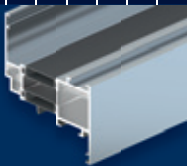




WINDOW TECHNOLOGY
DOOR TECHNOLOGY
AUTOMATIC ENTRANCE SYSTEMS
BUILDING MANAGEMENT SYSTEMS



WINDOW TECHNOLOGY – ORDER CATALOGUE



The Tilt&Turn hardware range ALU-JET 10

Edition 10/2022

Securing technology for you



The Gretsch-Unitas group

Opening, moving, closing, securing – true to its motto "Securing technology for you", Gretsch-Unitas group provides groundbreaking solutions for window and door technology, automatic entrance systems and building management systems. With its system brands, the group delivers solutions for burglar inhibition on doors and windows, for barrier-free building, for doors in escape and rescue routes, extending to individual facade solutions for projects.



Gretsch-Unitas GmbH Baubeschläge



GU in Ditzingen is the headquarters of the group, development, administration and the production of modern architectural hardware for window and door technology. Apart from different flexible assembly departments, the production site comprises a high-tech punching, galvanising and anodising facility.

BKS GmbH



BKS manufactures mechanical and electronic locking cylinders, locks, locking systems and panic locks for escape and rescue routes. Harmonised mechanical and electronic system solutions are available for access control.

FERCO International S.A.S.



Ferco is the largest production site for window hardware in France. As a subsidiary of the Gretsch-Unitas group, Ferco also offers customer support and distribution in France for all products of the group.



GU Automatic



GU Automatic offers innovative, secure and reliable solutions for automatic entrance systems and automatic door systems, revolving doors, all-glass sliding walls, security curved sliding doors and controlled physical access.

ela-soft



The successful GEMOS facility management and organisation system was designed by ela-soft, one of the market and technology leaders in the building technology branch.

Securing technology for you



Design freedom thanks to the modular ALU-JET 10 hardware

ALU-JET features state-of-the-art technology which means it can meet the high expectations for windows and moving facade elements in commercial construction projects. The ALU-JET 10 central locking system is the modular basis for all special designs such as Parallel-Projecting, Horizontal-Pivot or Vertical-Pivot windows, as well as Swing&Slide and Top-Hung windows. Safety through tested quality: The ALU-JET is tested according to EN 13126-8 and certified by ift according to QM 328.



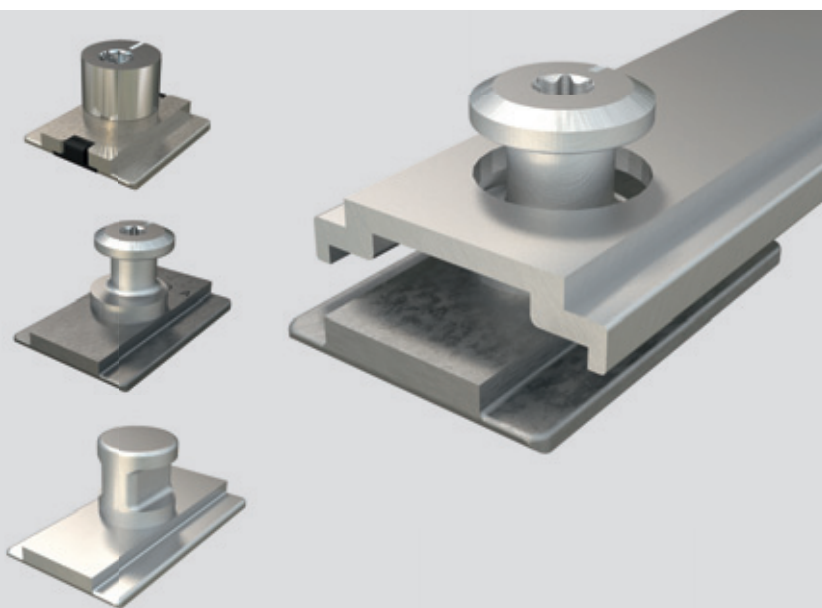


ALU-JET 10 central locking system



Product characteristics

- Universally applicable for all opening methods
- Uniform Ø 10 mm connecting rod holes for the coupling points and locking cams/handle connectors
- Burglar inhibition freely configurable: Further locking points can be added at any position of the connecting rod
- Leaf weights up to 300 kg possible
- Efficient installation:
 - toolless mounting of corner drives
 - only one continuous connecting rod per sash side
 - fixed connecting rod length on hinge side and bottom sash side (prefabrication possible)
- Non-handed mishandling device integrated in the corner-drive



