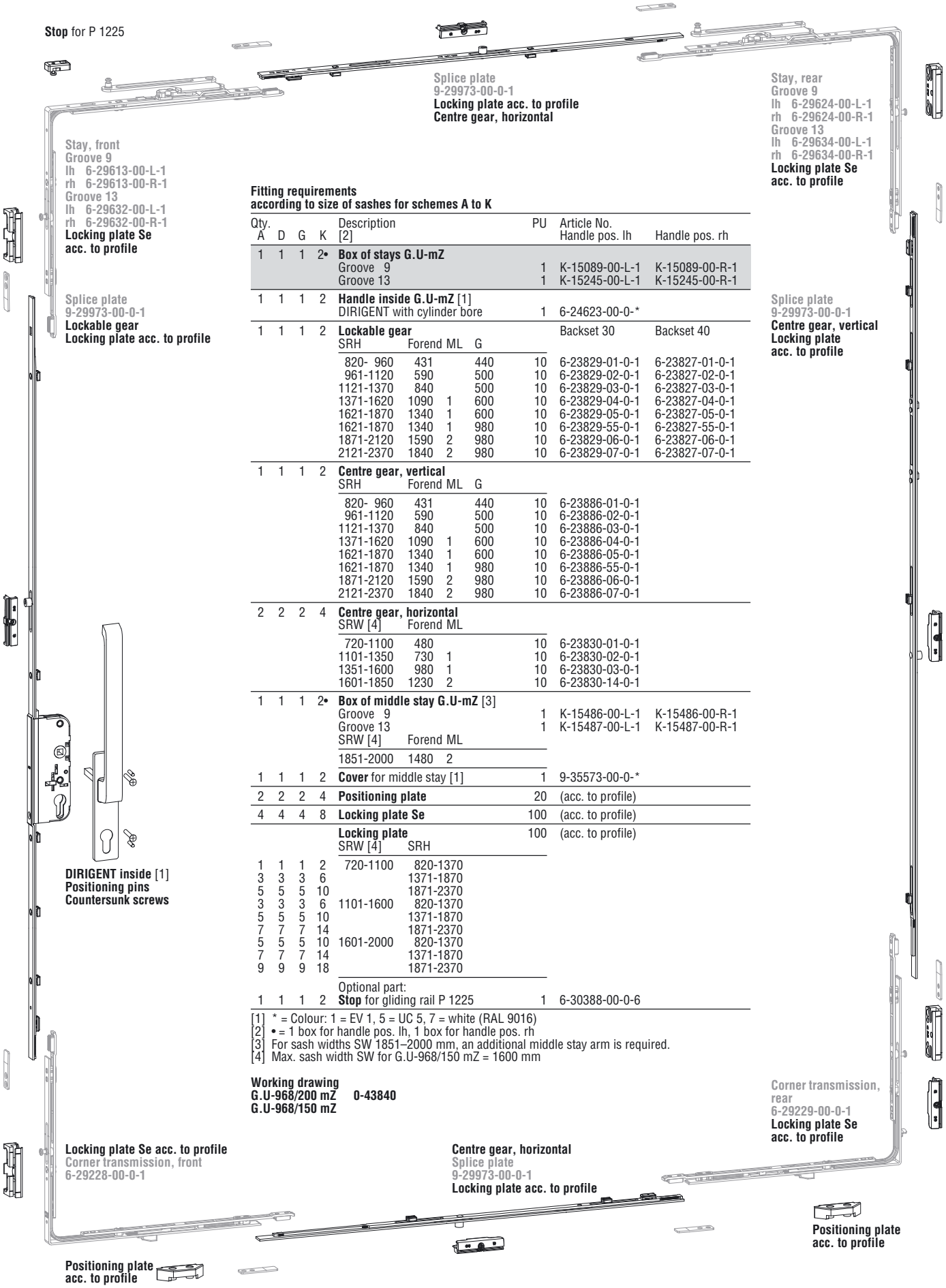
Qty. A	D	G	K	Description [2]	PU	Article No. Handle pos. lh	Handle pos. rh
1	1	1	2•	**Box of stays G.U-mZ**			
				Groove 9	1	K-15089-00-L-1	K-15089-00-R-1
				Groove 13	1	K-15245-00-L-1	K-15245-00-R-1
1	1	1	2•	**Box of geared handle G.U-mZ** [1]			
				DIRIGENT with anti-lockout device	1	K-14286-02-L-*	K-14286-02-R-*
2	2	2	4	**Centre gear, vertical**			
				SRH / Forend ML / G			
				820- 960 / 431 / 440	10	6-23886-01-0-1	
				961-1120 / 590 / 500	10	6-23886-02-0-1	
				1121-1370 / 840 / 500	10	6-23886-03-0-1	
				1371-1620 / 1090 1 / 600	10	6-23886-04-0-1	
				1621-1870 / 1340 1 / 600	10	6-23886-05-0-1	
				1621-1870 / 1340 1 / 980	10	6-23886-55-0-1	
				1871-2120 / 1590 2 / 980	10	6-23886-06-0-1	
				2121-2370 / 1840 2 / 980	10	6-23886-07-0-1	
2	2	2	4	**Centre gear, horizontal**			
				SRW [4] / Forend ML			
				720-1100 / 480	10	6-23830-01-0-1	
				1101-1350 / 730 1	10	6-23830-02-0-1	
				1351-1600 / 980 1	10	6-23830-03-0-1	
				1601-1850 / 1230 2	10	6-23830-14-0-1	
1	1	1	2•	**Box of middle stay G.U-mZ** [3]			
				Groove 9	1	K-15486-00-L-1	K-15486-00-R-1
				Groove 13	1	K-15487-00-L-1	K-15487-00-R-1
				SRW [4] / Forend ML			
				1851-2000 / 1480 2			
1	1	1	2	**Cover** for middle stay [1]	1	9-35573-00-0-*	
2	2	2	4	**Positioning plate**	20	(acc. to profile)	
4	4	4	8	**Locking plate Se**	100	(acc. to profile)	
				Locking plate	100	(acc. to profile)	
				SRW [4] / SRH			
1	1	1	2	720-1100 / 820-1370			
3	3	3	6	/ 1371-1870			
5	5	5	10	/ 1871-2370			
3	3	3	6	1101-1600 / 820-1370			
5	5	5	10	/ 1371-1870			
7	7	7	14	/ 1871-2370			
5	5	5	10	1601-2000 / 820-1370			
7	7	7	14	/ 1371-1870			
9	9	9	18	/ 1871-2370			
				Optional part:			
1	1	1	2	**Stop** for gliding rail P 1225	1	6-30388-00-0-6	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[2] • = 1 box for handle pos. lh, 1 box for handle pos. rh
[3] For sash widths SW 1851–2000 mm, an additional middle stay arm is required.
[4] Max. sash width SW for G.U-968/150 mZ = 1600 mm

Working drawing
G.U-968/200 mZ 0-43840
G.U-968/150 mZ

with lockable gear, groove position 9 and 13

Enhanced basic security



Fitting requirements
according to size of sashes for schemes A to K

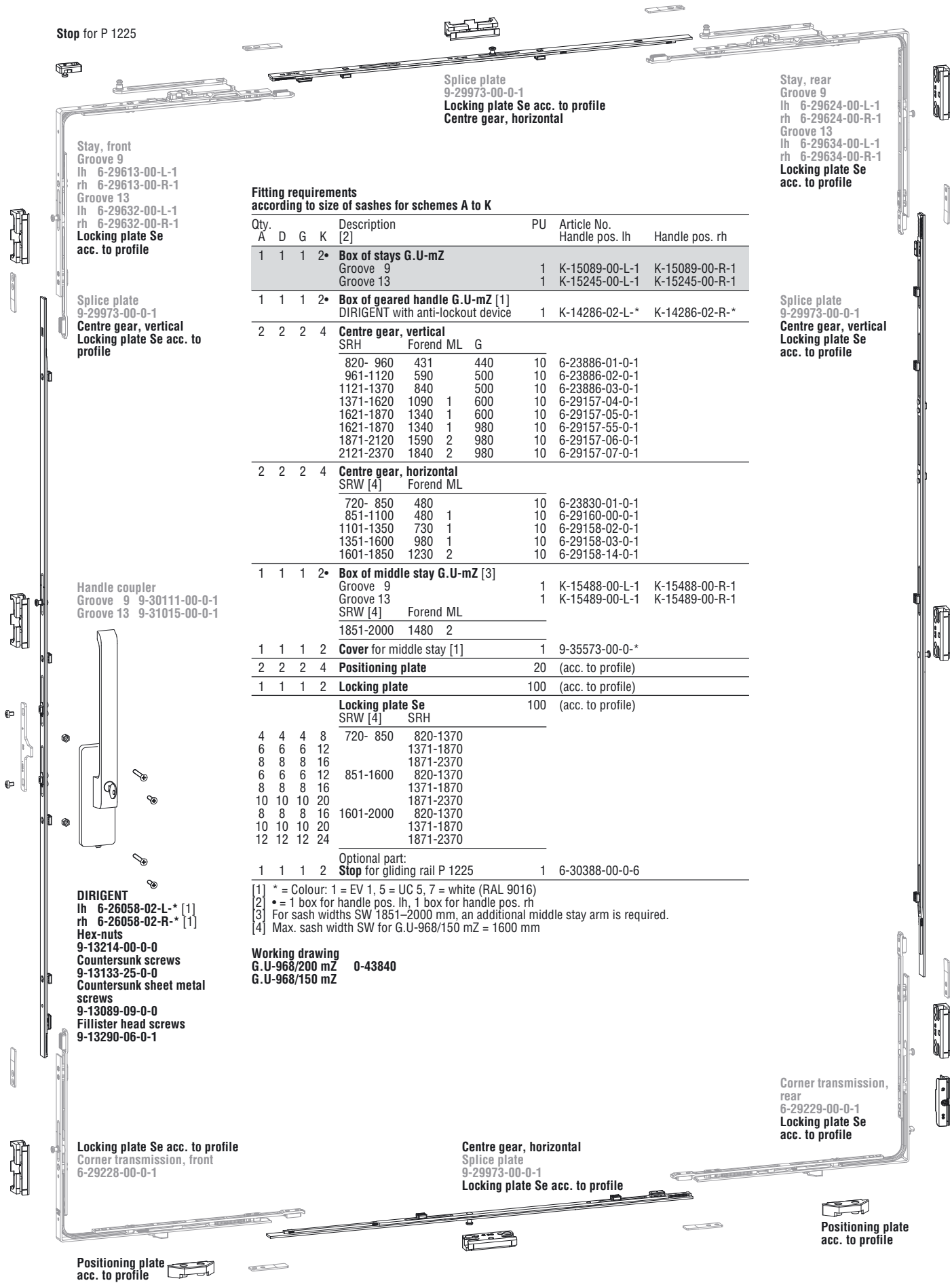
Qty. A	D	G	K	Description [2]	PU	Article No. Handle pos. lh	Handle pos. rh
1	1	1	2•	**Box of stays G.U-mZ**			
				Groove 9	1	K-15089-00-L-1	K-15089-00-R-1
				Groove 13	1	K-15245-00-L-1	K-15245-00-R-1
1	1	1	2	**Handle inside G.U-mZ** [1]			
				DIRIGENT with cylinder bore	1	6-24623-00-0-*	
1	1	1	2	**Lockable gear**		Backset 30	Backset 40
				SRH Forend ML G			
				820- 960 431 440	10	6-23829-01-0-1	6-23827-01-0-1
				961-1120 590 500	10	6-23829-02-0-1	6-23827-02-0-1
				1121-1370 840 500	10	6-23829-03-0-1	6-23827-03-0-1
				1371-1620 1090 1 600	10	6-23829-04-0-1	6-23827-04-0-1
				1621-1870 1340 1 600	10	6-23829-05-0-1	6-23827-05-0-1
				1621-1870 1340 1 980	10	6-23829-55-0-1	6-23827-55-0-1
				1871-2120 1590 2 980	10	6-23829-06-0-1	6-23827-06-0-1
				2121-2370 1840 2 980	10	6-23829-07-0-1	6-23827-07-0-1
1	1	1	2	**Centre gear, vertical**			
				SRH Forend ML G			
				820- 960 431 440	10	6-23886-01-0-1	
				961-1120 590 500	10	6-23886-02-0-1	
				1121-1370 840 500	10	6-23886-03-0-1	
				1371-1620 1090 1 600	10	6-23886-04-0-1	
				1621-1870 1340 1 600	10	6-23886-05-0-1	
				1621-1870 1340 1 980	10	6-23886-55-0-1	
				1871-2120 1590 2 980	10	6-23886-06-0-1	
				2121-2370 1840 2 980	10	6-23886-07-0-1	
2	2	2	4	**Centre gear, horizontal**			
				SRW [4] Forend ML			
				720-1100 480	10	6-23830-01-0-1	
				1101-1350 730 1	10	6-23830-02-0-1	
				1351-1600 980 1	10	6-23830-03-0-1	
				1601-1850 1230 2	10	6-23830-14-0-1	
1	1	1	2•	**Box of middle stay G.U-mZ** [3]			
				Groove 9	1	K-15486-00-L-1	K-15486-00-R-1
				Groove 13	1	K-15487-00-L-1	K-15487-00-R-1
				SRW [4] Forend ML			
				1851-2000 1480 2			
1	1	1	2	**Cover** for middle stay [1]	1	9-35573-00-0-*	
2	2	2	4	**Positioning plate**	20	(acc. to profile)	
4	4	4	8	**Locking plate Se**	100	(acc. to profile)	
				Locking plate	100	(acc. to profile)	
				SRW [4] SRH			
1	1	1	2	720-1100 820-1370			
3	3	3	6	1371-1870			
5	5	5	10	1871-2370			
3	3	3	6	1101-1600 820-1370			
5	5	5	10	1371-1870			
7	7	7	14	1871-2370			
5	5	5	10	1601-2000 820-1370			
7	7	7	14	1371-1870			
9	9	9	18	1871-2370			
				Optional part:			
1	1	1	2	**Stop** for gliding rail P 1225	1	6-30388-00-0-6	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[2] • = 1 box for handle pos. lh, 1 box for handle pos. rh
[3] For sash widths SW 1851–2000 mm, an additional middle stay arm is required.
[4] Max. sash width SW for G.U-968/150 mZ = 1600 mm

Working drawing
G.U-968/200 mZ 0-43840
G.U-968/150 mZ

with geared handle inside, groove position 9 and 13

WK 2



Fitting requirements
according to size of sashes for schemes A to K

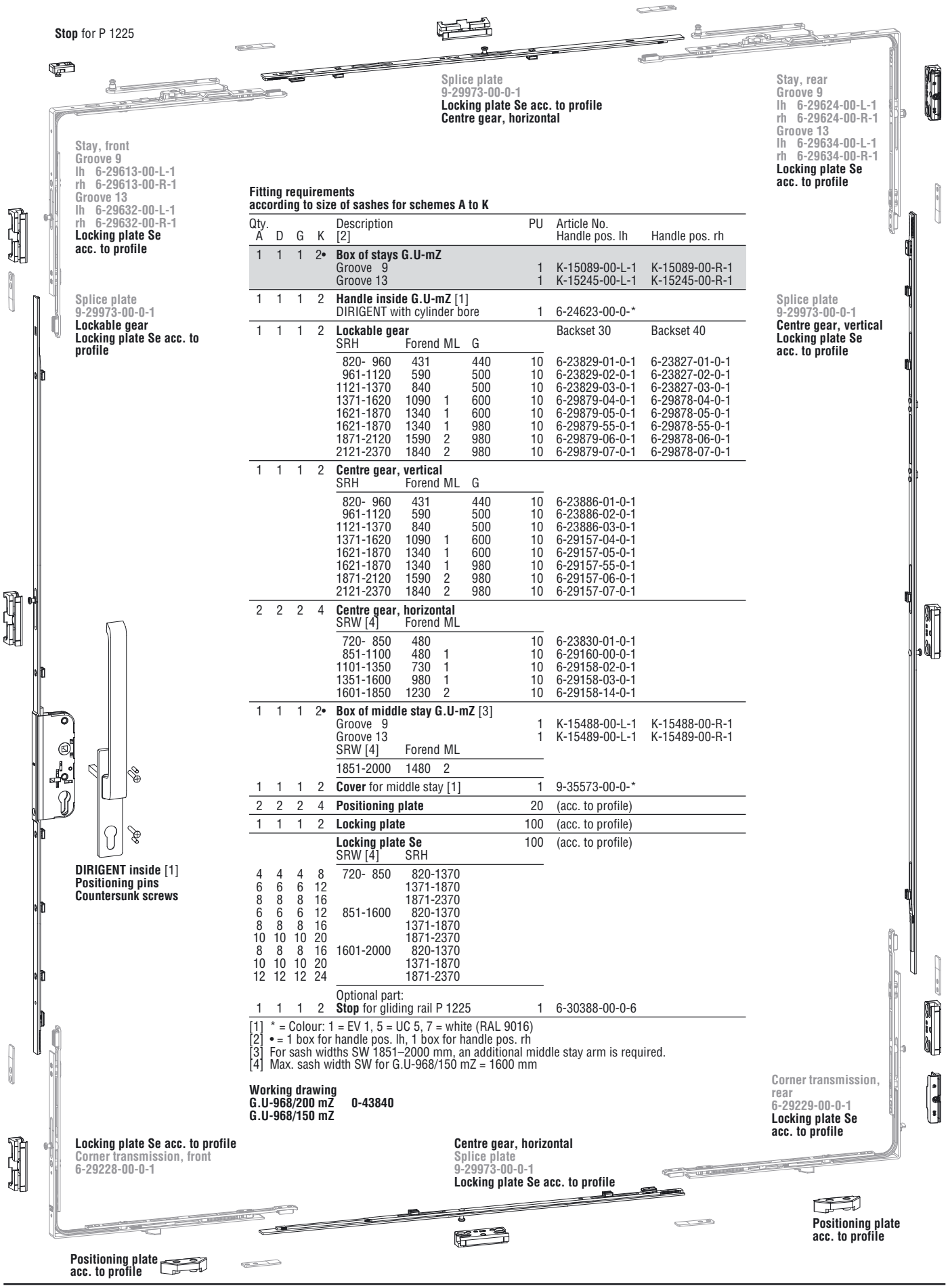
Qty. A	D	G	K	Description [2]	PU	Article No. Handle pos. lh	Handle pos. rh
1	1	1	2•	**Box of stays G.U-mZ**			
				Groove 9	1	K-15089-00-L-1	K-15089-00-R-1
				Groove 13	1	K-15245-00-L-1	K-15245-00-R-1
1	1	1	2•	**Box of geared handle G.U-mZ** [1]			
				DIRIGENT with anti-lockout device	1	K-14286-02-L-*	K-14286-02-R-*
2	2	2	4	**Centre gear, vertical**			
				SRH / Forend ML / G			
				820- 960 / 431 / 440	10	6-23886-01-0-1	
				961-1120 / 590 / 500	10	6-23886-02-0-1	
				1121-1370 / 840 / 500	10	6-23886-03-0-1	
				1371-1620 / 1090 1 / 600	10	6-29157-04-0-1	
				1621-1870 / 1340 1 / 600	10	6-29157-05-0-1	
				1621-1870 / 1340 1 / 980	10	6-29157-55-0-1	
				1871-2120 / 1590 2 / 980	10	6-29157-06-0-1	
				2121-2370 / 1840 2 / 980	10	6-29157-07-0-1	
2	2	2	4	**Centre gear, horizontal**			
				SRW [4] / Forend ML			
				720- 850 / 480	10	6-23830-01-0-1	
				851-1100 / 480 1	10	6-29160-00-0-1	
				1101-1350 / 730 1	10	6-29158-02-0-1	
				1351-1600 / 980 1	10	6-29158-03-0-1	
				1601-1850 / 1230 2	10	6-29158-14-0-1	
1	1	1	2•	**Box of middle stay G.U-mZ** [3]			
				Groove 9	1	K-15488-00-L-1	K-15488-00-R-1
				Groove 13	1	K-15489-00-L-1	K-15489-00-R-1
				SRW [4] / Forend ML			
				1851-2000 / 1480 2			
1	1	1	2	**Cover** for middle stay [1]	1	9-35573-00-0-*	
2	2	2	4	**Positioning plate**	20	(acc. to profile)	
1	1	1	2	**Locking plate**	100	(acc. to profile)	
				Locking plate Se	100	(acc. to profile)	
				SRW [4] / SRH			
4	4	4	8	720- 850 / 820-1370			
6	6	6	12	/ 1371-1870			
8	8	8	16	/ 1871-2370			
6	6	6	12	851-1600 / 820-1370			
8	8	8	16	/ 1371-1870			
10	10	10	20	/ 1871-2370			
8	8	8	16	1601-2000 / 820-1370			
10	10	10	20	/ 1371-1870			
12	12	12	24	/ 1871-2370			
				Optional part:			
1	1	1	2	**Stop** for gliding rail P 1225	1	6-30388-00-0-6	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[2] • = 1 box for handle pos. lh, 1 box for handle pos. rh
[3] For sash widths SW 1851–2000 mm, an additional middle stay arm is required.
[4] Max. sash width SW for G.U-968/150 mZ = 1600 mm

Working drawing
G.U-968/200 mZ 0-43840
G.U-968/150 mZ

with lockable gear, groove position 9 and 13

WK 2



Fitting requirements
according to size of sashes for schemes A to K

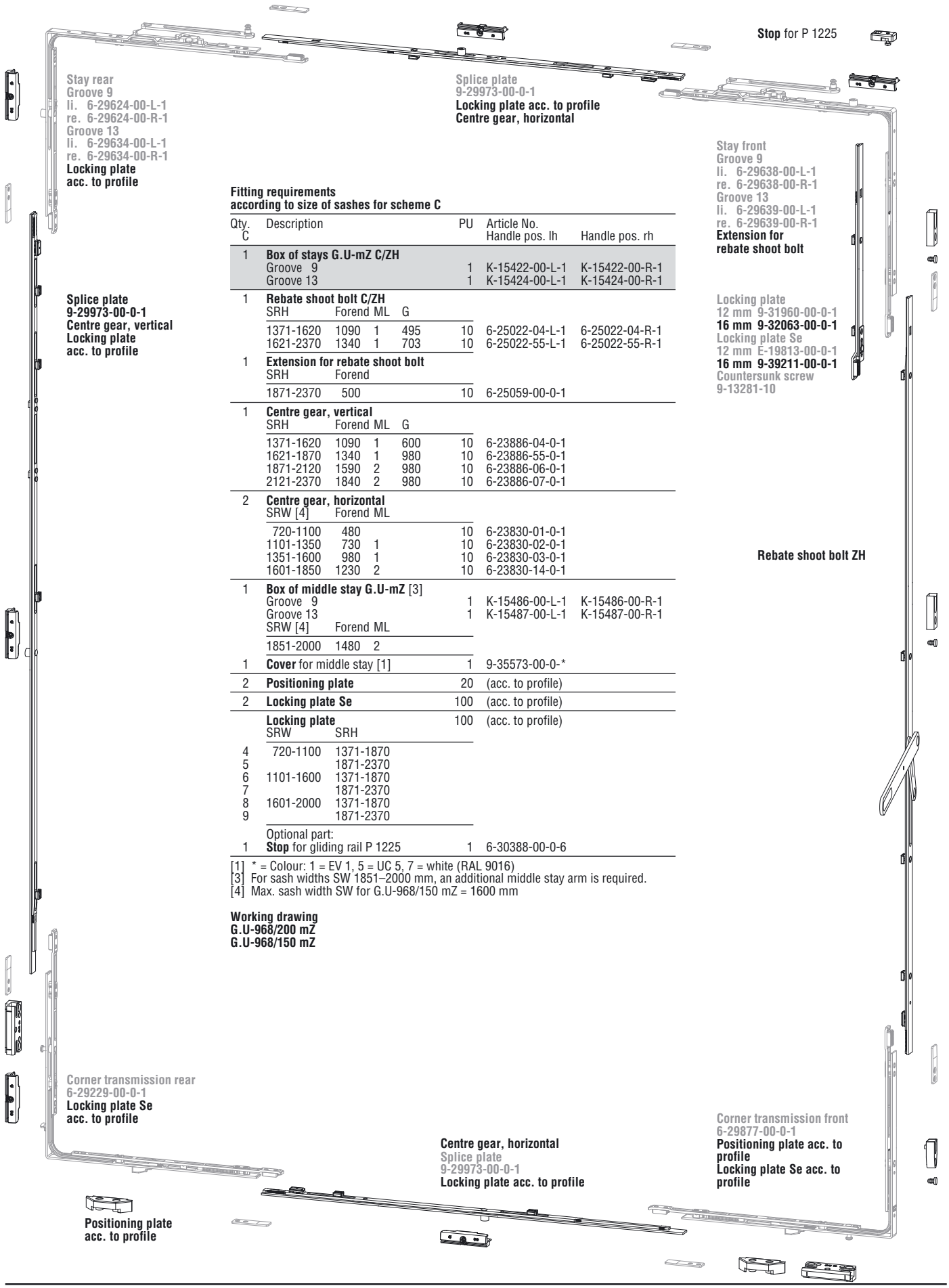
Qty. A	D	G	K	Description [2]	PU	Article No. Handle pos. lh	Handle pos. rh
1	1	1	2•	**Box of stays G.U-mZ**			
				Groove 9	1	K-15089-00-L-1	K-15089-00-R-1
				Groove 13	1	K-15245-00-L-1	K-15245-00-R-1
1	1	1	2	**Handle inside G.U-mZ** [1]			
				DIRIGENT with cylinder bore	1	6-24623-00-0-*	
1	1	1	2	**Lockable gear**		Backset 30	Backset 40
				SRH Forend ML G			
				820- 960 431 440	10	6-23829-01-0-1	6-23827-01-0-1
				961-1120 590 500	10	6-23829-02-0-1	6-23827-02-0-1
				1121-1370 840 500	10	6-23829-03-0-1	6-23827-03-0-1
				1371-1620 1090 1 600	10	6-29879-04-0-1	6-29878-04-0-1
				1621-1870 1340 1 600	10	6-29879-05-0-1	6-29878-05-0-1
				1621-1870 1340 1 980	10	6-29879-55-0-1	6-29878-55-0-1
				1871-2120 1590 2 980	10	6-29879-06-0-1	6-29878-06-0-1
				2121-2370 1840 2 980	10	6-29879-07-0-1	6-29878-07-0-1
1	1	1	2	**Centre gear, vertical**			
				SRH Forend ML G			
				820- 960 431 440	10	6-23886-01-0-1	
				961-1120 590 500	10	6-23886-02-0-1	
				1121-1370 840 500	10	6-23886-03-0-1	
				1371-1620 1090 1 600	10	6-29157-04-0-1	
				1621-1870 1340 1 600	10	6-29157-05-0-1	
				1621-1870 1340 1 980	10	6-29157-55-0-1	
				1871-2120 1590 2 980	10	6-29157-06-0-1	
				2121-2370 1840 2 980	10	6-29157-07-0-1	
2	2	2	4	**Centre gear, horizontal**			
				SRW [4] Forend ML			
				720- 850 480	10	6-23830-01-0-1	
				851-1100 480 1	10	6-29160-00-0-1	
				1101-1350 730 1	10	6-29158-02-0-1	
				1351-1600 980 1	10	6-29158-03-0-1	
				1601-1850 1230 2	10	6-29158-14-0-1	
1	1	1	2•	**Box of middle stay G.U-mZ** [3]			
				Groove 9	1	K-15488-00-L-1	K-15488-00-R-1
				Groove 13	1	K-15489-00-L-1	K-15489-00-R-1
				SRW [4] Forend ML			
				1851-2000 1480 2			
1	1	1	2	**Cover** for middle stay [1]	1	9-35573-00-0-*	
2	2	2	4	**Positioning plate**	20	(acc. to profile)	
1	1	1	2	**Locking plate**	100	(acc. to profile)	
				Locking plate Se	100	(acc. to profile)	
				SRW [4] SRH			
4	4	4	8	720- 850 820-1370			
6	6	6	12	1371-1870			
8	8	8	16	1871-2370			
6	6	6	12	851-1600 820-1370			
8	8	8	16	1371-1870			
10	10	10	20	1871-2370			
8	8	8	16	1601-2000 820-1370			
10	10	10	20	1371-1870			
12	12	12	24	1871-2370			
				Optional part:			
1	1	1	2	**Stop** for gliding rail P 1225	1	6-30388-00-0-6	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[2] • = 1 box for handle pos. lh, 1 box for handle pos. rh
[3] For sash widths SW 1851–2000 mm, an additional middle stay arm is required.
[4] Max. sash width SW for G.U-968/150 mZ = 1600 mm

Working drawing
G.U-968/200 mZ 0-43840
G.U-968/150 mZ

with rebate shoot bolt, groove position 9 and 13

Basic security



Fitting requirements according to size of sashes for scheme C

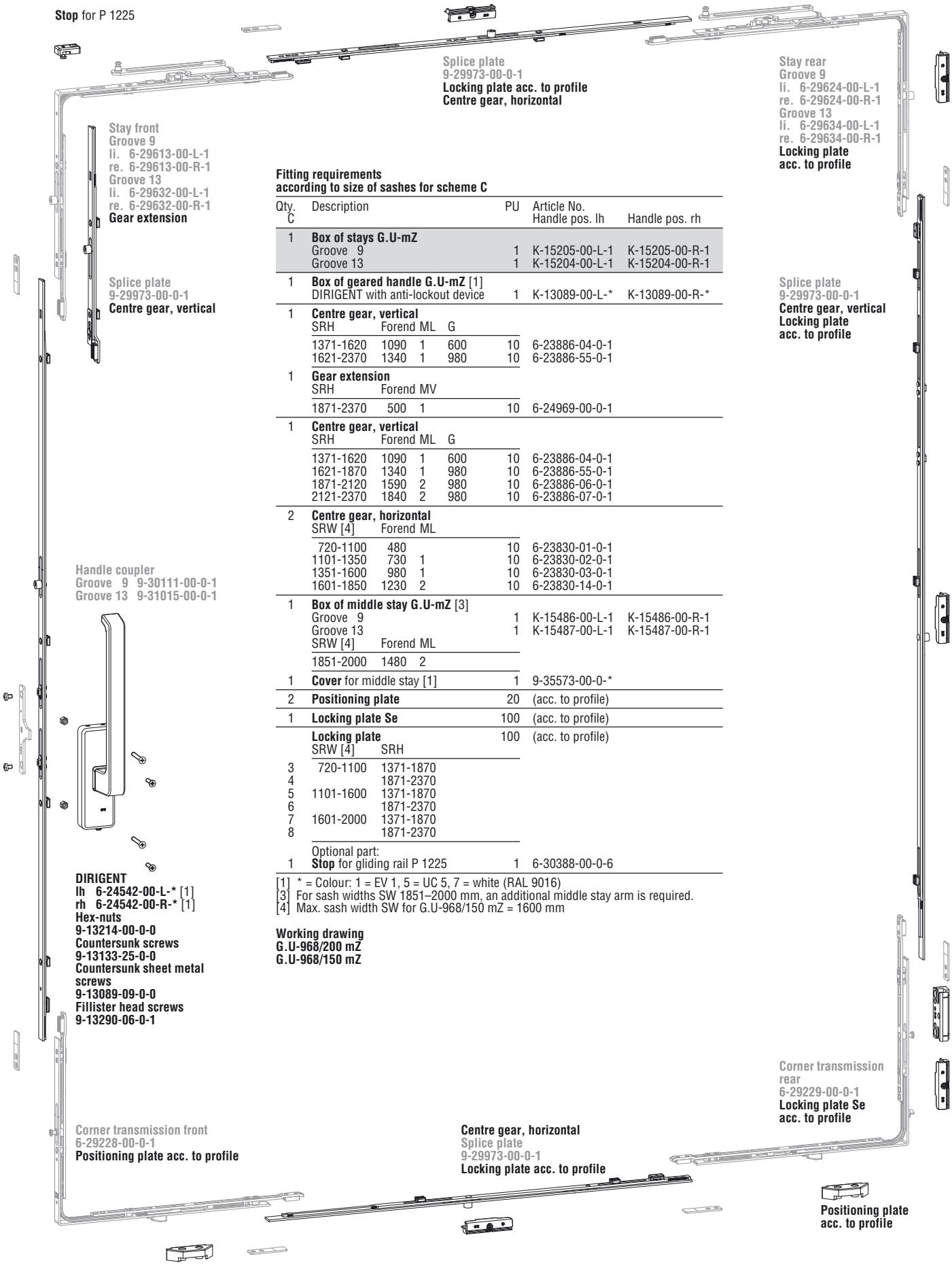
Qty. C	Description					PU	Article No. Handle pos. lh	Handle pos. rh
1	**Box of stays G.U-mZ C/ZH**							
	Groove 9					1	K-15422-00-L-1	K-15422-00-R-1
	Groove 13					1	K-15424-00-L-1	K-15424-00-R-1
1	**Rebate shoot bolt C/ZH**							
	SRH	Forend	ML	G				
	1371-1620	1090	1	495		10	6-25022-04-L-1	6-25022-04-R-1
	1621-2370	1340	1	703		10	6-25022-55-L-1	6-25022-55-R-1
1	**Extension for rebate shoot bolt**							
	SRH	Forend						
	1871-2370	500				10	6-25059-00-0-1	
1	**Centre gear, vertical**							
	SRH	Forend	ML	G				
	1371-1620	1090	1	600		10	6-23886-04-0-1	
	1621-1870	1340	1	980		10	6-23886-55-0-1	
	1871-2120	1590	2	980		10	6-23886-06-0-1	
	2121-2370	1840	2	980		10	6-23886-07-0-1	
2	**Centre gear, horizontal**							
	SRW [4]	Forend	ML					
	720-1100	480				10	6-23830-01-0-1	
	1101-1350	730	1			10	6-23830-02-0-1	
	1351-1600	980	1			10	6-23830-03-0-1	
	1601-1850	1230	2			10	6-23830-14-0-1	
1	**Box of middle stay G.U-mZ** [3]							
	Groove 9					1	K-15486-00-L-1	K-15486-00-R-1
	Groove 13					1	K-15487-00-L-1	K-15487-00-R-1
	SRW [4]	Forend	ML					
	1851-2000	1480	2					
1	**Cover** for middle stay [1]					1	9-35573-00-0-*	
2	**Positioning plate**					20	(acc. to profile)	
2	**Locking plate Se**					100	(acc. to profile)	
	Locking plate					100	(acc. to profile)	
	SRW	SRH						
4	720-1100	1371-1870						
5		1871-2370						
6	1101-1600	1371-1870						
7		1871-2370						
8	1601-2000	1371-1870						
9		1871-2370						
	Optional part:							
1	**Stop** for gliding rail P 1225					1	6-30388-00-0-6	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[3] For sash widths SW 1851–2000 mm, an additional middle stay arm is required.
[4] Max. sash width SW for G.U-968/150 mZ = 1600 mm

Working drawing
G.U-968/200 mZ
G.U-968/150 mZ

with geared handle inside, groove position 9 and 13

Basic security



Fitting requirements
according to size of sashes for scheme C

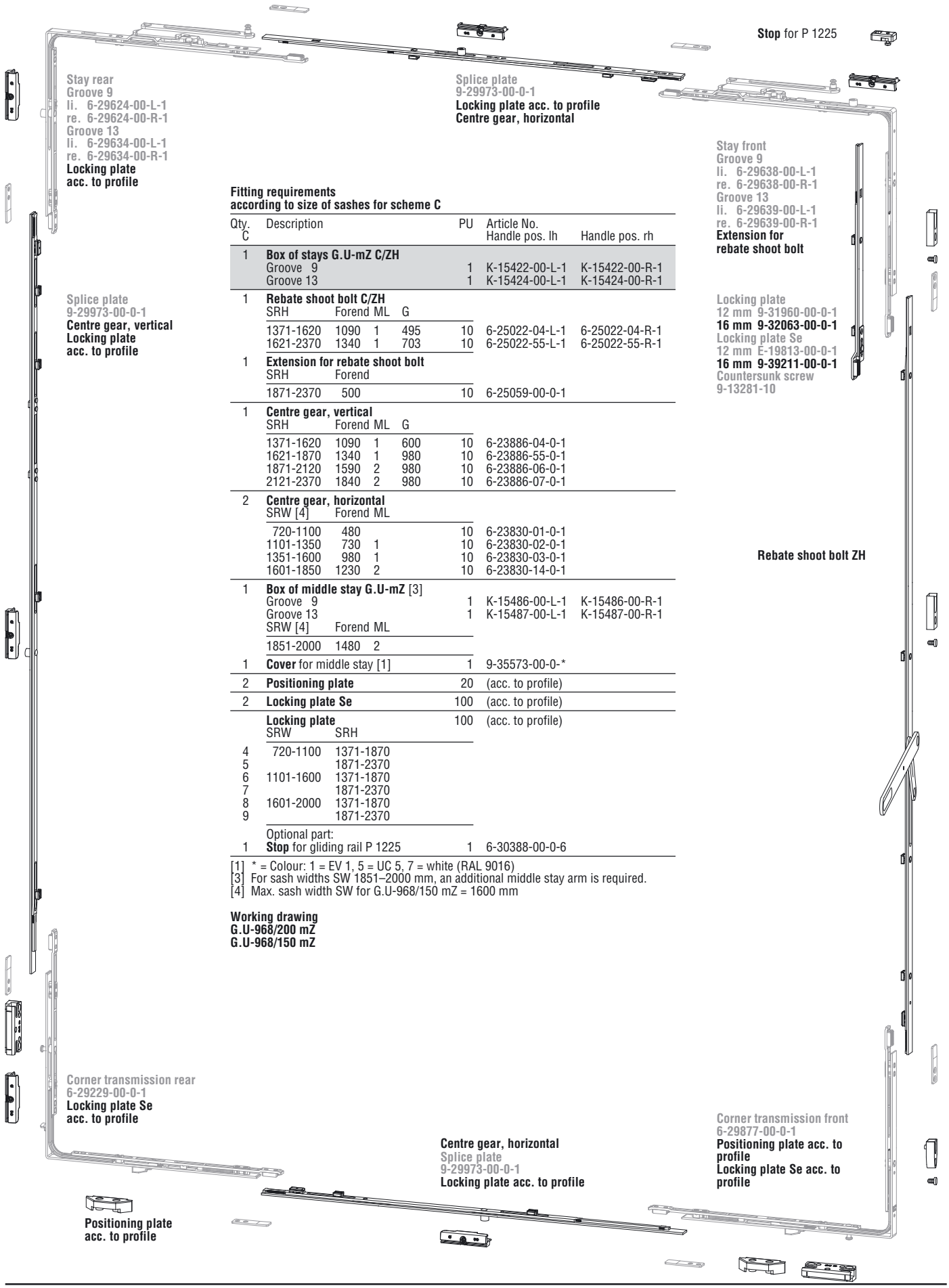
Qty. C	Description	PU	Article No. Handle pos. lh	Handle pos. rh
1	**Box of stays G.U-mZ**			
	Groove 9	1	K-15205-00-L-1	K-15205-00-R-1
	Groove 13	1	K-15204-00-L-1	K-15204-00-R-1
1	**Box of geared handle G.U-mZ** [1]			
	DIRIGENT with anti-lockout device	1	K-13089-00-L-*	K-13089-00-R-*
1	**Centre gear, vertical**			
	SRH Forend ML G			
	1371-1620 1090 1 600	10	6-23886-04-0-1	
	1621-2370 1340 1 980	10	6-23886-55-0-1	
1	**Gear extension**			
	SRH Forend MV			
	1871-2370 500 1	10	6-24969-00-0-1	
1	**Centre gear, vertical**			
	SRH Forend ML G			
	1371-1620 1090 1 600	10	6-23886-04-0-1	
	1621-1870 1340 1 980	10	6-23886-55-0-1	
	1871-2120 1590 2 980	10	6-23886-06-0-1	
	2121-2370 1840 2 980	10	6-23886-07-0-1	
2	**Centre gear, horizontal**			
	SRW [4] Forend ML			
	720-1100 480	10	6-23830-01-0-1	
	1101-1350 730 1	10	6-23830-02-0-1	
	1351-1600 980 1	10	6-23830-03-0-1	
	1601-1850 1230 2	10	6-23830-14-0-1	
1	**Box of middle stay G.U-mZ** [3]			
	Groove 9	1	K-15486-00-L-1	K-15486-00-R-1
	Groove 13	1	K-15487-00-L-1	K-15487-00-R-1
	SRW [4] Forend ML			
	1851-2000 1480 2			
1	**Cover** for middle stay [1]	1	9-35573-00-0-*	
2	**Positioning plate**	20	(acc. to profile)	
1	**Locking plate Se**	100	(acc. to profile)	
	Locking plate	100	(acc. to profile)	
	SRW [4] SRH			
3	720-1100 1371-1870			
4	1871-2370			
5	1101-1600 1371-1870			
6	1871-2370			
7	1601-2000 1371-1870			
8	1871-2370			
	Optional part:			
1	**Stop** for gliding rail P 1225	1	6-30388-00-0-6	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[3] For sash widths SW 1851–2000 mm, an additional middle stay arm is required.
[4] Max. sash width SW for G.U-968/150 mZ = 1600 mm

Working drawing
G.U-968/200 mZ
G.U-968/150 mZ

with rebate shoot bolt, groove position 9 and 13

Basic security



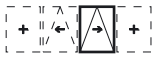
Fitting requirements
according to size of sashes for scheme C

Qty. C	Description					PU	Article No. Handle pos. lh	Handle pos. rh
1	**Box of stays G.U-mZ C/ZH**							
	Groove 9					1	K-15422-00-L-1	K-15422-00-R-1
	Groove 13					1	K-15424-00-L-1	K-15424-00-R-1
1	**Rebate shoot bolt C/ZH**							
	SRH	Forend	ML	G				
	1371-1620	1090	1	495		10	6-25022-04-L-1	6-25022-04-R-1
	1621-2370	1340	1	703		10	6-25022-55-L-1	6-25022-55-R-1
1	**Extension for rebate shoot bolt**							
	SRH	Forend						
	1871-2370	500				10	6-25059-00-0-1	
1	**Centre gear, vertical**							
	SRH	Forend	ML	G				
	1371-1620	1090	1	600		10	6-23886-04-0-1	
	1621-1870	1340	1	980		10	6-23886-55-0-1	
	1871-2120	1590	2	980		10	6-23886-06-0-1	
	2121-2370	1840	2	980		10	6-23886-07-0-1	
2	**Centre gear, horizontal**							
	SRW [4]	Forend	ML					
	720-1100	480				10	6-23830-01-0-1	
	1101-1350	730	1			10	6-23830-02-0-1	
	1351-1600	980	1			10	6-23830-03-0-1	
	1601-1850	1230	2			10	6-23830-14-0-1	
1	**Box of middle stay G.U-mZ** [3]							
	Groove 9					1	K-15486-00-L-1	K-15486-00-R-1
	Groove 13					1	K-15487-00-L-1	K-15487-00-R-1
	SRW [4]	Forend	ML					
	1851-2000	1480	2					
1	**Cover** for middle stay [1]					1	9-35573-00-0-*	
2	**Positioning plate**					20	(acc. to profile)	
2	**Locking plate Se**					100	(acc. to profile)	
	Locking plate					100	(acc. to profile)	
	SRW	SRH						
4	720-1100	1371-1870						
5		1871-2370						
6	1101-1600	1371-1870						
7		1871-2370						
8	1601-2000	1371-1870						
9		1871-2370						
	Optional part:							
1	**Stop** for gliding rail P 1225					1	6-30388-00-0-6	

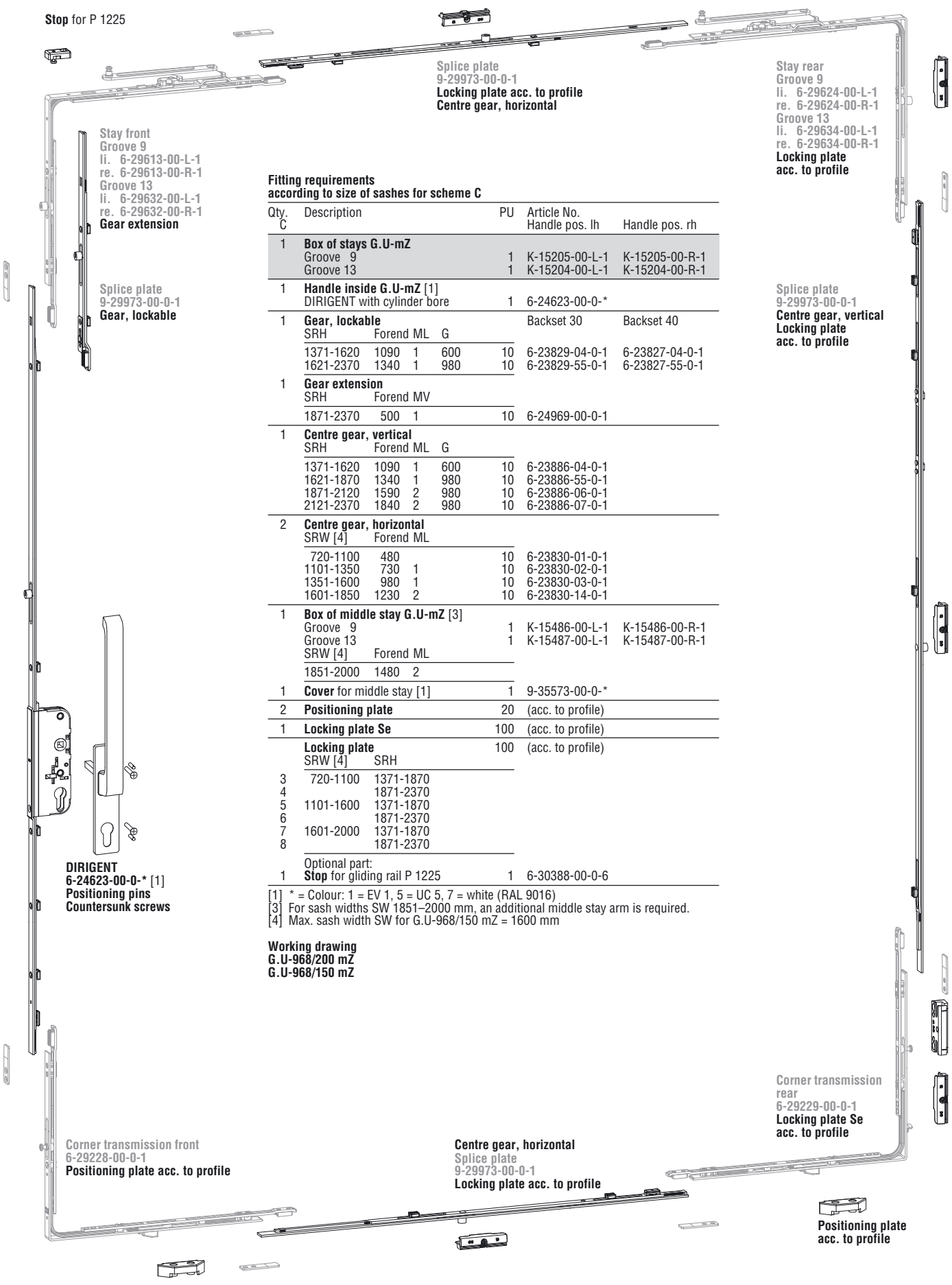
[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[3] For sash widths SW 1851–2000 mm, an additional middle stay arm is required.
[4] Max. sash width SW for G.U-968/150 mZ = 1600 mm

Working drawing
G.U-968/200 mZ
G.U-968/150 mZ

with lockable gear, groove position 9 and 13



Basic security



Fitting requirements
according to size of sashes for scheme C

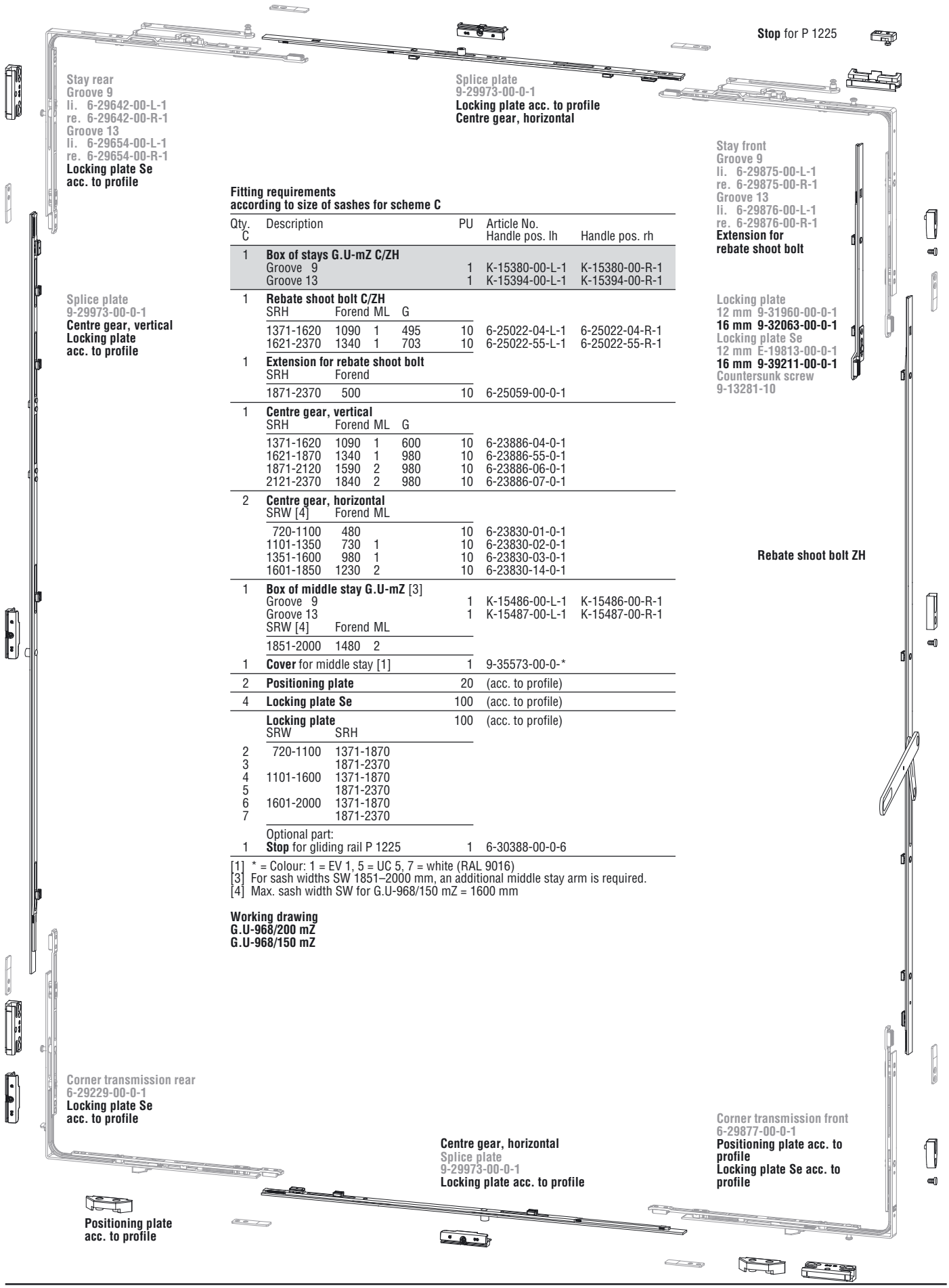
Qty. C	Description				PU	Article No. Handle pos. lh	Handle pos. rh
1	**Box of stays G.U-mZ**						
	Groove 9				1	K-15205-00-L-1	K-15205-00-R-1
	Groove 13				1	K-15204-00-L-1	K-15204-00-R-1
1	**Handle inside G.U-mZ** [1]						
	DIRIGENT with cylinder bore				1	6-24623-00-0-*	
1	**Gear, lockable**					Backset 30	Backset 40
	SRH	Forend	ML	G			
	1371-1620	1090	1	600	10	6-23829-04-0-1	6-23827-04-0-1
	1621-2370	1340	1	980	10	6-23829-55-0-1	6-23827-55-0-1
1	**Gear extension**						
	SRH	Forend	MV				
	1871-2370	500	1		10	6-24969-00-0-1	
1	**Centre gear, vertical**						
	SRH	Forend	ML	G			
	1371-1620	1090	1	600	10	6-23886-04-0-1	
	1621-1870	1340	1	980	10	6-23886-55-0-1	
	1871-2120	1590	2	980	10	6-23886-06-0-1	
	2121-2370	1840	2	980	10	6-23886-07-0-1	
2	**Centre gear, horizontal**						
	SRW [4]	Forend	ML				
	720-1100	480			10	6-23830-01-0-1	
	1101-1350	730	1		10	6-23830-02-0-1	
	1351-1600	980	1		10	6-23830-03-0-1	
	1601-1850	1230	2		10	6-23830-14-0-1	
1	**Box of middle stay G.U-mZ** [3]						
	Groove 9				1	K-15486-00-L-1	K-15486-00-R-1
	Groove 13				1	K-15487-00-L-1	K-15487-00-R-1
	SRW [4]	Forend	ML				
	1851-2000	1480	2				
1	**Cover** for middle stay [1]				1	9-35573-00-0-*	
2	**Positioning plate**				20	(acc. to profile)	
1	**Locking plate Se**				100	(acc. to profile)	
	Locking plate				100	(acc. to profile)	
	SRW [4]	SRH					
3	720-1100	1371-1870					
4		1871-2370					
5	1101-1600	1371-1870					
6		1871-2370					
7	1601-2000	1371-1870					
8		1871-2370					
	Optional part:						
1	**Stop** for gliding rail P 1225				1	6-30388-00-0-6	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[3] For sash widths SW 1851–2000 mm, an additional middle stay arm is required.
[4] Max. sash width SW for G.U-968/150 mZ = 1600 mm

Working drawing
G.U-968/200 mZ
G.U-968/150 mZ

with rebate shoot bolt, groove position 9 and 13

Enhanced basic security



Fitting requirements according to size of sashes for scheme C

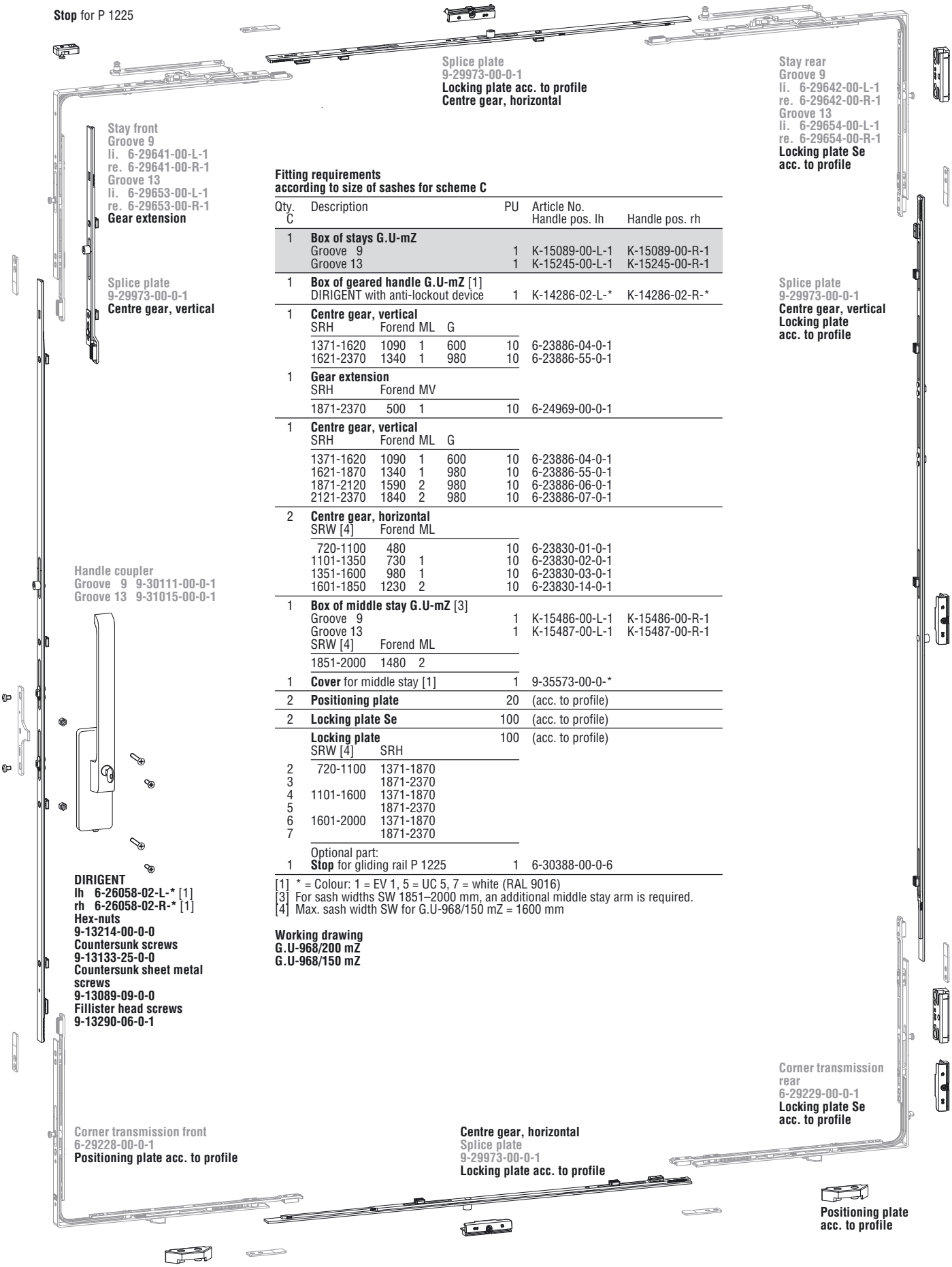
Qty. C	Description					PU	Article No. Handle pos. lh	Handle pos. rh
1	**Box of stays G.U-mZ C/ZH**							
	Groove 9					1	K-15380-00-L-1	K-15380-00-R-1
	Groove 13					1	K-15394-00-L-1	K-15394-00-R-1
1	**Rebate shoot bolt C/ZH**							
	SRH	Forend	ML	G				
	1371-1620	1090	1	495		10	6-25022-04-L-1	6-25022-04-R-1
	1621-2370	1340	1	703		10	6-25022-55-L-1	6-25022-55-R-1
1	**Extension for rebate shoot bolt**							
	SRH	Forend						
	1871-2370	500				10	6-25059-00-0-1	
1	**Centre gear, vertical**							
	SRH	Forend	ML	G				
	1371-1620	1090	1	600		10	6-23886-04-0-1	
	1621-1870	1340	1	980		10	6-23886-55-0-1	
	1871-2120	1590	2	980		10	6-23886-06-0-1	
	2121-2370	1840	2	980		10	6-23886-07-0-1	
2	**Centre gear, horizontal**							
	SRW [4]	Forend	ML					
	720-1100	480				10	6-23830-01-0-1	
	1101-1350	730	1			10	6-23830-02-0-1	
	1351-1600	980	1			10	6-23830-03-0-1	
	1601-1850	1230	2			10	6-23830-14-0-1	
1	**Box of middle stay G.U-mZ** [3]							
	Groove 9					1	K-15486-00-L-1	K-15486-00-R-1
	Groove 13					1	K-15487-00-L-1	K-15487-00-R-1
	SRW [4]	Forend	ML					
	1851-2000	1480	2					
1	**Cover** for middle stay [1]					1	9-35573-00-0-*	
2	**Positioning plate**					20	(acc. to profile)	
4	**Locking plate Se**					100	(acc. to profile)	
	Locking plate					100	(acc. to profile)	
	SRW	SRH						
2	720-1100	1371-1870						
3		1871-2370						
4	1101-1600	1371-1870						
5		1871-2370						
6	1601-2000	1371-1870						
7		1871-2370						
	Optional part:							
1	**Stop** for gliding rail P 1225					1	6-30388-00-0-6	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[3] For sash widths SW 1851–2000 mm, an additional middle stay arm is required.
[4] Max. sash width SW for G.U-968/150 mZ = 1600 mm

Working drawing
G.U-968/200 mZ
G.U-968/150 mZ

with geared handle inside, groove position 9 and 13

Enhanced basic security



Fitting requirements
according to size of sashes for scheme C

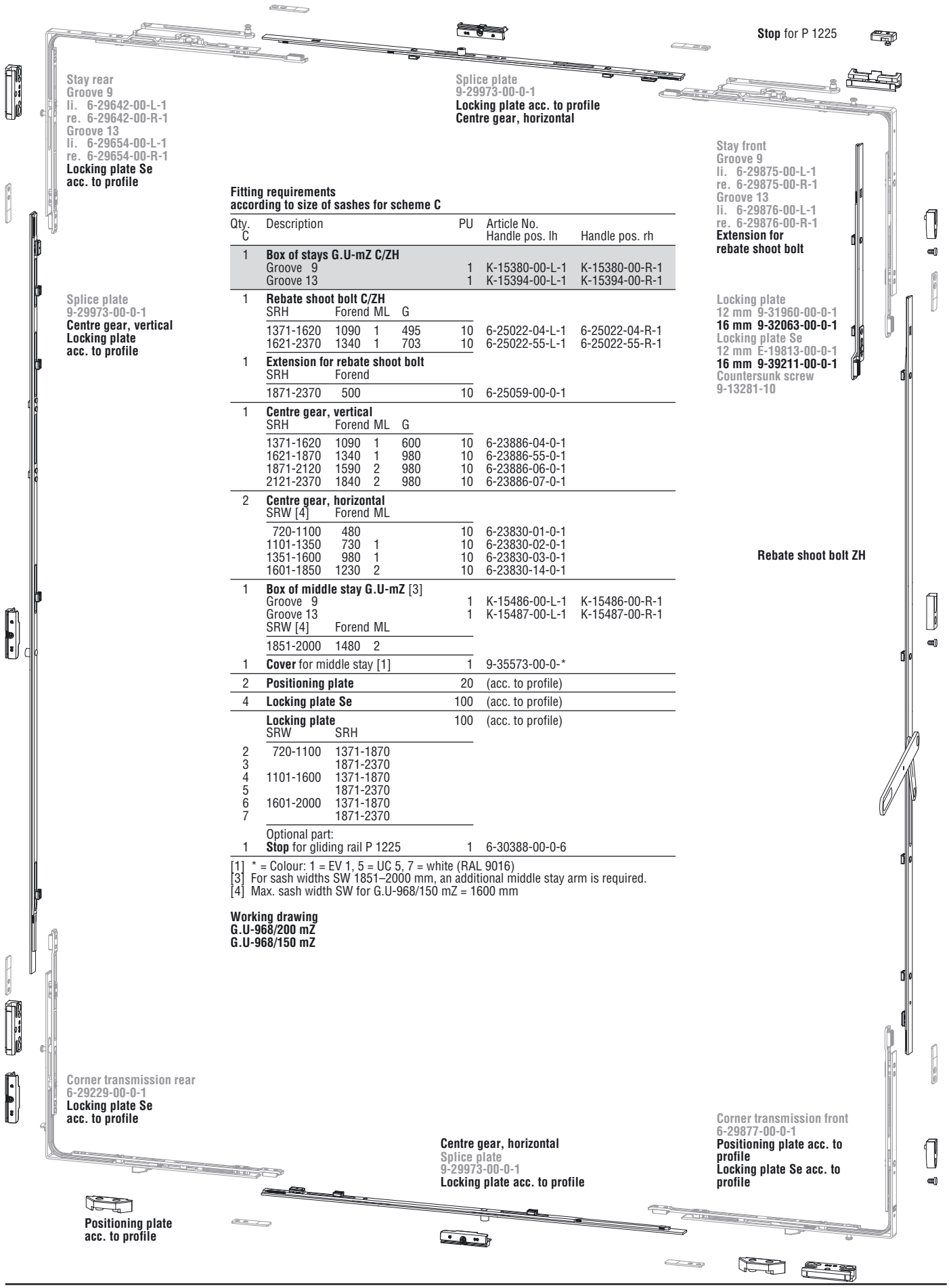
Qty. C	Description				PU	Article No. Handle pos. lh	Handle pos. rh
1	**Box of stays G.U-mZ**						
	Groove 9				1	K-15089-00-L-1	K-15089-00-R-1
	Groove 13				1	K-15245-00-L-1	K-15245-00-R-1
1	**Box of geared handle G.U-mZ** [1]						
	DIRIGENT with anti-lockout device				1	K-14286-02-L-*	K-14286-02-R-*
1	**Centre gear, vertical**						
	SRH	Forend	ML	G			
	1371-1620	1090	1	600	10	6-23886-04-0-1	
	1621-2370	1340	1	980	10	6-23886-55-0-1	
1	**Gear extension**						
	SRH	Forend	MV				
	1871-2370	500	1		10	6-24969-00-0-1	
1	**Centre gear, vertical**						
	SRH	Forend	ML	G			
	1371-1620	1090	1	600	10	6-23886-04-0-1	
	1621-1870	1340	1	980	10	6-23886-55-0-1	
	1871-2120	1590	2	980	10	6-23886-06-0-1	
	2121-2370	1840	2	980	10	6-23886-07-0-1	
2	**Centre gear, horizontal**						
	SRW [4]	Forend	ML				
	720-1100	480			10	6-23830-01-0-1	
	1101-1350	730	1		10	6-23830-02-0-1	
	1351-1600	980	1		10	6-23830-03-0-1	
	1601-1850	1230	2		10	6-23830-14-0-1	
1	**Box of middle stay G.U-mZ** [3]						
	Groove 9				1	K-15486-00-L-1	K-15486-00-R-1
	Groove 13				1	K-15487-00-L-1	K-15487-00-R-1
	SRW [4]	Forend	ML				
	1851-2000	1480	2				
1	**Cover** for middle stay [1]				1	9-35573-00-0-*	
2	**Positioning plate**				20	(acc. to profile)	
2	**Locking plate Se**				100	(acc. to profile)	
	Locking plate				100	(acc. to profile)	
	SRW [4]	SRH					
2	720-1100	1371-1870					
3		1871-2370					
4	1101-1600	1371-1870					
5		1871-2370					
6	1601-2000	1371-1870					
7		1871-2370					
	Optional part:						
1	**Stop** for gliding rail P 1225				1	6-30388-00-0-6	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[3] For sash widths SW 1851–2000 mm, an additional middle stay arm is required.
[4] Max. sash width SW for G.U-968/150 mZ = 1600 mm

Working drawing
G.U-968/200 mZ
G.U-968/150 mZ

with rebate shoot bolt, groove position 9 and 13

Enhanced basic security



Fitting requirements
according to size of sashes for scheme C

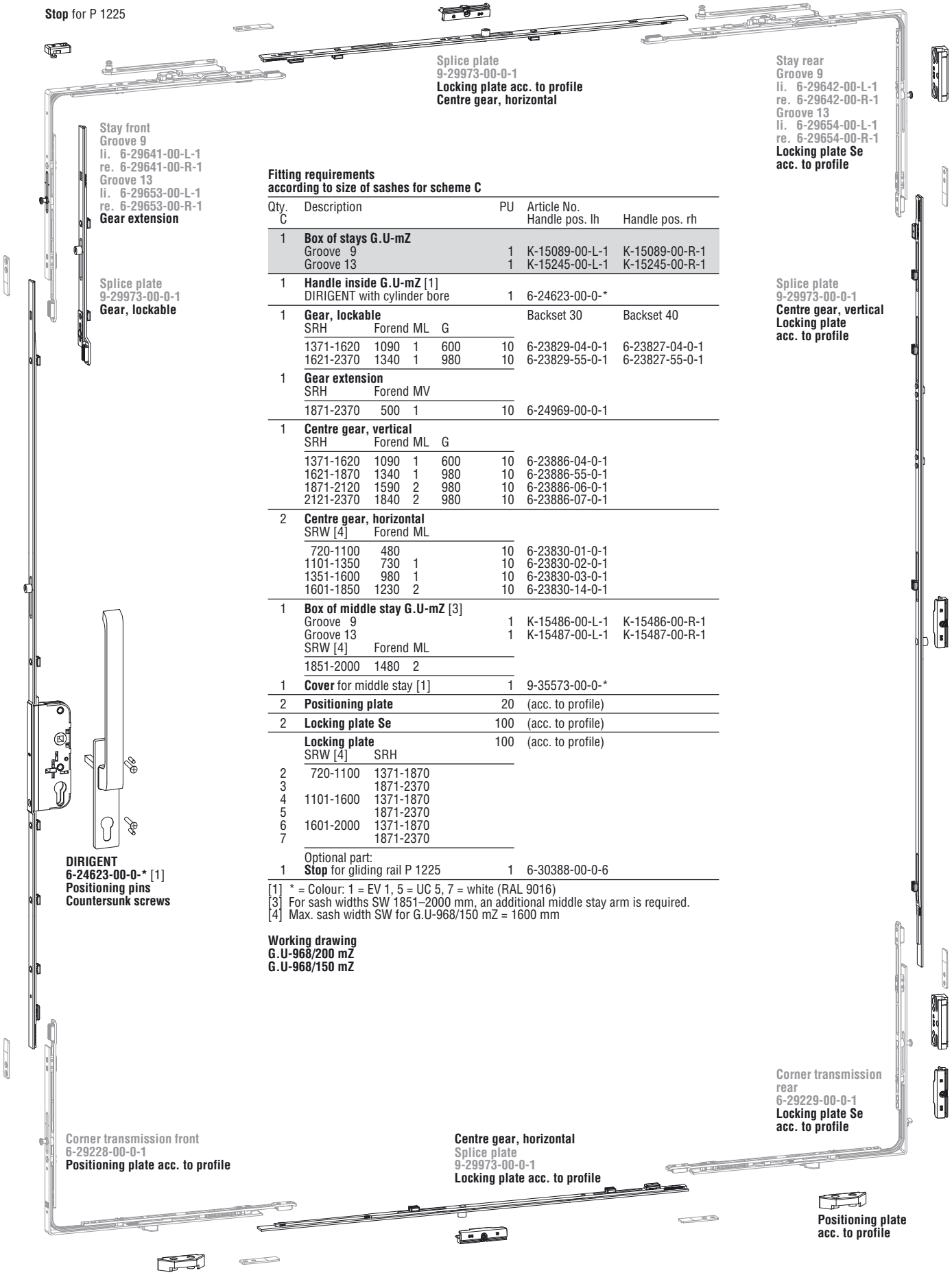
Qty. C	Description					PU	Article No. Handle pos. lh	Handle pos. rh
1	**Box of stays G.U-mZ C/ZH**							
	Groove 9					1	K-15380-00-L-1	K-15380-00-R-1
	Groove 13					1	K-15394-00-L-1	K-15394-00-R-1
1	**Rebate shoot bolt C/ZH**							
	SRH	Forend	ML	G				
	1371-1620	1090	1	495		10	6-25022-04-L-1	6-25022-04-R-1
	1621-2370	1340	1	703		10	6-25022-55-L-1	6-25022-55-R-1
1	**Extension for rebate shoot bolt**							
	SRH	Forend						
	1871-2370	500				10	6-25059-00-0-1	
1	**Centre gear, vertical**							
	SRH	Forend	ML	G				
	1371-1620	1090	1	600		10	6-23886-04-0-1	
	1621-1870	1340	1	980		10	6-23886-55-0-1	
	1871-2120	1590	2	980		10	6-23886-06-0-1	
	2121-2370	1840	2	980		10	6-23886-07-0-1	
2	**Centre gear, horizontal**							
	SRW [4]	Forend	ML					
	720-1100	480				10	6-23830-01-0-1	
	1101-1350	730	1			10	6-23830-02-0-1	
	1351-1600	980	1			10	6-23830-03-0-1	
	1601-1850	1230	2			10	6-23830-14-0-1	
1	**Box of middle stay G.U-mZ** [3]							
	Groove 9					1	K-15486-00-L-1	K-15486-00-R-1
	Groove 13					1	K-15487-00-L-1	K-15487-00-R-1
	SRW [4]	Forend	ML					
	1851-2000	1480	2					
1	**Cover** for middle stay [1]					1	9-35573-00-0-*	
2	**Positioning plate**					20	(acc. to profile)	
4	**Locking plate Se**					100	(acc. to profile)	
	Locking plate					100	(acc. to profile)	
	SRW	SRH						
2	720-1100	1371-1870						
3		1871-2370						
4	1101-1600	1371-1870						
5		1871-2370						
6	1601-2000	1371-1870						
7		1871-2370						
	Optional part:							
1	**Stop** for gliding rail P 1225					1	6-30388-00-0-6	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[3] For sash widths SW 1851–2000 mm, an additional middle stay arm is required.
[4] Max. sash width SW for G.U-968/150 mZ = 1600 mm

Working drawing
G.U-968/200 mZ
G.U-968/150 mZ

with lockable gear, groove position 9 and 13

Enhanced basic security



Fitting requirements
according to size of sashes for scheme C

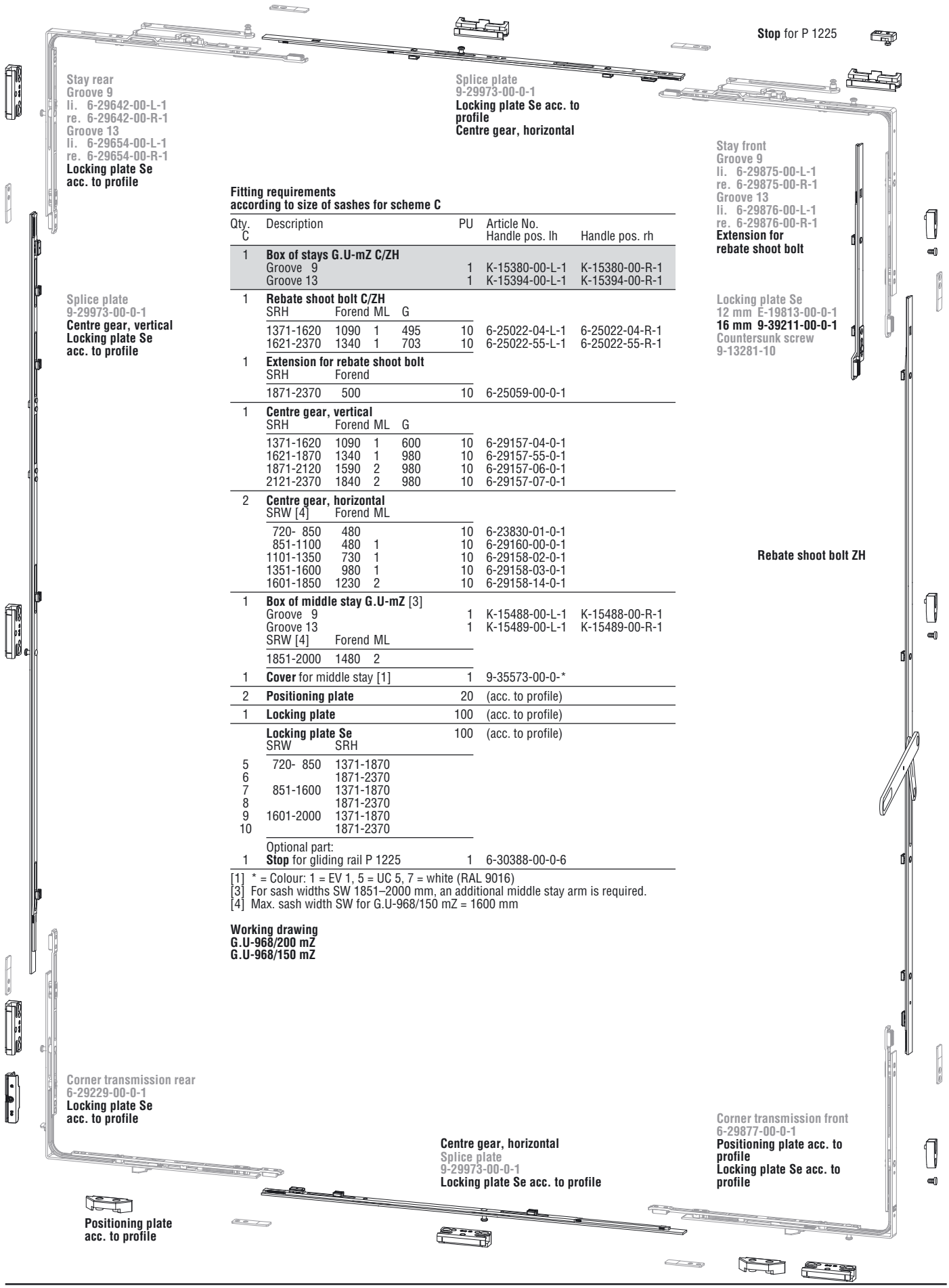
Qty. C	Description					PU	Article No. Handle pos. lh	Handle pos. rh
1	**Box of stays G.U-mZ**							
	Groove 9					1	K-15089-00-L-1	K-15089-00-R-1
	Groove 13					1	K-15245-00-L-1	K-15245-00-R-1
1	**Handle inside G.U-mZ** [1]							
	DIRIGENT with cylinder bore					1	6-24623-00-0-*	
1	**Gear, lockable**						Backset 30	Backset 40
	SRH	Forend	ML	G				
	1371-1620	1090	1	600		10	6-23829-04-0-1	6-23827-04-0-1
	1621-2370	1340	1	980		10	6-23829-55-0-1	6-23827-55-0-1
1	**Gear extension**							
	SRH	Forend	MV					
	1871-2370	500	1			10	6-24969-00-0-1	
1	**Centre gear, vertical**							
	SRH	Forend	ML	G				
	1371-1620	1090	1	600		10	6-23886-04-0-1	
	1621-1870	1340	1	980		10	6-23886-55-0-1	
	1871-2120	1590	2	980		10	6-23886-06-0-1	
	2121-2370	1840	2	980		10	6-23886-07-0-1	
2	**Centre gear, horizontal**							
	SRW [4]	Forend	ML					
	720-1100	480				10	6-23830-01-0-1	
	1101-1350	730	1			10	6-23830-02-0-1	
	1351-1600	980	1			10	6-23830-03-0-1	
	1601-1850	1230	2			10	6-23830-14-0-1	
1	**Box of middle stay G.U-mZ** [3]							
	Groove 9					1	K-15486-00-L-1	K-15486-00-R-1
	Groove 13					1	K-15487-00-L-1	K-15487-00-R-1
	SRW [4]	Forend	ML					
	1851-2000	1480	2					
1	**Cover** for middle stay [1]					1	9-35573-00-0-*	
2	**Positioning plate**					20	(acc. to profile)	
2	**Locking plate Se**					100	(acc. to profile)	
	Locking plate					100	(acc. to profile)	
	SRW [4]	SRH						
2	720-1100	1371-1870						
3		1871-2370						
4	1101-1600	1371-1870						
5		1871-2370						
6	1601-2000	1371-1870						
7		1871-2370						
	Optional part:							
1	**Stop** for gliding rail P 1225					1	6-30388-00-0-6	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[3] For sash widths SW 1851–2000 mm, an additional middle stay arm is required.
[4] Max. sash width SW for G.U-968/150 mZ = 1600 mm

Working drawing
G.U-968/200 mZ
G.U-968/150 mZ

with rebate shoot bolt, groove position 9 and 13

WK 2



Fitting requirements
according to size of sashes for scheme C

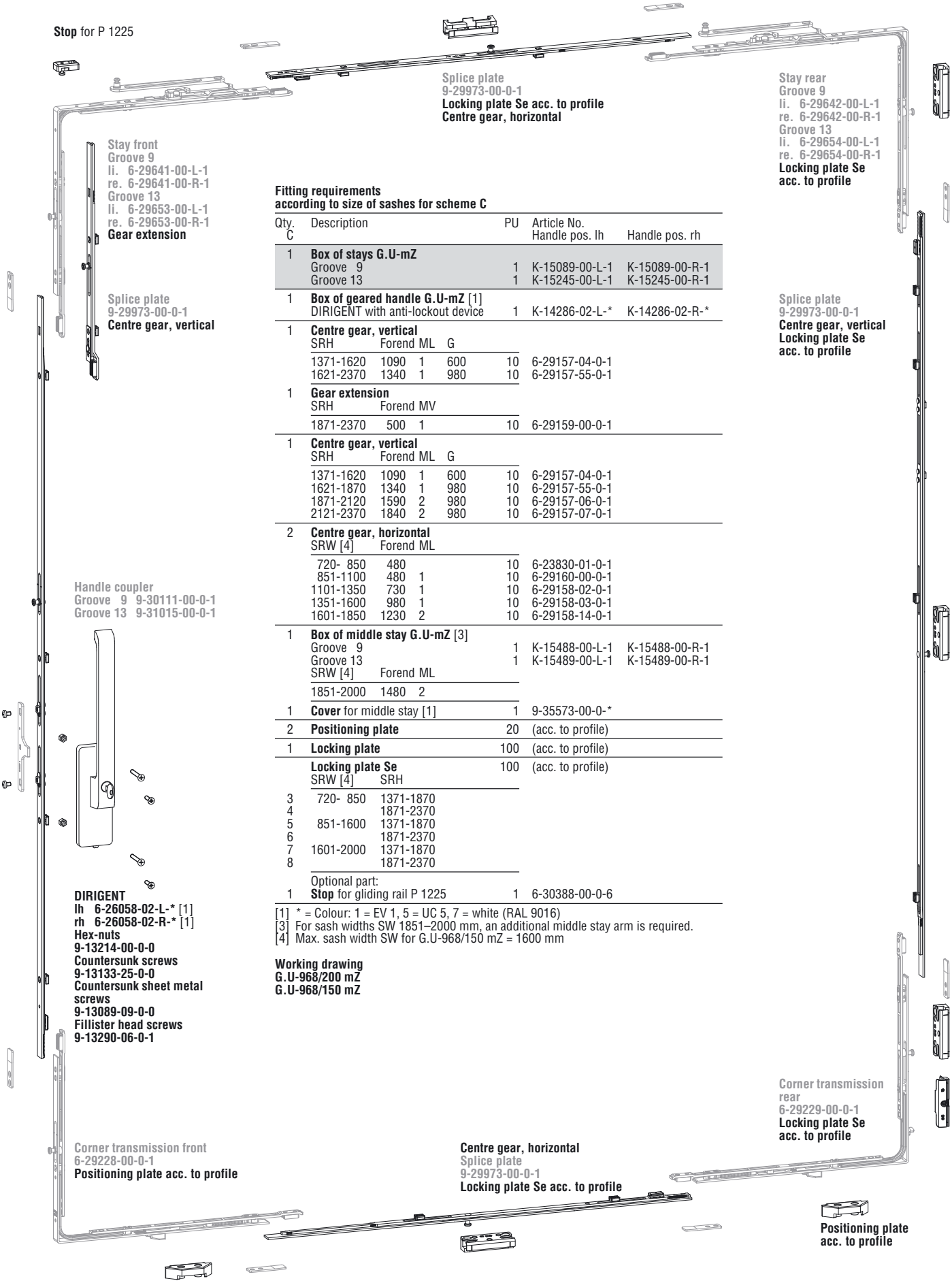
Qty. C	Description					PU	Article No. Handle pos. lh	Handle pos. rh
1	**Box of stays G.U-mZ C/ZH**							
	Groove 9					1	K-15380-00-L-1	K-15380-00-R-1
	Groove 13					1	K-15394-00-L-1	K-15394-00-R-1
1	**Rebate shoot bolt C/ZH**							
	SRH	Forend	ML	G				
	1371-1620	1090	1	495		10	6-25022-04-L-1	6-25022-04-R-1
	1621-2370	1340	1	703		10	6-25022-55-L-1	6-25022-55-R-1
1	**Extension for rebate shoot bolt**							
	SRH	Forend						
	1871-2370	500				10	6-25059-00-0-1	
1	**Centre gear, vertical**							
	SRH	Forend	ML	G				
	1371-1620	1090	1	600		10	6-29157-04-0-1	
	1621-1870	1340	1	980		10	6-29157-55-0-1	
	1871-2120	1590	2	980		10	6-29157-06-0-1	
	2121-2370	1840	2	980		10	6-29157-07-0-1	
2	**Centre gear, horizontal**							
	SRW [4]	Forend	ML					
	720- 850	480				10	6-23830-01-0-1	
	851-1100	480	1			10	6-29160-00-0-1	
	1101-1350	730	1			10	6-29158-02-0-1	
	1351-1600	980	1			10	6-29158-03-0-1	
	1601-1850	1230	2			10	6-29158-14-0-1	
1	**Box of middle stay G.U-mZ** [3]							
	Groove 9					1	K-15488-00-L-1	K-15488-00-R-1
	Groove 13					1	K-15489-00-L-1	K-15489-00-R-1
	SRW [4]	Forend	ML					
	1851-2000	1480	2					
1	**Cover** for middle stay [1]					1	9-35573-00-0-*	
2	**Positioning plate**					20	(acc. to profile)	
1	**Locking plate**					100	(acc. to profile)	
	Locking plate Se					100	(acc. to profile)	
	SRW	SRH						
5	720- 850	1371-1870						
6		1871-2370						
7	851-1600	1371-1870						
8		1871-2370						
9	1601-2000	1371-1870						
10		1871-2370						
	Optional part:							
1	**Stop** for gliding rail P 1225					1	6-30388-00-0-6	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[3] For sash widths SW 1851–2000 mm, an additional middle stay arm is required.
[4] Max. sash width SW for G.U-968/150 mZ = 1600 mm

Working drawing
G.U-968/200 mZ
G.U-968/150 mZ

with geared handle inside, groove position 9 and 13

WK 2



Fitting requirements
according to size of sashes for scheme C

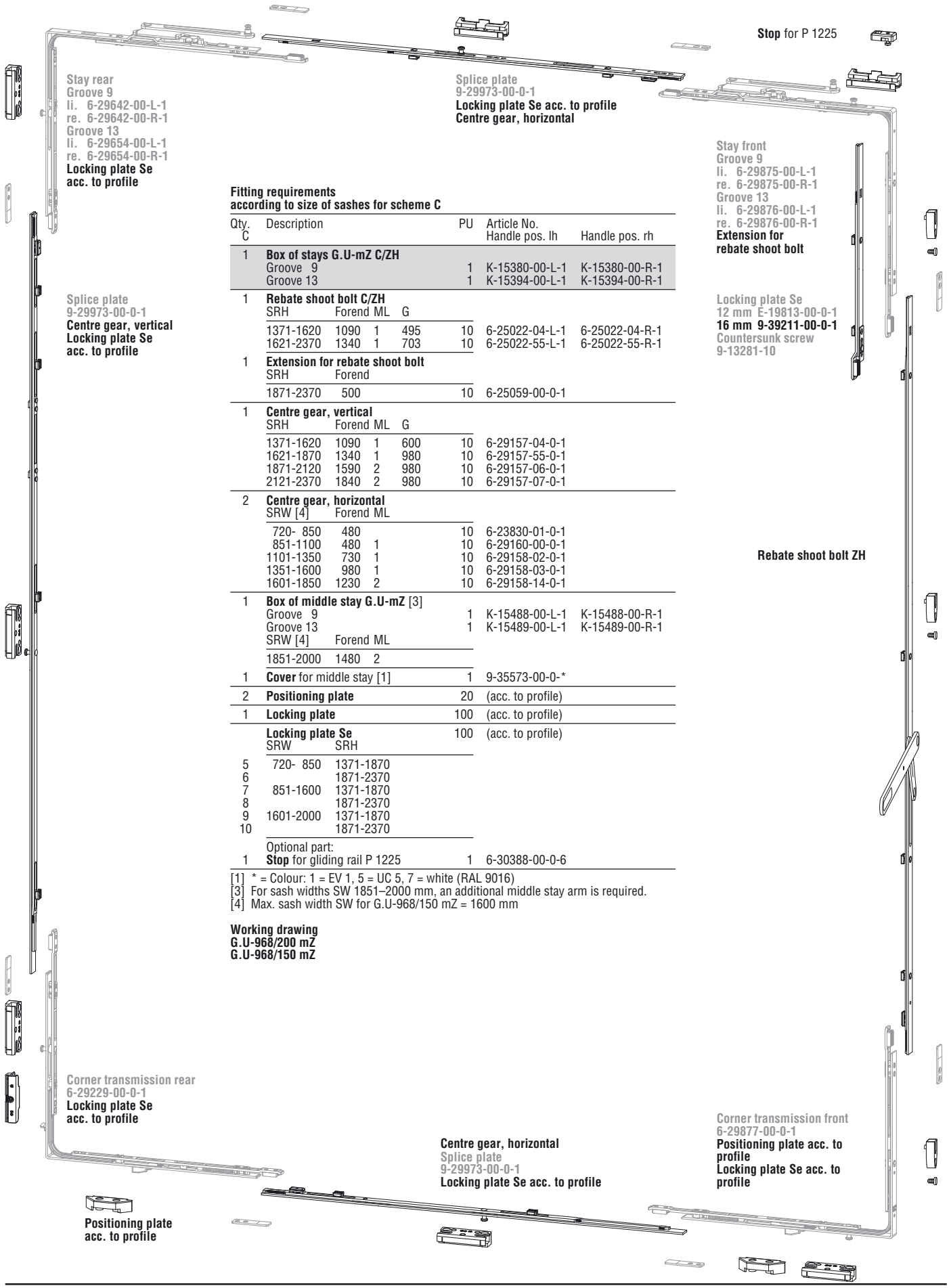
Qty. C	Description					PU	Article No. Handle pos. lh	Handle pos. rh
1	**Box of stays G.U-mZ**							
	Groove 9					1	K-15089-00-L-1	K-15089-00-R-1
	Groove 13					1	K-15245-00-L-1	K-15245-00-R-1
1	**Box of geared handle G.U-mZ** [1]							
	DIRIGENT with anti-lockout device					1	K-14286-02-L-*	K-14286-02-R-*
1	**Centre gear, vertical**							
	SRH	Forend	ML	G				
	1371-1620	1090	1	600		10	6-29157-04-0-1	
	1621-2370	1340	1	980		10	6-29157-55-0-1	
1	**Gear extension**							
	SRH	Forend	MV					
	1871-2370	500	1			10	6-29159-00-0-1	
1	**Centre gear, vertical**							
	SRH	Forend	ML	G				
	1371-1620	1090	1	600		10	6-29157-04-0-1	
	1621-1870	1340	1	980		10	6-29157-55-0-1	
	1871-2120	1590	2	980		10	6-29157-06-0-1	
	2121-2370	1840	2	980		10	6-29157-07-0-1	
2	**Centre gear, horizontal**							
	SRW [4]	Forend	ML					
	720- 850	480				10	6-23830-01-0-1	
	851-1100	480	1			10	6-29160-00-0-1	
	1101-1350	730	1			10	6-29158-02-0-1	
	1351-1600	980	1			10	6-29158-03-0-1	
	1601-1850	1230	2			10	6-29158-14-0-1	
1	**Box of middle stay G.U-mZ** [3]							
	Groove 9					1	K-15488-00-L-1	K-15488-00-R-1
	Groove 13					1	K-15489-00-L-1	K-15489-00-R-1
	SRW [4]	Forend	ML					
	1851-2000	1480	2					
1	**Cover** for middle stay [1]					1	9-35573-00-0-*	
2	**Positioning plate**					20	(acc. to profile)	
1	**Locking plate**					100	(acc. to profile)	
	Locking plate Se					100	(acc. to profile)	
	SRW [4]	SRH						
3	720- 850	1371-1870						
4		1871-2370						
5	851-1600	1371-1870						
6		1871-2370						
7	1601-2000	1371-1870						
8		1871-2370						
	Optional part:							
1	**Stop** for gliding rail P 1225					1	6-30388-00-0-6	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[3] For sash widths SW 1851–2000 mm, an additional middle stay arm is required.
[4] Max. sash width SW for G.U-968/150 mZ = 1600 mm

Working drawing
G.U-968/200 mZ
G.U-968/150 mZ

with rebate shoot bolt, groove position 9 and 13

WK 2



Fitting requirements
according to size of sashes for scheme C

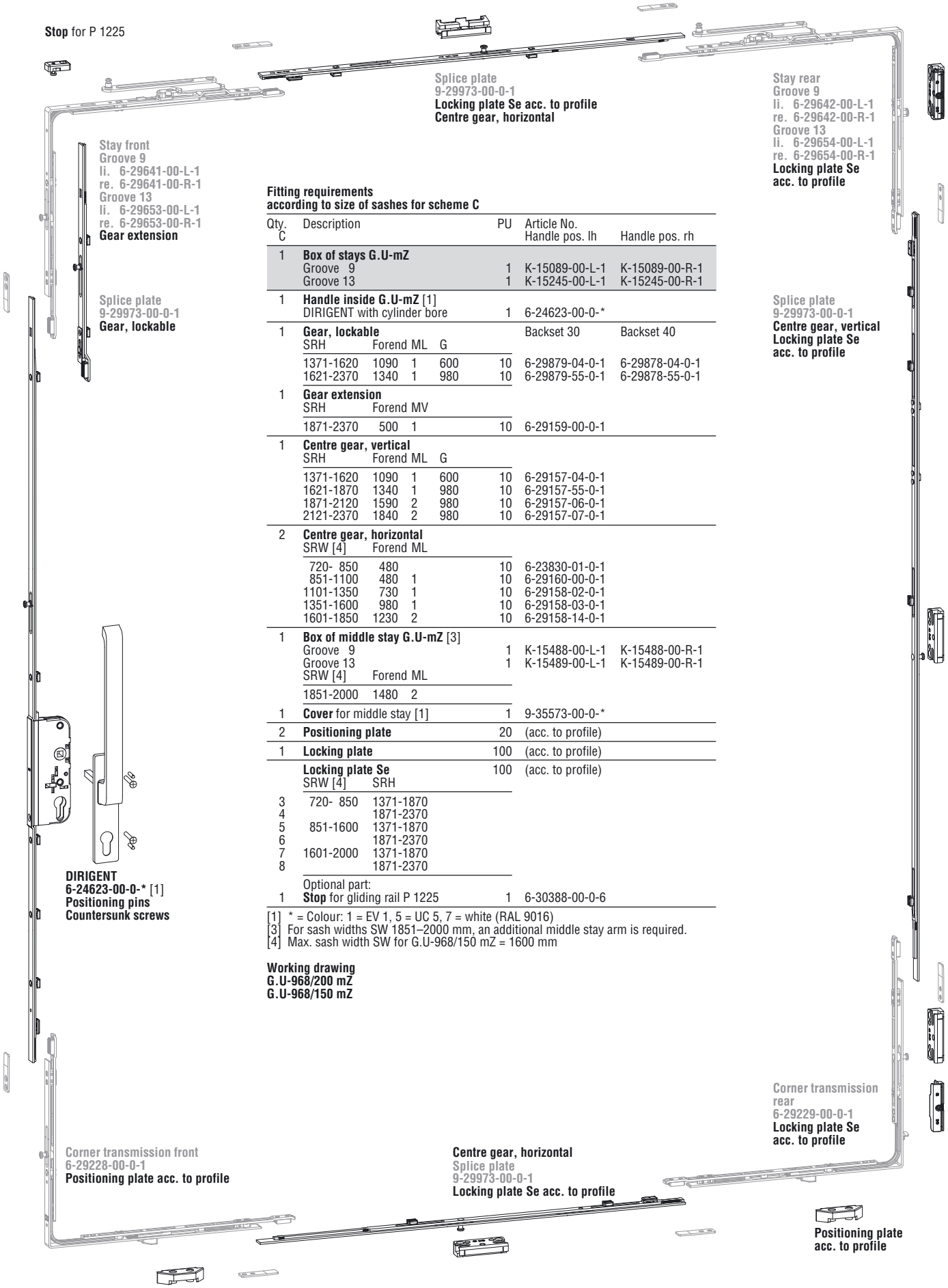
Qty. C	Description					PU	Article No. Handle pos. lh	Handle pos. rh
1	**Box of stays G.U-mZ C/ZH**							
	Groove 9					1	K-15380-00-L-1	K-15380-00-R-1
	Groove 13					1	K-15394-00-L-1	K-15394-00-R-1
1	**Rebate shoot bolt C/ZH**							
	SRH	Forend	ML	G				
	1371-1620	1090	1	495		10	6-25022-04-L-1	6-25022-04-R-1
	1621-2370	1340	1	703		10	6-25022-55-L-1	6-25022-55-R-1
1	**Extension for rebate shoot bolt**							
	SRH	Forend						
	1871-2370	500				10	6-25059-00-0-1	
1	**Centre gear, vertical**							
	SRH	Forend	ML	G				
	1371-1620	1090	1	600		10	6-29157-04-0-1	
	1621-1870	1340	1	980		10	6-29157-55-0-1	
	1871-2120	1590	2	980		10	6-29157-06-0-1	
	2121-2370	1840	2	980		10	6-29157-07-0-1	
2	**Centre gear, horizontal**							
	SRW [4]	Forend	ML					
	720- 850	480				10	6-23830-01-0-1	
	851-1100	480	1			10	6-29160-00-0-1	
	1101-1350	730	1			10	6-29158-02-0-1	
	1351-1600	980	1			10	6-29158-03-0-1	
	1601-1850	1230	2			10	6-29158-14-0-1	
1	**Box of middle stay G.U-mZ** [3]							
	Groove 9					1	K-15488-00-L-1	K-15488-00-R-1
	Groove 13					1	K-15489-00-L-1	K-15489-00-R-1
	SRW [4]	Forend	ML					
	1851-2000	1480	2					
1	**Cover** for middle stay [1]					1	9-35573-00-0-*	
2	**Positioning plate**					20	(acc. to profile)	
1	**Locking plate**					100	(acc. to profile)	
	Locking plate Se					100	(acc. to profile)	
	SRW	SRH						
5	720- 850	1371-1870						
6		1871-2370						
7	851-1600	1371-1870						
8		1871-2370						
9	1601-2000	1371-1870						
10		1871-2370						
	Optional part:							
1	**Stop** for gliding rail P 1225					1	6-30388-00-0-6	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[3] For sash widths SW 1851–2000 mm, an additional middle stay arm is required.
[4] Max. sash width SW for G.U-968/150 mZ = 1600 mm