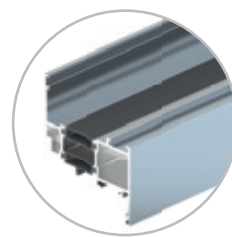
Security with a system

Anti-jemmy locking cams insertable from underneath, suitable for all resistance classes from basic security to RC3 according to EN 1627

Product overview

Designation	Rebate clearance [mm]	Frame grooves [mm]			Tested load-bearing capacity [kg]	Sash width [mm]	Sash height [mm]
		10/14	12/15	14/18			
ALU-JET 10 central locking system with ALU-JET 510 surface-mounted hinge-side	11.5	10/14	12/15	14/18	80 [1] 100 [2]	395-1600	500-2400
ALU-JET 10 central locking system with ALU-JET 710 surface-mounted hinge-side	11.5	10/14	12/15	14/18	130	410-1700	500-2800
ALU-JET 10 central locking system with ALU-JET CC610 concealed hinge-side	11.5	10/14	12/15*	14/18	150	500-1600	500-2800

[1] Windows: SRW 1300 mm x SRH 1200 mm | [2] Balcony-doors: SRW 900 mm x SRH 2300 mm | * on request
For all stated weights and dimensions, please refer to our application diagrams and the manufacturer's profile information!
For more information: www.g-u.com



ALU-JET 510 and ALU-JET 710 surface-mounted hinge-sides



ALU-JET 510

Elegant aesthetics
The standard solution
for all standard formats
available on the market



Product characteristics

- Universally applicable for Tilt&Turn, Tilt-First, Turn-Only and Tilt-Only sashes
- Efficient mounting through modularly preassembled modules
- Extensive range of surface finishes
- All components are non-handed
- Convenient hardware setting options
- Maintenance-free stay-hinges and corner-hinges



ALU-JET 710

Tried-and-tested technology

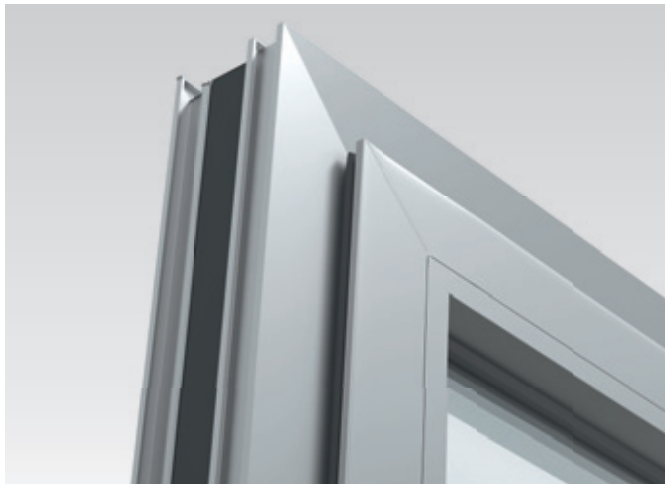
The project solution
for heavy window elements

Technical data

Designation	Rebate clearance [mm]	Frame grooves [mm]	Hinge-passage [mm]	Tested hardware load-bearing capacity [kg]	Sash width [mm]	Sash height [mm]
ALU-JET 510 surface-mounted hinge side	11.5	10/14 12/15 14/18	3.5	80 [1] 100 [2]	395–1600	500–2400
ALU-JET 710 surface-mounted hinge side	11.5	10/14 12/15 14/18	3.0	130	410–1700	500–2800

[1] Windows: SRW 1300 mm x SRH 1200 mm | [2] Balcony-doors: SRW 900 mm x SRH 2300 mm
For all stated weights and dimensions, please refer to our application diagrams and the manufacturer's profile information!
For more information: www.g-u.com