Working drawing
G.U-968/200 mZ
G.U-968/150 mZ

with lockable gear, groove position 9 and 13

WK 2



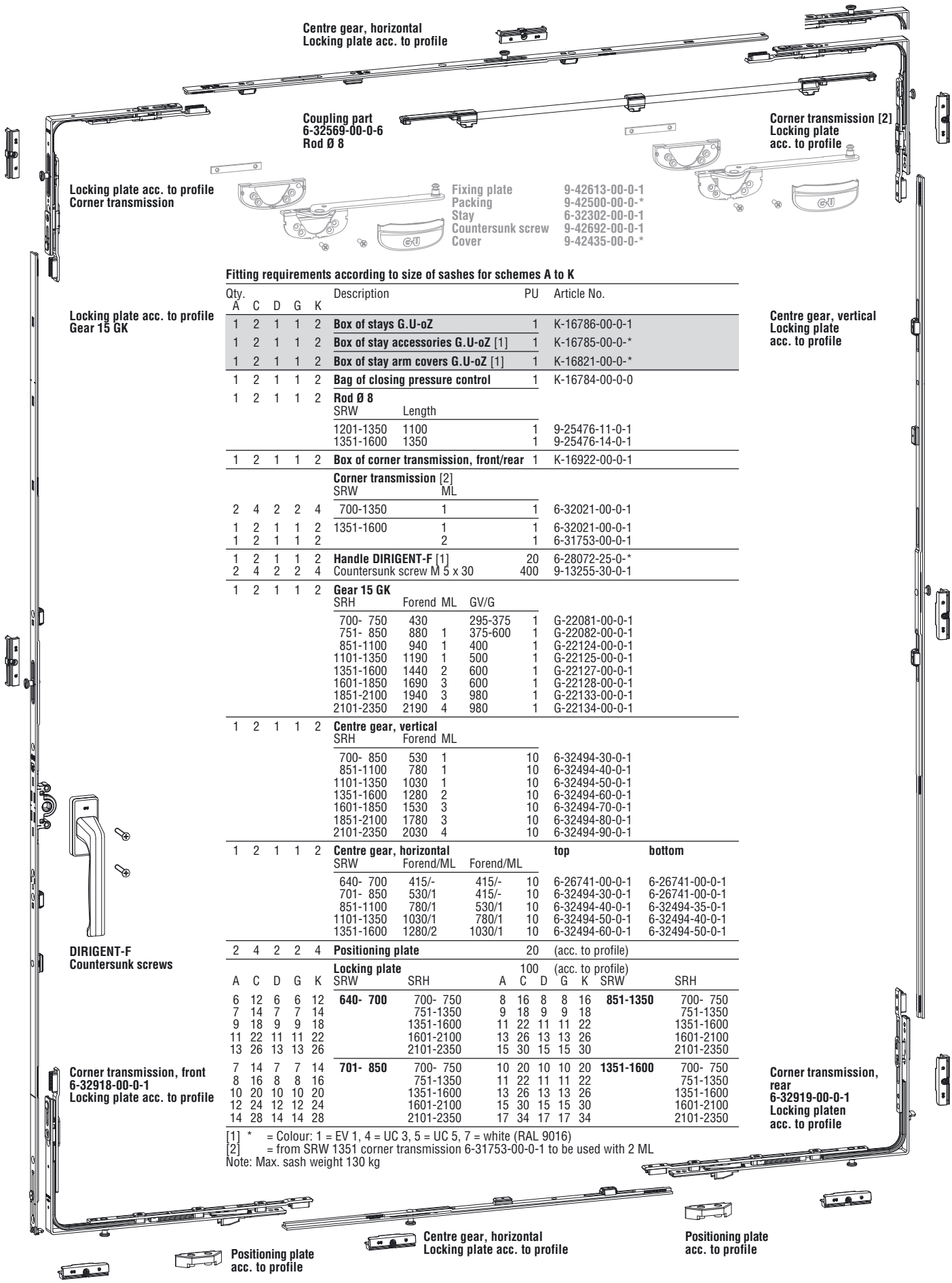
Fitting requirements
according to size of sashes for scheme C

Qty. C	Description				PU	Article No. Handle pos. lh	Handle pos. rh
1	**Box of stays G.U-mZ**						
	Groove 9				1	K-15089-00-L-1	K-15089-00-R-1
	Groove 13				1	K-15245-00-L-1	K-15245-00-R-1
1	**Handle inside G.U-mZ** [1]						
	DIRIGENT with cylinder bore				1	6-24623-00-0-*	
1	**Gear, lockable**					Backset 30	Backset 40
	SRH	Forend	ML	G			
	1371-1620	1090	1	600	10	6-29879-04-0-1	6-29878-04-0-1
	1621-2370	1340	1	980	10	6-29879-55-0-1	6-29878-55-0-1
1	**Gear extension**						
	SRH	Forend	MV				
	1871-2370	500	1		10	6-29159-00-0-1	
1	**Centre gear, vertical**						
	SRH	Forend	ML	G			
	1371-1620	1090	1	600	10	6-29157-04-0-1	
	1621-1870	1340	1	980	10	6-29157-55-0-1	
	1871-2120	1590	2	980	10	6-29157-06-0-1	
	2121-2370	1840	2	980	10	6-29157-07-0-1	
2	**Centre gear, horizontal**						
	SRW [4]	Forend	ML				
	720- 850	480			10	6-23830-01-0-1	
	851-1100	480	1		10	6-29160-00-0-1	
	1101-1350	730	1		10	6-29158-02-0-1	
	1351-1600	980	1		10	6-29158-03-0-1	
	1601-1850	1230	2		10	6-29158-14-0-1	
1	**Box of middle stay G.U-mZ** [3]						
	Groove 9				1	K-15488-00-L-1	K-15488-00-R-1
	Groove 13				1	K-15489-00-L-1	K-15489-00-R-1
	SRW [4]	Forend	ML				
	1851-2000	1480	2				
1	**Cover** for middle stay [1]				1	9-35573-00-0-*	
2	**Positioning plate**				20	(acc. to profile)	
1	**Locking plate**				100	(acc. to profile)	
	Locking plate Se				100	(acc. to profile)	
	SRW [4]	SRH					
3	720- 850	1371-1870					
4		1871-2370					
5	851-1600	1371-1870					
6		1871-2370					
7	1601-2000	1371-1870					
8		1871-2370					
	Optional part:						
1	**Stop** for gliding rail P 1225				1	6-30388-00-0-6	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[3] For sash widths SW 1851–2000 mm, an additional middle stay arm is required.
[4] Max. sash width SW for G.U-968/150 mZ = 1600 mm

Working drawing
G.U-968/200 mZ
G.U-968/150 mZ

Handle inside – gear 15, groove position 9 and 13



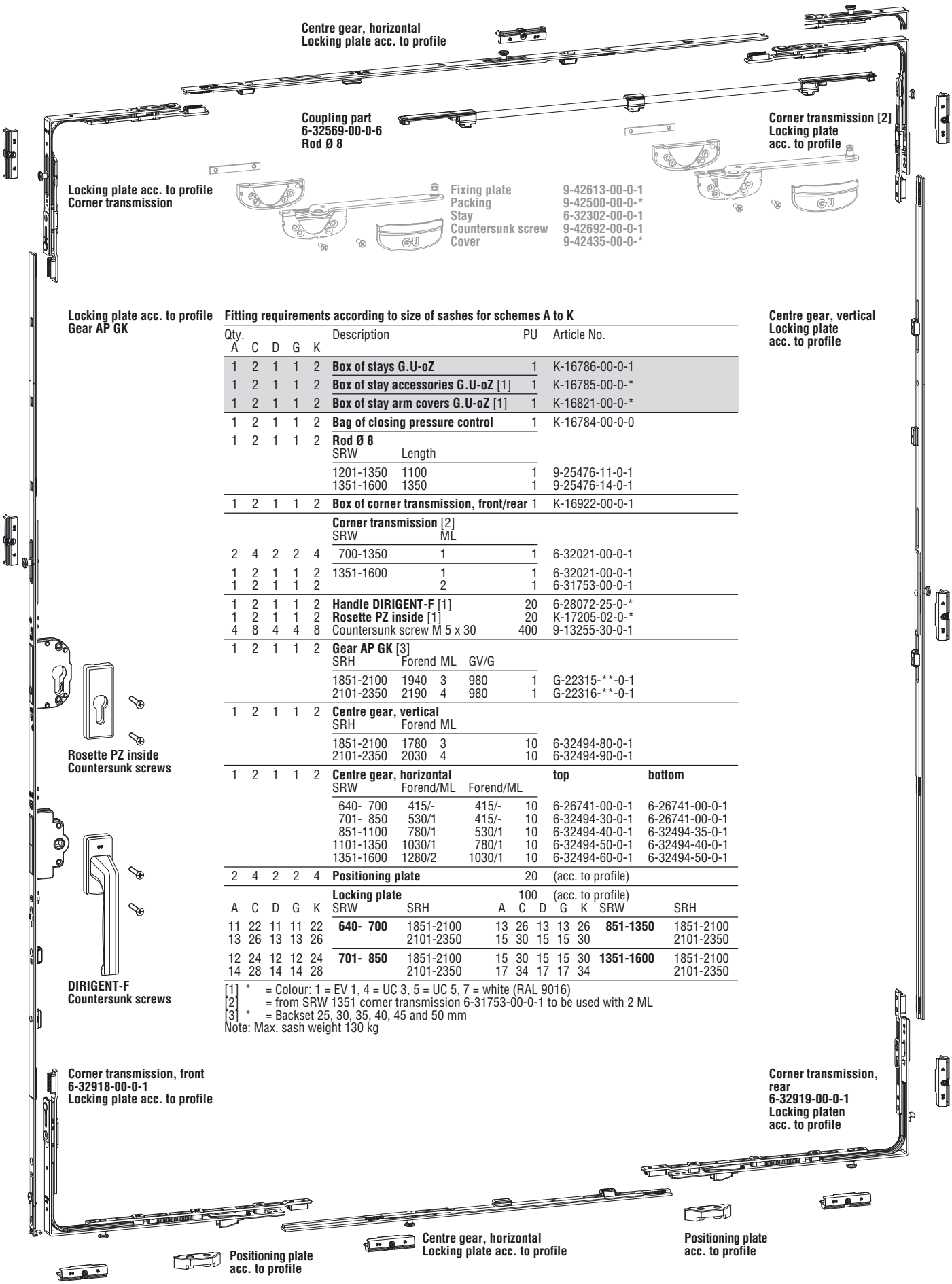
Fitting requirements according to size of sashes for schemes A to K

Qty. A	C	D	G	K	Description	PU	Article No.
1	2	1	1	2	**Box of stays G.U-oZ**	1	K-16786-00-0-1
1	2	1	1	2	**Box of stay accessories G.U-oZ** [1]	1	K-16785-00-0-*
1	2	1	1	2	**Box of stay arm covers G.U-oZ** [1]	1	K-16821-00-0-*
1	2	1	1	2	**Bag of closing pressure control**	1	K-16784-00-0-0
1	2	1	1	2	**Rod Ø 8**		
					SRW Length		
					1201-1350 1100	1	9-25476-11-0-1
					1351-1600 1350	1	9-25476-14-0-1
1	2	1	1	2	**Box of corner transmission, front/rear**	1	K-16922-00-0-1
					Corner transmission [2]		
					SRW ML		
2	4	2	2	4	700-1350 1	1	6-32021-00-0-1
1	2	1	1	2	1351-1600 1	1	6-32021-00-0-1
1	2	1	1	2	2	1	6-31753-00-0-1
1	2	1	1	2	**Handle DIRIGENT-F** [1]	20	6-28072-25-0-*
2	4	2	2	4	Countersunk screw M 5 x 30	400	9-13255-30-0-1
1	2	1	1	2	**Gear 15 GK**		
					SRH Forend ML GV/G		
					700- 750 430 295-375	1	G-22081-00-0-1
					751- 850 880 1 375-600	1	G-22082-00-0-1
					851-1100 940 1 400	1	G-22124-00-0-1
					1101-1350 1190 1 500	1	G-22125-00-0-1
					1351-1600 1440 2 600	1	G-22127-00-0-1
					1601-1850 1690 3 600	1	G-22128-00-0-1
					1851-2100 1940 3 980	1	G-22133-00-0-1
					2101-2350 2190 4 980	1	G-22134-00-0-1
1	2	1	1	2	**Centre gear, vertical**		
					SRH Forend ML		
					700- 850 530 1	10	6-32494-30-0-1
					851-1100 780 1	10	6-32494-40-0-1
					1101-1350 1030 1	10	6-32494-50-0-1
					1351-1600 1280 2	10	6-32494-60-0-1
					1601-1850 1530 3	10	6-32494-70-0-1
					1851-2100 1780 3	10	6-32494-80-0-1
					2101-2350 2030 4	10	6-32494-90-0-1
1	2	1	1	2	**Centre gear, horizontal**	**top**	**bottom**
					SRW Forend/ML Forend/ML		
					640- 700 415/- 415/-	10	6-26741-00-0-1 6-26741-00-0-1
					701- 850 530/1 415/-	10	6-32494-30-0-1 6-26741-00-0-1
					851-1100 780/1 530/1	10	6-32494-40-0-1 6-32494-35-0-1
					1101-1350 1030/1 780/1	10	6-32494-50-0-1 6-32494-40-0-1
					1351-1600 1280/2 1030/1	10	6-32494-60-0-1 6-32494-50-0-1
2	4	2	2	4	**Positioning plate**	20	(acc. to profile)
					Locking plate	100	(acc. to profile)

A	C	D	G	K	SRW	SRH	A	C	D	G	K	SRW	SRH
6	12	6	6	12	**640- 700**	700- 750	8	16	8	8	16	**851-1350**	700- 750
7	14	7	7	14		751-1350	9	18	9	9	18		751-1350
9	18	9	9	18		1351-1600	11	22	11	11	22		1351-1600
11	22	11	11	22		1601-2100	13	26	13	13	26		1601-2100
13	26	13	13	26		2101-2350	15	30	15	15	30		2101-2350
7	14	7	7	14	**701- 850**	700- 750	10	20	10	10	20	**1351-1600**	700- 750
8	16	8	8	16		751-1350	11	22	11	11	22		751-1350
10	20	10	10	20		1351-1600	13	26	13	13	26		1351-1600
12	24	12	12	24		1601-2100	15	30	15	15	30		1601-2100
14	28	14	14	28		2101-2350	17	34	17	17	34		2101-2350

[1] * = Colour: 1 = EV 1, 4 = UC 3, 5 = UC 5, 7 = white (RAL 9016)
[2] = from SRW 1351 corner transmission 6-31753-00-0-1 to be used with 2 ML
Note: Max. sash weight 130 kg

Handle inside – lockable gear AP, groove position 9 and 13



Fitting requirements according to size of sashes for schemes A to K

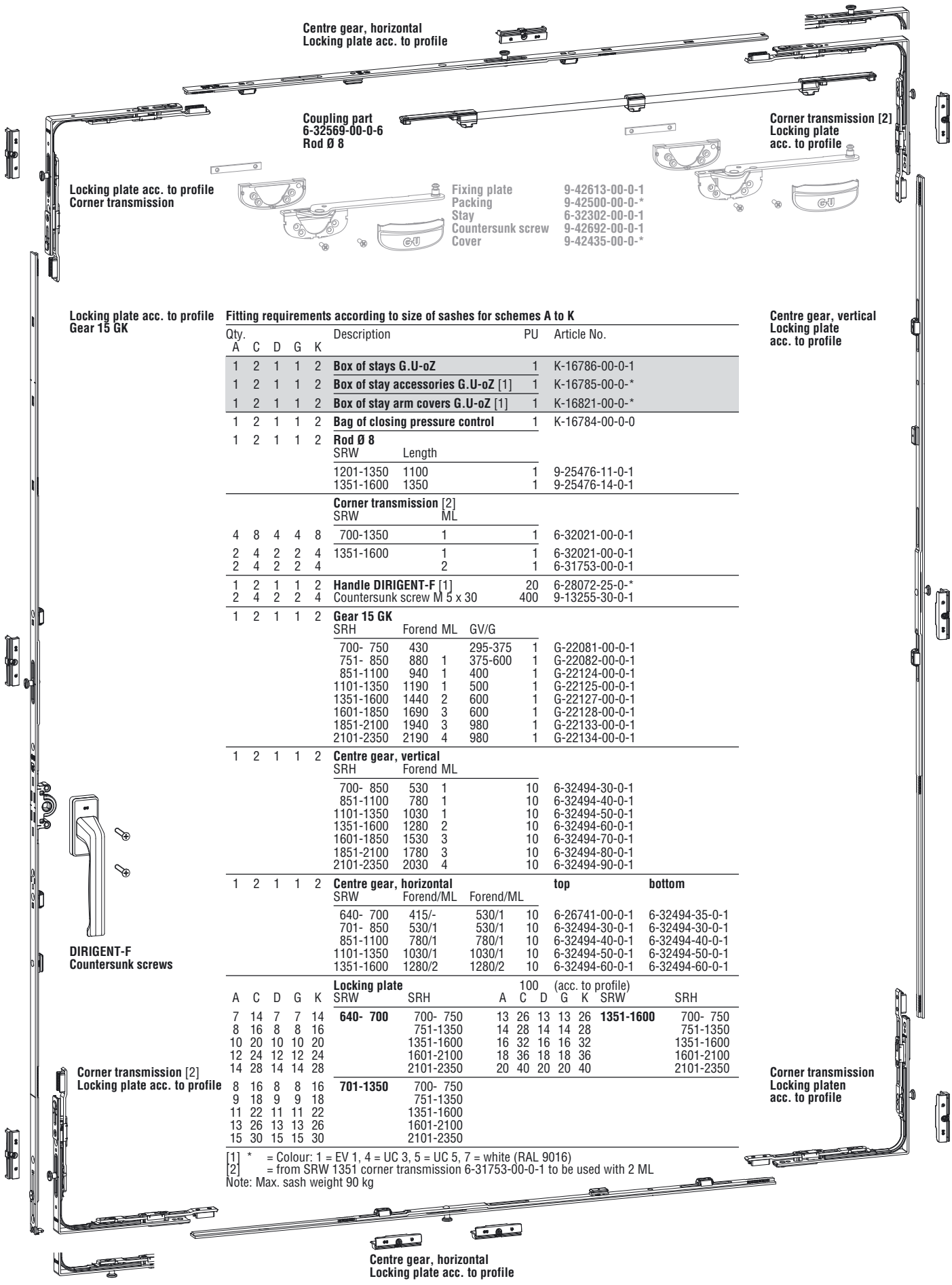
Qty. A	C	D	G	K	Description	PU	Article No.
1	2	1	1	2	**Box of stays G.U-oZ**	1	K-16786-00-0-1
1	2	1	1	2	**Box of stay accessories G.U-oZ** [1]	1	K-16785-00-0-*
1	2	1	1	2	**Box of stay arm covers G.U-oZ** [1]	1	K-16821-00-0-*
1	2	1	1	2	**Bag of closing pressure control**	1	K-16784-00-0-0
1	2	1	1	2	**Rod Ø 8** SRW / Length		
					1201-1350 / 1100	1	9-25476-11-0-1
					1351-1600 / 1350	1	9-25476-14-0-1
1	2	1	1	2	**Box of corner transmission, front/rear**	1	K-16922-00-0-1
					Corner transmission [2] SRW / ML		
2	4	2	2	4	700-1350 / 1	1	6-32021-00-0-1
1	2	1	1	2	1351-1600 / 1	1	6-32021-00-0-1
1	2	1	1	2	/ 2	1	6-31753-00-0-1
1	2	1	1	2	**Handle DIRIGENT-F** [1]	20	6-28072-25-0-*
1	2	1	1	2	**Rosette PZ inside** [1]	20	K-17205-02-0-*
4	8	4	4	8	Countersunk screw M 5 x 30	400	9-13255-30-0-1
1	2	1	1	2	**Gear AP GK** [3] SRH / Forend / ML / GV/G		
					1851-2100 / 1940 / 3 / 980	1	G-22315-**-0-1
					2101-2350 / 2190 / 4 / 980	1	G-22316-**-0-1
1	2	1	1	2	**Centre gear, vertical** SRH / Forend / ML		
					1851-2100 / 1780 / 3	10	6-32494-80-0-1
					2101-2350 / 2030 / 4	10	6-32494-90-0-1

1	2	1	1	2	**Centre gear, horizontal** SRW	Forend/ML	Forend/ML		**top**	**bottom**
					640- 700	415/-	415/-	10	6-26741-00-0-1	6-26741-00-0-1
					701- 850	530/1	415/-	10	6-32494-30-0-1	6-26741-00-0-1
					851-1100	780/1	530/1	10	6-32494-40-0-1	6-32494-35-0-1
					1101-1350	1030/1	780/1	10	6-32494-50-0-1	6-32494-40-0-1
					1351-1600	1280/2	1030/1	10	6-32494-60-0-1	6-32494-50-0-1
2	4	2	2	4	**Positioning plate**			20	(acc. to profile)	

A	C	D	G	K	**Locking plate** SRW	SRH	A	C	D	G	K	SRW	SRH	100 (acc. to profile)
11	22	11	11	22	**640- 700**	1851-2100	13	26	13	13	26	**851-1350**	1851-2100	
13	26	13	13	26		2101-2350	15	30	15	15	30		2101-2350	
12	24	12	12	24	**701- 850**	1851-2100	15	30	15	15	30	**1351-1600**	1851-2100	
14	28	14	14	28		2101-2350	17	34	17	17	34		2101-2350	

[1] * = Colour: 1 = EV 1, 4 = UC 3, 5 = UC 5, 7 = white (RAL 9016)
[2] = from SRW 1351 corner transmission 6-31753-00-0-1 to be used with 2 ML
[3] * = Backset 25, 30, 35, 40, 45 and 50 mm
Note: Max. sash weight 130 kg

Handle inside – gear 15, groove position 9 and 13



Fitting requirements according to size of sashes for schemes A to K

Qty. A	C	D	G	K	Description	PU	Article No.
1	2	1	1	2	**Box of stays G.U-oZ**	1	K-16786-00-0-1
1	2	1	1	2	**Box of stay accessories G.U-oZ** [1]	1	K-16785-00-0-*
1	2	1	1	2	**Box of stay arm covers G.U-oZ** [1]	1	K-16821-00-0-*
1	2	1	1	2	**Bag of closing pressure control**	1	K-16784-00-0-0
1	2	1	1	2	**Rod Ø 8** SRW / Length		
					1201-1350 / 1100	1	9-25476-11-0-1
					1351-1600 / 1350	1	9-25476-14-0-1
					Corner transmission [2] SRW / ML		
4	8	4	4	8	700-1350 / 1	1	6-32021-00-0-1
2	4	2	2	4	1351-1600 / 1	1	6-32021-00-0-1
2	4	2	2	4	2	1	6-31753-00-0-1
1	2	1	1	2	**Handle DIRIGENT-F** [1]	20	6-28072-25-0-*
2	4	2	2	4	Countersunk screw M 5 x 30	400	9-13255-30-0-1
1	2	1	1	2	**Gear 15 GK** SRH / Forend / ML / GV/G		
					700- 750 / 430 / / 295-375	1	G-22081-00-0-1
					751- 850 / 880 / 1 / 375-600	1	G-22082-00-0-1
					851-1100 / 940 / 1 / 400	1	G-22124-00-0-1
					1101-1350 / 1190 / 1 / 500	1	G-22125-00-0-1
					1351-1600 / 1440 / 2 / 600	1	G-22127-00-0-1
					1601-1850 / 1690 / 3 / 600	1	G-22128-00-0-1
					1851-2100 / 1940 / 3 / 980	1	G-22133-00-0-1
					2101-2350 / 2190 / 4 / 980	1	G-22134-00-0-1
1	2	1	1	2	**Centre gear, vertical** SRH / Forend / ML		
					700- 850 / 530 / 1	10	6-32494-30-0-1
					851-1100 / 780 / 1	10	6-32494-40-0-1
					1101-1350 / 1030 / 1	10	6-32494-50-0-1
					1351-1600 / 1280 / 2	10	6-32494-60-0-1
					1601-1850 / 1530 / 3	10	6-32494-70-0-1
					1851-2100 / 1780 / 3	10	6-32494-80-0-1
					2101-2350 / 2030 / 4	10	6-32494-90-0-1
1	2	1	1	2	**Centre gear, horizontal** SRW / Forend/ML / Forend/ML	**top**	**bottom**
					640- 700 / 415/- / 530/1	10	6-26741-00-0-1 / 6-32494-35-0-1
					701- 850 / 530/1 / 530/1	10	6-32494-30-0-1 / 6-32494-30-0-1
					851-1100 / 780/1 / 780/1	10	6-32494-40-0-1 / 6-32494-40-0-1
					1101-1350 / 1030/1 / 1030/1	10	6-32494-50-0-1 / 6-32494-50-0-1
					1351-1600 / 1280/2 / 1280/2	10	6-32494-60-0-1 / 6-32494-60-0-1

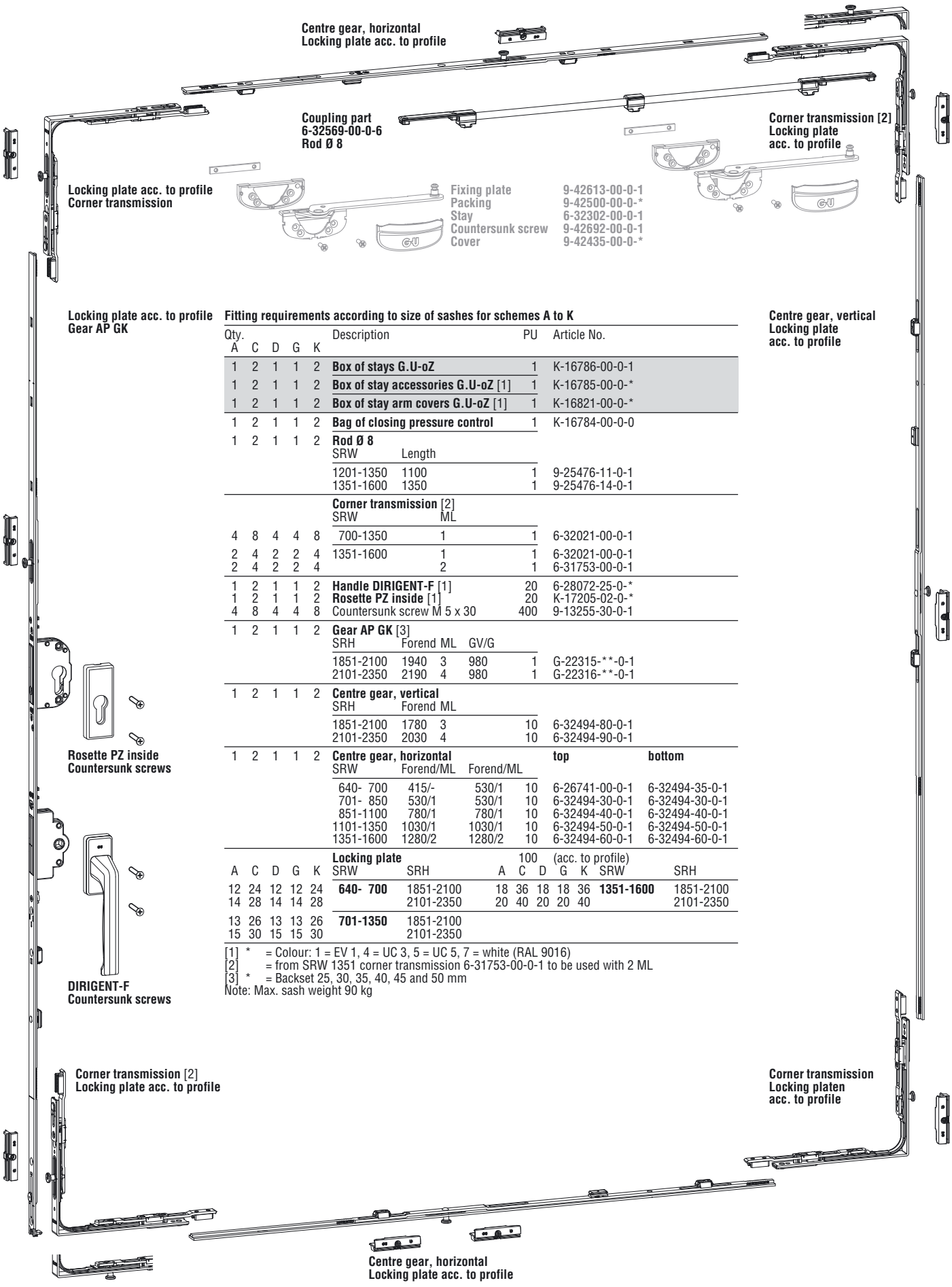
Locking plate 100 (acc. to profile)

A	C	D	G	K	SRW	SRH
7	14	7	7	14	**640- 700**	700- 750
8	16	8	8	16		751-1350
10	20	10	10	20		1351-1600
12	24	12	12	24		1601-2100
14	28	14	14	28		2101-2350
8	16	8	8	16	**701-1350**	700- 750
9	18	9	9	18		751-1350
11	22	11	11	22		1351-1600
13	26	13	13	26		1601-2100
15	30	15	15	30		2101-2350

A	C	D	G	K	SRW	SRH
13	26	13	13	26	**1351-1600**	700- 750
14	28	14	14	28		751-1350
16	32	16	16	32		1351-1600
18	36	18	18	36		1601-2100
20	40	20	20	40		2101-2350

[1] * = Colour: 1 = EV 1, 4 = UC 3, 5 = UC 5, 7 = white (RAL 9016)
[2] = from SRW 1351 corner transmission 6-31753-00-0-1 to be used with 2 ML
Note: Max. sash weight 90 kg

Handle inside – lockable gear AP, groove position 9 and 13



Fitting requirements according to size of sashes for schemes A to K

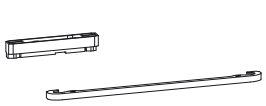
Qty. A	C	D	G	K	Description	PU	Article No.
1	2	1	1	2	**Box of stays G.U-oZ**	1	K-16786-00-0-1
1	2	1	1	2	**Box of stay accessories G.U-oZ** [1]	1	K-16785-00-0-*
1	2	1	1	2	**Box of stay arm covers G.U-oZ** [1]	1	K-16821-00-0-*
1	2	1	1	2	**Bag of closing pressure control**	1	K-16784-00-0-0
1	2	1	1	2	**Rod Ø 8**		
					SRW 1201-1350 Length 1100	1	9-25476-11-0-1
					SRW 1351-1600 Length 1350	1	9-25476-14-0-1
					Corner transmission [2] SRW / ML		
4	8	4	4	8	700-1350 / 1	1	6-32021-00-0-1
2	4	2	2	4	1351-1600 / 1	1	6-32021-00-0-1
2	4	2	2	4	1351-1600 / 2	1	6-31753-00-0-1
1	2	1	1	2	**Handle DIRIGENT-F** [1]	20	6-28072-25-0-*
1	2	1	1	2	**Rosette PZ inside** [1]	20	K-17205-02-0-*
4	8	4	4	8	Countersunk screw M 5 x 30	400	9-13255-30-0-1
1	2	1	1	2	**Gear AP GK** [3]		
					SRH 1851-2100 Forend 1940 ML 3 GV/G 980	1	G-22315-**-0-1
					SRH 2101-2350 Forend 2190 ML 4 GV/G 980	1	G-22316-**-0-1
1	2	1	1	2	**Centre gear, vertical**		
					SRH 1851-2100 Forend 1780 ML 3	10	6-32494-80-0-1
					SRH 2101-2350 Forend 2030 ML 4	10	6-32494-90-0-1
1	2	1	1	2	**Centre gear, horizontal**		**top** / **bottom**
					SRW 640- 700 Forend/ML 415/- Forend/ML 530/1	10	6-26741-00-0-1 / 6-32494-35-0-1
					SRW 701- 850 Forend/ML 530/1 Forend/ML 530/1	10	6-32494-30-0-1 / 6-32494-30-0-1
					SRW 851-1100 Forend/ML 780/1 Forend/ML 780/1	10	6-32494-40-0-1 / 6-32494-40-0-1
					SRW 1101-1350 Forend/ML 1030/1 Forend/ML 1030/1	10	6-32494-50-0-1 / 6-32494-50-0-1
					SRW 1351-1600 Forend/ML 1280/2 Forend/ML 1280/2	10	6-32494-60-0-1 / 6-32494-60-0-1

A	C	D	G	K	**Locking plate** SRW	SRH	100 (acc. to profile) A	C	D	G	K	SRW	SRH
12	24	12	12	24	**640- 700**	1851-2100	18	36	18	18	36	**1351-1600**	1851-2100
14	28	14	14	28		2101-2350	20	40	20	20	40		2101-2350
13	26	13	13	26	**701-1350**	1851-2100							
15	30	15	15	30		2101-2350							

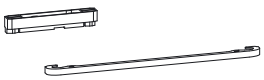
[1] * = Colour: 1 = EV 1, 4 = UC 3, 5 = UC 5, 7 = white (RAL 9016)
[2] = from SRW 1351 corner transmission 6-31753-00-0-1 to be used with 2 ML
[3] * = Backset 25, 30, 35, 40, 45 and 50 mm
Note: Max. sash weight 90 kg

Doors and windows with sash width SW up to 2000 mm and sash weight up to 200 kg – fitting groove 16 mm

End cap 9-34523-00-0-*
Gliding rail P 1225
Cover rail P 1480



Stay arm glider 6-22755-00-0-0
Stay arm cover 9-35573-00-0-*



Gliding rail P 1225
End cap 9-34523-00-0-*
Cover rail P 1480

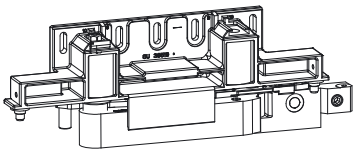
Fitting requirements according to size of sashes for schemes A to K

Quantity A	C	D	G	K	Description [2]	PU	Article No. Handle pos. lh	Handle pos. rh
1	2•	1	1	2•	**Box of runners G.U-968/200** Contents	1	K-15268-00-L-0	K-15268-00-R-0
					1 Runner, front 1 Runner, rear			
		1			**Positioning pin D** for control part	1	9-39897-00-0-1	
1	2	1	1	2	**Bag of profiles G.U-968/200** [1] Contents			
					1 Rod Ø 10 mm 1 Gliding rail P 1225 1 Running rail P 1213 1 Cover rail P 1480 1 Cover rail P 1603 1 Box of accessories			
					SW			
					740- 850	1	K-15269-20-0-*	
					851-1100	1	K-15269-25-0-*	
					1101-1350	1	K-15269-30-0-*	
					1351-1600	1	K-15269-35-0-*	
					1601-1850	1	K-15269-40-0-*	
					1851-2000	1	K-15269-45-0-*	

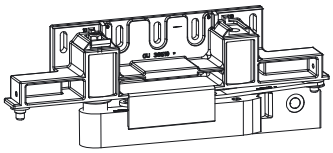
[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[2] • = 1 box for handle pos. lh, 1 box for handle pos. rh

Note for G.U-968/200 mZ:
For sashes with heavy glazing, tandem runners are required.

Working drawings
G.U-968/200 mZ 0-44709
G.U-968/200 mZ Scheme C 0-43861

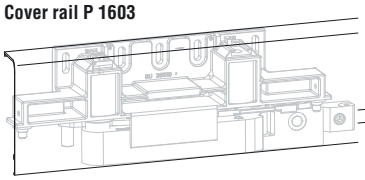


Runner, front lh 6-32332-00-L-0
rh 6-32332-00-R-0



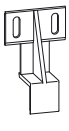
Runner, rear lh 6-29557-00-L-0
rh 6-29557-00-R-0

Cover rail P 1603



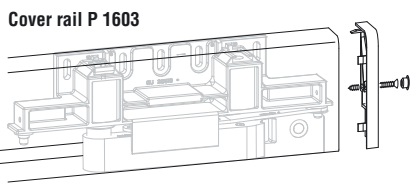
Cover 9-26687-00-0-*
Countersunk screw 9-13151-38-0-0
End cap 9-38520-00-L-*

Support
9-38527-00-0-0

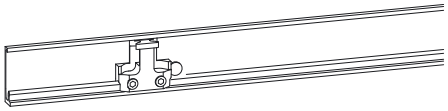


Rod Ø 10 mm
Guide 6-29750-00-0-1

Cover rail P 1603



End cap 9-38520-00-R-*
Countersunk screw 9-13151-38-0-0
Cover 9-26687-00-0-*

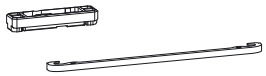


Running rail P 1213
Control part 6-33328-00-0-*
Positioning pin D for control part

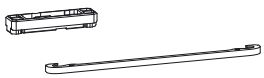
Running rail P 1213
Spring-loaded buffer 6-29564-00-0-*

Doors and windows with sash width SW up to 1600 mm and sash weight up to 150 kg – fitting groove 16 mm

End cap 9-34523-00-0-*
Gliding rail P 1225
Cover rail P 1480



Stay arm glider 6-22755-00-0-0
Stay arm cover 9-35573-00-0-*



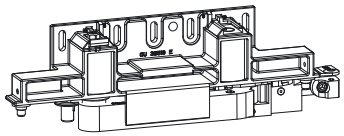
Gliding rail P 1225
End cap 9-34523-00-0-*
Cover rail P 1480

Fitting requirements according to size of sashes for schemes A to K

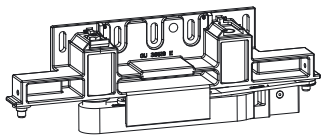
Quantity A	C	D	G	K	Description [2]	PU	Article No. Handle pos. lh	Handle pos. rh
1	2•	1	1	2•	**Box of runners G.U-968/150** Contents	1	K-15278-00-L-0	K-15278-00-R-0
					1 Runner, front 1 Runner, rear			
		1			**Positioning pin D** for control part	1	9-39897-00-0-1	
1	2	1	1	2	**Bag of profiles G.U-968/150** [1] Contents			
					1 Rod Ø 8 mm 1 Gliding rail P 1225 1 Running rail P 1300 1 Cover rail P 1480 1 Cover rail P 1608 1 Box of accessories			
					SW			
					600- 850	1	K-15279-20-0-*	
					851-1100	1	K-15279-25-0-*	
					1101-1350	1	K-15279-30-0-*	
					1351-1600	1	K-15279-35-0-*	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[2] • = 1 box for handle pos. lh, 1 box for handle pos. rh

Working drawings
G.U-968/150 mZ 0-43905
G.U-968/150 mZ Scheme C 0-43861
G.U-968/150 oZ 0-44495

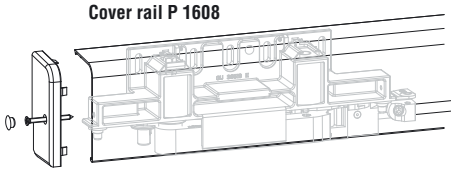


Runner, front lh 6-32545-00-L-0
rh 6-32545-00-R-0



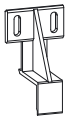
Runner, rear lh 6-29561-00-L-0
rh 6-29561-00-R-0

Cover rail P 1608



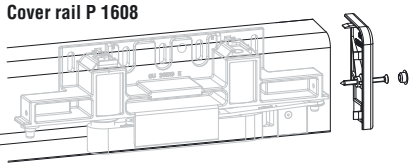
Cover 9-26687-00-0-*
Countersunk screw 9-13151-38-0-0
End cap 9-38543-00-L-*

Support
9-38527-00-0-0



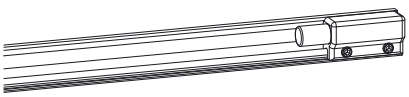
Rod Ø 8 mm
Guide 6-24764-00-0-1

Cover rail P 1608



End cap 9-38543-00-R-*
Countersunk screw 9-13151-38-0-0
Cover 9-26687-00-0-*

Running rail P 1300
Control part 6-33329-00-0-*
Positioning pin D for control part



Running rail P 1300
Spring-loaded buffer 6-29565-00-0-*

Doors and windows with sash width SW up to 1600 mm and sash weight up to 90 kg – fitting groove 16 mm

End cap **9-34523-00-0-***
Gliding rail **P 1225**
Cover rail **P 1480**

Stay arm glider **6-22755-00-0-0**

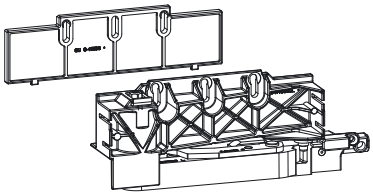
Gliding rail **P 1225**
End cap **9-34523-00-0-***
Cover rail **P 1480**

Fitting requirements according to size of sashes for schemes A to K

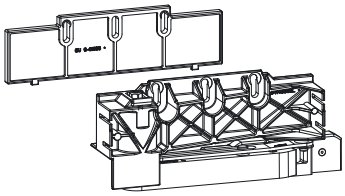
Quantity A	C	D	G	K	Description [2]	PU	Article No. Handle pos. lh	Handle pos. rh
1	2•	1	1	2•	**Box of runners G.U-90**	1	K-16656-00-L-0	K-16656-00-R-0
					Contents			
					1 Runner, front 1 Runner, rear			
1	2	1	1	2	**Bag of packings G.U-90**	1	K-16657-00-0-6	
					Contents			
					2 Packings runner 2 Adapter sleeves for end caps 2 ABC Spax screws			
		1			**Positioning pin D** for control part	1	9-39897-00-0-1	
1	2	1	1	2	**Bag of profiles G.U-968/150** [1]			
					Contents			
					1 Rod Ø 8 mm 1 Gliding rail P 1225 1 Running rail P 1300 1 Cover rail P 1480 1 Cover rail P 1608 1 Box of accessories			
					SW			
					600- 850	1	K-15279-20-0-*	
					851-1100	1	K-15279-25-0-*	
					1101-1350	1	K-15279-30-0-*	
					1351-1600	1	K-15279-35-0-*	

[1] * = Colour: 1 = EV 1, 5 = UC 5, 7 = white (RAL 9016)
[2] • = 1 box for handle pos. lh, 1 box for handle pos. rh

Working drawing
G.U-90 oZ 0-44424

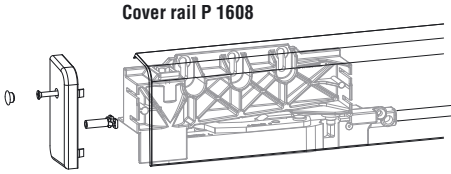


Packing runner **9-41596-00-0-6**
Runner, front lh **6-32546-00-L-0**
rh **6-32546-00-R-0**



Packing runner **9-41596-00-0-6**
Runner, rear lh **6-31759-00-L-0**
rh **6-31759-00-R-0**

Cover rail P 1608

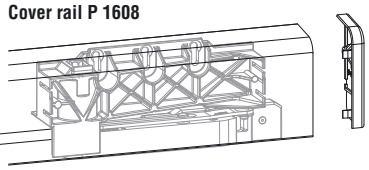


Cover **9-26687-00-0-***
ABC Spax screw **H-00109-20-0-3**
End cap **9-38543-00-L-***
Adapter sleeve **9-41597-01-0-6**

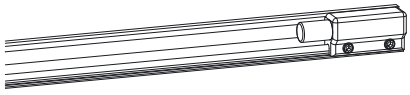
Support
9-38527-00-0-0

Rod **Ø 8 mm**
Guide **6-24764-00-0-1**

Cover rail P 1608



Adapter sleeve **9-41597-01-0-6**
End cap **9-38543-00-R-***
ABC Spax screw **H-00109-20-0-3**
Cover **9-26687-00-0-***



Running rail **P 1300**
Spring-loaded buffer **6-29565-00-0-***

Running rail **P 1300**
Control part **6-33329-00-0-***
Positioning pin D for control part

Parallel slide and tilt fittings G.U-968/200 mZ, G.U-968/150 mZ, G.U-968/150 oZ, G.U-90 oZ

Application	Description	PU	Article No.
G.U-968/200 mZ, G.U-968/150 mZ	**Aluminium windows and patio doors**		
Assembly of handles	Drilling jig for geared handle	1	6-24697-00-0-0
	Drilling jig for handle inside and handle both sides	1	6-24025-00-0-1
	Stop for drilling jigs 6-24697 and 6-24025	1	9-27406-00-0-1
	Drilling jig for lockable gear	1	6-25745-00-0-1
Assembly of runners, stays, gliding and running rail	Drilling jig for runners, support and stay G.U-oZ	1	6-34878-99-0-0
	Drilling jig for runners and support	1	6-33342-00-0-0
	Drilling jig for gliding and running rail	1	6-24696-00-0-1
	Drilling jig for stop pin (control part scheme D)	1	6-30447-00-0-0
	Positioning jig for gliding rail	1	6-23246-00-0-0
	Positioning jig for running rail	1	6-23241-00-0-0
G.U-968/150 oZ	**Aluminium windows and patio doors**		
Assembly of handles	Drilling jig for handle	1	6-22459-00-0-0
	Stop for 6-22459 – fixed gear position	1	9-27406-00-0-1
	Drilling jig with stop for gear AP 25 to AP 50	1	6-25156-00-0-9
Assembly of runners, stays, gliding and running rail	Drilling jig for runners, support and stay G.U-oZ	1	6-34878-99-0-0
	Drilling jig for runners and support	1	6-33342-00-0-0
	Drilling jig for gliding and running rail	1	6-24696-00-0-1
	Drilling jig for stop pin (control part scheme D)	1	6-30447-00-0-0
	Positioning jig for gliding rail	1	6-23246-00-0-0
	Positioning jig for running rail	1	6-23241-00-0-0
Assembly of locking plates	1 set of positioning jigs for locking plates, fixed gear position length of locking plates 55 mm	1	6-32644-00-0-0
	1 positioning jigs for locking plates SRW 640- 700	1	6-33007-04-0-0
G.U-90 oZ	**Aluminium windows and patio doors**		
Assembly of handles	Drilling jig for handle	1	6-22459-00-0-0
	Stop for 6-22459 – fixed gear position	1	9-27406-00-0-1
	Drilling jig with stop for gear AP 25 to AP 50	1	6-25156-00-0-9
Assembly of runners, stays, gliding and running rail	Drilling jig for runners and support	1	9-30424-00-0-0
	Drilling jig for gliding and running rail	1	6-24696-00-0-1
	Drilling jig for stop pin (control part scheme D)	1	6-30447-00-0-0
	Positioning jig for gliding rail	1	6-23246-00-0-0
	Positioning jig for running rail	1	6-23241-00-0-0
Assembly of locking plates	1 set of positioning jigs for locking plates, fixed gear position length of locking plates 55 mm	1	6-32644-00-0-0
	1 positioning jigs for locking plates SRW 640- 700	1	6-33007-04-0-0

Order catalogue part 4
Slide-fold fittings for aluminium windows and patio doors

Contents

The present catalogue part contains all slide-fold fittings and accessories according to the latest state of the art.
The following indications will make you familiar with the concept of the catalogue and help you to handle it easily.

Catalogue structure

The present catalogue part is structured in the following way:
– Optional parts and turn handles
– Sets
– Drilling and assembly tools
– Tilt locking plates, locking plates

Optional parts and turn handles

The option pages show you optional parts and turn handles for all slide-fold fittings at a glance. All supplements of standard versions are clearly arranged.

Locking mechanisms

Fitting requirements according to sash size and scheme
The illustrations of the locking mechanisms are supplemented by corresponding parts tables helping to determine the hardware composition.
Parts supplementing standard versions are clearly presented and can be easily selected.

Runners, profiles and hinges

Fitting requirements for schemes 321 to 743
The illustrations of the fittings are supplemented by corresponding parts tables helping to determine the hardware composition.
Parts supplementing standard versions are clearly presented and can be easily selected.

Drilling and positioning jigs

Drilling jigs, positioning jigs and auxiliary tools for hardware assembly are grouped according to fitting types.

Tilt locking plates, locking plates and hinges

Tilt locking plates, locking plates and hinges are grouped according to profile system.

Order numbers

The order number gives information about
– the article
– its size
– its application - e.g. DIN lh or DIN rh
– its colour/finish

Example
Order number
9-33492-00-0-7

9-33492- - -	Article number
- -01- -	Size
- - -L-	Left hand assembly
- - -R-	Right hand assembly
- - -0-	Usable on both sides
- - - -1	F 1/EV 1, natural (silver colour), fer**GU**ard*silver
- - - -2	F 2/EV 2, champagne colour
- - - -3	F 3, brass colour (gold colour)
- - - -4	UC 3, medium bronze (medium brown)
- - - -A	F 4, bronze colour
- - - -C	Titanium colour
- - - -5	UC 5, dark bronze (dark brown RAL 8022)
- - - -6	onyx matt (black RAL 9005)
- - - -7	white (RAL 9016)
- - - -7T	white (RAL 9010)
- - - -8	Stainless steel (stainless steel colour)
- - - -*	Surface treatment variable (available colours see price list)

Prices

Single part price list "Total programme"
The prices are listed by ascending article numbers.

Additional sales documentation

Apart from the order catalogue, the following documentation on slide-fold fittings is available:
– Brochures and leaflets informing about product features and advantages
– Presentation boards of all fitting versions
– Working drawings with mounting instructions
– Instructions for maintenance and care

Slide-fold fittings
for aluminium windows and patio doors

Application

Range of applications for G.U slide-fold fittings:
– Slide-fold doors with 3 to 7 sashes,
– Slide-fold windows with 3 to 7 sashes,
each with running and gliding rails.

Locking mechanisms

Slide-fold locking mechanisms, inward opening
The locking mechanisms for inward opening slide-fold windows and patio doors feature one handle operation. Gear side with carrier for geared handle or lockable mill-in gears with 25 to 50 mm backset prepared for the installation of a profile cylinder.
All locking parts are designed for Euro groove 15/20 mm. The locking pins of locking mechanism and corner transmissions are adjustable. The clampable locking plates are adjustable to allow for optimum gasket pressure.
From sash widths and heights over 1200 mm, middle locks are used. Corner transmissions are provided with rust-proof 4-leaf stainless steel springs.
SW 355-1000 mm
SH -2400 mm

Runners, profiles and hinges

Slide-fold fittings G.U-822
Bottom running fittings for single sashes up to 80 kg, with 4-wheel carriages, adjustable for various sash overlap dimensions, height adjustable + 4 mm or -1.5 mm. Wheels made of fabric reinforced laminated plastic with ball bearing. Sash weight up to 80 kg

Slide-fold fittings G.U-825
Top running fittings for single sashes up to 80 kg, with 4-wheel carriages, adjustable for various sash overlap dimensions, height adjustable + 4 mm or -1.5 mm. Wheels made of fabric reinforced laminated plastic with ball bearing. Sash weight up to 80 kg

Tilt locking plates, locking plates

Frame profile specific tilt locking plates and locking plates according to table (see at the end of this catalogue chapter).

Drilling jigs, positioning jigs

Drilling jigs and other tools for hardware assembly are to be found at the end of this catalogue chapter and also in the respective working drawings.

Geared handles DIRIGENT, SPACIO and ADAGIO-A

The geared handles with concealed fixings are made of aluminium. The rosettes are provided with a rugged detent device. Lockable and removable handles as well as handles SPACIO with extended carrier fork complete the programme.

uncoated	without surface coating
F 1/EV 1	silver colour
UC 5	dark bronze
black	black (RAL 9005)
white	white (RAL 9016 or RAL 9010)

Turn handles DIRIGENT [1]

The handles are made of aluminium with concealed fixings. The rosettes have a robust retention feature and fixed cams. Lockable handles complete the programme.

Standard colours:

F 1/EV 1	silver colour
F 2/EV 2	new silver colour
F 3	gold colour
F 4	light brown
dark brown	dark brown (RAL 8022)
black	black (RAL 9005)
white	white (RAL 9016 or RAL 9010)

[1] More turn handles see part 3 of the present order catalogue.

Standard handles

Standard version for slide-fold fittings G.U-822 and G.U-825 with carrier: geared handle SPACIO;
standard version for slide-fold fittings G.U-822 and G.U-825 with mill-in gear and lock with cylinder bore: handle DIRIGENT-F.

Running rail P 1213

Aluminium running rail, suitable for use with slide-fold sashes with standard and special fittings.

Gliding rail P 1381

Aluminium gliding rail, suitable for use with slide-fold sashes (top guide).

Standard colours

Slide-fold fittings are supplied in the following standard colours:

EV 1	Visible aluminium parts anodized EV 1, cover profiles grey
UC 3	Visible aluminium parts anodized middle bronze, cover profiles middle brown
UC 5	Visible aluminium parts anodized dark bronze, cover profiles dark brown
white	Visible aluminium parts anodized EV 1, cover profiles white

Further colours and finishes on request.

Curved slide-fold units

If slide-fold units are arranged along a curved ground plan, the circle diametre must be 8 m at the minimum. Special guidelines of profile manufacturers have to be observed.

Materials, surface sealing fer**GU**ard*silver

The fitting parts are made of high quality steel, zinc die-casting or aluminium alloys.
Depending on the material, they are protected against corrosion by surface sealing with fer**GU**ard*silver or by anodisation (aluminium parts).

Standard surface sealing of slide-fold fittings: fer**GU**ard*silver

Locking components of slide-fold come with the surface sealing fer**GU**ard*silver.

Abbreviations

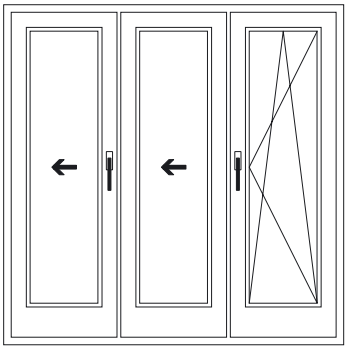
CB	Cylinder bore
FRW	Frame rebate width
G	Fixed gear position
lh	left hand
ML	Middle lock
PU	Packing unit
rh	right hand
SH	Sash height
ST	Sash thickness
SW	Sash width
TFW	Total frame width

Profile system manufacturers' information

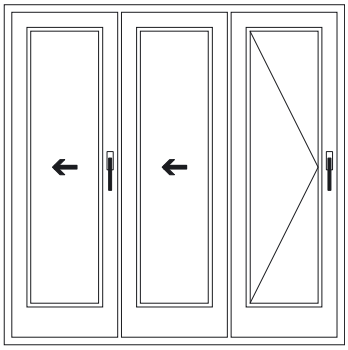
It is important to observe the product information issued by the profile system manufacturers, especially information concerning construction and fabrication, maximum sash dimensions and weights and material features such as linear expansion of profiles.

Slide-fold fittings
for aluminium windows and patio doors

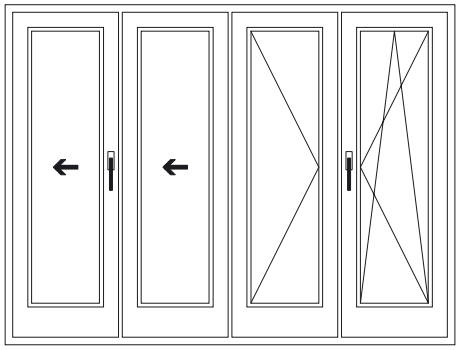
Sash arrangement according to schemes 321 to 651
with tilt-turn or side hung passage sash



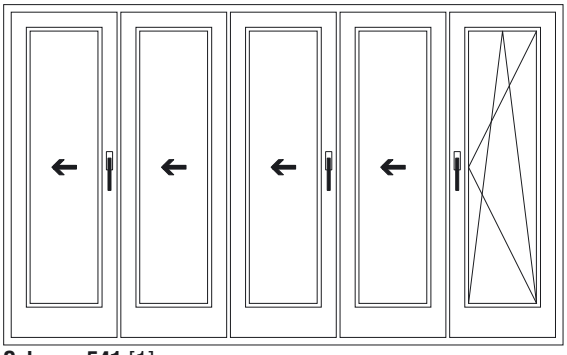
Scheme 321 [1]
2 slide-fold sashes,
1 tilt-turn sash



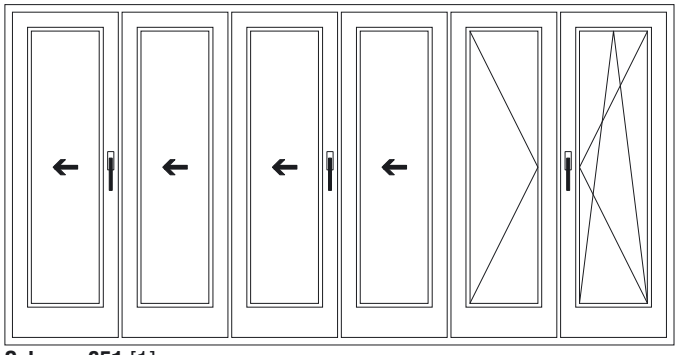
Scheme 330
2 slide-fold sashes,
1 side hung sash



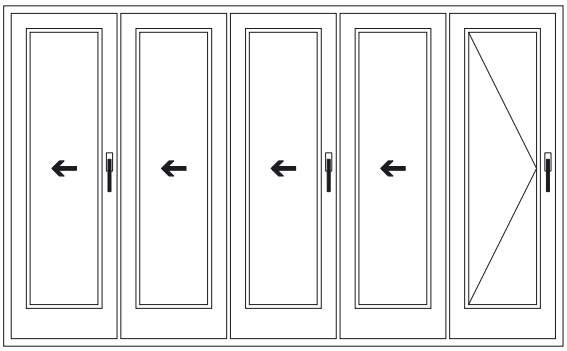
Scheme 431 [1]
2 slide-fold sashes,
1 inactive side hung sash, 1 tilt-turn sash



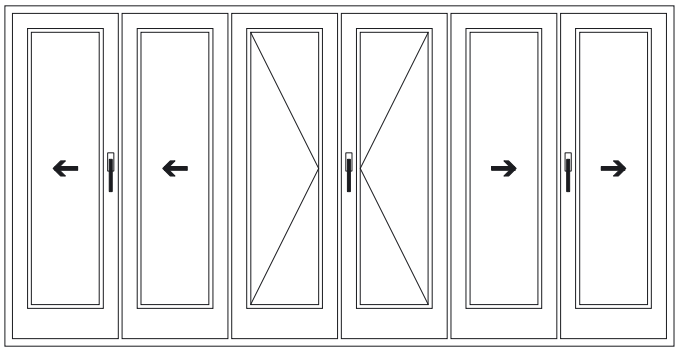
Scheme 541 [1]
4 slide-fold sashes,
1 tilt-turn sash



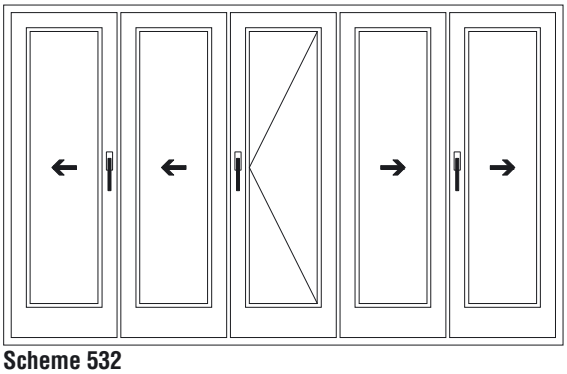
Scheme 651 [1]
4 slide-fold sashes,
1 inactive side hung sash, 1 tilt-turn sash



Scheme 550
4 slide-fold sashes,
1 side hung sash



Scheme 633
4 slide-fold sashes,
1 inactive side hung sash, 1 side hung sash



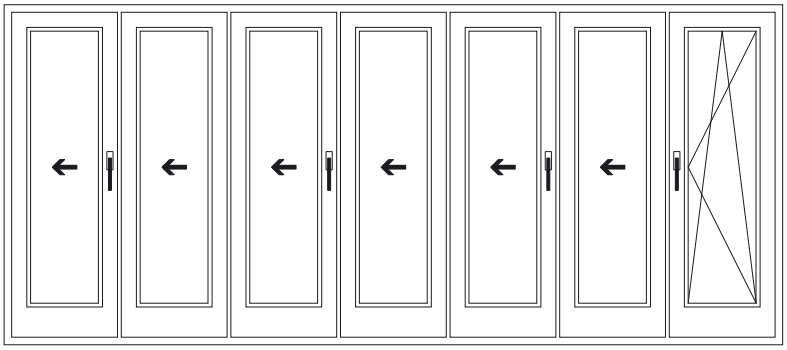
Scheme 532
4 slide-fold sashes,
1 side hung sash

Legend:

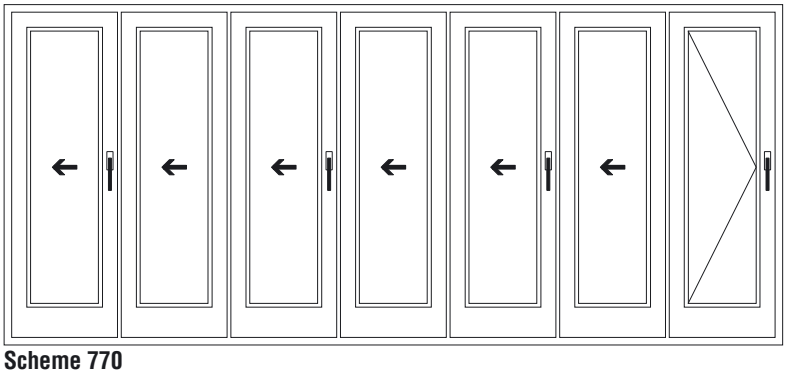
[1] Passage sash also as side hung sash
– with sash hinges and JET AK 8 side hung locking mechanism

Slide-fold fittings
for aluminium windows and patio doors

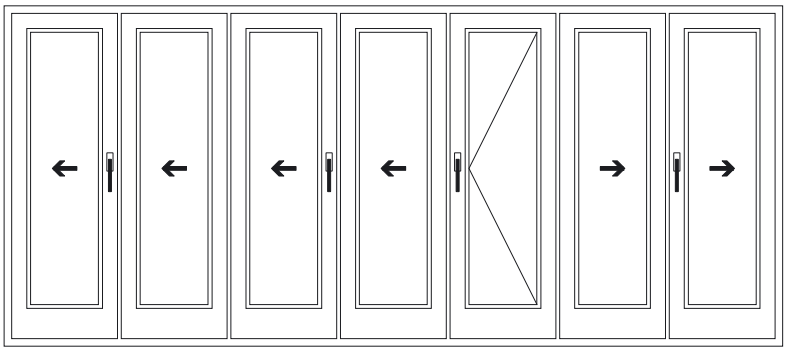
Sash arrangement according to schemes 743 to 770
with tilt-turn or side hung passage sash



Scheme 761 [1]
6 slide-fold sashes,
1 tilt-turn sash



Scheme 770
6 slide-fold sashes,
1 side hung sash

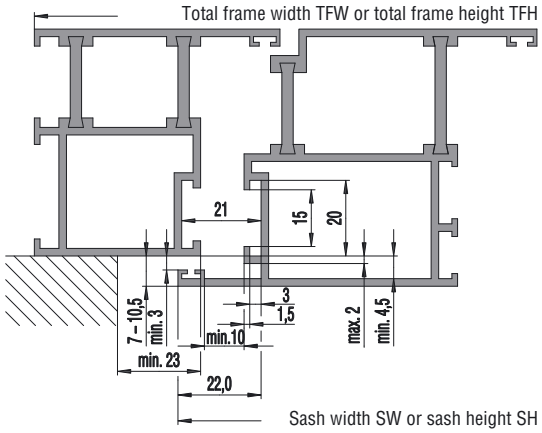


Scheme 743
6 slide-fold sashes,
1 side hung sash

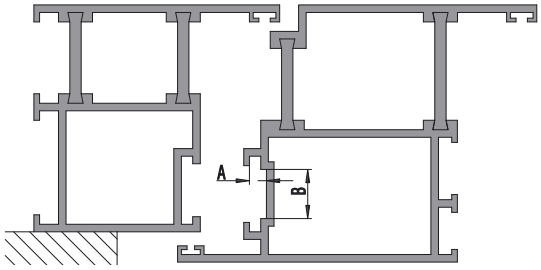
Legend:

[1] Passage sash also as side hung sash
– with sash hinges and JET AK 8 side hung locking mechanism

Assembly dimensions – frame and sash profile



Frame and sash profile
Sash with Euro groove 15/20



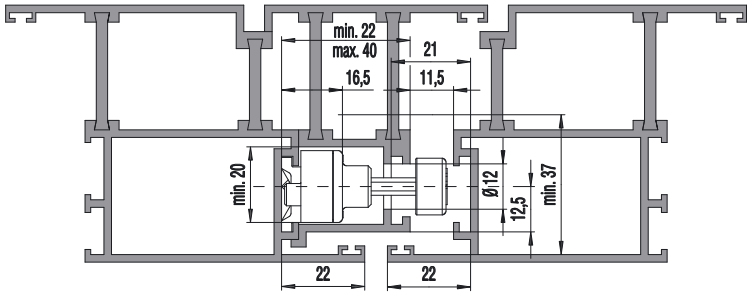
Corner transmissions

6-30889-**00**-0-1 Euro groove 15/20
Deepened Euro groove 15/20 with dim. A = max. 3,9 mm or dim. B = max. 13 mm

6-30889-**01**-0-1 Deepened Euro groove 15/20 with dim. A = 4,0 up to 5,1 mm

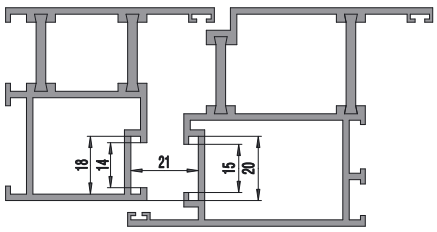
Frame and sash profile
Sash with deepened Euro groove 15/20

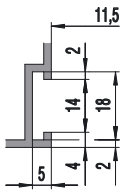
Assembly dimensions – false mullion profile



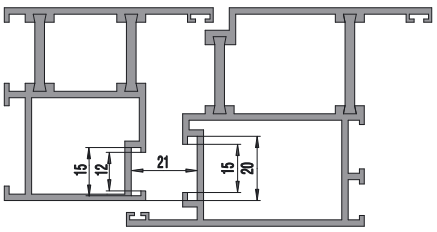
False mullion profile with single groove for locking plates
Locking with inavctive sash gear or shoot bolts

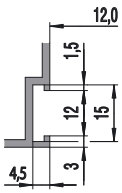
Assembly dimensions – frame grooves



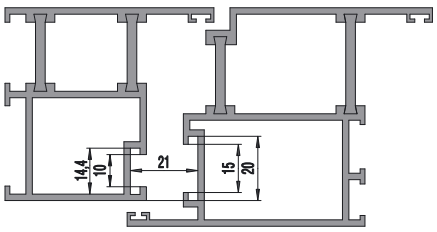


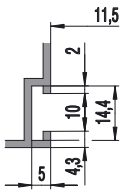
Frame groove 14/18





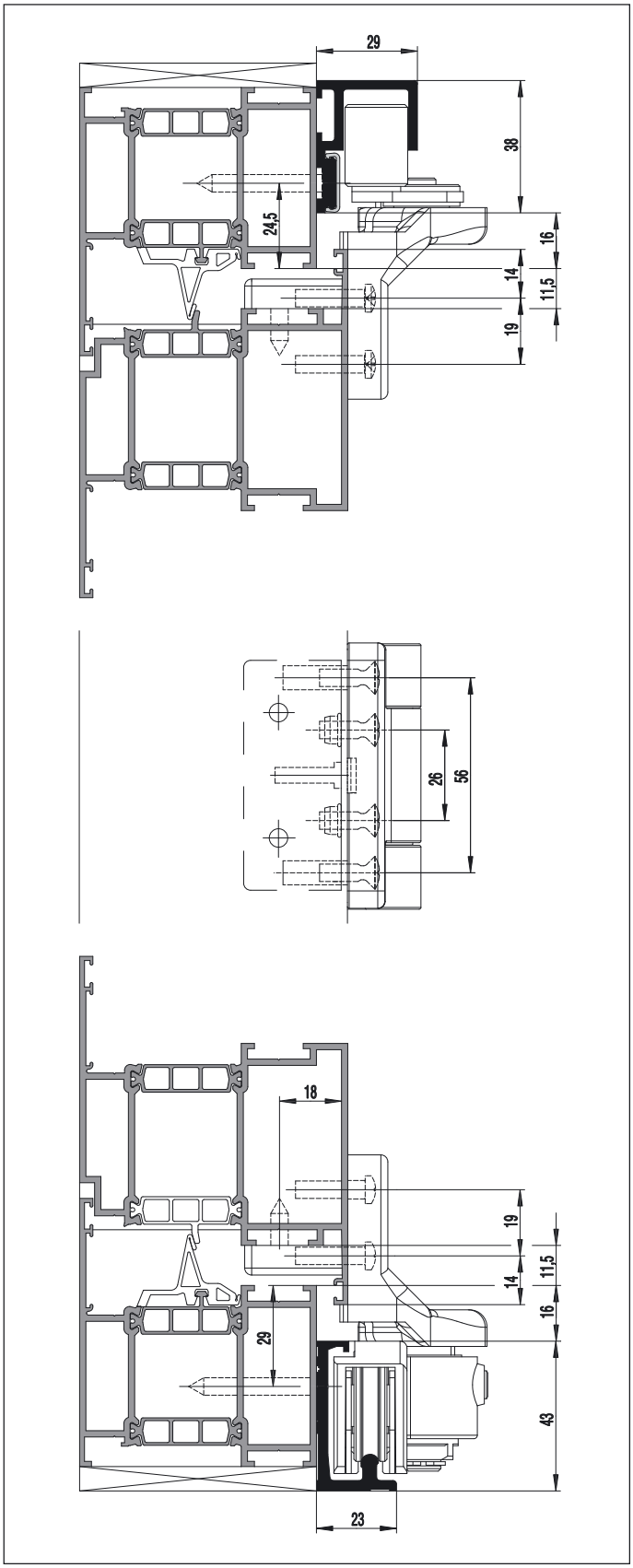
Frame groove 12/15



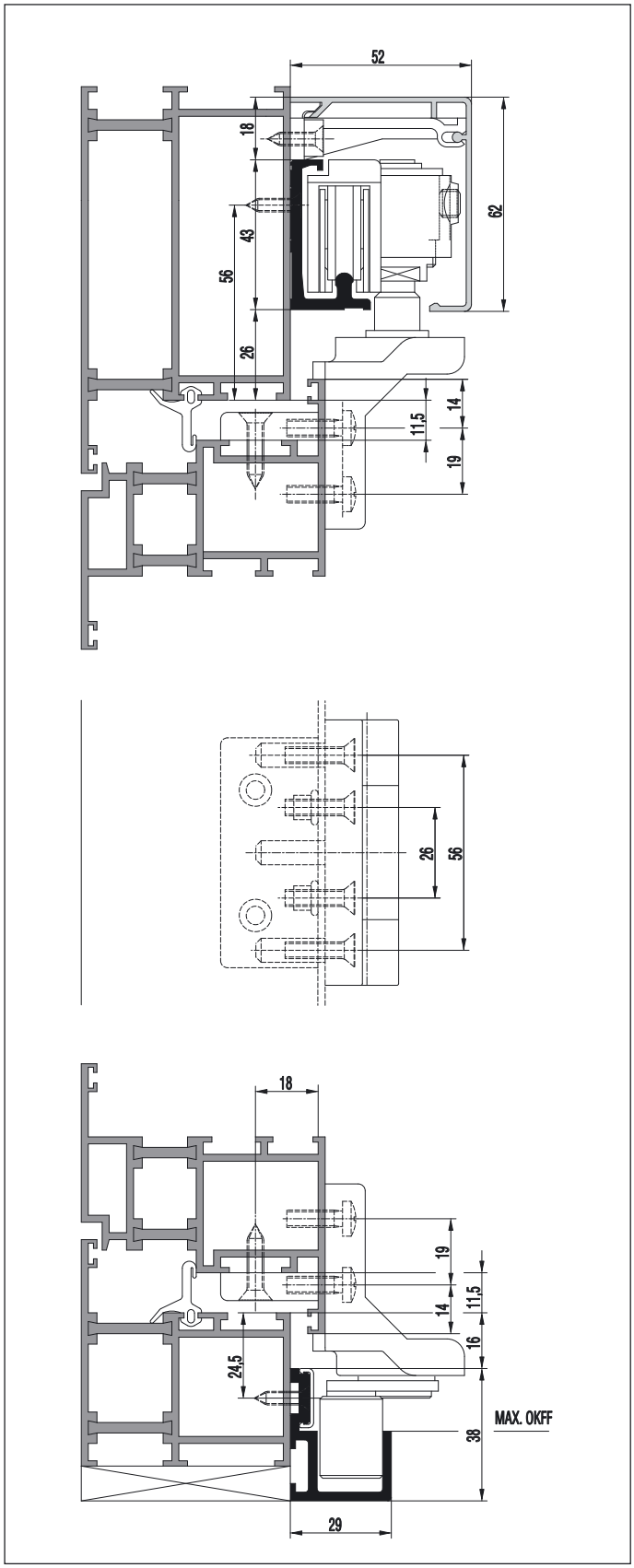


Frame groove 10/14

Assembly dimensions – gliding rails, running rails, runners, hinges

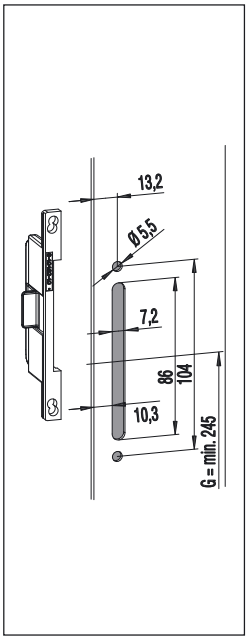


Slide-fold fittings G.U-822

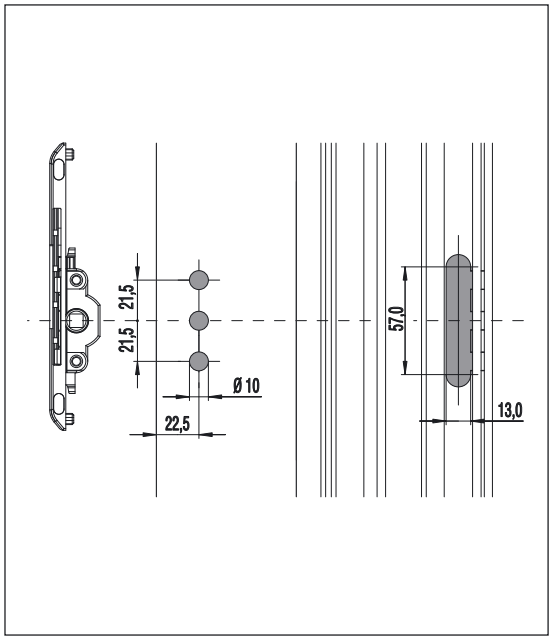


Slide-fold fittings G.U-825

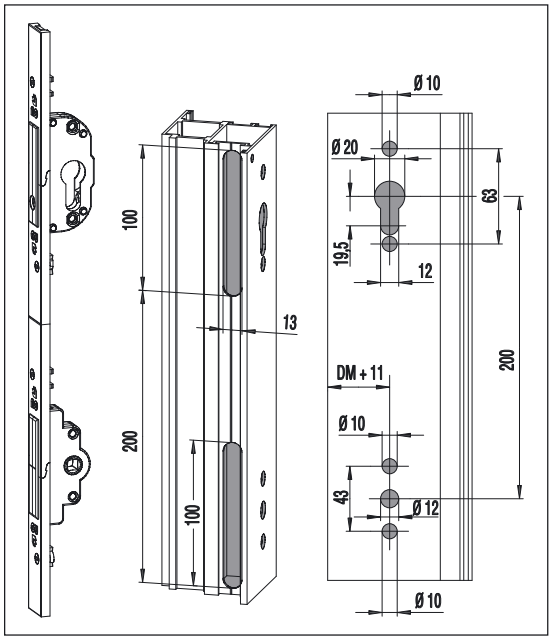
Drilling and milling dimensions



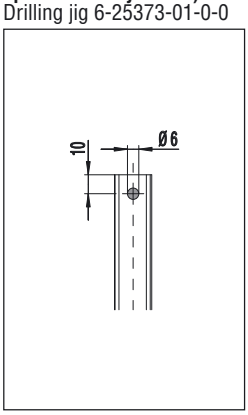
Dimensions for geared handle and WOSD (wrong operation safety device)
Drilling jig 6-25373-01-0



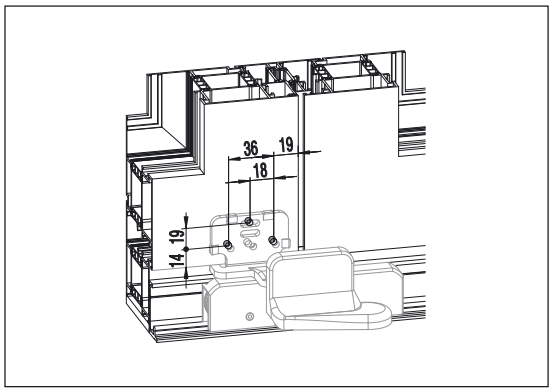
Dimensions for mill-in gears with or without WOSD



Dimensions for mill-in gears with or without WOSD and lock with cylinder bore
Drilling jig 6-26191-00-0-2



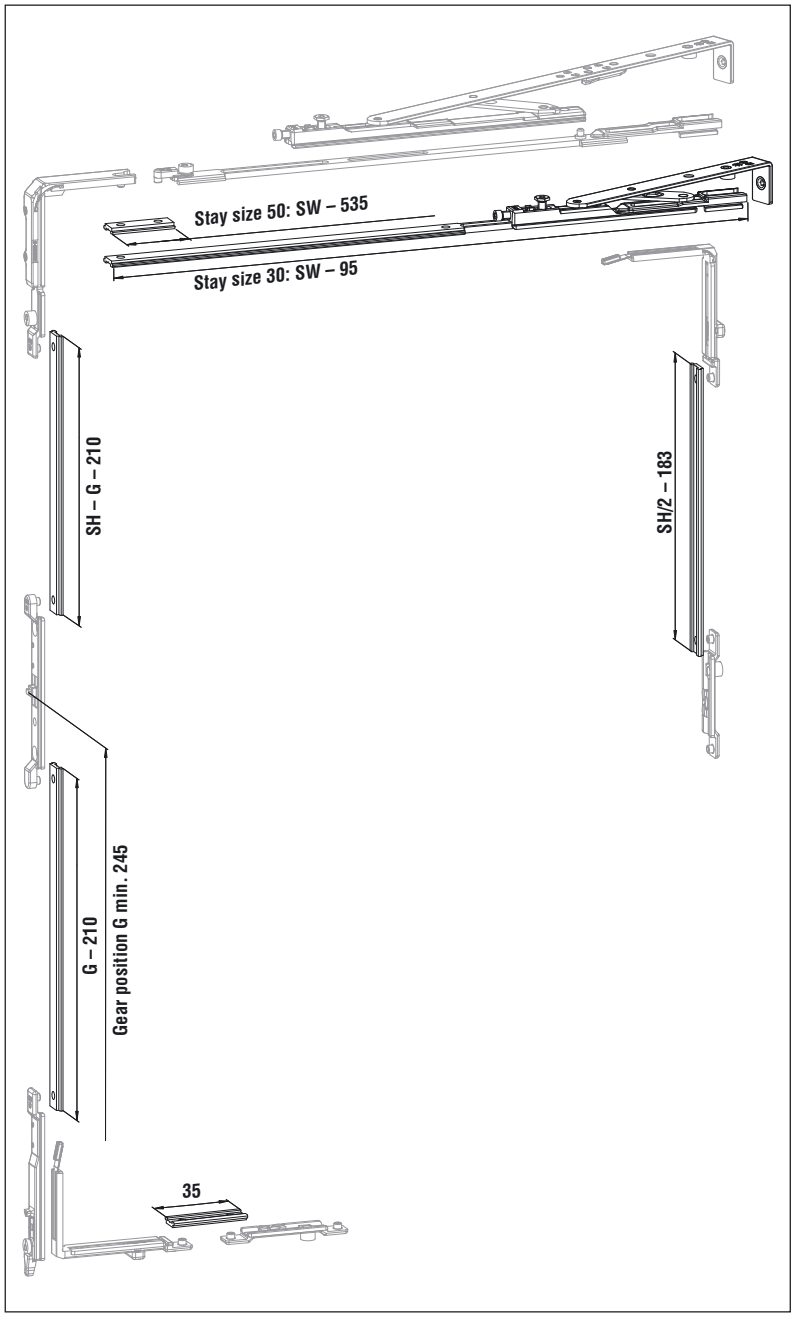
Push rod drill holes



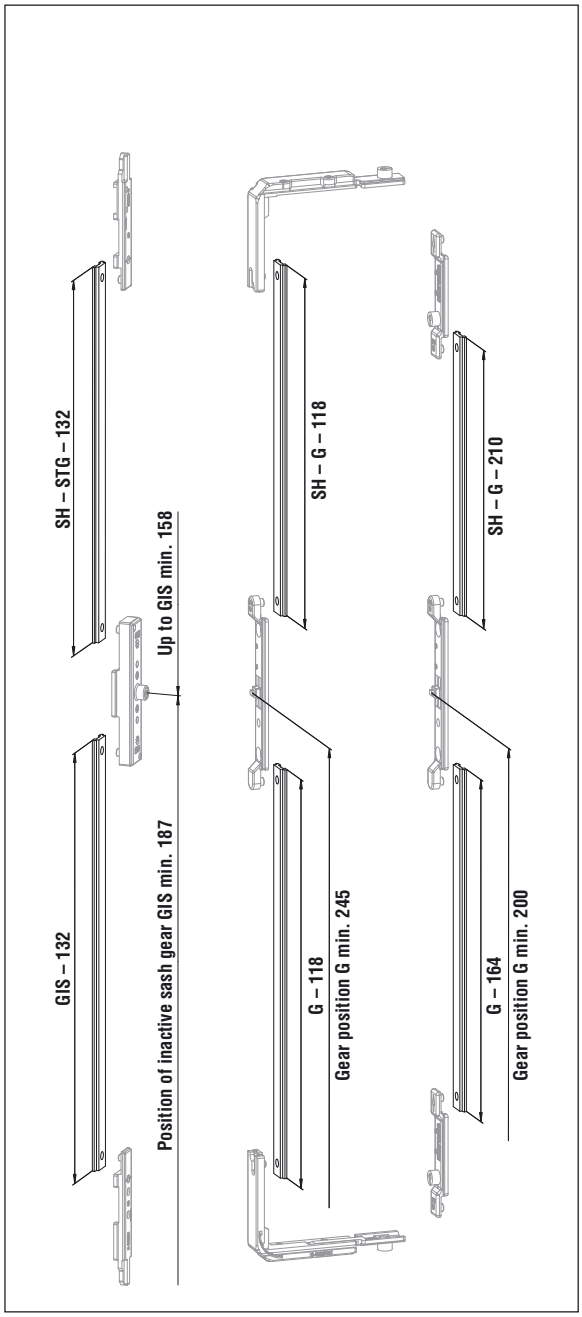
Dimensions for corner bearing
Drilling jig 6-25831-01-0-9

Push rod cutting lengths with 22 mm sash overlap

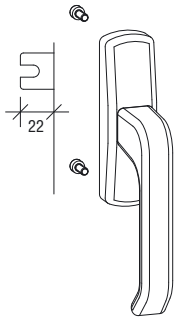
Tilt-turn fittings



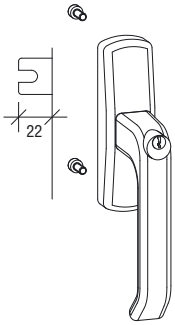
Inactive sash, fold sash and side hung fittings



Geared handles SPACIO
aluminium, painted – 1 carrier fork 22 mm

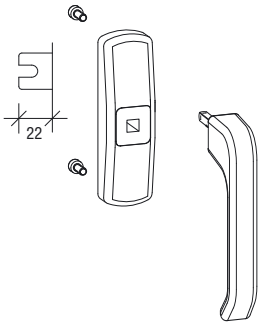


Bag of geared handle SPACIO – not lockable
2 screws
G-46551-96-0-*



Bag of geared handle SPACIO – lockable
2 screws, 2 keys
G-46553-96-0-*

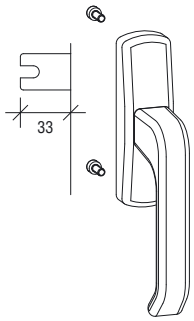
Bag of geared handle SPACIO – lockable for first tilt fittings
2 screws, 2 keys
G-46557-96-0-*



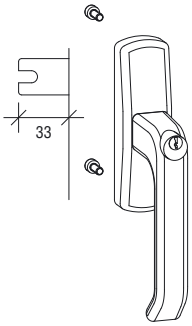
Bag of geared rosette SPACIO
2 screws
G-46555-96-0-*

Removable handle SPACIO
G-18888-00-0-*

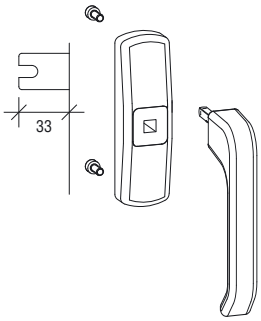
Geared handles SPACIO
aluminium, painted – 1 carrier fork 33 mm



Bag of geared handle SPACIO – not lockable
2 screws
G-46595-96-0-*



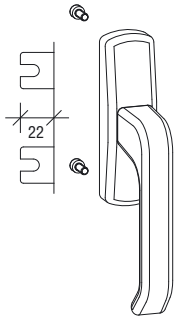
Bag of geared handle SPACIO – lockable
2 screws, 2 keys
G-46597-96-0-*



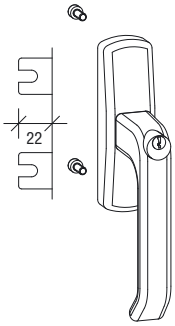
Bag of geared rosette SPACIO
2 screws
G-46596-96-0-*

Removable handle SPACIO
G-18888-00-0-*

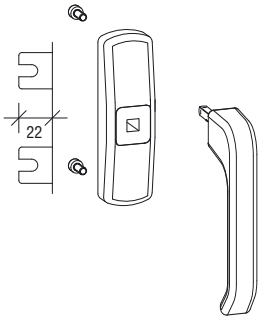
Geared handles SPACIO
aluminium, painted – 2 carrier forks 22 mm – DIN right hand



Bag of geared handle SPACIO – not lockable
2 screws
G-46552-96-R-*



Bag of geared handle SPACIO – lockable
2 screws, 2 keys
G-46554-96-R-*

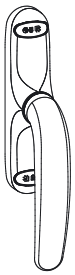


Bag of geared rosette SPACIO
2 screws
G-46556-96-R-*

Removable handle SPACIO
G-18888-00-0-*

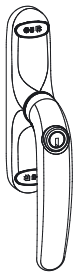
Bag of accessories
Conversion of SPACIO handles with 2 carrier forks to DIN left hand
G-46550-00-L-1

Geared handles ADAGIO-A
powder coated



Geared handle ADAGIO-A – not lockable

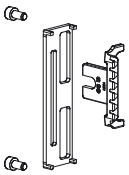
6-31723-00-0-*



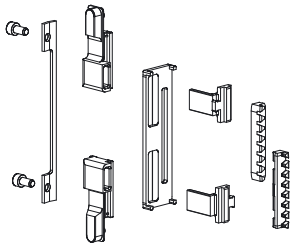
Geared handle ADAGIO-A – lockable
2 keys
6-31724-00-0-*

Clip – neutral
9-41505-00-0-*

Accessories for ADAGIO-A



Bag of accessories for 1 carrier fork 22 mm
K-15814-00-0-1



Bag of accessories for 2 carrier forks
K-15815-00-0-1

Accessories for side hung sashes with geared handle SPACIO

90° limiter for aluminium rosettes
9-34612-00-0-6

Accessories for geared handles SPACIO and ADAGIO-A

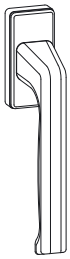
Fixing plate – single
hole centre distance mm

104	**9-41506-00-0-8**

Wrong operation safety device (WOSD) – single
hole centre distance mm

84 and 98	**6-31065-10-0-1**
96 and 104	**6-31065-40-0-1**

Handles DIRIGENT-F for mill-in gears [1]



DIRIGENT-F
Spindle 25 6-28072-25-0-*
Spindle 29 6-28072-29-0-*

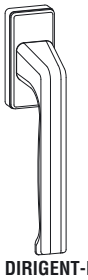
DIRIGENT-F/Z
with push button cylinder, all keys alike
Spindle 29 6-28075-29-0-*

DIRIGENT-F/F flat
6-28101-00-0-*

MODENA-F/Z 100 Nm [2]
for security windows and patio doors
Spindle 29 6-34397-29-0-*

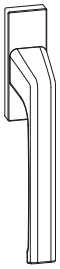
DIRIGENT-F/SG
Spindle 50 8-00694-50-0-7

Rosette/F inside – flat
6-24913-00-0-*

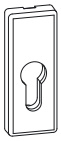


DIRIGENT-F
inside – without spindle
6-28072-00-0-*

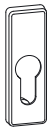
DIRIGENT-F/AF,
outside – flat
6-25223-00-0-*



DIRIGENT-F/A,
outside
6-25993-00-0-*



Rosette with CB inside
square K-17205-02-0-*
oval K-17204-02-0-*



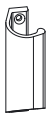
Rosette PZ/A outside
square 9-43605-02-0-*
oval 9-43582-02-0-*

Spindle
ST 56-68 9-26874-56-0-1
ST 69-80 9-26874-69-0-1

Inside/ outside operation
Countersunk screw M 5
ST 50-54 9-13255-60-0-1
ST 55-59 9-13255-65-0-1
ST 60-64 9-13255-70-0-1
ST 65-69 9-13255-75-0-1
ST 70-74 9-13255-80-0-1
ST 75-80 9-13255-85-0-1

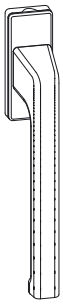
Inside operation
Countersunk screw M 5
Spindle 25 9-13255-30-0-1
Spindle 29 9-13255-35-0-1

Knob lock
Backset 25 - 50 mm
K-13282-00-0-*



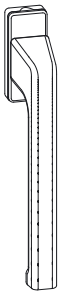
Pull handle outside
9-22921-00-0-*

[1] = More turn handles see part 3 of the present order catalogue.
[2] = Tested to DIN V EN V 1627 for resistance to pull-off and twist-off attempts at 100 Nm.