ALU-JET CC610 concealed hinge-side

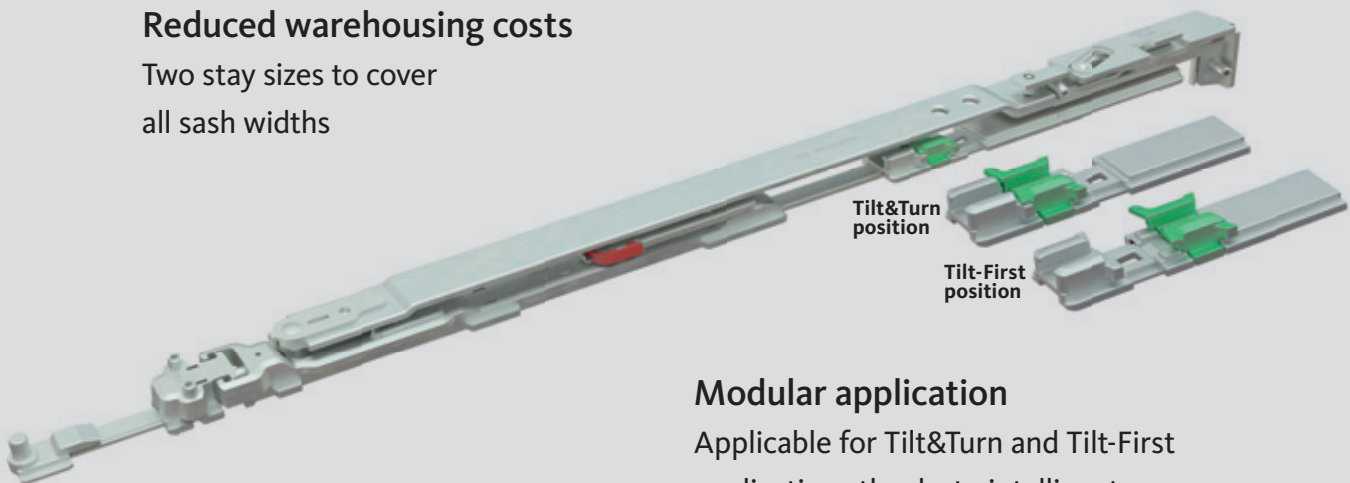


Product characteristics

- Universally applicable for Tilt&Turn, Tilt-First, Turn-Only and Tilt-Only sashes
- Sash weights up to 150 kg possible without additional components
- For hinge-side locking on Turn-Only sashes, the central locking system can be guided through the Turn-Only stay-guide

Reduced warehousing costs

Two stay sizes to cover all sash widths



Modular application

Applicable for Tilt&Turn and Tilt-First applications thanks to intelligent clamping technology

Product overview

Designation	Rebate clearance [mm]	Frame grooves [mm]	Tested hardware load-bearing capacity [kg]	Sash width [mm]	Sash height [mm]
ALU-JET CC610 concealed hinge-side	11.5	10/14 12/15* 14/18	150	500-1600	500-2800

* on request
For all stated weights and dimensions, please refer to our application diagrams and the manufacturer's profile information!
For more information: www.g-u.com

ALU-JET S800

The project solution for heavy facade elements up to 300 kg



Product characteristics

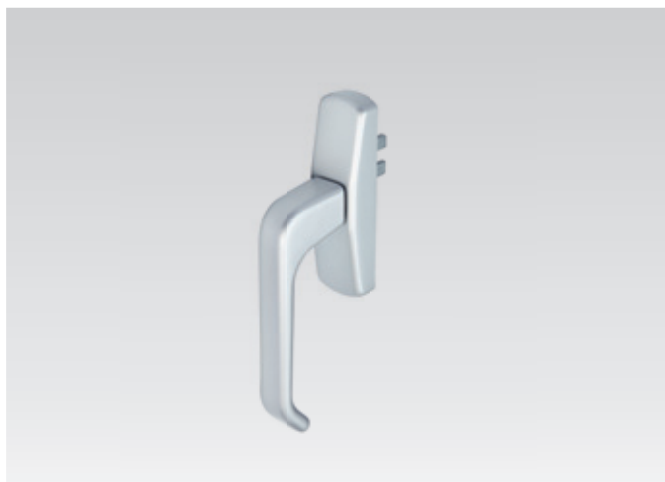
- Applicable for Turn-Only and Tilt-Only sashes
- Opening angle 180°
- For profile systems with hinge-passage from 7 mm
- Extensive range of surface finishes
- Maintenance-free, high-performance polymer bearings