DIRIGENT-HL
elongated
Rosette 32 x 81 mm
Spindle 25 6-31382-25-0-*
Spindle 29 6-31382-29-0-*

DIRIGENT-HL
elongated
Rosette 32 x 81 mm
push button cylinder
Spindle 30 6-31383-30-0-*



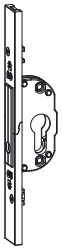
DIRIGENT-HL
elongated
Rosette 28 x 67 mm
Spindle 33 6-32629-33-0-*

Mill-in gears

Mill-in gear 180°
without wrong operation safety device (WOSD)
Backset 14 mm
6-31280-00-0-1

Mill-in gear 180°
without wrong operation safety device (WOSD)
6-25916--0-1**

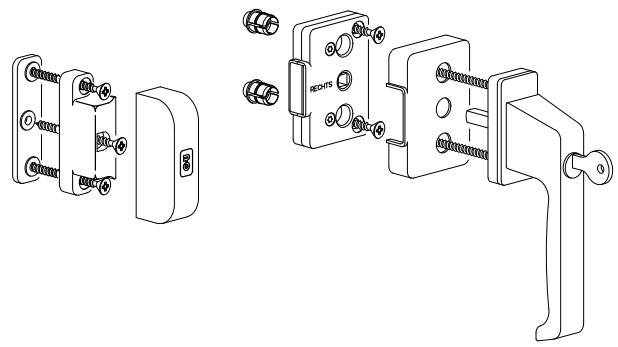
Mill-in gear 180°
with wrong operation safety device (WOSD)
6-25917--0-1**



Lock
with cylinder bore
6-25918--0-1**

**** = Sizes**
25, 30, 35, 40, 45, 50

G.U Face fixed window lock



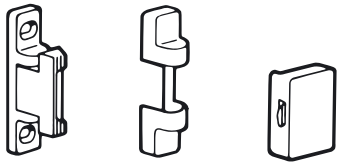
Box of face fixed window lock with turn handle DIRIGENT F/Z

EV 1	**K-14662-00-0-11**
dark brown	**K-14662-00-0-5**
white	**K-14662-00-0-7**

Contents of box

1 Turn handle DIRIGENT F/Z, lockable
1 Spindle 7 x 75 mm
1 Face fixed lock
1 Cover for face fixed lock
2 Sleeve for Ø 10 mm
2 Sleeve for Ø 12 mm
1 Strike box
1 Cover for strike box
1 Packing 3 mm
1 Packing 4 mm
1 Packing 5 mm
1 Packing 6 mm
7 Spax countersunk screw 5 x 55 mm

JET Slit ventilation catch



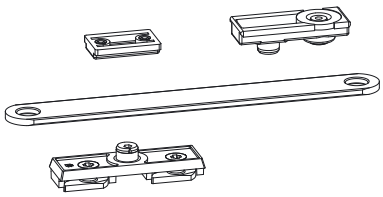
Slit ventilation catch **Cover** **Catch plate**

Fitting requirements JET Slit ventilation catch for aluminium windows

Quantity	Description	PU	Article No.
1	**JET Slit ventilation catch**, with sash overlap	10	K-12223-90-0-*
1	**JET Slit ventilation catch**, without sash overlap	10	K-12216-90-0-*
	Drilling jig	1	6-23861-00-0-0

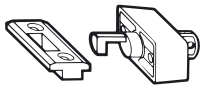
Working drawing 0-38928

Limiting stay

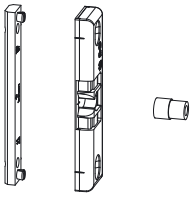


Bag of limiting stay with brake

Frame groove	Stay length	SW mm	PU	Article No.
14/18	150 mm	> 260	1	G-12952-14-0-1
14/18	250 mm	> 360	1	G-12953-14-0-1
12/15	150 mm	> 260	1	G-12952-12-0-1
12/15	250 mm	> 360	1	G-12953-12-0-1
10/14	150 mm	> 260	1	G-12952-10-0-1
10/14	250 mm	> 360	1	G-12953-10-0-1



Bag of blocking lock screw-on version – with key K-12968-00-0-*



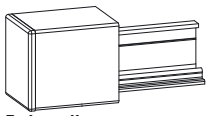
Bag of door catch K-12962-00-0-1

Locking pin, single A-02823-00-0-0

Carrier pin, single push rod one-piece G-14694-00-0-0

Carrier pin, single push rod two-piece G-11669-00-0-0

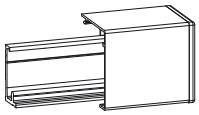
Slide-fold fittings G.U-825 at bottom in- and outside without threshold



End cap lh 9-32740-00-L-* Cover rail P 1391 Running rail P 1213

Gliding rail P 1410

Support 9-32741



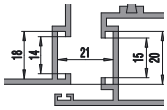
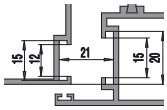
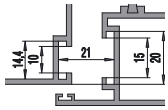
Running rail P 1213 Cover rail P 1391 End cap rh 9-32740-00-R-*

Bag of profiles G.U-825
at bottom in- and outside without threshold

TFW mm	PU	Article No.
-2960	1	K-14679-30-0-*
2961-6700	1	K-14679-67-0-*

Locking plates, sash hinges – Euro groove 15/20

Locking plates according to frame groove

Description	Gasket pressure	Illustration	**Frame groove 14/18** 	**12/15** 	**10/14** 
Tilt locking plate Tilt-turn and side hung sashes clampable	standard + 0,7 mm		6-30964-00-0-1 6-30964-01-0-1	6-30964-00-0-1 6-30964-01-0-1	6-30964-00-0-1 6-30964-01-0-1
Locking plate Frame profiles clampable	standard + 0,7 mm		6-30959-00-0-1 6-30959-01-0-1	6-30959-00-0-1 6-30959-01-0-1	6-30959-00-0-1 6-30959-01-0-1
Locking plate Frame profiles clampable	adjustable		G-11071-00-0-1	G-11800-00-0-1	G-11065-00-0-1
Locking plate for false mullion clampable	standard + 1,5 mm + 3,0 mm		6-30961-00-0-1 G-19658-02-0-1 G-19658-03-0-1	6-30961-00-0-1 G-19658-02-0-1 G-19658-03-0-1	6-30961-00-0-1 G-19658-02-0-1 G-19658-03-0-1
Supporting plate Tilt-turn sash clampable			6-31066-00-0-1	6-31066-00-0-1	6-31066-00-0-1
Wedge for frame First tilt and side hung sashes clampable			6-30998-00-0-1	6-30998-00-0-1	6-30998-00-0-1
Wedge for sash Tilt-turn, first tilt, side hung and inactive sashes clampable			9-40404-00-0-1	9-40404-00-0-1	9-40404-00-0-1

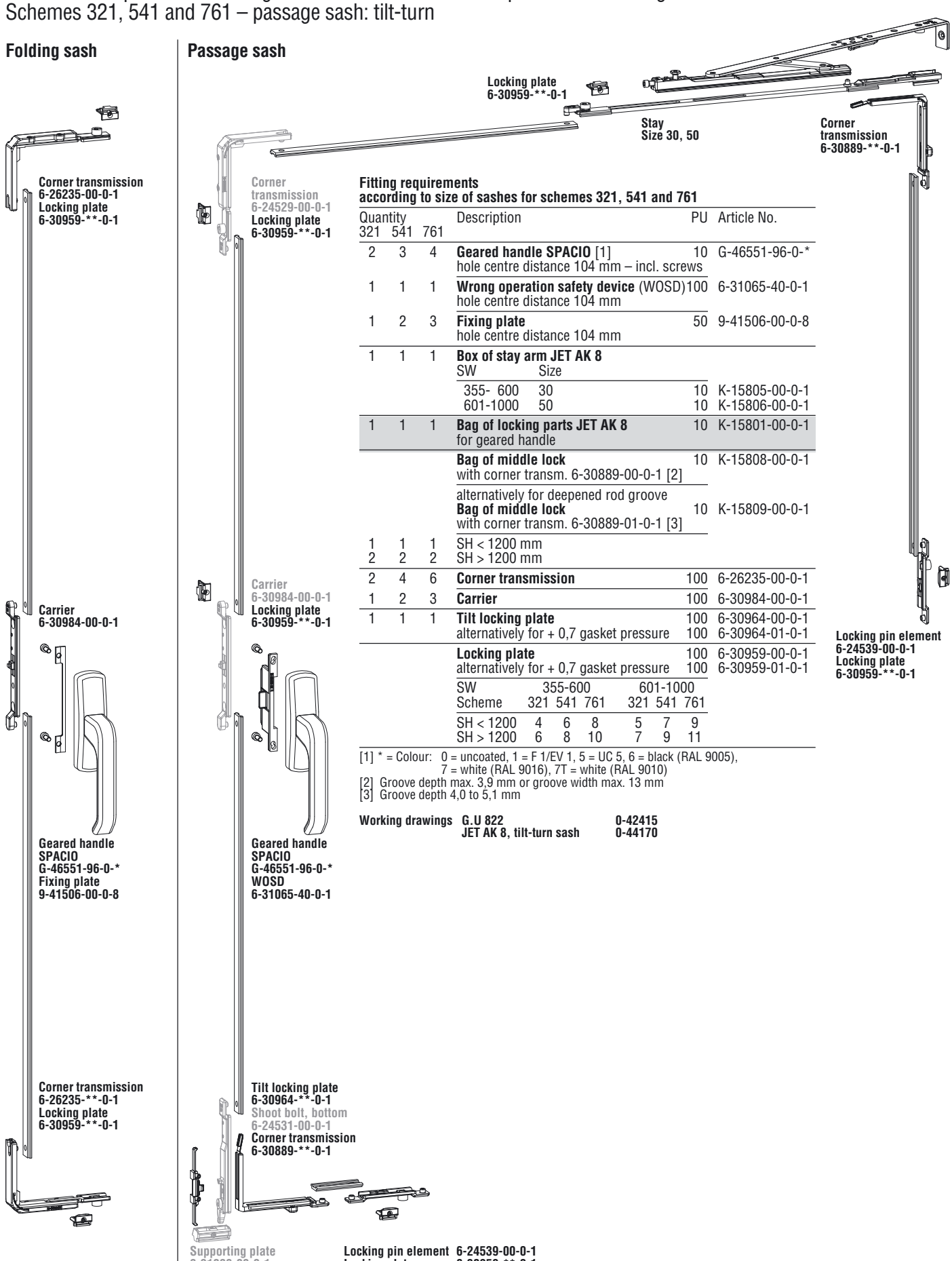
Sash hinges according to profile systems

Profile systems aluminium	Z-shaped sash profile	T-shaped sash profile	Frame profile G.U-822	Frame profile G.U-825	False mullion	Frame groove	Working drawing G.U-822	Working drawing G.U-825	Box of sash hinges
Akotherm AT 730	2551		2503		2559	12/15	0-44181-1		K-13205-01-0-1
Alcan Serie Contact	4024 F		4002 D	4043 M	4029 F	12/15	0-42650-1	0-42652-1	K-13205-01-0-1
Alcoa AA 610	771 597		771 575			10/14	0-42649-1	0-42671-1	K-13205-01-0-1
Alcoa RT 620	734 077		717 834	717 839	717 876	10/14	0-42649-1	0-42671-1	K-13205-03-0-1
Alumil System 11500	11934		11514		11658	12/15	0-44806-1		K-13205-03-0-1
Bug 90	831 802		831 604	831 620	831 810	10/14			K-13205-03-0-1
Doral						10/14	0-43371-1		K-13205-01-0-1
Egybel	901 053		901 010		901 080	14/18	0-43740-1		K-13205-03-0-1
EurAl Serie 65	162 100		161 100		165 100	14/18	0-42764-1		K-13205-03-0-1
Heroal Serie 40	6402		6422		6403	10/14	0-42675-1		K-13205-01-0-1
Inespal						14/18	0-43677-1		K-13205-01-0-1
Kubal Serie 2000 W	2662		2605		2607	10/14	0-43205-1		K-13205-01-0-1
MKF TKI 602	602-02-022		602-01-015	602-01-015	602-02-026		0-42645-1	0-42654-1	K-13205-01-0-1
Pechiney	N 113351		N 113311		N 113352	10/14	0-42767-1	0-42771-1	K-13205-01-0-1
Philippi Serie 2000						14/18	0-43532-1		K-13205-01-0-1
Redal Serie 64	91.125		91.025		91.055	14/18			K-13205-01-0-1
Sapa						14/18	0-43062-1		K-13205-01-0-1
SAPA-Ekonal E75 Plus	34V02		34K02		34V05	14/18	0-44123-1		K-13205-01-0-1
SAPA-Ekonal i60	56030	56031	56012		56041	12/15	0-42966-1		K-13205-01-0-1
SAPA-Ekonal i70	42330	42331	42004	42807		12/15	0-42651-1	0-42655-1	K-13205-01-0-1
SMS Serie 15 000	15 720		15 492		15 800	10/14	0-43564-1		K-13205-01-0-1
Sykon	5332		5330		5338	10/14	0-42577-1		K-13205-01-0-1
VAW Serie 75E	000 479		002 279		001 179	14/18			K-13205-01-0-1

Windows and patio doors with geared handle inside for sash profiles with euro groove 15/20 mm
Schemes 321, 541 and 761 – passage sash: tilt-turn

Folding sash

Passage sash



Fitting requirements
according to size of sashes for schemes 321, 541 and 761

Quantity 321	541	761	Description	PU	Article No.
2	3	4	**Geared handle SPACIO** [1] hole centre distance 104 mm – incl. screws	10	G-46551-96-0-*
1	1	1	**Wrong operation safety device** (WOSD) hole centre distance 104 mm	100	6-31065-40-0-1
1	2	3	**Fixing plate** hole centre distance 104 mm	50	9-41506-00-0-8
1	1	1	**Box of stay arm JET AK 8** SW Size		
			355- 600 30	10	K-15805-00-0-1
			601-1000 50	10	K-15806-00-0-1
1	1	1	**Bag of locking parts JET AK 8** for geared handle	10	K-15801-00-0-1
			Bag of middle lock with corner transm. 6-30889-00-0-1 [2]	10	K-15808-00-0-1
			alternatively for deepened rod groove **Bag of middle lock** with corner transm. 6-30889-01-0-1 [3]	10	K-15809-00-0-1
1	1	1	SH < 1200 mm		
2	2	2	SH > 1200 mm		
2	4	6	**Corner transmission**	100	6-26235-00-0-1
1	2	3	**Carrier**	100	6-30984-00-0-1
1	1	1	**Tilt locking plate**	100	6-30964-00-0-1
			alternatively for + 0,7 gasket pressure	100	6-30964-01-0-1
			Locking plate	100	6-30959-00-0-1
			alternatively for + 0,7 gasket pressure	100	6-30959-01-0-1

SW	355-600			601-1000		
Scheme	321	541	761	321	541	761
SH < 1200	4	6	8	5	7	9
SH > 1200	6	8	10	7	9	11

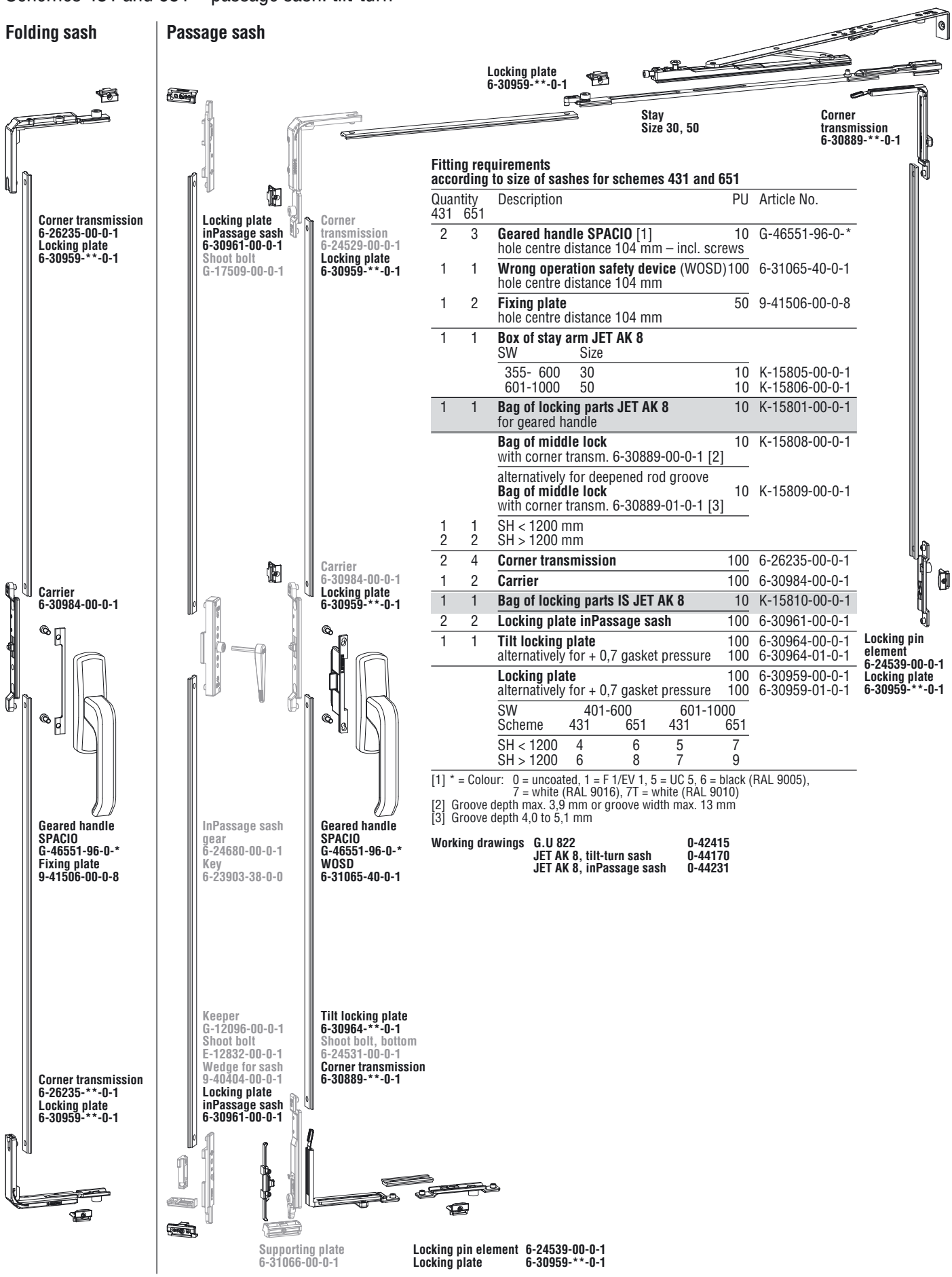
[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 5 = UC 5, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)
[2] Groove depth max. 3,9 mm or groove width max. 13 mm
[3] Groove depth 4,0 to 5,1 mm

Working drawings **G.U 822** **0-42415**
JET AK 8, tilt-turn sash **0-44170**

Windows and patio doors with geared handle inside for sash profiles with euro groove 15/20 mm
Schemes 431 and 651 – passage sash: tilt-turn

Folding sash

Passage sash



Locking pin element 6-24539-00-0-1
Locking plate 6-30959--0-1**

Fitting requirements
according to size of sashes for schemes 431 and 651

Quantity 431	Quantity 651	Description	PU	Article No.
2	3	**Geared handle SPACIO** [1] hole centre distance 104 mm – incl. screws	10	G-46551-96-0-*
1	1	**Wrong operation safety device** (WOSD) hole centre distance 104 mm	100	6-31065-40-0-1
1	2	**Fixing plate** hole centre distance 104 mm	50	9-41506-00-0-8
1	1	**Box of stay arm JET AK 8** SW Size		
		355- 600 30	10	K-15805-00-0-1
		601-1000 50	10	K-15806-00-0-1
1	1	**Bag of locking parts JET AK 8** for geared handle	10	K-15801-00-0-1
		Bag of middle lock with corner transm. 6-30889-00-0-1 [2]	10	K-15808-00-0-1
		alternatively for deepened rod groove **Bag of middle lock** with corner transm. 6-30889-01-0-1 [3]	10	K-15809-00-0-1
1	1	SH < 1200 mm		
2	2	SH > 1200 mm		
2	4	**Corner transmission**	100	6-26235-00-0-1
1	2	**Carrier**	100	6-30984-00-0-1
1	1	**Bag of locking parts IS JET AK 8**	10	K-15810-00-0-1
2	2	**Locking plate inPassage sash**	100	6-30961-00-0-1
1	1	**Tilt locking plate**	100	6-30964-00-0-1
		alternatively for + 0,7 gasket pressure	100	6-30964-01-0-1
		Locking plate	100	6-30959-00-0-1
		alternatively for + 0,7 gasket pressure	100	6-30959-01-0-1

SW	401-600		601-1000	
Scheme	431	651	431	651
SH < 1200	4	6	5	7
SH > 1200	6	8	7	9

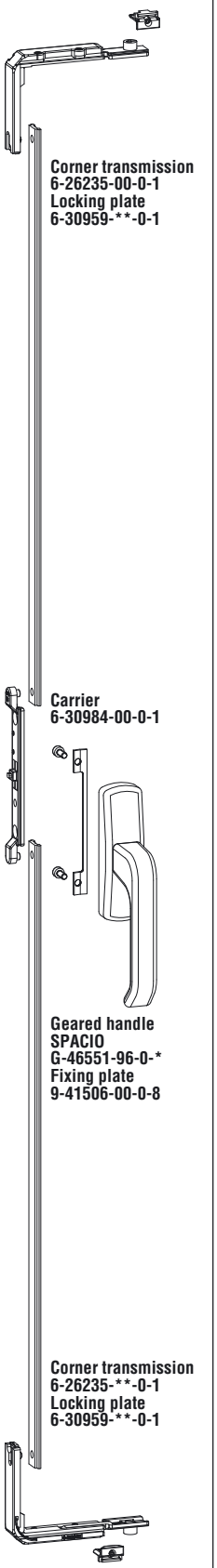
[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 5 = UC 5, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)
[2] Groove depth max. 3,9 mm or groove width max. 13 mm
[3] Groove depth 4,0 to 5,1 mm

Working drawings

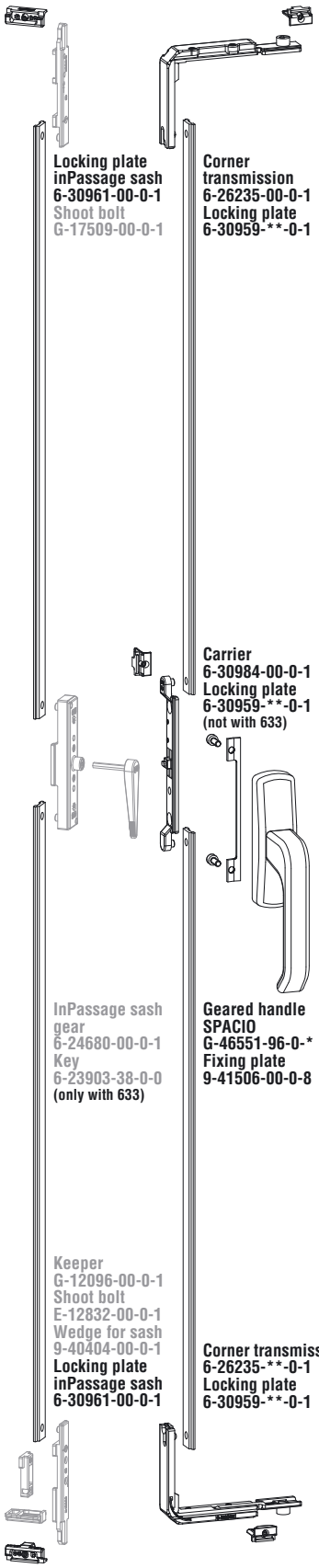
G.U 822	**0-42415**
JET AK 8, tilt-turn sash	**0-44170**
JET AK 8, inPassage sash	**0-44231**

Windows and patio doors with geared handle inside for sash profiles with euro groove 15/20 mm
Schemes 330, 532, 550, 633, 743 and 770 – passage sash: side hung

Folding sash



Passage sash



Fitting requirements
according to size of sashes for schemes 330, 532, 550, 633, 743 and 770

Quantity 330	532	550	633	743	770	Description	PU	Article No.
2	3	3	3	4	4	**Geared handle SPACIO** [1] hole centre distance 104 mm – incl. screws	10	G-46551-96-0-*
2	3	3	3	4	4	**Fixing plate** hole centre distance 104 mm	50	9-41506-00-0-8
4	6	6	6	8	8	**Corner transmission**	100	6-26235-00-0-1
2	3	3	3	4	4	**Carrier**	100	6-30984-00-0-1
			1			**Bag of locking parts IS JET AK 8**	10	K-15810-00-0-1
			2			**Locking plate inPassage sash**	100	6-30961-00-0-1
						Locking plate alternatively for + 0,7 gasket pressure	100 100	6-30959-00-0-1 6-30959-01-0-1
4	6	6	6	8	8	SH < 1200 mm		
5	7	7	7	9	9	SH > 1200 mm		

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 5 = UC 5, 6 = black (RAL 9005),
7 = white (RAL 9016), 7T = white (RAL 9010)

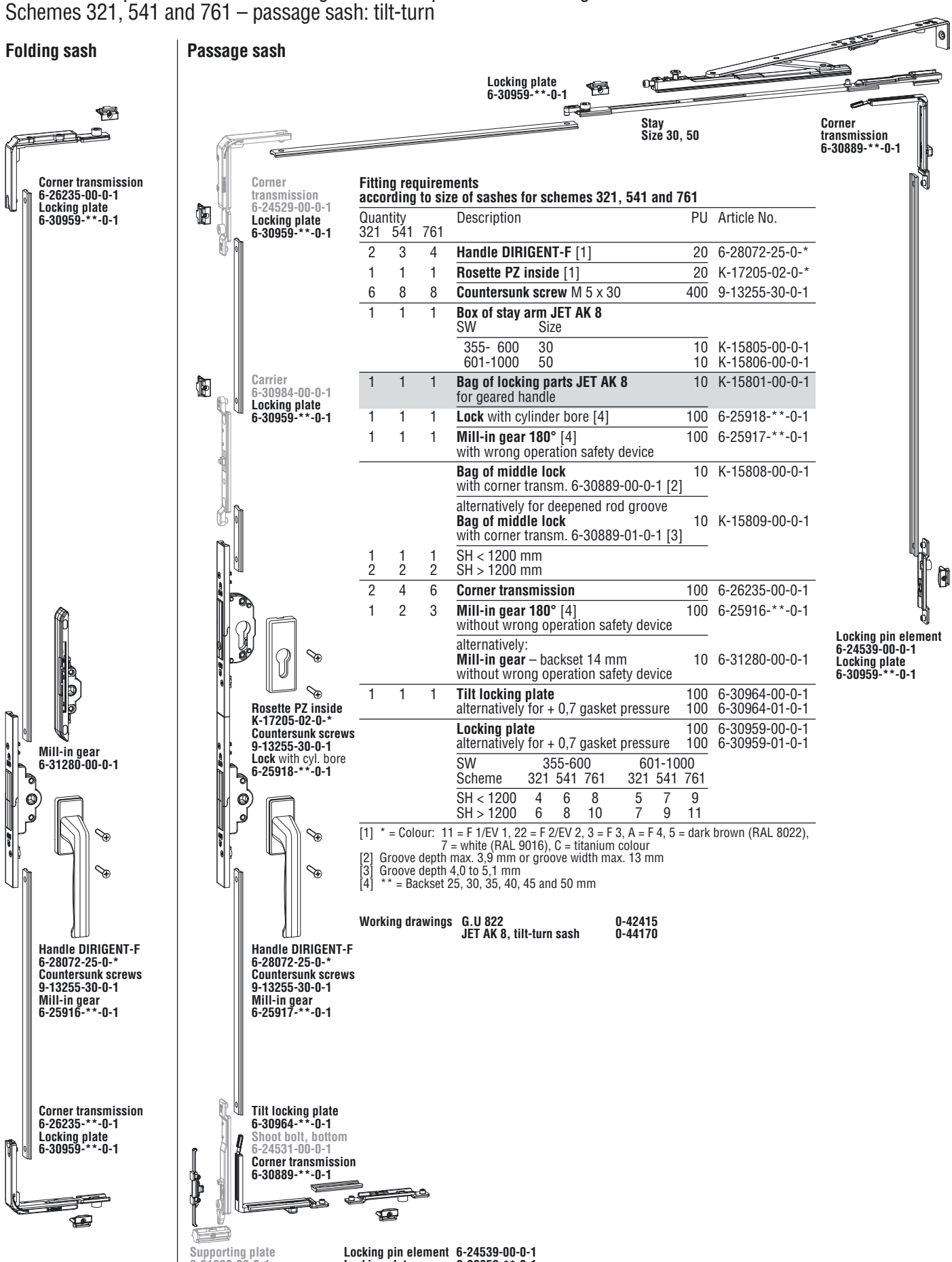
Working drawings

G.U 822	**0-42415**
JET AK 8, side hung sash	**0-44231**
JET AK 8, inPassage sash	**0-44231**

Windows and patio doors with mill-in gear for sash profiles with euro groove 15/20 mm
Schemes 321, 541 and 761 – passage sash: tilt-turn

Folding sash

Passage sash



Fitting requirements
according to size of sashes for schemes 321, 541 and 761

Quantity 321	541	761	Description	PU	Article No.
2	3	4	**Handle DIRIGENT-F** [1]	20	6-28072-25-0-*
1	1	1	**Rosette PZ inside** [1]	20	K-17205-02-0-*
6	8	8	**Countersunk screw** M 5 x 30	400	9-13255-30-0-1
1	1	1	**Box of stay arm JET AK 8** SW / Size		
			355- 600 30	10	K-15805-00-0-1
			601-1000 50	10	K-15806-00-0-1
1	1	1	**Bag of locking parts JET AK 8** for geared handle	10	K-15801-00-0-1
1	1	1	**Lock** with cylinder bore [4]	100	6-25918-**-0-1
1	1	1	**Mill-in gear 180°** [4] with wrong operation safety device	100	6-25917-**-0-1
			Bag of middle lock with corner transm. 6-30889-00-0-1 [2]	10	K-15808-00-0-1
			alternatively for deepened rod groove **Bag of middle lock** with corner transm. 6-30889-01-0-1 [3]	10	K-15809-00-0-1
1	1	1	SH < 1200 mm		
2	2	2	SH > 1200 mm		
2	4	6	**Corner transmission**	100	6-26235-00-0-1
1	2	3	**Mill-in gear 180°** [4] without wrong operation safety device	100	6-25916-**-0-1
			alternatively: **Mill-in gear** – backset 14 mm without wrong operation safety device	10	6-31280-00-0-1
1	1	1	**Tilt locking plate**	100	6-30964-00-0-1
			alternatively for + 0,7 gasket pressure	100	6-30964-01-0-1
			Locking plate	100	6-30959-00-0-1
			alternatively for + 0,7 gasket pressure	100	6-30959-01-0-1

SW	355-600			601-1000		
Scheme	321	541	761	321	541	761
SH < 1200	4	6	8	5	7	9
SH > 1200	6	8	10	7	9	11

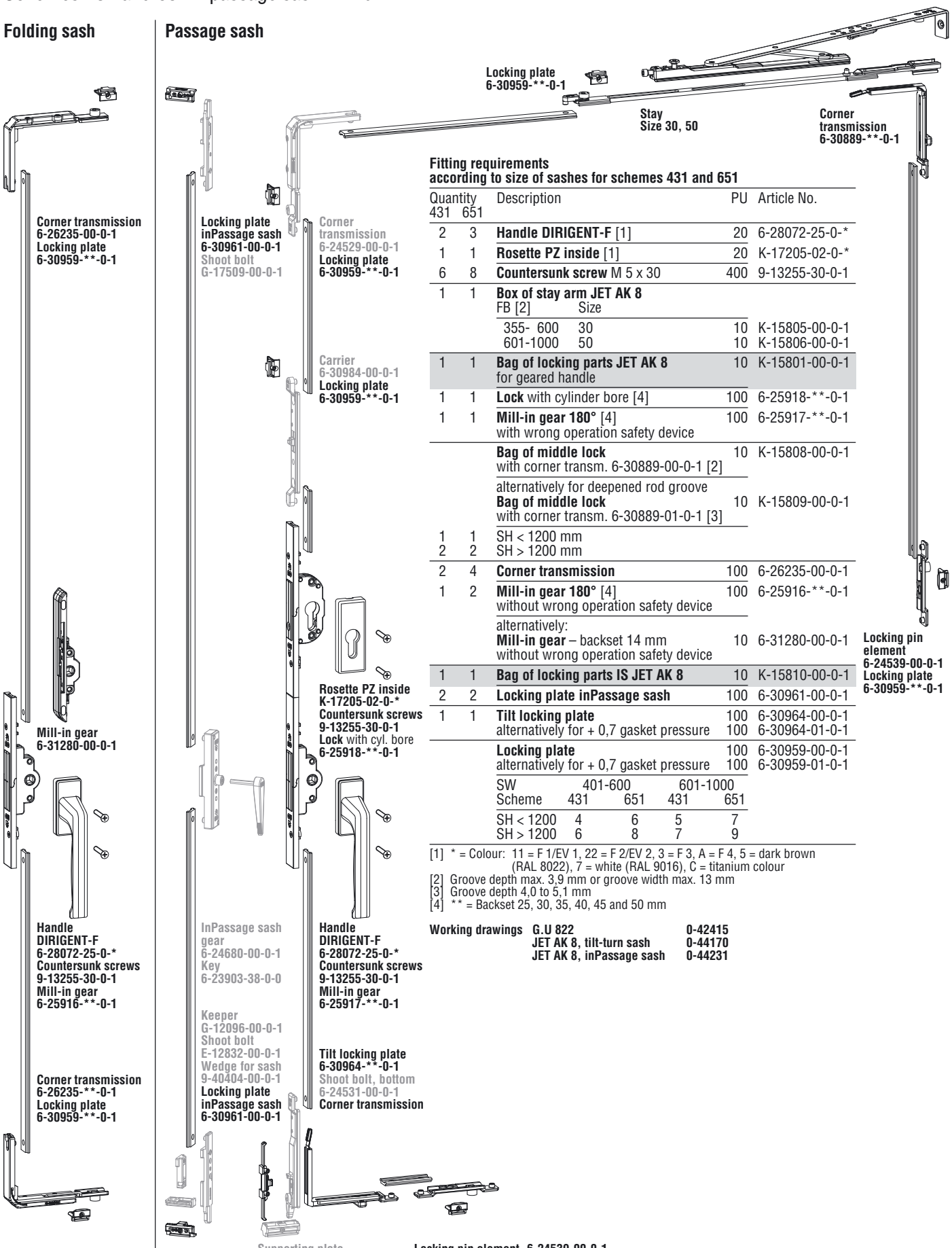
[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4, 5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour
[2] Groove depth max. 3,9 mm or groove width max. 13 mm
[3] Groove depth 4,0 to 5,1 mm
[4] ** = Backset 25, 30, 35, 40, 45 and 50 mm

Working drawings **G.U 822** **0-42415**
JET AK 8, tilt-turn sash **0-44170**

Windows and patio doors with mill-in gear for sash profiles with euro groove 15/20 mm
Schemes 431 and 651 – passage sash: tilt-turn

Folding sash

Passage sash



Fitting requirements according to size of sashes for schemes 431 and 651

Quantity 431	Quantity 651	Description	PU	Article No.
2	3	**Handle DIRIGENT-F** [1]	20	6-28072-25-0-*
1	1	**Rosette PZ inside** [1]	20	K-17205-02-0-*
6	8	**Countersunk screw** M 5 x 30	400	9-13255-30-0-1
1	1	**Box of stay arm JET AK 8**		
		FB [2] Size		
		355- 600 30	10	K-15805-00-0-1
		601-1000 50	10	K-15806-00-0-1
1	1	**Bag of locking parts JET AK 8** for geared handle	10	K-15801-00-0-1
1	1	**Lock** with cylinder bore [4]	100	6-25918-**-0-1
1	1	**Mill-in gear 180°** [4] with wrong operation safety device	100	6-25917-**-0-1
		Bag of middle lock with corner transm. 6-30889-00-0-1 [2]	10	K-15808-00-0-1
		alternatively for deepened rod groove **Bag of middle lock** with corner transm. 6-30889-01-0-1 [3]	10	K-15809-00-0-1
1	1	SH < 1200 mm		
2	2	SH > 1200 mm		
2	4	**Corner transmission**	100	6-26235-00-0-1
1	2	**Mill-in gear 180°** [4] without wrong operation safety device	100	6-25916-**-0-1
		alternatively: **Mill-in gear** – backset 14 mm without wrong operation safety device	10	6-31280-00-0-1
1	1	**Bag of locking parts IS JET AK 8**	10	K-15810-00-0-1
2	2	**Locking plate inPassage sash**	100	6-30961-00-0-1
1	1	**Tilt locking plate**	100	6-30964-00-0-1
		alternatively for + 0,7 gasket pressure	100	6-30964-01-0-1
		Locking plate	100	6-30959-00-0-1
		alternatively for + 0,7 gasket pressure	100	6-30959-01-0-1

SW	401-600		601-1000	
Scheme	431	651	431	651
SH < 1200	4	6	5	7
SH > 1200	6	8	7	9

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4, 5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour
[2] Groove depth max. 3,9 mm or groove width max. 13 mm
[3] Groove depth 4,0 to 5,1 mm
[4] ** = Backset 25, 30, 35, 40, 45 and 50 mm

Working drawings

G.U 822	**0-42415**
JET AK 8, tilt-turn sash	**0-44170**
JET AK 8, inPassage sash	**0-44231**

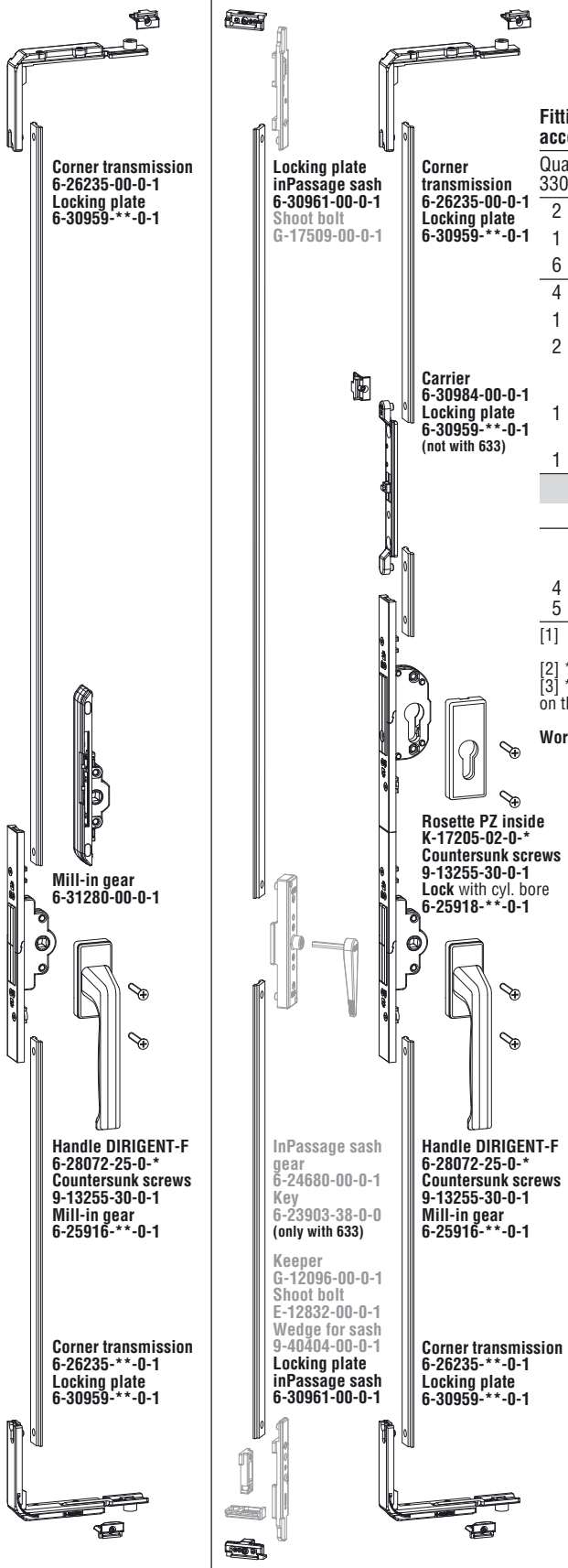
Locking pin element **6-24539-00-0-1**
Locking plate **6-30959-**-0-1**

Slide-fold locking mechanism, inward opening

Windows and patio doors with mill-in gear for sash profiles with euro groove 15/20 mm
Schemes 330, 532, 550, 633, 743 and 770 – passage sash: side hung

Folding sash

Passage sash



Fitting requirements
according to size of sashes for schemes 330, 532, 550, 633, 743 and 770

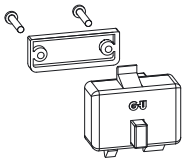
Quantity 330	532	550	633	743	770	Description	PU	Article No.
2	3	3	3	4	4	**Handle DIRIGENT-F** [1]	20	6-28072-25-0-*
1	1	1	1	1	1	**Rosette PZ inside** [1]	20	K-17205-02-0-*
6	8	8	8	10	10	**Countersunk screw** M 5 x 30	400	9-13255-30-0-1
4	6	6	6	8	8	**Corner transmission**	100	6-26235-00-0-1
1	1	1	1	1	1	**Carrier** up to SH 1200 mm	100	6-30984-00-0-1
2	3	3	3	4	4	**Mill-in gear 180°** [2] without wrong operation safety device	100	6-25916-**-0-1
						alternatively at Folding sash:		
1	2	2	2	3	3	**Mill-in gear** – backset 14 mm [3] without wrong operation safety device	10	6-31280-00-0-1
1	1	1	1	1	1	**Lock** with cylinder bore [4]	100	6-25918-**-0-1
			1			**Bag of locking parts IS JET AK 8**	10	K-15810-00-0-1
			2			**Locking plate inPassage sash**	100	6-30961-00-0-1
						Locking plate	100	6-30959-00-0-1
						alternatively for + 0,7 gasket pressure	100	6-30959-01-0-1
4	6	6	6	8	8	SH < 1200 mm		
5	7	7	7	9	9	SH > 1200 mm		

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4, 5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour
[2] ** = Backset 25, 30, 35, 40, 45 and 50 mm
[3] ** = If on the folding sash mill-in gear 6-31280-00-0-1 is used, mill-in gear 180° 6-25916-**-0-1 is used on the passage sash only.

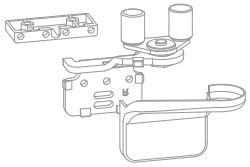
Working drawings **G.U 822** **0-42415**
JET AK 8, side hung sash **0-44231**

Windows and patio doors inward opening – bottom running – sash profiles with euro groove 15/20 mm

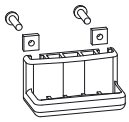
End cap 9-32532-00-0-*
Gliding rail P 1381
Cover rail P 1226



Folding catch
Packing
Spax cylinder screw



Support 9-33628-08-0-0
Gliding roller 6-25336-00-0-1
Corner bearing 9-33448-00-R-1
Cover 9-33449-00-R-*

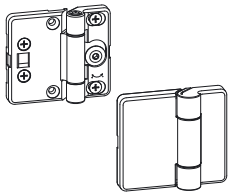


Support
Fillister head screws
Square nut

Fitting requirements according to size of sashes

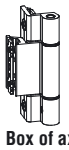
Quantity 321	330	431	541	550	532	651	633	761	770	743	Description	PU	Article No.
1	1	1	2	2	2	2	2	3	3	3	**Basic box G.U-822** [1]	1	K-13861-08-0-*
											Contents		
											1 Runner, 1 Gliding roller, 1 Corner bearing, lh, 1 Corner bearing, rh, 1 Cover, lh, 1 Cover, rh, 2 Support		
1	2	2	3	4	3	4	4	5	6	5	**Box of sash hinge G.U-822/825**		
											17/40	1	K-13205-01-0-1
											17/45	1	K-13205-03-0-1
											25/45	1	K-13812-00-0-1
											17/17	1	K-13813-00-0-1
											Contents		
											3 Sash hinge long, 3 Sash hinge short, 3 Hinge pin		
1	2	2	3	4	3	4	4	5	6	5	**Bag of covers G.U-822/825** [1]		
											for sash hinge 17/40, 17/45	1	K-15392-00-0-*
											for sash hinge 25/45	1	K-15399-00-0-*
											for sash hinge 17/17	1	K-15393-00-0-*
											Contents		
											3 Cover long, 3 Cover short		
6 [3]	3	6 [3]	6 [3]	3	6	6 [3]	6	6 [3]	3	6	**Box of axial hinge**, 127 mm – 3-part [2] Frame groove 14/18, 12/15, 10/14	100	G-46731-00-0-*
											alternatively: **Box of axial hinge**, 93 mm – 3-part [2] Frame groove 14/18	50	K-15887-00-0-*
1	1	1	1	1	1	1	1	1	1	1	**Bag of profiles G.U-822** [1]		
											Contents		
											1 Running rail P 1213, 1 Gliding rail P 1381, 1 Cover rail P 1226, 2 End cap		
											TFW mm		
											-2960	1	K-13206-30-0-*
											2961-3960	1	K-13206-40-0-*
											3961-5000	1	K-13206-50-0-*
											5001-6700	1	K-13206-67-0-*
–	1	1	–	1	1	1	2	–	1	1	**Bag of folding catch G.U-822/825** [1]	1	K-13334-00-0-*
											Contents		
											1 Folding catch, 1 Support, 2 Spax cylinder screw 5 x 30, 2 Fillister head screws M 5 x 20, 2 Square nut M 5		
–	1	1	–	1	1	1	2	–	1	1	**Packing** for folding catch [1]	1	9-33492-00-0-*

[1] * = Colour: 1 = F 1/EV 1, 2 = F 2/EV 2, 3 = brass colour, 4 = UC 3, 5 = UC 5, 7 = white (RAL 9016)
[2] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 5 = UC 5, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)
[3] If the passage sash is tilt-turn (instead of side hung), 3 boxes of axial hinge less are required.



Sash hinge long
Sash hinge short
Hinge pin
Cover long
Cover short

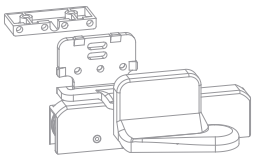
Box of axial hinge 127 mm – 3-part



Box of axial hinge 93 mm – 3-part

Working drawing 0-42415

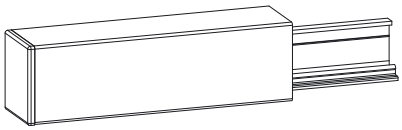
Running rail P 1213

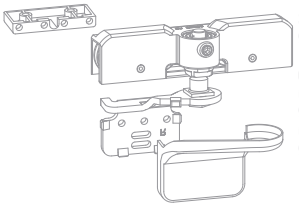


Support 9-33628-08-0-0
Corner bearing 9-33448-00-L-1
Runner 6-25334-00-0-*
Cover 9-33449-00-L-*

Windows and patio doors inward opening – top running – sash profiles with euro groove 15/20 mm

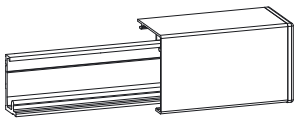
End cap, lh 9-32740-00-L-*
Cover rail P 1391
Running rail P 1213





Support
9-33628-08-0-0
Runner
6-25436-00-0-*
Corner bearing
9-33448-00-L-1
Cover
9-33449-00-L-*

Support
9-32741-00-0-0

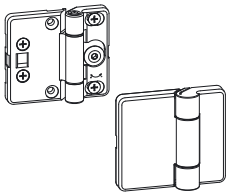


Running rail P 1213
Cover rail P 1391
End cap, rh 9-32740-00-R-*

Fitting requirements according to size of sashes

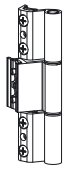
Quantity 321	330	431	541	550	532	651	633	761	770	743	Description	PU	Article No.
1	1	1	2	2	2	2	2	3	3	3	**Basic box G.U-825** [1]	1	K-13982-08-0-*
											Contents		
											1 Runner 1 Gliding roller 1 Corner bearing, lh 1 Corner bearing, rh 1 Cover, lh 1 Cover, rh 2 Support		
1	2	2	3	4	3	4	4	5	6	5	**Box of sash hinge G.U-822/825**		
											17/40	1	K-13205-01-0-1
											17/45	1	K-13205-03-0-1
											25/45	1	K-13812-00-0-1
											17/17	1	K-13813-00-0-1
											Contents		
											3 Sash hinge long 3 Sash hinge short 3 Hinge pin		
1	2	2	3	4	3	4	4	5	6	5	**Bag of covers G.U-822/825** [1]		
											for sash hinge 17/40, 17/45	1	K-15392-00-0-*
											for sash hinge 25/45	1	K-15399-00-0-*
											for sash hinge 17/17	1	K-15393-00-0-*
											Contents		
											3 Cover long 3 Cover short		
6 [3]	3	6 [3]	6 [3]	3	6	6 [3]	6	6 [3]	3	6	**Box of axial hinge**, 127 mm – 3-part [2] Frame groove 14/18, 12/15, 10/14	100	G-46731-00-0-*
											alternatively: **Box of axial hinge**, 93 mm – 3-part [2] Frame groove 14/18	50	K-15887-00-0-*
1	1	1	1	1	1	1	1	1	1	1	**Bag of profiles G.U-825** [1]		
											Contents		
											1 Running rail P 1213 1 Gliding rail P 1381 1 Cover rail P 1226 1 Cover rail P 1391 1 End cap, links 1 End cap, rechts 2 Support		
											TFW mm		
											-2960	1	K-13272-30-0-*
											2961-3960	1	K-13272-40-0-*
											3961-5000	1	K-13272-50-0-*
											5001-6700	1	K-13272-67-0-*
–	1	1	–	1	1	1	2	–	1	1	**Bag of folding catch G.U-822/825** [1] Contents	1	K-13334-00-0-*
											1 Folding catch 1 Support 2 Spax cylinder screw 5 x 30 2 Fillister head screws M 5 x 20 2 Square nut M 5		
–	1	1	–	1	1	1	2	–	1	1	**Packing** for folding catch [1]	1	9-33492-00-0-*

[1] * = Colour: 1 = F 1/EV 1, 2 = F 2/EV 2, 3 = brass colour, 4 = UC 3, 5 = UC 5, 7 = white (RAL 9016)
[2] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 5 = UC 5, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)
[3] If the passage sash is tilt-turn (instead of side hung), 3 boxes of axial hinge less are required.



Sash hinge long
Sash hinge short
Hinge pin

Cover long
Cover short

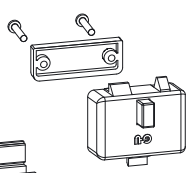


Box of axial hinge
127 mm – 3-part

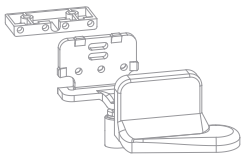
Box of axial hinge
93 mm – 3-part

Working drawing 0-42454

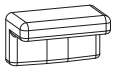
Gliding rail P 1381
Cover rail P 1226



Spax cylinder screw
Packing
Folding catch



Support
9-33628-08-0-0
Corner bearing
9-33448-00-R-1
Gliding roller
6-25336-00-0-1
Cover
9-33449-00-R-*



Fillister head screws
Square nut
Support

Gliding rail P 1381
Cover rail P 1226

Tilt-turn fittings

Tilt-turn passage sash

Fitting requirements for schemes 321, 431, 541, 651 and 761

Qty.	Description		PU	Article No.
1	**Bag of hinge side fittings** [1]			
	Frame groove	14/18	10	K-15800-00-0-*
		12/15	10	K-16668-00-0-*
		10/14	10	K-16667-00-0-*
	Contents			
	1 Stay arm bearing [1]			6-30875-00-0-*
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Stay arm hinge [1]			6-31088-00-0-*
	1 Bearing sleeve			9-39805-00-0-6
	2 Covers			9-39807-00-0-6
	1 Corner bearing [1]			9-39812-00-0-*
	1 Casing for corner bearing	14/18		6-30872-00-0-1
		12/15		6-32056-00-0-1
		10/14		6-32055-00-0-1
	1 Corner bearing axle			6-31087-00-0-6
	1 Corner hinge [1]			6-31073-00-0-*
	1 Clamping angle			6-30873-00-0-1
	2 Countersunk screws			9-13489-12-R-8

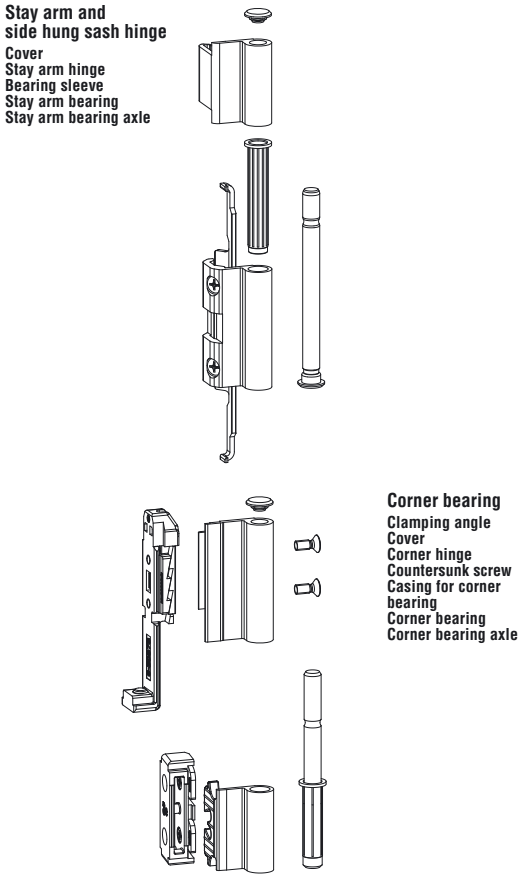
[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)

Optional part

Qty.	Description	PU	Article No.
1	**Bag of bearing sleeves/covers light grey** [1] for all bags of hinge side/middle hinge JET AK 8	1	K-17803-00-0-1
	Contents		
	1 Bearing sleeve		9-39805-00-0-1
	2 Covers		9-39807-00-0-1
	1 Corner bearing sleeve		9-39831-00-0-1
	1 Safety cover		9-39806-00-0-1

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)

Working drawings 0-44170



G.U-822, G.U-825

Application	Description	PU	Article No.
Assembly of corner bearing	Drilling jig for corner bearing	1	6-25831-01-0-9
Assembly of sash hinge, corner hinge	Drilling jig for sash hing 17/40 (K-13205-01)	1	6-25369-00-0-9
	Drilling jig for sash hing 17/45 (K-13205-03)	1	6-25996-03-0-0
	Drilling jig for sash hing 25/45 (K-13812-00)	1	6-25996-02-0-0
	Drilling jig for sash hing 17/17 (K-13813-00)	1	6-25996-01-0-0
	Rod for drilling jig 6-25369/6-25695	1	9-32596-00-0-3
	Stop for rod 9-32596	1	6-25371-00-0-9
Assembly of running rail and gliding rail	Drilling jig for running or gliding rail	1	6-23616-00-0-1
Assembly of folding catch	Drilling jig for folding catch	1	6-25575-00-0-9

Slide-fold fittings for aluminium windows and patio doors

Application

Range of applications for G.U slide-fold fittings:
– Slide-fold doors with 3 to 7 sashes,
– Slide-fold windows with 3 to 7 sashes,
each with running and gliding rails.

Locking mechanisms

Slide-fold locking mechanisms, inward opening
The locking mechanisms for inward opening slide-fold windows and patio doors feature one handle operation. Gear side with carrier for geared handle or lockable mill-in gears with 25 to 50 mm backset prepared for the installation of a profile cylinder.
All locking parts are designed for fitting groove 16 mm. The locking pins of locking mechanism and corner transmissions are adjustable. The clampable locking plates are adjustable to allow for optimum gasket pressure.
From sash heights over 851 mm , middle locks are used. Corner transmissions are provided with rust-proof 4-leaf stainless steel springs.
SRW 401-1000 mm
SRH 851-2350 mm

Runner, profiles and hinges

Slide-fold fittings G.U-822
Bottom running fittings for single sashes up to 80 kg, with 4-wheel carriages, adjustable for various sash overlap dimensions, height adjustable + 4 mm or -1.5 mm. Wheels made of fabric reinforced laminated plastic with ball bearing. Sash weight up to 80 kg

Slide-fold fittings G.U-825
Top running fittings for single sashes up to 80 kg, with 4-wheel carriages, adjustable for various sash overlap dimensions, height adjustable + 4 mm or -1.5 mm. Wheels made of fabric reinforced laminated plastic with ball bearing. Sash weight up to 80 kg

Locking plates

Frame profile specific locking plates according to table (see at the end of this catalogue chapter).

Drilling jigs, positioning jigs

Drilling jigs and other tools for hardware assembly are to be found at the end of this catalogue chapter and also in the respective working drawings.

Turn handles DIRIGENT [1]

The handles are made of aluminium with concealed fixings. The rosettes have a robust retention feature and fixed cams. Lockable handles and handles for operation from both sides complete the programme.

Standard colours:

F 1/EV 1	silver colour
F 2/EV 2	new silver colour
F 3	gold colour
F 4	light brown
dark brown	dark brown (RAL 8022)
black	black (RAL 9005)
white	white (RAL 9016 or RAL 9010)

[1] More turn handles see part 3 of the present order catalogue.

Standard handles

Standard version for slide-fold fittings G.U-822 and G.U-825 with gear 15 or lockable gear with cylinder bore: handle DIRIGENT-F.

Running rail P 1213

Aluminium running rail, suitable for use with slide-Folding sashes with standard and special fittings.

Gliding rail P 1381

Aluminium gliding rail, suitable for use with slide-Folding sashes (top guide).

Standard colours

Slide-fold fittings are supplied in the following standard colours:

EV 1	Visible aluminium parts anodized EV 1, cover profiles grey
UC 3	Visible aluminium parts anodized middle bronze, cover profiles middle brown
UC 5	Visible aluminium parts anodized dark bronze, cover profiles dark brown
white	Visible aluminium parts anodized EV 1, cover profiles white

Further colours and finishes on request.

Curved slide-fold units

If slide-fold units are arranged along a curved ground plan, the circle diametre must be 8 m at the minimum. Special guidelines of profile manufacturers have to be observed.

Materials, surface sealing fer**GU**ard*silver

The fitting parts are made of high quality steel, zinc die-casting or aluminium alloys.
Depending on the material, they are protected against corrosion by surface sealing with fer**GU**ard*silver or by anodisation (aluminium parts).

Standard surface sealing of slide-fold fittings: fer**GU**ard*silver

Locking components of slide-fold come with the surface sealing fer**GU**ard*silver.

Abbreviations

CB	Cylinder bore
FRW	Frame rebate width
G	Fixed gear position
lh	left hand
ML	Middle lock
PU	Packing unit
rh	right hand
SRH	Sash rebate height
SRW	Sash rebate width
ST	Sash thickness
TFW	Total frame width

Profile system manufacturers' information

It is important to observe the product information issued by the profile system manufacturers, especially information concerning construction and fabrication, maximum sash dimensions and weights and material features such as linear expansion of profiles.

Slide-fold fittings
for aluminium windows and patio doors

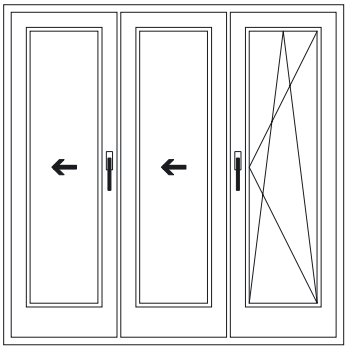
Profile systems with 16 mm fitting groove

Profile manufacturer	Profile system	Sash overlap mm	Groove position mm	Fitting groove [1] undercut/plane	Frame groove	Frame groove Dim. A	Frame groove Dim. B
Alco	Alousystem 550	20,0	13,0	U	14/18	1,5	4,0
Almaco		18,0	9,0	U	14/18		
Alumil	M 11000 M 11500 M 20000	18,0 18,0 18,0	9,0 9,0 9,0	U U U	14/18 14/18 14/18	1,5 1,5 1,5	3,5 3,5 3,5
Aluminco		20,0	9,0	U	14/18	1,5	3,5
Domal	Bright PA70S	18,0	9,0	U	14/18	1,5	3,5
Elvial	4300 4600 5400 5600 5700	18,0 18,0 18,0 18,0 18,0	9,0 9,0 9,0 9,0 9,0	U U U U U	14/18 14/18 14/18 14/18 14/18	1,5 1,5 1,5 1,5 1,5	4,0 4,0 4,0 4,0 4,0
Europa	5000	18,0	9,0	U	14/18	1,5	3,5
Etem	E40	20,0	9,0	U	14/18	2,0	4,0
Exalco	Albio 109C	18,0	9,0	U	14/18	1,3	3,9
Heroal	065 / 065i / 065f 090 / 090S 110 ES	18,0 18,0 18,0	9,0 9,0 9,0	U U U	10/14 10/14 10/14	2,0 2,0 2,0	4,3 4,3 4,3
Kawneer	Kalory	20,0	9,0	U	10/14		4,0
Nordall	78TTF	18,0	9,0	U	14/18	1,5	3,5
Ponzio	Windstop 55TT	18,0	9,0	U	14/18	2,0	4,0
TS-Aluminium	65	18,0	9,0	P	14/18	2,0	4,0

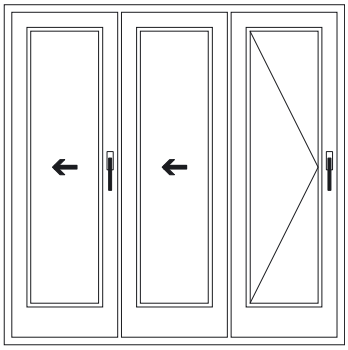
[1] U = undercut, P = plane

Slide-fold fittings
for aluminium windows and patio doors

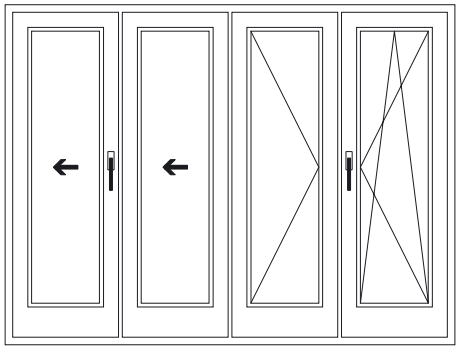
Sash arrangement according to schemes 321 to 651
with tilt-turn or side hung passage sash



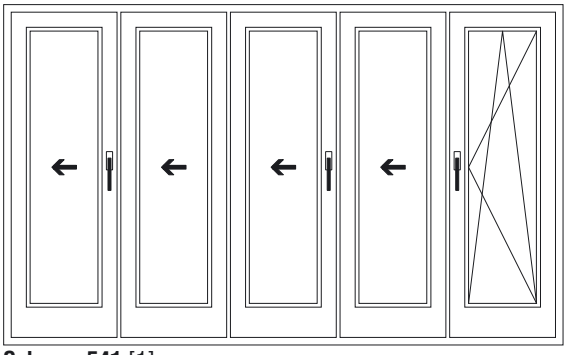
Scheme 321 [1]
2 slide-Folding sashes,
1 tilt-turn sash



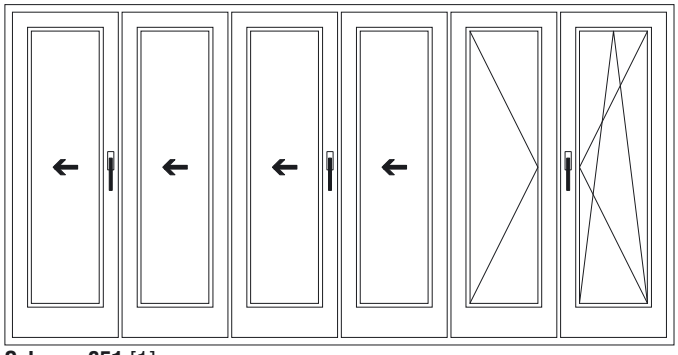
Scheme 330
2 slide-Folding sashes,
1 side hung sash



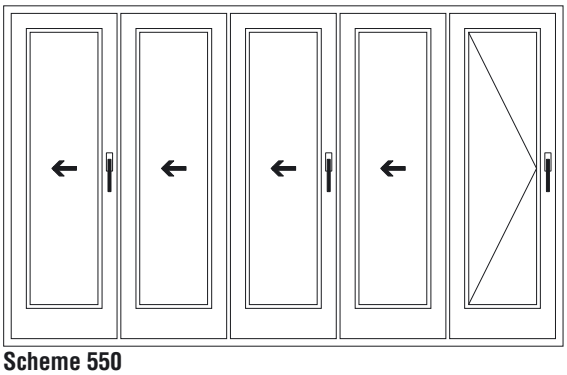
Scheme 431 [1]
2 slide-Folding sashes,
1 inactive side hung sash, 1 tilt-turn sash



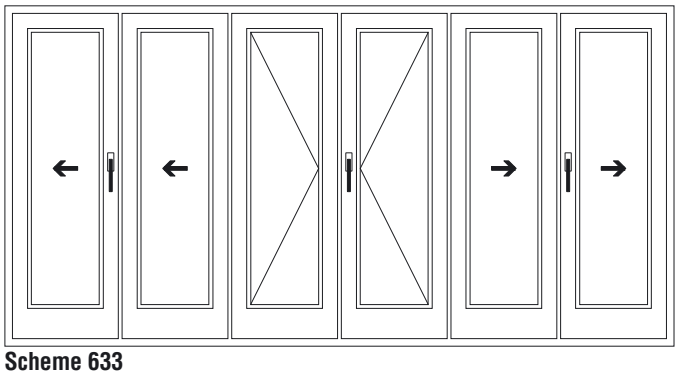
Scheme 541 [1]
4 slide-Folding sashes,
1 tilt-turn sash



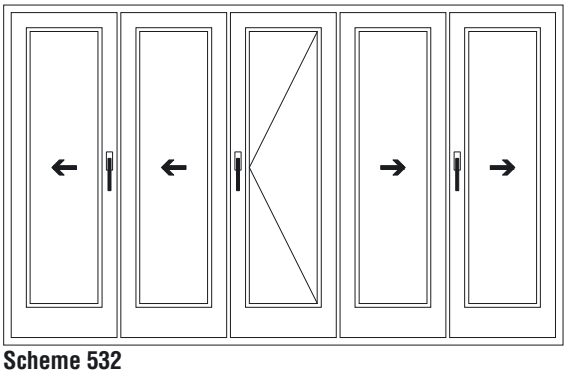
Scheme 651 [1]
4 slide-Folding sashes,
1 inactive side hung sash, 1 tilt-turn sash



Scheme 550
4 slide-Folding sashes,
1 side hung sash



Scheme 633
4 slide-Folding sashes,
1 inactive side hung sash, 1 side hung sash



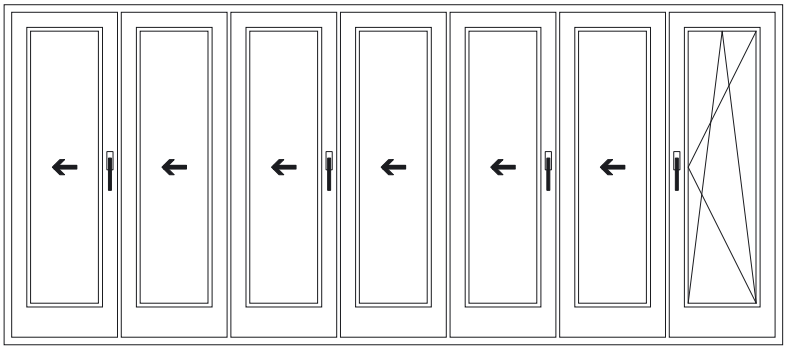
Scheme 532
4 slide-Folding sashes,
1 side hung sash

Legend:

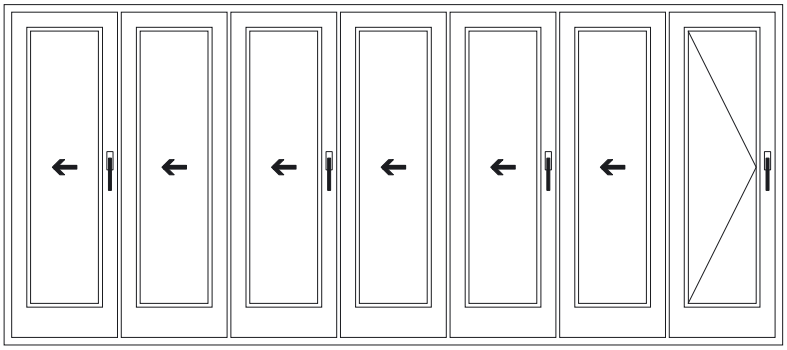
[1] Passage sash also as side hung sash
– with sash hinges and UNI-JET side hung locking mechanism

Slide-fold fittings
for aluminium windows and patio doors

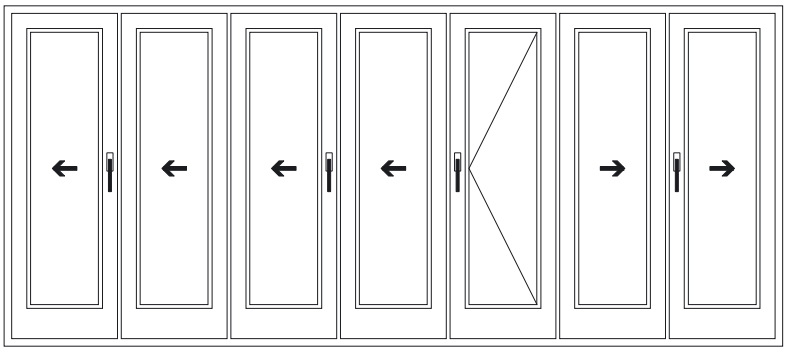
Sash arrangement according to schemes 743 to 770
with tilt-turn or side hung passage sash



Scheme 761 [1]
6 slide-Folding sashes,
1 tilt-turn sash



Scheme 770
6 slide-Folding sashes,
1 side hung sash

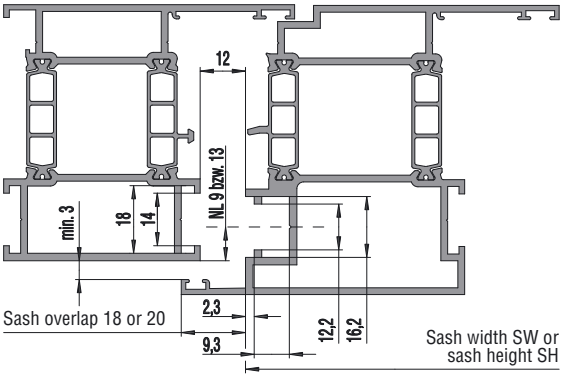


Scheme 743
6 slide-Folding sashes,
1 side hung sash

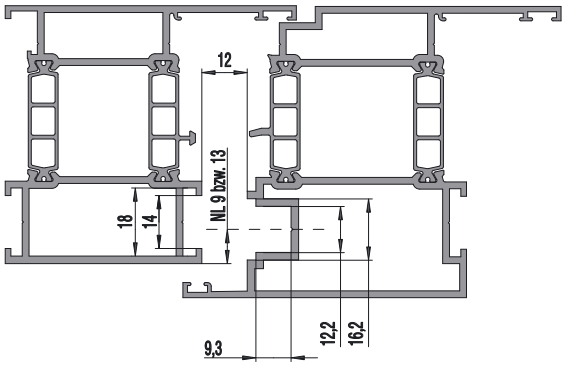
Legend:

[1] Passage sash also as side hung sash
– with sash hinges and UNI-JETside hung locking mechanism

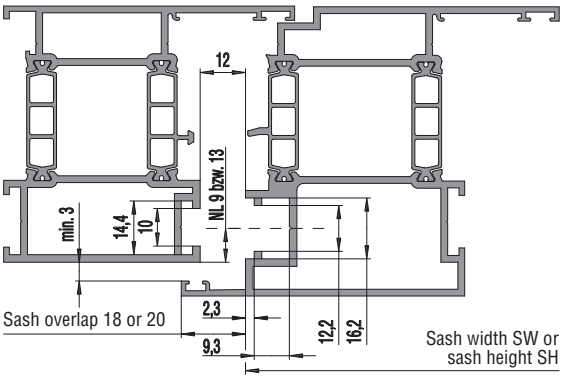
Assembly dimensions – frame and sash profile



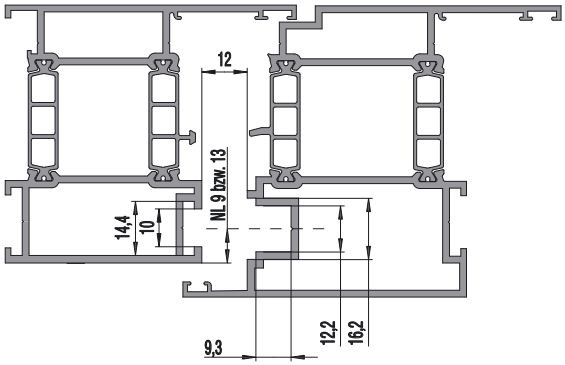
Frame and sash profile
Sash with undercut fitting groove 16 mm – groove position 9 or 13 mm
Frame groove 14/18



Frame and sash profile
Sash with plane fitting groove 16 mm – groove position 9 or 13 mm
Frame groove 14/18

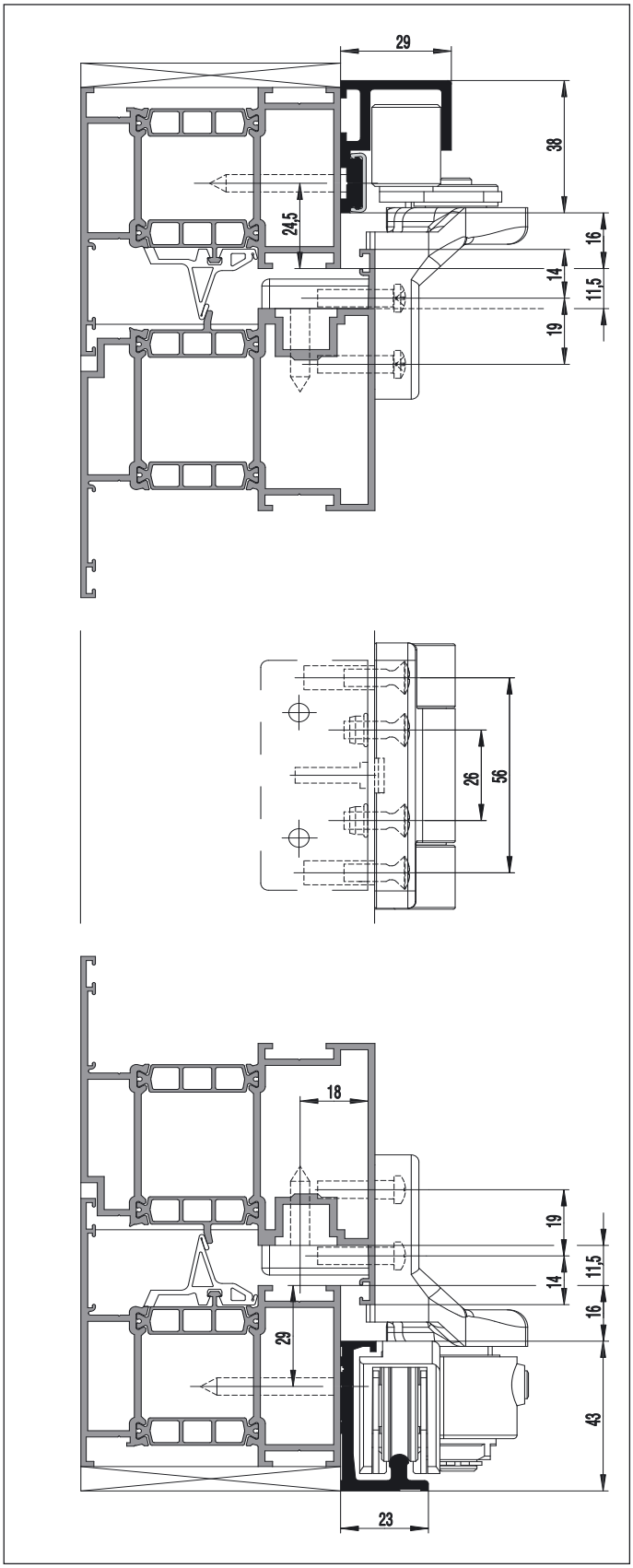


Frame and sash profile
Sashes with undercut fitting groove 16 mm – groove position 9 or 13 mm
Frame groove 10/14

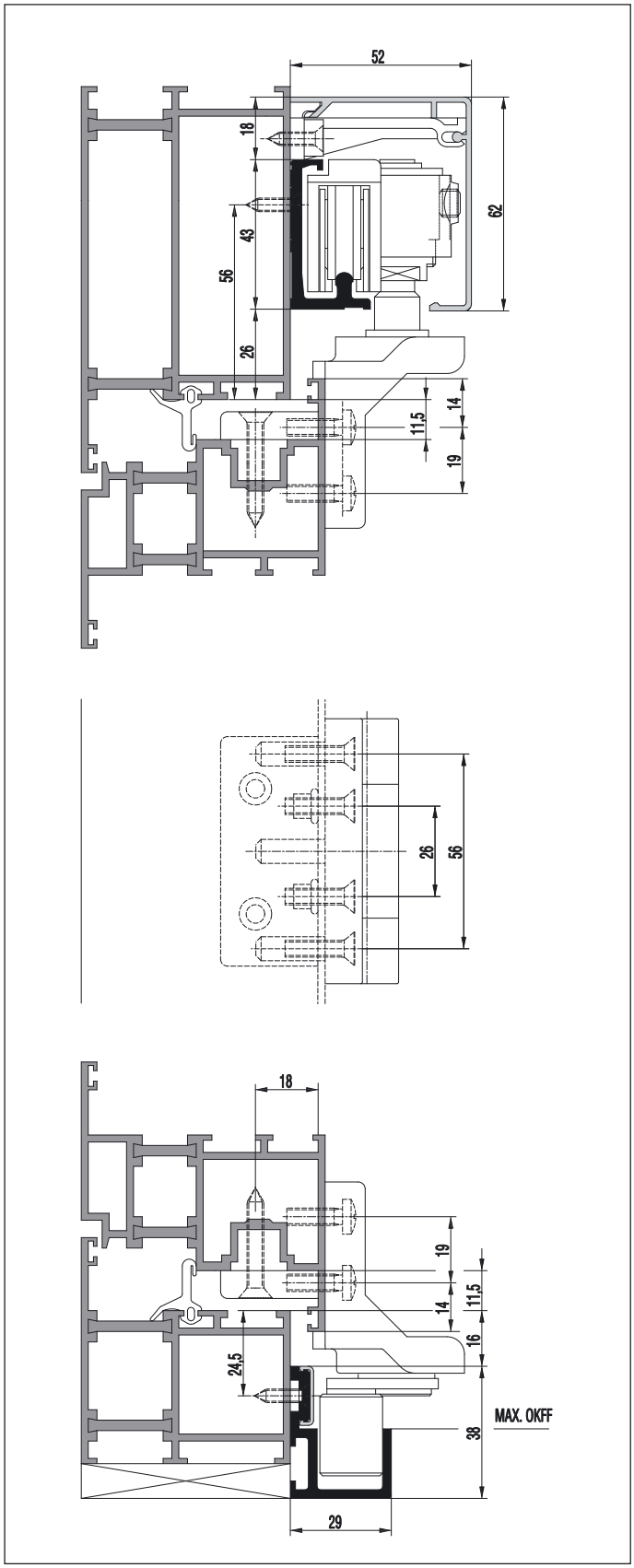


Frame and sash profile
Sashes with plane fitting groove 16 mm – groove position 9 or 13 mm
Frame groove 10/14

Assembly dimensions – gliding rails, running rails, runners, hinges

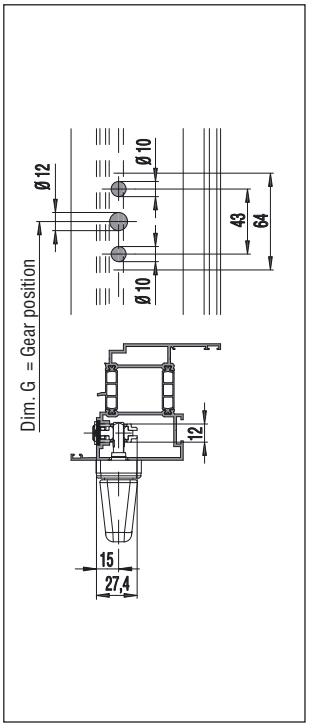


Slide-fold fittings G.U-822

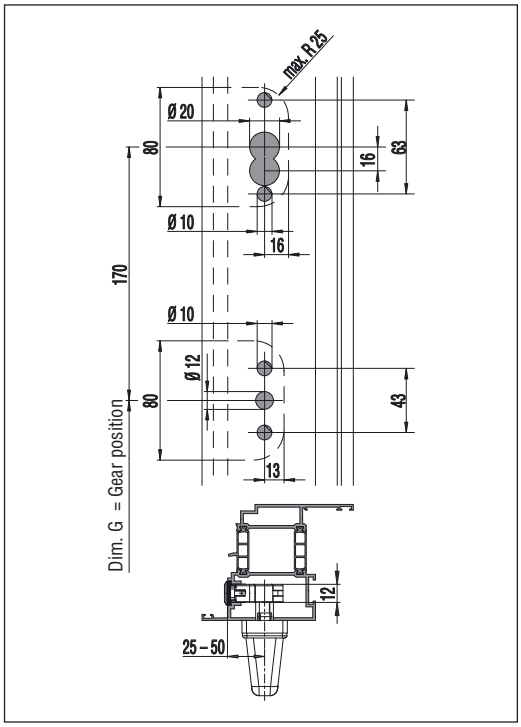


Slide-fold fittings G.U-825

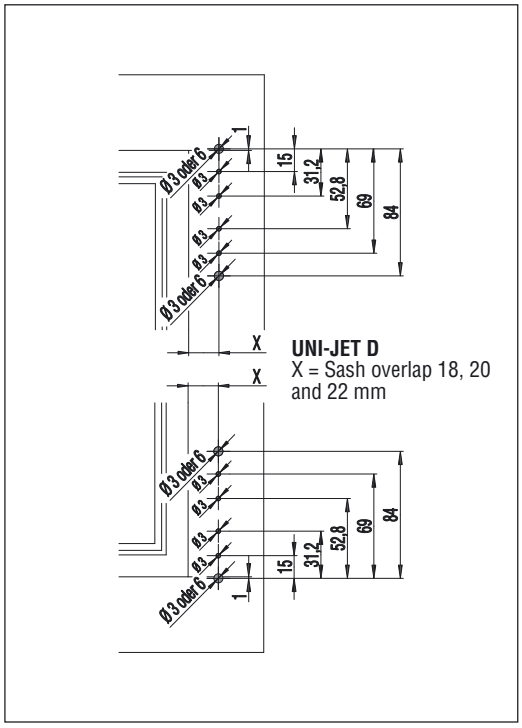
Drilling and milling dimensions



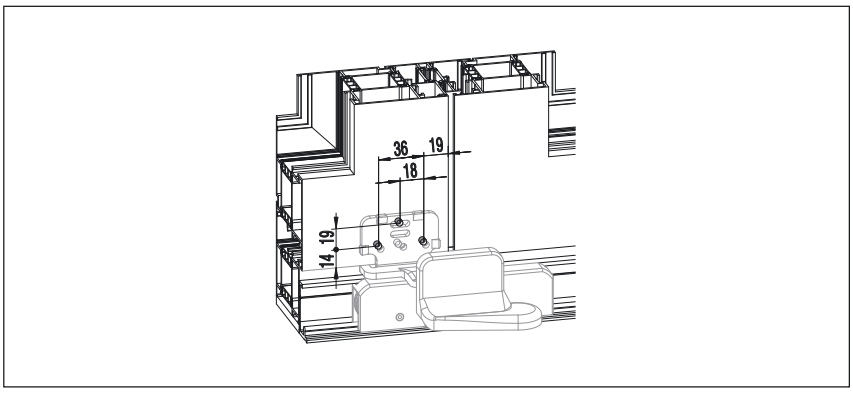
Dimensions for handles DIRIGENT
Drilling jig 6-22459-00-0-0
Stop 9-27406-00-0-1



Dimensions for gears AP 25 up to AP 50
Drilling jig with stop 6-25156-00-0-9

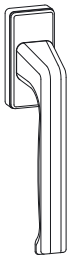


Dimensions for stay arm bearing and corner bearing UNI-JET D
Drilling jig, drill Ø 3 mm 6-27412-03-0-0
Drilling jig, drill Ø 3 mm and 6 mm 6-27412-53-0-0

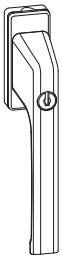


Dimensions corner bearing
Drilling jig 6-25831-01-0-9

Handles DIRIGENT-F [1]



DIRIGENT-F
Spindle 25 6-28072-25-0-*
Spindle 29 6-28072-29-0-*



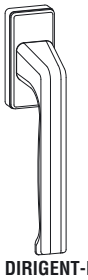
DIRIGENT-F/Z
with push button cylinder, all keys alike
Spindle 29 6-28075-29-0-*

DIRIGENT-F/F flat
6-28101-00-0-*

MODENA-F/Z 100 Nm [2]
for security windows and patio doors
Spindle 29 6-34397-29-0-*

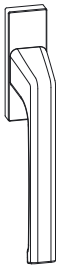
DIRIGENT-F/SG
Spindle 50 8-00694-50-0-7

Rosette/F inside – flat
6-24913-00-0-*

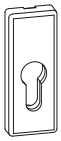


DIRIGENT-F
inside – without spindle
6-28072-00-0-*

DIRIGENT-F/AF,
outside – flat
6-25223-00-0-*



DIRIGENT-F/A,
outside
6-25993-00-0-*



Rosette with CB inside
square K-17205-02-0-*
oval K-17204-02-0-*

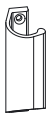
Rosette PZ/A outside
square 9-43605-02-0-*
oval 9-43582-02-0-*

Spindle
ST 56-68 9-26874-56-0-1
ST 69-80 9-26874-69-0-1

Inside/ outside operation
Countersunk screw M 5
ST 50-54 9-13255-60-0-1
ST 55-59 9-13255-65-0-1
ST 60-64 9-13255-70-0-1
ST 65-69 9-13255-75-0-1
ST 70-74 9-13255-80-0-1
ST 75-80 9-13255-85-0-1

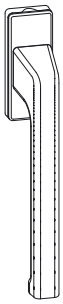
Inside operation
Countersunk screw M 5
Spindle 25 9-13255-30-0-1
Spindle 29 9-13255-35-0-1

Knob lock
Backset 25 - 50 mm
K-13282-00-0-*



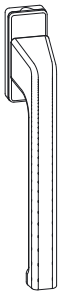
Pull handle outside
9-22921-00-0-*

[1] = More turn handles see part 3 of the present order catalogue.
[2] = Tested to DIN V EN V 1627 for resistance to pull-off and twist-off attempts at 100 Nm.



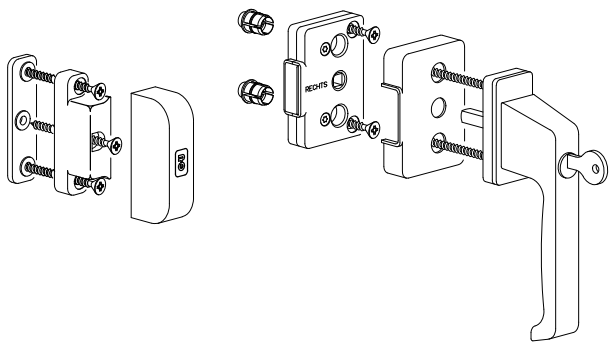
DIRIGENT-HL
elongated
Rosette 32 x 81 mm
Spindle 25 6-31382-25-0-*
Spindle 29 6-31382-29-0-*

DIRIGENT-HL
elongated
Rosette 32 x 81 mm
push button cylinder
Spindle 30 6-31383-30-0-*



DIRIGENT-HL
elongated
Rosette 28 x 67 mm
Spindle 33 6-32629-33-0-*

G.U Face fixed window lock



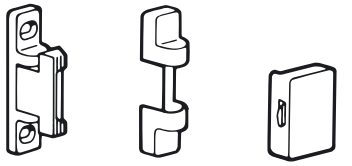
Box of face fixed window lock with turn handle DIRIGENT F/Z

EV 1	**K-14662-00-0-11**
dark brown	**K-14662-00-0-5**
white	**K-14662-00-0-7**

Contents of box

1 Turn handle DIRIGENT F/Z, lockable
1 Spindle 7 x 75 mm
1 Face fixed lock
1 Cover for face fixed lock
2 Sleeve for Ø 10 mm
2 Sleeve for Ø 12 mm
1 Strike box
1 Cover for strike box
1 Packing 3 mm
1 Packing 4 mm
1 Packing 5 mm
1 Packing 6 mm
7 Spax countersunk screw 5 x 55 mm

JET Slit ventilation catch



Slit ventilation catch **Cover** **Catch plate**

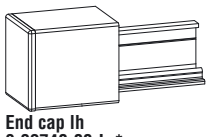
Fitting requirements JET Slit ventilation catch for aluminium windows

Quantity	Description	PU	Article No.
1	**JET Slit ventilation catch**, with sash overlap	10	K-12223-90-0-*
1	**JET Slit ventilation catch**, without sash overlap	10	K-12216-90-0-*
	Drilling jig	1	6-23861-00-0-0

Working drawing 0-38928

4

Slide-fold fittings G.U-825 at bottom in- and outside without threshold



End cap lh
9-32740-00-L-*
Cover rail P 1391
Running rail P 1213

Gliding rail P 1410

Support 9-32741

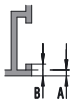
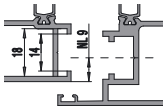
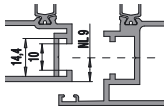
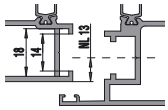
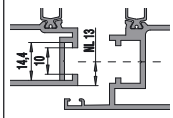
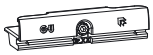
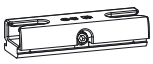
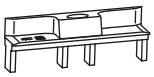
Running rail P 1213
Cover rail P 1391
End cap rh
9-32740-00-R-*

Bag of profiles G.U-825
at bottom in- and outside without threshold

TFW mm	PU	Article No.
-2960	1	K-14679-30-0-*
2961-6700	1	K-14679-67-0-*

Locking plates, sash hinges – Fitting groove 16 mm

Locking plates according to frame groove

Description	Dim.	Length mm	Illustration	Groove position 9 Frame groove 14/18	Groove position 9 Frame groove 10/14	Groove position 13 Frame groove 14/18	Groove position 13 Frame groove 10/14
							
Standard locking plate Frame – zinc to clamp	A = 2,0 A = 1,5	55 55		6-32628-00-0-1 6-32628-01-0-1	6-32628-00-0-1 6-32628-01-0-1	6-33278-00-0-1 6-33278-01-0-1	6-33278-00-0-1 6-33278-01-0-1
Standard locking plate Frame – zinc screw-on version	B = 4,0 B = 3,5	55 55 55		9-45219-14-0-1 9-45219-15-0-1	9-45219-10-0-1		
Mushroom locking plate Se Frame – steel	B = 4,0 B = 3,5	55 55 55		6-27674-48-0-1 6-27674-49-0-1	6-27674-62-0-1	6-33398-00-0-1	6-27831-44-0-1
Mushroom locking plate Ahs Frame – zinc to clamp	B = 4,0 B = 3,5	55 55 55		6-32225-14-0-1 6-32225-15-0-1	6-32225-10-0-1		
Locking plate for false mullion Fitting groove 16 mm – zinc		55		E-13534-12-0-1	E-13534-12-0-1	E-13534-12-0-1	E-13534-12-0-1
Locking plate for false mullion Se Fitting groove 16 mm – steel		55		6-27831-52-0-1	6-27831-52-0-1	6-27831-52-0-1	6-27831-52-0-1

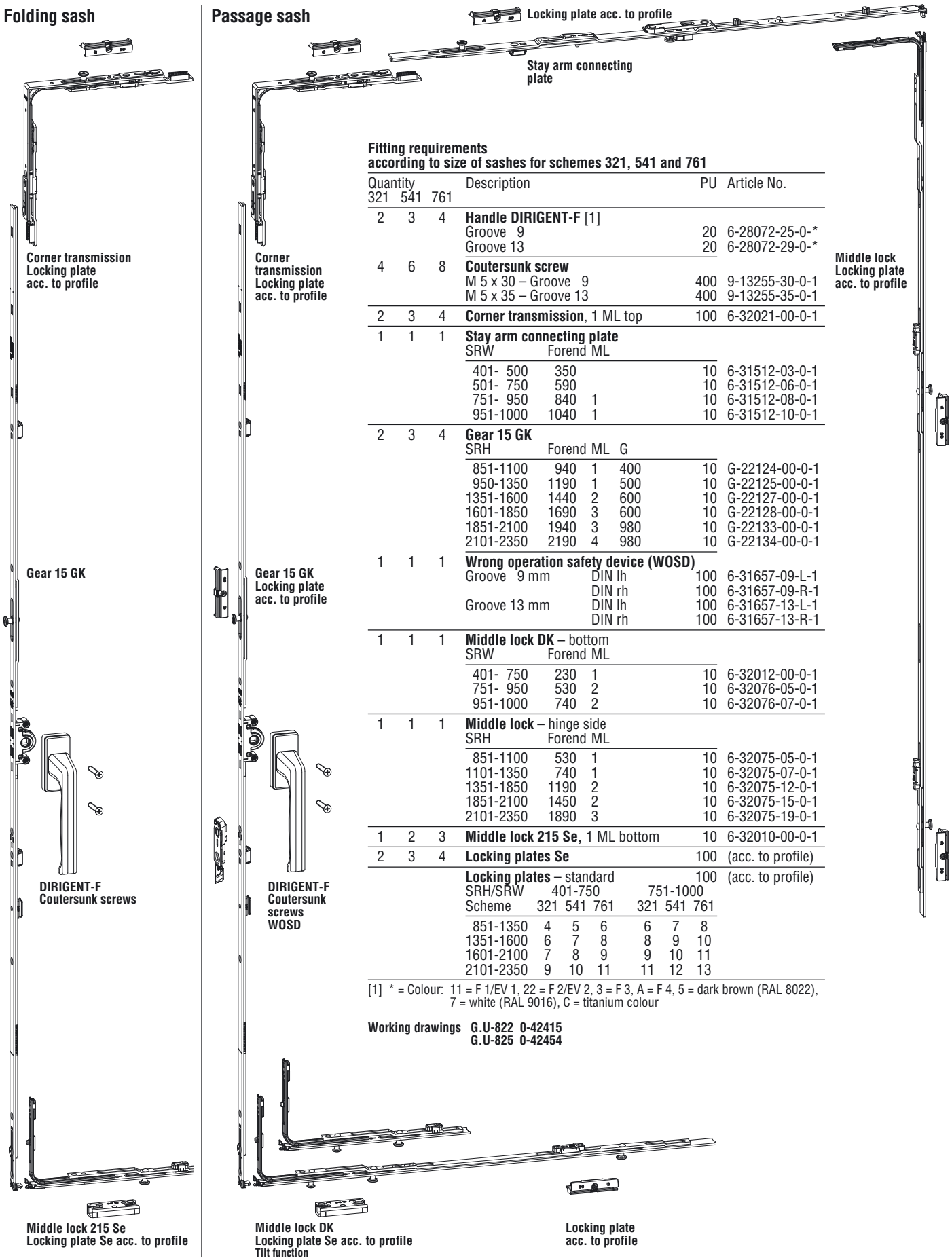
Sash hinges and locking plates according to profile systems

Profile systems aluminium	Z-shaped sash profile	T-shaped sash profile	Frame profile	False mullion	Working drawing G.U-822	Box of sash hinges	Locking plate frame	Locking plate Se frame	Locking plate false mullion
Akotherm AT 615	1549	1511	1503	1508	0-42594-1	K-13205-03-0-1	6-25495-00-0-1		6-25495-00-0-1
Alsec 2000-Serie 59	56556-92		53194-80	53198-97	0-42547-1	K-13812-00-0-1	9-30146-13-0-1		9-30146-13-0-1
Forster Norm (Stahl)	32.635		32.357	32.642	0-43781-1	K-13205-01-0-1	9-30147-00-0-1	6-32207-18-0-1	9-30256-00-0-1
Forster Therm Clima (Stahl)	510.800		510.751	510.832	0-43776-1	K-13205-01-0-1	9-30147-00-0-1	6-32207-18-0-1	9-30256-00-0-1

Windows and patio doors with handle inside for sash profiles with fitting groove 16 mm
Schemes 321, 541 and 761 – passage sash: tilt-turn

Folding sash

Passage sash



Fitting requirements
according to size of sashes for schemes 321, 541 and 761

Quantity 321	541	761	Description	PU	Article No.
2	3	4	**Handle DIRIGENT-F** [1]		
			Groove 9	20	6-28072-25-0-*
			Groove 13	20	6-28072-29-0-*
4	6	8	**Coutersunk screw**		
			M 5 x 30 – Groove 9	400	9-13255-30-0-1
			M 5 x 35 – Groove 13	400	9-13255-35-0-1
2	3	4	**Corner transmission**, 1 ML top	100	6-32021-00-0-1
1	1	1	**Stay arm connecting plate**		

SRW	Forend	ML		
401- 500	350		10	6-31512-03-0-1
501- 750	590		10	6-31512-06-0-1
751- 950	840	1	10	6-31512-08-0-1
951-1000	1040	1	10	6-31512-10-0-1

2	3	4	**Gear 15 GK**		

SRH	Forend	ML	G		
851-1100	940	1	400	10	G-22124-00-0-1
950-1350	1190	1	500	10	G-22125-00-0-1
1351-1600	1440	2	600	10	G-22127-00-0-1
1601-1850	1690	3	600	10	G-22128-00-0-1
1851-2100	1940	3	980	10	G-22133-00-0-1
2101-2350	2190	4	980	10	G-22134-00-0-1

1	1	1	**Wrong operation safety device (WOSD)**			
			Groove 9 mm	DIN lh	100	6-31657-09-L-1
				DIN rh	100	6-31657-09-R-1
			Groove 13 mm	DIN lh	100	6-31657-13-L-1
				DIN rh	100	6-31657-13-R-1
1	1	1	**Middle lock DK –** bottom			

SRW	Forend	ML		
401- 750	230	1	10	6-32012-00-0-1
751- 950	530	2	10	6-32076-05-0-1
951-1000	740	2	10	6-32076-07-0-1
1	1	1	**Middle lock** – hinge side			

SRH	Forend	ML		
851-1100	530	1	10	6-32075-05-0-1
1101-1350	740	1	10	6-32075-07-0-1
1351-1850	1190	2	10	6-32075-12-0-1
1851-2100	1450	2	10	6-32075-15-0-1
2101-2350	1890	3	10	6-32075-19-0-1

1	2	3	**Middle lock 215 Se,** 1 ML bottom	10	6-32010-00-0-1
2	3	4	**Locking plates Se**	100	(acc. to profile)

Locking plates – standard 100 (acc. to profile)

SRH/SRW	401-750			751-1000		
Scheme	321	541	761	321	541	761
851-1350	4	5	6	6	7	8
1351-1600	6	7	8	8	9	10
1601-2100	7	8	9	9	10	11
2101-2350	9	10	11	11	12	13

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4, 5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour

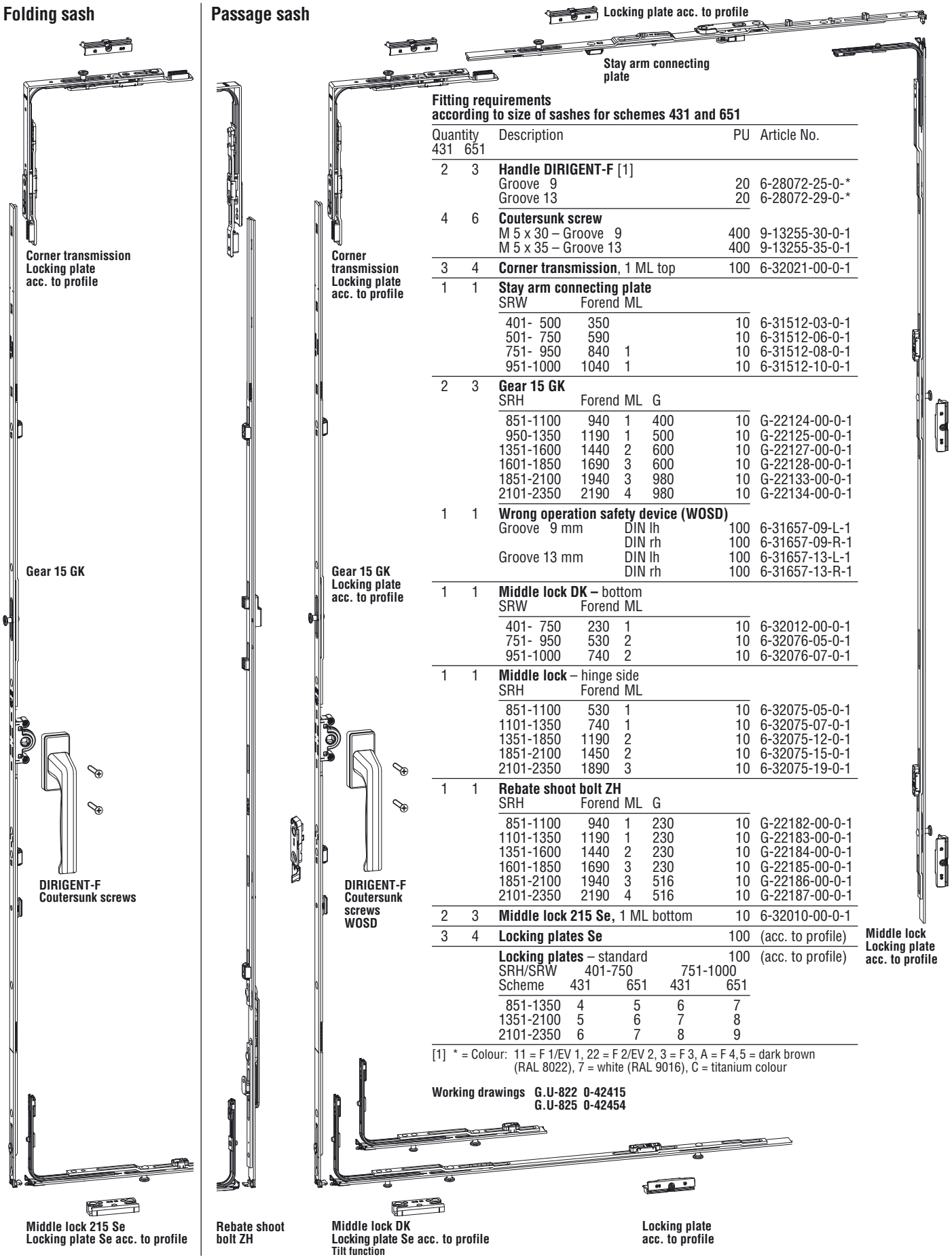
Working drawings **G.U-822 0-42415**
G.U-825 0-42454

Slide-fold locking mechanism, inward opening

Windows and patio doors with handle inside for sash profiles with fitting groove 16 mm
Schemes 431 and 651 – passage sash: tilt-turn

Folding sash

Passage sash



Fitting requirements
according to size of sashes for schemes 431 and 651

Quantity 431	Quantity 651	Description				PU	Article No.
2	3	**Handle DIRIGENT-F** [1]					
		Groove 9				20	6-28072-25-0-*
		Groove 13				20	6-28072-29-0-*
4	6	**Coutersunk screw**					
		M 5 x 30 – Groove 9				400	9-13255-30-0-1
		M 5 x 35 – Groove 13				400	9-13255-35-0-1
3	4	**Corner transmission**, 1 ML top				100	6-32021-00-0-1
1	1	**Stay arm connecting plate**					
		SRW	Forend	ML			
		401- 500	350			10	6-31512-03-0-1
		501- 750	590			10	6-31512-06-0-1
		751- 950	840	1		10	6-31512-08-0-1
		951-1000	1040	1		10	6-31512-10-0-1
2	3	**Gear 15 GK**					
		SRH	Forend	ML	G		
		851-1100	940	1	400	10	G-22124-00-0-1
		950-1350	1190	1	500	10	G-22125-00-0-1
		1351-1600	1440	2	600	10	G-22127-00-0-1
		1601-1850	1690	3	600	10	G-22128-00-0-1
		1851-2100	1940	3	980	10	G-22133-00-0-1
		2101-2350	2190	4	980	10	G-22134-00-0-1
1	1	**Wrong operation safety device (WOSD)**					
		Groove 9 mm			DIN lh	100	6-31657-09-L-1
					DIN rh	100	6-31657-09-R-1
		Groove 13 mm			DIN lh	100	6-31657-13-L-1
					DIN rh	100	6-31657-13-R-1
1	1	**Middle lock DK –** bottom					
		SRW	Forend	ML			
		401- 750	230	1		10	6-32012-00-0-1
		751- 950	530	2		10	6-32076-05-0-1
		951-1000	740	2		10	6-32076-07-0-1
1	1	**Middle lock** – hinge side					
		SRH	Forend	ML			
		851-1100	530	1		10	6-32075-05-0-1
		1101-1350	740	1		10	6-32075-07-0-1
		1351-1850	1190	2		10	6-32075-12-0-1
		1851-2100	1450	2		10	6-32075-15-0-1
		2101-2350	1890	3		10	6-32075-19-0-1
1	1	**Rebate shoot bolt ZH**					
		SRH	Forend	ML	G		
		851-1100	940	1	230	10	G-22182-00-0-1
		1101-1350	1190	1	230	10	G-22183-00-0-1
		1351-1600	1440	2	230	10	G-22184-00-0-1
		1601-1850	1690	3	230	10	G-22185-00-0-1
		1851-2100	1940	3	516	10	G-22186-00-0-1
		2101-2350	2190	4	516	10	G-22187-00-0-1
2	3	**Middle lock 215 Se,** 1 ML bottom				10	6-32010-00-0-1
3	4	**Locking plates Se**				100	(acc. to profile)
		Locking plates – standard				100	(acc. to profile)
		SRH/SRW	401-750		751-1000		
		Scheme	431	651	431	651	
		851-1350	4	5	6	7	
		1351-2100	5	6	7	8	
		2101-2350	6	7	8	9	

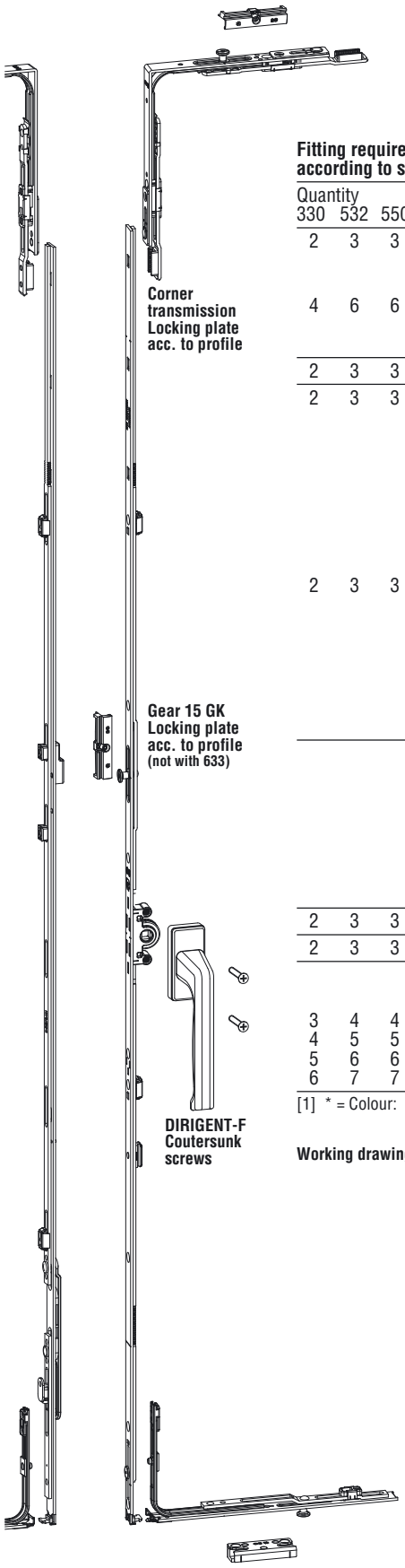
[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4,5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour

Working drawings **G.U-822 0-42415**
G.U-825 0-42454

Windows and patio doors with handle inside for sash profiles with fitting groove 16 mm
Schemes 330, 532, 550, 633, 743 and 770 – passage sash: side hung

Folding sash

Passage sash



Fitting requirements
according to size of sashes for schemes 330, 532, 550, 633, 743 and 770

Quantity 330	532	550	633	743	770	Description	PU	Article No.
2	3	3	3	4	4	**Handle DIRIGENT-F** [1]		
						Groove 9	20	6-28072-25-0-*
						Groove 13	20	6-28072-29-0-*
4	6	6	6	8	8	**Coutersunk screw**		
						M 5 x 30 – Groove 9	400	9-13255-30-0-1
						M 5 x 35 – Groove 13	400	9-13255-35-0-1
2	3	3	4	4	4	**Corner transmission**, 1 ML top	100	6-32021-00-0-1
2	3	3	3	4	4	**Gear 15 GK**		
						SRH Forend ML G		
						851-1100 940 1 400	10	G-22124-00-0-1
						950-1350 1190 1 500	10	G-22125-00-0-1
						1351-1600 1440 2 600	10	G-22127-00-0-1
						1601-1850 1690 3 600	10	G-22128-00-0-1
						1851-2100 1940 3 980	10	G-22133-00-0-1
						2101-2350 2190 4 980	10	G-22134-00-0-1
						alternatively:		
2	3	3	3	4	4	**Gear 25 GK**		
						SRH Forend ML G		
						851-1100 940 1 400	10	G-22790-00-0-1
						950-1350 1190 1 500	10	G-22791-00-0-1
						1351-1600 1440 2 600	10	G-22792-00-0-1
						1601-1850 1690 3 600	10	G-22793-00-0-1
						1851-2100 1940 3 980	10	G-22321-00-0-1
						2101-2350 2190 4 980	10	G-22322-00-0-1
			1			**Rebate shoot bolt ZH**		
						SRH Forend ML G		
						851-1100 940 1 230	10	G-22182-00-0-1
						1101-1350 1190 1 230	10	G-22183-00-0-1
						1351-1600 1440 2 230	10	G-22184-00-0-1
						1601-1850 1690 3 230	10	G-22185-00-0-1
						1851-2100 1940 3 516	10	G-22186-00-0-1
						2101-2350 2190 4 516	10	G-22187-00-0-1
2	3	3	4	4	4	**Middle lock 215 Se**, 1 ML bottom	10	6-32010-00-0-1
2	3	3	4	4	4	**Locking plates Se**	100	(acc. to profile)
						Locking plates – standard	100	(acc. to profile)
						FFH		
3	4	4	5	5	5	851-1350		
4	5	5	6	6	6	1351-1600		
5	6	6	7	7	7	1601-2100		
6	7	7	8	8	8	2101-2350		

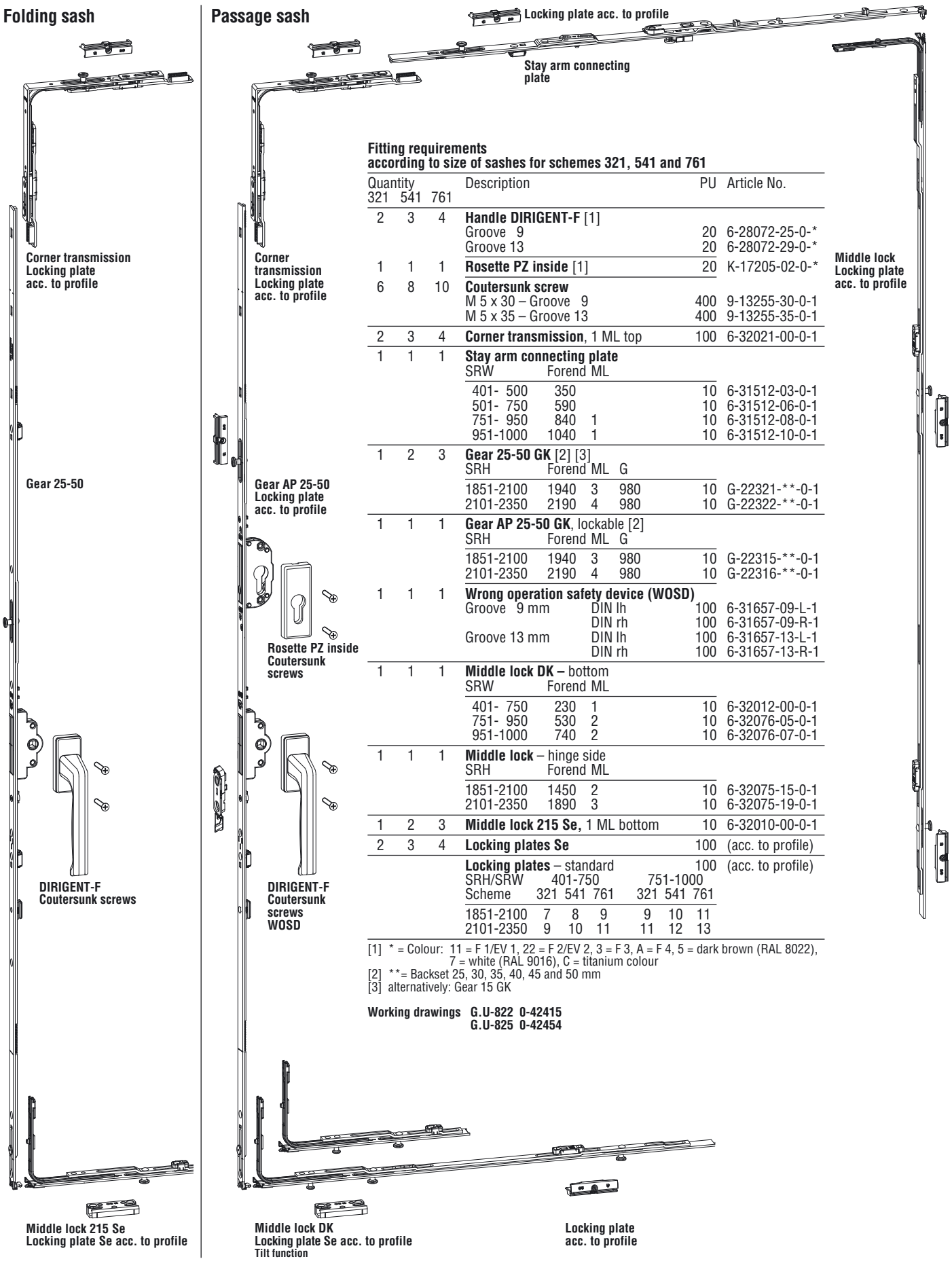
[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4, 5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour

Working drawings **G.U-822 0-42415**
G.U-825 0-42454

Windows and patio doors with lockable gear AP for sash profiles with fitting groove 16 mm
Schemes 321, 541 and 761 – passage sash: tilt-turn

Folding sash

Passage sash



Fitting requirements
according to size of sashes for schemes 321, 541 and 761

Quantity 321	541	761	Description	PU	Article No.
2	3	4	**Handle DIRIGENT-F** [1]		
			Groove 9	20	6-28072-25-0-*
			Groove 13	20	6-28072-29-0-*
1	1	1	**Rosette PZ inside** [1]	20	K-17205-02-0-*
6	8	10	**Coutersunk screw**		
			M 5 x 30 – Groove 9	400	9-13255-30-0-1
			M 5 x 35 – Groove 13	400	9-13255-35-0-1
2	3	4	**Corner transmission**, 1 ML top	100	6-32021-00-0-1
1	1	1	**Stay arm connecting plate**		
			SRW / Forend ML		
			401- 500 / 350	10	6-31512-03-0-1
			501- 750 / 590	10	6-31512-06-0-1
			751- 950 / 840 1	10	6-31512-08-0-1
			951-1000 / 1040 1	10	6-31512-10-0-1
1	2	3	**Gear 25-50 GK** [2] [3]		
			SRH / Forend ML G		
			1851-2100 / 1940 3 980	10	G-22321-**-0-1
			2101-2350 / 2190 4 980	10	G-22322-**-0-1
1	1	1	**Gear AP 25-50 GK**, lockable [2]		
			SRH / Forend ML G		
			1851-2100 / 1940 3 980	10	G-22315-**-0-1
			2101-2350 / 2190 4 980	10	G-22316-**-0-1
1	1	1	**Wrong operation safety device (WOSD)**		
			Groove 9 mm / DIN lh	100	6-31657-09-L-1
			DIN rh	100	6-31657-09-R-1
			Groove 13 mm / DIN lh	100	6-31657-13-L-1
			DIN rh	100	6-31657-13-R-1
1	1	1	**Middle lock DK –** bottom		
			SRW / Forend ML		
			401- 750 / 230 1	10	6-32012-00-0-1
			751- 950 / 530 2	10	6-32076-05-0-1
			951-1000 / 740 2	10	6-32076-07-0-1
1	1	1	**Middle lock** – hinge side		
			SRH / Forend ML		
			1851-2100 / 1450 2	10	6-32075-15-0-1
			2101-2350 / 1890 3	10	6-32075-19-0-1
1	2	3	**Middle lock 215 Se,** 1 ML bottom	10	6-32010-00-0-1
2	3	4	**Locking plates Se**	100	(acc. to profile)
			Locking plates – standard	100	(acc. to profile)
			SRH/SRW 401-750 / 751-1000		
			Scheme 321 541 761 / 321 541 761		
			1851-2100 7 8 9 / 9 10 11		
			2101-2350 9 10 11 / 11 12 13		

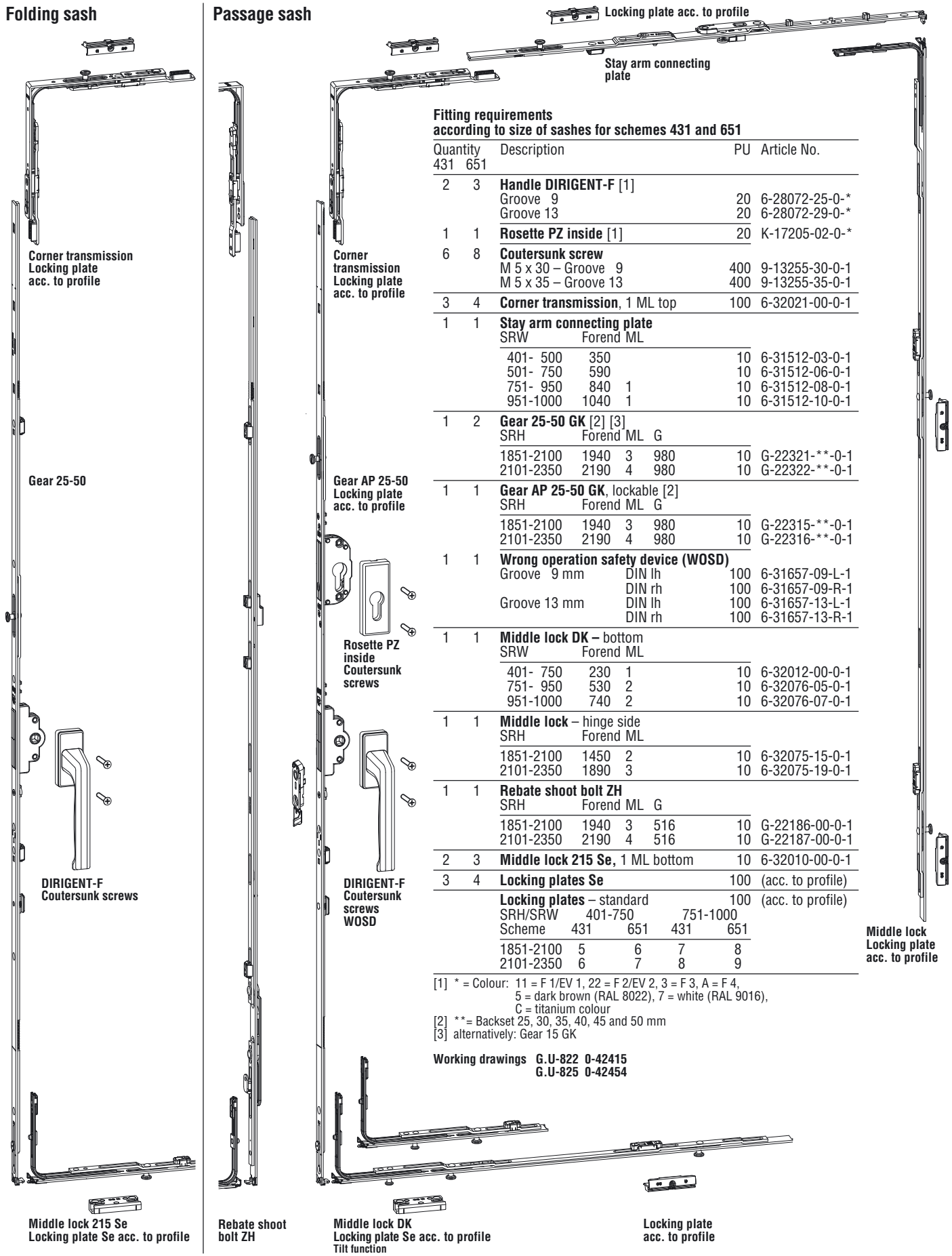
[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4, 5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour
[2] **= Backset 25, 30, 35, 40, 45 and 50 mm
[3] alternatively: Gear 15 GK

Working drawings **G.U-822 0-42415**
G.U-825 0-42454

Windows and patio doors with lockable gear AP for sash profiles with fitting groove 16 mm
Schemes 431 and 651 – passage sash: tilt-turn

Folding sash

Passage sash



Fitting requirements
according to size of sashes for schemes 431 and 651

Quantity 431	Quantity 651	Description	PU	Article No.
2	3	**Handle DIRIGENT-F** [1]		
		Groove 9	20	6-28072-25-0-*
		Groove 13	20	6-28072-29-0-*
1	1	**Rosette PZ inside** [1]	20	K-17205-02-0-*
6	8	**Coutersunk screw**		
		M 5 x 30 – Groove 9	400	9-13255-30-0-1
		M 5 x 35 – Groove 13	400	9-13255-35-0-1
3	4	**Corner transmission**, 1 ML top	100	6-32021-00-0-1
1	1	**Stay arm connecting plate**		
		SRW / Forend ML		
		401- 500 / 350	10	6-31512-03-0-1
		501- 750 / 590	10	6-31512-06-0-1
		751- 950 / 840 1	10	6-31512-08-0-1
		951-1000 / 1040 1	10	6-31512-10-0-1
1	2	**Gear 25-50 GK** [2] [3]		
		SRH / Forend ML G		
		1851-2100 / 1940 3 980	10	G-22321-**-0-1
		2101-2350 / 2190 4 980	10	G-22322-**-0-1
1	1	**Gear AP 25-50 GK**, lockable [2]		
		SRH / Forend ML G		
		1851-2100 / 1940 3 980	10	G-22315-**-0-1
		2101-2350 / 2190 4 980	10	G-22316-**-0-1
1	1	**Wrong operation safety device (WOSD)**		
		Groove 9 mm / DIN lh	100	6-31657-09-L-1
		DIN rh	100	6-31657-09-R-1
		Groove 13 mm / DIN lh	100	6-31657-13-L-1
		DIN rh	100	6-31657-13-R-1
1	1	**Middle lock DK –** bottom		
		SRW / Forend ML		
		401- 750 / 230 1	10	6-32012-00-0-1
		751- 950 / 530 2	10	6-32076-05-0-1
		951-1000 / 740 2	10	6-32076-07-0-1
1	1	**Middle lock** – hinge side		
		SRH / Forend ML		
		1851-2100 / 1450 2	10	6-32075-15-0-1
		2101-2350 / 1890 3	10	6-32075-19-0-1
1	1	**Rebate shoot bolt ZH**		
		SRH / Forend ML G		
		1851-2100 / 1940 3 516	10	G-22186-00-0-1
		2101-2350 / 2190 4 516	10	G-22187-00-0-1
2	3	**Middle lock 215 Se,** 1 ML bottom	10	6-32010-00-0-1
3	4	**Locking plates Se**	100	(acc. to profile)
		Locking plates – standard	100	(acc. to profile)

SRH/SRW	401-750		751-1000	
Scheme	431	651	431	651
1851-2100	5	6	7	8
2101-2350	6	7	8	9

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4,
5 = dark brown (RAL 8022), 7 = white (RAL 9016),
C = titanium colour
[2] **= Backset 25, 30, 35, 40, 45 and 50 mm
[3] alternatively: Gear 15 GK

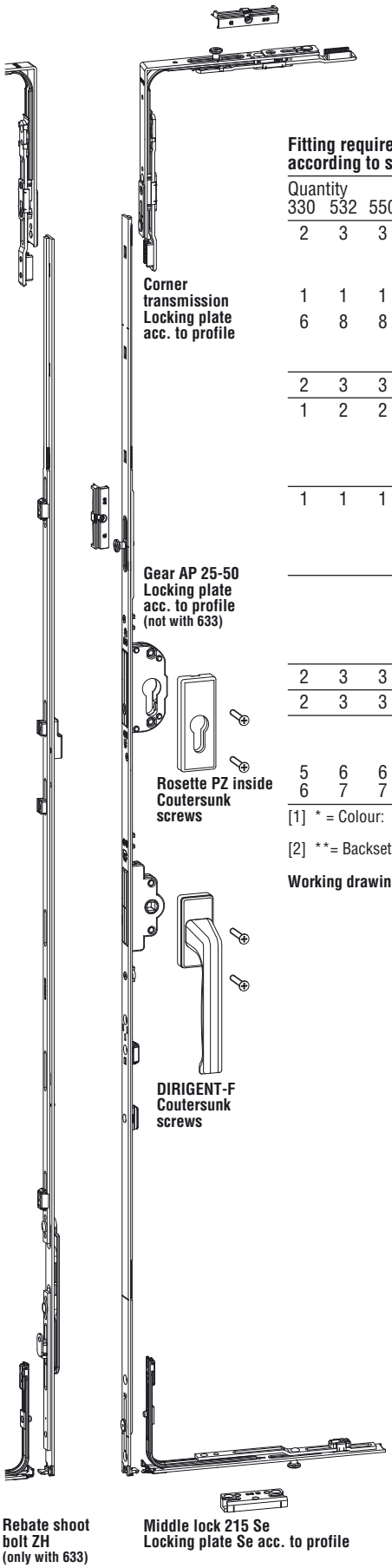
Working drawings **G.U-822 0-42415**
G.U-825 0-42454

Slide-fold locking mechanism, inward opening

Windows and patio doors with lockable gear AP for sash profiles with fitting groove 16 mm
Schemes 330, 532, 550, 633, 743 and 770 – passage sash: side hung

Folding sash

Passage sash



Fitting requirements
according to size of sashes for schemes 330, 532, 550, 633, 743 and 770

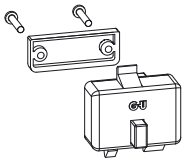
Quantity 330	532	550	633	743	770	Description	PU	Article No.
2	3	3	3	4	4	**Handle DIRIGENT-F** [1]		
						Groove 9	20	6-28072-25-0-*
						Groove 13	20	6-28072-29-0-*
1	1	1	1	1	1	**Rosette PZ inside** [1]	20	K-17205-02-0-*
6	8	8	8	10	10	**Coutersunk screw**		
						M 5 x 30 – Groove 9	400	9-13255-30-0-1
						M 5 x 35 – Groove 13	400	9-13255-35-0-1
2	3	3	4	4	4	**Corner transmission**, 1 ML top	100	6-32021-00-0-1
1	2	2	2	3	3	**Gear 25-50 GK** [2]		
						SRH Forend ML G		
						1851-2100 1940 3 980	10	G-22321-**-0-1
						2101-2350 2190 4 980	10	G-22322-**-0-1
1	1	1	1	1	1	**Gear AP 25-50 GK**, lockable [2]		
						SRH Forend ML G		
						1851-2100 1940 3 980	10	G-22315-**-0-1
						2101-2350 2190 4 980	10	G-22316-**-0-1
			1			**Rebate shoot bolt ZH**		
						SRH Forend ML G		
						1851-2100 1940 3 516	10	G-22186-00-0-1
						2101-2350 2190 4 516	10	G-22187-00-0-1
2	3	3	4	4	4	**Middle lock 215 Se,** 1 ML bottom	10	6-32010-00-0-1
2	3	3	4	4	4	**Locking plates Se**	100	(acc. to profile)
						Locking plates – standard	100	(acc. to profile)
						FFH		
5	6	6	7	7	7	1851-2100		
6	7	7	8	8	8	2101-2350		

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4, 5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour
[2] **= Backset 25, 30, 35, 40, 45 and 50 mm

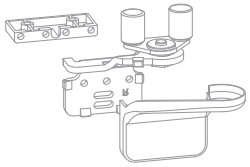
Working drawings **G.U-822 0-42415**
G.U-825 0-42454

Windows and patio doors inward opening – bottom running – sash profiles with fitting groove 16 mm

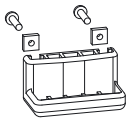
End cap 9-32532-00-0-*
Gliding rail P 1381
Cover rail P 1226



Folding catch
Packing
Spax cylinder screw



Support
9-33628-08-0-0
Gliding roller
6-25336-00-0-1
Corner bearing
9-33448-00-R-1
Cover
9-33449-00-R-*



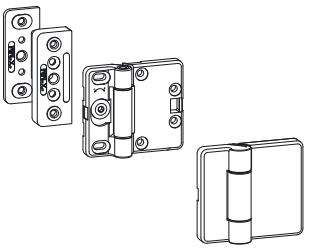
Support
Fillister head screws
Square nut

Fitting requirements according to size of sashes

Quantity 321	330	431	541	550	532	651	633	761	770	743	Description	PU	Article No.
1	1	1	2	2	2	2	2	3	3	3	**Basic box G.U-822** [1] Contents	1	K-13861-08-0-*
											1 Runner 1 Gliding roller 1 Corner bearing, lh 1 Corner bearing, rh 1 Cover, lh 1 Cover, rh 2 Support		
3 [2]	3	4 [2]	5 [2]	5	5	6 [2]	6	7 [2]	7	7	**Box of sash hinge G.U-822/825**		
											17/40	1	K-13205-01-0-1
											17/45	1	K-13205-03-0-1
											25/45	1	K-13812-00-0-1
											17/17	1	K-13813-00-0-1
											Contents		
											3 Sash hinge long 3 Sash hinge short 3 Hinge pin		
2 [2]	1	2 [2]	2 [2]	1	2	2 [2]	2	2 [2]	1	2	**Bag of Packing** [1] for sash hinge	1	K-14088-00-0-*
3 [2]	3	4 [2]	5 [2]	5	5	6 [2]	6	7 [2]	7	7	**Bag of covers G.U-822/825** [1]		
											for sash hinge 17/40, 17/45	1	K-15392-00-0-*
											for sash hinge 25/45	1	K-15399-00-0-*
											for sash hinge 17/17	1	K-15393-00-0-*
											Contents		
											3 Cover long 3 Cover short		
1	1	1	1	1	1	1	1	1	1	1	**Bag of profiles G.U-822** [1] Contents		
											1 Running rail P 1213 1 Gliding rail P 1381 1 Cover rail P 1226 2 End cap		
											TFW mm		
											-2960	1	K-13206-30-0-*
											2961-3960	1	K-13206-40-0-*
											3961-5000	1	K-13206-50-0-*
											5001-6700	1	K-13206-67-0-*
–	1	1	–	1	1	1	2	–	1	1	**Bag of folding catch G.U-822/825** [1] Contents	1	K-13334-00-0-*
											1 Folding catch 1 Support 2 Spax cylinder screw 5 x 30 2 Fillister head screws M 5 x 20 2 Square nut M 5		
–	1	1	–	1	1	1	2	–	1	1	**Packing** for folding catch [1]	1	9-33492-00-0-*

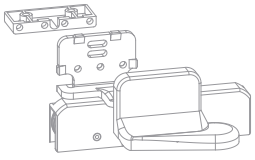
[1] * = Colour: 1 = F 1/EV 1, 2 = F 2/EV 2, 3 = brass colour, 4 = UC 3, 5 = UC 5, 7 = white (RAL 9016)
[2] If the passage sash is tilt-turn (instead of side hung), 1 box of axial hinge, 1 bag of packing and 1 bag of covers less are required.

Working drawing 0-42415



Packing for sash hinge
Sash hinge long
Sash hinge short
Hinge pin
Cover long
Cover short

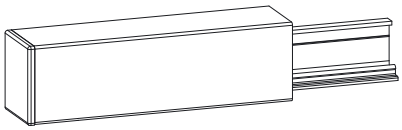
Running rail P 1213

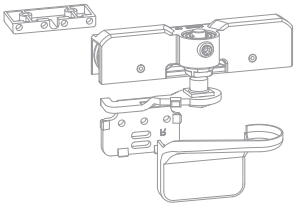


Support
9-33628-08-0-0
Corner bearing
9-33448-00-L-1
Runner
6-25334-00-0-*
Cover
9-33449-00-L-*

Windows and patio doors inward opening – top running – sash profiles with fitting groove 16 mm

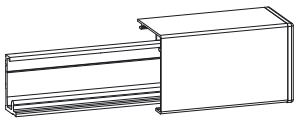
End cap, lh 9-32740-00-L-*
Cover rail P 1391
Running rail P 1213





Support
9-33628-08-0-0
Runner
6-25436-00-0-*
Corner bearing
9-33448-00-L-1
Cover
9-33449-00-L-*

Support
9-32741-00-0-0



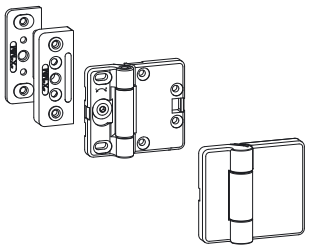
Running rail P 1213
Cover rail P 1391
End cap, rh 9-32740-00-R-*

Fitting requirements according to size of sashes

Quantity 321	330	431	541	550	532	651	633	761	770	743	Description	PU	Article No.
1	1	1	2	2	2	2	2	3	3	3	**Basic box G.U-825** [1]	1	K-13982-08-0-*
											Contents		
											1 Runner 1 Corner bearing, lh 1 Cover, lh 2 Support	1 Gliding roller 1 Corner bearing, rh 1 Cover, rh	
3 [2]	3	4 [2]	5 [2]	5	5	6 [2]	6	7 [2]	7	7	**Box of sash hinge G.U-822/825**		
											17/40	1	K-13205-01-0-1
											17/45	1	K-13205-03-0-1
											25/45	1	K-13812-00-0-1
											17/17	1	K-13813-00-0-1
											Contents		
											3 Sash hinge long 3 Hinge pin	3 Sash hinge short	
2 [2]	1	2 [2]	2 [2]	1	2	2 [2]	2	2 [2]	1	2	**Bag of Packing** [1] for sash hinge	1	K-14088-00-0-*
3 [2]	3	4 [2]	5 [2]	5	5	6 [2]	6	7 [2]	7	7	**Bag of covers G.U-822/825** [1]		
											for sash hinge 17/40, 17/45	1	K-15392-00-0-*
											for sash hinge 25/45	1	K-15399-00-0-*
											for sash hinge 17/17	1	K-15393-00-0-*
											Contents		
											3 Cover long	3 Cover short	
1	1	1	1	1	1	1	1	1	1	1	**Bag of profiles G.U-825** [1] Inhalt		
											1 Running rail P 1213 1 Gliding rail P 1381 1 Cover rail P 1226 1 Cover rail P 1391 1 End cap, lh 1 End cap, rh 2 Support		
											RAB mm		
											-2960	1	K-13272-30-0-*
											2961-3960	1	K-13272-40-0-*
											3961-5000	1	K-13272-50-0-*
											5001-6700	1	K-13272-67-0-*
–	1	1	–	1	1	1	2	–	1	1	**Bag of folding catch G.U-822/825** [1] Contents	1	K-13334-00-0-*
											1 Folding catch 2 Spax cylinder screw 5 x 30 2 Fillister head screws M 5 x 20 2 Square nut M 5	1 Support	
–	1	1	–	1	1	1	2	–	1	1	**Packing** for folding catch [1]	1	9-33492-00-0-*

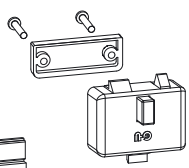
[1] * = Colour: 1 = F 1/EV 1, 2 = F 2/EV 2, 3 = brass colour, 4 = UC 3, 5 = UC 5, 7 = white (RAL 9016)
[2] If the passage sash is tilt-turn (instead of side hung), 1 box of axial hinge, 1 bag of packing and 1 bag of covers less are required.

Working drawing 0-42454

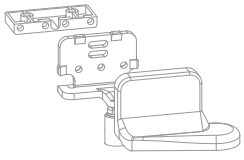


Packing for sash hinge
Sash hinge long
Sash hinge short
Hinge pin
Cover long
Cover short

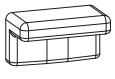
Gliding rail P 1381
Cover rail P 1226



Spax cylinder screw
Packing
Folding catch



Support
9-33628-08-0-0
Corner bearing
9-33448-00-R-1
Gliding roller
6-25336-00-0-1
Cover
9-33449-00-R-*



Fillister head screws
Square nut
Support

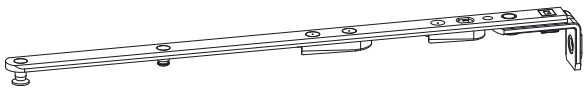
Gliding rail P 1381
Cover rail P 1226

Tilt-turn fittings – for sash with undercut fitting groove 16 mm

Tilt-turn passage sash

Fitting requirements for schemes 321, 431, 541, 651 and 761

Qty.	Description		PU	Article No.
1	**Stay arm tilt-turn**			
	SRW			
	280- 500		10	6-31518-03-0-1
	501- 750		10	6-31518-06-0-1
	751-1200		10	6-31518-08-0-1
	1201-1600		10	6-31518-12-0-1



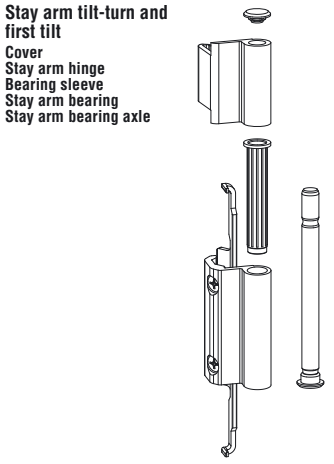
Stay arm tilt-turn

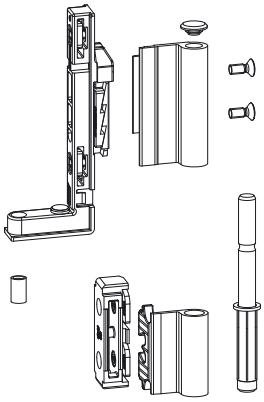
Tilt-turn passage sash

Fitting requirements for schemes 321, 431, 541, 651 and 761

Qty.	Description		PU	Article No.
1	**Bag of hinge side** [1]			
	for sash with undercut fitting groove 16 mm			
	Groove 9	Sash overlap 18	10	K-17125-18-0-*
	Frame groove 14 / 18	Sash overlap 20	10	K-17125-20-0-*
	Groove 9	Sash overlap 18	10	K-17506-18-0-*
	Frame groove 10 / 14	Sash overlap 20	10	K-17506-20-0-*
	Contents			
	1 Stay arm bearing [1]	Sash overlap 18		6-31591-18-0-*
		Sash overlap 20		6-31591-20-0-*
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Stay arm hinge [1]	Sash overlap 18		6-31592-18-0-*
		Sash overlap 20		6-31592-20-0-*
	1 Bearing sleeve			9-39805-00-0-6
	2 Covers			9-39807-00-0-6
	1 Corner bearing [1]	Sash overlap 18		9-39812-00-0-*
		Sash overlap 20		9-43356-00-0-*
	1 Corner bearing case	Frame groove 14 / 18		6-30872-00-0-1
		Frame groove 10 / 14		6-32055-00-0-1
	1 Corner bearing axle			6-31087-00-0-6
	1 Corner hinge [1]	Sash overlap 18		6-31575-18-0-*
		Sash overlap 20		6-31575-20-0-*
	1 Clamping angle			6-33462-00-0-1
	2 Countersunk screws			9-13489-12-R-8
	1 Bearing sleeve 130	Sash weight > 80 kg		9-43545-00-0-1
1	**Bag of middle hinge** [1]			
	for sash with undercut fitting groove 16 mm			
	Groove 9	Sash overlap 18	10	K-17216-18-0-*
		Sash overlap 20	10	K-17216-20-0-*
	Contents			
	1 Bearing hinge [1]	Sash overlap 18		6-33727-18-0-*
		Sash overlap 20		6-33727-20-0-*
	1 Middle hinge [1]	Sash overlap 18		6-33751-18-0-*
		Sash overlap 20		6-33751-20-0-*
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Bearing sleeve			9-39805-00-0-6
	1 Cover			9-39807-00-0-6

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)





Optional part

Qty.	Description	PU	Article No.
1	**Bag of bearing sleeves/covers light grey** [1]	1	K-17803-00-0-1
	for all bags of hinge side/middle hinge UNI-JET C		
	Contents		
	1 Bearing sleeve		9-39805-00-0-1
	2 Covers		9-39807-00-0-1
	1 Corner bearing sleeve		9-39831-00-0-1
	1 Safety cover		9-39806-00-0-1

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)

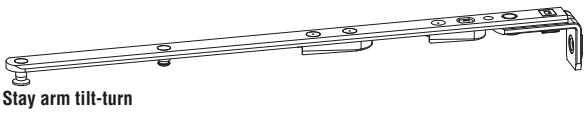
Working drawing 0-44708

Tilt-turn fittings – for sash with plane fitting groove 16 mm

Tilt-turn passage sash

Fitting requirements for schemes 321, 431, 541, 651 and 761

Qty.	Description		PU	Article No.
1	**Stay arm tilt-turn**			
	SRW			
	280- 500		10	6-31518-03-0-1
	501- 750		10	6-31518-06-0-1
	751-1200		10	6-31518-08-0-1
	1201-1600		10	6-31518-12-0-1



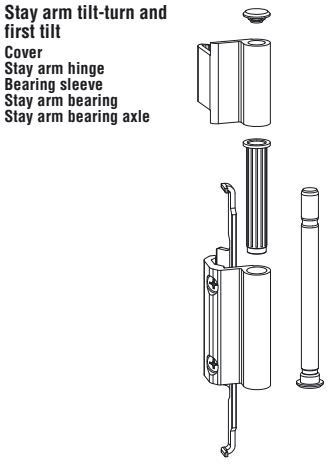
Stay arm tilt-turn

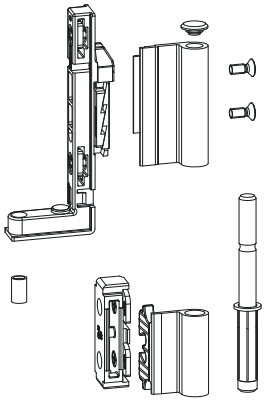
Tilt-turn passage sash

Fitting requirements for schemes 321, 431, 541, 651 and 761

Qty.	Description		PU	Article No.
1	**Bag of hinge side** [1]			
	for sash with plane fitting groove 16 mm			
	Groove 9	Sash overlap 18	10	K-17126-18-0-*
	Frame groove 14 / 18	Sash overlap 20	10	K-17126-20-0-*
	Groove 9	Sash overlap 18	10	K-17507-18-0-*
	Frame groove 10 / 14	Sash overlap 20	10	K-17507-20-0-*
	Contents			
	1 Stay arm bearing [1]	Sash overlap 18		6-31591-18-0-*
		Sash overlap 20		6-31591-20-0-*
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Stay arm hinge [1]	Sash overlap 18		6-31592-18-0-*
		Sash overlap 20		6-31592-20-0-*
	1 Bearing sleeve			9-39805-00-0-6
	2 Covers			9-39807-00-0-6
	1 Corner bearing [1]	Sash overlap 18		9-39812-00-0-*
		Sash overlap 20		9-43356-00-0-*
	1 Corner bearing case	Frame groove 14 / 18		6-30872-00-0-1
		Frame groove 10 / 14		6-32055-00-0-1
	1 Corner bearing axle			6-31087-00-0-6
	1 Corner hinge [1]	Sash overlap 18		6-31575-18-0-*
		Sash overlap 20		6-31575-20-0-*
	1 Support angle			6-33463-00-0-1
	2 Countersunk screws			9-13489-12-R-8
	1 Bearing sleeve 130	Sash weight > 80 kg		9-43545-00-0-1
1	**Bag of middle hinge** [1]			
	for sash with plane fitting groove 16 mm			
	Groove 9	Sash overlap 18	10	K-17217-18-0-*
		Sash overlap 20	10	K-17217-20-0-*
	Contents			
	1 Bearing hinge [1]	Sash overlap 18		6-33727-18-0-*
		Sash overlap 20		6-33727-20-0-*
	1 Middle hinge [1]	Sash overlap 18		6-33752-18-0-*
		Sash overlap 20		6-33752-20-0-*
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Bearing sleeve			9-39805-00-0-6
	1 Cover			9-39807-00-0-6

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)





Optional part

Qty.	Description	PU	Article No.
1	**Bag of bearing sleeves/covers light grey** [1]	1	K-17803-00-0-1
	for all bags of hinge side/middle hinge UNI-JET C		
	Contents		
	1 Bearing sleeve		9-39805-00-0-1
	2 Covers		9-39807-00-0-1
	1 Corner bearing sleeve		9-39831-00-0-1
	1 Safety cover		9-39806-00-0-1

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)

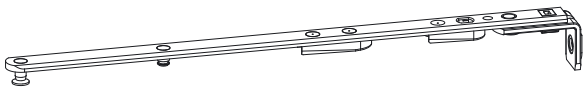
Working drawing 0-44708

Tilt-turn fittings – for sash with undercut fitting groove 16 mm

Tilt-turn passage sash

Fitting requirements for schemes 321, 431, 541, 651 and 761

Qty.	Description		PU	Article No.
1	**Stay arm tilt-turn**			
	SRW			
	280- 500		10	6-31518-03-0-1
	501- 750		10	6-31518-06-0-1
	751-1200		10	6-31518-08-0-1
	1201-1600		10	6-31518-12-0-1



Stay arm tilt-turn

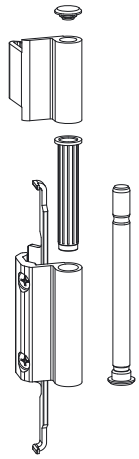
Tilt-turn passage sash

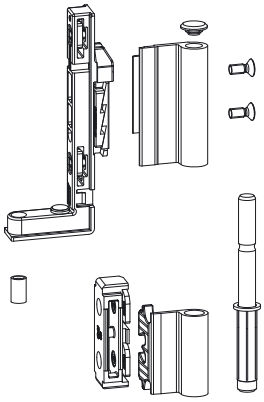
Fitting requirements for schemes 321, 431, 541, 651 and 761

Qty.	Description		PU	Article No.
1	**Bag of hinge side** [1]			
	for sash with plane fitting groove 16 mm			
	Groove 13	Sash overlap 18	10	K-17127-18-0-*
	Frame groove 14 / 18	Sash overlap 20	10	K-17127-20-0-*
	Groove 13	Sash overlap 18	10	K-17508-18-0-*
	Frame groove 10 / 14			
	Contents			
	1 Stay arm bearing [1]	Sash overlap 18		6-31591-18-0-*
		Sash overlap 20		6-31591-20-0-*
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Stay arm hinge [1]	Sash overlap 18		6-33433-18-0-*
		Sash overlap 20		6-33433-20-0-*
	1 Bearing sleeve			9-39805-00-0-6
	2 Covers			9-39807-00-0-6
	1 Corner bearing [1]	Sash overlap 18		9-39812-00-0-*
		Sash overlap 20		9-43356-00-0-*
	1 Corner bearing case	Frame groove 14 / 18		6-30872-00-0-1
		Frame groove 10 / 14		6-32055-00-0-1
	1 Corner bearing axle			6-31087-00-0-6
	1 Corner hinge [1]	Sash overlap 18		6-33432-18-0-*
		Sash overlap 20		6-33432-20-0-*
	1 Clamping angle			6-33462-00-0-1
	2 Countersunk screws			9-13489-12-R-8
	1 Bearing sleeve 130	Sash weight > 80 kg		9-43545-00-0-1
1	**Bag of middle hinge** [1]			
	for sash with undercut fitting groove 16 mm			
	Groove 13	Sash overlap 18	10	K-17218-18-0-*
		Sash overlap 20	10	K-17218-20-0-*
	Contents			
	1 Bearing hinge [1]	Sash overlap 18		6-33727-18-0-*
		Sash overlap 20		6-33727-20-0-*
	1 Middle hinge [1]	Sash overlap 18		6-33806-18-0-*
		Sash overlap 20		6-33806-20-0-*
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Bearing sleeve			9-39805-00-0-6
	1 Cover			9-39807-00-0-6

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)

Stay arm tilt-turn and first tilt
Cover
Stay arm hinge
Bearing sleeve
Stay arm bearing
Stay arm bearing axle





Corner bearing
Clamping angle/Support angle
Cover
Corner hinge
Countersunk screw
Bearing sleeve 130
Corner bearing case
Corner bearing
Corner bearing axle

Optional part

Qty.	Description	PU	Article No.
1	**Bag of bearing sleeves/covers light grey** [1]	1	K-17803-00-0-1
	for all bags of hinge side/middle hinge UNI-JET C		
	Contents		
	1 Bearing sleeve		9-39805-00-0-1
	2 Covers		9-39807-00-0-1
	1 Corner bearing sleeve		9-39831-00-0-1
	1 Safety cover		9-39806-00-0-1

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)

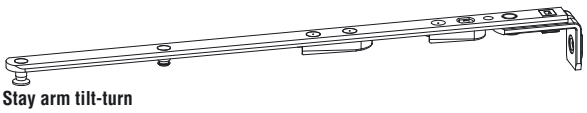
Working drawing 0-44708

Tilt-turn fittings – for sash with plane fitting groove 16 mm

Tilt-turn passage sash

Fitting requirements for schemes 321, 431, 541, 651 and 761

Qty.	Description		PU	Article No.
1	**Stay arm tilt-turn**			
	SRW			
	280- 500		10	6-31518-03-0-1
	501- 750		10	6-31518-06-0-1
	751-1200		10	6-31518-08-0-1
	1201-1600		10	6-31518-12-0-1



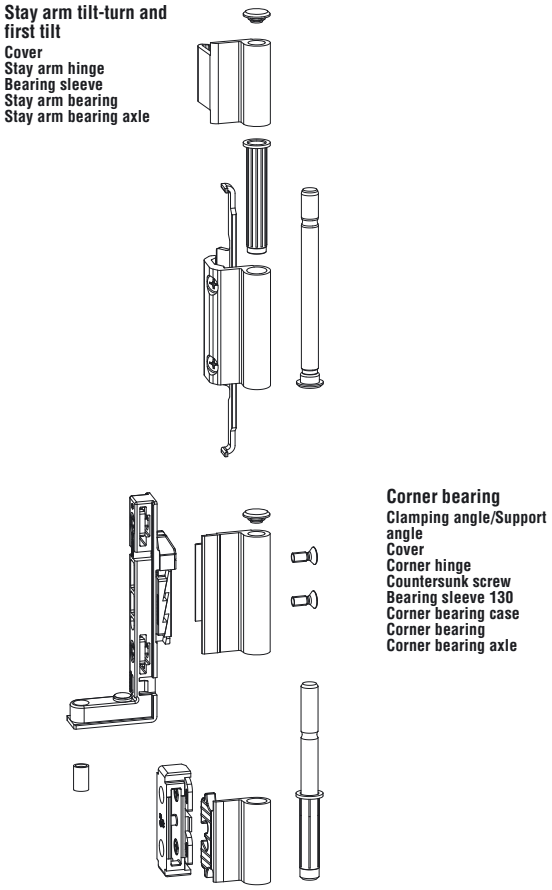
Stay arm tilt-turn

Tilt-turn passage sash

Fitting requirements for schemes 321, 431, 541, 651 and 761

Qty.	Description		PU	Article No.
1	**Bag of hinge side** [1]			
	for sash with plane fitting groove 16 mm			
	Groove 13	Sash overlap 20	10	K-17128-20-0-*
	Frame groove 14 / 18			
	Groove 13	Sash overlap 18	10	K-17509-18-0-*
	Frame groove 10 / 14	Sash overlap 20	10	K-17509-20-0-*
	Contents			
	1 Stay arm bearing [1]	Sash overlap 18		6-31591-18-0-*
		Sash overlap 20		6-31591-20-0-*
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Stay arm hinge [1]	Sash overlap 18		6-33433-18-0-*
		Sash overlap 20		6-33433-20-0-*
	1 Bearing sleeve			9-39805-00-0-6
	2 Covers			9-39807-00-0-6
	1 Corner bearing [1]	Sash overlap 18		9-39812-00-0-*
		Sash overlap 20		9-43356-00-0-*
	1 Corner bearing case	Frame groove 14 / 18		6-30872-00-0-1
		Frame groove 10 / 14		6-32055-00-0-1
	1 Corner bearing axle			6-31087-00-0-6
	1 Corner hinge [1]	Sash overlap 18		6-33432-18-0-*
		Sash overlap 20		6-33432-20-0-*
	1 Support angle			6-33463-00-0-1
	2 Countersunk screws			9-13489-12-R-8
	1 Bearing sleeve 130	Sash weight > 80 kg		9-43545-00-0-1
1	**Bag of middle hinge** [1]			
	for sash with plane fitting groove 16 mm			
	Groove 13	Sash overlap 18	10	K-17219-18-0-*
		Sash overlap 20	10	K-17219-20-0-*
	Contents			
	1 Bearing hinge [1]	Sash overlap 18		6-33727-18-0-*
		Sash overlap 20		6-33727-20-0-*
	1 Middle hinge [1]	Sash overlap 18		6-33807-18-0-*
		Sash overlap 20		6-33807-20-0-*
	1 Stay arm bearing axle			6-30874-00-0-6
	1 Bearing sleeve			9-39805-00-0-6
	1 Cover			9-39807-00-0-6

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)



Optional part

Qty.	Description	PU	Article No.
1	**Bag of bearing sleeves/covers light grey** [1]	1	K-17803-00-0-1
	for all bags of hinge side/middle hinge UNI-JET C		
	Contents		
	1 Bearing sleeve		9-39805-00-0-1
	2 Covers		9-39807-00-0-1
	1 Corner bearing sleeve		9-39831-00-0-1
	1 Safety cover		9-39806-00-0-1

[1] * = Colour: 0 = uncoated, 1 = F 1/EV 1, 6 = black (RAL 9005), 7 = white (RAL 9016), 7T = white (RAL 9010)

Working drawing 0-44708

Tilt-turn fittings

Tilt-turn passage sash – groove 9

Fitting requirements for schemes 321, 431, 541, 651 and 761

Qty.	Description		PU	Article No.
1	**Stay arm** [2][3] SRW			
	280- 500		10	6-32970-**-*-1
	501- 750		10	6-32971-**-*-1
	751-1200		10	6-32972-**-*-1
	1201-1600		10	6-32973-**-*-1
1	**Stay arm bearing**	Ø 3, L = 2,5	100	6-31636-03-0-1
	with supporting pins	Ø 6, L = 2,5	100	6-31636-06-0-1
1	**Cover** for stay arm bearing [1]		100	9-41653-00-0-*
1	**Cover** for stay arm hinge [1]		100	9-41695-00-0-*
1	**Rebate corner hinge** without brake [2][3]		100	6-31521-**-*-1
1	**Corner bearing** [1]	Ø 3, L = 2,5	100	6-28743-03-0-*
	with supporting pins	Ø 6, L = 22	100	6-28742-22-0-*
1	**Cover** for rebate hinge [1][3]		100	9-40487-00-*-*
1	**Cover** for corner bearing [1]		100	9-35461-00-0-*

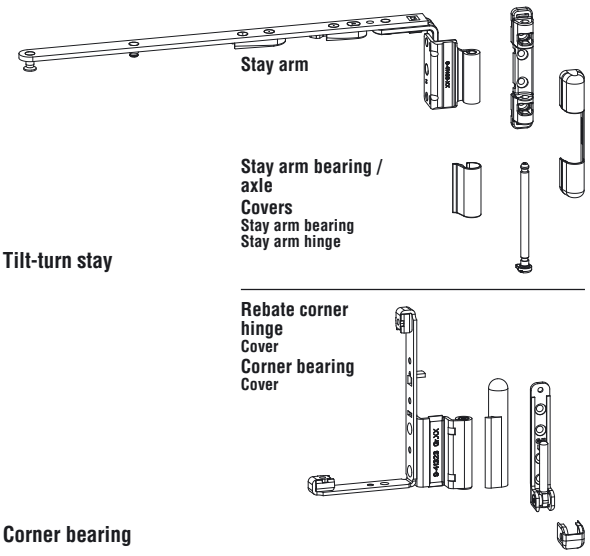
[1] * Colour: 1 = EV 1, 3 = F 3, 5 = brown (RAL 8022), 6 = black (RAL 9005), 7 = white (RAL 9016), 8 = stainless steel colour
[2] ** Size 18, 20 or 22 according to sash overlap
[3] * L = DIN left, R = DIN right

Tilt-turn passage sash – groove 13

Fitting requirements for schemes 321, 431, 541, 651 and 761

Qty.	Description		PU	Article No.
1	**Stay arm** [2][3] SRW			
	280- 500		10	6-34185-**-*-1
	501- 750		10	6-34186-**-*-1
	751-1200		10	6-34187-**-*-1
	1201-1600		10	6-34188-**-*-1
1	**Stay arm bearing**	Ø 3, L = 2,5	100	6-31636-03-0-1
	with supporting pins	Ø 6, L = 2,5	100	6-31636-06-0-1
1	**Cover** for stay arm bearing [1]		100	9-41653-00-0-*
1	**Cover** for stay arm hinge [1]		100	9-41695-00-0-*
1	**Rebate corner hinge** without brake [2][3]		100	6-31522-**-*-1
1	**Corner bearing** [1]	Ø 3, L = 2,5	100	6-28743-03-0-*
	with supporting pins	Ø 6, L = 22	100	6-28742-22-0-*
1	**Cover** for rebate hinge [1][3]		100	9-40487-00-*-*
1	**Cover** for corner bearing [1]		100	9-35461-00-0-*

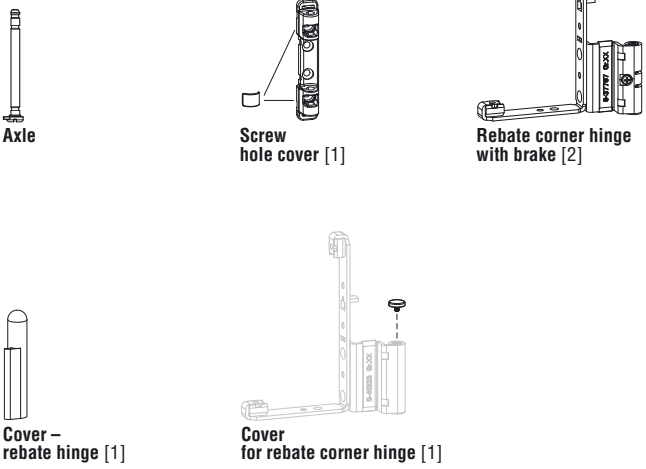
[1] * Colour: 1 = EV 1, 3 = F 3, 5 = brown (RAL 8022), 6 = black (RAL 9005), 7 = white (RAL 9016), 8 = stainless steel colour
[2] ** Size 18, 20 or 22 according to sash overlap
[3] * L = DIN left, R = DIN right



Optional parts for hinge side UNI-JET D

Description		PU	Article No. DIN left	DIN right
Axle		10	6-31840-00-0-1	6-31840-00-0-1
Screw hole cover [1]		100	9-41874-00-0-*	9-41874-00-0-*
Rebate corner hinge [2]	Groove 9	100	6-28740-**-L-1	6-28740-**-R-1
with brake	Groove 13	100	6-28741-**-L-1	6-28741-**-R-1
Cover for rebate hinge [1]		100	9-37725-00-L-*	9-37725-00-R-*
Cover for rebate corner hinge [1]		100	9-42796-00-0-*	9-42796-00-0-*

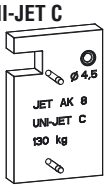
[1] * Colour: 1 = EV 1, 5 = brown (RAL 8022), 7 = white (RAL 9016)
[2] ** Size 18, 20 or 22 according to sash overlap



G.U-822, G.U-825

Application	Description	PU	Article No.
Assembly of corner bearing	Drilling jig for corner bearing	1	6-25831-01-0-9
Assembly of sash hinge, corner hinge	Drilling jig for sash hing 17/40 (K-13205-01)	1	6-25369-00-0-9
	Drilling jig for sash hing 17/45 (K-13205-03)	1	6-25996-03-0-0
	Drilling jig for sash hing 25/45 (K-13812-00)	1	6-25996-02-0-0
	Drilling jig for sash hing 17/17 (K-13813-00)	1	6-25996-01-0-0
	Rod for drilling jig 6-25369/6-25695	1	9-32596-00-0-3
	Stop for rod 9-32596	1	6-25371-00-0-9
Assembly of running rail and gliding rail	Drilling jig for running or gliding rail	1	6-23616-00-0-1
Assembly of folding catch	Drilling jig for folding catch	1	6-25575-00-0-9

UNI-JET C and D

Application	Description	PU	Article No.
Assembly of stay arm bearing 130 kg	**Tilt-turn, first tilt, side hung and tilt sash fittings**		
UNI-JET C	Drilling and mounting jig for stay arm bearing 130 kg 9-41710-00-0-1		
	Sash overlap 18 mm	1	6-31591-00-0-6
	Sash overlap 20 mm	1	6-33776-00-0-6
Assembly of corner and stay arm bearings	Drilling jig for corner bearing and stay arm bearing, drill Ø 3 mm	1	6-27412-03-0-0
UNI-JET D	Drilling jig for corner bearing and stay arm bearing, drill Ø 3 and 6 mm	1	6-27412-53-0-0
Assembly of locking plates UNI-JET C and D	1 set of positioning jigs for locking plates, fixed gear position length of locking plate 55 mm	1	6-32644-00-0-0
	1 set of positioning jigs for locking plates, variable gear position length of locking plate 55 mm	1	6-32645-00-0-0
Assembly of turn handles UNI-JET C and D	Drilling jig for turn handle	1	6-22459-00-0-0
	Stop for 6-22459 – fixed gear position	1	9-27406-00-0-1
	Drilling jig with stop for gear AP 25 up to AP 50	1	6-25156-00-0-9

Order catalogue part 4
Slide fittings INLINE for aluminium windows and patio doors

Contents

The present catalogue part contains all slide fittings, flush pulls EURIS and accessories according to the latest state of the art.
The following indications will make you familiar with the concept of the catalogue and help you to handle it easily.

Catalogue structure

The present catalogue part is structured in the following way:
– Optional parts and turn handles
– Sets

Optional parts and turn handles

The option pages show you optional parts and turn handles for all slide fittings at a glance. All supplements of standard versions are clearly arranged.

Locking mechanisms INLINE

Fitting requirements per sliding sash
The illustrations of the locking mechanisms are supplemented by corresponding parts tables helping to determine the hardware composition.
Parts supplementing standard versions are clearly presented and can be easily selected.

Flush pulls and pull handles EURIS

All EURIS handles are illustrated and specified in separate tables.

Locking plates, latches

The choice of locking plates and latches depends on the profile system, please inquire.

Order numbers

The order number gives information about
– the article
– its size
– its application - e.g. DIN lh or DIN rh
– its colour/finish

Example
Order number
G-13954-03-0-1

G-13954-	- -	Article number
-	-01- -	Size
-	- -L-	Left hand assembly
-	- -R-	Right hand assembly
-	- -0-	Usable on both sides
-	- - -1	F 1/EV 1, natural (silver colour), fer**GU**ard*silver
-	- - -2	F 2/EV 2, champagne colour
-	- - -3	F 3, brass colour (gold colour)
-	- - -4	UC 3, medium bronze (medium brown)
-	- - -A	F 4, bronze colour
-	- - -C	Titanium colour
-	- - -5	UC 5, dark bronze (dark brown RAL 8022)
-	- - -6	onyx matt (black RAL 9005)
-	- - -7	white (RAL 9016)
-	- - -7T	white (RAL 9010)
-	- - -8	Stainless steel (stainless steel colour)
-	- - -*	Surface treatment variable (available colours see price list)

Prices

Single part price list "Total programme"
The prices are listed by ascending article numbers.

Additional sales documentation

Apart from the order catalogue, the following documentation on slide-fold fittings is available:
– Brochures and leaflets informing about product features and advantages
– Presentation boards of all fitting versions
– Working drawings with mounting instructions
– Instructions for maintenance and care

Slide fittings INLINE
for aluminium windows and patio doors

Application

Range of applications for slide fittings INLINE:
– Slide doors with 3 to 2 sashes
– Slide windows with 3 to 2 sashes

Locking mechanisms INLINE

INLINE locking mechanisms are concealed in the rebate and provide for one handle operation. All locking parts are designed for the standard hardware groove of 16,3 mm width and 2,5 mm depth.
Gears with 15 or 7,5 mm backset for handle DIRIGENT or lockable gears with 15 mm backset prepared for the installation of a profile cylinder. The gears are provided with locking pins and anti-lift security device.

Locking plates and latches

Locking plates and latches according to profile system are specified for each project individually.

Turn handles DIRIGENT [1]

The handles are made of aluminium with concealed fixings. The rosettes have a robust retention feature and fixed cams. Lockable handles and handles for operation from both sides complete the programme.

Standard colours:

F 1/EV 1	silver colour
F 2/EV 2	new silver colour
F 3	gold colour
F 4	light brown
dark brown	dark brown (RAL 8022)
black	black (RAL 9005)
white	white (RAL 9016 or RAL 9010)

[1] More turn handles see part 3 of the present order catalogue.

Flush pulls EURIS

Flush pulls EURIS are supplied in the following standard colours:

EV 1	Aluminium parts anodized EV 1
UC 5	Aluminium parts anodized dark bronze
schwarz	Aluminium parts anodized black or black coated
weiß	Aluminium parts white coated

Further colours and finishes on request.

Materials, surface sealing fer**GU**ard*silver

The fitting parts are made of high quality steel, zinc die-casting or aluminium alloys.
Depending on the material, they are protected against corrosion by surface sealing with fer**GU**ard*silver or by anodisation (aluminium parts).

Standard surface sealing of slide fittings INLINE: fer**GU**ard*silber

All locking components of slide-fold fittings come with the surface sealing fer**GU**ard*silver.

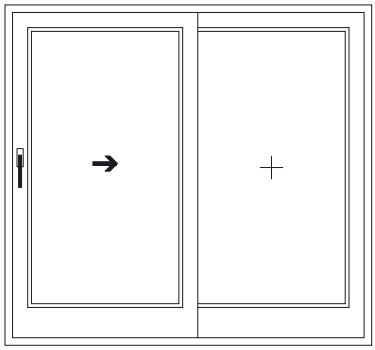
Abbreviations

CB	Cylinder bore
G	Fixed gear position
ML	Middle lock
PU	Packing unit

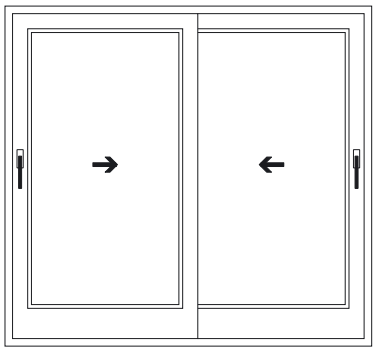
Profile system manufacturers' information

It is important to observe the product information issued by the profile system manufacturers, especially information concerning construction and fabrication, maximum sash dimensions and weights and material features such as linear expansion of profiles.

Sash arrangement according to schemes A and D

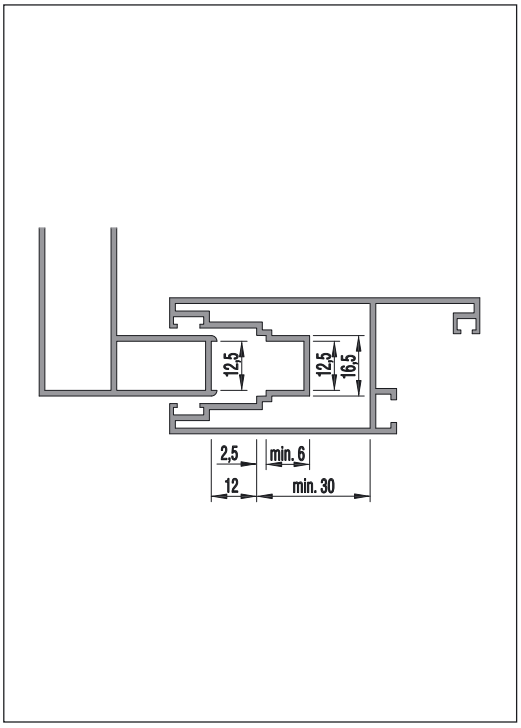


Scheme A
1 slide door, 1 fixed glazing
Drawing shows handle position lh



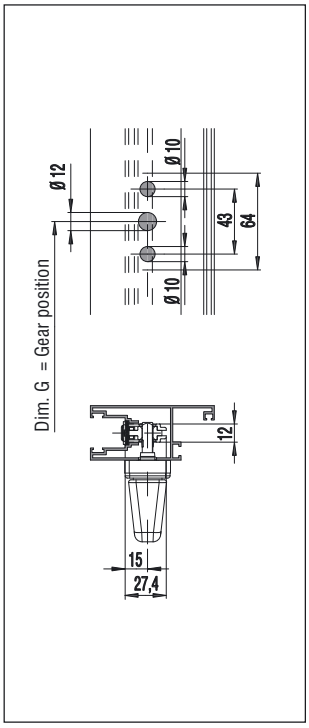
Scheme D
2 slide doors
Drawing shows handle position lh and rh

Assembly dimensions – frame and sash profile

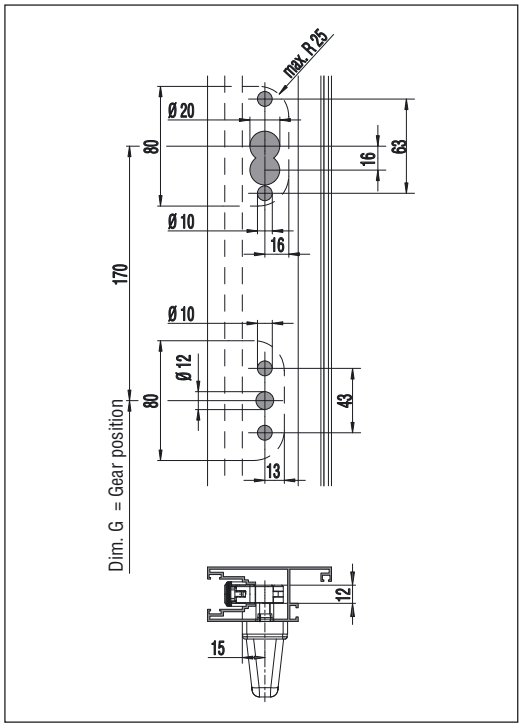


Frame and sash profile
Sash with fitting groove 16 mm

Drilling and milling dimensions

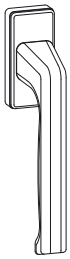


Dimensions for handles DIRIGENT
Drilling jig 6-22459-00-0-0
Stop 9-27406-00-0-1



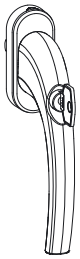
Dimensions for gears AP 25 up to AP 50
Drilling jig with stop 6-25156-00-0-9

Handles DIRIGENT-F [1]



DIRIGENT-F
Spindle 25 6-28072-25-0-*
Spindle 29 6-28072-29-0-*
Spindle 33 6-28072-33-0-*

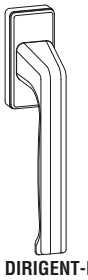
DIRIGENT-F/Z
with push button cylinder, all keys alike
Spindle 29 6-28075-29-0-*
Spindle 33 6-28075-33-0-*



MODENA-F/Z 100 Nm [2]
for security windows and patio doors
Spindle 29 6-34397-29-0-*
Spindle 33 6-34397-33-0-*

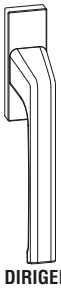
DIRIGENT-F/SG
Spindle 50 8-00694-50-0-7

Rosette/F inside – flat
6-24913-00-0-*

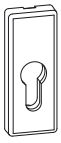


DIRIGENT-F
inside – without spindle
6-28072-00-0-*

DIRIGENT-F/AF,
outside – flat
6-25223-00-0-*



DIRIGENT-F/A,
outside
6-25993-00-0-*



Rosette with CB inside
square K-17205-02-0-*
oval K-17204-02-0-*

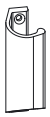
Rosette PZ/A outside
square 9-43605-02-0-*
oval 9-43582-02-0-*

Spindle
ST 56-68 9-26874-56-0-1
ST 69-80 9-26874-69-0-1

Inside/ outside operation
Countersunk screw M 5
ST 50-54 9-13255-60-0-1
ST 55-59 9-13255-65-0-1
ST 60-64 9-13255-70-0-1
ST 65-69 9-13255-75-0-1
ST 70-74 9-13255-80-0-1
ST 75-80 9-13255-85-0-1

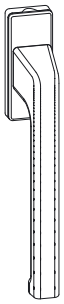
Inside operation
Countersunk screw M 5
Spindle 25 9-13255-30-0-1
Spindle 29 9-13255-35-0-1
Spindle 33 9-13255-40-0-1

Knob lock
Backset 25 - 50 mm
K-13282-00-0-*



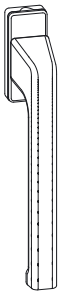
Pull handle outside
9-22921-00-0-*

[1] = More turn handles see part 3 of the present order catalogue.
[2] = Geprüft nach DIN V ENV 1627 auf 100 Nm gegen Abreißen und Abdrehen.



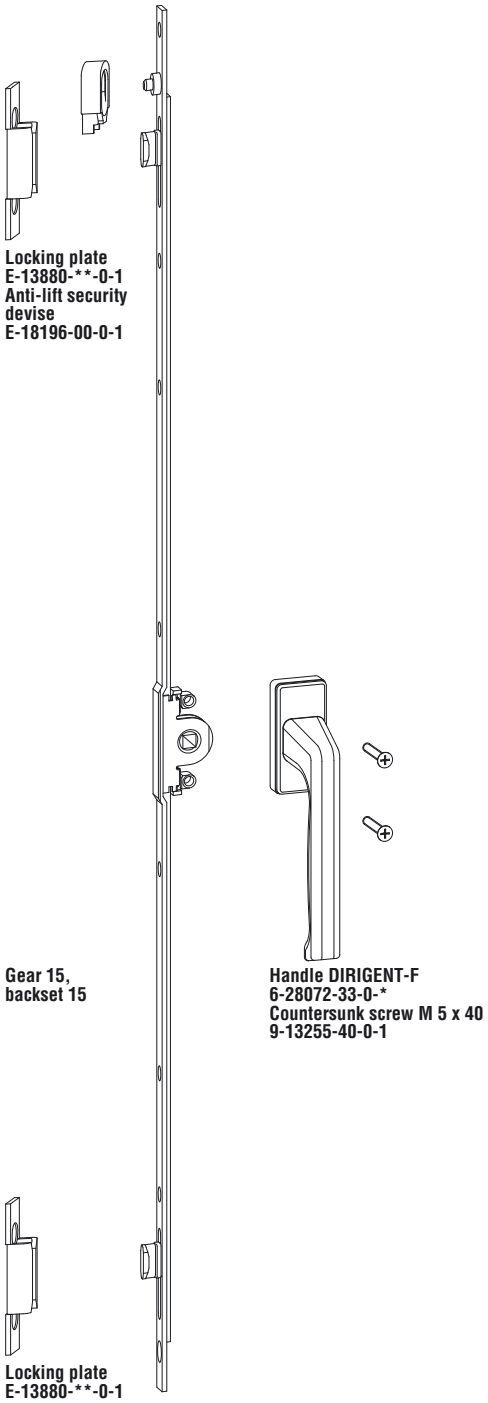
DIRIGENT-HL
elongated
Rosette 32 x 81 mm
Spindle 25 6-31382-25-0-*
Spindle 33 6-31382-33-0-*

DIRIGENT-HL
elongated
Rosette 32 x 81 mm
push button cylinder
Spindle 30 6-31383-30-0-*
Spindle 33 6-31383-33-0-*



DIRIGENT-HL
elongated
Rosette 28 x 67 mm
Spindle 33 6-32629-33-0-*

Windows and patio doors with gear 15 for sash profiles with fitting groove 16 mm



Sliding sash

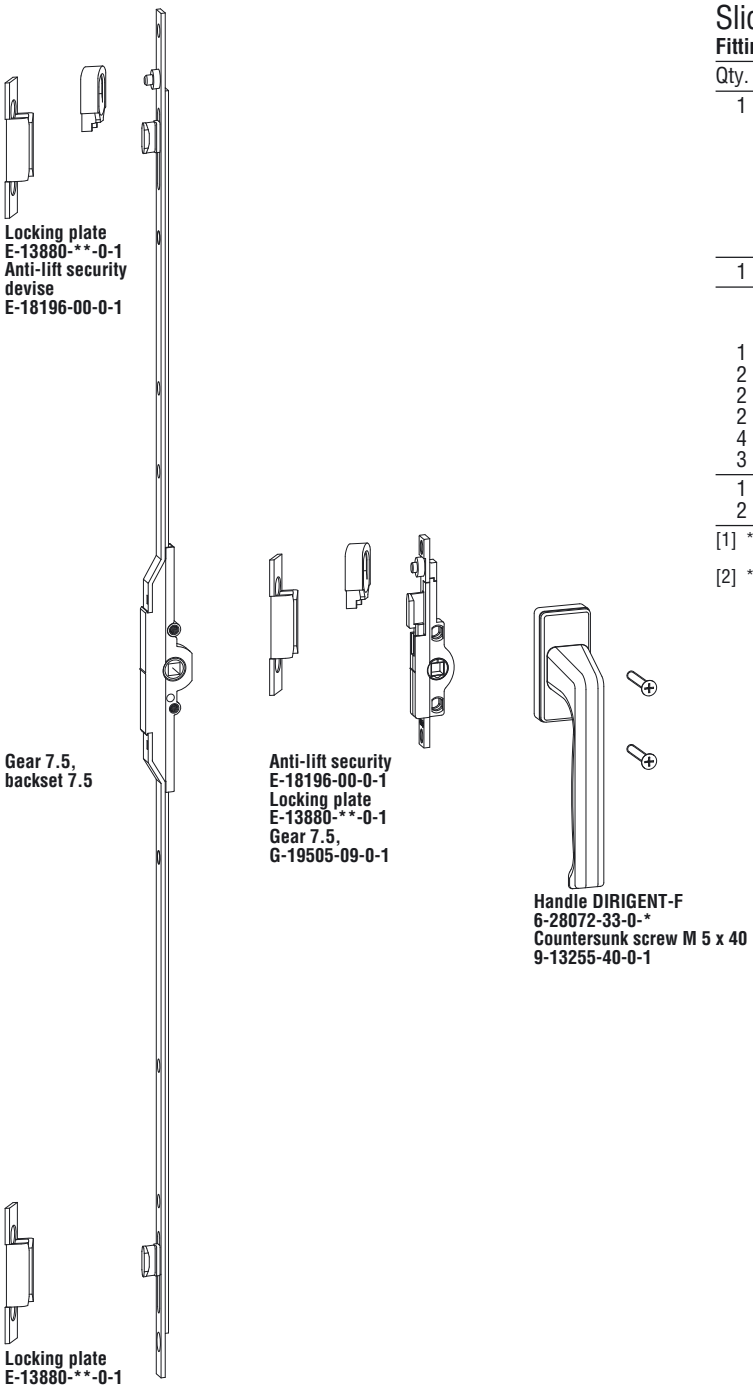
Fitting requirements per sliding sash

Qty.	Description			PU	Article No.
1	**Gear 15, backset 15 mm**				
	Length	ML	G		
	300	1	110	10	G-13954-03-0-1
	600	2	300	10	G-13954-06-0-1
	1000	2	500	10	G-13954-10-0-1
	1600	2	800	10	G-13954-16-0-1
	1600	4	800	10	G-13954-26-0-1
1	**Anti-lift security devise**			100	E-18196-00-0-1
	Locking plate [2]			100	E-13880-**-0-1
	Gear length				
1	300				
2	600				
2	1000				
2	1600				
4	1600				
3	1800				
1	**Handle DIRIGENT-F** [1] [2]			20	6-28072-**-0-*
2	**Countersunk screw** M 5 x ** [2]			400	9-13255-**-0-1

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4, 5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour

[2] ** = Selection according to profile system – on request

Windows and patio doors with gear 7.5 for sash profiles with fitting groove 16 mm



Sliding sash

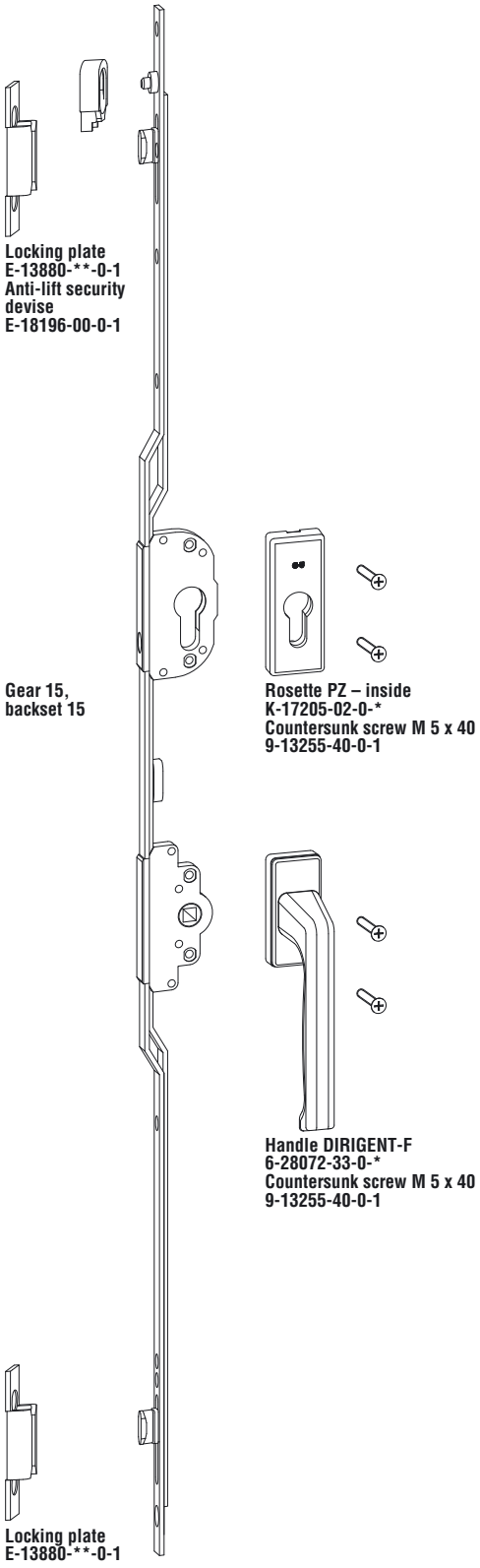
Fitting requirements per sliding sash

Qty.	Description			PU	Article No.
1	**Gear 7.5, backset 7.5 mm**				
	Length	ML	G		
	125	1		10	G-19505-09-0-1
	600	2	300	10	G-15383-06-0-1
	1000	2	500	10	G-15383-10-0-1
	1600	2	800	10	G-15383-16-0-1
	1600	4	800	10	G-15383-26-0-1
1	**Anti-lift security devise**			100	E-18196-00-0-1
	Locking plate [2]			100	E-13880-**-0-1
	Gear length				
1	125				
2	600				
2	1000				
2	1600				
4	1600				
3	1800				
1	**Handle DIRIGENT-F** [1] [2]			20	6-28072-**-0-*
2	**Countersunk screw** M 5 x ** [2]			400	9-13255-**-0-1

[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4,
5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour

[2] ** = Selection according to profile system – on request

Windows and patio doors with lockable gear 15 for sash profiles with fitting groove 16 mm



Sliding sash

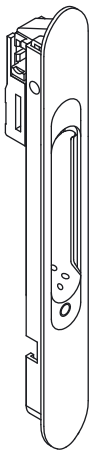
Fitting requirements per sliding sash

Qty.	Description			PU	Article No.
1	**Gear 15 – lockable, backset 15 mm**				
	Length	ML	G		
	1600	2	800	10	G-15386-10-0-1
	1600	4	800	10	G-18330-10-0-1
1	**Anti-lift security devise**			100	E-18196-00-0-1
	Locking plate [2]			100	E-13880-**-0-1
	Gear length				
2	1600				
4	1600				
1	**Handle DIRIGENT-F** [1] [2]			20	6-28072-**-0-*
1	**Rosette PZ – inside** [1]			20	K-17205-02-0-*
4	**Countersunk screw** M 5 x ** [2]			400	9-13255-**-0-1

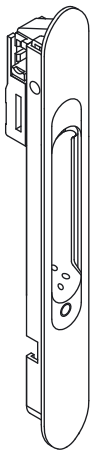
[1] * = Colour: 11 = F 1/EV 1, 22 = F 2/EV 2, 3 = F 3, A = F 4, 5 = dark brown (RAL 8022), 7 = white (RAL 9016), C = titanium colour

[2] ** = Selection according to profile system – on request

for sliding windows and patio doors



Flush pull EURIS – Type MA
G-46669-00-0-*

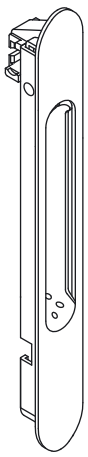


Flush pull EURIS – Type M1
G-46666-00-0-*

Flush pulls EURIS

Description	PU	Article No.
Flush pull EURIS – Type MA [1] Flush pull inside, automatic release – without latch dimension between axes 15 mm	20	G-46669-00-0-*
Flush pull EURIS – Type M1 [1] Flush pull inside, manual release – without latch dimension between axes 15 mm	20	G-46666-00-0-*

[1] * = Colour: 1E = anodized EV 1, 5E = anodized UC 5, 6E = anodized black,
6V = black (RAL 9005) coated, 7 = white (RAL 9016),
7T = white (RAL 9010) coated

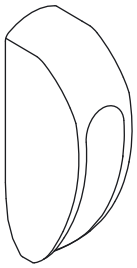


Flush pull EURIS – Type CF
G-19638-00-0-*

Flush pulls EURIS

Description	PU	Article No.
Flush pull EURIS – Type CF [1] Flush pull inside, fix	20	G-19638-00-0-*

[1] * = Colour: 1E = anodized EV 1, 5E = anodized UC 5, 6E = anodized black,
6V = black (RAL 9005) coated, 7 = white (RAL 9016),
7T = white (RAL 9010) coated



Pull handle inside – Type B1
G-19700-00-0-*

Accessories for flush pulls EURIS

Description		PU	Article No.
Pull handle inside – Type B1 [1]			
with 2 screws and 2 sleeves	black	20	G-19700-00-0-6
for fixing	white	20	G-19700-00-0-7

[1] Colour: 6 = PVC black, 7 = PVC white

for sliding windows and patio doors

Pull handles EURIS – outside – Type P2
G-46630-00-0-*

Pull handles EURIS – outside – Type P2B
G-19694-00-0-*

Pull handles EURIS – outside

Description	PU	Article No.
Pull handles EURIS – outside – Type P2 [1] without cylinder bore	20	G-46630-00-0-*
Pull handles EURIS – outside – Type P2B [1] with cylinder bore	20	G-19694-00-0-*

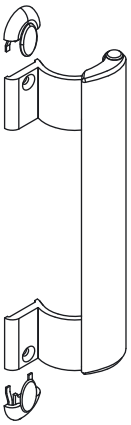
[1] * = Colour: 1E = anodized EV 1, 5E = anodized UC 5, 6E = anodized black,
6V = black (RAL 9005) coated, 7 = white (RAL 9016),
7T = white (RAL 9010) coated

Pull handles EURIS – outside – Type P1
G-19682-00-0-*

Pull handles EURIS – outside

Description	PU	Article No.
Pull handles EURIS – outside – Type P1 [1] with end caps	20	G-19682-00-0-*

[1] * = Colour: 1E = anodized EV 1, 5E = anodized UC 5, 6E = anodized black,
6V = black (RAL 9005) coated, 7 = white (RAL 9016),
7T = white (RAL 9010) coated



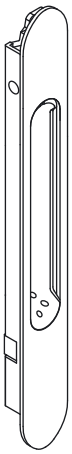
Pull handles EURIS – inside
G-20352-00-0-*

Pull handles EURIS – inside

Description	PU	Article No.
Pull handles EURIS – inside [1] with end caps and covers	20	G-20352-00-0-*

[1] * = Colour: 1E = anodized EV 1, 5E = anodized UC 5, 6E = anodized black,
6V = black (RAL 9005) coated, 7 = white (RAL 9016),
7T = white (RAL 9010) coated

for sliding windows and patio doors

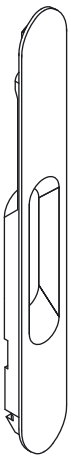


Pull handles EURIS – fix, outside – Type CE
G-19639-00-0-*

Pull handles EURIS – fix, outside

Description	PU	Article No.
Pull handles EURIS – fix, outside – Type CE [1] Profile thickness up to 35 mm	20	G-19639-00-0-*

[1] * = Colour: 1E = anodized EV 1, 5E = anodized UC 5, 6E = anodized black, 6V = black (RAL 9005) coated, 7 = white (RAL 9016), 7T = white (RAL 9010) coated



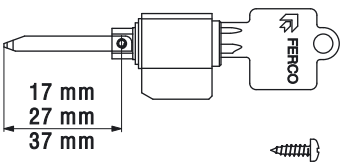
Pull handles EURIS – fix, outside – Type CEM
G-19941-00-0-*

Pull handles EURIS – fix, outside

Description	PU	Article No.
Pull handles EURIS – fix, outside – Type CEM [1] Profile thickness up to 27 mm	20	G-19941-00-0-*

[1] * = Colour: 1E = anodized EV 1, 5E = anodized UC 5, 6E = anodized black, 6V = black (RAL 9005) coated, 7 = white (RAL 9016), 7T = white (RAL 9010) coated

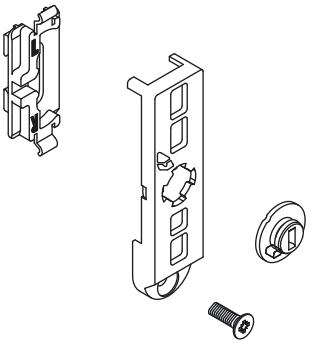
for sliding windows and patio doors



Bag of cylinder
G-46681--*-0**

Cylinder

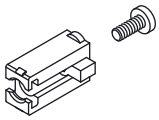
Description	PU	Article No.
Bag of cylinder – standard differ, 17 mm with screws – for profile thickness 26 – 30 mm	1	G-46681-17-0-0
Bag of cylinder – all keys alike, 17 mm with screws – for profile thickness 26 – 30 mm	1	G-46681-17-4-0
Bag of cylinder – standard differ, 27 mm with screws – for profile thickness 30 – 38 mm	1	G-46681-27-0-0
Bag of cylinder – all keys alike, 27 mm with screws – for profile thickness 30 – 38 mm	1	G-46681-27-4-0
Bag of cylinder – standard differ, 37 mm with screws – for profile thickness 40 – 45 mm	1	G-46681-37-0-0
Bag of cylinder – all keys alike, 37 mm with screws – for profile thickness 40 – 45 mm	1	G-46681-37-4-0



Cylinder kit
G-19628-00-0-0

Cylinder kit

Description	PU	Article No.
Cylinder kit for adaptation to inside pull (if a cylinder is used with the outside pull)	1	G-19628-00-0-0

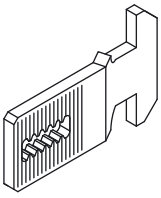


Bag of wrong operation safety device
G-46690--0-6**

Wrong operation safety device

Description	PU	Article No.
Bag of wrong operation safety device [1] Contents 1 wrong operation safety device, 1 screw	100	G-46690-**-0-6

[1] ** = Selection according to profile system – on request



Bag of latch
E-19542--0-8**

Latch

Description	PU	Article No.
Bag of latch [1] for adaptation to inside pull (if a cylinder is used with the outside pull)	200	E-19542-**-0-8

[1] ** = Selection according to profile system – on request

Locking plate
E-12899-00-0-1

Locking plate
G-11337-00-0-1

Locking plates [1]

Description	PU	Article No.
Locking plate, screw-on version	100	E-12899-00-0-1
Locking plate, screw-on version	100	G-11337-00-0-1
Locking plate, screw-on version	100	E-12908-00-0-1
Locking plate	100	G-12898-00-0-1
Locking plate with nirosta clip	100	G-13945-00-0-1

[1] Selection according to profile system – on request

Locking plate
E-12908-00-0-1

Locking plate
G-12898-00-0-1

Locking plate
G-13945-00-0-1

Product group

F
A

Lift-slide fittings
horizontal and vertical pivot fittings

Contents

Lift-slide fittings, Horizontal and vertical pivot fittings

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Lift-slide fittings

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Product information HS-*Master* 5.**5**
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Description HS-*Master* 5.**16**

Fitting requirements, sets

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Sykon, Technal GT/GT1, Thyssen-Schulte TSB W 70, VAW-Profitherm 5.**21**

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Horizontal and vertical pivot fittings

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Fitting requirements, sets

Horizontal pivot fittings UNITAS 18/3
Alu Menziken Alisol 3, Alumil M 15000, Doral, Etem E-40 / E-45, Eural Serie 65, Fujisash 5.**32**
Heroal Serie 110 E, Metra NC 50 i, Metra NC 50 STH, Metra NC 65 STH, Metra NC 68 STH, MKF Serie TKI 602 5.**33**
Ponzio Windstop 65 tt, Showa Front, Thyssen-Schulte TSB W 70 5.**34**

Horizontal pivot fittings 515
Profile systems with Euro groove 15/20 mm on the sash 6 Locks 5.**35**

Vertical pivot fittings UNITAS 88
Alumil M 15000, Doral, Etem E-40 / E-45, Fujisash, Heroal Serie 110 E, Metra NC 50 i 5.**36**
Metra NC 50 STH, Metra NC 65 STH, Metra NC 68 STH, MKF Serie TKI 602, Ponzio Windstop 65 tt, Showa Front 5.**37**
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Order catalogue part 5
Lift-slide fittings for aluminium windows and patio doors

Contents

Part 5 of the present order catalogue contains all lift-slide fittings for aluminium windows and patio doors, thresholds, top guides and accessories according to the latest state of the art.
The following indications will make you familiar with the concept of the catalogue and help you to handle it easily.

Catalogue structure

The present catalogue part is structured in the following way:
– Optional parts and turn handles
– Sets
– Drilling and assembly tools

Optional parts and turn handles

The option pages show you optional parts and turn handles for all lift-slide fittings at a glance. All supplements of standard versions are clearly arranged.

Sets

Fitting requirements according to sash size and scheme
The illustrations of the fittings are supplemented by corresponding parts tables helping to determine the hardware composition.
Parts supplementing standard versions are clearly presented and can be easily selected.

Drilling and positioning jigs

Drilling jigs, positioning jigs and auxiliary tools for hardware assembly are grouped according to fitting types.

Order numbers

The order number gives information about
– the article
– its size
– its application - e.g. DIN lh or DIN rh
– its colour/finish

Example
Order number
6-30015-01-0-1

6-30015-	- -	Article number
-	-01- -	Size
-	- -L-	Left hand assembly
-	- -R-	Right hand assembly
-	- -0-	Usable on both sides
-	- - -1	F 1/EV 1, natural (silver colour), fer**GU**ard*silver
-	- - -2	F 2/EV 2, champagne colour
-	- - -3	F 3, brass colour (gold colour)
-	- - -4	UC 3, medium bronze (medium brown)
-	- - -A	F 4, bronze colour
-	- - -C	Titanium colour
-	- - -5	UC 5, dark bronze (dark brown RAL 8022)
-	- - -6	onyx matt (black RAL 9005)
-	- - -7	white (RAL 9016)
-	- - -7T	white (RAL 9010)
-	- - -8	Stainless steel (stainless steel colour)
-	- - -*	Surface treatment variable (available colours see price list)

Prices

Single part price list "Total programme"
The prices are listed by ascending article numbers.

Additional sales documentation

Apart from the order catalogue, the following documentation on lift-slide fittings is available:
– Brochures and leaflets informing about product features and advantages
– Presentation boards of all fitting versions
– Working drawings with mounting instructions
– Instructions for maintenance and care

Lift-slide fittings
for aluminium windows and patio doors

Application

Range of applications for G.U lift-slide fittings:
– Lift-slide patio doors with 2 to 4 sashes
– Lift-slide windows with 2 to 4 sashes

Designs

Lift-sliding fittings G.U-934
Fittings for single sashes up to 300 kg, with 4-wheel carriages and clamp fixed connecting bar. Wheels made of fabric reinforced laminated plastic with ball bearing. Lift-locking gear with 37.5 and 27.5 mm backset and cylinder bore.

Lift-sliding fittings G.U-937
Fittings for single sashes up to 150 kg, with 4-wheel carriages and clamp fixed connecting bar. Wheels made of fabric reinforced laminated plastic with ball bearing. Lift-locking gear with 37.5 and 27.5 mm backset and cylinder bore.

Handles

The DIRIGENT handles are made of aluminium with concealed fixings. Rosettes with robust retaining feature.
Standard version: handles without cylinder bore. Handles with cylinder bore, handles for operation on both sides with cylinder bore and removable handles complete the programme.

Adaptation of fittings

The adaptation of lift-slide fittings to various profile systems is effected by means of special spacers and packings.
These components are contained in the tables "Fitting requirements". An illustration of system related spacers and detailed mounting instructions are to be found in the corresponding working drawing.

Standard colours

Lift-slide fittings are supplied in the following standard colours:

EV 1	Visible aluminium parts anodised EV 1
EV 2	Visible aluminium parts anodised EV 2
UC 5	Visible aluminium parts anodised dark bronze
White	Visible aluminium parts white (RAL 9016)

Further colours and finishes on request.

Materials, surface sealing fer**GU**ard*silver

The fitting parts are made of high quality steel, zinc die-casting or aluminium alloys.
Depending on the material, they are protected against corrosion by surface sealing with fer**GU**ard*silver or by anodisation (aluminium parts).

Standard surface sealing of lift-slide fittings: fer**GU**ard*silver

Locking components and runners of lift-slide fittings come with the surface sealing fer**GU**ard*silver.

Abbreviations

CB	Cylinder bore
G	Fixed gear position
lh	left hand
PU	Packing unit
rh	right hand
SH	Sash height
ST	Sash thickness
SW	Sash width
TFW	Total frame width

Profile system manufacturers' information

It is important to observe the product information issued by profile system manufacturers, especially information concerning construction and fabrication, maximum sash dimensions and weights and material features such as linear expansion of profiles.

Application

Profile systems [1]	Sash arrangement Scheme [2] A	C	D	F	Fittings	Assembly drawing
Akotherm	•	•	•	•	G.U-934	0-39431-1
Albio Serie 230	•	•	•	•	G.U-934	0-44822-1
Alcoa RT 135	•	•	•	•	G.U-934	0-44417-1
Alumil Serie S 410	•		•		G.U-937	0-44694-1
Alumil Serie S 500	•		•		G.U-934	0-44685-1
Brökelmann Serie WG	•	•	•	•	G.U-934	
Forster (Belgium)	•		•		G.U-934	0-43992-1
Forster (Italy)	•	•	•	•	G.U-934	0-44559-1
Gartner	•	•	•	•	G.U-934	
Metra NC 150 STH	•	•	•	•	G.U-934	0-44415-1
Pontio Gastello	•	•	•	•	G.U-934	0-43821-1
Profilati (Italy)	•	•	•	•	G.U-934	0-44499-1
SAPA-RC Serie 125	•	•	•	•	G.U-934	0-44718-1
SAPA-ES 60	•		•		G.U-934	0-43376-1
Sykon	•		•		G.U-934	
	•		•		G.U-937	
Technal GXI	•		•		G.U-934	E-42971-1
Thyssen-Schulte TSB W 70	•		•		G.U-934	0-43138-1
VAW Profitherm	•		•		G.U-934	

[1] Further profile systems on request.
[2] Unstated Schemes on request.

Lift-slide fittings HS-*Master* for timber, PVC and aluminium patio doors

Application

HS-*Master* lift-slide fittings are applied:
- with lift-slide patio doors G.U-934 according to schemes A and C with HS-*Master* drive
- in domestic construction with high demands on operation
- with side entrances in projects frequented by the public, e.g. in gastronomy
- in buildings for the disabled where easy and safe operation is required
- in "barrier free construction"
- The installation in PVC and aluminium profiles requires sectional drawings of frame and sash profiles and must be clarified with G.U.

Design

Design and delivery
Compact drive unit made to measure in the following variants:
HS-*Master* in
- Standard design for
  - operation via handle / "Push and go function"
  - operation via switch (push-button switch on site)

Optional design with additional equipment for
- operation via radio transmitter
- the installation of a light barrier set for safe use
- radio transmitter and light barrier set
- the installation of a light curtain for safe use
- radio transmitter and light curtain

Each variant requires a push-button switch on site.

Operation

Ease of operation
- Lifting and opening to the desired position as well as closing are effected by motor.
- Very simple operation.

Various modes of operation
- Via handle or push-button
- Via remote control
- Via radar sensor.

Safe operation
- As a standard, the HS-*Master* drive is equipped with load interruption.
- Due to an optional light barrier, the sliding door does not close as long as persons or objects – e.g. wheel chairs – are within the light barrier zone.
- An optional light curtain installed on the gear side controls the total height of the door and prevents it from closing, as soon as persons or objects are caught by the light. Obstacles are recognised via memory function.
  Installation:
  - inside: in the drive casing
  - outside: in front of the sliding sash
- It is possible to operate the door by handle at any time (important in case of power failure).

Range of applications

Schemes	A	C
Min. length HS-*Master* drive	1900 mm	3800 mm
Sash width SW	950-3300 mm	950-3300 mm
Sash height SH	1855-2765 mm	1855-2765 mm
Sash weight	up to 300 kg	up to 300 kg

Handles

All handles of the lift-slide range can be used.

Retrofitting of lift-slide patio doors

Lift-slide units already installed can be retrofitted with HS-*Master*.
It only takes the following measures:

- The tilt-locking gear must be exchanged.
- Units with G.U-933 runners must be retrofitted with runners of the new lift-slide system G.U-934.

Barrier-free construction

What does barrier-free mean?

Barrier free construction means to prevent barriers and obstacles when planning and building entrances and movement areas in buildings (source: building lexicon).

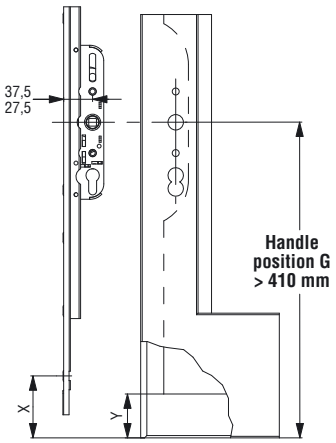
Prescriptions and standards

The requirements to barrier-free construction are based on the respective prescriptions and standards of the Basic Constitutional Law as well as on the prescription for equalisation of disabled persons.
Planning guide for barrier-free construction in the public building sector: DIN 18024, part 1 and 2. Planning guide for barrier-free construction in the private housebuilding sector: DIN 18025, part 1 and 2. A respective draft has already been published.

Barrier-free construction with lift-slide fittings

Lift-locking gears with handle position 850 mm

By the use of lift-locking gears with variable handle position, the handle height may be adapted to individual requirements, so that the handles can be achieved easily, also from a sedentary position (e.g. from wheelchair drivers).



Order data

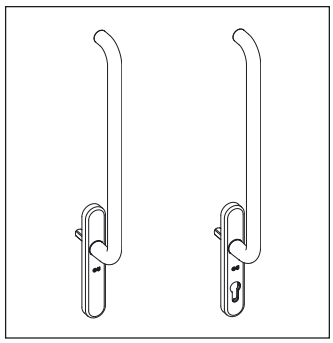
G = handle position
SH = sash height
Y = groove depth

X = bottom line of sash to first screw-hole of the cover rail
G.U-934 = Y + 23,5 mm
G.U-937 = Y + 35,5 mm

Article No.

Backset	Article No.
37,5 mm	6-30021-**-0-*
27,5 mm	6-30019-**-0-*

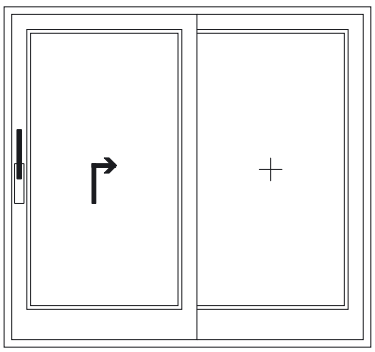
Extended turn handles RONDO made from stainless steel



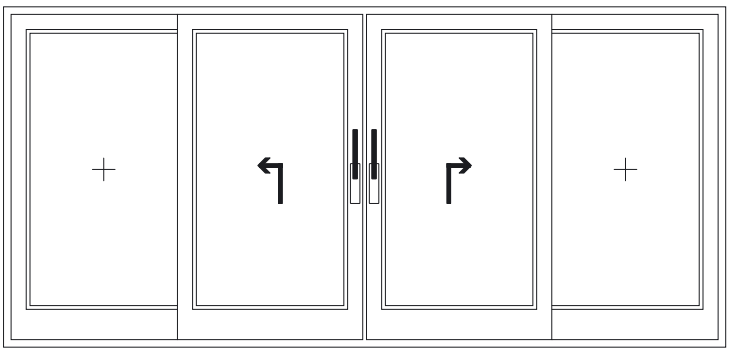
The extended handle RONDO is available as a special version for barrier-free construction.
Application: operation of sliding doors from a sedentary position.

Handle length 400 mm

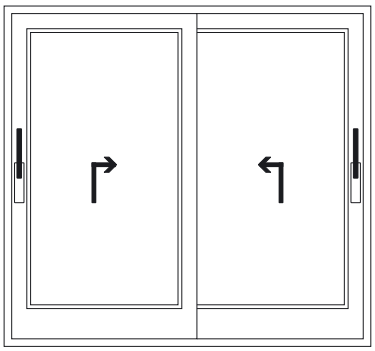
Lift-slide fittings – sash arrangement according to schemes A to F [1]



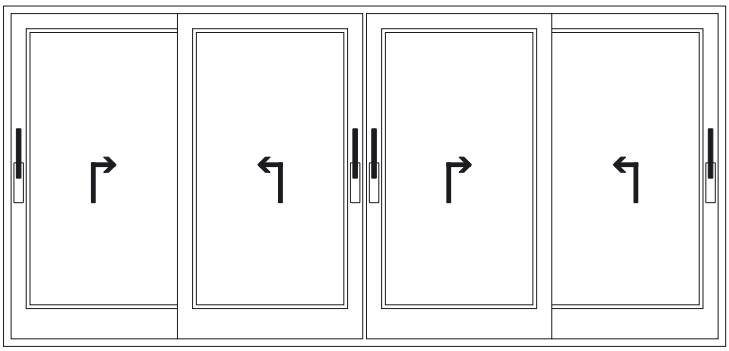
Scheme A
1 lift-slide door, 1 fixed glazing
Drawing shows left hand fittings



Scheme C
2 lift-slide doors, 2 fixed glazings
Drawing shows left hand and right hand fittings



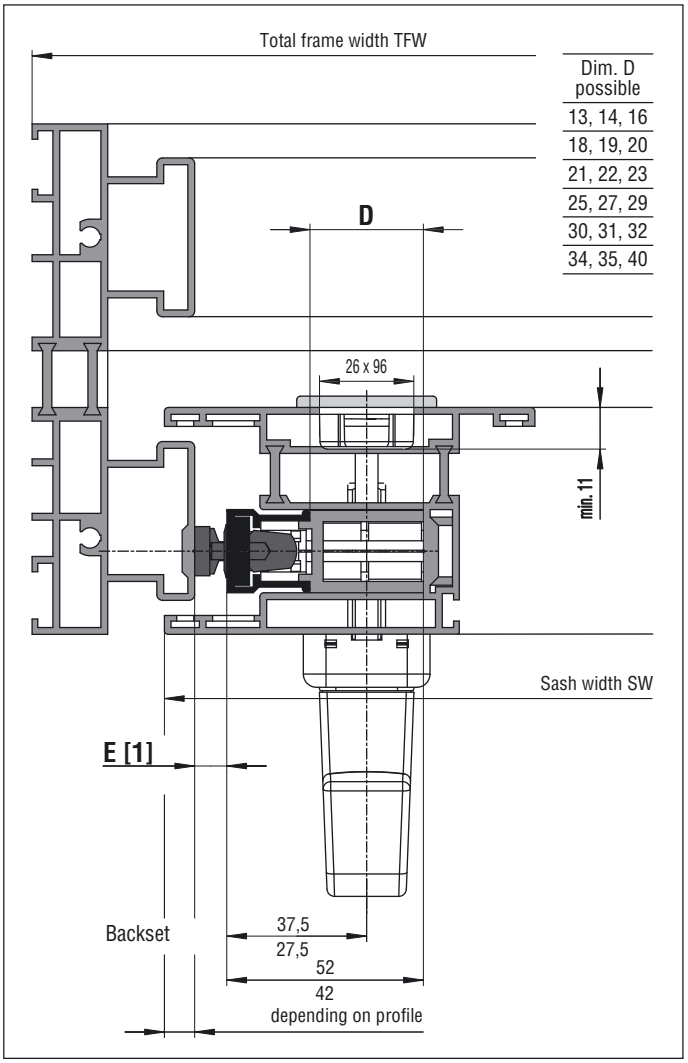
Scheme D
2 lift-slide doors
Drawing shows left hand and right hand fittings



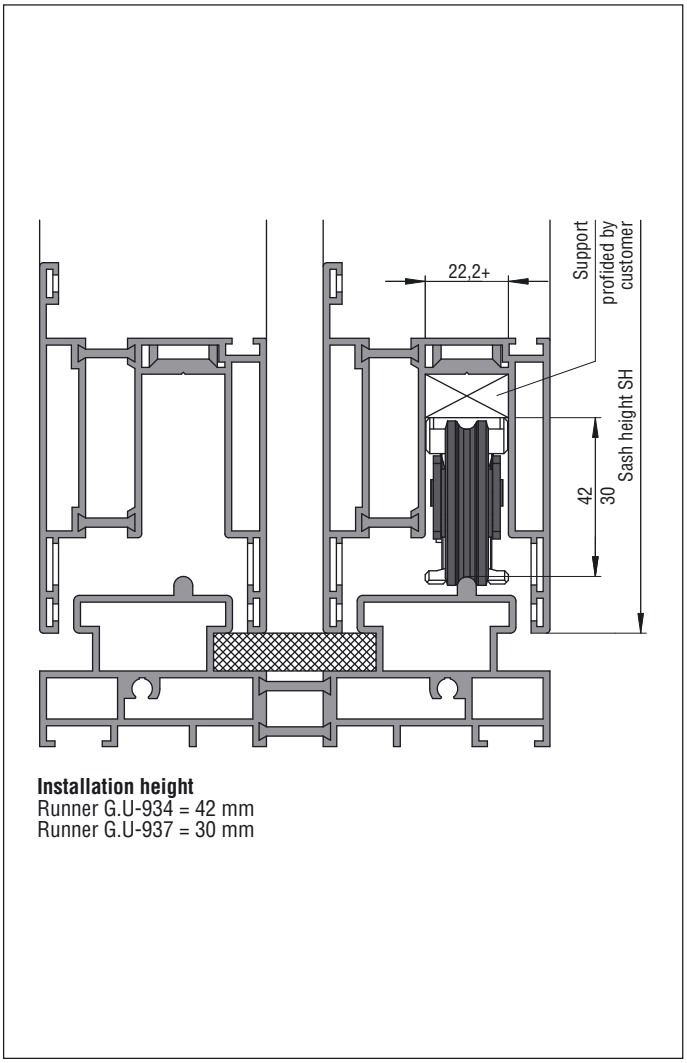
Scheme F
4 lift-slide doors
Drawing shows left hand and right hand fittings

[1] = The ordering pages of the catalogue show the fittings for schemes A and C. Fitting requirements for schemes D, F and G on request.

Assembly, drilling and milling dimensions

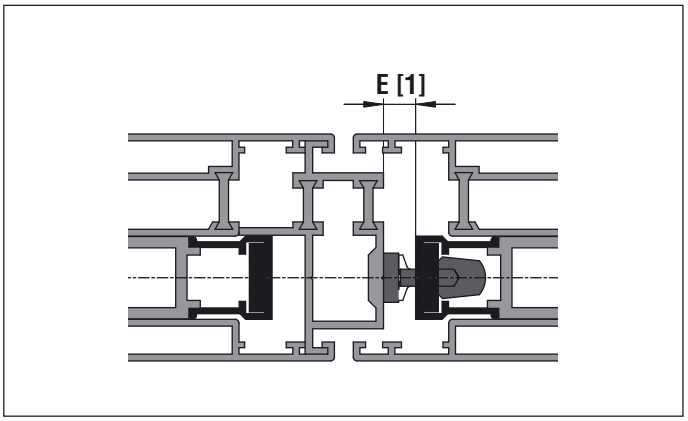


Lift-locking gears G.U-934, G.U-937

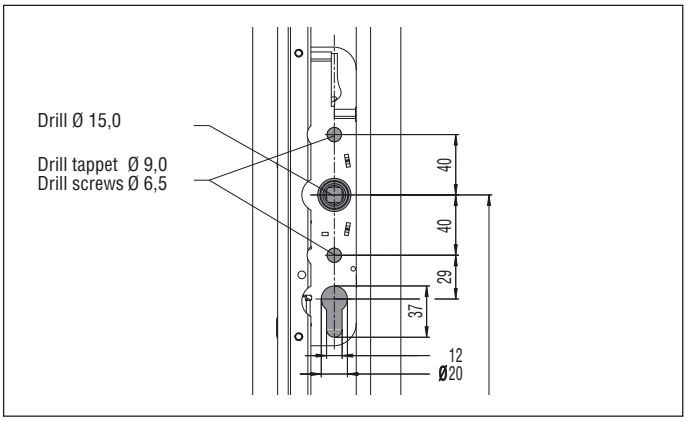


Installation height
Runner G.U-934 = 42 mm
Runner G.U-937 = 30 mm

Runner G.U-934, G.U-937



Meeting stile locking with schemes C and F



Drill pattern for handle
Drilling jig 9-27272-00-0-0

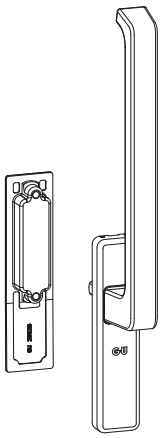
[1] Locking bolt according to dim. E

Dim. E mm	Locking bolt standard	Locking bolt slit ventilation
5,5	6-22648-01-0-1	9-43830-05-0-8
6,5	6-22648-02-0-1	9-43830-04-0-8
8,5	6-22648-03-0-1	9-43830-03-0-8
9,5	6-22648-04-0-1	9-43830-02-0-8
11,0	6-22648-05-0-1	9-43830-06-0-8
13,0	6-22648-06-0-1	9-43830-01-0-8

Dim. E mm	Locking bolt standard	Locking bolt slit ventilation
13,5	6-22623-01-0-1	
14,5	6-22623-02-0-1	
16,0	6-23309-00-0-1	
17,0	6-22623-03-0-1	9-29718-00-0-1
19,5	6-22623-04-0-1	
21,5	6-22623-05-0-1	

Handles DIRIGENT – Aluminium

Handle length 240 mm



Lift-slide fittings

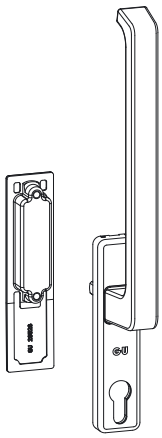
Handle inside – G.U-934/937
DIRIGENT without cylinder bore, without cams
Sash thickness up to 80 mm, adjustable spindle length
6-24608-00-0-*

Handle inside – G.U-934/937
DIRIGENT without cylinder bore, detent 90°
Sash thickness up to 80 mm, adjustable spindle length
6-24613-00-0-*

Flush pull (to order separately)

Milling depth mm	Article No.
17	**9-29526-00-0-***
14	**9-29992-00-0-***
14	**9-29992-01-0-***
13	**9-29992-02-0-***

Handle length 240 mm



Lift-slide fittings

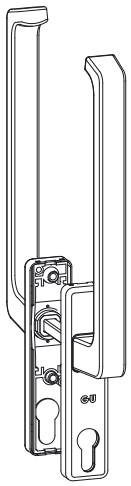
Handle inside – G.U-934/937
DIRIGENT with cylinder bore, without cams
Sash thickness up to 80 mm, adjustable spindle length
6-24609-00-0-*

Handle inside – G.U-934/937
DIRIGENT with cylinder bore, detent 90°
Sash thickness up to 80 mm, adjustable spindle length
6-24614-00-0-*

Flush pull (to order separately)

Milling depth mm	Article No.
17	**9-29526-00-0-***
14	**9-29992-00-0-***
14	**9-29992-01-0-***
13	**9-29992-02-0-***

Handle length 240 mm

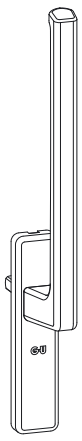


Lift-slide fittings

Handle on both sides – G.U-934/937
DIRIGENT with cylinder bore
Sash thickness up to 90 mm, adjustable spindle length
6-24615-96-0-*

Handle on both sides – G.U-934/937
DIRIGENT with cylinder bore, detent 90°
Sash thickness up to 90 mm, adjustable spindle length
6-24616-96-0-*

Handles DIRIGENT removable – Aluminium

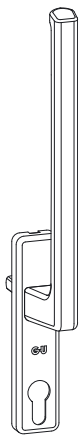


Contents:
1 handle DIRIGENT inside without cylinder bore
2 positioning pins

Handle length 240 mm

Lift-slide fittings

Handle inside – G.U-934/937
DIRIGENT without cylinder bore, without cams
Sash thickness up to 80 mm
K-17398-00-0-*

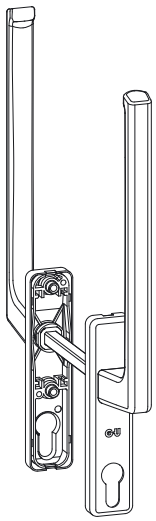


Contents:
1 handle DIRIGENT inside with cylinder bore
2 positioning pins

Handle length 240 mm

Lift-slide fittings

Handle inside – G.U-934/937
DIRIGENT with cylinder bore, without cams
Sash thickness up to 80 mm
K-17399-00-0-*



Contents:
1 handle DIRIGENT on both sides with cylinder bore

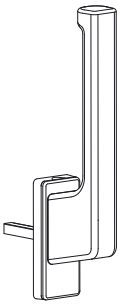
Handle length 240 mm

Lift-slide fittings

Handle on both sides – G.U-934/937
DIRIGENT with cylinder bore and cams
Sash thickness up to 90 mm
K-17400-00-0-*

Handles DIRIGENT HL for light units

Handle length 160 mm



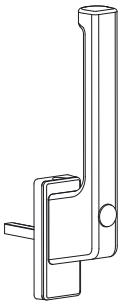
Lift-slide fittings

Handle inside – G.U-934/937
DIRIGENT HL, not lockable
Sash thickness up to 56 mm
Detent 180°
Rosette 32 x 81 **6-31809-37-0-***

Bag of handle adapter
Contents:
1 screw-on disc
1 reduction sleeve
2 screws
K-16554-01-0-1

Application:
For sash weights up to 120 kg

Handle length 160 mm



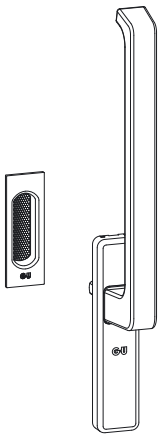
Lift-slide fittings

Handle inside – G.U-934/937
DIRIGENT HL, lockable
Sash thickness up to 56 mm
Detent 180°
Rosette 32 x 81 **6-31810-37-0-***

Bag of handle adapter
Contents:
1 screw-on disc
1 reduction sleeve
2 screws
K-16554-01-0-1

Application:
For sash weights up to 120 kg

Handles DIRIGENT – Stainless steel



Contents:
1 handle DIRIGENT inside without cylinder bore
1 flush pull

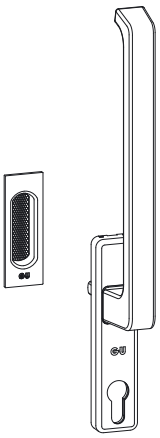
Handle length 240 mm

Lift-slide fittings

Bag of handle inside – G.U-934/937
DIRIGENT, without cylinder bore
Sash thickness 68 mm
K-16804-00-0-8

Bag of handle inside – G.U-934/937
DIRIGENT, without cylinder bore, detent 90°
Sash thickness 68 mm
K-16867-00-0-8

Flush pull
9-42539-01-0-8



Contents:
1 handle DIRIGENT inside with cylinder bore
1 flush pull

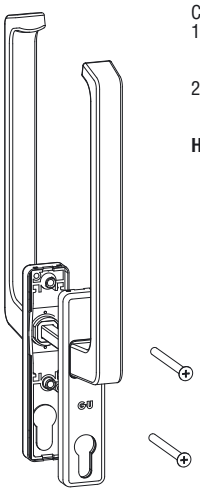
Handle length 240 mm

Lift-slide fittings

Bag of handle inside – G.U-934/937
DIRIGENT with cylinder bore
Sash thickness up to 80 mm,
adjustable spindle length
K-16805-00-0-8

Bag of handle inside – G.U-934/937
DIRIGENT with cylinder bore, detent 90°
Sash thickness up to 80 mm,
adjustable spindle length
K-16865-00-0-8

Flush pull
9-42539-01-0-8



Contents:
1 handle DIRIGENT on both sides with cylinder bore
2 countersunk screws M 6 x 100

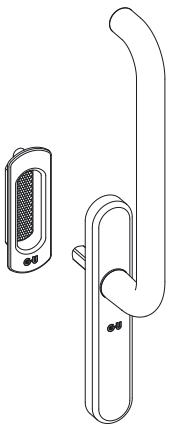
Handle length 240 mm

Lift-slide fittings

Bag of handle on both sides – G.U-934/937
DIRIGENTwith cylinder bore
Sash thickness up to 90 mm,
adjustable spindle length
K-16795-00-0-8

Bag of handle on both sides – G.U-934/937
DIRIGENT with cylinder bore, detent 90°
Sash thickness up to 90 mm,
adjustable spindle length
K-16861-00-0-8

Handles RONDO – Stainless steel



Contents:
1 handle RONDO inside without cylinder bore
1 flush pull

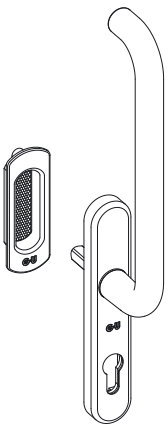
Handle length 240 mm

Lift-slide fittings

Bag of handle inside – G.U-934/937
RONDO, without cylinder bore
Sash thickness 68 mm
K-16807-00-0-8

Bag of handle inside – G.U-934/937
RONDO, without cylinder bore, detent 90°
Sash thickness 68 mm
K-16868-00-0-8

Flush pull
9-39035-01-0-8



Contents:
1 handle RONDO inside with cylinder bore
1 flush pull

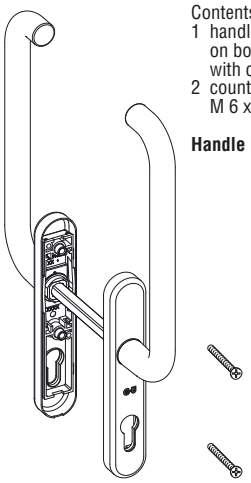
Handle length 240 mm

Lift-slide fittings

Bag of handle inside – G.U-934/937
RONDO with cylinder bore
Sash thickness up to 80 mm,
adjustable spindle length
K-16808-00-0-8

Bag of handle inside – G.U-934/937
RONDO with cylinder bore, detent 90°
Sash thickness up to 80 mm,
adjustable spindle length
K-16866-00-0-8

Flush pull
9-39035-01-0-8



Contents:
1 handle RONDO on both sides with cylinder bore
2 countersunk screws M 6 x 100

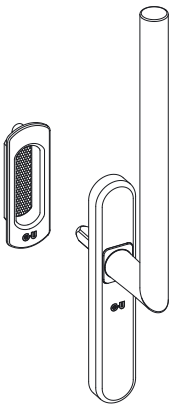
Handle length 240 mm

Lift-slide fittings

Bag of handle on both sides – G.U-934/937
RONDO with cylinder bore
Sash thickness up to 90 mm,
adjustable spindle length
K-16798-00-0-8

Bag of handle on both sides – G.U-934/937
RONDO with cylinder bore, detent 90°
Sash thickness up to 90 mm,
adjustable spindle length
K-16864-00-0-8

Handles FORTE – Stainless steel



Contents:
1 handle FORTE inside without cylinder bore
1 flush pull

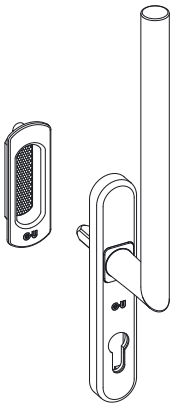
Handle length 240 mm

Lift-slide fittings

Bag of handle inside – G.U-934/937
FORTE without cylinder bore
Sash thickness 68 mm
K-17013-00-0-8

Bag of handle inside – G.U-934/937
FORTE without cylinder bore, detent 90°
Sash thickness 68 mm
K-17018-00-0-8

Flush pull
9-39035-01-0-8



Contents:
1 handle FORTE inside with cylinder bore
1 flush pull

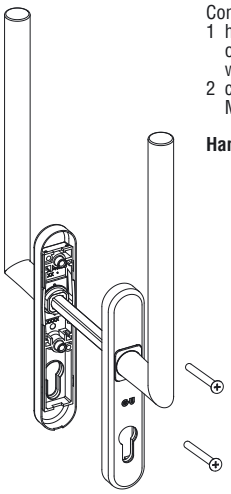
Handle length 240 mm

Lift-slide fittings

Bag of handle inside – G.U-934/937
FORTE with cylinder bore
Sash thickness up to 80 mm, adjustable spindle length
K-17014-00-0-8

Bag of handle inside – G.U-934/937
FORTE with cylinder bore, detent 90°
Sash thickness up to 80 mm, adjustable spindle length
K-17019-00-0-8

Flush pull
9-39035-01-0-8



Contents:
1 handle FORTE on both sides with cylinder bore
2 countersunk screws M 6 x 100

Handle length 240 mm

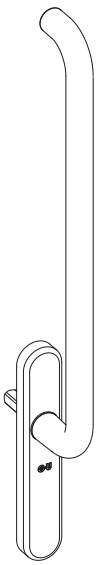
Lift-slide fittings

Bag of handle on both sides – G.U-934/937
FORTE with cylinder bore
Sash thickness up to 90 mm, adjustable spindle length
K-17017-00-0-8

Bag of handle on both sides – G.U-934/937
FORTE with cylinder bore, detent 90°
Sash thickness up to 90 mm, adjustable spindle length
K-17022-00-0-8

Handles RONDO, elongated – Stainless steel

Handle length 400 mm

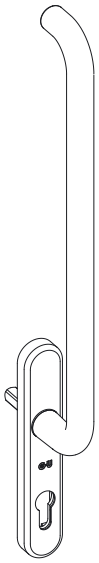


Lift-slide fittings

Handle inside – G.U-934/937
RONDO, without cylinder bore
Sash thickness 68 mm
K-17231-00-0-8 [1]

[1] alternatively: Colour 1, 5, 7

Handle length 400 mm



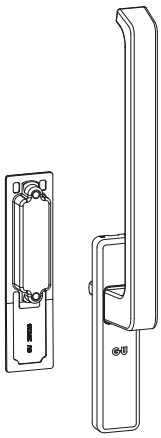
Lift-slide fittings

Handle inside – G.U-934/937
RONDO with cylinder bore
Sash thickness 68 mm
K-17232-00-0-8 [1]

[1] alternatively: Colour 1, 5, 7

Handles DIRIGENT – Polished brass

DIRIGENT Se



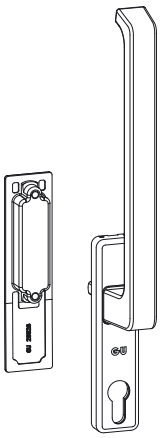
Handle lebgth
240 mm

Lift-slide fittings

Handle inside – G.U-934/937
DIRIGENT without cylinder bore
Sash thickness up to 80 mm,
adjustable spindle length
6-26728-01-0-B

Handle inside – G.U-934/937
DIRIGENT without cylinder bore,
detent 90°
Sash thickness up to 80 mm,
adjustable spindle length
6-26729-01-0-B

Flush pull
(to order separately)
9-34957-00-0-3



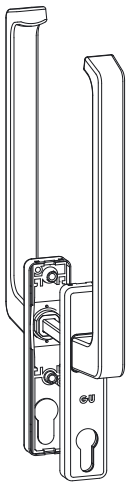
Handle lebgth
240 mm

Lift-slide fittings

Handle inside – G.U-934/937
DIRIGENT with cylinder bore
Sash thickness up to 80 mm,
adjustable spindle length
6-26728-02-0-B

Handle inside – G.U-934/937
DIRIGENT with cylinder bore,
detent 90°
Sash thickness up to 80 mm,
adjustable spindle length
6-26729-02-0-B

Flush pull
(to order separately)
9-34957-00-0-3



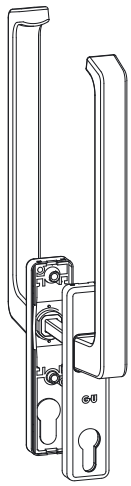
Handle lebgth
240 mm

Lift-slide fittings

Handle on both sides – G.U-934/937
DIRIGENT with cylinder bore
Sash thickness up to 90 mm,
adjustable spindle length
6-26731-00-0-B

Handle on both sides – G.U-934/937
DIRIGENT with cylinder bore,
detent 90°
Sash thickness up to 90 mm,
adjustable spindle length
6-26732-00-0-B

Countersunk screw M 6
Sash thickness 45-90 mm
9-32789-10-0-1



Handle lebgth
240 mm

Lift-slide fittings

Handle on both sides – G.U-934/937
DIRIGENT Se with cylinder bore
Sash thickness up to 90 mm,
adjustable spindle length
6-24617-96-0-*

Handle on both sides – G.U-934/937
DIRIGENT Se with cylinder bore,
detent 90°
Sash thickness up to 90 mm,
adjustable spindle length
6-24618-96-0-*

Flush pull Se
(to order separately)
9-29622-00-0-*

Countersunk screw M 6
Sash thickness 45-90 mm
9-32789-10-0-1

Lift-slide fittings G.U-934/937

Handle length
240 mm

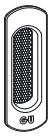
Removable handle
DIRIGENT
6-24619-00-0-*

Rosette inside
without cylinder bore
6-23243-01-0-*

Rosette inside
with cylinder bore
6-23243-02-0-*

Flush pull
9-29526-00-0-*
9-29992-00-0-*
9-29992-01-0-*
9-29992-02-0-*

Flush pull
Stainless steel
9-42737-01-0-8



Flush pull
Stainless steel
9-39035-01-0-8

Rosette outside
9-29527-00-0-*

Countersunk screw M 6 – DIN 965
for handle on both sides

ST

-60 mm	**M 6 x 75**	**9-13274-75-0-1**
61-65 mm	**M 6 x 80**	**9-13274-80-0-1**
66-70 mm	**M 6 x 85**	**9-13274-85-0-1**
71-78 mm	**M 6 x 90**	**9-13274-90-0-1**

Countersunk screw M 6
Sash thickness
45-90 mm
9-32789-10-0-3

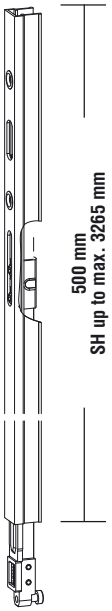
Bag of cover disc
K-17481-00-0-*
*** -1 = EV 1 colour**
*** -5 = UC 5 colour**
*** -6 = black**
*** -7 = white**
*** -8 = stainless steel colour**

Contents
1 Cover disc
1 Sleeve
1 Countersunk sheet metal screw 3,9 x 13

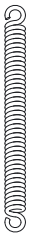
Spindle 10 mm
for handles with adjustable spindle length
Sash thickness up to 100 mm
9-24377-60-0-1

Lift-slide fittings G.U-934, G.U-937

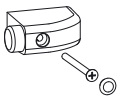
Cover rail extension
9-28483-05-0-*



Gear extension
6-32030-00-0-*

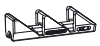


Tension spring for sashes > 200 kg
9-40235-05-0-0

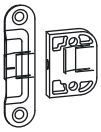


Bag of stop 90
K-17134-00-0-*
*** -6 = black**
*** -7 = white**

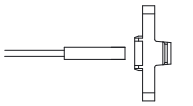
Anti-drill escutcheon for lift-locking gear
Backset
37,5 9-41309-02-0-0
27,5 9-41309-01-0-0
AD 0-44187



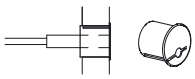
Bag of bottom keeper with hexagonal screw for slit ventilation
K-11929-00-0-1



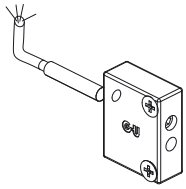
Bag of vertical middle lock
SC 10 K-11864-00-0-1
SC 28 K-17132-00-0-1
AD 0-36943



Bag of monitoring locking status
K-16752-00-0-0
AD 0-44449

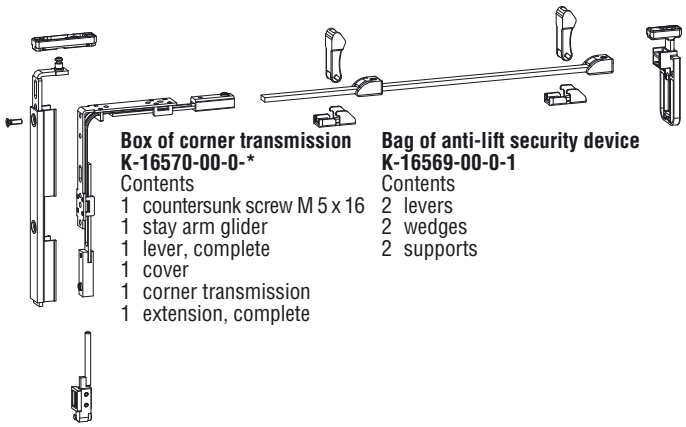


Excentric plug
6-33079-00-0-*



Bag of monitoring locking status Scheme C
K-17322-00-0-0
AD 0-44768

Anti-lift security



Box of corner transmission
K-16570-00-0-*
Contents
1 countersunk screw M 5 x 16
1 stay arm glider
1 lever, complete
1 cover
1 corner transmission
1 extension, complete

Bag of anti-lift security device
K-16569-00-0-1
Contents
2 levers
2 wedges
2 supports

Fitting requirements
according to size of sashes for schemes A to G

Quantity A	C	D	G	Description	PU	Article No.
1	2	2	1	**Box of corner transmission**	1	K-16570-00-0-*
1	2	2	1	**Bag of anti-lift sec. device**	1	K-16569-00-0-1
1	2	2	1	**Rear guide**	1	6-23297-00-0-0
1	2	2	1	**Connecting bar P 959**		
				FB / Länge		
				600-1220 / 1000	1	9-28355-10-0-1
				1221-1720 / 1500	1	9-28355-15-0-1
				1721-2020 / 1800	1	9-28355-18-0-1
				2021-3000 / 2600	1	9-28355-26-0-1

AD 0-44267

Bag of meeting stile gasket HS

Meeting stile gasket HS

Bag of meeting stile gasket HS

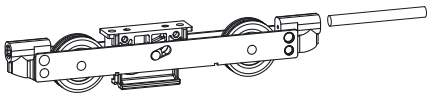
Description	Sash clearance SC mm	Length L mm	Article No.
HS 25/29 WK	25 - 29	2400	K-15799-24-0-*
HS 25/29 WK	25 - 29	2900	K-15799-29-0-*
HS 16/20 WK	16 - 20	2400	K-15798-24-0-*
HS 16/20 WK	16 - 20	2900	K-15798-29-0-*
HS 10 WK	10	2400	K-15797-24-0-*
HS 10 WK	10	2900	K-15797-29-0-*

Bag of extension for meeting stile gasket HS

Description	Sash clearance FA mm	Length L mm	Article No.
HS 25/29 WK	25 - 29	500	K-16857-00-0-*
HS 16/20 WK	16 - 20	500	K-16856-00-0-*
HS 10 WK	10	500	K-16855-00-0-*

Lift-slide fittings G.U-934

Runner for sashes up to 400 kg – G.U-934



Additional runner **Rod**

Box of tandem runner – G.U-934 for sashes up to 400 kg
K-17804-01-0-1 **PU 1**

Contents:
2 additional runners 6-30016-01-0-1

additional:
2 rods Ø 8 mm, length 65 mm
(to be cut from connecting rod 9-25476--0-1)**
AD 0-44455

Quantity required
1 set per sliding sash

Note:
For maximum sash weights it is important to observe the profile manufacturer's instructions.

Support runner V

Bag of support runner G.U-934 for V running rail
K-17455-02-0-1 **PU 1**

Contents:
2 support runner V
9-43614-02-0-1

Support runner R 2,5

Bag of support runner G.U-934 for running rail R 2,5
K-17455-03-0-1 **PU 1**

Contents:
2 support runner R 2,5
9-43614-03-0-1

Packings for runner – G.U-934

Description	Depth mm	Runner, front Article No.	Runner, rear Article No.
Packing	1,0	9-41680-00-0-1	9-41681-00-0-1
Packing	2,0	9-41680-02-0-1	9-41681-02-0-1
Packing	5,0	9-41680-05-0-1	9-41681-05-0-1
Packing	6,0	9-41680-06-0-1	9-41681-06-0-1

for lift-slide units with heavy sashes

Safe operation of large and heavy units

Advantages:
- The HS Speed Limiter prevents heavy sashes from accelerating, thus avoiding damage to
  - Persons
  - Property and to parts of the structure
- Unrestricted convenience of operation
- Easy assembly; also suited for subsequent assembly
- Especially suited for the use in public buildings, e.g. schools
- For timber, PVC and aluminium units

Range of application

Sash width	max. 3300 mm [1]
Sash height	max. 2765 mm [1], [2]
Sash weight	max. 400 kg [1]
Sash arrangement	Schemes A and C

[1] Adapted to lift-slide fittings G.U-934
[2] Adapted to lift-slide fittings G.U-937

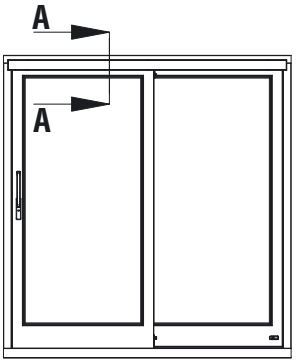
Fitting requirements according to sash width for schemes A and C

Qty. A	Qty. C	Description		PU	Article No.
1	2	**Basic box HS-*SPEED Limiter***			
		Sash weight up to 400 kg		1	K-17179-20-0-1
		Bag of profile HS-*SPEED Limiter*			
		SW	TFW		
1		-1450	- 3000	1	K-17180-30-0-*
	1		- 6700	1	K-17180-67-0-*
1		1451-1700	3001- 3500	1	K-17180-35-0-*
	2		6701- 7000	1	K-17180-35-0-*
1		1701-1950	3501- 4000	1	K-17180-40-0-*
	2		7001- 8000	1	K-17180-40-0-*
1		1951-2200	4001- 4500	1	K-17180-45-0-*
	2		8001- 9000	1	K-17180-45-0-*
1		2201-2450	4501- 5000	1	K-17180-50-0-*
	2		9001-10000	1	K-17180-50-0-*
1		2451-3300	5001- 6700	1	K-17180-67-0-*
	2		10001-13400	1	K-17180-67-0-*

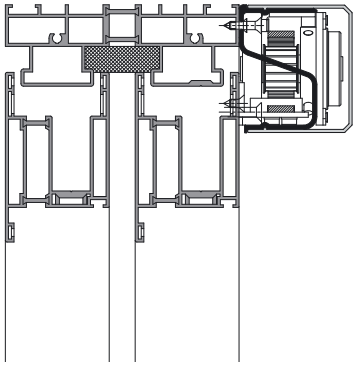
Remark:
Scheme A = Scheme D inside sash
Scheme C = Scheme F inside sash

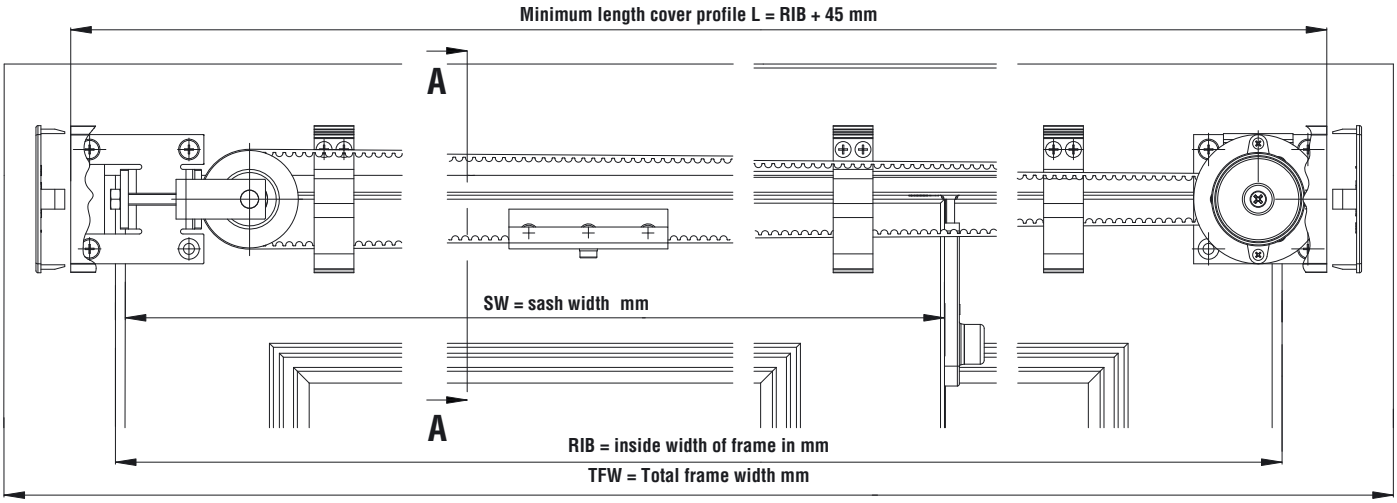
5

Interior view

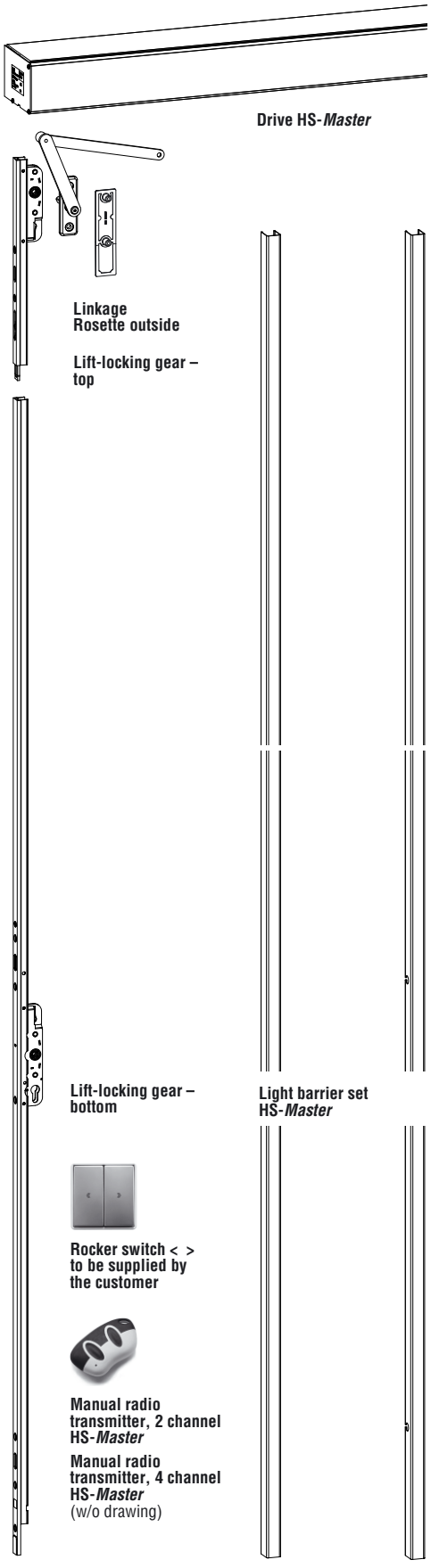


Section A – A





for lift-slide fittings G.U-934 – sash clearance 28 and 10 mm



Lift-slide fittings HS-*Master*

Fitting requirements for scheme A and C

Qty. A	Qty. C	Description		PU	Article No. Scheme A	Scheme C
I.		**Drive HS-*Master* – standard version**				
1	1	**Drive HS-*Master*** [1] Standard version for – operation via handle / "Push and go function" – operation via rocker switch (switch supplied by customer) Manufacture according to order specification	230 V 110 V	1 1	6-32205-98-L/R-* 6-33283-98-L/R-*	6-33625-98-L/R-*
		alternatively: **Drive HS-*Master*** [1] same as standard version, but additionally prepared for operation via manual radio transmitter (radio receiver and 1 transmitter installed – further transmitters as accessories)	230 V 110 V	1 1	6-32654-98-L/R-* 6-33284-98-L/R-*	6-33626-98-L/R-*
II.		**Drive HS-*Master* with light barrier set**				
1	–	**Drive HS-*Master*** [1] same as standard version, but additionally prepared for installation of light barrier set	230 V 110 V	1 1	6-32650-98-L/R-* 6-33285-98-L/R-*	
		alternatively: **Drive HS-*Master*** [1] same as standard version, but additionally prepared for operation via manual radio transmitter (radio receiver and 1 transmitter installed – further transmitters as accessories) and for installation of light barrier set	230 V 110 V	1 1	6-32651-98-L/R-* 6-33286-98-L/R-*	
1	–	**Light barrier set HS-*Master***	230/110 V	1	K-16772-00-0-*	
		Contents: 2 light barrier rail, lh / rh 2 light barrier – transmitter, 2 light barrier – receiver 8 guides				
III.		**Drive HS-*Master* with light curtain**				
1	–	**Drive HS-*Master*** [1] same as standard version, but additionally prepared for installation of light curtain inside	230 V 110 V	1 1	6-32652-98-L/R-* 6-33287-98-L/R-*	
		alternatively: **Drive HS-*Master*** [1] same as standard version, but additionally prepared for operation via manual radio transmitter (radio receiver and 1 transmitter installed – further transmitters as accessories) and for installation of light curtain inside	230 V 110 V	1 1	6-32653-98-L/R-* 6-33288-98-L/R-*	
1		**Light curtain HS-*Master* – outside**	230/110 V	1	6-32640-00-0-0	
Components generally required with versions I, II and III						
1	2	**Box of linkage HS-*Master*** [1] Contents: 1 linkage, 1 rosette outside 1 fixing material		1	K-16750-00-0-*	K-16750-00-0-*
1	2	**Box of lift-locking gear HS-*Master*** Sash height SH = 1855-2765 mm Contents: 2 lift-locking gear HS-*Master*, top / bottom 1 connecting bar 1 drilling jig		1	K-16748-00-0-1	K-16748-00-0-1
–	1	**Bag of accessories** – according to profile system			(on request)	(on request)
1	2	**Lift-slide fittings G.U-934** without lift-locking gear				

[1] * Colour: 1 = EV 1, 5 = UC 5, 7 = white

Accessories for HS-*Master*

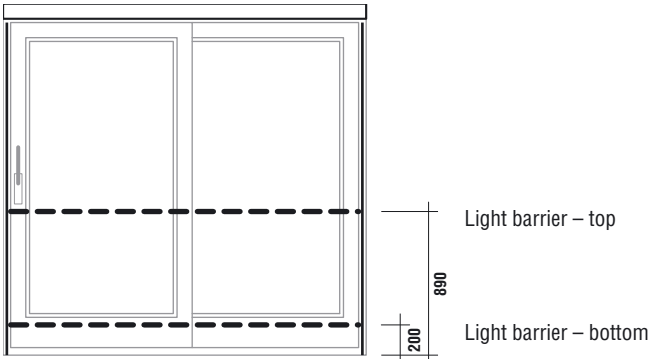
Fitting requirements for scheme A and C

Qty.	Description	Colour	PU	Article No.	
1*	**Manual radio transmitter HS-*Master*** 2 channel with G.U specific coding for HS-*Master* with radio receiver	grey-blue grey-burgundy grey-anthrazit grey-red	1 1 1 1	6-32264-01-0-0 6-32264-02-0-0 6-32264-03-0-0 6-32264-04-0-0	6-32264-01-0-0 6-32264-02-0-0 6-32264-03-0-0 6-32264-04-0-0
	alternatively: **Manual radio transmitter HS-*Master*** 4 channel	grey-yellow	1	6-33788-00-0-0	6-33788-00-0-0
1	**Radio receiver card HS-*Master***		1	6-32627-00-0-0	
2	**Radar sensor HS-*Master***		1	A-7032830	
1	**Rocker switch < > – to be supplied by the customer** – Make: JUNG 535 U or equivalent				

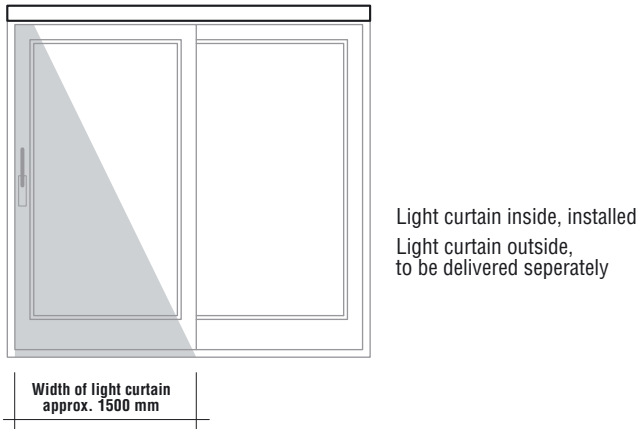
* = min. 1 units, max. 85 units possible

Lift-slide fittings HS-*Master* – Scheme A

Security functions

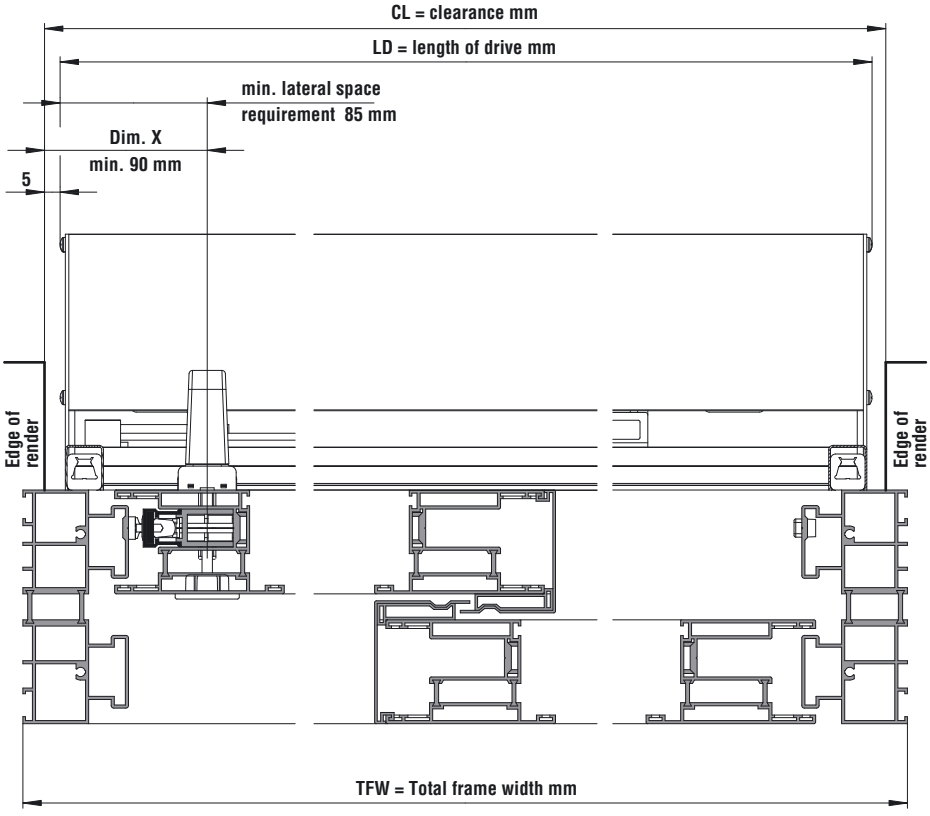


Safe operation with light barrier

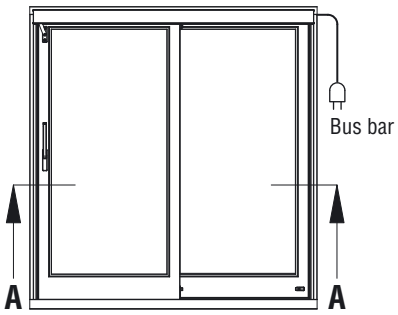


Safe operation of HS-*Master* with light curtain
Inside curtain installed, outside curtain delivered seperately

Order references



Interior view



Section A – A (Drawing shows left-hand active sash)

Description			Dimensions mm
Length of drive	**LD**	=	
Dim. X (min. 90)	**X**	=	
Position of handle			[ ] lh [ ] rh
Clearance	CL	=	
Total frame width	TFW	=	
Sash width	SW	=	
Sash height	SH	=	

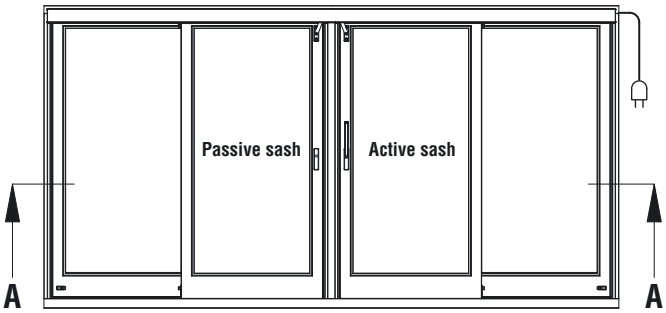
Specification of profile	
Manufacturer	
Profile series	

Range of applications

Scheme	A
Min. length HS-*Master* drive	1900 mm
Sash width SW	950-3300 mm
Sash height SH	1855-2765 mm
Sash weight	up to 300 kg

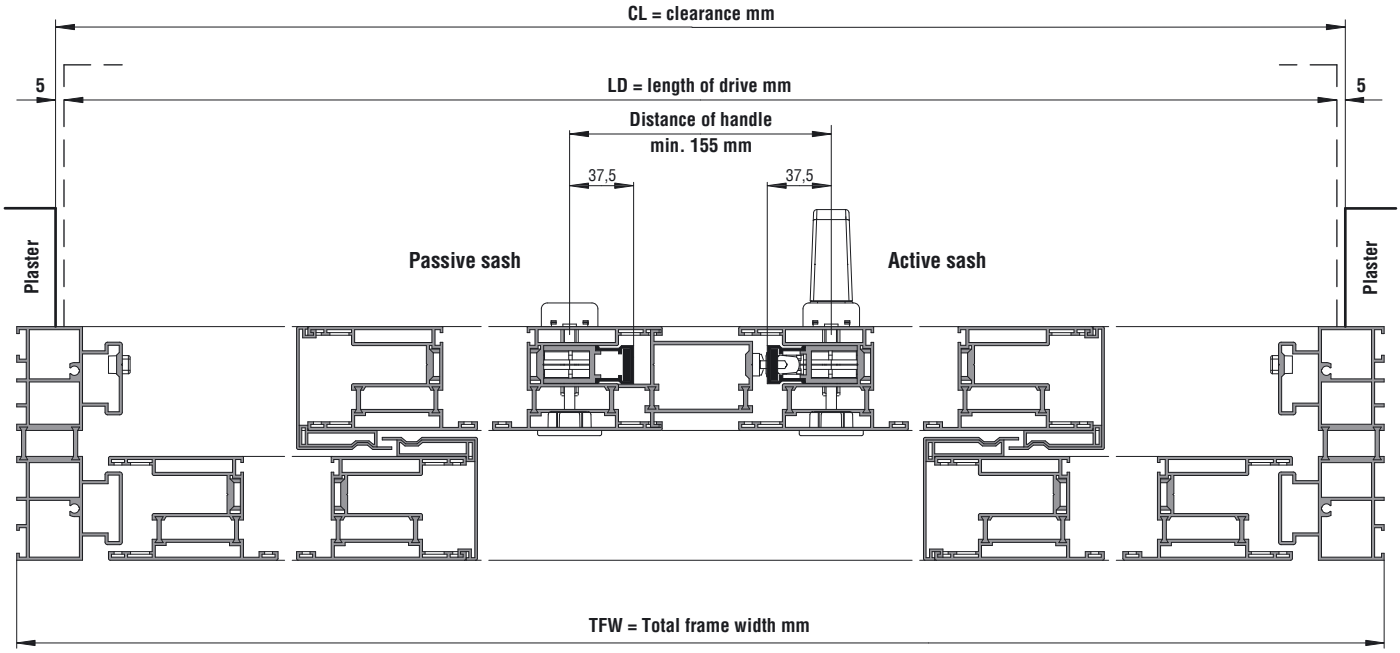
Lift-slide fittings HS-*Master* – Scheme C

Interior view



Power connection on active sash side

Order references



Section A – A (Drawing shows left-hand active sash)

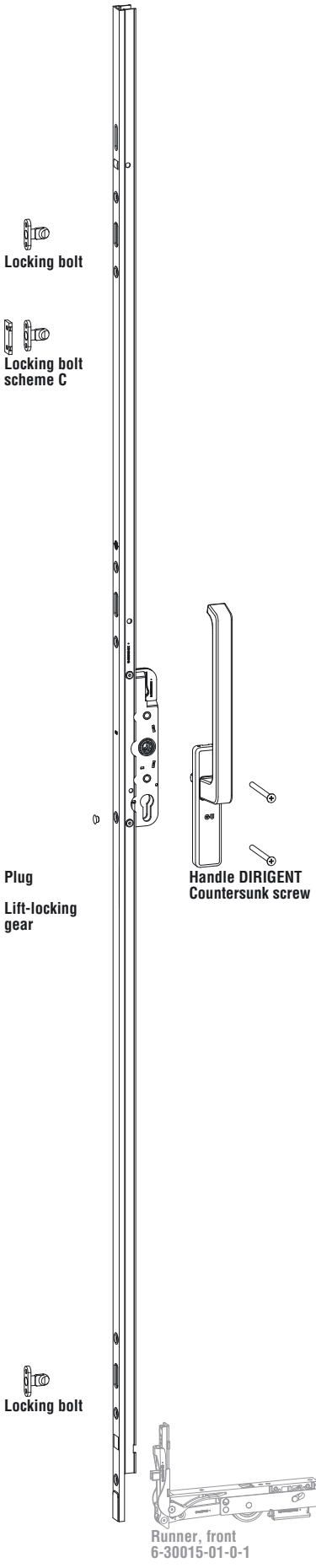
Description			Dimensions mm
Length of drive	**LD**	=	
Distance of handle	**GA**	=	
Position of handle active sash			[ ] lh [ ] rh
Clearance	CL	=	
Total frame width	TFW	=	
Sash width	SW	=	
Sash height	SH	=	
Sash thickness	ST	=	
Sash clearance	SC	=	

Specification of profile	
Manufacturer	
Profile series	

Range of applications

Scheme	C
Min. length HS-*Master* drive	3800 mm
Sash width SW	950-3300 mm
Sash height SH	1855-2765 mm
Sash weight	up to 300 kg

Lift-slide fittings G.U-934 according to profile system



Fitting requirements
according to size of sashes for schemes A to F

Quantity A	C	D	F	Description	PU	Akotherm	Albio Serie 230	Alcoa RT 135
1	2	2	4	**Box of runners – G.U-934/954**	1	K-16488-00-0-1	K-16488-00-0-1	
1	2	2	4	**Additional box G.U-934**	1	K-16934-00-0-0	K-17482-00-0-0	K-17007-00-0-0
1	2	2	4	**Bag of packing runners G.U-934**	1			K-17847-00-0-0
1	2	2	4	**Handle DIRIGENT** [1]	1	6-24607-00-0-*	6-24608-00-0-*	6-24607-00-0-*
1	2	2	4	**Flush pull** [1]	1	9-29992-01-0-*	9-29992-01-0-*	9-29992-01-0-*
	2		2	Locking bolt	1	6-22648-01-0-1	6-22648-01-0-1	K-13391-00-0-0
	2		2	Fixing platte	1		9-24414-00-0-0	
	4		4	Countersunk screw M 5 x 55	1		9-13133-55-0-0	
				Optional parts				
2	4	2	4	Bag of stop 90 [1]	1		K-17134-00-0-*	K-17134-00-0-*
1	2	2	4	**Lift-locking gear G.U-934** [1] [2]				
				Length G [3] Article No.		SH	SH	SH
				1190 ~ 410 6-30021-11-0-*	10	750-1295	825-1245	787-1332
				1770 ~ 410 6-30021-19-0-*	10	1165-1795	1195-1825	1202-1832
				2270 ~1010 6-30021-24-0-*	10	1795-2295	1825-2325	1832-2332
				2670 ~1010 6-30021-28-0-*	10	2045-2695	2075-2725	2082-2732
1	2	2	4	**Connecting bar Ø 8**				
				Length Article No.		SW	SW	SW
				1100 9-25476-11-0-1	10	700-1600	700-1600	700-1600
				1350 9-25476-14-0-1	10	1601-1850	1601-1850	1601-1850
				1850 9-25476-18-0-1	10	1851-2350	1851-2350	1851-2350
				3300 9-25476-33-0-1	10	2351-3300	2351-3300	2351-3300

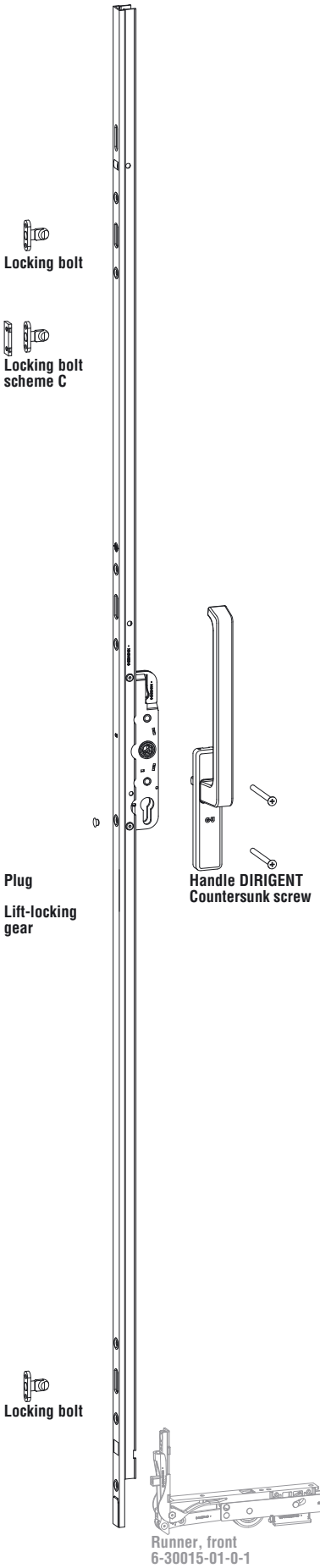
[1] * = Colour: 1 = EV 1, 2 = EV 2, 5 = UC 5, 7 = white (RAL 9016)
[2] = Up to 200 kg sash weight with tension spring 9-40235-05-0-0 [3] = Exact handle position depending on profile dimension

Fitting requirements
according to size of sashes for schemes A to F

Quantity A	C	D	F	Description	PU	Alumil Serie S 500	Forster (Belgium)	Forster (Italy)
1	2	2	4	**Box of runners – G.U-934/954**	1	K-16488-00-0-1	K-16488-00-0-1	K-16488-00-0-1
1	2	2	4	**Additional box G.U-934**	1	K-17464-00-0-0	K-17467-00-0-0	K-17121-00-0-1
1	2	2	4	**Handle DIRIGENT** [1]	1	6-24608-00-0-*	6-24607-00-0-*	6-24607-00-0-*
1	2	2	4	**Flush pull** [1]	1	9-29992-02-0-*	9-29992-01-0-*	
	2		2	Fixing platte	1			9-24414-00-0-0
	2		4	Rubber buffer 60	1			9-23793-00-0-0
				Optional parts				
2	4	2	4	Bag of stop 90 [1]	1	K-17134-00-0-*	K-17134-00-0-*	K-17134-00-0-*
1	1	2	2	Bag of bottom keeper	1		K-12057-00-0-1	K-12057-00-0-1
1	2	2	4	**Lift-locking gear G.U-934** [1] [2]				
				Length G [3] Article No.		SH	SH	SH
				1190 ~ 410 6-30021-11-0-*	10	830-1250	750-1295	825-1245
				1770 ~ 410 6-30021-19-0-*	10	1200-1830	1165-1795	1195-1825
				2270 ~1010 6-30021-24-0-*	10	1830-2330	1795-2295	1826-2325
				2670 ~1010 6-30021-28-0-*	10	2080-2730	2045-2695	2075-2725
1	2	2	4	**Connecting bar Ø 8**				
				Length Article No.		SW	SW	SW
				1100 9-25476-11-0-1	10	700-1600	700-1600	700-1600
				1350 9-25476-14-0-1	10	1601-1850	1601-1850	1601-1850
				1850 9-25476-18-0-1	10	1851-2350	1851-2350	1851-2350
				3300 9-25476-33-0-1	10	2351-3300	2351-3300	2351-3300

[1] * = Colour: 1 = EV 1, 2 = EV 2, 5 = UC 5, 7 = white (RAL 9016)
[2] = Up to 200 kg sash weight with tension spring 9-40235-05-0-0 [3] = Exact handle position depending on profile dimension

Lift-slide fittings G.U-934 according to profile system



Fitting requirements according to size of sashes for schemes A to F

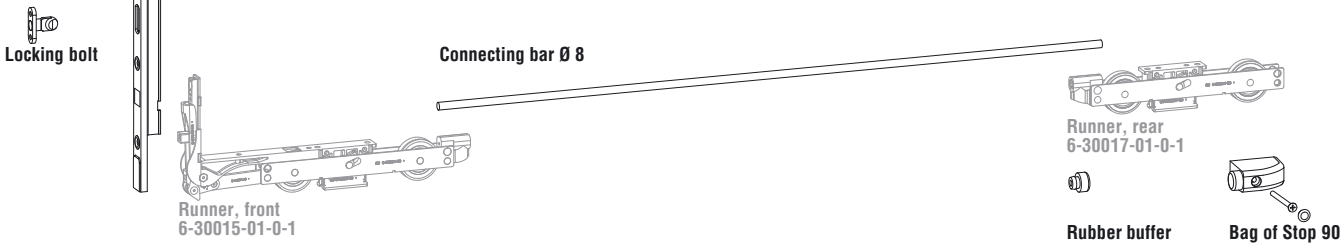
Quantity A	C	D	F	Description	PU	Gartner	Metra NC 150 STH	Pontio/ Gastello
1	2	2	4	**Basic box – G.U-934**	1		K-16965-00-0-0	K-16967-00-0-0
1	2	2	4	**Box of runners – G.U-934/954**	1	K-16488-00-0-1		
1	2	2	4	**Additional box G.U-934**	1	K-17468-00-0-0		
1	2	2	4	**Handle DIRIGENT** [1]	1	6-24607-00-0-*	6-24608-00-0-*	6-24607-00-0-*
1	2	2	4	**Flush pull** [1]	1	9-29992-01-0-*	9-29992-01-0-*	9-29992-01-0-*
2	4	4	8	Countersunk screw M 6	100		9-13274-70-0-1	
1	2	4	4	Guide	1		K-14281-00-0-6	
2	4	2	4	Sealing plate	1		6-22154-05-0-0	
	2		2	Locking bolt	1	6-22648-05-0-1		9-38825-00-0-1
	1		1	Bag of locking bolt	1		K-14280-00-0-3	
				Optional parts				
2	4	2	4	Bag of stop 90 [1]	1	K-17134-00-0-*	K-17134-00-0-*	K-17134-00-0-*
1	1	2	2	Bag of bottom keeper	1	K-12057-00-0-1	K-12057-00-0-1	K-12057-00-0-1
1	2	2	4	**Lift-locking gear G.U-934** [1] [2]				
				Length G [3]	Article No.		SH	SH	SH
				1190 ~ 410	6-30021-11-0-*	10	750-1295	830-1250	750-1295
				1770 ~ 410	6-30021-19-0-*	10	1165-1795	1200-1830	1165-1795
				2270 ~1010	6-30021-24-0-*	10	1795-2295	1830-2330	1795-2295
				2670 ~1010	6-30021-28-0-*	10	2045-2695	2080-2730	2045-2695
1	2	2	4	**Connecting bar Ø 8**				
				Length	Article No.		SW	SW	SW
				1100	9-25476-11-0-1	10	700-1600	700-1600	700-1600
				1350	9-25476-14-0-1	10	1601-1850	1601-1850	1601-1850
				1850	9-25476-18-0-1	10	1851-2350	1851-2350	1851-2350
				3300	9-25476-33-0-1	10	2351-3300	2351-3300	2351-3300

[1] * = Colour: 1 = EV 1, 2 = EV 2, 5 = UC 5, 7 = white (RAL 9016)
[2] = Up to 200 kg sash weight with tension spring 9-40235-05-0-0 [3] = Exact handle position depending on profile dimension

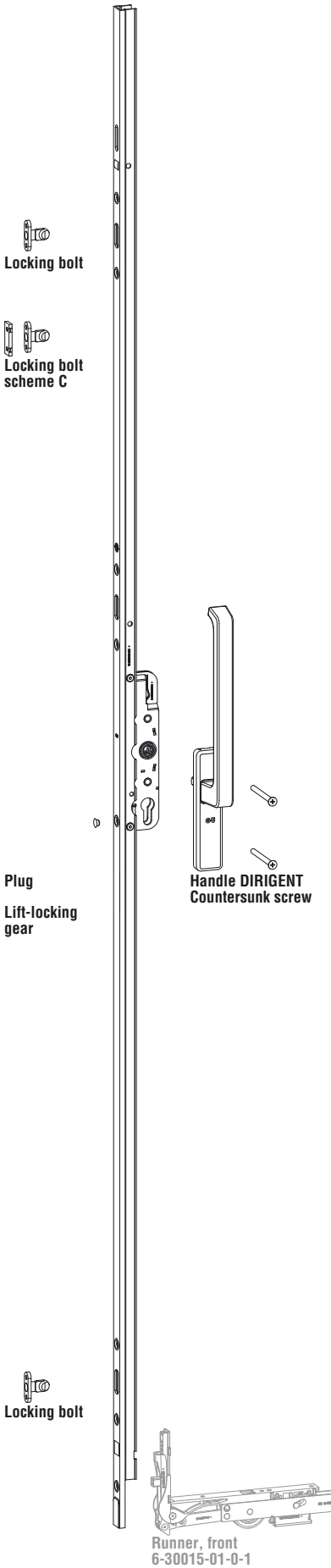
Fitting requirements according to size of sashes for schemes A to F

Quantity A	C	D	F	Description	PU	Profilati	SAPA-RC Serie 125	SAPA-ES 60
1	2	2	4	**Basic box – G.U-934**	1	K-16967-00-0-0		
1	2	2	4	**Box of runners – G.U-934/954**	1		K-16488-00-0-1	K-16488-00-0-1
1	2	2	4	**Additional box G.U-934**	1		K-17266-00-0-1	K-17469-00-0-0
1	2	2	4	**Handle DIRIGENT** [1]	1	6-24608-00-0-*	6-24607-00-0-*	6-24607-00-0-*
1	2	2	4	**Flush pull** [1]	1	9-29992-01-0-*		9-29992-01-0-*
2	4	4	8	Countersunk screw M 6	100			9-24775-00-0-0
	2		2	Locking bolt	1	6-22648-05-0-1		
	2		2	Fixing platte	1	9-24414-00-0-0		
	4		4	Countersunk screw M 5 x 20	1	9-13133-20-0-0		
				Optional parts				
2	4	2	4	Bag of stop 90 [1]	1	K-17134-00-0-*	K-17134-00-0-*	K-17134-00-0-*
1	1	2	2	Bag of bottom keeper	1		K-12057-00-0-1	
1	2	2	4	**Lift-locking gear G.U-934** [1] [2]				
				Length G [3]	Article No.		SH	SH	SH
				1190 ~ 410	6-30021-11-0-*	10	830-1250	774-1239	750-1295
				1770 ~ 410	6-30021-19-0-*	10	1200-1830	1144-1819	1165-1795
				2270 ~1010	6-30021-24-0-*	10	1830-2330	1774-2319	1795-2295
				2670 ~1010	6-30021-28-0-*	10	2080-2730	2024-2719	2045-2695
1	2	2	4	**Connecting bar Ø 8**				
				Length	Article No.		SW	SW	SW
				1100	9-25476-11-0-1	10	700-1600	700-1600	700-1600
				1350	9-25476-14-0-1	10	1601-1850	1601-1850	1601-1850
				1850	9-25476-18-0-1	10	1851-2350	1851-2350	1851-2350
				3300	9-25476-33-0-1	10	2351-3300	2351-3300	2351-3300

[1] * = Colour: 1 = EV 1, 2 = EV 2, 5 = UC 5, 7 = white (RAL 9016)
[2] = Up to 200 kg sash weight with tension spring 9-40235-05-0-0 [3] = Exact handle position depending on profile dimension



Lift-slide fittings G.U-934 according to profile system



Fitting requirements
according to size of sashes for schemes A to F

Quantity A	C	D	F	Description	PU	Sykon	Technal GT / GT1	Thyssen-Schulte TSB W 70
1	2	2	4	**Box of runners – G.U-934/954**	1	K-16488-00-0-1	K-16488-00-0-1	K-16488-00-0-1
1	2	2	4	**Additional box G.U-934**	1	K-17470-00-0-0	K-17471-00-0-0	K-17472-00-0-0
1	2	2	4	**Handle DIRIGENT** [1]	1	6-24607-00-0-*	6-24607-00-0-*	6-24607-00-0-*
1	2	2	4	**Flush pull** [1]	1	9-29992-01-0-*	9-29992-01-0-*	9-29992-01-0-*
2	4	4	8	Countersunk screw M 6	100	9-13274-60-0-1		
				Optional parts				
2	4	2	4	Bag of stop 90 [1]	1	K-17134-00-0-*	K-17134-00-0-*	K-17134-00-0-*
1	2	2	4	**Lift-locking gear G.U-934** [1] [2]				
				Length G [3]	Article No.		SH	SH	SH
				1190 ~ 410	6-30021-11-0-*	10	750-1295	750-1295	750-1295
				1770 ~ 410	6-30021-19-0-*	10	1165-1795	1165-1795	1165-1795
				2270 ~1010	6-30021-24-0-*	10	1795-2295	1795-2295	1795-2295
				2670 ~1010	6-30021-28-0-*	10	2045-2695	2045-2695	2045-2695
1	2	2	4	**Connecting bar Ø 8**				
				Length	Article No.		SW	SW	SW
				1100	9-25476-11-0-1	10	700-1600	700-1600	700-1600
				1350	9-25476-14-0-1	10	1601-1850	1601-1850	1601-1850
				1850	9-25476-18-0-1	10	1851-2350	1851-2350	1851-2350
				3300	9-25476-33-0-1	10	2351-3300	2351-3300	2351-3300

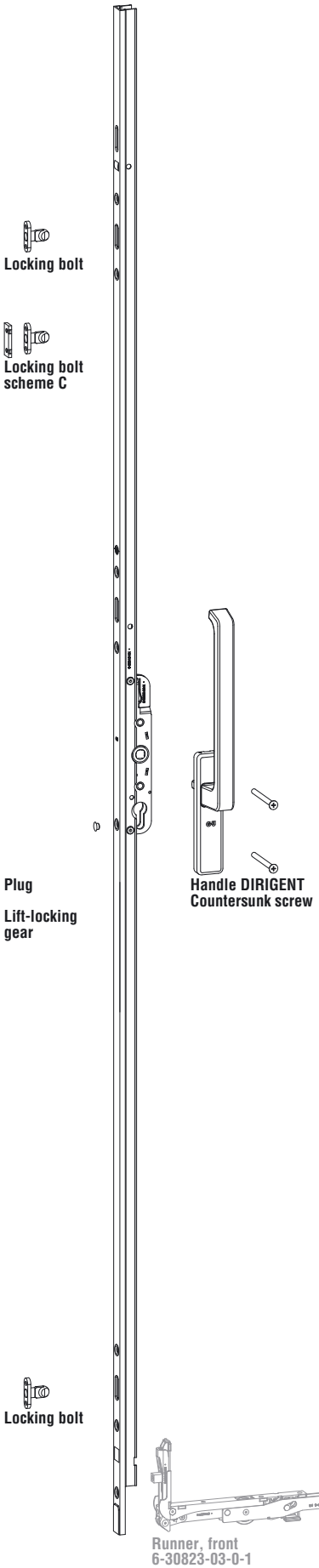
[1] * = Colour: 1 = EV 1, 2 = EV 2, 5 = UC 5, 7 = white (RAL 9016)
[2] = Up to 200 kg sash weight with tension spring 9-40235-05-0-0 [3] = Exact handle position depending on profile dimension

Fitting requirements
according to size of sashes for schemes A to F

Quantity A	C	D	F	Description	PU	VAW Profitherm
1	2	2	4	**Box of runners – G.U-934/954**	1	K-16488-00-0-1
1	2	2	4	**Additional box G.U-934**	1	K-17473-00-0-0
1	2	2	4	**Handle DIRIGENT** [1]	1	6-24607-00-0-*
1	2	2	4	**Flush pull** [1]	1	9-29992-01-0-*
				Optional parts		
2	4	2	4	Bag of stop 90 [1]	1	K-17134-00-0-*
1	1	2	2	Bag of bottom keeper	1	K-12057-00-0-1
1	2	2	4	**Lift-locking gear G.U-934** [1] [2]		
				Length G [3]	Article No.		SH
				1190 ~ 410	6-30021-11-0-*	10	750-1295
				1770 ~ 410	6-30021-19-0-*	10	1165-1795
				2270 ~1010	6-30021-24-0-*	10	1795-2295
				2670 ~1010	6-30021-28-0-*	10	2045-2695
1	2	2	4	**Connecting bar Ø 8**			
				Length	Article No.		SW
				1100	9-25476-11-0-1	10	700-1600
				1350	9-25476-14-0-1	10	1601-1850
				1850	9-25476-18-0-1	10	1851-2350
				3300	9-25476-33-0-1	10	2351-3300

[1] * = Colour: 1 = EV 1, 2 = EV 2, 5 = UC 5, 7 = white (RAL 9016)
[2] = Up to 200 kg sash weight with tension spring 9-40235-05-0-0 [3] = Exact handle position depending on profile dimension

Lift-slide fittings G.U-937 according to profile system



Fitting requirements
according to size of sashes for schemes A and D

Quantity A	Quantity D	Description	PU	Alumil Serie S 410	Sykon
1	2	**Box of runners – G.U-937/957**	1	K-16721-00-0-1	K-16721-00-0-1
1	2	**Additional box G.U-937**	1	K-17474-00-0-0	K-17476-00-0-0
1	2	**Handle DIRIGENT** [1]	1	6-24608-00-0-*	6-24608-00-0-*
1	2	**Flush pull** [1]	1		9-29526-00-0-*
2	4	Countersunk screw M 6	100		9-13183-70-0-0
		Optional parts			
2	2	Bag of stop 90 [1]	1	K-17134-00-0-*	K-17134-00-0-*
1	2	Bag of bottom keeper	1	K-12057-00-0-1	K-12057-00-0-1
1	2	**Lift-locking gear G.U-937** [1]			
		Length G [2] Article No.		SH	SH
		1190 ~ 410 6-30019-11-0-*	10	830-1250	750-1295
		1770 ~ 410 6-30019-19-0-*	10	1200-1830	1165-1795
		2270 ~1010 6-30019-24-0-*	10	1830-2330	1795-2295
		2670 ~1010 6-30019-28-0-*	10	2080-2730	2045-2695
1	2	**Connecting bar Ø 8**			
		Length Article No.		SW	SW
		1100 9-25476-11-0-1	10	700-1600	700-1600
		1350 9-25476-14-0-1	10	1601-1850	1601-1850
		1850 9-25476-18-0-1	10	1851-2350	1851-2350
		3300 9-25476-33-0-1	10	2351-3300	2351-3300

[1] * = Colour: 1 = EV 1, 2 = EV 2, 5 = UC 5, 7 = white (RAL 9016)
[2] = Exact handle position depending on profile dimension

Order catalogue part 5
Horizontal and vertical pivot fittings for aluminium windows

Contents

The present catalogue part contains all horizontal and vertical pivot fittings for aluminium windows and accessories according to the latest state of the art.
The following indications will make you familiar with the concept of the catalogue and help you to handle it easily.

Catalogue structure

The present catalogue part is structured in the following way:
– Optional parts and turn handles, drilling jig
– Sets

Optional parts and turn handles

The option pages show you optional parts and turn handles for all horizontal and vertical pivot fittings at a glance. All supplements of standard versions are clearly arranged.

Sets

Fitting requirements according to sash size and scheme
The illustrations of the fittings are supplemented by corresponding parts tables helping to determine the hardware composition.
Parts supplementing standard versions are clearly presented and can be easily selected.

Order numbers

The order number gives information about
– the article
– its size
– its application - e.g. DIN lh or DIN rh
– its colour/finish

Example
Order number
6-25948-30-0-1

6-25948-	- -	Article number
-	-30- -	Size
-	- -L-	Left hand assembly
-	- -R-	Right hand assembly
-	- -0-	Usable on both sides
-	- - -1	F 1/EV 1, natural (silver colour), fer**GU**ard*silver
-	- - -2	F 2/EV 2, champagne colour
-	- - -3	F 3, brass colour (gold colour)
-	- - -4	UC 3, medium bronze (medium brown)
-	- - -A	F 4, bronze colour
-	- - -C	Titanium colour
-	- - -5	UC 5, dark bronze (dark brown RAL 8022)
-	- - -6	onyx matt (black RAL 9005)
-	- - -7	white (RAL 9016)
-	- - -7T	white (RAL 9010)
-	- - -8	Stainless steel (stainless steel colour)
-	- - -*	Surface treatment variable (available colours see price list)

Prices

Single part price list "Total programme"
The prices are listed by ascending article numbers.

Additional sales documentation

Apart from the order catalogue, the following documentation on horizontal and vertical pivot fittings is available:
– Brochures and leaflets informing about product features and advantages
– Presentation boards of all fitting versions
– Working drawings with mounting instructions
– Instructions for maintenance and care

Horizontal and vertical pivot fittings for aluminium windows

Application

Range of application for UNITAS horizontal and vertical pivot fittings:
– Horizontal pivot windows
– Vertical pivot windows
– Fan-lights equipped with fan-light openers

Designs

Horizontal pivot UNITAS 18
Compact screw-on pivot made of non-ferrous metal, for sashes up to 175 kg. Standard version in monobloc construction, exactly adapted to the specifications of various profile systems. Sealing with silicone gaskets.

Vertical pivot UNITAS 88
Compact screw-on pivot made of non-ferrous metal, for sashes up to 175 kg. Standard version in monobloc construction, exactly adapted to the specifications of various profile systems. Sealing with silicone gaskets.

Schwinglager 515
Compact screw-on pivot made of zinc die-casting for sashes up to 130 kg.

Handles

The handles DIRIGENT-T are provided with cockspur for slit ventilation. Handles DIRIGENT-S without cockspur complete the programme.

Locking system 380 E

The fittings are concealed in the rebate and provide for one handle operation. All locking parts are designed for Euro groove 15/20 mm. The locking pins of locking mechanism are adjustable. Clip-on locking plates, fixed or adjustable as an option for optimum gasket pressure.
Corner transmissions are provided with rust-proof 4-leaf stainless steel springs.

Standard colours

Horizontal and vertical pivot fittings are supplied in the following standard colours:

EV 1 Handle DIRIGENT silver colour coated, pivots silver colour coated
UC 5 Handle DIRIGENT dark brown (RAL 8022) coated, pivots dark brown (RAL 8022) coated
White Handle DIRIGENT white (RAL 9016) coated, pivots white (RAL 9016) coated

Further colours and finishes on request.

Materials, surface sealing fer**GU**ard*silver

The fitting parts are made of high quality steel, zinc die-casting or aluminium alloys.
Depending on the material, they are protected against corrosion by surface sealing with fer**GU**ard*silver or by anodisation (aluminium parts).

Standard surface sealing of horizontal and vertical pivot fittings: fer**GU**ard*silver

All locking components of horizontal and vertical pivot fittings come with the surface sealing fer**GU**ard*silver.

Abbreviations

SRH Sash rebate height
SRW Sash rebate width
PU Packing unit

Profile system manufacturers' information

It is important to observe the product information issued by profile system manufacturers, especially information concerning construction and fabrication, maximum sash dimensions and weights and material features such as linear expansion of profiles.

Application, locking plates

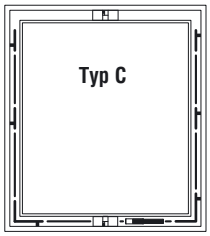
Profile system	Fittings	Frame profile	Sash profile	Reversible profile	Locking plates bottom	top	Begrenzungs-schere	Assembly drawing
Horizontal pivot fittings								
Alu Menziken Alisol 3	UNITAS 18/3	V 73 202	V 76 783	M 39 116	6-27358-00-0-8	G-11071-00-0-1	K-13393-00-0-1	0-43699-1
Alumil M 15000	UNITAS 18/3	M 15008	M 15128	M 15132	6-28832-00-0-1	G-11071-00-0-1	K-13393-00-0-1	0-45486-1
Doral	UNITAS 18/3				6-24666-00-0-1	G-11065-00-0-1	K-13393-00-0-1	0-43061-1
Etem E-40 / E-45	UNITAS 18/3	40101	40230	40530	6-28832-00-0-1	G-11071-00-0-1	K-13393-00-0-1	
Eural Serie 65	UNITAS 18/3				6-27358-00-0-8	G-11071-00-0-1	K-13393-00-0-1	0-43764-1
Fujisash	UNITAS 18/3				6-27358-00-0-8	6-27358-00-0-8	K-13393-00-0-1	0-42927-1
Heroal Serie 110 E	UNITAS 18/3				6-24666-00-0-1	6-30959-01-0-1	K-13393-00-0-1	
Metra NC 50 i	UNITAS 18/3				6-24666-00-0-1	6-30959-01-0-1	K-13393-00-0-1	0-44262-1
Metra NC 50 STH	UNITAS 18/3				6-24666-00-0-1	6-30959-01-0-1	K-13393-00-0-1	0-44285-1
Metra NC 65 STH	UNITAS 18/3				6-24666-00-0-1	6-30959-01-0-1	K-13393-00-0-1	0-44219-1
Metra NC 68 STH	UNITAS 18/3				6-24666-00-0-1	6-30959-01-0-1	K-13393-00-0-1	0-44159-1
MKF Serie TKI 602	UNITAS 18/3	602-01-024	602-03-103		6-24666-00-0-1	9-31758-00-0-1	K-13393-00-0-1	0-43210-1
Ponzio Windstop 65 tt	UNITAS 18/3		365.730	365.650	6-24666-00-0-1	G-11071-00-0-1	K-13393-00-0-1	0-45160-1
Showa-Front	UNITAS 18/3				6-27358-00-0-8	6-27358-00-0-8	K-13393-00-0-1	0-43059-1
Thyssen-Schulte TSB W 70	UNITAS 18/3	W70 14131	W70 57368	Z10 65401	6-24666-00-0-1	G-11800-00-0-1	K-13393-00-0-1	0-43384-1
System neutral drawing	UNITAS 18/3							0-42956-1
Vertical pivot fittings					Frame profile	Reversible profile		
Alumil M 15000	UNITAS 88	M 15008	M 15128	M 15132	G-11071-00-0-1	6-28832-00-0-1	K-13393-00-0-1	0-45488-1
Doral	UNITAS 88				G-11065-00-0-1	6-24666-00-0-1	K-13393-00-0-1	0-43056-1
Etem E-40 / E-45	UNITAS 88	40101	40230	40530	G-11071-00-0-1	6-28832-00-0-1	K-13393-00-0-1	
Fujisash	UNITAS 88				6-27358-00-0-8	6-27358-00-0-8	K-13393-00-0-1	0-42928-1
Heroal Serie 110 E	UNITAS 88				6-30959-01-0-1	6-24666-00-0-1	K-13393-00-0-1	
Metra NC 50 i	UNITAS 88				6-30959-01-0-1	6-24666-00-0-1	K-13393-00-0-1	0-44263-1
Metra NC 50 STH	UNITAS 88				6-30959-01-0-1	6-24666-00-0-1	K-13393-00-0-1	0-44286-1
Metra NC 65 STH	UNITAS 88				6-30959-01-0-1	6-24666-00-0-1	K-13393-00-0-1	0-44218-1
Metra NC 68 STH	UNITAS 88				6-30959-01-0-1	6-24666-00-0-1	K-13393-00-0-1	0-44158-1
MKF Serie TKI 602	UNITAS 88	602-01-024	602-03-103		9-31758-00-0-1	6-24666-00-0-1	K-13393-00-0-1	0-43211-1
Ponzio Windstop 65 tt	UNITAS 88		365.730	365.650	G-11071-00-0-1	6-24666-00-0-1	K-13393-00-0-1	0-45159-1
Showa Front	UNITAS 88				6-27358-00-0-8	6-27358-00-0-8	K-13393-00-0-1	0-43058-1
Thyssen-Schulte TSB W 70	UNITAS 88	W70 14131	W70 57368	Z10 65401	G-11800-00-0-1	6-24666-00-0-1	K-13393-00-0-1	0-43385-1
System neutral drawing	UNITAS 88							0-42959-1

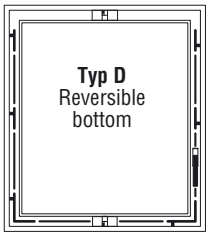
Arrangement of horizontal pivot fittings

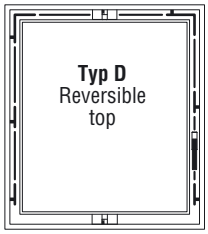
Locking system G.U-FERCO 380 E

Arrangement of vertical pivot fittings

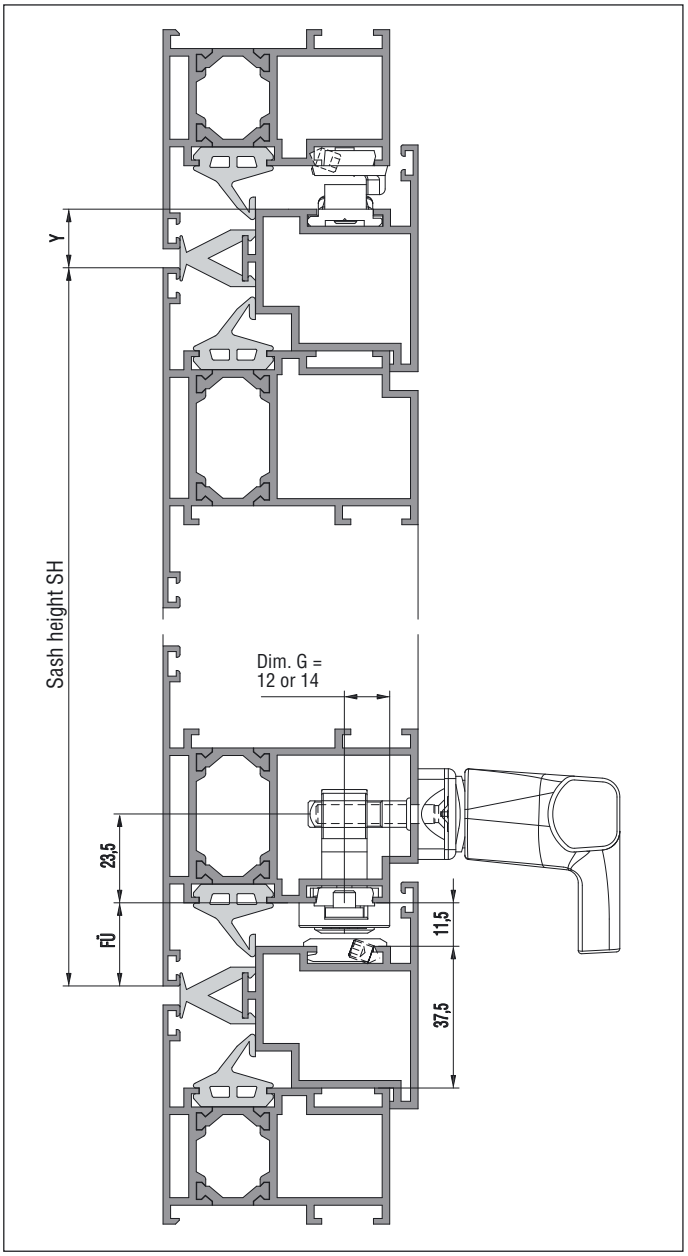
Locking system G.U-FERCO 380 E



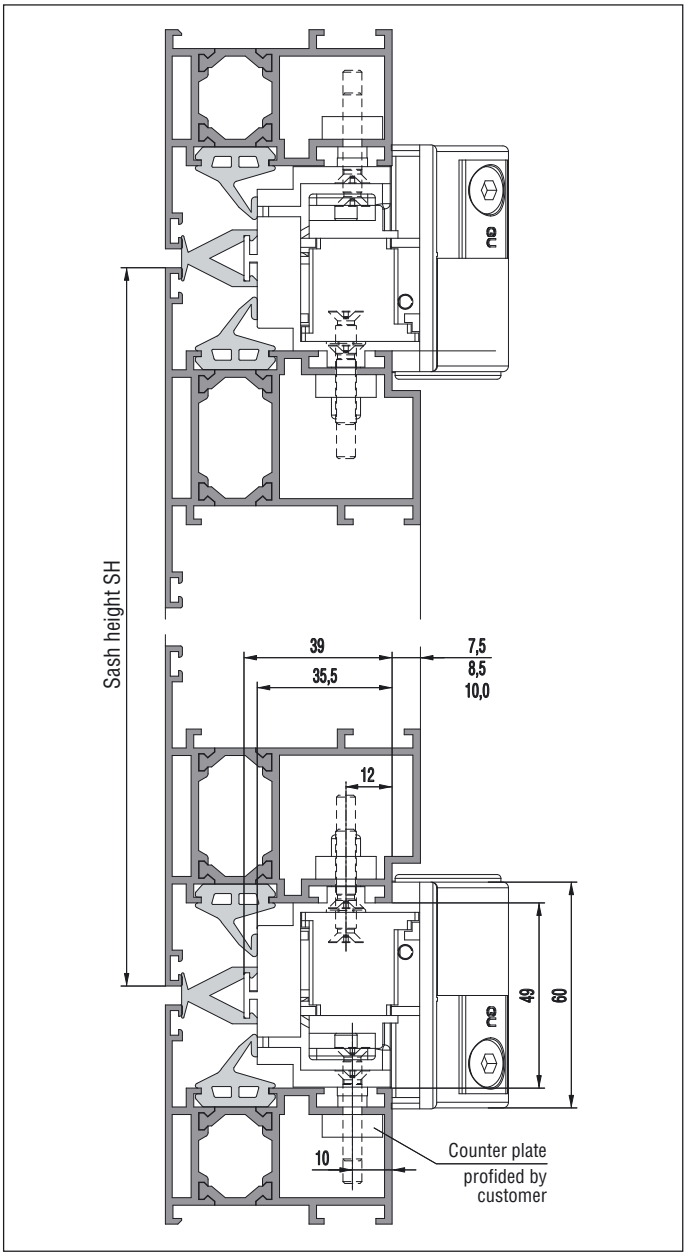




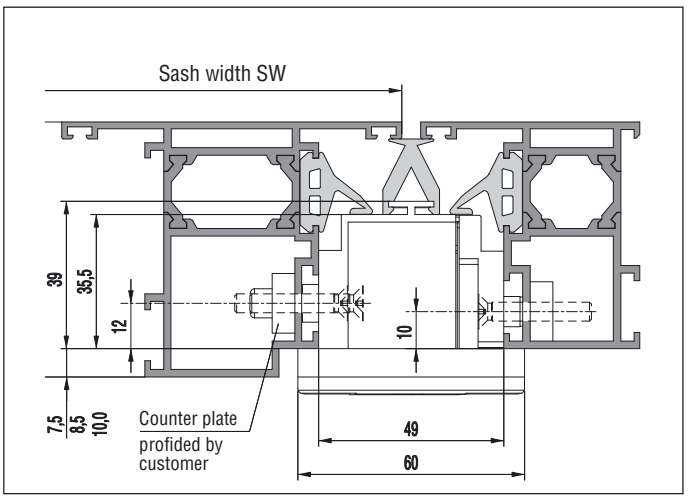
Assembly dimensions – frame and sash profile



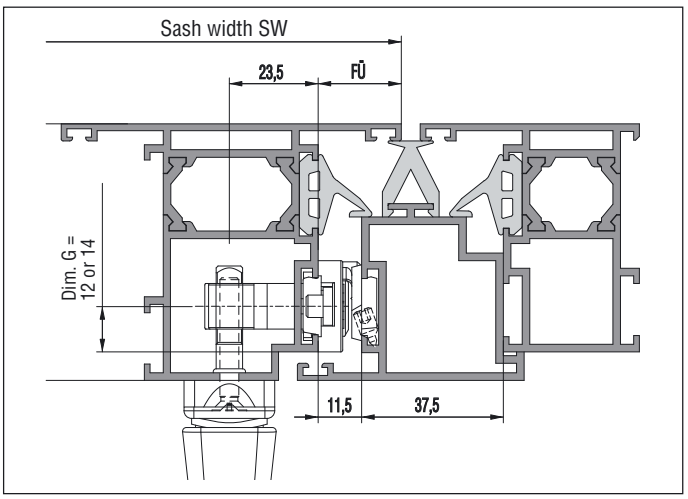
Horizontal pivot fittings UNITAS 18/3



Vertical pivot fittings UNITAS 88

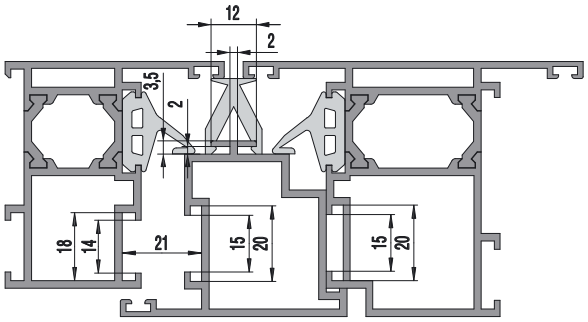


Horizontal pivot fittings UNITAS 18/3

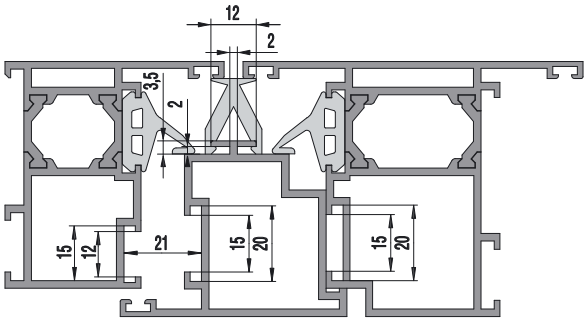


Vertical pivot fittings UNITAS 88

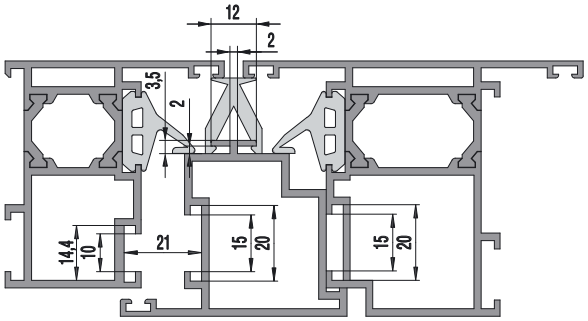
Assembly dimensions – frame, sash and reversible profile



Frame groove 14/18

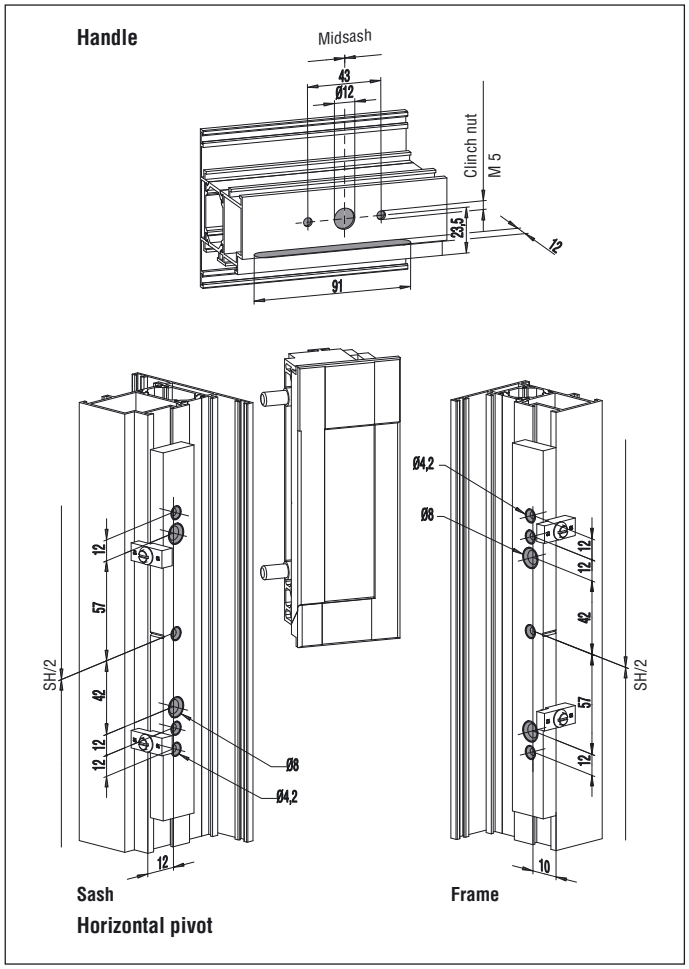


Frame groove 12/15

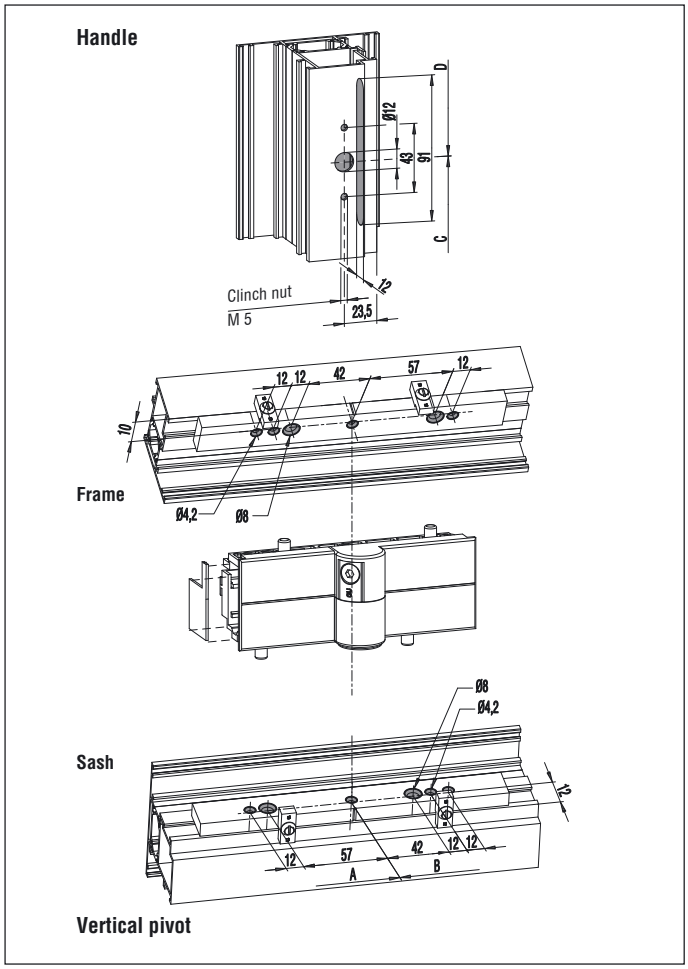


Frame groove 10/14

Drilling and milling dimensions

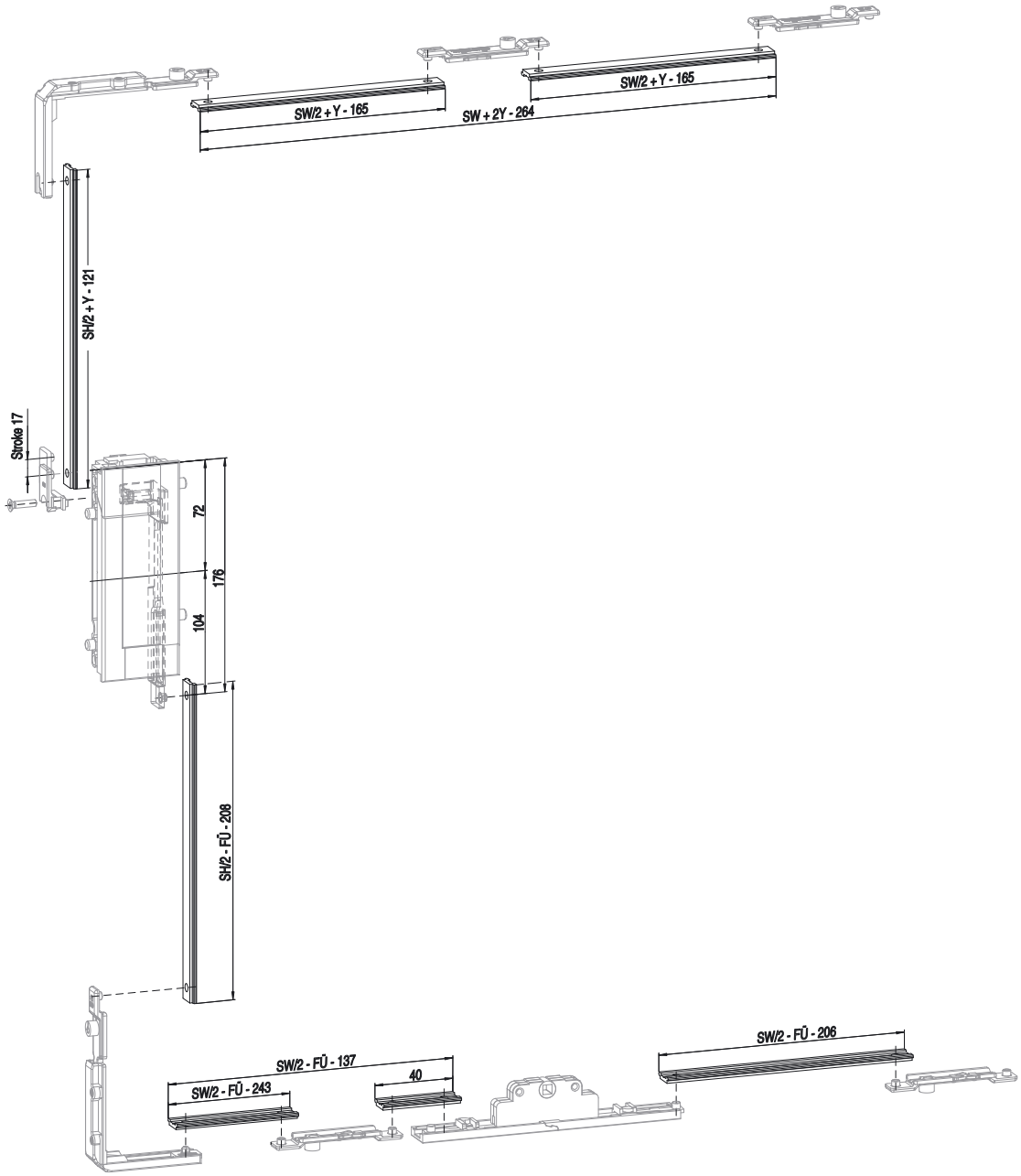


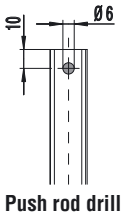
Drill pattern for handle and pivot – horizontal pivot fittings UNITAS 88



Drill pattern for handle and pivot – vertical pivot fittings UNITAS 88

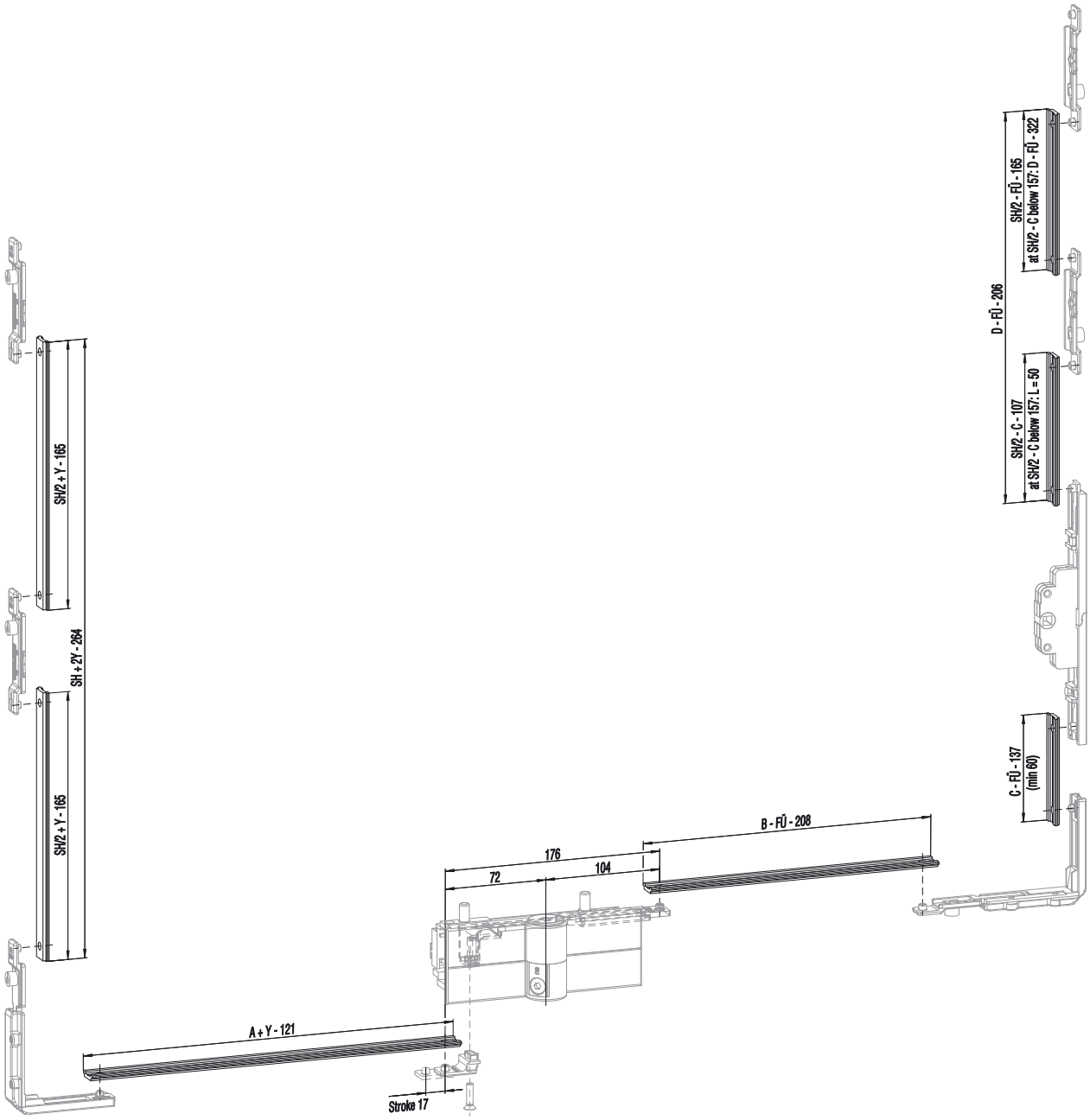
Push rod cutting lengths with 22 mm sash overlap – horizontal pivot fittings UNITAS 18/3

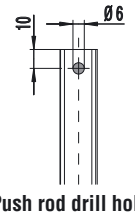




Push rod drill holes

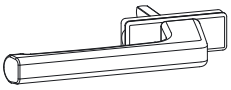
Push rod cutting lengths with 22 mm sash overlap – vertical pivot fittings UNITAS 88



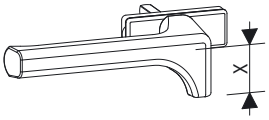


Push rod drill holes

Horizontal and vertical pivot fittings for aluminium windows

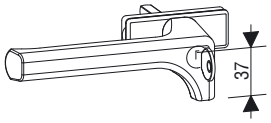


Handle DIRIGENT-S 44
without lugs
Spindle 30 6-29189-30-0-*
Rosette 24 x 67 mm



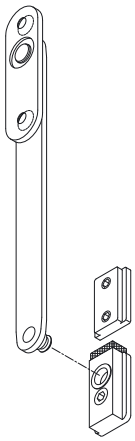
Handle DIRIGENT-T 46
without lugs, dim. "X" = 42 mm
Spindle 30 6-29187-30-0-*
Rosette 24 x 67 mm

Handle DIRIGENT-T 49
without lugs, dim. "X" = 37 mm
Spindle 30 6-29188-30-0-*
Rosette 24 x 67 mm



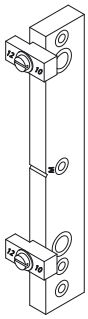
Handle DIRIGENT-F/Z
lockable,
for aluminium windows on request

Automatic 180° locking latch
9-20017-00-0-*



Bag of limiting stay
K-13393-00-0-1

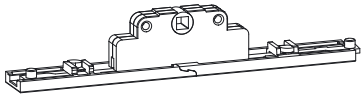
Assembly drawing 0-42973



Drilling jig for
horizontal pivot UNITAS 18/3 and
vertical pivot UNITAS 88
6-27419-00-0-0

Optional part for limiting stay

Illustration	Description	PU	Article No.
	Adapter ring Ø 6 mm for clip pin to push rod hole Ø 8 mm	1	9-45167-00-0-6



Mill-in gear 90°

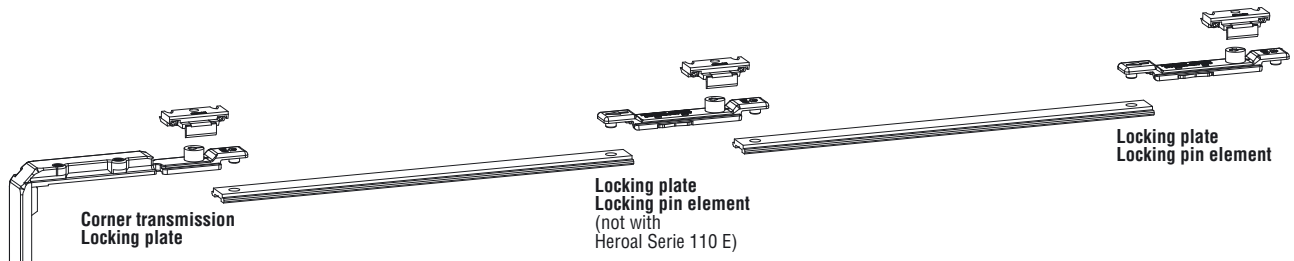
Mill-in gear 90° with thread M 5
for handle mounting with countersunk screws M 5

Application Sash groove	Description	Backset mm	PU	Article No.
Euro groove 15/20	**Mill-in gear 90°**	25	1	6-25948-25-0-1
		30	1	6-25948-30-0-1
		37	1	6-25948-37-0-1
		42	1	6-25948-42-0-1
		45	1	6-25948-45-0-1
		50	1	6-25948-50-0-1

Mill-in gear 90° with drill-hole Ø 4,8
for handle mounting with countersunk sheet metal screws 4,8

Application Sash groove	Description	Backset mm	PU	Article No.
Euro groove 15/20	**Mill-in gear 90°**	30	1	6-25948-33-0-1
Sash groove 16/20	**Mill-in gear 90°**	35	1	6-25948-35-0-1
		40	1	6-25948-40-0-1

Profile systems Alu Menziken Alisol 3, Alumil M 15000, Doral, Etem E-40 / E-45, Eural Serie 65, Fujisash

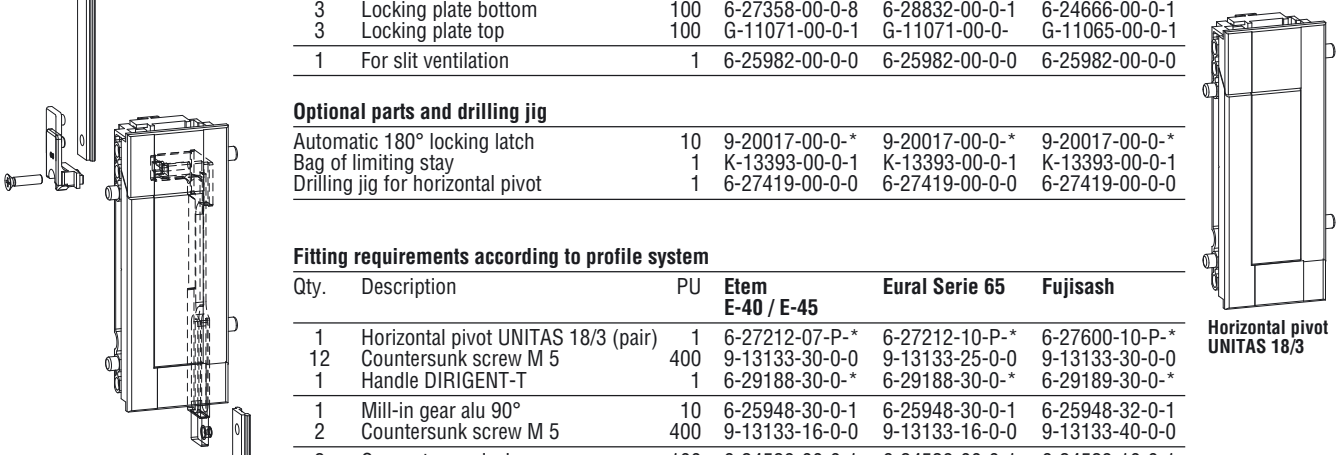


Fitting requirements according to profile system

Qty.	Description	PU	Alu Menziken Alisol 3	Alumil M 15000	Doral
1	Horizontal pivot UNITAS 18/3 (pair)	1	6-27212-10-P-*	6-27212-07-P-*	6-27212-10-P-*
12	Countersunk screw M 5	400	9-13133-30-0-0	9-13133-25-0-0	9-13133-30-0-0
1	Handle DIRIGENT-T	1	6-28112-25-0-*	6-29188-30-0-*	6-29188-30-0-*
1	Mill-in gear alu 90°	10	6-25948-30-0-1	6-25948-33-0-1	6-25948-30-0-1
2	Countersunk screw M 5	400	9-13133-25-0-0	9-13133-35-0-0	9-13133-40-0-0
2	Corner transmission	100	6-24529-00-0-1	6-24529-00-0-1	6-24529-05-0-1
4	Locking pin element	100	6-24539-00-0-1	6-24539-00-0-1	6-24539-05-0-1
3	Locking plate bottom	100	6-27358-00-0-8	6-28832-00-0-1	6-24666-00-0-1
3	Locking plate top	100	G-11071-00-0-1	G-11071-00-0-	G-11065-00-0-1
1	For slit ventilation	1	6-25982-00-0-0	6-25982-00-0-0	6-25982-00-0-0

Optional parts and drilling jig

Automatic 180° locking latch		10	9-20017-00-0-*	9-20017-00-0-*	9-20017-00-0-*
Bag of limiting stay		1	K-13393-00-0-1	K-13393-00-0-1	K-13393-00-0-1
Drilling jig for horizontal pivot		1	6-27419-00-0-0	6-27419-00-0-0	6-27419-00-0-0

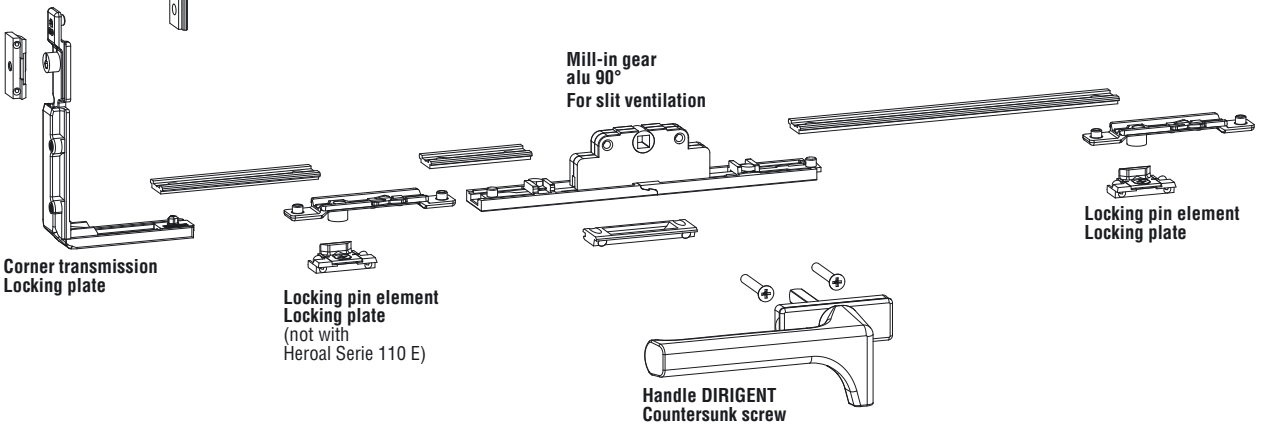


Fitting requirements according to profile system

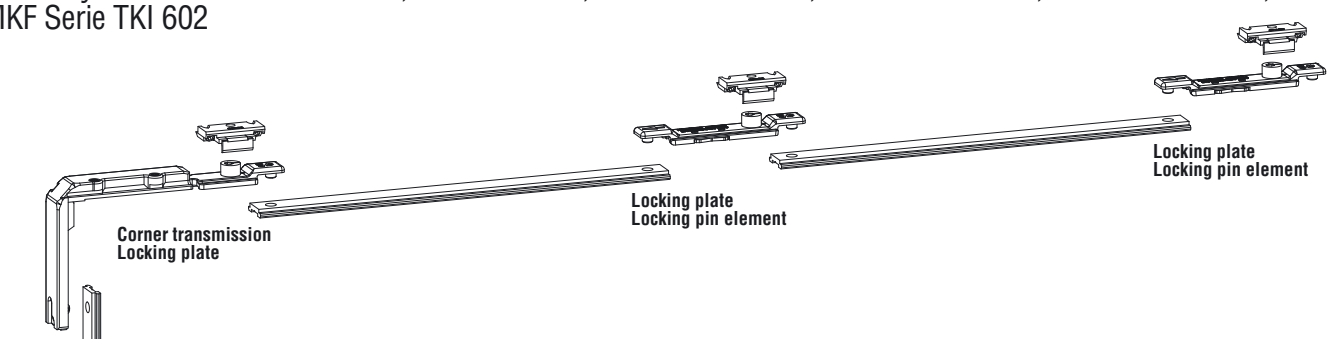
Qty.	Description	PU	Etem E-40 / E-45	Eural Serie 65	Fujisash
1	Horizontal pivot UNITAS 18/3 (pair)	1	6-27212-07-P-*	6-27212-10-P-*	6-27600-10-P-*
12	Countersunk screw M 5	400	9-13133-30-0-0	9-13133-25-0-0	9-13133-30-0-0
1	Handle DIRIGENT-T	1	6-29188-30-0-*	6-29188-30-0-*	6-29189-30-0-*
1	Mill-in gear alu 90°	10	6-25948-30-0-1	6-25948-30-0-1	6-25948-32-0-1
2	Countersunk screw M 5	400	9-13133-16-0-0	9-13133-16-0-0	9-13133-40-0-0
2	Corner transmission	100	6-24529-00-0-1	6-24529-00-0-1	6-24529-10-0-1
4	Locking pin element	100	6-24539-00-0-1	6-24539-00-0-1	
4	Locking pin	100			A-02823-00-0-0
3	Locking plate bottom	100	6-28832-00-0-1	6-27358-00-0-8	6-27358-00-0-8
3	Locking plate top	100	G-11071-00-0-1	G-11071-00-0-1	6-27358-00-0-8
1	For slit ventilation	1	6-25982-00-0-0	6-25982-00-0-0	6-25982-00-0-0

Optional parts and drilling jig

Automatic 180° locking latch		10	9-20017-00-0-*	9-20017-00-0-*	9-20017-00-0-*
Bag of limiting stay		1	K-13393-00-0-1	K-13393-00-0-1	K-13393-00-0-1
Drilling jig for horizontal pivot		1	6-27419-00-0-0	6-27419-00-0-0	6-27419-00-0-0



Profile systems Heroal Serie 110 E, Metra NC 50 i, Metra NC 50 STH, Metra NC 65 STH, Metra NC 68 STH, MKF Serie TKI 602

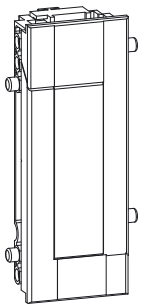


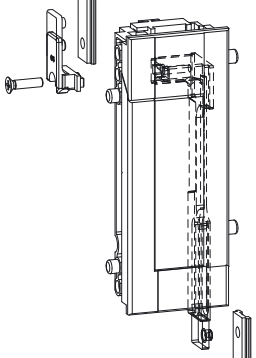
Fitting requirements according to profile system

Qty.	Description	PU	Heroal Serie 110 E	Metra NC 50 i	Metra NC 50 STH
1	Basic box UNITAS 18/3	1	K-17069-00-0-*		
1	Horizontal pivot UNITAS 18/3 (pair)	1		6-27212-10-P-*	6-27212-10-P-*
1	Handle DIRIGENT-T	1		6-29187-30-0-*	6-29187-30-0-*
1	Box of locking system UNITAS 88	1		K-14729-00-0-1	K-14729-00-0-1
1	For slit ventilation	1		6-25982-00-0-0	6-25982-00-0-0

Optional parts and drilling jig

Automatic 180° locking latch	10	9-20017-00-0-*	9-20017-00-0-*	9-20017-00-0-*
Bag of limiting stay	1	K-13393-00-0-1	K-13393-00-0-1	K-13393-00-0-1
Drilling jig for horizontal pivot	1	6-27419-00-0-0	6-27419-00-0-0	6-27419-00-0-0



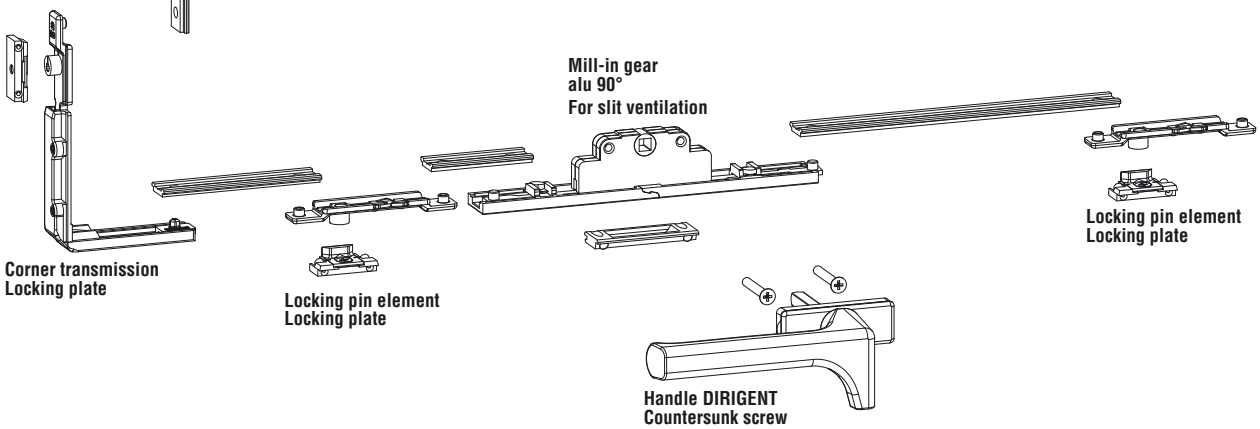


Fitting requirements according to profile system

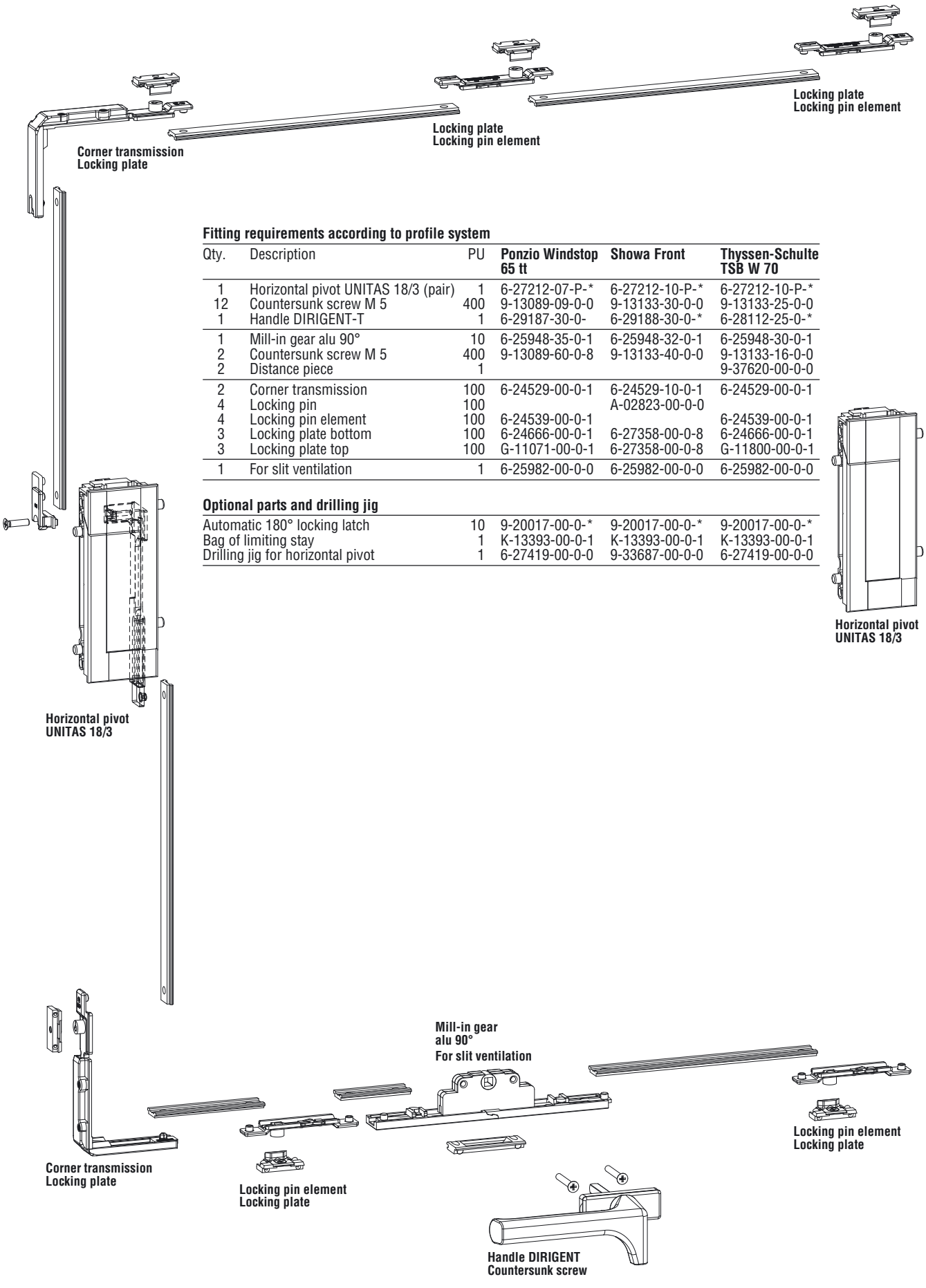
Qty.	Description	PU	Metra NC 65 STH	Metra NC 68 STH	MKF Serie TKI 602
1	Horizontal pivot UNITAS 18/3 (pair)	1	6-27212-10-P-*	6-27212-07-P-*	6-27212-10-P-*
12	Countersunk screw M 5	400			9-13133-30-0-0
1	Handle DIRIGENT-T	1	6-29187-30-0-*	6-29187-30-0-*	6-29188-30-0-*
1	Box of locking system UNITAS 88	1	K-14729-00-0-1	K-14729-00-0-1	
1	Mill-in gear alu 90°	10			6-25948-30-0-1
2	Countersunk screw	400			9-13133-25-0-0
2	Corner transmission	100			6-24529-00-0-1
4	Locking pin element	100			6-24539-00-0-1
3	Locking plate bottom	100			6-24666-00-0-1
3	Locking plate top	100			9-31758-00-0-7
1	For slit ventilation	1	6-25982-00-0-0	6-25982-00-0-0	6-25982-00-0-0
2	Gasket 20	1		9-35495-01-0-6	
2	Gasket 20	1		9-35495-02-0-6	

Optional parts and drilling jig

Automatic 180° locking latch	10	9-20017-00-0-*	9-20017-00-0-*	9-20017-00-0-*
Bag of limiting stay	1	K-13393-00-0-1	K-13393-00-0-1	K-13393-00-0-1
Drilling jig for horizontal pivot	1	6-27419-00-0-0	6-27419-00-0-0	6-27419-00-0-0



Profile systems Ponzio Windstop 65 tt, Showa Front, Thyssen-Schulte TSB W 70



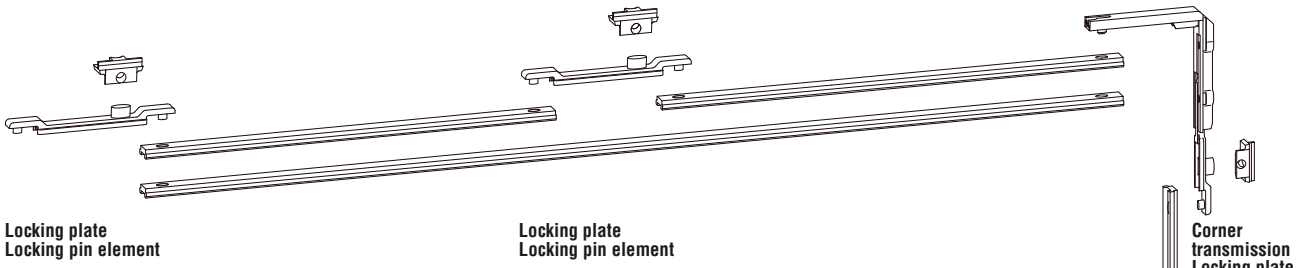
Fitting requirements according to profile system

Qty.	Description	PU	Ponzio Windstop 65 tt	Showa Front	Thyssen-Schulte TSB W 70
1	Horizontal pivot UNITAS 18/3 (pair)	1	6-27212-07-P-*	6-27212-10-P-*	6-27212-10-P-*
12	Countersunk screw M 5	400	9-13089-09-0-0	9-13133-30-0-0	9-13133-25-0-0
1	Handle DIRIGENT-T	1	6-29187-30-0-	6-29188-30-0-*	6-28112-25-0-*
1	Mill-in gear alu 90°	10	6-25948-35-0-1	6-25948-32-0-1	6-25948-30-0-1
2	Countersunk screw M 5	400	9-13089-60-0-8	9-13133-40-0-0	9-13133-16-0-0
2	Distance piece	1			9-37620-00-0-0
2	Corner transmission	100	6-24529-00-0-1	6-24529-10-0-1	6-24529-00-0-1
4	Locking pin	100		A-02823-00-0-0	
4	Locking pin element	100	6-24539-00-0-1		6-24539-00-0-1
3	Locking plate bottom	100	6-24666-00-0-1	6-27358-00-0-8	6-24666-00-0-1
3	Locking plate top	100	G-11071-00-0-1	6-27358-00-0-8	G-11800-00-0-1
1	For slit ventilation	1	6-25982-00-0-0	6-25982-00-0-0	6-25982-00-0-0

Optional parts and drilling jig

Automatic 180° locking latch		10	9-20017-00-0-*	9-20017-00-0-*	9-20017-00-0-*
Bag of limiting stay		1	K-13393-00-0-1	K-13393-00-0-1	K-13393-00-0-1
Drilling jig for horizontal pivot		1	6-27419-00-0-0	9-33687-00-0-0	6-27419-00-0-0

Profile systems with Euro groove 15/20 mm on the sash – 6 lockings



Locking plate
Locking pin element

Locking plate
Locking pin element

Corner transmission Locking plate

Screw 9-30458-00-0-0

Rod connector E-13899-00-0-0

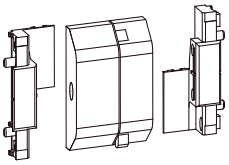
Screw 9-13133-10-0-0

Fitting requirements for horizontal pivot windows with 6 lockings

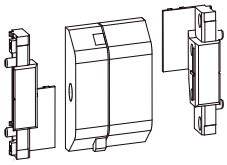
Qty.	Description		PU	Article No.
1	**Pairs horizontal pivot 515**		1	G-12029-00-4-*
4	**Adapter** for horizontal pivot		1	(on request)
8	**Screw** for adapter		1	0-2417-–16-0-0
1	**Gear box** for handle		1	A-92420-00-0-0
1	**Handle**		1	(on request)
2	**Screw** for handle		1	E-16245-25-0-0
2	**Corner transmission**		1	6-24529-00-0-1
4	**Locking pin element**		1	6-24539-00-0-0
3	**Locking plate**, bottom	Groove 15/20	1	G-12907-00-0-1
1	**Rod connector**		1	E-13899-00-0-0
1	**Screw**		1	9-30458-00-0-0
2	**Screw**		1	9-13133-10-0-0
	alternatively:			
1	**Vertical rod transmission**		1	G-13936-00-0-1
3	**Locking plate**, top adjustable	Groove 10/14	100	G-11065-00-0-1
		Groove 12/15	100	G-11800-00-0-1
		Groove 14/18	100	G-11071-00-0-1

Notes:
Adapter for horizontal pivots 515 and handles according to profile system on request

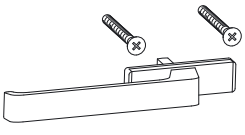
alternatively:
Vertical rod transmission G-13936-00-0-1



Horizontal pivot 515 Adapter

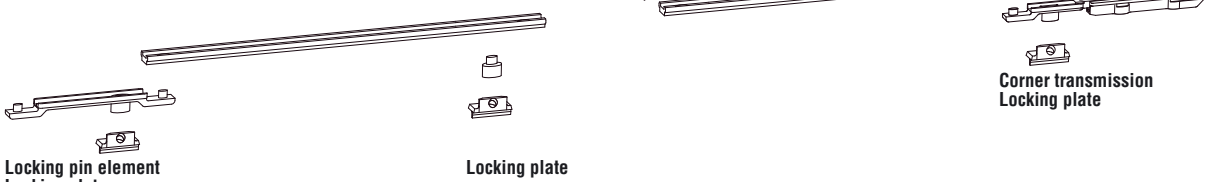


Horizontal pivot 515 Adapter



Handle Screws

Gear box

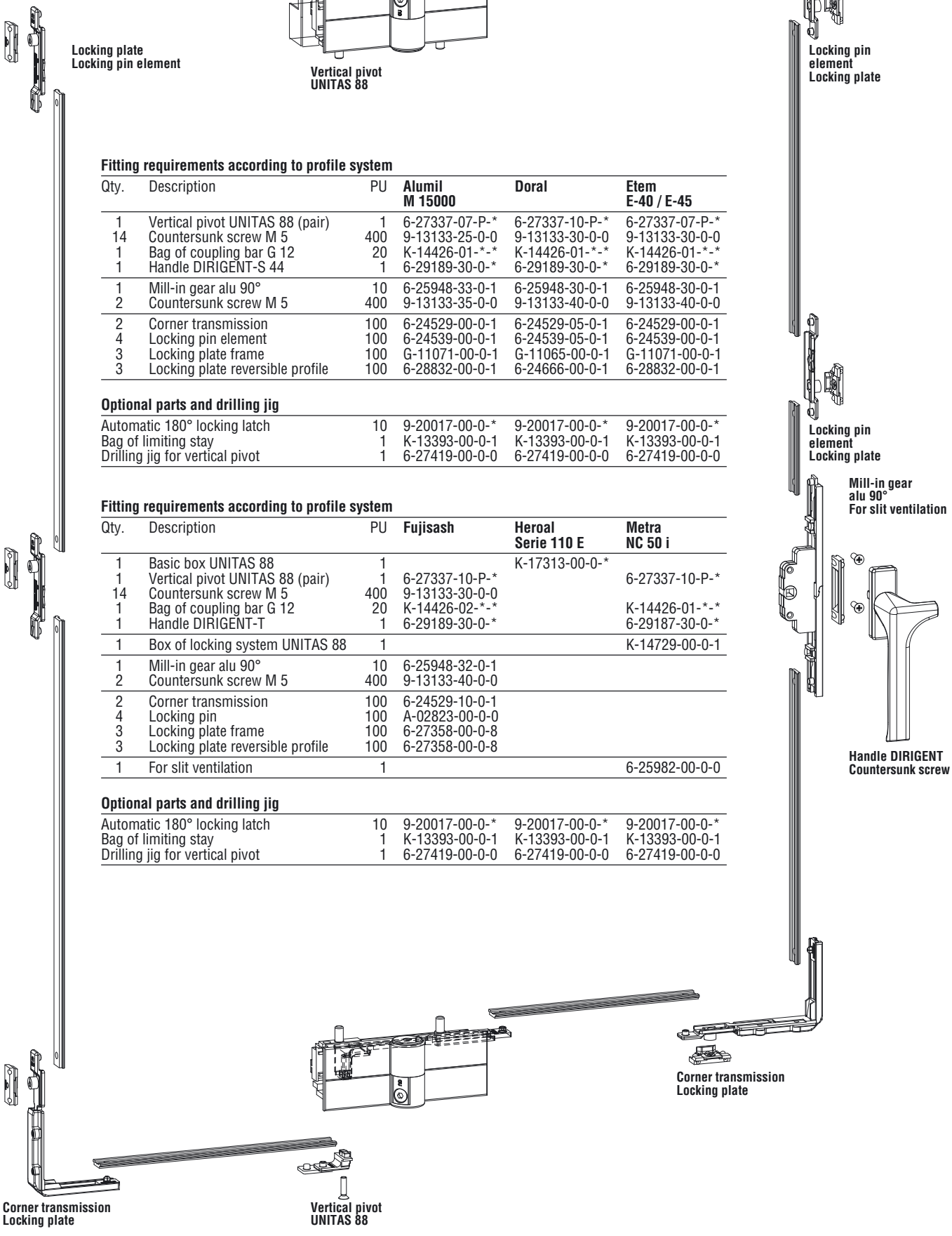


Corner transmission Locking plate

Locking pin element Locking plate

Locking plate

Profile systems Alumil M 15000, Doral, Etem E-40 / E-45, Fujisash, Heroal Serie 110 E, Metra NC 50 i



Fitting requirements according to profile system

Qty.	Description	PU	**Alumil M 15000**	**Doral**	**Etem E-40 / E-45**
1	Vertical pivot UNITAS 88 (pair)	1	6-27337-07-P-*	6-27337-10-P-*	6-27337-07-P-*
14	Countersunk screw M 5	400	9-13133-25-0-0	9-13133-30-0-0	9-13133-30-0-0
1	Bag of coupling bar G 12	20	K-14426-01-*-*	K-14426-01-*-*	K-14426-01-*-*
1	Handle DIRIGENT-S 44	1	6-29189-30-0-*	6-29189-30-0-*	6-29189-30-0-*
1	Mill-in gear alu 90°	10	6-25948-33-0-1	6-25948-30-0-1	6-25948-30-0-1
2	Countersunk screw M 5	400	9-13133-35-0-0	9-13133-40-0-0	9-13133-40-0-0
2	Corner transmission	100	6-24529-00-0-1	6-24529-05-0-1	6-24529-00-0-1
4	Locking pin element	100	6-24539-00-0-1	6-24539-05-0-1	6-24539-00-0-1
3	Locking plate frame	100	G-11071-00-0-1	G-11065-00-0-1	G-11071-00-0-1
3	Locking plate reversible profile	100	6-28832-00-0-1	6-24666-00-0-1	6-28832-00-0-1

Optional parts and drilling jig

Automatic 180° locking latch	10	9-20017-00-0-*	9-20017-00-0-*	9-20017-00-0-*
Bag of limiting stay	1	K-13393-00-0-1	K-13393-00-0-1	K-13393-00-0-1
Drilling jig for vertical pivot	1	6-27419-00-0-0	6-27419-00-0-0	6-27419-00-0-0

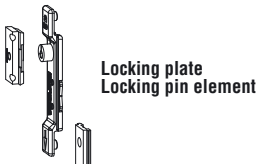
Fitting requirements according to profile system

Qty.	Description	PU	**Fujisash**	**Heroal Serie 110 E**	**Metra NC 50 i**
1	Basic box UNITAS 88	1		K-17313-00-0-*	
1	Vertical pivot UNITAS 88 (pair)	1	6-27337-10-P-*		6-27337-10-P-*
14	Countersunk screw M 5	400	9-13133-30-0-0		
1	Bag of coupling bar G 12	20	K-14426-02-*-*		K-14426-01-*-*
1	Handle DIRIGENT-T	1	6-29189-30-0-*		6-29187-30-0-*
1	Box of locking system UNITAS 88	1			K-14729-00-0-1
1	Mill-in gear alu 90°	10	6-25948-32-0-1		
2	Countersunk screw M 5	400	9-13133-40-0-0		
2	Corner transmission	100	6-24529-10-0-1		
4	Locking pin	100	A-02823-00-0-0		
3	Locking plate frame	100	6-27358-00-0-8		
3	Locking plate reversible profile	100	6-27358-00-0-8		
1	For slit ventilation	1			6-25982-00-0-0

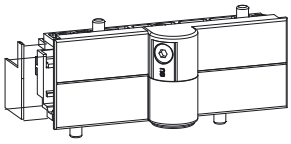
Optional parts and drilling jig

Automatic 180° locking latch	10	9-20017-00-0-*	9-20017-00-0-*	9-20017-00-0-*
Bag of limiting stay	1	K-13393-00-0-1	K-13393-00-0-1	K-13393-00-0-1
Drilling jig for vertical pivot	1	6-27419-00-0-0	6-27419-00-0-0	6-27419-00-0-0

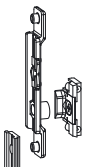
Profile systems Metra NC 50 STH, Metra NC 65 STH, Metra NC 68 STH, MKF Serie TKI 602, Ponzio Windstop 65 tt, Showa Front



Locking plate
Locking pin element



Vertical pivot
UNITAS 88



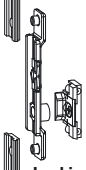
Locking pin element
Locking plate

Fitting requirements according to profile system

Qty.	Description	PU	Metra NC 50 STH	Metra NC 65 STH	Metra NC 68 STH
1	Vertical pivot UNITAS 88 (pair)	1	6-27337-10-P-*	6-27337-10-P-*	6-27337-07-P-*
1	Bag of coupling bar G 12	20	K-14426-01-*-*	K-14426-01-*-*	K-14426-01-*-*
1	Handle DIRIGENT	1	6-29187-30-0-*	6-29187-30-0-*	6-29187-30-0-*
1	Box of locking system UNITAS 88	1	K-14729-00-0-1	K-14729-00-0-1	K-14729-00-0-1
1	For slit ventilation	1	6-25982-00-0-0	6-25982-00-0-0	6-25982-00-0-0
4	Gasket 20	1			9-35495-03-0-6

Optional parts and drilling jig

Automatic 180° locking latch	10	9-20017-00-0-*	9-20017-00-0-*	9-20017-00-0-*
Bag of limiting stay	1	K-13393-00-0-1	K-13393-00-0-1	K-13393-00-0-1
Drilling jig for vertical pivot	1	6-27419-00-0-0	6-27419-00-0-0	6-27419-00-0-0



Locking pin element
Locking plate

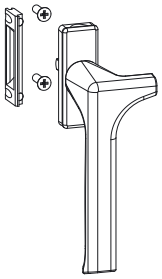
Fitting requirements according to profile system

Qty.	Description	PU	MKF Serie TKI 602	Ponzio Windstop 65 tt	Showa Front
1	Vertical pivot UNITAS 88 (pair)	1	6-27337-10-P-*	6-27337-07-P-*	6-27337-10-P-*
14	Countersunk screw	400	9-13133-30-0-0	9-13089-09-0-0	9-13133-30-0-0
1	Bag of coupling bar G 12	20	K-14426-01-*-*	K-14426-01-*-*	K-14426-02-*-*
1	Handle DIRIGENT	1	6-29189-30-0-*	6-29189-30-0-*	6-29189-30-0-*
1	Mill-in gear alu 90°	10	6-25948-30-0-1	6-25948-35-0-1	6-25948-32-0-1
2	Countersunk screw	400	9-13133-25-0-0	9-13089-60-0-8	9-13133-40-0-0
2	Corner transmission	100	6-24529-00-0-1	6-24529-00-0-1	6-24529-10-0-1
4	Locking pin	100			A-02823-00-0-0
4	Locking pin element	100	6-24539-00-0-1	6-24539-00-0-1	
3	Locking plate frame	100	9-31758-00-0-7	G-11071-00-0-1	6-27358-00-0-8
3	Locking plate reversible profile	100	6-24666-00-0-1	6-24666-00-0-1	6-27358-00-0-8
1	For slit ventilation	1			

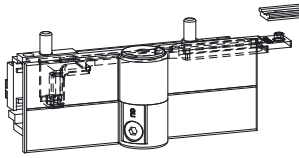
Optional parts and drilling jig

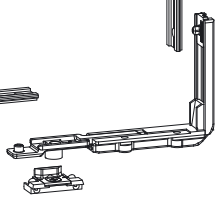
Automatic 180° locking latch	10	9-20017-00-0-*	9-20017-00-0-*	9-20017-00-0-*
Bag of limiting stay	1	K-13393-00-0-1	K-13393-00-0-1	K-13393-00-0-1
Drilling jig for vertical pivot	1	6-27419-00-0-0	6-27419-00-0-0	9-33687-00-0-0

Mill-in gear alu 90°
For slit ventilation



Handle DIRIGENT
Countersunk screw



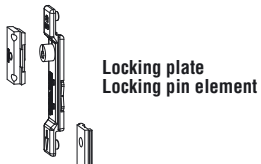


Corner transmission
Locking plate

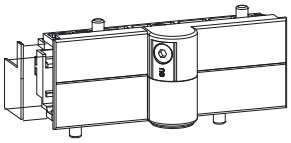
Corner transmission
Locking plate

Vertical pivot
UNITAS 88

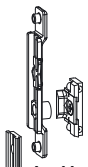
Profile system Thyssen-Schulte TSB W 70



Locking plate
Locking pin element



Vertical pivot
UNITAS 88



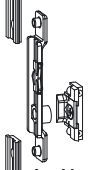
Locking pin
element
Locking plate

Fitting requirements according to profile system

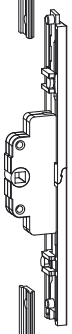
Qty.	Description	PU	**Thyssen-Schulte TSB W 70**
1	Vertical pivot UNITAS 88 (pair)	1	6-27337-10-P-*
14	Countersunk screw	400	9-13133-25-0-0
1	Bag of coupling bar G 12	20	K-14426-01-*-*
1	Handle DIRIGENT	1	6-28112-25-0-*
1	Mill-in gear alu 90°	10	6-25948-30-0-1
2	Countersunk screw	400	9-13133-16-0-0
2	Distance piece	1	9-37620-00-0-0
2	Corner transmission	100	6-24529-00-0-1
4	Locking pin element	100	6-24539-00-0-1
3	Locking plate frame	100	6-24666-00-0-1
3	Locking plate reversible profile	100	G-11800-00-0-1
1	For slit ventilation	1	6-25982-00-0-0

Optional parts and drilling jig

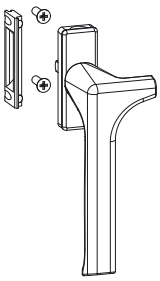
Automatic 180° locking latch	10	9-20017-00-0-*
Bag of limiting stay	1	K-13393-00-0-1
Drilling jig for vertical pivot	1	6-27419-00-0-0



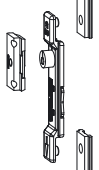
Locking pin
element
Locking plate

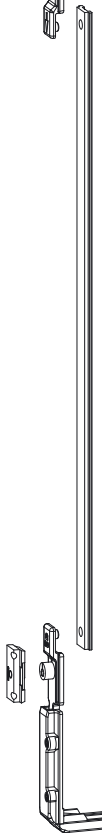


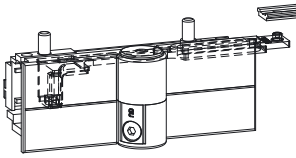
Mill-in gear
alu 90°
For slit ventilation

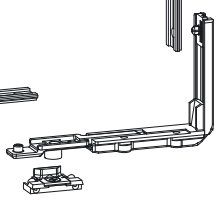


Handle DIRIGENT
Countersunk screw

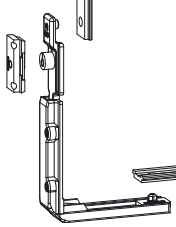








Corner transmission
Locking plate



Corner transmission
Locking plate

Vertical pivot
UNITAS 88

Product group

G

Fan-light openers and electric drives

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Electric drives, chain drives, spindle drives and rack and pinion drives, miscellaneous fittings for timber windows

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Order catalogue part 7
Fan-light openers, face-fixed

Contents

Part 7 of the present order catalogue contains fan-light openers for aluminium windows, vertical and corner gears, electric drives and accessories according to the latest state of the art.

The following indications will make you familiar with the concept of the catalogue and help you to handle it easily.

Catalogue structure

The present catalogue part is structured in the following way:
– Optional parts and turn handles
– Sets

Sets

Optional parts
The option pages show you optional parts for face-fixed fan-light openers at a glance. All supplements of standard versions are clearly arranged.

Fitting requirements according to sash size and scheme
The illustrations of the fittings are supplemented by corresponding parts tables helping to determine the hardware composition.
Parts supplementing standard versions are clearly presented and can be easily selected.

Order numbers

The order number gives information about
– the article
– its size
– its application - e.g. lh or rh assembly
– its colour/finish

Example
Order number
6-24841-50-0-1

6-24841- - -	Article number
- -50- -	Size
- - -L-	Left hand assembly
- - -R-	Right hand assembly
- - -0-	Usable on both sides
- - - -1	F 1/EV 1, natural (silver colour), fer**GU**ard*silver
- - - -2	F 2/EV 2, champagne colour
- - - -3	F 3, brass colour or gold colour
- - - -4	UC 3, middle bronze or middle brown
- - - -A	F 4, bronze or bronze colour
- - - -C	titan colour
- - - -5	UC 5, dark bronze or dark brown
- - - -6	Onyx matt or black (RAL 9005)
- - - -7	White (RAL 9016)
- - - -7T	White (RAL 9010)
- - - -8	Stainless steel or stainless steel colour
- - - -*	Surface treatment variable (available colours see price list)

Prices

Single part price list "Total programme"
The prices are listed by ascending article numbers.

Additional sales documentation

Apart from the order catalogue, the following documentation on lift-slide and lift-tilt-slide fittings is available:
– Brochures and leaflets informing about product features and advantages
– Order sheets for the specialized trade
– Assembly drawings with mounting instructions
– Instructions for maintenance and care

Fan-light openers, face-fixed for aluminium windows

Application

Range of applications for face-fixed fan-light openers:
– Bottom hung inward opening or top hung outward opening windows with one or more sashes
– Installation for group ventilation as well as smoke and heat evacuation.

Designs

Fan-light opener VENTUS F 200
Slimline, unobtrusive opener with force locked horizontal stay arms for rectangular, oblique angle head, arch head and segmental arch head tilt windows. Vertical and horizontal rods covered with clip-on aluminium profile.

Fan-light opener VENTUS F 300
Slimline, unobtrusive opener with force locked horizontal stay arms for rectangular, oblique angle head tilt windows. Vertical and horizontal rods covered with clip-on aluminium profile.

Operation variants

– Lever handle
– Lever handle and flexible transmission
– Vertical gear, articulated crank rod fixed or removable
– Corner gear, articulated crank rod fixed or removable
– Vertical or corner gear with transmissions
– Electrical drives for individual control
– Electrical drives for group control

Group ventilation installations

Operation of ventilation sashes by electric drives ELTRAL. For electric drives an additional individual control is possible.

Special fan-light opener versions

Apart from the standard versions presented in this catalogue, manifold project related solutions are possible. Prices on request.

Standard colours

Colour EV 1
– Aluminium parts anodized in natural tone
– Other visible parts in silver colour

Colour UC 3
– Aluminium parts anodized in medium bronze colour
– Other visible parts in medium brown

Colour UC 5
– Aluminium parts anodized in dark bronze colour
– Other visible parts in dark brown

White
– Aluminium parts with white lacquer finish (RAL 9016)
– Other visible parts in white colour (RAL 9016)

Further colours and finishes on request.

Materials, surface sealing fer**GU**ard*silver

The fitting parts are made of high quality steel, zinc die-casting or aluminium alloys.
Depending on the material, they are protected against corrosion by surface sealing with fer**GU**ard*silver or by anodisation (aluminium parts).

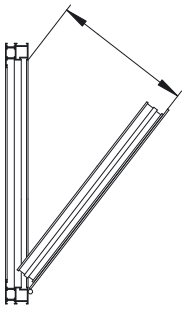
Abbreviations and ordering dimensions

B	Total sash width
B-E	Sill to bottom edge of lever handle or articulated crank handle (straight)
D	Centre of vertical rod to edge of sash
E -B	Top edge of sash on operation side to sill for oblique angle head and segmental arch head windows
E -E	Top edge of sash on operation side to bottom edge of lever handle or articulated crank handle (straight) for oblique angle head and segmental arch head windows
FB	Sash width
FBs	Sash width for oblique angle head windows
FH	Sash height
FHf	Sash height on angular sash bracket for oblique angle head windows
O-B	Top edge of sash to sill
O-End	Top edge of sash to bottom edge of lever handle or articulated crank handle (straight)
Ö	Opening width of sash
PU	Packing unit
r	Radius
RLB	Frame width in the clear (top hung sash opening outward)
RLH	Frame height in the clear (top hung sash opening outward)
T	Depth of reveal
U-B	Bottom edge of sash to sill, springing of arch to sill for arch head windows
U-E	Bottom edge of sash to bottom edge of lever handle or articulated crank handle (straight), springing of arch to bottom edge of lever handle or articulated crank handle (straight)
Ü	Projection of window sill
x	Installation height for vertical and corner gears
y	Sash backset of outward opening windows
z	Distance between individual sashes

Profile system manufacturers' information

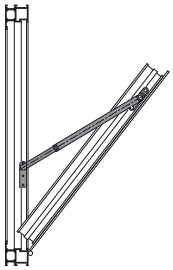
It is important to observe the product information issued by the profile system manufacturers, especially information concerning construction and fabrication, maximum sash dimensions and weights and material features such as linear expansion of profiles.

Dimension "Opening width"



Opening width

G.U security stay EURO-SOLID



According to RAL regulations, tilt sashes fitted with fan-light hardware must be provided with additional catching stays.
G.U security stays Euro-Solid prevent dammage that might occur when opening stays are improperly mounted.

Assembly drawing 0-43278

Application

Type of fittings	Sash width Dim. SW mm	Sash height Dim. SH min. mm	Opening width mm	Sash weigth max. kg	Stroke mm	O-E min. mm	Space requirement lateral mm	Space requirement top mm	Rod Ø mm	Standard assembly drawing
VENTUS F 200	400-3600 [1] 400-3600	300 250	200 [1] 165	80	50 [1] 40	440	20	20	8	0-43700-1
VENTUS F 300	620-3600	350	300 [1] 220	200	70 [1] 50	570	26	26	10	0-42700-1

[1] Standard version

Group ventilation installations with electric drives

Group ventilation installation with 1 operating point according to figure A

Qty.	Description
1 - 8	Electric drive ELTRAL S 230 L, ELTRAL S 230 E Electric drive ELTRAL 300 E1
1	Rocker switch, single-pole

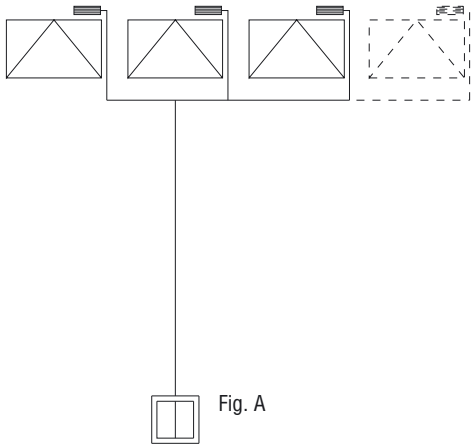
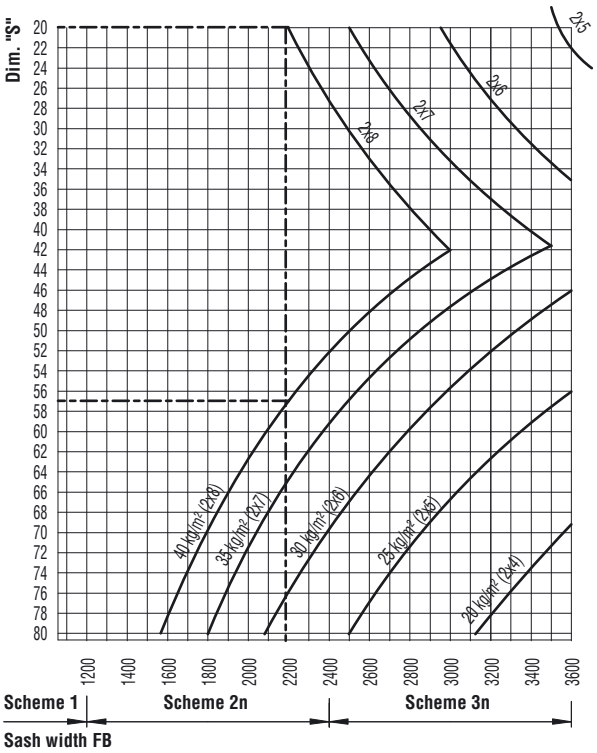
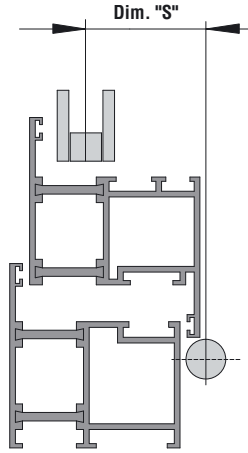


Fig. A

Range of application according to Dim. „S“ – operation with lever handle, vertical gear or corner gear



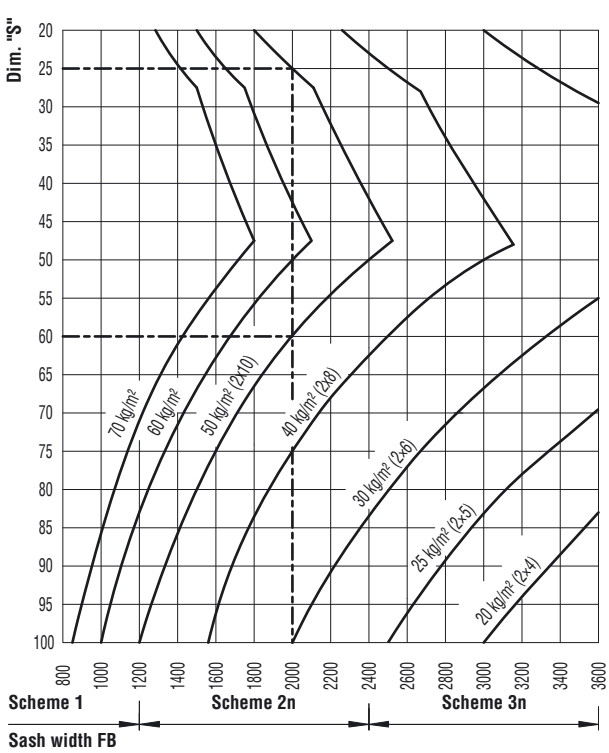


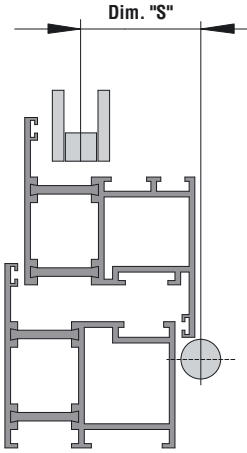
Example:

Glazing	2 x 8 mm
Glass weight	40 kg/m²
Sash width	2200 mm
Dim. "S"	**20 – 57 mm possible**

Sash weight max. 80 kg

Fan-light opener VENTUS F 200





Example:

Glazing	2 x 10 mm
Glass weight	50 kg/m²
Sash width	2000 mm
Dim. "S"	**25 – 60 mm possible**

Sash weight max. 200 kg

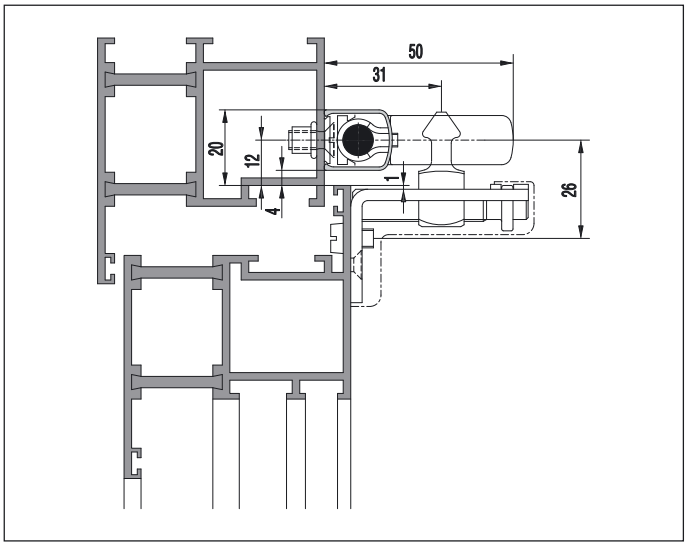
Fan-light opener VENTUS F 300

Fan-light openers, face-fixed for aluminium windows assembly drawings, G.U security and rebate stays

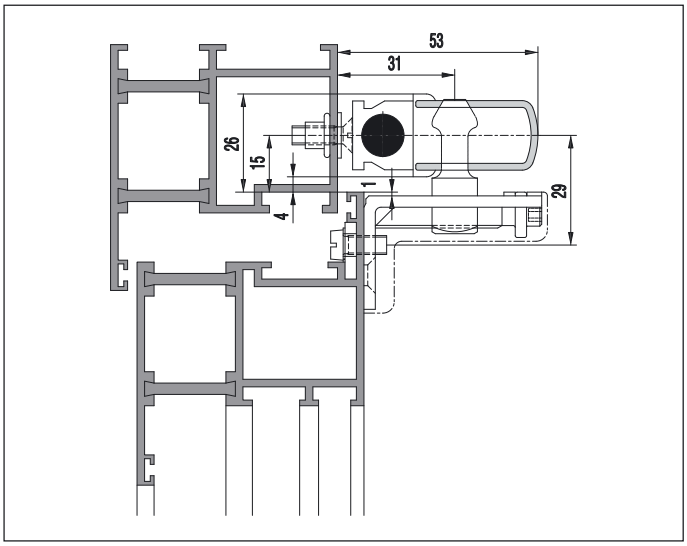
Aluminium profile systems

Profile systems	Sash profile	Frame profile	Assembly drawings VENTUS F 200	VENTUS F 300	Security stay	Rebate stay
Akotherm	1506	1503			EURO-SOLID	
Alcoa RT 620	734 077	717 876			EURO-SOLID	K-13393-00-0-1
Alcoa RT 620	734 075	717 832			EURO-SOLID	K-13393-00-0-1
Alisol 3	V 76007	V 73210				
Alisol 3	V 76104	V 75116		0-42985-4	EURO-SOLID	
Alsec 2000 Serie 59	CH 52534	CH 52731				
Brökelmann Conform	RG 6211	RG 6121			EURO-SOLID	
Bug 90	831 602	831 614				
EurAl Serie 65	162 200	161 100				K-13393-00-0-1
Finstral S 70						
Forster (Stahl)	500 600	502 565				
Hansen System 55	550 30550	550 10381	0-43339-4	0-43335-4		
Heroal Serie 30	30	31			EURO-SOLID	K-13393-00-0-1
Heroal Serie 40	6401	6423			EURO-SOLID	
Heroal Serie 40	6401	6422			EURO-SOLID	
Heroal Serie 65	9301	9322			EURO-SOLID	
Hueck 1.0	510200	510101			EURO-SOLID	
Hueck AK 80	578 200	578 100			EURO-SOLID	
Isal 99						
Isopro (Stahl)	ip-63620	ip-01541				
Jansen (Stahl)						
Kubal					EURO-SOLID	
Metra 65	265 101	165 108				
MKF TKI 602					EURO-SOLID	
Pesalu	7001069	4201041				
Redal	33.202	33.225			EURO-SOLID	
SAPA-Ekonal i70	42330	42001			EURO-SOLID	
Schüco Royal 64w	108 580	104 610				
Schüco Royal S						
Sidal nc 60 S	873	863				
Sykon					EURO-SOLID	
Thyssen-Schulte TSB W 70	W70 51348	W70 14146	0-43803-1		EURO-SOLID	K-13393-00-0-1
VAW	000 379	002 279			EURO-SOLID	
Wicline	110051	110001			EURO-SOLID	

Assembly dimensions



Fan-light openers VENTUS F 200



Fan-light openers VENTUS F 300

Fan-light openers, face-fixed for aluminium windows

Profile systems with 16 mm fitting groove

Profile manufacturer	Profile system	Sash overlap mm	Groove position mm	Frame groove	Frame groove Dim. A	Frame groove Dim. B
Alco	Alousystem 550	20,0	13,0	14/18	1,5	4,0
Almaco		18,0	9,0	14/18		
Alumil	M 11000 M 11500 M 20000	18,0 18,0 18,0	9,0 9,0 9,0	14/18 14/18 14/18	1,5 1,5 1,5	3,5 3,5 3,5
Aluminco		20,0	9,0	14/18	1,5	3,5
Domal	Bright PA70S	18,0	9,0	14/18	1,5	3,5
Elvial	4300 4600 5400 5600 5700 6700 6800 Optimum	18,0 18,0 18,0 18,0 18,0 18,0 18,0	9,0 9,0 9,0 9,0 9,0 9,0 9,0	14/18 14/18 14/18 14/18 14/18 14/18 14/18	1,5 1,5 1,5 1,5 1,5 1,5 1,5	4,0 4,0 4,0 4,0 4,0 4,0 4,0
Europa	5000	18,0	9,0	14/18	1,5	3,5
Etem	E40	20,0	9,0	14/18	2,0	4,0
Exalco	Albio 109C	18,0	9,0	14/18	1,3	3,9
Heroal	Serie 065 Serie 065i Serie 065f Serie 090 Serie 090 S Serie 110 ES Serie 20 Serie 25	18,0 18,0 18,0 18,0 18,0 18,0 18,0 18,0	9,0 9,0 9,0 9,0 9,0 9,0 9,0 9,0	10/14 10/14 10/14 10/14 10/14 10/14 10/14 10/14	2,0 2,0 2,0 2,0 2,0 2,0 2,0 2,0	4,3 4,3 4,3 4,3 4,3 4,3 4,3 4,3
Kawneer	Kalory	20,0	9,0	10/14		4,0
Nordall	78TTF	18,0	9,0	14/18	1,5	3,5
Ponzio	Windstop 55TT	18,0	9,0	14/18	2,0	4,0
TS-Aluminium	65	18,0	9,0	14/18	2,0	4,0

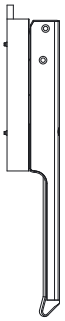
Profile systems with Euro groove 15/20

Profile manufacturer	Profile system	Frame groove
Akotherm	Serie AT 600 Serie AT 730	12/15 12/15
Alcan	Serie 6500 Serie Contact Serie PA110	12/15 12/15 12/15
Alcoa	AA 610 AA 611 AA 630 AA 720 RT 55 RT 620	10/14 10/14 10/14 10/14 10/14 10/14
Alisol	3	14/18
Alsec	Serie 59	14/18
Aluminco		14/18
EurAl	Serie 65 Serie 75 Serie 75/1.0	14/18 14/18 14/18
Forster	Unico	plane groove
Hueck	Serie 1.0 Serie 2.1	Special groove Special groove
Redal	Serie 64	14/18
Reynaers	CS 24-SL CS 38-SL CS 59 CS 59PA CS 68 CS 77 CS 86-HI ECO System	14/18 14/18 14/18 14/18 14/18 14/18 14/18 14/18

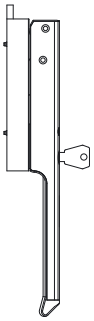
Profilhersteller	Profile system	Frame groove
Sapa	Confort 26 Ekonal i65 Ekonal i70 Ekonal i75 ES 60 RC Confort 125	14/18 14/18 14/18 14/18 14/18 14/18
Schüco Royal	AWS 65 AWS 65 BS AWS 70 ST.HI AWS 70 WF.HI AWS 70.HI AWS 75 BS.HI AWS 75.SI	Special groove Special groove Special groove Special groove Special groove Special groove Special groove
TS-Aluminium	65	14/18
VAW	Serie 75E	14/18
Wicona	WICLINE 125 WICLINE 65 WICLINE 65 HI WICLINE 65N WICLINE 77 WICLINE 77 HI WICLINE 77 Industriekontur	Special groove Special groove Special groove Special groove Special groove Special groove Special groove

Fan-light openers, face-fixed

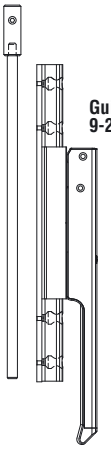
Fan-light opener VENTUS F 200



Lever handle
Stroke
40 mm 6-28681-40-0-*

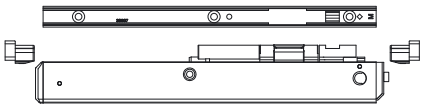


Lever handle, lockable
Stroke
50 mm 6-32100-50-0-*
40 mm 6-32100-40-0-*



Guide
9-28893-00-0-0

Swivelling lever handle
Stroke
50 mm K-12608-00-0-*
AD 0-44366



Stay arm bearing
6-29134-00-0-*
Stay with lift-off security device
6-29589-00-0-*
Rod bearing (2 pieces)
9-38016-00-0-0

Accessories for
vertical rod, Ø 8 mm

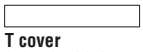
Sleeve
6-22842-00-0-1

Guide
9-28893-00-0-0

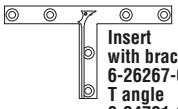
Guide for transmission
9-33711-00-0-*

Fixing plate
for lever handle
9-33787-00-0-*

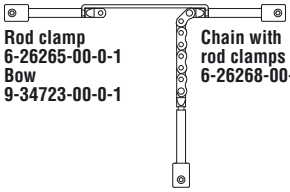
Bag of T angle VENTUS F 200



T cover
9-37591-00-0-*



Insert
with brace
6-26267-00-0-1
T angle
9-34721-00-0-1



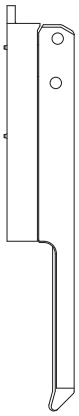
Rod clamp
6-26265-00-0-1
Bow
9-34723-00-0-1

Chain with
rod clamps
6-26268-00-0-1

Bag of T angle VENTUS F 200
K-14194-00-0-*

Assembly drawing 0-43822

Fan-light opener VENTUS F 300



Lever handle
Stroke
50 mm 6-26249-50-0-*

Guide
9-34491-00-0-0

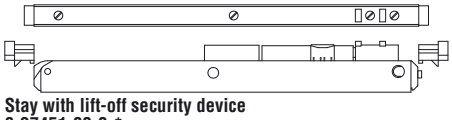
Guide
9-34491-00-0-0

Swivelling lever handle
Stroke
50 mm K-14242-50-0-*
70 mm K-14242-70-0-*

Accessories for
vertical rod, Ø 10 mm

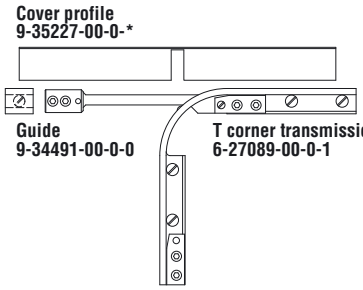
Sleeve
6-26813-00-0-1

Guide
9-34491-00-0-0



Stay with lift-off security device
6-27451-00-0-*
Stay arm bearing
6-26244-00-0-*
Rod bearing (2 pieces)
9-34458-00-0-0

Bag of T angle VENTUS F 300



Cover profile
9-35227-00-0-*

Guide
9-34491-00-0-0

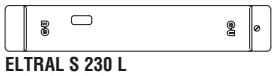
T corner transmission
6-27089-00-0-1

Bag of T angle VENTUS F 300
K-14201-00-R-*
(rh/lh convertable)

Assembly drawing 0-43037

Electric drives

Electric drives 230 V



ELTRAL S 230 L
6-31730-00-0-*
ELTRAL S 230 E
6-31732-00-0-*

ELTRAL 300 E1
9-31020-01-0-*

Electric drives 24 V

ELTRAL S 24 L
6-31734-00-0-*

ELTRAL 300/24
9-31021-00-0-*

Radio remote control

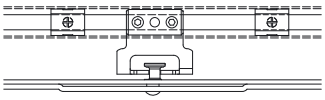
Hand-held transmitter 42 FH
9-42496-00-0-0

Radio actuator FAJ 6 UP
9-42495-00-0-0
Installation in flush-mounted socket
230 V AC 50Hz
Power rating:
250 V ~
700 VA

Fan-light openers, face-fixed

Fan-light opener VENTUS F 200 Se

UNI-JET locking mechanism in the rebate



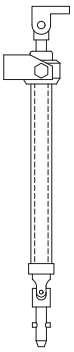
Fitting requirements according to sash overlap and groove

Application	Size 1 Alu window	Size 2 Alu window	Size 3 Alu window
Sash overlap	18 mm	18 mm	20 – 22 mm
Groove position	9 mm	9 mm or 13 mm	9 mm or 13 mm
Article No.	**K-16718-01-0-***	**K-16718-02-0-***	**K-16718-03-0-***
Contents			
1 JET engaging fork	6-32154-01-0-1	6-32154-02-0-1	6-32154-03-0-1
2 guide	9-28893-00-0-0	9-28893-00-0-0	9-28893-00-0-0
1 cover profile[1]	9-39509-00-0-*	9-39509-00-0-*	9-39509-00-0-*

[1] = length 250 mm – with cut-out

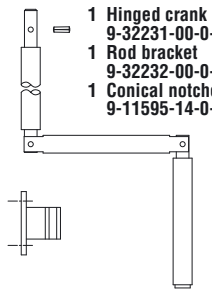
Assembly drawing 0-43813

Telescopic spindle drive



Fitting requirements for pushing force up to 400 N

Qty.	Description	PU	Article No.
1	**Telescopic spindle drive for top hung windows and light domes** Technical data Stroke mm 300 Length of gear mm 222	1	6-24869-00-0-1
1	**Crank rod** (not illustrated) – to be cut from: Aluminium tube, L = 5000 mm	1	9-32230-50-0-*
1	**Bag of hinged crank** for articulated crank handle	1	K-13162-00-0-*
1	**Bag of coupling horn** for removable crank rod	1	K-13165-00-0-1



1 Hinged crank 9-32231-00-0-*
1 Rod bracket 9-32232-00-0-*
1 Conical notched pin 9-11595-14-0-1

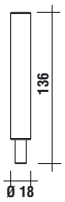
Bag of hinged crank K-13162-00-0-*

1 Coupling horn 9-29570-00-0-1
1 Conical notched pin 9-11595-14-0-1

Bag of coupling horn K-13165-00-0-1

Assembly drawing 0-40636

Vertical gear and corner gear



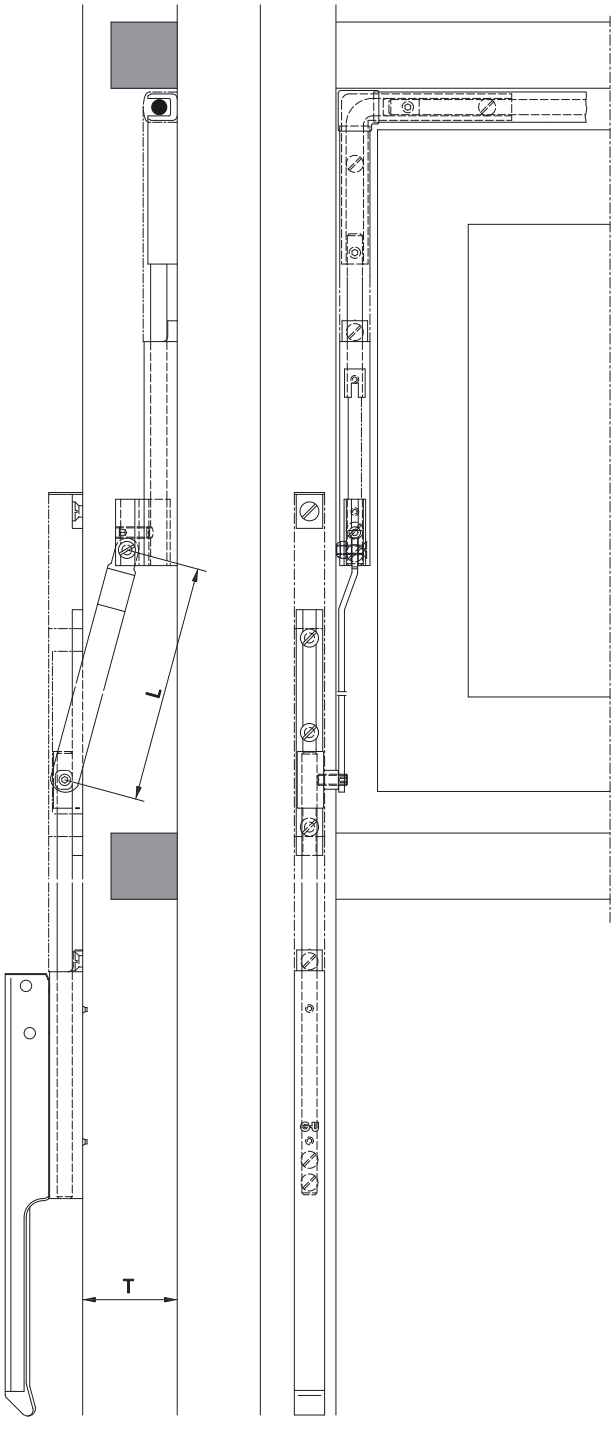
Load-limiting device 6-31245-00-0-1 for VENTUS F 200 and VENTUS F 300
Release torque 4 Nm

Assembly drawing 0-44556

7

Fan-light openers, face-fixed

Fan-light opener VENTUS F 200



Mullion passage transmission

Box of mullion passage transmission
K-15384-08-0-*

Mullion depth T	17 to 80 mm
Mullion depth L	126 mm

Box of mullion passage transmission
K-15384-15-0-*

Mullion depth T	17 to 150 mm
Mullion depth L	266 mm

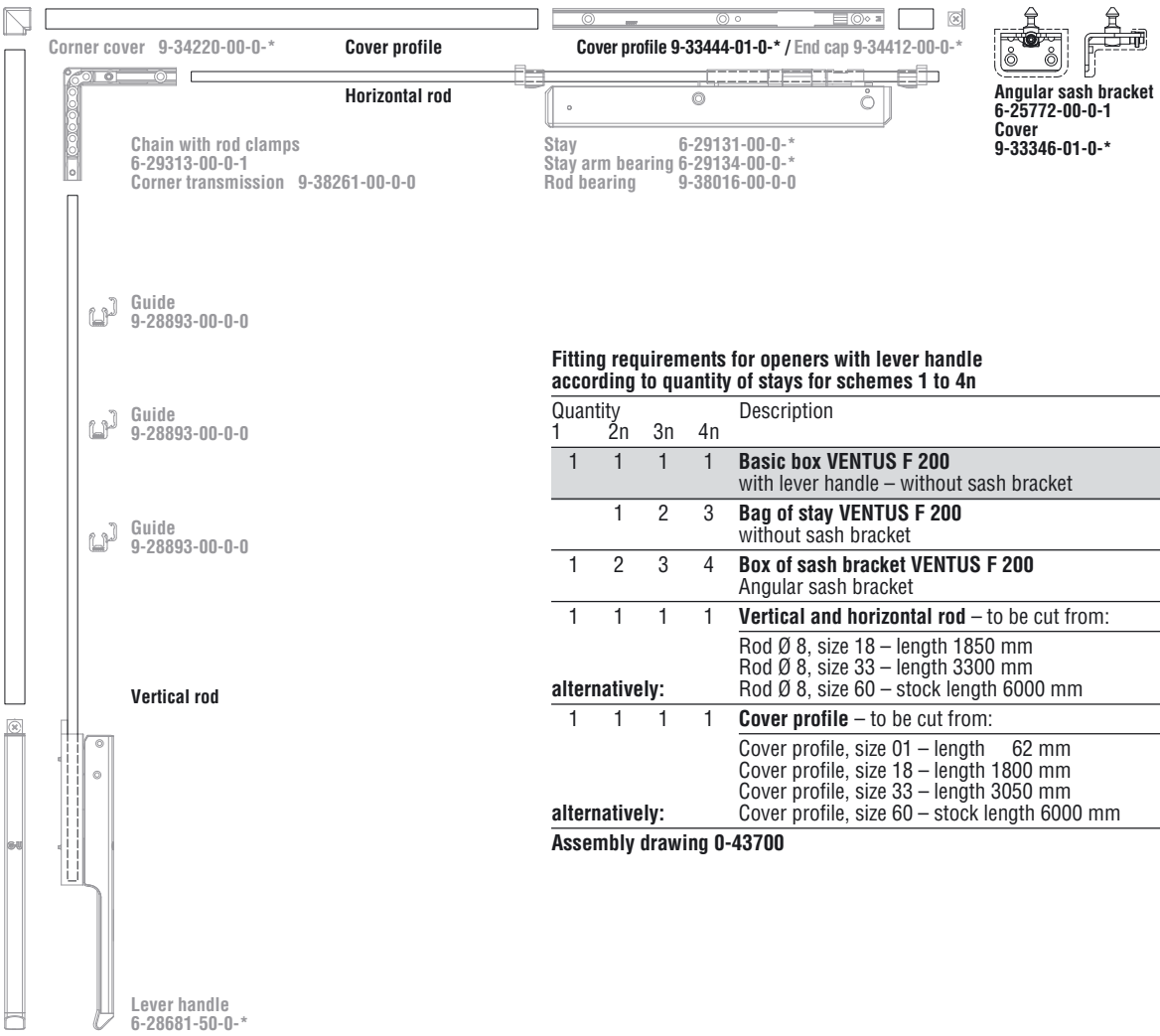
Single parts

1 mullion transmission	6-29260
1 guide	9-33600
1 gliding profile	9-28888
1 locking part	9-35860
1 cover profile	9-33443
1 end cap	9-34412

Assembly drawings

Tilt sash	0-43889
Top hung sash	0-44206

Standard version
Lever handle

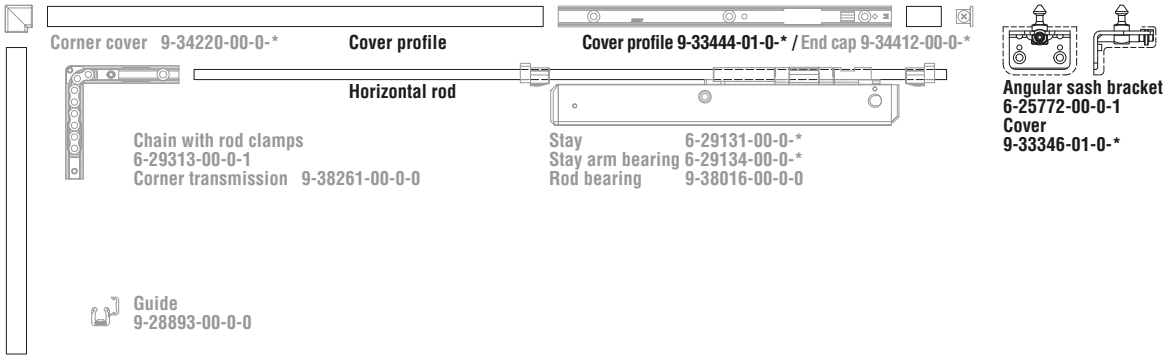


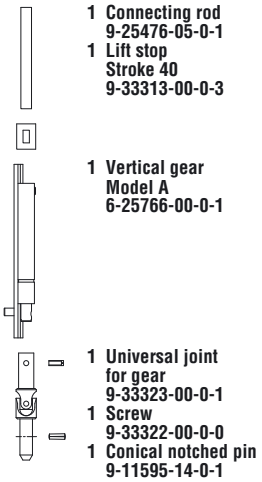
Fitting requirements for openers with lever handle according to quantity of stays for schemes 1 to 4n

Quantity 1	2n	3n	4n	Description	PU	Article No.
1	1	1	1	**Basic box VENTUS F 200** with lever handle – without sash bracket	1	K-15011-00-0-*
	1	2	3	**Bag of stay VENTUS F 200** without sash bracket	10	K-15013-00-0-*
1	2	3	4	**Box of sash bracket VENTUS F 200** Angular sash bracket	10	K-15225-00-0-*
1	1	1	1	**Vertical and horizontal rod** – to be cut from:		
				Rod Ø 8, size 18 – length 1850 mm	10	9-25476-18-0-1
				Rod Ø 8, size 33 – length 3300 mm	10	9-25476-33-0-1
alternatively:				Rod Ø 8, size 60 – stock length 6000 mm	10	9-25476-60-0-1
1	1	1	1	**Cover profile** – to be cut from:		
				Cover profile, size 01 – length 62 mm	10	9-33444-01-0-*
				Cover profile, size 18 – length 1800 mm	10	9-33444-18-0-*
				Cover profile, size 33 – length 3050 mm	10	9-33444-33-0-*
alternatively:				Cover profile, size 60 – stock length 6000 mm	10	9-33444-60-0-*

Assembly drawing 0-43700

Standard version
Vertical gear



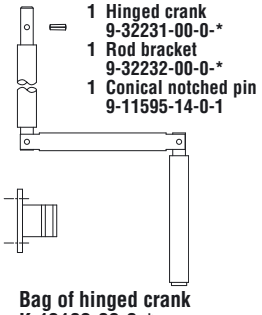


1 Connecting rod
9-25476-05-0-1
1 Lift stop
Stroke 40
9-33313-00-0-3

1 Vertical gear
Model A
6-25766-00-0-1

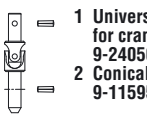
1 Universal joint
for gear
9-33323-00-0-1
1 Screw
9-33322-00-0-0
1 Conical notched pin
9-11595-14-0-1

Bag of vertical gear
K-13402-00-0-1



1 Hinged crank
9-32231-00-0-*
1 Rod bracket
9-32232-00-0-*
1 Conical notched pin
9-11595-14-0-1

Bag of hinged crank
K-13162-00-0-*



1 Universal joint
for crank rod
9-24050-00-0-1
2 Conical notched pin
9-11595-14-0-1

1 Rod guide
6-25128

Bag of universal joint
for crank rod
K-13164-00-0-1

1 Coupling horn
9-29570-00-0-1
1 Conical notched
pin
9-11595-14-0-1

Bag of coupling
horn
K-13165-00-0-1

Fitting requirements for openers with vertical gear
according to quantity of stays for schemes 1 to 4n

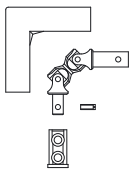
Quantity 1	2n	3n	4n	Description	PU	Article No.
1	1	1	1	**Basic box VENTUS F 200** without lever handle – without sash bracket	1	K-15012-00-0-*
	1	2	3	**Bag of stay VENTUS F 200** without sash bracket	10	K-15013-00-0-*
1	2	3	4	**Box of sash bracket VENTUS F 200** Angular sash bracket	10	K-15225-00-0-*
1	1	1	1	**Horizontal rod** – to be cut from:		
				Rod Ø 8, size 06 – length 600 mm	10	9-25476-06-0-1
				Rod Ø 8, size 18 – length 1850 mm	10	9-25476-18-0-1
				Rod Ø 8, size 33 – length 3300 mm	10	9-25476-33-0-1
alternatively:				Rod Ø 8, size 60 – stock length 6000 mm	10	9-25476-60-0-1
1	1	1	1	**Cover profile** – to be cut from:		
				Cover profile, size 01 – length 62 mm	10	9-33444-01-0-*
				Cover profile, size 06 – length 800 mm	10	9-33444-06-0-*
				Cover profile, size 18 – length 1800 mm	10	9-33444-18-0-*
				Cover profile, size 33 – length 3050 mm	10	9-33444-33-0-*
alternatively:				Cover profile, size 60 – stock length 6000 mm	10	9-33444-60-0-*
1	1	1	1	**Bag of vertical gear**, model A	1	K-13402-00-0-1

Assembly drawing 0-43700

Fitting requirements for articulated crank rod and accessories
according to types a to h for vertical and corner gears

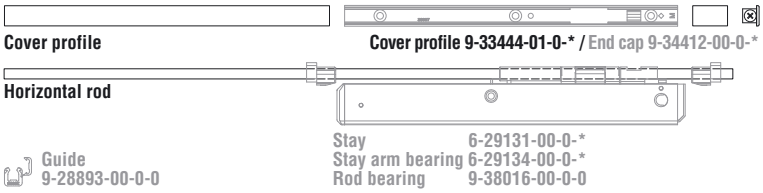
Types a	b	c	d	e	f	g	h	Description	PU	Article No.
1	1	1	1	1	1	1	1	**Crank rod** (not illustrated) – to be cut from: aluminium tube, stock length 5000 mm	1	9-32230-50-0-*
1	1	1	1	1	1	1	1	**Bag of hinged crank**	1	K-13162-00-0-*
		1	1	2	2	1	1	**Bag of universal joint** for crank rod	1	K-13164-00-0-1
	1		1		1		1	**Bag of coupling horn**	1	K-13165-00-0-1

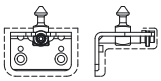
Standard version
Corner gear



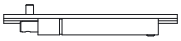
1 Cover
9-33337-00-0-*
1 Double universal joint
9-33333-00-0-1
1 Bearing
9-33335-00-0-0
1 Screw
9-33322-00-0-0

Bag of corner gear K-13403-00-0-*



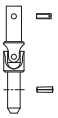


Angular sash bracket
6-25772-00-0-1
Cover
9-33346-01-0-*



1 Vertical gear Model A
6-25766-00-0-1

1 Lift stop Stroke 40
9-33313-00-0-3
1 Connecting rod
9-25476-05-0-1



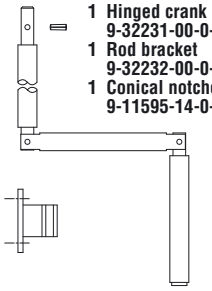
1 Universal joint for gear
9-33323-00-0-1
1 Screw
9-33322-00-0-0
1 Conical notched pin
9-11595-14-0-1

Bag of vertical gear K-13402-00-0-1

Fitting requirements for openers with corner gear according to quantity of stays for schemes 1 to 4n

Quantity 1	2n	3n	4n	Description	PU	Article No.
1	2	3	4	**Bag of stay VENTUS F 200** without sash bracket	10	K-15013-00-0-*
1	1	1	1	**End cap**	1	9-34412-00-0-*
1	2	3	4	**Box of sash bracket VENTUS F 200** Angular sash bracket	10	K-15225-00-0-*
1	1	1	1	**Horizontal rod** – to be cut from:		
				Rod Ø 8, size 06 – length 600 mm	10	9-25476-06-0-1
				Rod Ø 8, size 18 – length 1850 mm	10	9-25476-18-0-1
				Rod Ø 8, size 33 – length 3300 mm	10	9-25476-33-0-1
				alternatively: Rod Ø 8, size 60 – stock length 6000 mm	10	9-25476-60-0-1
1	1	1	1	**Cover profile** – to be cut from:		
				Cover profile, size 01 – length 62 mm	10	9-33444-01-0-*
				Cover profile, size 06 – length 800 mm	10	9-33444-06-0-*
				Cover profile, size 18 – length 1800 mm	10	9-33444-18-0-*
				Cover profile, size 33 – length 3050 mm	10	9-33444-33-0-*
				alternatively: Cover profile, size 60 – stock length 6000 mm	10	9-33444-60-0-*
1	1	1	1	**Bag of vertical gear**, model A	1	K-13402-00-0-1
1	1	1	1	**Bag of additional parts** for corner gear, model A	1	K-13403-00-0-*

Assembly drawing 0-43700

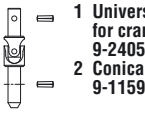


1 Hinged crank
9-32231-00-0-*
1 Rod bracket
9-32232-00-0-*
1 Conical notched pin
9-11595-14-0-1

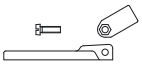
Bag of hinged crank K-13162-00-0-*

Fitting requirements for articulated crank rod and accessories according to types a to h for vertical and corner gears

Types a	b	c	d	e	f	g	h	Description	PU	Article No.
1	1	1	1	1	1	1	1	**Crank rod** (not illustrated) – to be cut from: aluminium tube, stock length 5000 mm	1	9-32230-50-0-*
1	1	1	1	1	1	1	1	**Bag of hinged crank**	1	K-13162-00-0-*
		1	1	2	2	1	1	**Bag of universal joint** for crank rod	1	K-13164-00-0-1
	1		1		1		1	**Bag of coupling horn**	1	K-13165-00-0-1



1 Universal joint for crank rod
9-24050-00-0-1
2 Conical notched pin
9-11595-14-0-1



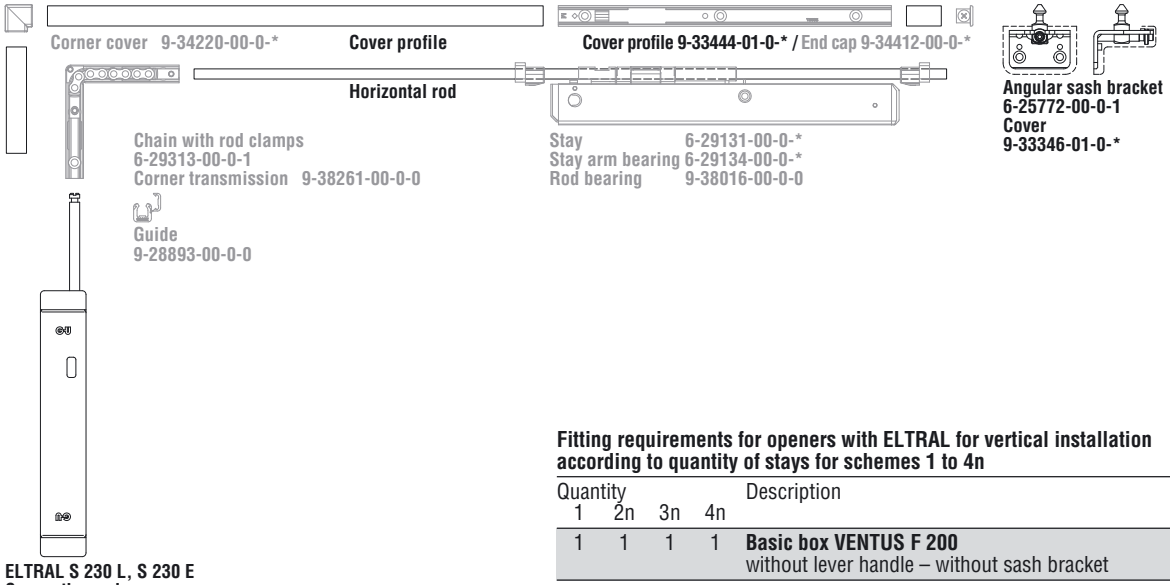
1 Rod guide
6-25128

Bag of universal joint for crank rod K-13164-00-0-1

1 Coupling horn
9-29570-00-0-1
1 Conical notched pin
9-11595-14-0-1

Bag of coupling horn K-13165-00-0-1

Standard version
ELTRAL, vertical installation on the side

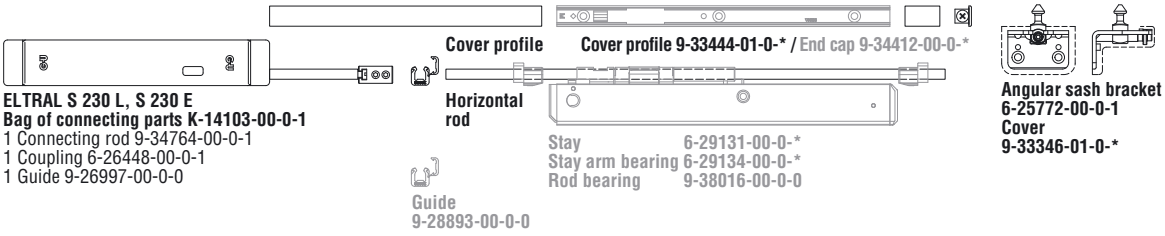


Fitting requirements for openers with ELTRAL for vertical installation according to quantity of stays for schemes 1 to 4n

Quantity 1	2n	3n	4n	Description	PU	Article No.
1	1	1	1	**Basic box VENTUS F 200** without lever handle – without sash bracket	1	K-15012-00-0-*
	1	2	3	**Bag of stay VENTUS F 200** without sash bracket	10	K-15013-00-0-*
1	2	3	4	**Box of sash bracket VENTUS F 200** Angular sash bracket	10	K-15225-00-0-*
1	1	1	1	**Horizontal rod** – to be cut from:		
				Rod Ø 8, size 06 – length 600 mm	10	9-25476-06-0-1
				Rod Ø 8, size 18 – length 1850 mm	10	9-25476-18-0-1
				Rod Ø 8, size 33 – length 3300 mm	10	9-25476-33-0-1
alternatively:				Rod Ø 8, size 60 – stock length 6000 mm	10	9-25476-60-0-1
1	1	1	1	**Cover profile** – to be cut from:		
				Cover profile, size 01 – length 62 mm	10	9-33444-01-0-*
				Cover profile, size 06 – length 800 mm	10	9-33444-06-0-*
				Cover profile, size 18 – length 1800 mm	10	9-33444-18-0-*
				Cover profile, size 33 – length 3050 mm	10	9-33444-33-0-*
alternatively:				Cover profile, size 60 – stock length 6000 mm	10	9-33444-60-0-*
1	1	1	1	**Electric drive ELTRAL S 230 L**	1	6-31730-00-0-*
alternatively:				**Electric drive ELTRAL S 230 E**	1	6-31732-00-0-*
1	1	1	1	**Connecting rod**, Ø 8 mm, W = 400-3600	1	9-34764-00-0-1

Assembly drawing 0-43700, assembly drawing ELTRAL 0-43791

Standard version
ELTRAL, horizontal installation at the top



ELTRAL S 230 L, S 230 E
Bag of connecting parts K-14103-00-0-1
1 Connecting rod 9-34764-00-0-1
1 Coupling 6-26448-00-0-1
1 Guide 9-26997-00-0-0

Angular sash bracket 6-25772-00-0-1
Cover 9-33346-01-0-*

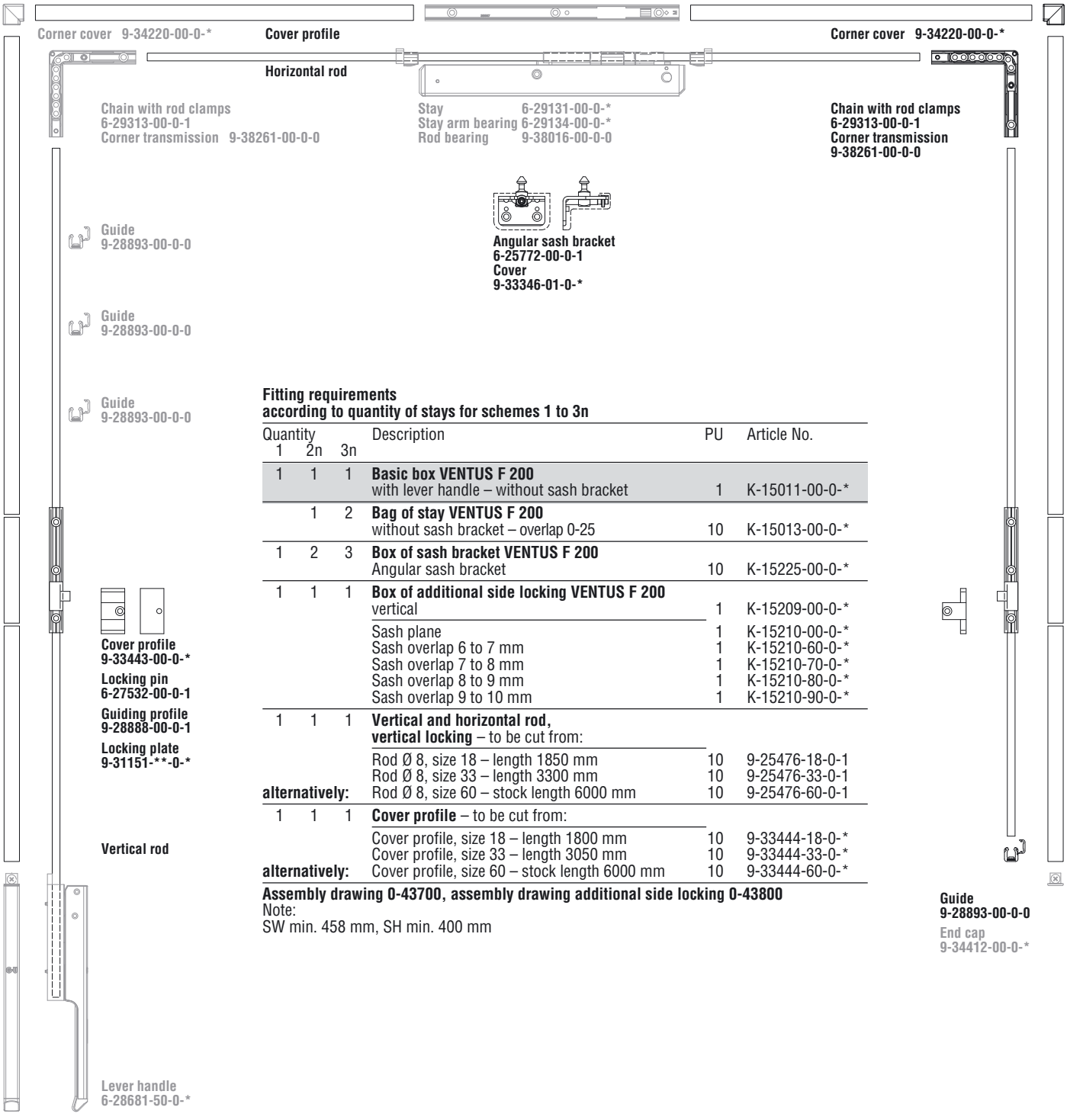
ELTRAL 300
Bag of connecting parts K-15216-00-0-1
1 Connecting rod 9-31018-01-0-1
1 Coupling 6-29592-00-0-1

Fitting requirements for openers with ELTRAL for horizontal installation according to quantity of stays for schemes 1 to 4n

Quantity 1	2n	3n	4n	Description	PU	Article No.
1	2	3	4	**Bag of stay VENTUS F 200** without sash bracket	10	K-15013-00-0-*
1	1	1	1	**End cap**	1	9-34412-00-0-*
1	2	3	4	**Box of sash bracket VENTUS F 200** Angular sash bracket	10	K-15225-00-0-*
1	1	1	1	**Horizontal rod** – to be cut from:		
				Rod Ø 8, size 06 – length 600 mm	10	9-25476-06-0-1
				Rod Ø 8, size 18 – length 1850 mm	10	9-25476-18-0-1
				Rod Ø 8, size 33 – length 3300 mm	10	9-25476-33-0-1
alternatively:				Rod Ø 8, size 60 – stock length 6000 mm	10	9-25476-60-0-1
1	1	1	1	**Cover profile** – to be cut from:		
				Cover profile, size 01 – length 62 mm	10	9-33444-01-0-*
				Cover profile, size 06 – length 800 mm	10	9-33444-06-0-*
				Cover profile, size 18 – length 1800 mm	10	9-33444-18-0-*
				Cover profile, size 33 – length 3050 mm	10	9-33444-33-0-*
alternatively:				Cover profile, size 60 – stock length 6000 mm	10	9-33444-60-0-*
1	1	1	1	**Electric drive ELTRAL S 230 L**	1	6-31730-00-0-*
alternatively:				**Electric drive ELTRAL S 230 E**	1	6-31732-00-0-*
1	1	1	1	**Bag of connecting parts**, W = 620-3600	1	K-14103-00-0-1
alternatively:				**Electric drive ELTRAL 300 E1**	1	9-31020-01-0-*
alternatively:				**Bag of connecting parts 300**, W = 650-3600	1	K-15216-00-0-1

Assembly drawing 0-43700, assembly drawing ELTRAL 0-43791

Standard version
Lever handle with additional side locking

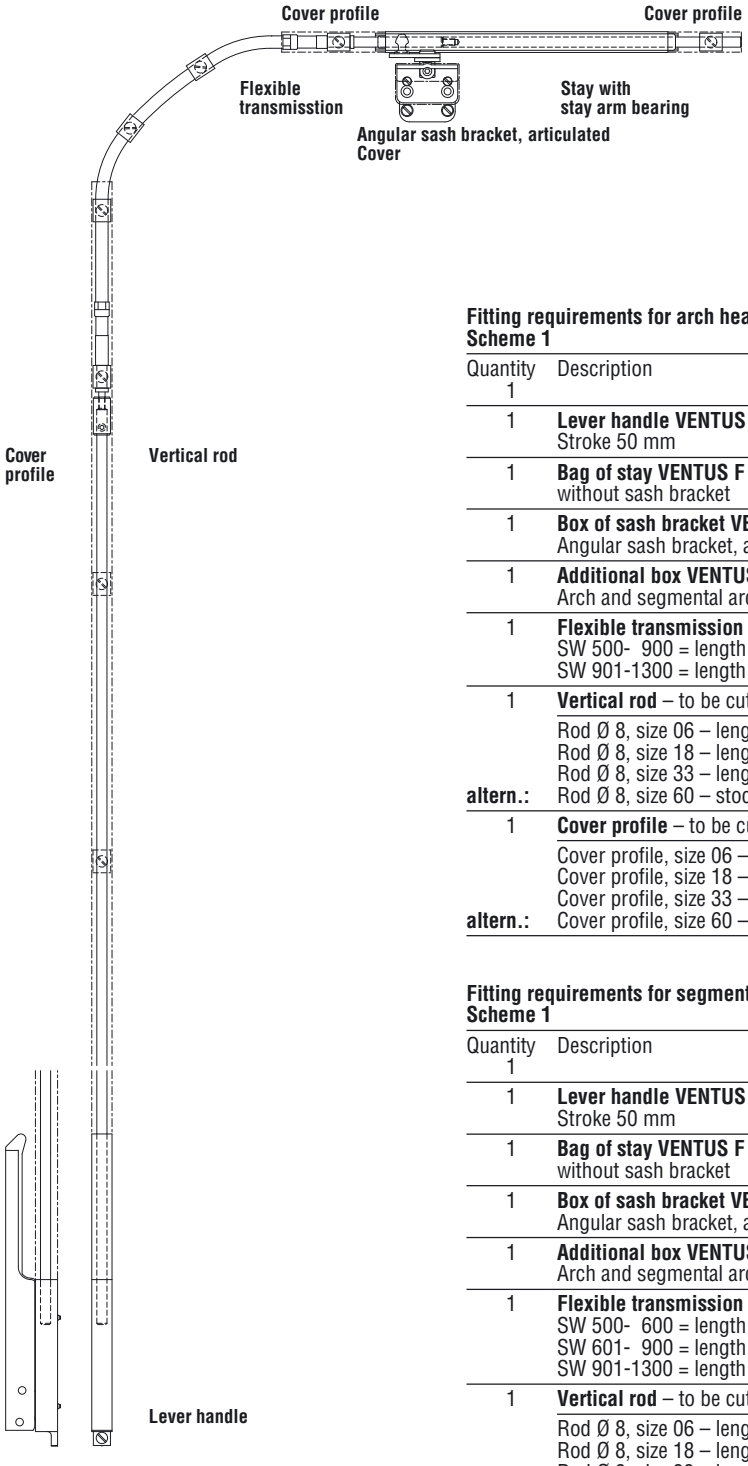


Fitting requirements
according to quantity of stays for schemes 1 to 3n

Quantity 1	2n	3n	Description	PU	Article No.
1	1	1	**Basic box VENTUS F 200** with lever handle – without sash bracket	1	K-15011-00-0-*
	1	2	**Bag of stay VENTUS F 200** without sash bracket – overlap 0-25	10	K-15013-00-0-*
1	2	3	**Box of sash bracket VENTUS F 200** Angular sash bracket	10	K-15225-00-0-*
1	1	1	**Box of additional side locking VENTUS F 200** vertical	1	K-15209-00-0-*
			Sash plane	1	K-15210-00-0-*
			Sash overlap 6 to 7 mm	1	K-15210-60-0-*
			Sash overlap 7 to 8 mm	1	K-15210-70-0-*
			Sash overlap 8 to 9 mm	1	K-15210-80-0-*
			Sash overlap 9 to 10 mm	1	K-15210-90-0-*
1	1	1	**Vertical and horizontal rod, vertical locking** – to be cut from:		
			Rod Ø 8, size 18 – length 1850 mm	10	9-25476-18-0-1
			Rod Ø 8, size 33 – length 3300 mm	10	9-25476-33-0-1
alternatively:			Rod Ø 8, size 60 – stock length 6000 mm	10	9-25476-60-0-1
1	1	1	**Cover profile** – to be cut from:		
			Cover profile, size 18 – length 1800 mm	10	9-33444-18-0-*
			Cover profile, size 33 – length 3050 mm	10	9-33444-33-0-*
alternatively:			Cover profile, size 60 – stock length 6000 mm	10	9-33444-60-0-*

Assembly drawing 0-43700, assembly drawing additional side locking 0-43800
Note:
SW min. 458 mm, SH min. 400 mm

Arch head and segmental arch head windows according to scheme 1
Standard version with flexible transmission



Fitting requirements for arch head windows
Scheme 1

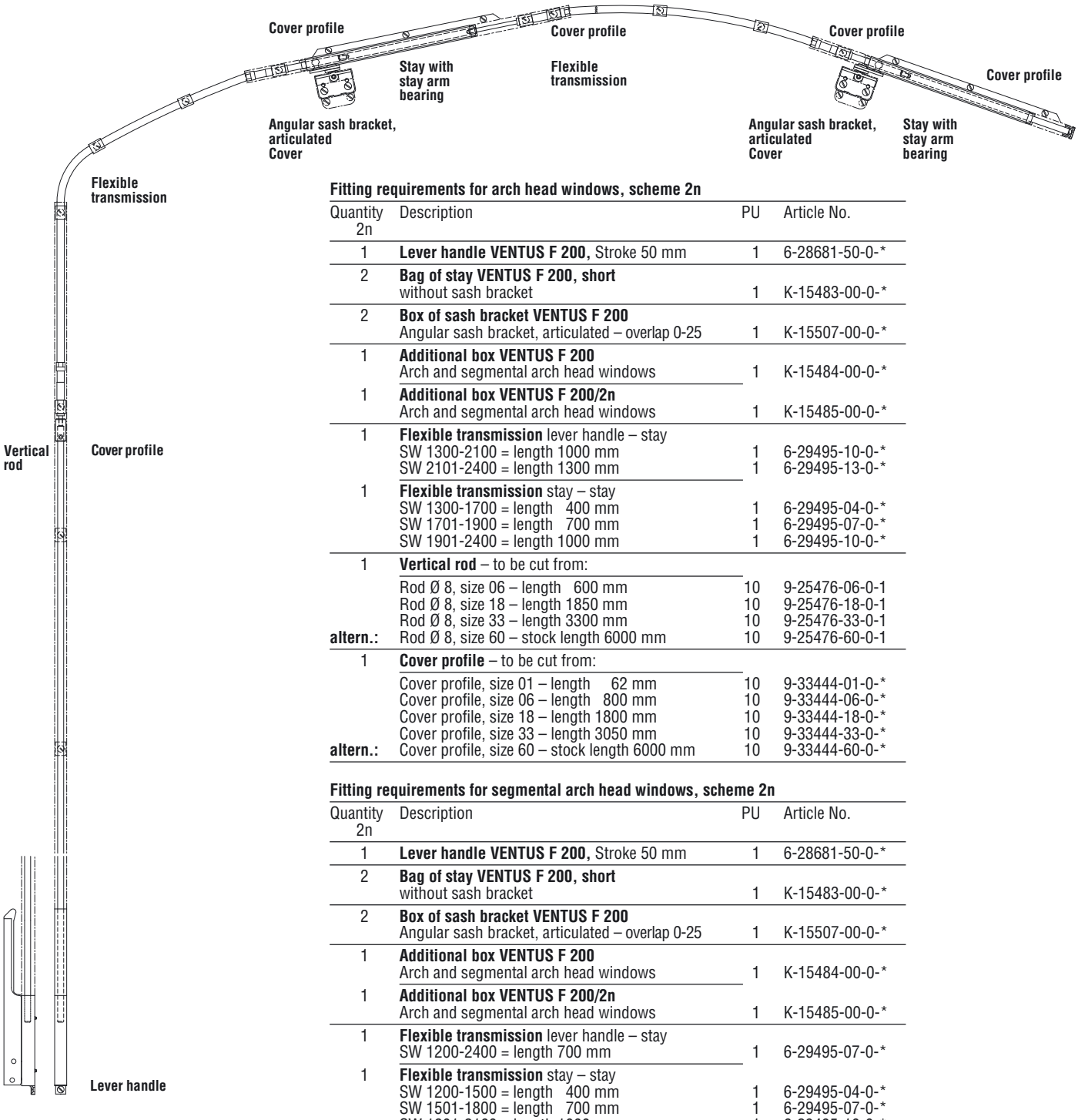
Quantity	Description	PU	Article No.
1			
1	**Lever handle VENTUS F 200**		
	Stroke 50 mm	1	6-28681-50-0-*
1	**Bag of stay VENTUS F 200, short**		
	without sash bracket	1	K-15483-00-0-*
1	**Box of sash bracket VENTUS F 200**		
	Angular sash bracket, articulated – overlap 0-25	1	K-15507-00-0-*
1	**Additional box VENTUS F 200**		
	Arch and segmental arch head windows	1	K-15484-00-0-*
1	**Flexible transmission**		
	SW 500- 900 = length 700 mm	1	6-29495-07-0-*
	SW 901-1300 = length 1000 mm	1	6-29495-10-0-*
1	**Vertical rod** – to be cut from:		
	Rod Ø 8, size 06 – length 600 mm	10	9-25476-06-0-1
	Rod Ø 8, size 18 – length 1850 mm	10	9-25476-18-0-1
	Rod Ø 8, size 33 – length 3300 mm	10	9-25476-33-0-1
altern.:	Rod Ø 8, size 60 – stock length 6000 mm	10	9-25476-60-0-1
1	**Cover profile** – to be cut from:		
	Cover profile, size 06 – length 800 mm	10	9-33444-06-0-*
	Cover profile, size 18 – length 1800 mm	10	9-33444-18-0-*
	Cover profile, size 33 – length 3050 mm	10	9-33444-33-0-*
altern.:	Cover profile, size 60 – stock length 6000 mm	10	9-33444-60-0-*

Fitting requirements for segmental arch head windows
Scheme 1

Quantity	Description	PU	Article No.
1			
1	**Lever handle VENTUS F 200**		
	Stroke 50 mm	1	6-28681-50-0-*
1	**Bag of stay VENTUS F 200, short**		
	without sash bracket	1	K-15483-00-0-*
1	**Box of sash bracket VENTUS F 200**		
	Angular sash bracket, articulated – overlap 0-25	1	K-15507-00-0-*
1	**Additional box VENTUS F 200**		
	Arch and segmental arch head windows	1	K-15484-00-0-*
1	**Flexible transmission**		
	SW 500- 600 = length 400 mm	1	6-29495-04-0-*
	SW 601- 900 = length 700 mm	1	6-29495-07-0-*
	SW 901-1300 = length 1000 mm	1	6-29495-10-0-*
1	**Vertical rod** – to be cut from:		
	Rod Ø 8, size 06 – length 600 mm	10	9-25476-06-0-1
	Rod Ø 8, size 18 – length 1850 mm	10	9-25476-18-0-1
	Rod Ø 8, size 33 – length 3300 mm	10	9-25476-33-0-1
altern.:	Rod Ø 8, size 60 – stock length 6000 mm	10	9-25476-60-0-1
1	**Cover profile** – to be cut from:		
	Cover profile, size 06 – length 800 mm	10	9-33444-06-0-*
	Cover profile, size 18 – length 1800 mm	10	9-33444-18-0-*
	Cover profile, size 33 – length 3050 mm	10	9-33444-33-0-*
altern.:	Cover profile, size 60 – stock length 6000 mm	10	9-33444-60-0-*

Assembly drawing 0-43951

Arch and segmental arch head windows according to scheme 2n
Standard version with flexible transmission



Fitting requirements for arch head windows, scheme 2n

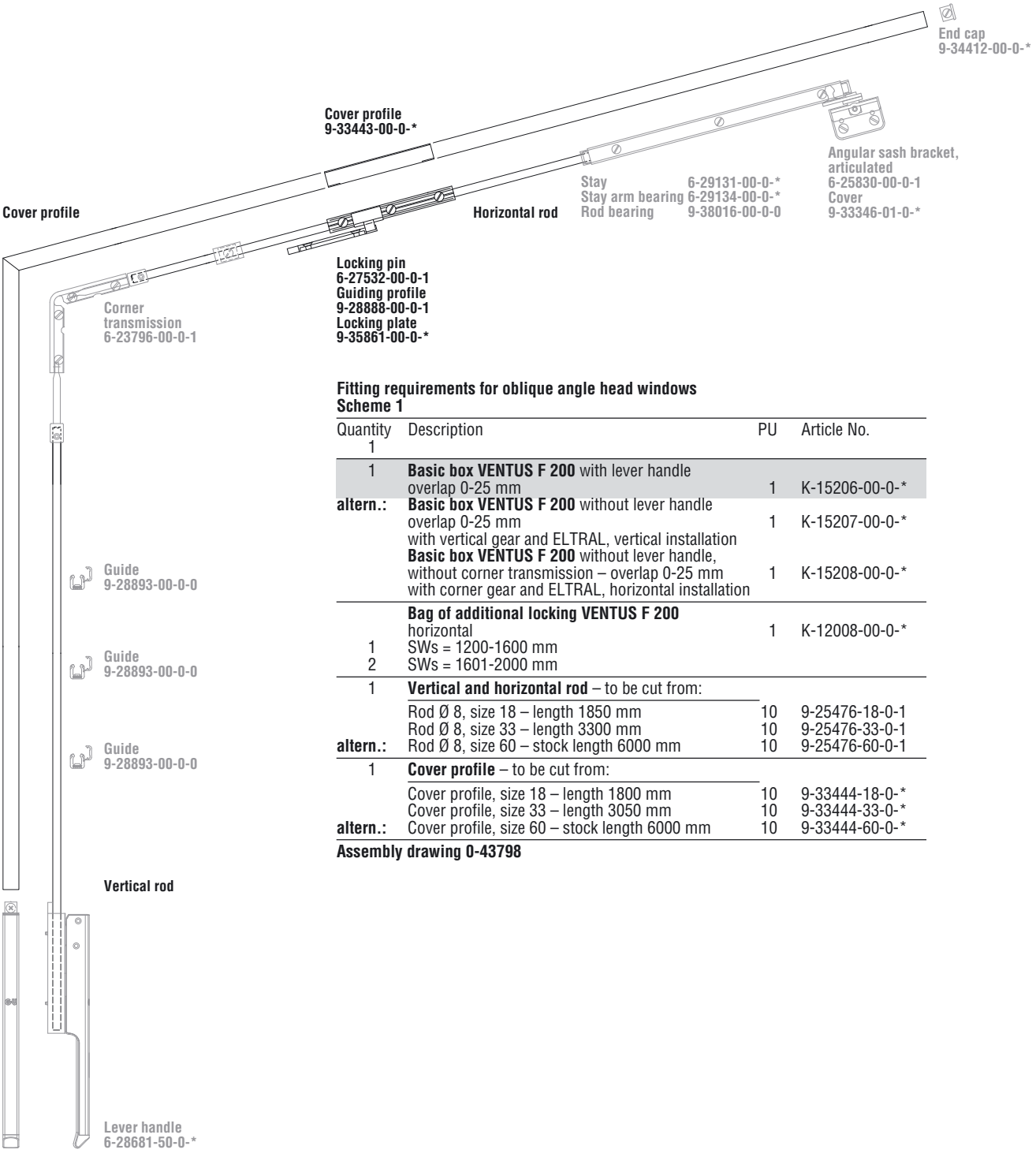
Quantity 2n	Description	PU	Article No.
1	**Lever handle VENTUS F 200,** Stroke 50 mm	1	6-28681-50-0-*
2	**Bag of stay VENTUS F 200, short** without sash bracket	1	K-15483-00-0-*
2	**Box of sash bracket VENTUS F 200** Angular sash bracket, articulated – overlap 0-25	1	K-15507-00-0-*
1	**Additional box VENTUS F 200** Arch and segmental arch head windows	1	K-15484-00-0-*
1	**Additional box VENTUS F 200/2n** Arch and segmental arch head windows	1	K-15485-00-0-*
1	**Flexible transmission** lever handle – stay		
	SW 1300-2100 = length 1000 mm	1	6-29495-10-0-*
	SW 2101-2400 = length 1300 mm	1	6-29495-13-0-*
1	**Flexible transmission** stay – stay		
	SW 1300-1700 = length 400 mm	1	6-29495-04-0-*
	SW 1701-1900 = length 700 mm	1	6-29495-07-0-*
	SW 1901-2400 = length 1000 mm	1	6-29495-10-0-*
1	**Vertical rod** – to be cut from:		
	Rod Ø 8, size 06 – length 600 mm	10	9-25476-06-0-1
	Rod Ø 8, size 18 – length 1850 mm	10	9-25476-18-0-1
	Rod Ø 8, size 33 – length 3300 mm	10	9-25476-33-0-1
altern.:	Rod Ø 8, size 60 – stock length 6000 mm	10	9-25476-60-0-1
1	**Cover profile** – to be cut from:		
	Cover profile, size 01 – length 62 mm	10	9-33444-01-0-*
	Cover profile, size 06 – length 800 mm	10	9-33444-06-0-*
	Cover profile, size 18 – length 1800 mm	10	9-33444-18-0-*
	Cover profile, size 33 – length 3050 mm	10	9-33444-33-0-*
altern.:	Cover profile, size 60 – stock length 6000 mm	10	9-33444-60-0-*

Fitting requirements for segmental arch head windows, scheme 2n

Quantity 2n	Description	PU	Article No.
1	**Lever handle VENTUS F 200,** Stroke 50 mm	1	6-28681-50-0-*
2	**Bag of stay VENTUS F 200, short** without sash bracket	1	K-15483-00-0-*
2	**Box of sash bracket VENTUS F 200** Angular sash bracket, articulated – overlap 0-25	1	K-15507-00-0-*
1	**Additional box VENTUS F 200** Arch and segmental arch head windows	1	K-15484-00-0-*
1	**Additional box VENTUS F 200/2n** Arch and segmental arch head windows	1	K-15485-00-0-*
1	**Flexible transmission** lever handle – stay		
	SW 1200-2400 = length 700 mm	1	6-29495-07-0-*
1	**Flexible transmission** stay – stay		
	SW 1200-1500 = length 400 mm	1	6-29495-04-0-*
	SW 1501-1800 = length 700 mm	1	6-29495-07-0-*
	SW 1801-2100 = length 1000 mm	1	6-29495-10-0-*
	SW 2101-2400 = length 1300 mm	1	6-29495-13-0-*
1	**Vertical rod** – to be cut from:		
	Rod Ø 8, size 06 – length 600 mm	10	9-25476-06-0-1
	Rod Ø 8, size 18 – length 1850 mm	10	9-25476-18-0-1
	Rod Ø 8, size 33 – length 3300 mm	10	9-25476-33-0-1
altern.:	Rod Ø 8, size 60 – stock length 6000 mm	10	9-25476-60-0-1
1	**Cover profile** – to be cut from:		
	Cover profile, size 01 – length 62 mm	10	9-33444-01-0-*
	Cover profile, size 06 – length 800 mm	10	9-33444-06-0-*
	Cover profile, size 18 – length 1800 mm	10	9-33444-18-0-*
	Cover profile, size 33 – length 3050 mm	10	9-33444-33-0-*
altern.:	Cover profile, size 60 – stock length 6000 mm	10	9-33444-60-0-*

Assembly drawing 0-43952

Standard version
Oblique angle head windows



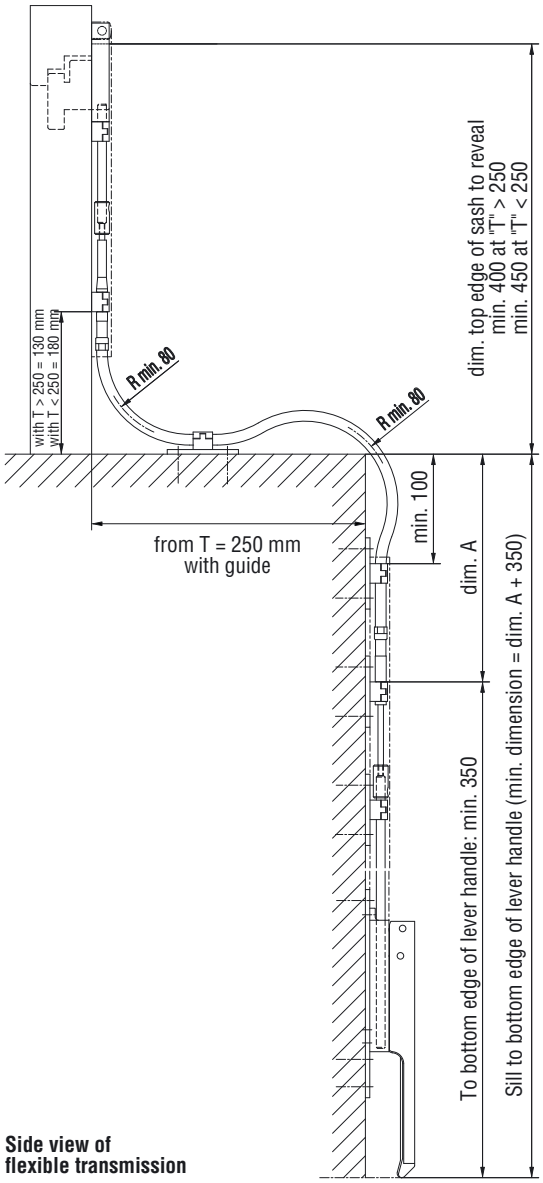
Fitting requirements for oblique angle head windows
Scheme 1

Quantity	Description	PU	Article No.
1			
1	**Basic box VENTUS F 200** with lever handle overlap 0-25 mm	1	K-15206-00-0-*
altern.:	**Basic box VENTUS F 200** without lever handle overlap 0-25 mm with vertical gear and ELTRAL, vertical installation	1	K-15207-00-0-*
	Basic box VENTUS F 200 without lever handle, without corner transmission – overlap 0-25 mm with corner gear and ELTRAL, horizontal installation	1	K-15208-00-0-*
	Bag of additional locking VENTUS F 200 horizontal	1	K-12008-00-0-*
1	SWs = 1200-1600 mm		
2	SWs = 1601-2000 mm		
1	**Vertical and horizontal rod** – to be cut from:		
	Rod Ø 8, size 18 – length 1850 mm	10	9-25476-18-0-1
	Rod Ø 8, size 33 – length 3300 mm	10	9-25476-33-0-1
altern.:	Rod Ø 8, size 60 – stock length 6000 mm	10	9-25476-60-0-1
1	**Cover profile** – to be cut from:		
	Cover profile, size 18 – length 1800 mm	10	9-33444-18-0-*
	Cover profile, size 33 – length 3050 mm	10	9-33444-33-0-*
altern.:	Cover profile, size 60 – stock length 6000 mm	10	9-33444-60-0-*

Assembly drawing 0-43798

Flexible transmission, special versions

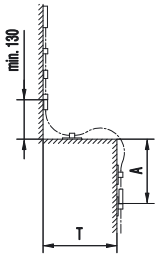
Flexible transmission



Side view of flexible transmission

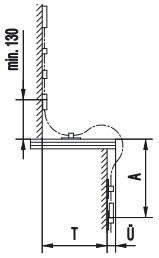
Fitting requirements for flexible transmission

Quantity	Description	PU	Article No.
1	**Additional box of flexible transmission**	1	K-14312-00-0-*
1	**Flexible transmission**		
	Size 02, length 200 mm	1	6-29495-02-0-*
	Size 04, length 400 mm	1	6-29495-04-0-*
	Size 07, length 700 mm	1	6-29495-07-0-*
	Size 10, length 1000 mm	1	6-29495-10-0-*
	Size 13, length 1300 mm	1	6-29495-13-0-*
	Size 20, length 2000 mm	1	6-29495-20-0-*



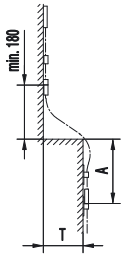
dim. t	dim. A	
730	170	
700	200	
670	230	
640	260	
610	290	length 1000
580	320	
550	350	
520	380	
490	410	
460	440	
430	170	
400	200	
370	230	
340	260	
310	290	length 700
280	320	
250	350	

dim. T = > 250 mm with guide



dim. t	dim. A	
670	230	
640	260	
610	290	
580	320	
550	350	length 1000
520	380	
490	410	
460	440	
430	170	
400	200	
370	230	
340	260	
310	290	length 700
280	320	
250	350	

dim. Ü max. 40 mm

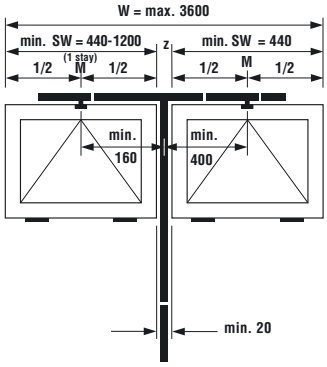


dim. t	dim. A	
240	360	
210	380	
180	400	length 700
150	425	
120	450	
90	170	
60	190	
30	200	length 400
0	250	

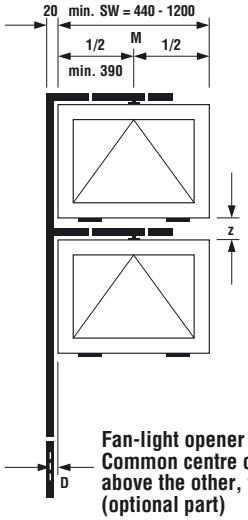
dim. T = < 250 mm without guide

Minimum dimensions depending on depth of reveal

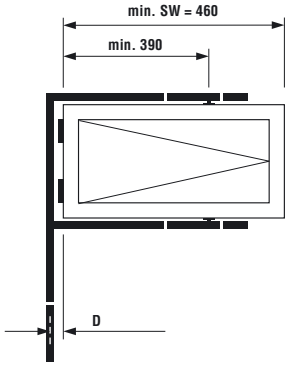
Special versions



Fan-light opener VENTUS F 200
Common centre operation of 2 side by side sashes, type 2n with T angle (optional part)

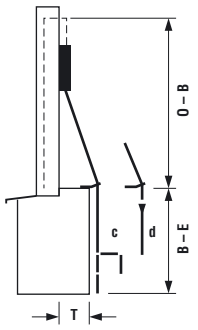


Fan-light opener VENTUS F 200
Common centre operation of 2 sashes one above the other, type 2ü with T angle (optional part)



Fan-light opener VENTUS F 200
Side hung sash with T angle (optional part)

Standard version, minimum dimensions

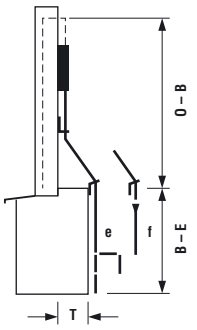


O-B min. Vert.	Cor.	T
310	200	30
345	200	60
380	200	90
415	210	120
450	245	150
485	280	180
525	315	210
560	350	240
595	390	270
630	425	300

B-E min. Vert.	Cor.	Type
475	475	c
515	515	d

O-E min. Vert.	Cor.	Type
715	505	a
765	555	b

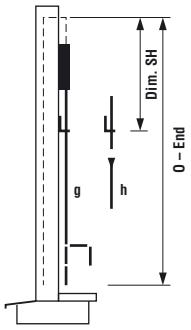
Vertical and corner gears
Types a, b, c and d



O-B min.	T
515	30
565	60
615	90
670	120
720	150
775	180
825	210
875	240
930	270
985	300

B-E min.	Type
475	e
515	f

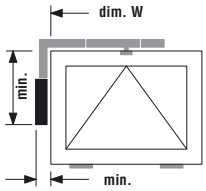
Vertical gear
Types e and f



dim. SH min.
400

O-End min.	Type
800	g
850	h

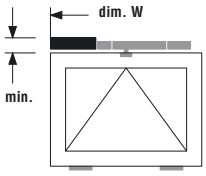
Vertical gear
Types g and h



	ELTRAL S [1]
Space requirement	39
Installation height	292
dim. W min.	400
dim. W max.	3600

[1] ELTRAL S 230 L, S 230 E

ELTRAL, vertical installation on the side

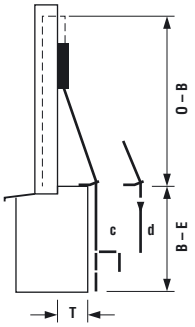


	ELTRAL S [1]	300
Space requirement	39	57
dim. W min.	620	650
dim. W max.	3600	3600 [2]

[1] ELTRAL S 230 L, S 230 E
[2] to 6000 mm on request

ELTRAL horizontal installation at the top

Rods cut to measure, minimum dimensions

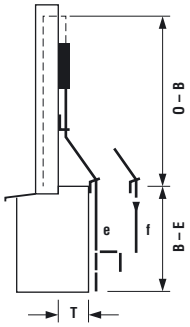


O-B min. Vert.	Cor.	T
310	200	30
345	200	60
380	200	90
415	210	120
450	245	150
485	280	180
525	315	210
560	350	240
595	390	270
630	425	300

B-E min. Vert.	Cor.	Type
475	475	c
515	515	d

O-E min. Vert.	Cor.	Type
715	505	a
765	555	b

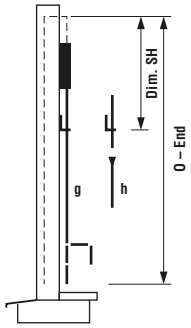
Vertical and corner gears
Types a, b, c and d



O-B min.	T
515	30
565	60
615	90
670	120
720	150
775	180
825	210
875	240
930	270
985	300

B-E min.	Type
475	e
515	f

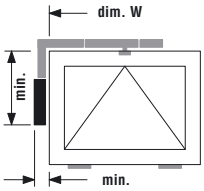
Vertical gear
Types e and f



dim. SH min.
400

O-End min.	Type
800	g
850	h

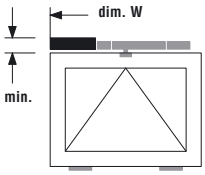
Vertical gear
Types g and h



	ELTRAL S [1]
Space requirement	39
Installation height	292
dim. W min.	400
dim. W max.	3600

[1] ELTRAL S 230 L, S 230 E

ELTRAL, vertical installation on the side

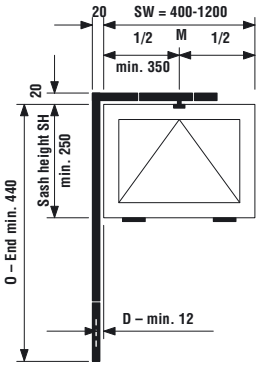


	ELTRAL S [1]	300
Space requirement	39	57
dim. W min.	620	650
dim. W max.	3600	3600 [2]

[1] ELTRAL S 230 L, S 230 E
[2] to 6000 mm on request

ELTRAL horizontal installation at the top

Fan-light opener VENTUS F 200
Lever handle

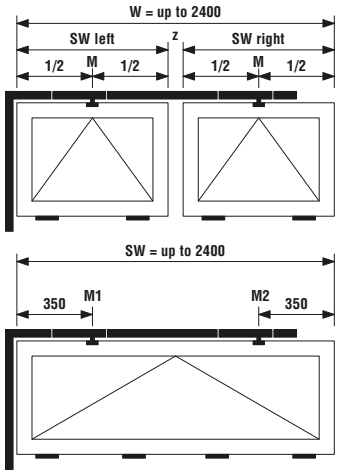


Scheme 1
Lever handle

Rod length depending on total sash width and dim. O-End

O-End	Length of vertical rod	Total sash width dim. SW or W 700	800	1000	1200
		Length of horizontal rod 365	415	515	615
1000	767	1132	1182	1282	1382
1100	867	1232	1282	1382	1482
1200	967	1332	1382	1482	1582
1300	1067	1432	1482	1582	1682
1400	1167	1532	1582	1682	1782
1500	1267	1632	1682	1782	1882
1600	1367	1732	1782	1882	1982
1700	1467	1832	1882	1982	2082
1800	1567	1932	1982	2082	2182
1900	1667	2032	2082	2182	2282
2000	1767	2132	2182	2282	2382

Rod and cover profile size 33 = grey, 60 = white

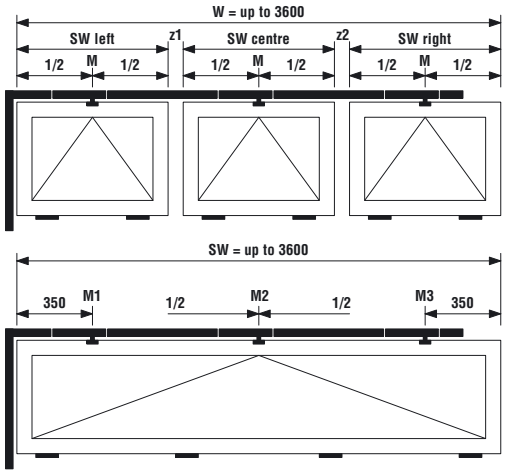


Scheme 2n

Rod length depending on total sash width and dim. O-End

O-End	Length of vertical rod	Total sash width dim. SW or W 1400	1600	1800	2000	2200	2400
		Length of horizontal rod 1065	1265	1465	1665	1865	2065
1000	767	1832	2032	2232	2432	2632	2832
1100	867	1932	2132	2332	2532	2732	2932
1200	967	2032	2232	2432	2632	2832	3032
1300	1067	2132	2332	2532	2732	2932	3132
1400	1167	2232	2432	2632	2832	3032	3232
1500	1267	2332	2532	2732	2932	3132	3332
1600	1367	2432	2632	2832	3032	3232	3432
1700	1467	2532	2732	2932	3132	3332	3532
1800	1567	2632	2832	3032	3232	3432	3632
1900	1667	2732	2932	3132	3332	3532	3732
2000	1767	2832	3032	3232	3432	3632	3832

Rod and cover profile size 33 = grey, 60 = white

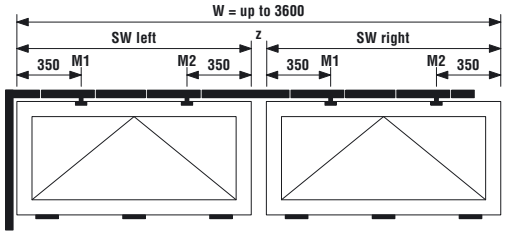


Scheme 3n

Rod length depending on total sash width and dim. O-End

O-End	Length of vertical rod	Total sash width dim. SW or W 2600	2800	3000	3200	3400	3600
		Length of horizontal rod 2265	2465	2665	2865	3065	3265
1000	767	3032	3232	3432	3632	3832	4032
1100	867	3132	3332	3532	3732	3932	4132
1200	967	3232	3432	3632	3832	4032	4232
1300	1067	3332	3532	3732	3932	4132	4332
1400	1167	3432	3632	3832	4032	4232	4432
1500	1267	3532	3732	3932	4132	4332	4532
1600	1367	3632	3832	4032	4232	4432	4632
1700	1467	3732	3932	4132	4332	4532	4732
1800	1567	3832	4032	4232	4432	4632	4832
1900	1667	3932	4132	4332	4532	4732	4932
2000	1767	4032	4232	4432	4632	4832	5032

Rod and cover profile size 33 = grey, 60 = white



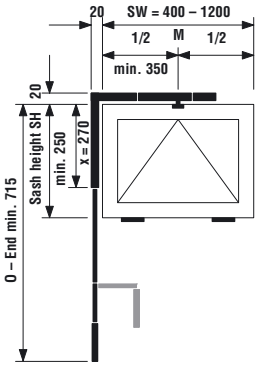
Scheme 4n

Rod length depending on total sash width and dim. O-End

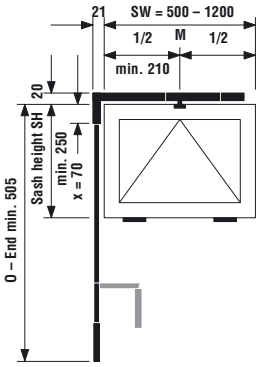
O-End	Length of vertical rod	Total sash width dim. SW or W 2600	2800	3000	3200	3400	3600
		Length of horizontal rod 2265	2465	2665	2865	3065	3265
1000	767	3032	3232	3432	3632	3832	4032
1100	867	3132	3332	3532	3732	3932	4132
1200	967	3232	3432	3632	3832	4032	4232
1300	1067	3332	3532	3732	3932	4132	4332
1400	1167	3432	3632	3832	4032	4232	4432
1500	1267	3532	3732	3932	4132	4332	4532
1600	1367	3632	3832	4032	4232	4432	4632
1700	1467	3732	3932	4132	4332	4532	4732
1800	1567	3832	4032	4232	4432	4632	4832
1900	1667	3932	4132	4332	4532	4732	4932
2000	1767	4032	4232	4432	4632	4832	5032

Rod and cover profile size 33 = grey, 60 = white

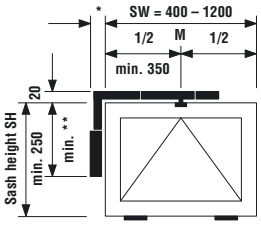
Fan-light opener VENTUS F 200
Vertical and corner gears, ELTRAL – vertical and horizontal installation



Scheme 1
Vertical gear

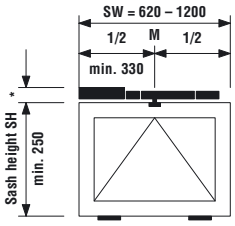


Scheme 1
Corner gear



Scheme 1
ELTRAL vertical, min. dimensions

	ELTRAL S [1]
*	39
**	292
W max.	3600



Scheme 1
ELTRAL horizontal, min. dimensions

	ELTRAL S [1]	300
*	39	57
W min.	620	650
W max.	3600	3600

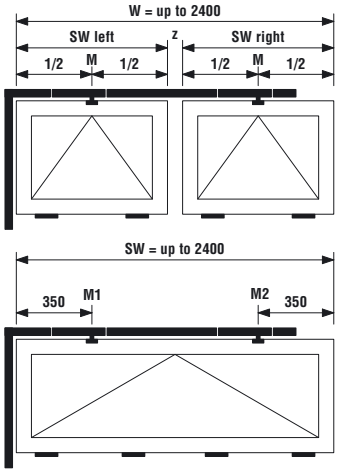
Length of horizontal rod depending on total sash width

	Total sash width dim. FB or B			
Drive	700	800	1000	1200
Vertical gear	365	415	515	615
Corner gear	486	536	636	736

Length of horizontal rod depending on total sash width

	Total sash width dim. SW or W			
Drive	700	800	1000	1200
ELTRAL S vertical [1]	530	580	680	780
ELTRAL S horizontal [1]	372	422	522	622
ELTRAL 300 horizontal	327	377	477	577

[1] ELTRAL S 230 L, S 230 E

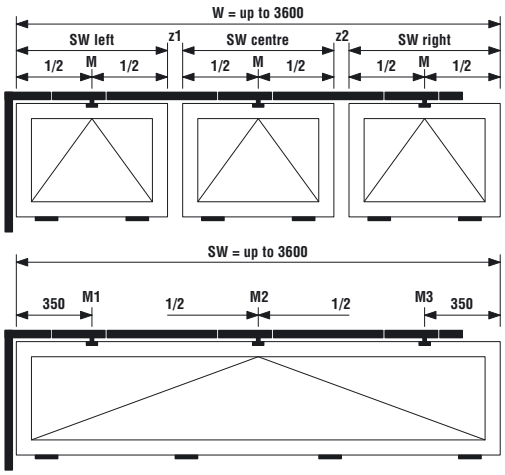


Scheme 2n

Length of horizontal rod depending on total sash width

	Total sash width dim. SW or W					
Drive	1400	1600	1800	2000	2200	2400
Vertical gear	1065	1265	1465	1665	1865	2065
Corner gear	1186	1386	1586	1786	1986	2186
ELTRAL S vertical [1]	1065	1265	1465	1665	1865	2065
ELTRAL S horizontal [1]	1072	1272	1472	1672	1872	2072
ELTRAL 300 horizontal	1027	1227	1427	1627	1827	2027

[1] ELTRAL S 230 L, S 230 E

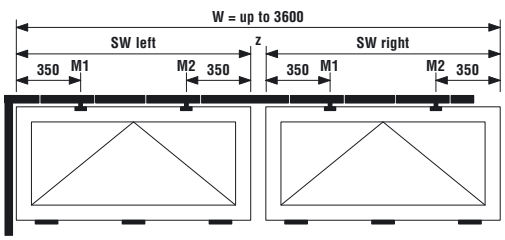


Scheme 3n

Length of horizontal rod depending on total sash width

	Total sash width dim. SW or W					
Drive	2600	2800	3000	3200	3400	3600
Vertical gear	2265	2465	2665	2865	3065	3265
Corner gear	2386	2586	2786	2986	3186	3386
ELTRAL S vertical [1]	2265	2465	2665	2865	3065	3265
ELTRAL S horizontal [1]	2272	2472	2672	2872	3072	3272
ELTRAL 300 horizontal	2227	2427	2627	2827	3027	3227

[1] ELTRAL S 230 L, S 230 E



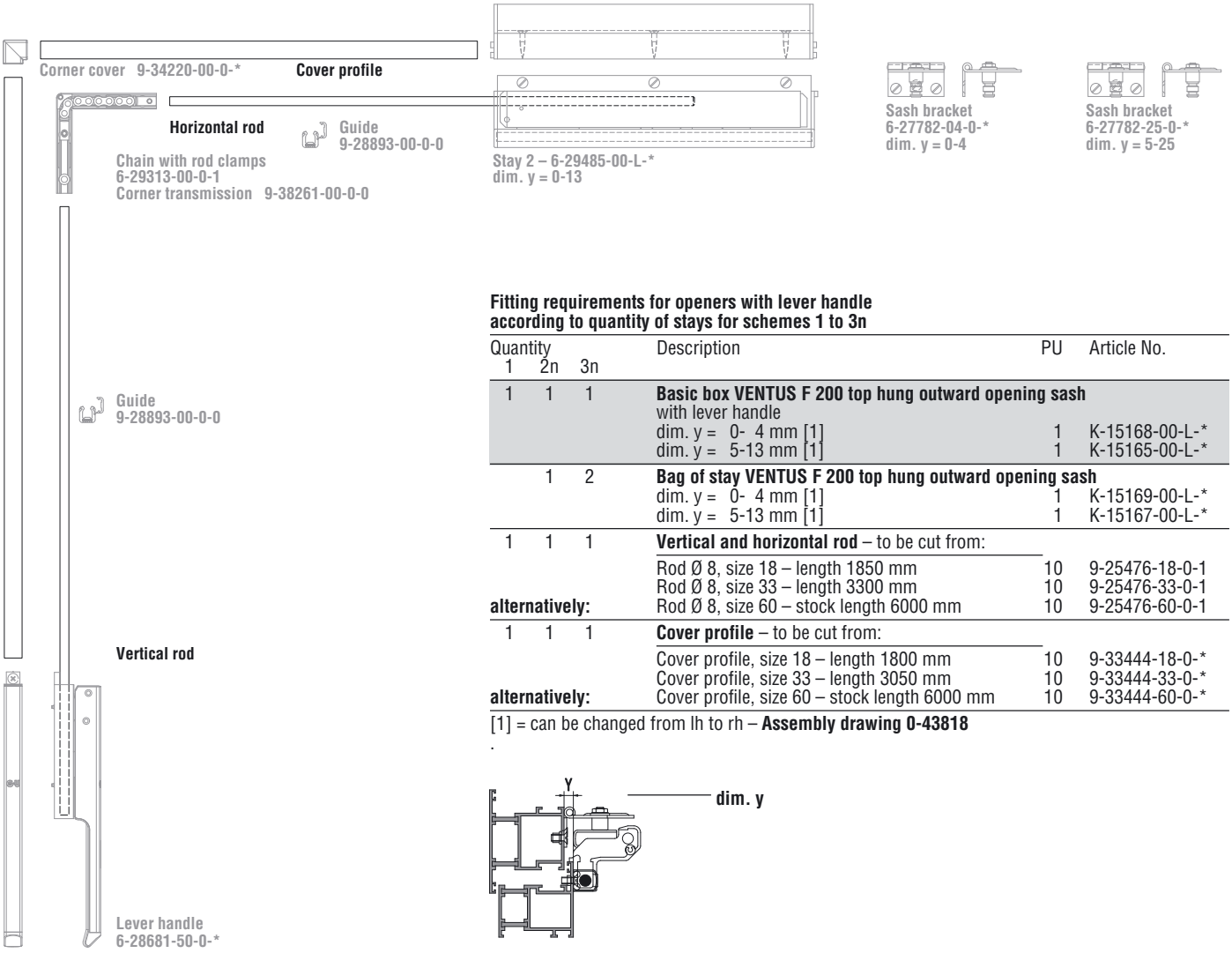
Scheme 4n

Length of horizontal rod depending on total sash width

	Total sash width dim. SW or W					
Drive	2600	2800	3000	3200	3400	3600
Vertical gear	2265	2465	2665	2865	3065	3265
Corner gear	2386	2586	2786	2986	3186	3386
ELTRAL S vertical [1]	2265	2465	2665	2865	3065	3265
ELTRAL S horizontal [1]	2272	2472	2672	2872	3072	3272
ELTRAL 300 horizontal	2227	2427	2627	2827	3027	3227

[1] ELTRAL S 230 L, S 230 E

Top hung outward opening sashes
Standard version – lever handle

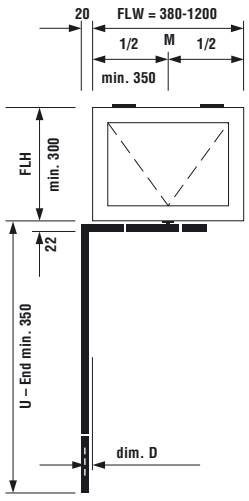


Fitting requirements for openers with lever handle according to quantity of stays for schemes 1 to 3n

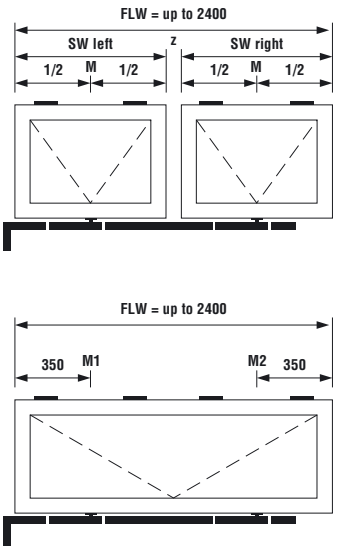
Quantity 1	2n	3n	Description	PU	Article No.
1	1	1	**Basic box VENTUS F 200 top hung outward opening sash** with lever handle		
			dim. y = 0- 4 mm [1]	1	K-15168-00-L-*
			dim. y = 5-13 mm [1]	1	K-15165-00-L-*
	1	2	**Bag of stay VENTUS F 200 top hung outward opening sash**		
			dim. y = 0- 4 mm [1]	1	K-15169-00-L-*
			dim. y = 5-13 mm [1]	1	K-15167-00-L-*
1	1	1	**Vertical and horizontal rod** – to be cut from:		
			Rod Ø 8, size 18 – length 1850 mm	10	9-25476-18-0-1
			Rod Ø 8, size 33 – length 3300 mm	10	9-25476-33-0-1
alternatively:			Rod Ø 8, size 60 – stock length 6000 mm	10	9-25476-60-0-1
1	1	1	**Cover profile** – to be cut from:		
			Cover profile, size 18 – length 1800 mm	10	9-33444-18-0-*
			Cover profile, size 33 – length 3050 mm	10	9-33444-33-0-*
alternatively:			Cover profile, size 60 – stock length 6000 mm	10	9-33444-60-0-*

[1] = can be changed from lh to rh – **Assembly drawing 0-43818**

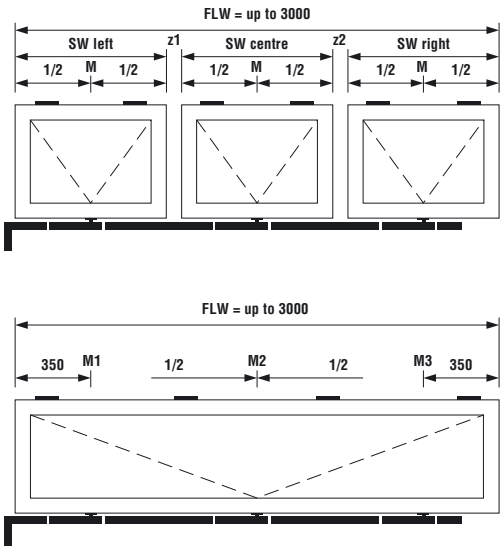
.



Scheme 1
Lever handle

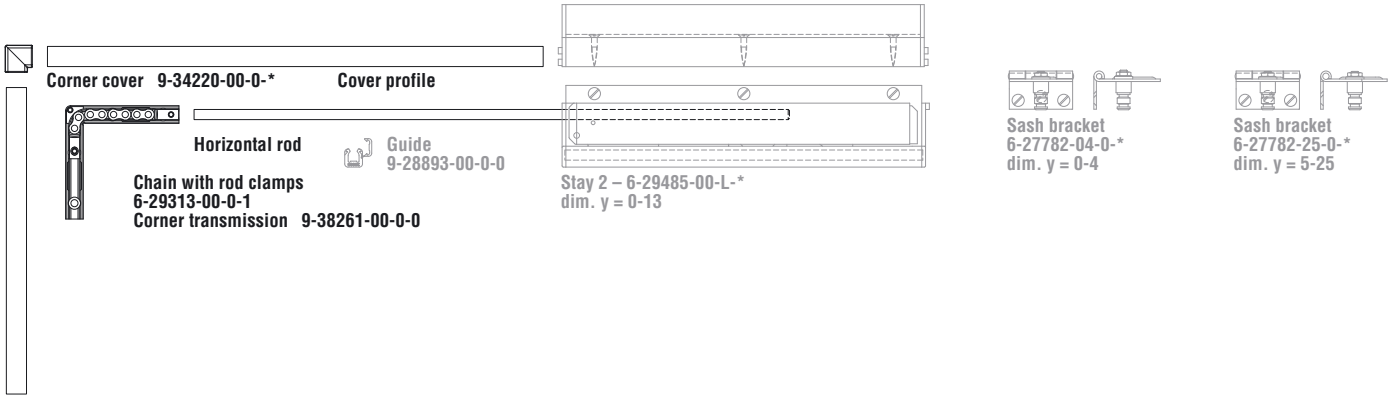


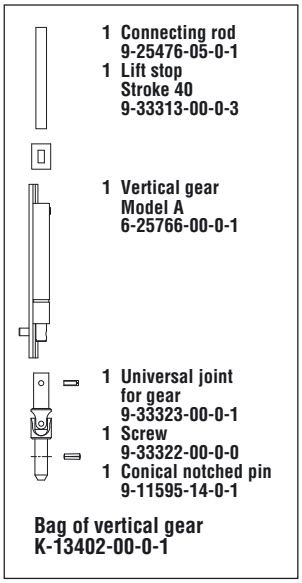
Scheme 2n



Scheme 3n

Top hung outward opening sashes
Standard version – vertical gear





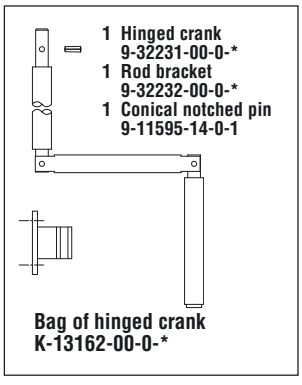
1 Connecting rod
9-25476-05-0-1
1 Lift stop
Stroke 40
9-33313-00-0-3
1 Vertical gear
Model A
6-25766-00-0-1
1 Universal joint
for gear
9-33323-00-0-1
1 Screw
9-33322-00-0-0
1 Conical notched pin
9-11595-14-0-1

Bag of vertical gear
K-13402-00-0-1

Fitting requirements for openers with vertical gear according to quantity of stays for schemes 1 to 3n

Quantity 1	2n	3n	Description	PU	Article No.
1	2	3	**Bag of stay VENTUS F 200 top hung outward opening sash**		
			dim. y = 0- 4 mm [1]	1	K-15169-00-L-*
			dim. y = 5-13 mm [1]	1	K-15167-00-L-*
1	1	1	**Chain with rod clamps**	1	6-29313-00-0-1
1	1	1	**Corner transmission**	1	9-38261-00-0-0
1	1	1	**Corner cover**	100	9-34220-00-0-*
1	1	1	**Horizontal rod** – to be cut from:		
			Rod Ø 8, size 06 – length 600 mm	10	9-25476-06-0-1
			Rod Ø 8, size 18 – length 1850 mm	10	9-25476-18-0-1
			Rod Ø 8, size 33 – length 3300 mm	10	9-25476-33-0-1
alternatively:			Rod Ø 8, size 60 – stock length 6000 mm	10	9-25476-60-0-1
1	1	1	**Cover profile** – to be cut from:		
			Cover profile, size 06 – length 800 mm	10	9-33444-06-0-*
			Cover profile, size 18 – length 1800 mm	10	9-33444-18-0-*
			Cover profile, size 33 – length 3050 mm	10	9-33444-33-0-*
alternatively:			Cover profile, size 60 – stock length 6000 mm	10	9-33444-60-0-*
1	1	1	**Bag of vertical gear**, model A	1	K-13402-00-0-1

[1] = can be changed from lh to rh



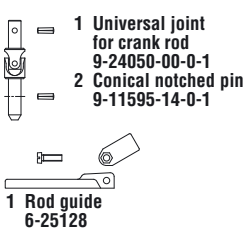
1 Hinged crank
9-32231-00-0-*
1 Rod bracket
9-32232-00-0-*
1 Conical notched pin
9-11595-14-0-1

Bag of hinged crank
K-13162-00-0-*

Fitting requirements for articulated crank rod and accessories according to types a to h for vertical and corner gears

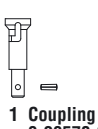
Type a	b	c	d	e	f	g	h	Description	PU	Article No.
1	1	1	1	1	1	1	1	**Crank rod** (not illustrated) – to be cut from: aluminium tube, stock length 5000 mm	1	9-32230-50-0-*
1	1	1	1	1	1	1	1	**Bag of hinged crank**	1	K-13162-00-0-*
		1	1	2	2	1	1	**Bag of universal joint** for crank rod	1	K-13164-00-0-1
	1		1		1		1	**Bag of coupling horn**	1	K-13165-00-0-1

Assembly drawing 0-43818



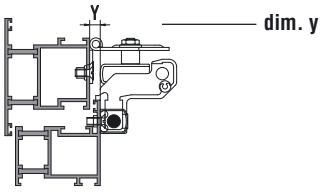
1 Universal joint
for crank rod
9-24050-00-0-1
2 Conical notched pin
9-11595-14-0-1
1 Rod guide
6-25128

Bag of universal joint for crank rod
K-13164-00-0-1

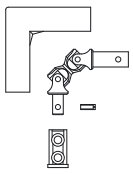


1 Coupling horn
9-29570-00-0-1
1 Conical notched pin
9-11595-14-0-1

Bag of coupling horn
K-13165-00-0-1

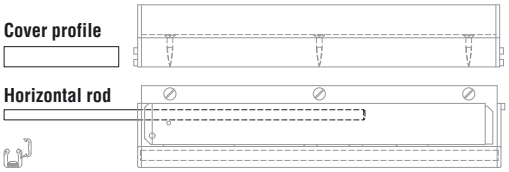


Top hung outward opening sashes
Standard version – corner gear



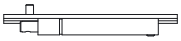
1 Cover
9-33337-00-0-*
1 Double universal joint
9-33333-00-0-1
1 Bearing
9-33335-00-0-0
1 Screw
9-33322-00-0-0

Bag of corner gear K-13403-00-0-*

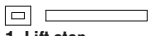


Sash bracket
6-27782-04-0-*
dim. y = 0-4

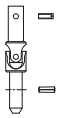
Sash bracket
6-27782-25-0-*
dim. y = 5-25



1 Vertical gear Model A
6-25766-00-0-1

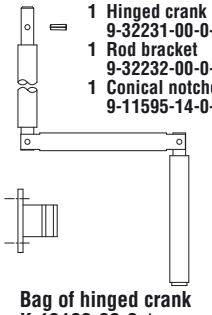


1 Lift stop Stroke 40
9-33313-00-0-3
1 Connecting rod
9-25476-05-0-1



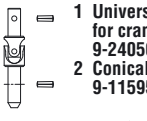
1 Universal joint for gear
9-33323-00-0-1
1 Screw
9-33322-00-0-0
1 Conical notched pin
9-11595-14-0-1

Bag of vertical gear K-13402-00-0-1

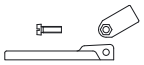


1 Hinged crank
9-32231-00-0-*
1 Rod bracket
9-32232-00-0-*
1 Conical notched pin
9-11595-14-0-1

Bag of hinged crank K-13162-00-0-*



1 Universal joint for crank rod
9-24050-00-0-1
2 Conical notched pin
9-11595-14-0-1



1 Rod guide
6-25128

Bag of universal joint for crank rod K-13164-00-0-1

1 Coupling horn
9-29570-00-0-1
1 Conical notched pin
9-11595-14-0-1

Bag of coupling horn K-13165-00-0-1

Fitting requirements for openers with corner gear according to quantity of stays for schemes 1 to 3n

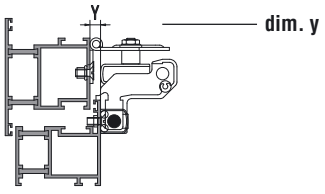
Quantity 1	2n	3n	Description	PU	Article No.
1	2	3	**Bag of stay VENTUS F 200 top hung outward opening sash**		
			dim. y = 0- 4 mm [1]	1	K-15169-00-L-*
			dim. y = 5-13 mm [1]	1	K-15167-00-L-*
1	1	1	**Horizontal rod** – to be cut from:		
			Rod Ø 8, size 06 – length 600 mm	10	9-25476-06-0-1
			Rod Ø 8, size 18 – length 1850 mm	10	9-25476-18-0-1
			Rod Ø 8, size 33 – length 3300 mm	10	9-25476-33-0-1
alternatively:			Rod Ø 8, size 60 – stock length 6000 mm	10	9-25476-60-0-1
1	1	1	**Cover profile** – to be cut from:		
			Cover profile, size 06 – length 800 mm	10	9-33444-06-0-*
			Cover profile, size 18 – length 1800 mm	10	9-33444-18-0-*
			Cover profile, size 33 – length 3050 mm	10	9-33444-33-0-*
alternatively:			Cover profile, size 60 – stock length 6000 mm	10	9-33444-60-0-*
1	1	1	**Bag of vertical gear**, model A	1	K-13402-00-0-1
1	1	1	**Bag of additional parts for corner gear**, model A	1	K-13403-00-0-*

[1] = can be changed from lh to rh

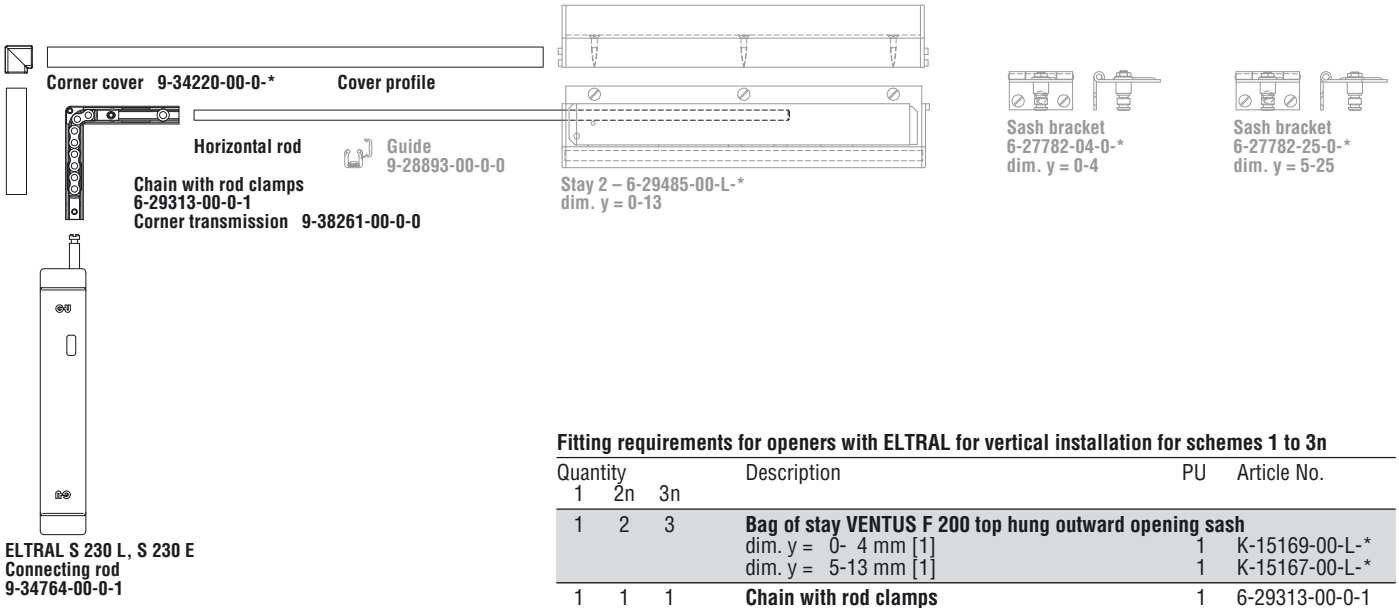
Fitting requirements for articulated crank rod and accessories according to types a to h for articulated crank rod

Type a	b	c	d	e	f	g	h	Description	PU	Article No.
1	1	1	1	1	1	1	1	**Crank rod** (not illustrated) – to be cut from: aluminium rod, stock length 5000 mm	1	9-32230-50-0-*
1	1	1	1	1	1	1	1	**Bag of hinged crank**	1	K-13162-00-0-*
		1	1	2	2	1	1	**Bag of universal joint** for crank rod	1	K-13164-00-0-1
	1		1		1		1	**Bag of coupling horn**	1	K-13165-00-0-1

Assembly drawing 0-43818



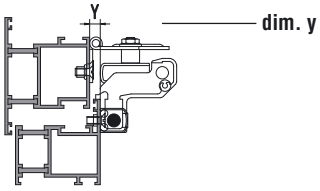
Top hung outward opening sashes
Standard version – ELTRAL, vertical installation on the side



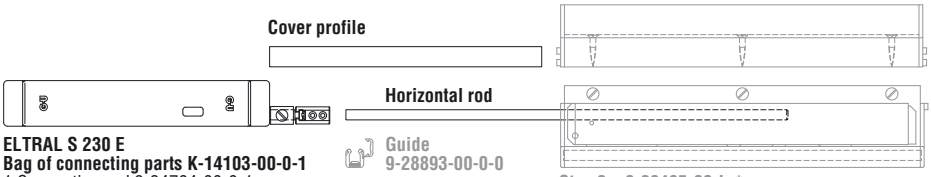
Fitting requirements for openers with ELTRAL for vertical installation for schemes 1 to 3n

Quantity 1	2n	3n		Description	PU	Article No.
1	2	3		**Bag of stay VENTUS F 200 top hung outward opening sash**		
				dim. y = 0- 4 mm [1]	1	K-15169-00-L-*
				dim. y = 5-13 mm [1]	1	K-15167-00-L-*
1	1	1		**Chain with rod clamps**	1	6-29313-00-0-1
1	1	1		**Corner transmission**	1	9-38261-00-0-0
1	1	1		**Corner cover**	100	9-34220-00-0-*
1	1	1		**Horizontal rod** – to be cut from:		
				Rod Ø 8, size 06 – length 600 mm	10	9-25476-06-0-1
				Rod Ø 8, size 18 – length 1850 mm	10	9-25476-18-0-1
				Rod Ø 8, size 33 – length 3300 mm	10	9-25476-33-0-1
			alternatively:	Rod Ø 8, size 60 – stock length 6000 mm	10	9-25476-60-0-1
1	1	1		**Cover profile** – to be cut from:		
				Cover profile, size 06 – length 800 mm	10	9-33444-06-0-*
				Cover profile, size 18 – length 1800 mm	10	9-33444-18-0-*
				Cover profile, size 33 – length 3050 mm	10	9-33444-33-0-*
			alternatively:	Cover profile, size 60 – stock length 6000 mm	10	9-33444-60-0-*
1	1	1	1	**Electric drive ELTRAL S 230 L**	1	6-31730-00-0-*
			alternatively:	**Electric drive ELTRAL S 230 E**	1	6-31732-00-0-*
1	1	1		**Connecting rod**, Ø 8 mm, W = 400-3000	1	9-34764-00-0-1

[1] = can be changed from lh to rh – **Assembly drawing 0-43831**



Top hung outward opening sashes
Standard version – ELTRAL, horizontal installation at the top



ELTRAL S 230 E
Bag of connecting parts K-14103-00-0-1
1 Connecting rod 9-34764-00-0-1
1 Coupling 6-26448-00-0-1
1 Guide 9-26997-00-0-0

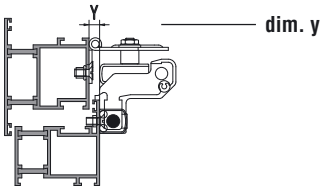
Sash bracket
6-27782-04-0-*
dim. y = 0-4

Sash bracket
6-27782-25-0-*
dim. y = 5-25

Fitting requirements for openers with ELTRAL for horizontal installation for schemes 1 to 3n

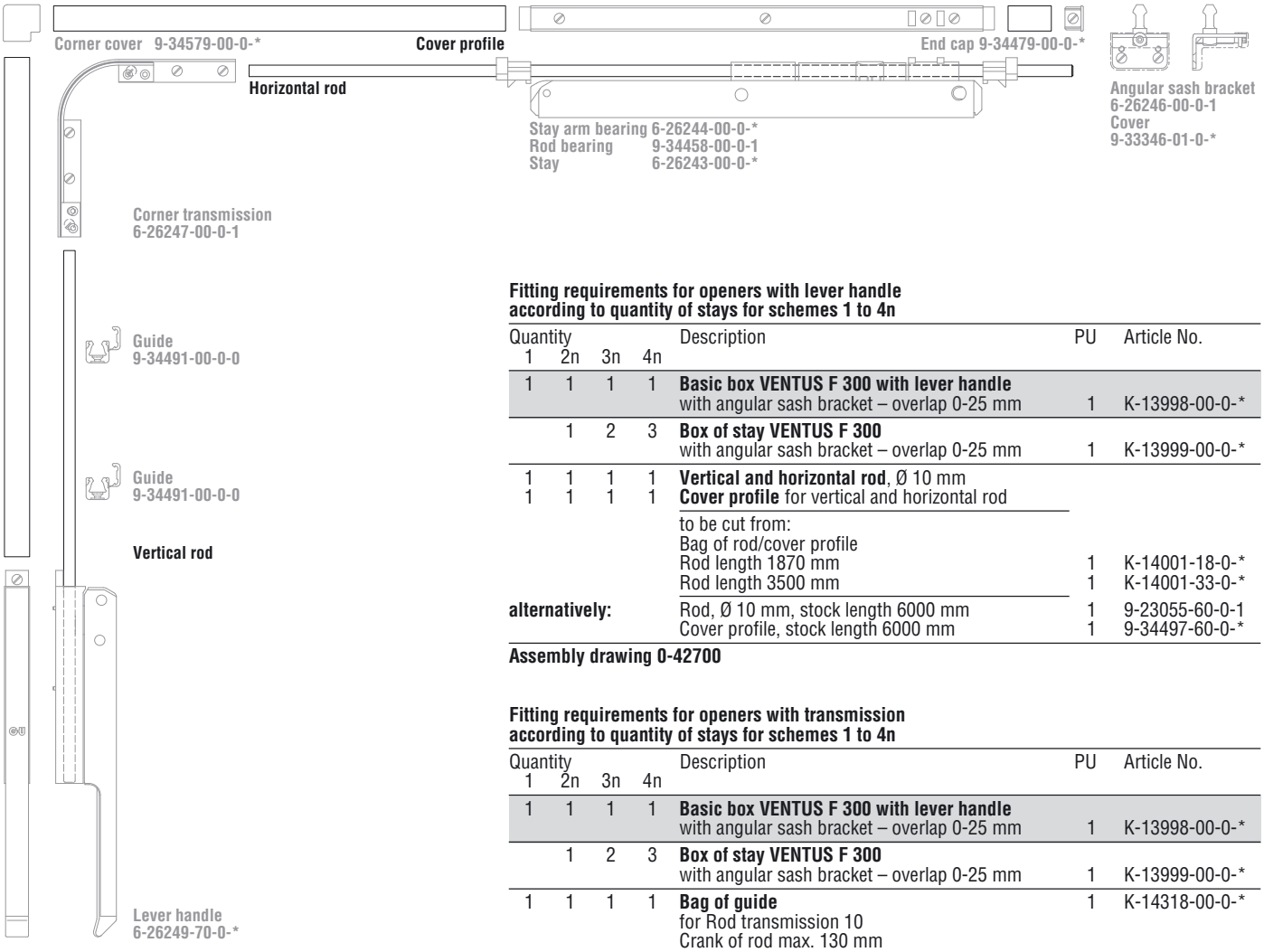
Quantity 1	2n	3n		Description	PU	Article No.
1	2	3		**Bag of stay VENTUS F 200 top hung outward opening sash**		
				dim. y = 0- 4 mm [1]	1	K-15169-00-L-*
				dim. y = 5-13 mm [1]	1	K-15167-00-L-*
1	1	1		**Horizontal rod** – to be cut from:		
				Rod Ø 8, size 06 – length 600 mm	10	9-25476-06-0-1
				Rod Ø 8, size 18 – length 1850 mm	10	9-25476-18-0-1
				Rod Ø 8, size 33 – length 3300 mm	10	9-25476-33-0-1
			alternatively:	Rod Ø 8, size 60 – stock length 6000 mm	10	9-25476-60-0-1
1	1	1		**Cover profile** – to be cut from:		
				Cover profile, size 06 – length 800 mm	10	9-33444-06-0-*
				Cover profile, size 18 – length 1800 mm	10	9-33444-18-0-*
				Cover profile, size 33 – length 3050 mm	10	9-33444-33-0-*
			alternatively:	Cover profile, size 60 – stock length 6000 mm	10	9-33444-60-0-*
1	1	1	1	**Electric drive ELTRAL S 230 L**	1	6-31730-00-0-*
			alternatively:	**Electric drive ELTRAL S 230 E**	1	6-31732-00-0-*
1	1	1	1	**Bag of connecting parts**, W = 620-3000	1	K-14103-00-0-1

[1] = can be changed from lh to rh – **Assembly drawing 0-43831**



7

Standard version
Lever handle and transmission



Fitting requirements for openers with lever handle according to quantity of stays for schemes 1 to 4n

Quantity 1	2n	3n	4n	Description	PU	Article No.
1	1	1	1	**Basic box VENTUS F 300 with lever handle** with angular sash bracket – overlap 0-25 mm	1	K-13998-00-0-*
	1	2	3	**Box of stay VENTUS F 300** with angular sash bracket – overlap 0-25 mm	1	K-13999-00-0-*
1	1	1	1	**Vertical and horizontal rod**, Ø 10 mm		
1	1	1	1	**Cover profile** for vertical and horizontal rod		
				to be cut from:		
				Bag of rod/cover profile		
				Rod length 1870 mm	1	K-14001-18-0-*
				Rod length 3500 mm	1	K-14001-33-0-*
alternatively:				Rod, Ø 10 mm, stock length 6000 mm	1	9-23055-60-0-1
				Cover profile, stock length 6000 mm	1	9-34497-60-0-*

Assembly drawing 0-42700

Fitting requirements for openers with transmission according to quantity of stays for schemes 1 to 4n

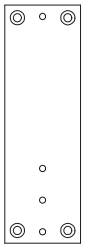
Quantity 1	2n	3n	4n	Description	PU	Article No.
1	1	1	1	**Basic box VENTUS F 300 with lever handle** with angular sash bracket – overlap 0-25 mm	1	K-13998-00-0-*
	1	2	3	**Box of stay VENTUS F 300** with angular sash bracket – overlap 0-25 mm	1	K-13999-00-0-*
1	1	1	1	**Bag of guide** for Rod transmission 10 Crank of rod max. 130 mm	1	K-14318-00-0-*
1	1	1	1	**Bag of additional** parts for rod transmission 10	1	K-14319-00-0-*
1	1	1	1	**Vertical** rod, Ø 10 mm		
				to be cut from:		
				Rod, Ø 10 mm, length 6000 mm	1	9-23055-60-0-1
1	1	1	1	**Horizontal rod**, Ø 10 mm		
1	1	1	1	**Cover profile** for horizontal rod		
				to be cut from		
				Bag of rod/cover profile		
				Rod length 1870 mm	1	K-14001-18-0-*
				Rod length 3500 mm	1	K-14001-33-0-*
alternatively:				Rod, Ø 10 mm, stock length 6000 mm	1	9-23055-60-0-1
				Cover profile, stock length 6000 mm	1	9-34497-60-0-*

Assembly drawing 0-42700

Fixing plate 9-33788-00-0-*

Guide 9-34491-00-0-0

Bag of guide K-14318-00-0-*



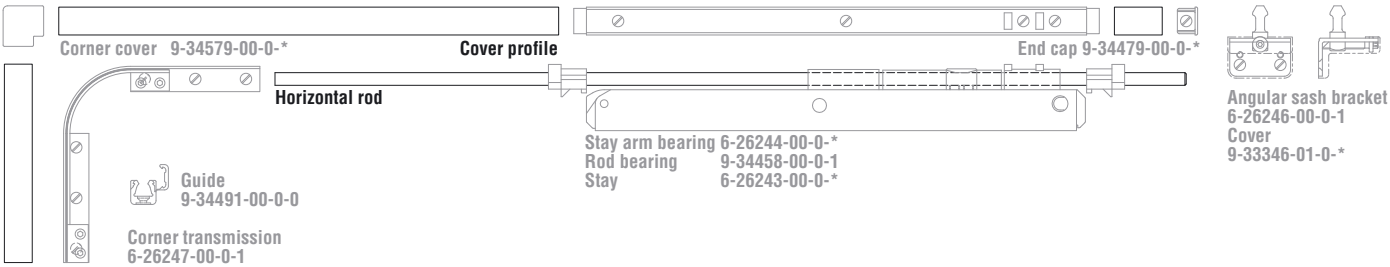
Fixing plate 9-35346-00-0-*

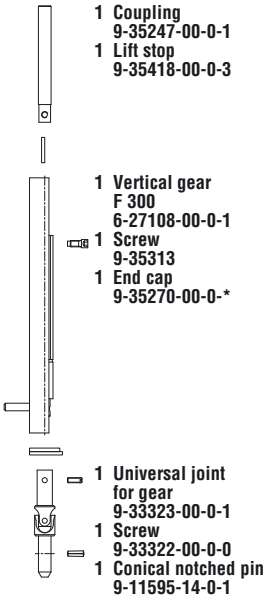
Fixing plate 9-33788-00-0-*

Guide 9-34491-00-0-0

Bag of additional parts K-14319-00-0-*

Standard version
Vertical gear



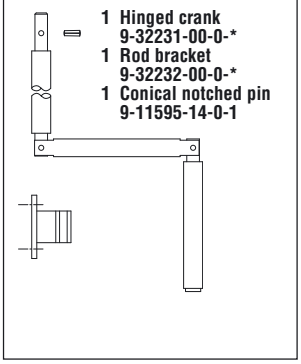


Bag of vertical gear
K-14219-00-0-*

Fitting requirements for openers with vertical gear according to quantity of stays for schemes 1 to 4n

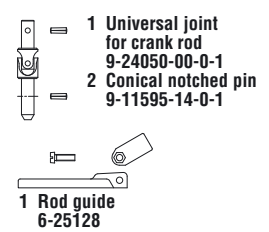
Quantity 1	2n	3n	4n	Description	PU	Article No.
1	1	1	1	**Basic box VENTUS F 300** without lever handle with angular sash bracket – overlap 0-25 mm	1	K-14320-00-0-*
	1	2	3	**Bag of stay VENTUS F 300** with angular sash bracket – overlap 0-25 mm	1	K-13999-00-0-*
1	1	1	1	**Horizontal rod**, Ø 10 mm		
1	1	1	1	**Cover profile** für horizontal rod		
				To be cut from: Bag of rod/Cover profile		
				length 600 mm	1	K-14001-06-0-*
				length 1870 mm	1	K-14001-18-0-*
				length 3500 mm	1	K-14001-33-0-*
alternatively:				Rod, Ø 10 mm, stock length 6000 mm	1	9-23055-60-0-1
				Cover profile, stock length 6000 mm	1	9-34497-60-0-*
1	1	1	1	**Bag of vertical gear F 300**	1	K-14219-00-0-*

Assembly drawing 0-42700

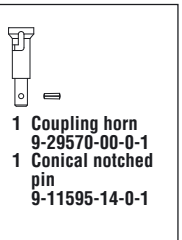


Fitting requirements for articulated crank rod and accessories according to types a to h for vertical and corner gears

Types a	b	c	d	e	f	g	h	Description	PU	Article No.
1	1	1	1	1	1	1	1	**Crank rod** – to be cut from: aluminium tube, stock length 5000 mm	1	9-32230-50-0-*
1	1	1	1	1	1	1	1	**Bag of hinged crank**	1	K-13162-00-0-*
		1	1	2	2	1	1	**Bag of universal joint** for crank rod	1	K-13164-00-0-1
	1		1		1		1	**Bag of coupling horn**	1	K-13165-00-0-1

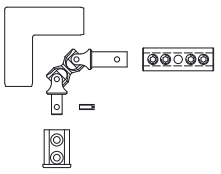


Bag of universal joint for crank rod
K-13164-00-0-1



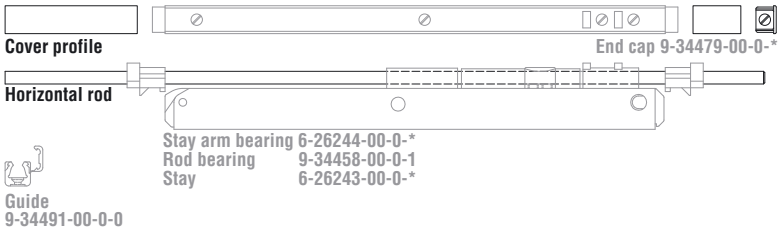
Bag of coupling horn
K-13165-00-0-1

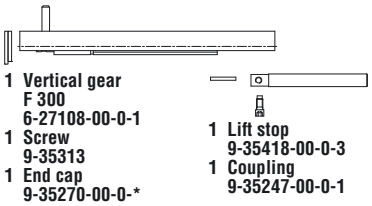
Standard version
Corner gear



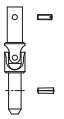
1 Cover
9-35357-00-0-*
1 Double universal joint
9-33333-00-0-1
1 Sleeve
6-26813-00-0-1
1 Bearing
9-35333-00-0-*
1 Screw
9-33322-00-0-0

Bag of corner gear K-14282-00-0-*





1 Vertical gear F 300
6-27108-00-0-1
1 Screw
9-35313
1 End cap
9-35270-00-0-*
1 Lift stop
9-35418-00-0-3
1 Coupling
9-35247-00-0-1



1 Universal joint for gear
9-33323-00-0-1
1 Screw
9-33322-00-0-0
1 Conical notched pin
9-11595-14-0-1

Bag of vertical gear K-14219-00-0-*

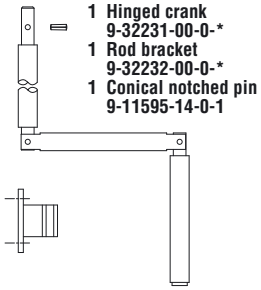
Fitting requirements for openers with corner gear according to quantity of stays for schemes 1 to 4n

Stück 1	2n	3n	4n	Bezeichnung	VE	Bestell-Nr.
1	2	3	4	**Bag of stay VENTUS F 300** with angular sash bracket – overlap 0-25 mm	1	K-13999-00-0-*
1	1	1	1	**End cap**	1	9-34479-00-0-*
1	1	1	1	**Horizontal rod**, Ø 10 mm		
1	1	1	1	**Cover profile** für horizontal rod		
				To be cut from: Bag of rod/Cover profile		
				length 600 mm	1	K-14001-06-0-*
				length 1870 mm	1	K-14001-18-0-*
				length 3500 mm	1	K-14001-33-0-*
				alternatively: Rod, Ø 10 mm, stock length 6000 mm	1	9-23055-60-0-1
				Cover profile, stock length 6000 mm	1	9-34497-60-0-*
1	1	1	1	**Bag of vertical gear F 300**	1	K-14219-00-0-*
1	1	1	1	**Bag of corner gear**	1	K-14282-00-0-*

Assembly drawing 0-42700

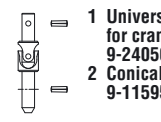
Fitting requirements for articulated crank rod and accessories according to types a to h for vertical and corner gears

Types a	b	c	d	e	f	g	h	Description	PU	Article No.
1	1	1	1	1	1	1	1	**Crank rod** – to be cut from: aluminium tube, stock length 5000 mm	1	9-32230-50-0-*
1	1	1	1	1	1	1	1	**Bag of hinged crank**	1	K-13162-00-0-*
		1	1	2	2	1	1	**Bag of universal joint** for crank rod	1	K-13164-00-0-1
	1		1		1		1	**Bag of coupling horn**	1	K-13165-00-0-1



1 Hinged crank
9-32231-00-0-*
1 Rod bracket
9-32232-00-0-*
1 Conical notched pin
9-11595-14-0-1

Bag of hinged crank K-13162-00-0-*



1 Universal joint for crank rod
9-24050-00-0-1
2 Conical notched pin
9-11595-14-0-1

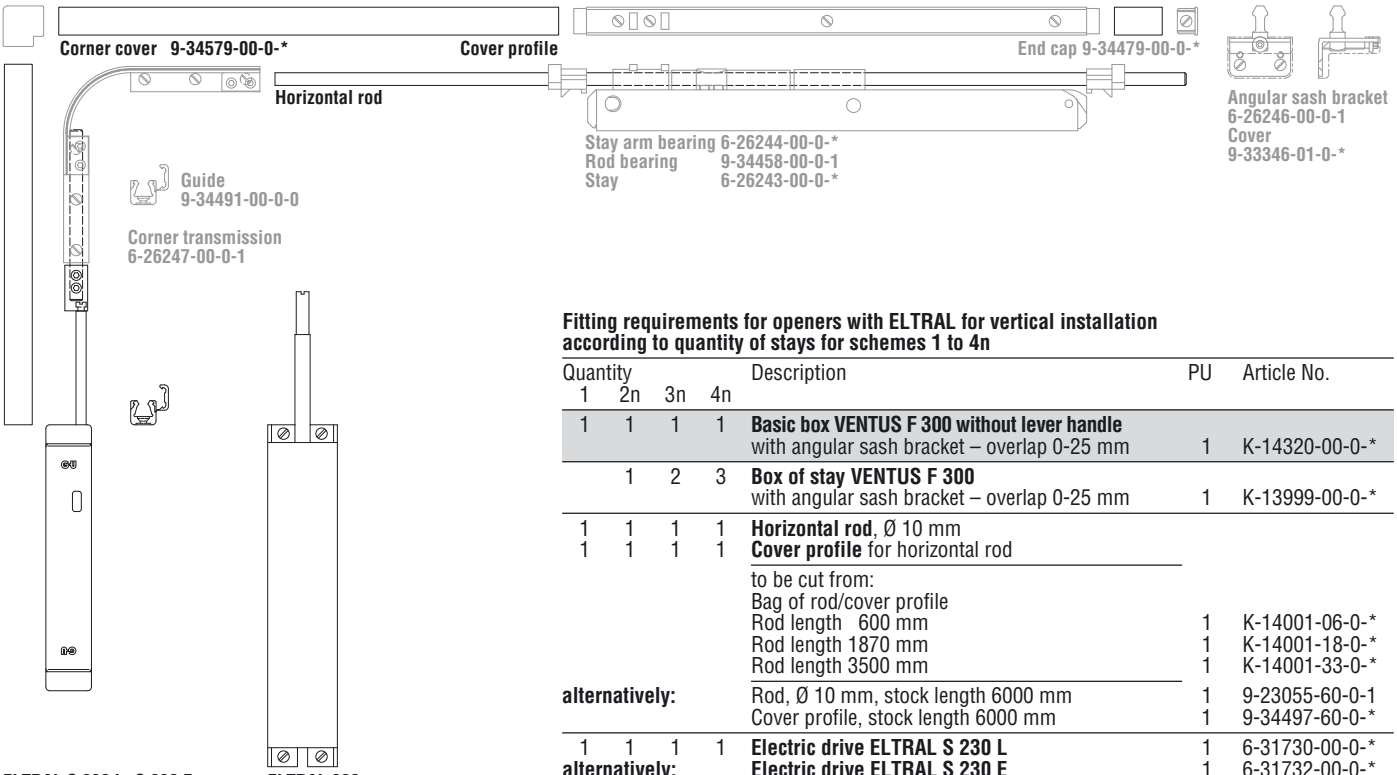
1 Rod guide
6-25128

Bag of universal joint for crank rod K-13164-00-0-1

1 Coupling horn
9-29570-00-0-1
1 Conical notched pin
9-11595-14-0-1

Bag of coupling horn K-13165-00-0-1

Standard version
ELTRAL, vertical installation on the side



ELTRAL S 230 L, S 230 E
Bag of connecting parts
K-14203-00-0-1
1 Connecting rod
9-34764-00-0-1
1 Coupling
6-26815-00-0-1
1 Guide
9-34491-00-0-0

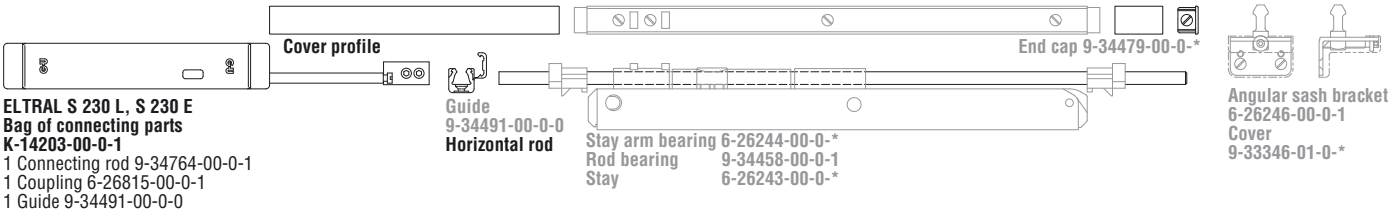
ELTRAL 300
1 Connecting rod
9-35331-00-0-1

Fitting requirements for openers with ELTRAL for vertical installation according to quantity of stays for schemes 1 to 4n

Quantity 1	2n	3n	4n	Description	PU	Article No.
1	1	1	1	**Basic box VENTUS F 300 without lever handle** with angular sash bracket – overlap 0-25 mm	1	K-14320-00-0-*
	1	2	3	**Box of stay VENTUS F 300** with angular sash bracket – overlap 0-25 mm	1	K-13999-00-0-*
1	1	1	1	**Horizontal rod**, Ø 10 mm		
1	1	1	1	**Cover profile** for horizontal rod		
				to be cut from: Bag of rod/cover profile		
				Rod length 600 mm	1	K-14001-06-0-*
				Rod length 1870 mm	1	K-14001-18-0-*
				Rod length 3500 mm	1	K-14001-33-0-*
alternatively:				Rod, Ø 10 mm, stock length 6000 mm	1	9-23055-60-0-1
				Cover profile, stock length 6000 mm	1	9-34497-60-0-*
1	1	1	1	**Electric drive ELTRAL S 230 L**	1	6-31730-00-0-*
alternatively:				**Electric drive ELTRAL S 230 E**	1	6-31732-00-0-*
1	1	1	1	**Bag of connecting parts**, B = 620-3600	1	K-14203-00-0-1
1	1	1	1	**Vertical** rod, to be cut from rod Ø 10 mm		
alternatively:				**Electric drive ELTRAL 300 E1**	1	9-31020-01-0-*
alternatively:				**Connecting rod**, Ø 12 mm, B = 605–3600 mm	1	9-35331-00-0-1

Assembly drawing 0-42700
Assembly drawings ELTRAL S 230 0-42807, ELTRAL 300 0-42710

Standard version
ELTRAL, horizontal installation at the top



ELTRAL S 230 L, S 230 E
Bag of connecting parts
K-14203-00-0-1
1 Connecting rod 9-34764-00-0-1
1 Coupling 6-26815-00-0-1
1 Guide 9-34491-00-0-0

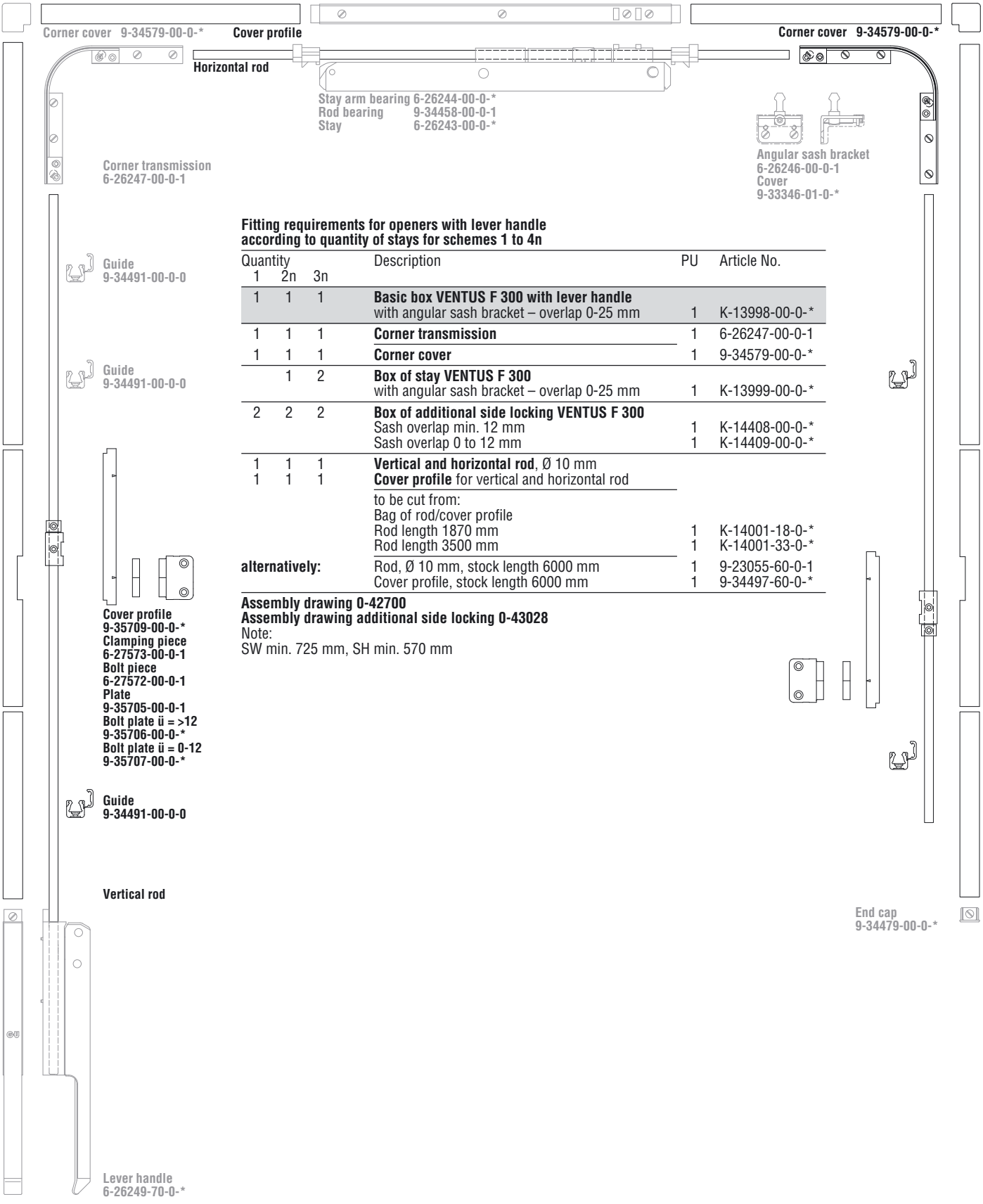
ELTRAL 300
Bag of connecting parts
K-14202-00-0-1
1 Connecting rod 9-31018-01-0-1
1 Coupling 6-26814-00-0-1
1 Guide 9-34491-00-0-0

Fitting requirements for openers with ELTRAL for horizontal installation according to quantity of stays for schemes 1 to 4n

Quantity 1	2n	3n	4n	Description	PU	Article No.
1	2	3	4	**Box of stay VENTUS F 300** with angular sash bracket – overlap 0-25 mm	1	K-13999-00-0-*
1	1	1	1	**End cap**	1	9-34479-00-0-*
1	1	1	1	**Horizontal rod**, Ø 10 mm		
1	1	1	1	**Cover profile** for horizontal rod		
				to be cut from Bag of rod/cover profile		
				Rod length 600 mm	1	K-14001-06-0-*
				Rod length 1870 mm	1	K-14001-18-0-*
				Rod length 3500 mm	1	K-14001-33-0-*
alternatively:				Rod, Ø 10 mm, stock length 6000 mm	1	9-23055-60-0-1
				Cover profile, stock length 6000 mm	1	9-34497-60-0-*
1	1	1	1	**Electric drive ELTRAL S 230 L**	1	6-31730-00-0-*
alternatively:				**Electric drive ELTRAL S 230 E**	1	6-31732-00-0-*
1	1	1	1	**Bag of connecting parts**, B = 825-3600	1	K-14203-00-0-1
alternatively:				**Electric drive ELTRAL 300 E1**	1	9-31020-01-0-*
alternatively:				**Bag of connecting parts 300**, B = 850-3600	1	K-14202-00-0-1

Assembly drawing 0-42700
Assembly drawings ELTRAL S 230 0-42807, ELTRAL 300 0-42710

Standard version
Lever handle additional side locking

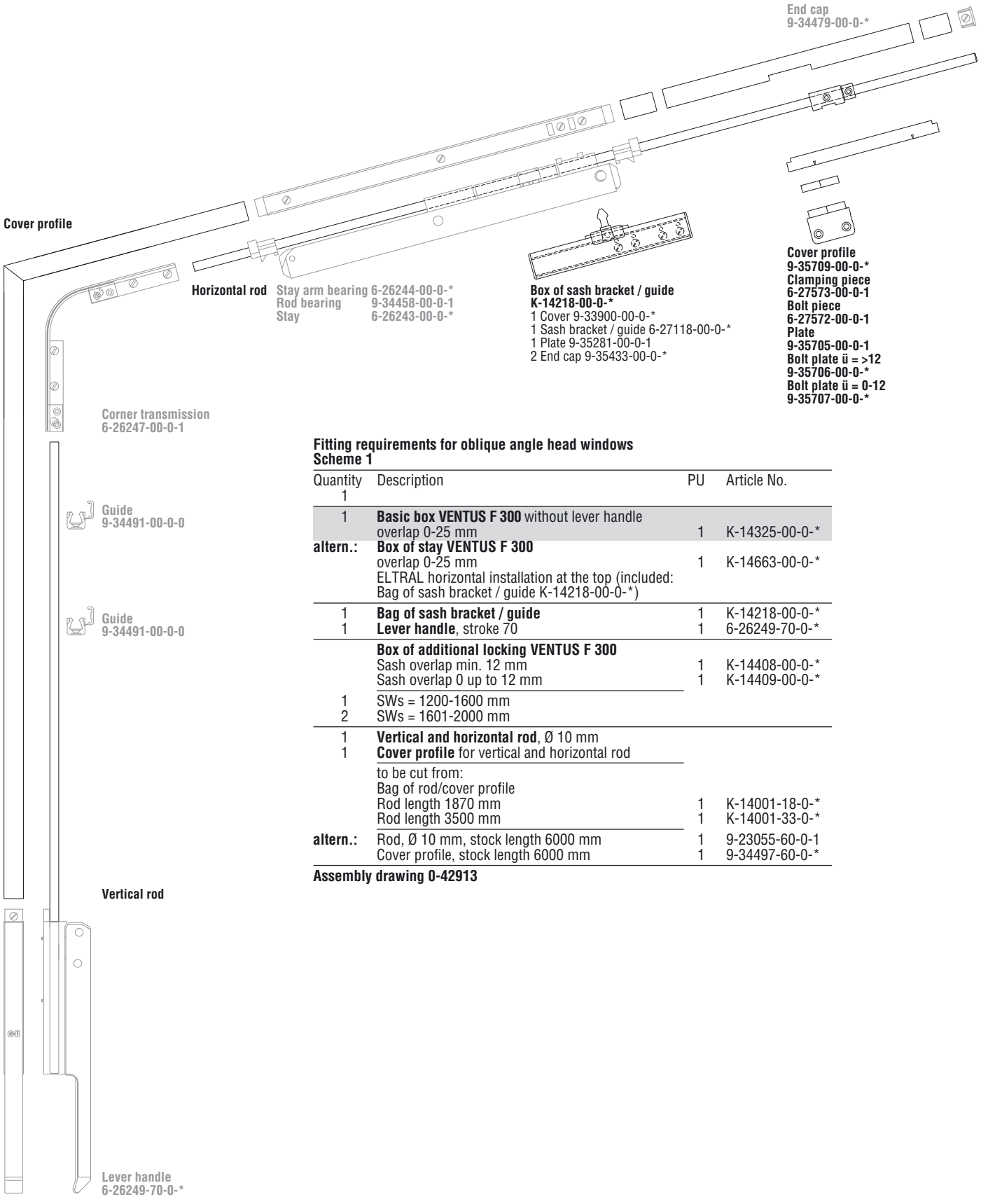


Fitting requirements for openers with lever handle according to quantity of stays for schemes 1 to 4n

Quantity 1	2n	3n	Description	PU	Article No.
1	1	1	**Basic box VENTUS F 300 with lever handle** with angular sash bracket – overlap 0-25 mm	1	K-13998-00-0-*
1	1	1	**Corner transmission**	1	6-26247-00-0-1
1	1	1	**Corner cover**	1	9-34579-00-0-*
	1	2	**Box of stay VENTUS F 300** with angular sash bracket – overlap 0-25 mm	1	K-13999-00-0-*
2	2	2	**Box of additional side locking VENTUS F 300**		
			Sash overlap min. 12 mm	1	K-14408-00-0-*
			Sash overlap 0 to 12 mm	1	K-14409-00-0-*
1	1	1	**Vertical and horizontal rod**, Ø 10 mm		
1	1	1	**Cover profile** for vertical and horizontal rod		
			to be cut from:		
			Bag of rod/cover profile		
			Rod length 1870 mm	1	K-14001-18-0-*
			Rod length 3500 mm	1	K-14001-33-0-*
alternatively:			Rod, Ø 10 mm, stock length 6000 mm	1	9-23055-60-0-1
			Cover profile, stock length 6000 mm	1	9-34497-60-0-*

Assembly drawing 0-42700
Assembly drawing additional side locking 0-43028
Note:
SW min. 725 mm, SH min. 570 mm

Standard version
Oblique angle head windows



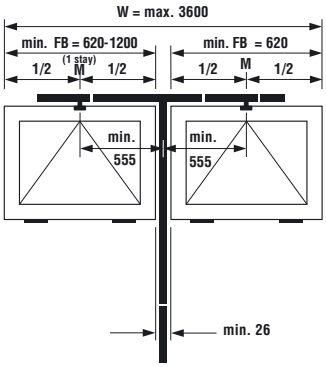
Fitting requirements for oblique angle head windows
Scheme 1

Quantity	Description	PU	Article No.
1			
1	**Basic box VENTUS F 300** without lever handle overlap 0-25 mm	1	K-14325-00-0-*
altern.:	**Box of stay VENTUS F 300** overlap 0-25 mm ELTRAL horizontal installation at the top (included: Bag of sash bracket / guide K-14218-00-0-*)	1	K-14663-00-0-*
1	**Bag of sash bracket / guide**	1	K-14218-00-0-*
1	**Lever handle**, stroke 70	1	6-26249-70-0-*
	Box of additional locking VENTUS F 300		
	Sash overlap min. 12 mm	1	K-14408-00-0-*
	Sash overlap 0 up to 12 mm	1	K-14409-00-0-*
1	SWs = 1200-1600 mm		
2	SWs = 1601-2000 mm		
1	**Vertical and horizontal rod**, Ø 10 mm		
1	**Cover profile** for vertical and horizontal rod		
	to be cut from: Bag of rod/cover profile		
	Rod length 1870 mm	1	K-14001-18-0-*
	Rod length 3500 mm	1	K-14001-33-0-*
altern.:	Rod, Ø 10 mm, stock length 6000 mm	1	9-23055-60-0-1
	Cover profile, stock length 6000 mm	1	9-34497-60-0-*

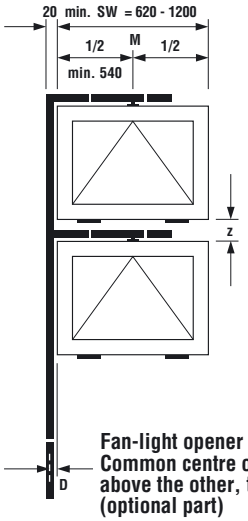
Assembly drawing 0-42913

Special versions
Standard version, minimum dimensions

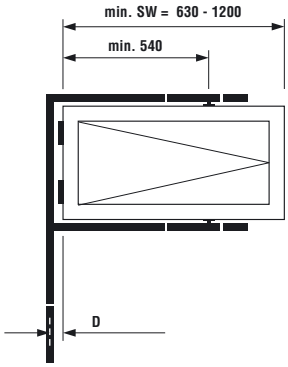
Special versions



Fan-light opener VENTUS F 200
Common centre operation of 2 side by side sashes, type 2n with T angle (optional part)

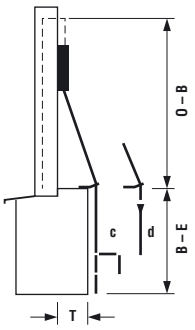


Fan-light opener VENTUS F 200
Common centre operation of 2 sashes one above the other, type 2ü with T angle (optional part)



Fan-light opener VENTUS F 200
Side hung sash with T angle (optional part)

Standard version, minimum dimensions

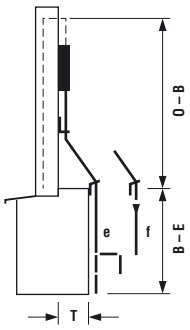


O-B min. Vert.	O-B min. Cor.	T
395	200	30
430	200	60
465	200	90
500	210	120
535	245	150
570	280	180
610	315	210
645	350	240
680	390	270
715	425	300

B-E min. Vert.	B-E min. Cor.	Type
475	475	c
515	515	d

O-E min. Vert.	O-E min. Cor.	Type
800	505	a
850	555	b

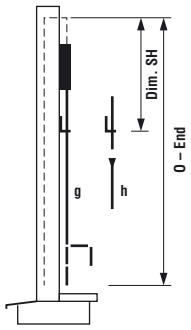
Vertical and corner gears
Types a, b, c and d



O-B min.	T
600	30
650	60
700	90
755	120
805	150
860	180
910	210
960	240
1015	270
1070	300

B-E min.	Type
475	e
515	f

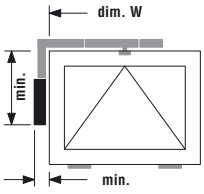
Vertical gear
Types e and f



dim. SH min.
350

O-End min.	Type
885	g
935	h

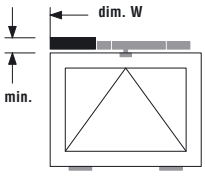
Vertical gear
Types g and h



	ELTRAL S [1]	300
Space requirement	39	56
Installation height	468	400
dim. W min.	620	605
dim. W max.	3600	6000

[1] ELTRAL S 230 L, S 230 E

ELTRAL, vertical installation on the side

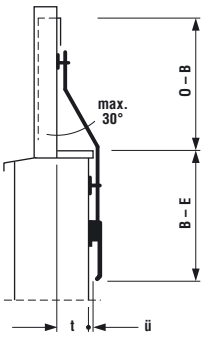


	ELTRAL S [1]	300
Space requirement	39	56
dim. W min.	825	850
dim. W max.	3600	6000

[1] ELTRAL S 230 L, S 230 E

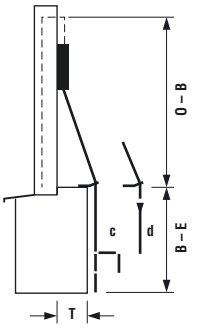
ELTRAL horizontal installation at the top

Rods cut to measure, minimum dimensions



O-B min.	T+Ü	Ü max.
300	30	5
350	60	5
420	100	5
475	130	5

Rod transmission
Ø 10 mm
dim. T + Ü max. 130 mm

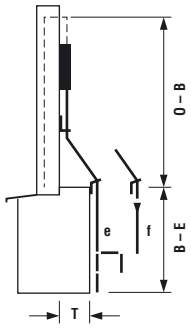


O-B min. Vert.	Cor.	T
395	200	30
430	200	60
465	200	90
500	210	120
535	245	150
570	280	180
610	315	210
645	350	240
680	390	270
715	425	300

B-E min. Vert.	Cor.	Type
475	475	c
515	515	d

O-E min. Vert.	Cor.	Type
800	505	a
850	555	b

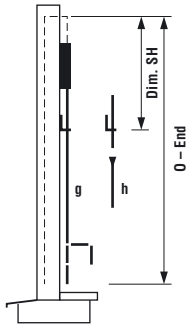
Vertical and corner gears
Type a, b, c and d



O-B min.	T
600	30
650	60
700	90
755	120
805	150
860	180
910	210
960	240
1015	270
1070	300

B-E min.	Type
475	e
515	f

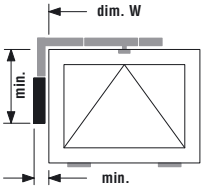
Vertical gear
Type e and f



dim. SH min.
350

O-End min.	Type
885	g
935	h

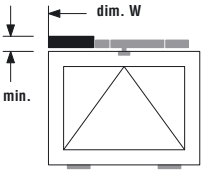
Vertical gear
Type g and h



	ELTRAL S [1]	300
Space requirement	39	56
Installation height	468	400
dim. W min.	620	605
dim. W max.	3600	6000

[1] ELTRAL S 230 L, S 230 E

ELTRAL, vertical installation on the side

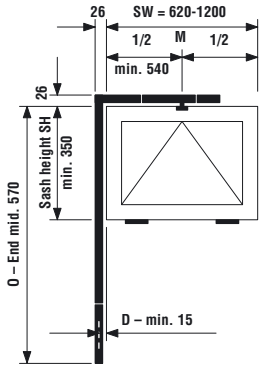


	ELTRAL S [1]	300
Space requirement	39	56
dim. W min.	825	850
dim. W max.	3600	6000

[1] ELTRAL S 230 L, S 230 E

ELTRAL horizontal installation at the top

Fan-light opener VENTUS F 300
Lever handle

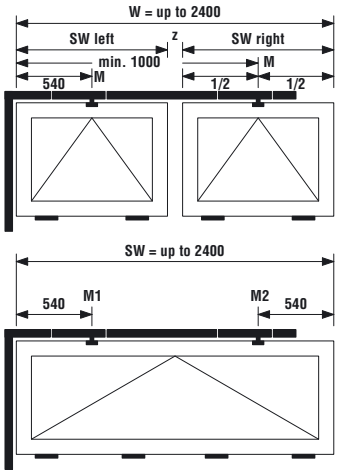


Scheme 1
Lever handle

Rod length depending on total sash width and dim. O-End

O-End	Length of vertical rod	Total sash width dim. SW or W up to 1200 Length of horizontal rod 540
1000	765	1305
1100	865	1405
1200	965	1505
1300	1065	1605
1400	1165	1705
1500	1265	1805
1600	1365	1905
1700	1465	2005
1800	1565	2105
1900	1665	2205
2000	1765	2305

Rod and cover profile size 33 = grey, 60 = white

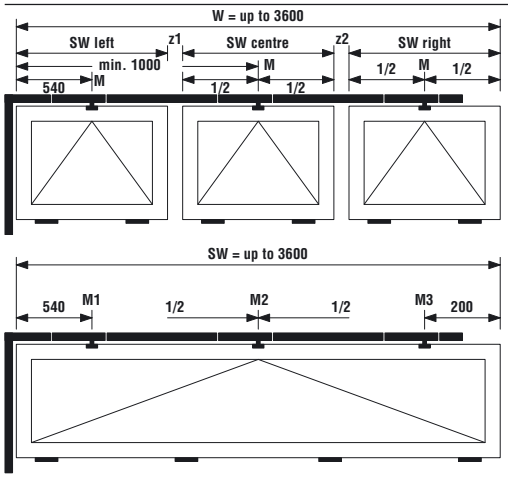


Scheme 2n

Rod length depending on total sash width and dim. O-End

O-End	Length of vertical rod	Total sash width dim. SW or W 1400	1600	1800	2000	2200	2400 Length of horizontal rod 1200	1400	1600	1800	2000	2200
1000	765	1965	2165	2365	2565	2765	2965
1100	865	2065	2265	2465	2665	2865	3065
1200	965	2165	2365	2565	2765	2965	3165
1300	1065	2265	2465	2665	2865	3065	3265
1400	1165	2365	2565	2765	2965	3165	3365
1500	1265	2465	2665	2865	3065	3265	3465
1600	1365	2565	2765	2965	3165	3365	3565
1700	1465	2665	2865	3065	3265	3465	3665
1800	1565	2765	2965	3165	3365	3565	3765
1900	1665	2865	3065	3265	3465	3665	3865
2000	1765	2965	3165	3365	3565	3765	3965

Rod and cover profile size 33 = grey, 60 = white

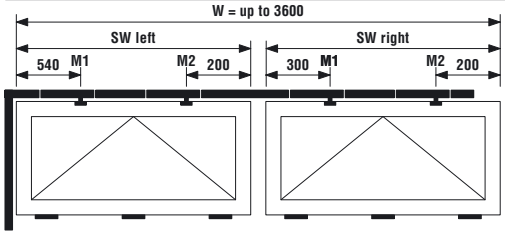


Scheme 3n

Rod length depending on total sash width and dim. O-End

O-End	Length of vertical rod	Total sash width dim. SW or W 2600	2800	3000	3200	3400	3600 Length of horizontal rod 2400	2600	2800	3000	3200	3400
1000	765	3165	3365	3565	3765	3965	4165
1100	865	3265	3465	3665	3865	4065	4265
1200	965	3365	3565	3765	3965	4165	4365
1300	1065	3465	3665	3865	4065	4265	4465
1400	1165	3565	3765	3965	4165	4365	4565
1500	1265	3665	3865	4065	4265	4465	4665
1600	1365	3765	3965	4165	4365	4565	4765
1700	1465	3865	4065	4265	4465	4665	4865
1800	1565	3965	4165	4365	4565	4765	4965
1900	1665	4065	4265	4465	4665	4865	5065
2000	1765	4165	4365	4565	4765	4965	5165

Rod and cover profile size 33 = grey, 60 = white



Scheme 4n

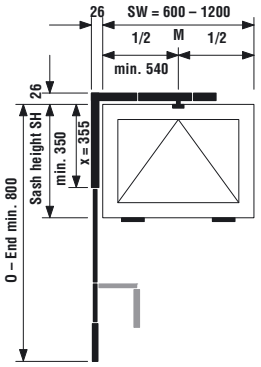
Rod length depending on total sash width and dim. O-End

O-End	Length of vertical rod	Total sash width dim. SW or W 2600	2800	3000	3200	3400	3600 Length of horizontal rod 2400	2600	2800	3000	3200	3400
1000	765	3165	3365	3565	3765	3965	4165
1100	865	3265	3465	3665	3865	4065	4265
1200	965	3365	3565	3765	3965	4165	4365
1300	1065	3465	3665	3865	4065	4265	4465
1400	1165	3565	3765	3965	4165	4365	4565
1500	1265	3665	3865	4065	4265	4465	4665
1600	1365	3765	3965	4165	4365	4565	4765
1700	1465	3865	4065	4265	4465	4665	4865
1800	1565	3965	4165	4365	4565	4765	4965
1900	1665	4065	4265	4465	4665	4865	5065
2000	1765	4165	4365	4565	4765	4965	5165

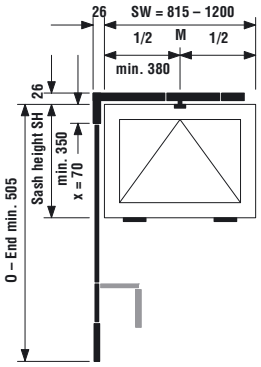
Rod and cover profile size 33 = grey, 60 = white

Length of horizontal rod

Fan-light opener VENTUS F 300
Vertical and corner gears, ELTRAL – vertical and horizontal installation



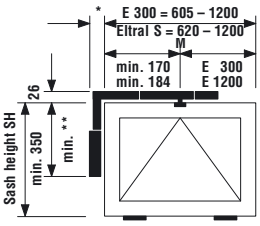
Scheme 1
Vertical gear



Scheme 1
Corner gear

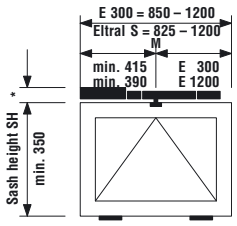
Length of horizontal rod depending on total sash width

Drive	Total sash width dim. FB or B 700	800	1000	1200
Vertical gear	540	540	540	540
Corner gear		585	635	735



Scheme 1
ELTRAL vertical, min. dimensions

	ELTRAL S [1]	300
*	39	56
**	468	400
W max.	3600	6000

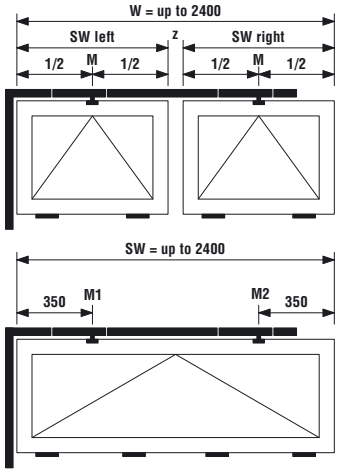


Scheme 1
ELTRAL horizontal, min. dimensions

	ELTRAL S [1]	300
*	39	56
W min.	825	850
W max.	3600	6000

Length of horizontal rod depending on total sash width

Drive	Total sash width dim. SW or W 700	800	1000	1200	
ELTRAL S vertical [1]	730	830	990	1090	[1]
ELTRAL S horizontal [1]		540	650	750	ELTRAL S 230 L
ELTRAL 300 vertical	610	710	870	970	S 230 E
ELTRAL 300 horizontal			620	720	

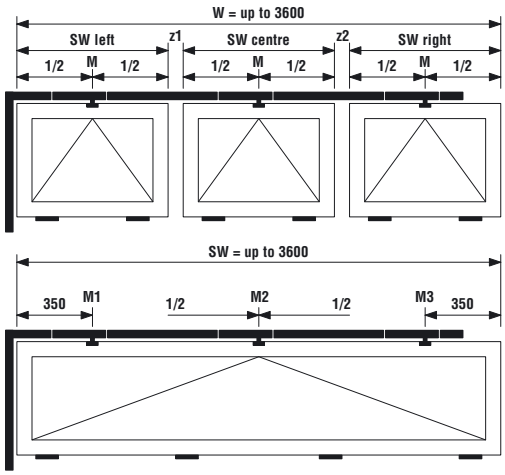


Scheme 2n

Length of horizontal rod depending on total sash width

Drive	Total sash width dim. SW or W 1400	1600	1800	2000	2200	2400
Vertical gear	1200	1400	1600	1800	2000	2200
Corner gear	1145	1345	1545	1745	1945	2145
ELTRAL S vertical [1]	1430	1630	1830	2030	2230	2430
ELTRAL S horizontal [1]	1090	1290	1490	1690	1890	2090
ELTRAL 300 vertical	1310	1510	1710	1910	2110	2310
ELTRAL 300 oben	1060	1260	1460	1660	1860	2060

[1] ELTRAL S 230 L, S 230 E

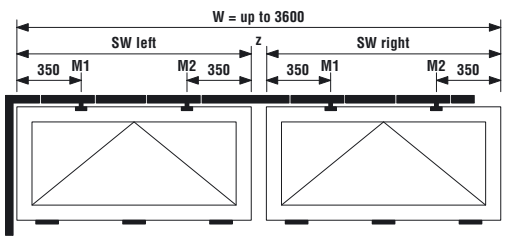


Scheme 3n

Length of horizontal rod depending on total sash width

Drive	Total sash width dim. SW or W 2600	2800	3000	3200	3400	3600
Vertical gear	2400	2600	2800	3000	3200	3400
Corner gear	2345	2545	2745	2945	3145	3345
ELTRAL S vertical [1]	2630	2830	3030	3230	3430	3630
ELTRAL S horizontal [1]	2290	2490	2690	2890	3090	3290
ELTRAL 300 vertical	2510	2710	2910	3110	3310	3510
ELTRAL 300 oben	2260	2460	2660	2860	3060	3260

[1] ELTRAL S 230 L, S 230 E



Scheme 4n

Length of horizontal rod depending on total sash width

Drive	Total sash width dim. SW or W 2600	2800	3000	3200	3400	3600
Vertical gear	2400	2600	2800	3000	3200	3400
Corner gear	2345	2545	2745	2945	3145	3345
ELTRAL S vertical [1]	2630	2830	3030	3230	3430	3630
ELTRAL S horizontal [1]	2290	2490	2690	2890	3090	3290
ELTRAL 300 vertical	2510	2710	2910	3110	3310	3510
ELTRAL 300 horizontal	2260	2460	2660	2860	3060	3260

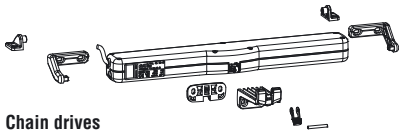
[1] ELTRAL S 230 L, S 230 E

ELTRAL S 230 L, ELTRAL S 230 E, ELTRAL S 24 L
ELTRAL 300 E1, ELTRAL 300/24

Application, illustration	Description			PU	Article No.
Aluminium windows	**Electric drive ELTRAL S 230 L for face-fixed fan-light openers**			1	6-31730-00-0-*
	Technical data				
	Supply voltage/frequence	V/Hz	230/50		
	Current consumption	A	0,15		
	Protection class		IP 50		
	Limit switch		load interruption		
	Intermittent duty ratio	%	20		
	Connecting plug		4-pin		
	Stroke max.	mm	70		
	Runtime per stroke of 50 mm	sec.	50		
	Pushing force	N	1200		
	Length	mm	210		
	Width	mm	36		
	Height	mm	76		
	Electric drive ELTRAL S 230 E for face-fixed fan-light openers			1	6-31732-00-0-*
	Technical data				
	Supply voltage/frequence	V/Hz	230/50		
	Current consumption	A	0,15		
	Protection class		IP 50		
	Limit switch		load interruption		
	Adjustment of opening width		electronic		
	Intermittent duty ratio	%	20		
	Connecting plug		4-pin		
	Stroke max.	mm	70		
	Runtime per stroke of 50 mm	sec.	50		
	Pushing force	N	1200		
	Length	mm	210		
	Width	mm	36		
	Height	mm	76		
	Elektroantrieb ELTRAL S 24 L for face-fixed fan-light openers			1	6-31734-00-0-*
	Technical data				
	Supply voltage/frequence	V DC	24		
	Current consumption	A	0,7		
	Protection class		IP 54		
	Limit switch		load interruption		
	Intermittent duty ratio	%	20		
	Connecting plug		4-polig		
	Stroke max.	mm	70		
	Runtime per stroke of 50 mm	sec.	45		
	Pushing force	N	1200		
	Length	mm	210		
	Width	mm	36		
	Height	mm	76		
Aluminium windows	**Electric drive ELTRAL 300 E1 for face-fixed fan-light openers**			1	9-31020-01-0-*
	Technical data				
	Supply voltage/frequence	V/Hz	230/50		
	Current consumption	A	0,10		
	Protection class		IP 54		
	Limit switch		included		
	Intermittent duty ratio	%	100		
	Cross section of cable	mm²	4 x 0,75		
	Cable length approx.	mm	1500		
	Stroke	mm	30-100		
	Factory set stroke	mm	40		
	Runtime per stroke of 50 mm	sec.	50		
	Pushing force	N	3000		
	Length	mm	270		
	Width	mm	55		
	Height	mm	102		
	Electric drive ELTRAL 300/24 for face-fixed fan-light openers			1	9-31021-00-0-*
	Technical data				
	Supply voltage/frequence	V DC	24		
	Current consumption	A	0,8		
	Protection class		IP 54		
	Limit switch		vorhanden		
	Intermittent duty ratio	%	100		
	Cross section of cable	mm²	4 x 0,75		
	Cable length approx.	mm	1500		
	Stroke	mm	100		
	Factory set stroke	mm	40		
	Runtime per stroke of 50 mm	sec.	50		
	Pushing force	N	3000		
	Length	mm	270		
	Width	mm	55		
	Height	mm	102		

Variable stroke, push/pull force up to 300 N

Fitting requirements for tilt sashes, top hung sashes and skylight

Application, illustration	Tilt sash	Description	PU	Article No.
Aluminium windows	1	**Chain drive ELTRAL KS 30/40 Solo – 230 V** [1] einclusive chain holder for tilt sash, chain bracket for top hung opening outward sash, pivoting brackets for both frame and soffit mounting	1	K-17433-00-0-*
 **Chain drives ELTRAL KS 30/40 – 230 V K-17433-00-0-*, K-17437-00-0-*, K-17435-00-0-***	1	alternatively for operation via hand-held radio transmitter: **Chain drive ELTRAL KS 30/40 Remote Solo – 230 V** [1] einclusive chain holder for tilt sash, chain bracket for top hung opening outward sash, pivoting brackets for both frame and soffit mounting	1	K-17437-00-0-*
Hand-held transmitter KS 30/40 K-17439-00-0-0	1	**Hand-held transmitter KS 30/40**	1	K-17439-00-0-0
	1	**Chain drive ELTRAL KS 30/40 Synchro – 230 V** [1] einclusive chain holder for tilt sash, chain bracket for top hung opening outward sash, pivoting brackets for both frame and soffit mounting	2	K-17435-02-0-*
Chain holder for top hung sash KS 30/40 9-44272-00-0-*		alternatively: Accessories for assembly on skylights and frame/mullion elements **Chain holder for top hung sash KS 30/40** [1] – horizontal top mounting	1	9-44272-00-0-*
Bag of chain holder for top hung sash KS 30/40 K-17441-00-0-*		**Bag of chain holder for top hung sash KS 30/40** [1] – vertical front mounting	1	K-17441-00-0-*
Bag of pivoting bracket KS 30/40 K-17440-00-0-*		**Bag of pivoting bracket KS 30/40** [1] – for skylight with low sash height	1	K-17440-00-0-*
		Bag of mounting bracket kit KS 30/40 [1] – inward opening	1	K-17720-00-0-*

Technical description
- User-friendly chain connection for simple release of sash
- pivoting brackets allow for use with low sash height
- electronic limit switch, self-positioning via microprocessor
- easy stroke adjustment: 110, 200, 300 and 400 mm (variable)

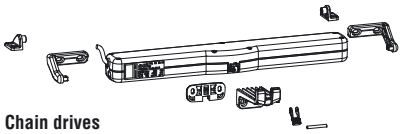
Technical data

– Supply voltage/frequence	230 V AC, 50 Hz
– Thrust/traction max.	300 N per drive
– Stroke – adjustable with DIP switch	110, 200, 300 and 400 mm
– Running time – 2/3 load	
ELTRAL KS 30/40 – 230 V	12 mm/s
ELTRAL KS 30/40 Remote – 230 V	10 mm/s
– Nominal current	0,12 A
– Intermittent duty ratio	30 %
– Ambient temperature	-5 to +65 °C
– Protection class	IP 30
– parallel switchable	up to max. 8 drives
– Connecting cable, fix	3 x 0,75 mm², ca. 2 m
– Length x Depth x Height	386,5 x 59 x 37 mm

[1] = Colour: 1 = grey (RAL 7047), 6 = black (RAL 9005), 7 = white (RAL 9016)

Variable stroke, push/pull force up to 300 N

Fitting requirements for tilt sashes, top hung sashes and skylight

Application, illustration	Tilt sash	Description	PU	Article No.
Aluminium windows	1	**Chain drive ELTRAL KS 30/40 Solo – 24 V** [1] eincluding chain holder for tilt sash, chain bracket for top hung opening outward sash, pivoting brackets for both frame and soffit mounting	1	K-17434-00-0-*
 **Chain drives ELTRAL KS 30/40 – 24 V K-17434-00-0-*, K-17436-00-0-***	1	**Chain drive ELTRAL KS 30/40 Synchro – 24 V** [1] eincluding chain holder for tilt sash, chain bracket for top hung opening outward sash, pivoting brackets for both frame and soffit mounting	2	K-17436-02-0-*
Chain holder for top hung sash KS 30/40 9-44272-00-0-*		alternatively: Accessories for assembly on skylights and frame/mullion elements		
		Chain holder for top hung sash KS 30/40 [1] – horizontal top mounting	1	9-44272-00-0-*
Bag of chain holder for top hung sash KS 30/40 K-17441-00-0-*		**Bag of chain holder for top hung sash KS 30/40** [1] – vertical front mounting	1	K-17441-00-0-*
Bag of pivoting bracket KS 30/40 K-17440-00-0-*		**Bag of pivoting bracket KS 30/40** [1] – for skylight with low sash height	1	K-17440-00-0-*
		Bag of mounting bracket kit KS 30/40 [1] – inward opening	1	K-17720-00-0-*

Technical description

– User-friendly chain connection for simple release of sash
– pivoting brackets allow for use with low sash height
– electronic limit switch, self-positioning via microprocessor
– easy stroke adjustment: 110, 200, 300 and 400 mm (variable)

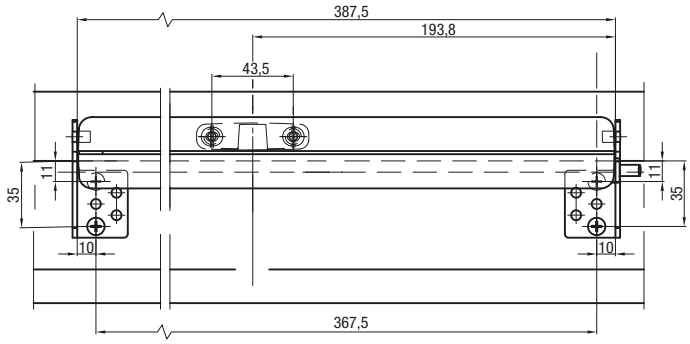
Technical data

– Supply voltage/frequence	24 V DC
– Thrust/traction max.	300 N per drive
– Stroke – adjustable with DIP switch	110, 200, 300 and 400 mm
– Running time – 2/3 load	10 mm/s
– Nominal current	0,9 A
– Intermittent duty ratio	30 %
– Ambient temperature	-5 to +65 °C
– Protection class	IP 30
– Connecting cable, fix	ca. 2 m
– Length x Depth x Height	386,5 x 59 x 37 mm

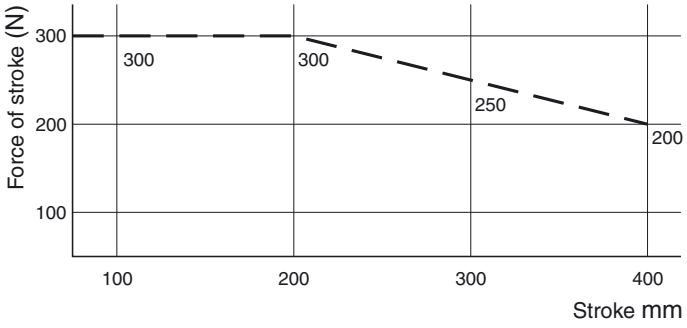
[1] = Colour: 1 = grey (RAL 7047), 6 = black (RAL 9005), 7 = white (RAL 9016)

Variable stroke, push/pull force up to 300 N

Dimensional drawing chain drive

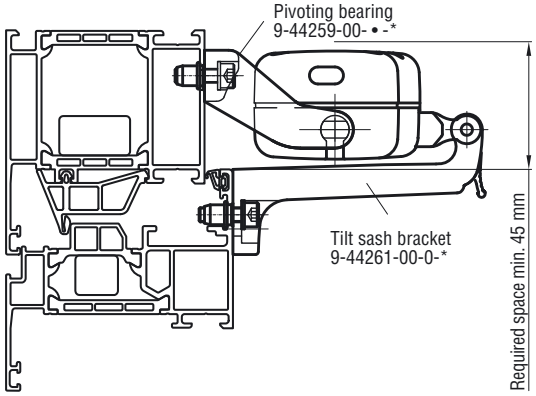


Load-displacement diagram



Assembly drawings

Tilt sashes inward opening – frame mounting



Fitting requirements for frame mounting

Qty.	Description	PU	Article No.
2	Pivoting bearing KS 30/40 [1] [2]	1	9-44259-00-• -*
1	Tilt sash bracket KS 30/40 [1]	1	9-44261-00-0-*

[1] * Colour: 1 = grey (RAL 7047), 6 = black (RAL 9005), 7 = white (RAL 9016)
[2] • L = left, R = right

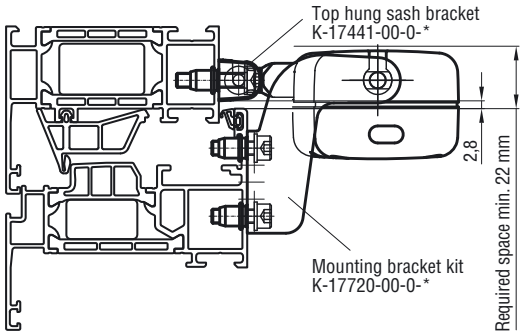
Min. sash height according to stroke

Stroke mm	100	200	300	400
Min. sash height mm	250	600	1100	1500

Assembly drawings
Hueck 0-45220 / 0-45221 / 0-45222 / 0-45223 / 0-45224
Reynaers 0-45225 / 0-45226 / 0-45227 / 0-45228
Wicona 0-45229 / 0-45230 / 0-45231 / 0-45232 / 0-45233 / 0-45234
Schüco 0-45072 / 0-45073 / 0-45074 / 0-45075 / 0-45076 / 0-45077 / 0-45078

Instruction for installation and operating guidelines
ELTRAL KS 30/40 Solo and Synchro M-00158-00
ELTRAL KS 30/40 Remote Solo M-00159-00

Tilt sashes inward opening – sash mounting



Fitting requirements for sash mounting

Qty.	Description	PU	Article No.
1	Bag of top hung sash bracket KS 30/40 [1]	1	K-17441-00-0-*
1	Bag of mounting bracket kit KS 30/40 [1]	1	K-17720-00-0-*

[1] = Colour: 1 = grey (RAL 7047), 6 = black (RAL 9005), 7 = white (RAL 9016)

Min. sash height according to stroke

Stroke mm	100	200	300	400
Min. sash height mm	200	400	650	900

Assembly drawings
Hueck 0-45208 / 0-45209 / 0-45210
Reynaers 0-45212 / 0-45213
Wicona 0-45214 / 0-45215 / 0-45216
Schüco 0-45069 / 0-45070 / 0-45071

Instruction for installation and operating guidelines
ELTRAL KS 30/40 Solo and Synchro M-00158-00
ELTRAL KS 30/40 Remote Solo M-00159-00

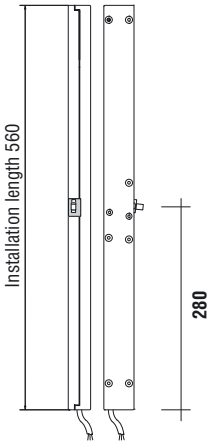
Stroke 200 to 400 mm, push/pull force up to 250 N

Application, illustration	Description	PU	Article No.
Aluminium windows	**Chain drive ELTRAL K 25 Solo – 230 V**		

Typ	Stroke mm	Thrust N	Traction N	PU	Article No.
K 25/200	200	250	250	1	K-17647-20-0-1
K 25/300	300	250	250	1	K-17647-30-0-1
K 25/400	400	250	250	1	K-17647-40-0-1

Chain drive ELTRAL K 25 Synchro – 230 V

Typ	Stroke mm	Thrust N	Traction N	PU	Article No.
K 25/200	200	250/drive	250/drive	2	K-17582-20-0-1
K 25/300	300	250/drive	250/drive	2	K-17582-30-0-1
K 25/400	400	250/drive	250/drive	2	K-17582-40-0-1



Technical description
High-performance chain drive
– For application preferably on side hung, tilt and top hung outward opening sashes
– Suitable for installation in the profile and concealed assembly
– Electronically controlled soft load interruption
– Casing of zinc die cast, plastics coated (RAL 9006)
– Reinforced sidebow chain, stainless steel
– Cable extension and stroke reduction not possible

Technical data

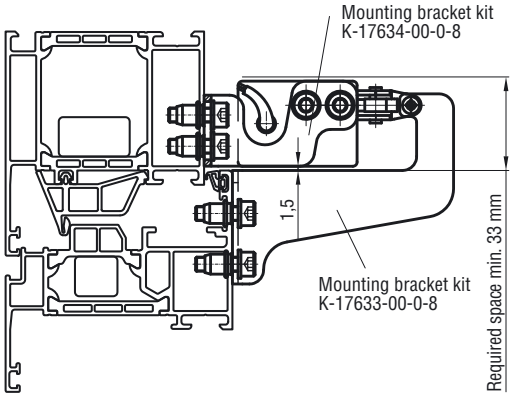
– Supply voltage/frequence	230 V AC, 50 Hz
– Current consumption	max. 0,2 A
– Running time – 2/3 load	7,0 mm/s
– Intermittent duty ratio	25 %
– Ambient temperature	-5 to +75 °C
– Protection class	IP 32
– Height	30 mm
– Depth	42 mm
– Connecting cable	4 x 0,75 mm², ca. 3 m

Assembly of ELTRAL K 25 – 230 V	**Mounting set K 25** **for tilt sashes inward opening – frame mounting** consisting of: – Mounting bracket kit K 20 / K 25 (K-17634-00-0-8) – Mounting bracket kit K 20 / K 25 (K-17633-00-0-8)	1	K-17594-00-0-8
	Mounting set K 25 **for tilt sashes inward opening – sash mounting** **for top hung sashes outward opening – frame mounting** consisting of: – Sash bracket K 20 / K 25 (K-17632-00-0-1) – Mounting bracket K 20 / K 25 (9-44724-00-9-8)	1	K-17595-00-0-8

Note:
Operating methods dubble (tandem) on request.

Assembly drawings

Tilt sashes inward opening – frame mounting



Min. sash height according to stroke

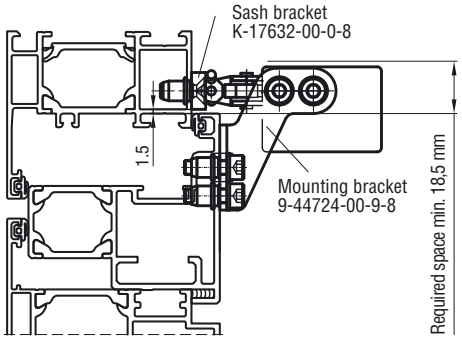
Stroke mm	200	300	400
Min. sash height mm	250*/425	350*/500	550*/600

* = with pivotable motor (attached with front screw only)

Assembly drawings
Hueck 0-45053 / 0-45056
Reynaers 0-45035 / 0-45037
Wicona 0-45020 / 0-45021
Schüco 0-44975 / 0-44976 / 0-44978 / 0-44980

Instruction for installation and operating guideline
ELTRAL K 25 Solo and Synchro 0-44929-GL-0

Tilt sashes inward opening – sash mounting
Top hung sashes outward opening – frame mounting



Min. sash height according to stroke

Stroke mm	200	300	400
Min. sash height mm	325	500	750

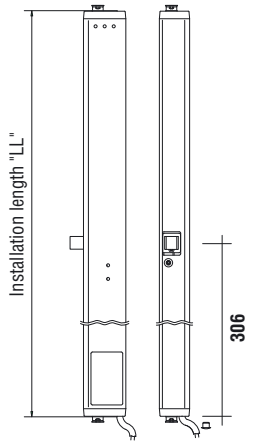
Assembly drawings
Hueck 0-45051 / 0-45052 / 0-45054 / 0-45055
Reynaers 0-45033 / 0-45034 / 0-45036 / 0-45038
Wicona 0-45017 / 0-45018 / 0-45019 / 0-45022 / 0-45023 / 0-45024 / 0-45025
Schüco 0-44977 / 0-44979 / 0-44981 / 0-44982 / 0-44983 / 0-44984

Instruction for installation and operating guideline
ELTRAL K 25 Solo and Synchro 0-44929-GL-0

Stroke 250 to 400 mm, push/pull force up to 600 N

Application, illustration	Description	PU	Article No.

Aluminium windows



Kettenantrieb ELTRAL K 60 Solo – 230 V

Typ	Stroke mm	Thrust N	Traction N	Length "LL" mm	PU	Article No.
K 60/250	250	600	600	537	1	K-17649-25-0-1
K 60/400	400	600	600	613	1	K-17649-40-0-1

Technical description
- Chain drive for high pressure loads
- Soft load interruption via integrated microcontroller module
- Stainless steel chain
- Stepless control of running smoothness with small load due to adjustable chain tension
- Low power consumption
- Mechanic release of chain for assembly or disassembly
- Sash height depending on type of mounting bracket
- Aluminium drive casing, EV 1 anodised
- Cable extension not possible!

Technical data

– Supply voltage/frequence	230 V AC, 50 Hz
– Current consumption	0,2 A
– Running time – $^2/_3$ load	10,0 mm/s
– Intermittent duty ratio	30%
– Protection class	IP 32
– Ambient temperature	-5°C bis +75°C
– Connectable in parallel	bis max. 8 Antriebe
– Connecting cable	6 x 0,75 mm², ca. 5 m
– Height x Depth	40 x 56 mm

Assembly of ELTRAL K 60 – 230 V

Mounting set K 60
for tilt sashes inward opening – frame mounting
consisting of:
– 2 x mounting bracket K 60 (9-44860-00-0-0)
– 1 x Z-mounting bracket K 60 (9-44713-00-0-0)
1 K-17662-00-0-1

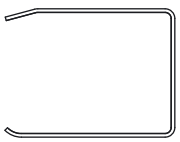
Mounting set K 60
for tilt sashes inward opening – sash mounting
for top hung sashes outward opening – frame mounting

Mounting bracket, short 1 K-17596-00-0-8
consisting of:
– Sash bracket K 60 (K-17641-00-0-1)
– Mounting bracket K 60 (9-44726-00-9-8)

Mounting bracket, long 1 K-17598-00-0-8
consisting of:
– Sash bracket K 60 (K-17641-00-0-1)
– Mounting bracket K 60 (9-44727-00-9-8)

Mounting set K 60 1 K-17660-00-0-1
for tilt sashes – sash mounting
for top hung sashes – frame mounting
consisting of:
– Sash bracket K 60 (K-17641-00-0-1)
– Folding bracket K 60 (K-17642-00-0-1)

Accessories ELTRAL K 60 – 230 V



Cover profile K 60
made from anodised aluminium, provides for:
– protection against dirt
– individual colouring
– sophisticated appearance

Length mm	PU	Article No.
1450	1	9-42211-00-0-1
3000	1	9-42212-00-0-1

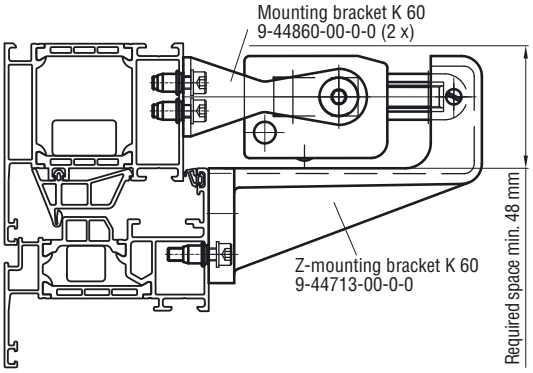
Mounting set for Cover profile K 60
consisting of: 1 K-17719-00-0-1
– 1 lateral cover, lh
– 1 lateral cover, rh
– 2 spacers
– 4 adhesive points
– 1 sealing plug (for cable outlet)

Note:
Operating methods dubble (tandem) on request.

Stroke 250 to 400 mm, push/pull force up to 600 N

Assembly drawings

Tilt sashes inward opening – frame mounting



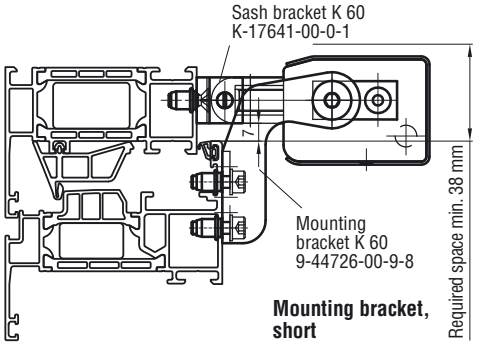
Min. sash height according to stroke

Stroke mm	250	400
Min. sash height mm	350	700

Assembly drawings
Hueck 0-45193 / 0-45194
Reynaers 0-45115
Wicona 0-45200 / 0-45201
Schüco 0-45104 / 0-45105

Instruction for installation and operating guideline
ELTRAL K 60 0-44937-GL-0

Tilt sashes inward opening – sash mounting
Top hung sashes outward opening – frame mounting



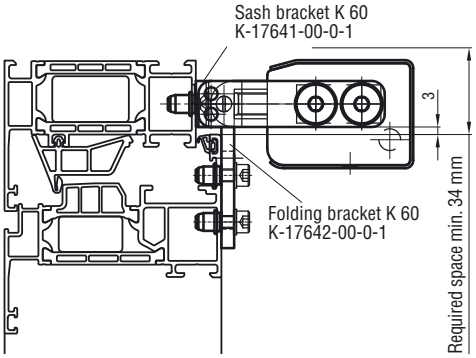
Min. sash height according to stroke

Stroke mm		250	400
Min. sash height mm	Mounting bracket, short	450	750

Assembly drawings
Hueck 0-45177 / 0-45178 / 0-45195 / 0-45196
Reynaers 0-45111 / 0-45116
Wicona 0-45187 / 0-45188 / 0-45202 / 0-45203
Schüco 0-45098 / 0-45100 / 0-45106 / 0-45107

Instruction for installation and operating guideline
ELTRAL K 60 0-44937-GL-0

Tilt sashes – sash mounting
Top hung sashes – frame mounting

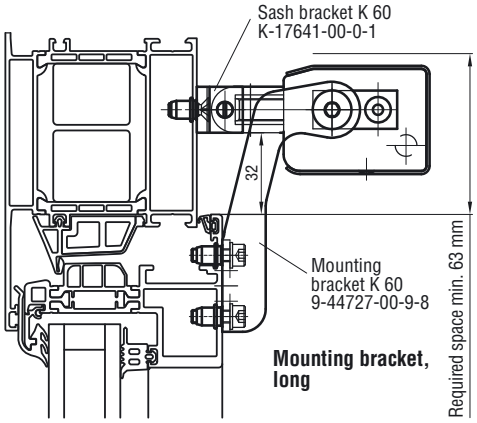


Min. sash height according to stroke

Stroke mm	250	400
Min. sash height mm	350	600

Assembly drawings
Hueck 0-45180 / 0-45181
Reynaers 0-45112
Wicona 0-45189 / 0-45190
Schüco 0-45099 / 0-45101

Instruction for installation and operating guideline
ELTRAL K 60 0-44937-GL-0



Min. sash height according to stroke

Stroke mm		250	400
Min. sash height mm	Mounting bracket, long	250	400

Assembly drawings
Hueck 0-45182
Reynaers 0-45113
Wicona 0-45191
Schüco 0-45102

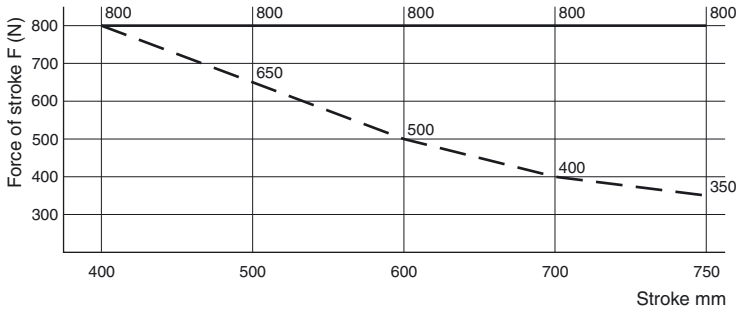
Instruction for installation and operating guideline
ELTRAL K 60 0-44937-GL-0

Stroke 300 to 750 mm, force of stroke 800 N

Application, illustration	Description	PU	Article No.
Aluminium windows	**Spindle drive ELTRAL S 80 – 230 V**		
	Types with various strokes		
	Stroke 300 mm	1	9-42094-30-0-1
	Stroke 500 mm	1	9-42094-50-0-1
	Stroke 750 mm	1	9-42094-75-0-1
	Technical description – Maintenance-free linear spindle drive – Resistant against humidity and corrosion – Aluminium drive casing, EV 1 anodised – Suitable for tilt, top hung, side hung, horizontal and vertical pivot windows, light domes, sunblinds – Durable, low noise, spindle with self-locking – Limit switch and electronic load interruption		
	Technical data – Supply voltage/frequence 230 V AC, 50 Hz – Current consumption 0,15 A – Max. force of stroke 800 N – Stress tested up to 3500 N – Running time – $^2/_3$ load 7,0 mm/s – Intermittent duty ratio 30% – Protection class IP 54 – Ambient temperature -5°C to +75°C – Connectable in parallel up to 8 drives at the maximum – Minimum length of drive 493 mm with stroke 300 mm – Connecting cable 6 x 0,75 mm², ca. 1 m		
Assembly of ELTRAL S 80 – 230 V	**Mounting set S 80** [1] consisting of: – Mounting bracket D/S – Sash bracket S/Z	1	K-17774-00-0-1

[1] = for sash height up to 400 mm

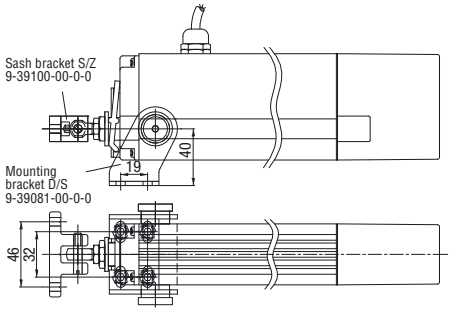
Load-displacement diagram



– mounting by the front part (1st third of motor length)

– mounting by the rear part (2nd and 3rd third of motor length)

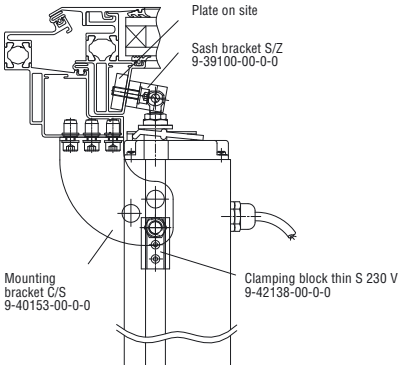
Assembly drawings



Mounting with mounting bracket D/S

Assembly drawings
0-45312 / 0-45309 / 0-45310

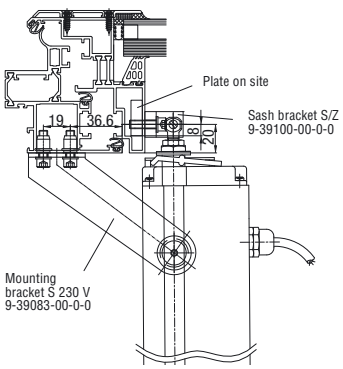
Instruction for installation and operating guideline
ELTRAL S 80 0-45289-GJ-0



Mounting with mounting bracket C/S

Assembly drawing
0-45308

Instruction for installation and operating guideline
ELTRAL S 80 0-45289-GJ-0

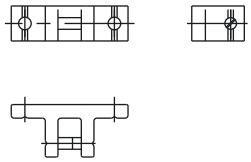
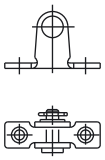
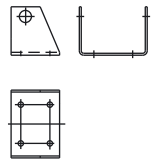
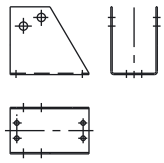
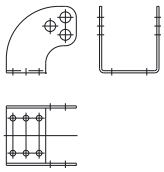
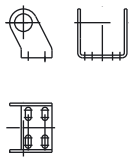
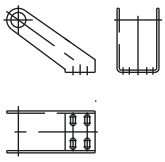


Mounting with mounting bracket S 230 V

Assembly drawing
0-45311

Instruction for installation and operating guideline
ELTRAL S 80 0-45289-GJ-0

Supports for sash, mounting brackets, clamping block thick

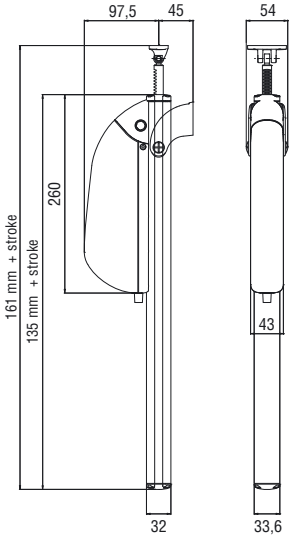
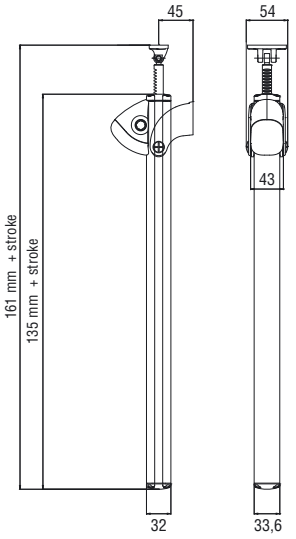
Application, illustration	Description	PU	Article No.
	**Support for sash S/Z** – Aluminium Dimensions Width 60,0 mm Height 18,0 mm Depth 27,0 mm	1	9-39100-00-0-0
	**Support for sash vertical S/Z** – steel zinc plated Dimensions Width 62,0 mm Height 17,0 mm Depth 37,0 mm	1	9-39102-00-0-1
	**Mounting bracket K 5** – steel zinc plated Dimensions Width 70,0 mm Height 50,0 mm Depth 50,0 mm	1	9-39078-00-0-1
	**Mounting bracket B/S** – steel zinc plated Dimensions Width 70,0 mm Height 120,0 mm Depth 102,0 mm	1	9-39079-00-0-1
	**Mounting bracket C/S** – stainless steel Dimensions Width 68,0 mm Height 80,0 mm Depth 76,0 mm	1	9-40153-00-0-1
	**Mounting bracket D/S** – clamp fixing, EV 1 colour Dimensions Width 56,0 mm Height 48,0 mm Depth 55,5 mm	1	9-39081-00-0-1
	**Mounting bracket S 230 V** – clamp fixing, steel zinc plated Dimensions Width 56,0 mm Height 118,0 mm Depth 85,5 mm	1	9-39083-00-0-1
	Clamping block thick S 230 V Dimensions Width 36,0 mm Height 20,0 mm Thickness 12,3 mm	1	9-39093-10-0-0

Clamping block thin, eyescrew

Application, illustration	Description		PU	Article No.
	Clamping block thin S 230 V Dimensions		1	9-42138-00-0-0
	Width	36,0 mm		
	Height	20,0 mm		
	Thickness	7,0 mm		
	Eyescrew – steel zinc plated Dimensions	Ø of eye		
	M 8 x 40	8,0 mm	1	9-40097-08-0-1

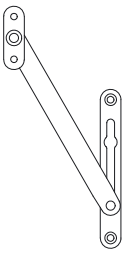
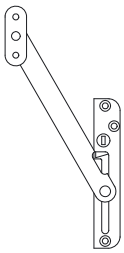
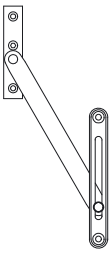
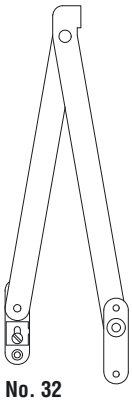
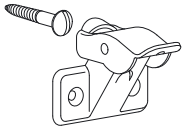
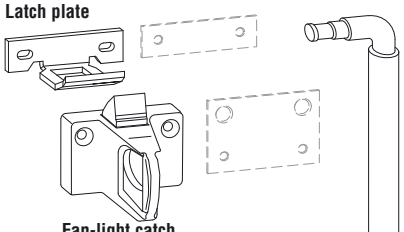
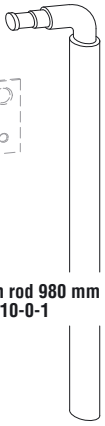
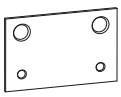
Rack and pinion drive ELTRAL Z 60 – 230 V

Stroke 180 to 1000 mm, push/pull force up to 600 N

Application, illustration	Description		PU	Article No.
Timber windows	**Rack and pinion drive ELTRAL Z 60 – 230 V** [1]			
	**Types with various strokes**	**Length**		
	Stroke 180 mm	315 mm	1	K-17845-18-0-1
	Stroke 230 mm	365 mm	1	K-17845-23-0-1
	Stroke 350 mm	485 mm	1	K-17845-35-0-1
	Stroke 550 mm	685 mm	1	K-17845-55-0-1
	Stroke 750 mm	785 mm	1	K-17845-75-0-1
	Stroke1000 mm	1135 mm	1	K-17845-01-0-1
	Rack and pinion slave unit ELTRAL Z 60 – 230 V [1]			
	Types with various strokes			
	Stroke 180 mm		1	K-17844-18-0-1
	Stroke 230 mm		1	K-17844-23-0-1
	Stroke 350 mm		1	K-17844-35-0-1
	Stroke 550 mm		1	K-17844-55-0-1
	Stroke 750 mm		1	K-17844-75-0-1
	Stroke1000 mm		1	K-17844-01-0-1
	Connecting shaft [2]			
	Length			
	1000 mm		1	9-45469-10-0-1
	1500 mm		1	9-45469-15-0-1
	2000 mm		1	9-45469-20-0-1
	2500 mm		1	9-45469-25-0-1
Rack and pinion driveELTRAL Z 60	**Technical description**			
	– Suitable for tilt, top hung opening outward, side hung sashes, for light domes and roof flaps			
	– Stainless steel push-pull tube			
	– Limit switch and electronic load disconnection			
	– Synchronisation of tandem and multiple systems via mechanical connecting rod			
	**Technical data**			
	– Supply voltage/frequence	230 V AC, 50 Hz		
	– Current consumption	0,145 A		
	– Push/pull force up to	600 N		
	– Locking force	3000 N		
	– Running time – 2/3 load	11 mm/s		
	– Intermittent duty ratio	30 %		
	– Protection class	IP 55		
	– Ambient temperature	-5°C to +65°C		
	– Connecting cable	2 m, 3-adrig		
Rack and pinion slave ELTRAL Z 60				
Assembly of ELTRAL Z 60 – 230 V	**Set fixing screws**		1	K-17846-00-0-1
	Mounting bracket		1	9-45466-00-0-1
	Support for sash		1	9-45465-00-0-1

[1] In the case of tandem or multiple systems, and also for the combination 'drive plus slave unit' please order the corresponding number of drives, respectively slave units.
[2] For the combination 'drive plus slave unit' it is necessary to order the connecting shaft separately (length depending on sash width).

Rebate stays and fan-light catches for tilt and top hung windows

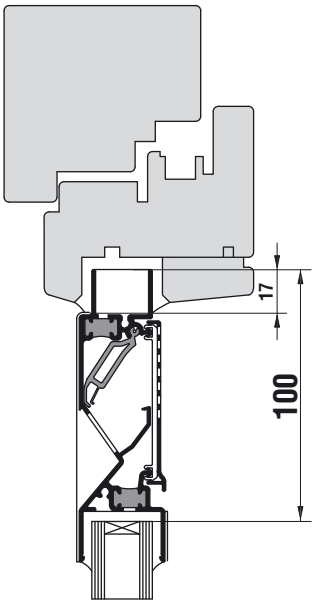
Application, illustration	Description	PU	Article No.	
Tilt windows **No. 23**  **No. 24**	**Rebate stay no. 23** with articulated arm, length			
	150	50	5-21020-15-0-1	
	Rebate stay no. 24 with articulated arm, length			
	150	50	5-21021-15-0-1	
	200	50	5-21021-20-0-1	
Tilt windows  **No. 27**  **No. 28 M**	**Rebate stay no. 27** with articulated arm, length		Left	Right
	150			
	with HEX Allen key locking device	50	5-20143-00-L-1	5-20143-00-R-1
	lockable with cylinder (without illustration)	40	5-20152-00-L-1	5-20152-00-R-1
	Key for cylinder (without illustration)	1	9-23074-00-0-0	
	Rebate stay no. 28 M with articulated arm, length			
	200	50	5-21041-20-0-1	
Top hung windows  **No. 32**	**Restrictor stay no. 32** with articulated arm	50	Left 5-20129-00-L-1	Right 5-20129-00-R-1
	Hexagonal Allen key SW 4 for rebate stays with locking device	1	9-11285-00-0-6	
Tilt windows Sashes with overlap	**Fan-light catch PERPLEX 45** screw-on version	100	5-20833-00-0-1	
 **PERPLEX 45** **Latch plate**  **Fan-light catch**  **Operation rod 980 mm G-12083-10-0-1**	**Bag of fan-light catch for 6 mm overlap thickness** [1] screw-on version	20	G-18412-01-0-*	
	Operation rod 980 mm [2]	1	G-12083-10-0-1	
	Packings for bag of fan-light catch [2]			
	Application	Thickness mm		
	Latch plate	0,5	1	E-12084-05-0-1
		1,0	1	E-12084-10-0-1
		3,0	1	E-12084-30-0-1
	Fan-light catch	0,5	1	E-12071-05-0-1
		1,0	1	E-12071-10-0-1
		3,0	1	E-12071-30-0-1

[1] * = Colour: 1 = EV 1, 6 = black, 7 = white (RAL 9016) [2] Not embodied in the bag of fan-light catch.

Overview of flap and rotating drum ventilator types

Ventilators for the installation in the glazing rebate and in the frame

Flap ventilator DUCOFLAT 100



Technical data

Glass reduction 100 mm

Installation in glazing rebate

Direction	horizontal
Connection to glazing	at bottom at top at side
Glass thickness	20 mm 24 mm 28 mm [1]

Installation in frame

Direction horizontal

Air flow 62 m³/h . m
Pressure differential 2 Pa

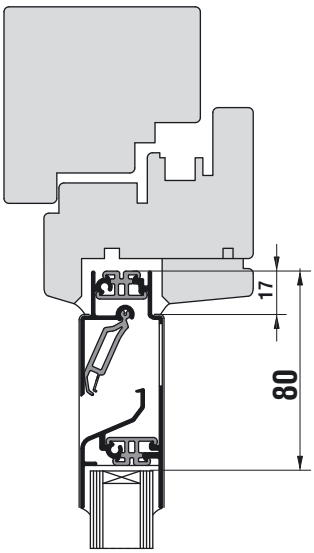
Max. length 2.500 mm
of installed ventilator

Seal
Plastic flap with gasket

Insect screen
Inside grille, punched, detachable for cleaning

[1] = only connection to glazing at bottom

Flap ventilator DUCOFLAT 80



Technical data

Glass reduction 80 mm

Installation in glazing rebate

Direction	horizontal
Connection to glazing	at bottom at top
Glass thickness	20 mm 24 mm 28 mm

Installation in frame

Direction horizontal

Air flow 57 m³/h . m
Pressure differential 2 Pa

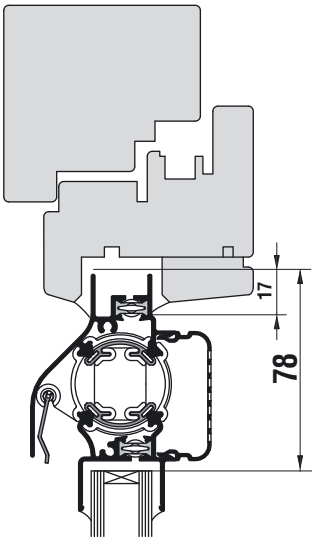
Max. length 2.500 mm
of installed ventilator

Seal
Plastic flap with gasket

Insect screen
Inside grille, slotted

Ventilators for the installation in the glazing rebate

Rotating drum ventilator DUCOTON 80 (ZR)



Technical data

Glass reduction 80 mm

ZR = self-regulating ventilation flap

Installation in glazing rebate

Direction	horizontal
Connection to glazing	at bottom
Glass thickness	20 mm 24 mm 28 mm 32 mm

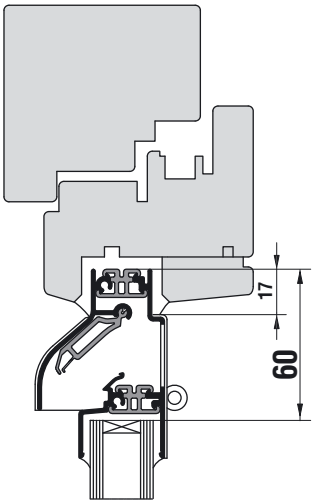
Airflow 50 m³/h . m
Pressure differential 2 Pa

Max. length 2.500 mm
of installed ventilator

Seal
Rotating drum with 4 finseal brushes

Insect screen
Inside grille, punched, detachable for cleaning

Flap ventilator DUCOPLUS 60



Technical data

Glass reduction 60 mm

Installation in glazing rebate

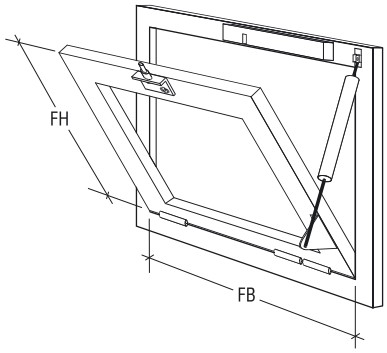
Direction	horizontal
Connection to glazing	at bottom
Glass thickness	20 mm 24 mm 28 mm 32 mm

Airflow 70 m³/h . m
Pressure differential 2 Pa

Max. length 2.500 mm
of installed ventilator

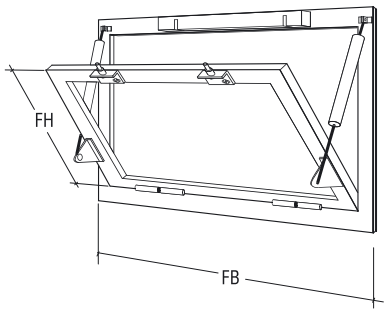
Seal
Plastic flap with gasket

Insect screen
Inside grille, slotted



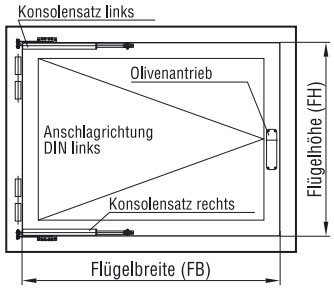
Opening system RWA 1000

for top, bottom or side hung windows opening inward
Sash width, timber and aluminium windows 450-1300 mm
Sash width, PVC windows 450-1000 mm



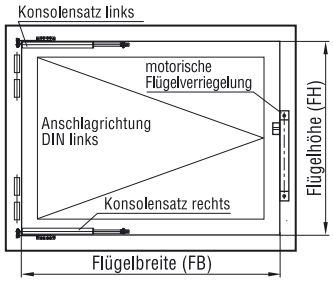
Opening system RWA 1000 S-SET

for top, bottom or side hung windows opening inward
Sash width, timber and aluminium windows 450-3000 mm
Sash width, PVC windows 450-1600 mm



Opening system RWA 1050

with lever handle ELTRAL OA
with integral closing sequence control
for side hung windows opening inward
Solo Max. sash height 1500 mm
Tandem Max. sash height 2500 mm



Opening system RWA 1050

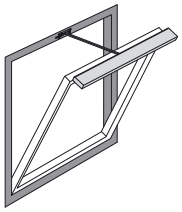
with electomotive sash locking ELTRAL VA
with integral closing sequence control
for side hung windows opening inward
Solo sash height 450-1300 mm
Tandem sash height 1200-2300 mm

Chain drives ELTRAL K

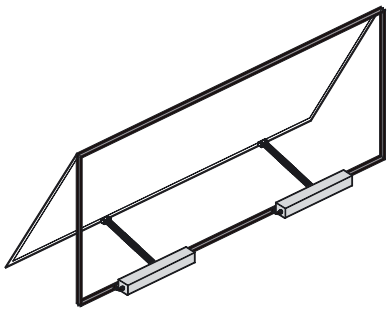
for top, bottom or side hung windows and roof-lights opening inward
for individual and synchronised use,
surface or concealed mounting

Chain drives ELTRAL	K 20*	K 25*	K 60
Push/pull force (N)	200	250	600
Opening widths (mm)	200/300/400	200/300/400/600	250-1000
Current consumption 24 V (A)	1,0	1,0	1,2
Min. sash height (mm) (depending on stroke) top/bottom hung window	400	400	200 (with stroke 250)
Dimensions (WxHxD in mm)	335x26x40	335x26x40	461x40x56 (with stroke 250)

* Not for roof-lights



Chain drive ELTRAL K
Solo – on bottom hung sash opening inward



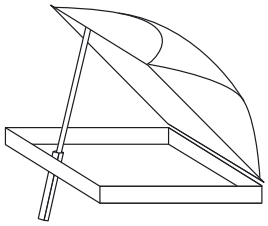
Chain drives ELTRAL K
Tandem – on top hung sash opening outward

Spindle drives ELTRAL S

for top or bottom hung windows and roof-lights opening in- and outward
for individual and synchronised use

Spindle drives ELTRAL	S 80	S 160
Push/pull force (N)	800*	1600*
Opening widths (mm)	300 – 1000	300 - 1000
Current consumption 24V (A)	1,4	1,2
Dimensions (WxHxD in mm)	(302+stroke)xØ36	(302+stroke)xØ36

* Observe load-displacement diagram



Spindle drive ELTRAL S
on roof-light