Product overview

Designation	Rebate clearance [mm]	Frame grooves [mm]	Tested hardware load-bearing capacity [kg]	Sash width [mm]	Sash height [mm]
ALU-JET S800 Turn-Only hinge/Tilt-Only hinge	11.5	10/14 12/15 14/18	300	max. 1700 [1] max. 2800 [2]	max. 2800 [1] max. 1700 [2]

[1] Turn-Only sash | [2] Tilt-Only sash
For all stated weights and dimensions, please refer to our application diagrams and the manufacturer's profile information!
For more information: www.g-u.com



SPACIO geared turn handle

Geared turn handles

- Available in fork lengths of 22 mm and 33 mm
- With one carrier fork for all standard applications
- With two carrier forks for spreading function on Turn-Only sashes with 90° handle actuation angle
- Optionally with removable service handles
- Optionally tested in accordance with EN 1627



BELCANTO turn handle with insertable gear

Turn handles in combination with insertable gear

- Extensive range of designs and surface finishes
- Optional versions:
 - lockable, for Tilt-First function
 - lockable with key or push-button
 - removable service handles
 - tested in accordance with EN 13126-3
 - tested in accordance with EN 1627
- Insertable gear:
 - optionally with mishandling device
 - optionally with anti-drill plate and connecting rod fixing for increased burglar resistance up to RC3 according to EN 1627



Rosette-free turn handle with insertable gear

Rosette-free turn handles with insertable gear

- Turn handles without visible substructure for high design demands in projects
- Optional versions:
 - lockable, for Tilt-First function
 - lockable with key
- Installation without milling work on the aluminium profile
- Insertable gear:
 - with mishandling device



Parallel-Projecting hardware

The special solution for sashes with weights up to 400 kg, opening widths up to 250 mm and sash heights up to 5000 mm. Parallel-Projecting windows can be created with a comprehensive range of GU stays for all frame materials, such as timber, PVC, aluminium and timber/aluminium.

Turn-Only window hardware

Today's facades, with floor-to-ceiling glazing, are a challenge for standard hardware. Gretsch-Unitas meets these requirements with specially developed hinges for Turn-Only sashes. They are concealed in the rebate and can bear sash weights of up to 350 kg.

Projecting Top-Hung hardware

This hardware range offers a number of different Projecting Top-Hung friction stays with opening angles from 20° to 50°. Sashes can be made to a height of 2500 mm. Projecting Top-Hung windows can be made with GU stays for all frame materials, such as timber, PVC, aluminium and timber/aluminium

Special constructions

Our specialists have developed innovative opening mechanisms to meet individual customer requirements regarding ventilation elements in building envelopes. We draw on our many years of experience and creative ideas to produce solutions tailored to each project.

Possible constructions / solutions with Parallel-Projecting windows

Designation Parallel-Projecting friction stay	Max. sash weight* [kg]	Sash height [mm]	Sash width [mm]	Opening width [mm]	
				manual	motor-driven
PAS350	100	350– 750	350–2000	150	180
PAS450	100	450–1000	450–2000	180	250
PAS670	200	670–1500	670–2000	150	180
PAS930	200	930–2000	930–2000	180	250
PAS1135	200	1400–2100	1400–2000	180	250

*Higher weights are possible if required

Possible constructions / solutions with Turn-Only windows

Designation	Max. sash weight [kg]	Sash height [mm]	Sash width [mm]	Opening width [°]
Concealed Turn-Only hinge	350	425–3500	350–1600	95
Stainless steel Turn-Only hinge	200	430–2800	450–1400	180

Possible constructions / solutions with Projecting Top-Hung windows

Designation Projecting Top-Hung friction stay	Max. sash weight [kg]	Sash height [mm]	Sash width [mm]	Opening width [°]
SKS40	40	276– 640	450–2500	50
SKS50	50	640– 800	450–2500	50
SKS65	65	800–1100	450–2500	50
SKS65H	100	600–1100	450–2500	30
SKS100	100	1100–1500	520–2500	45
SKS100H	100	1500–2000	520–2500	20
SKS180	180	2000–2500	520–2500	20





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RC2 Overviews of hardware sets

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RC3 Overviews of hardware sets

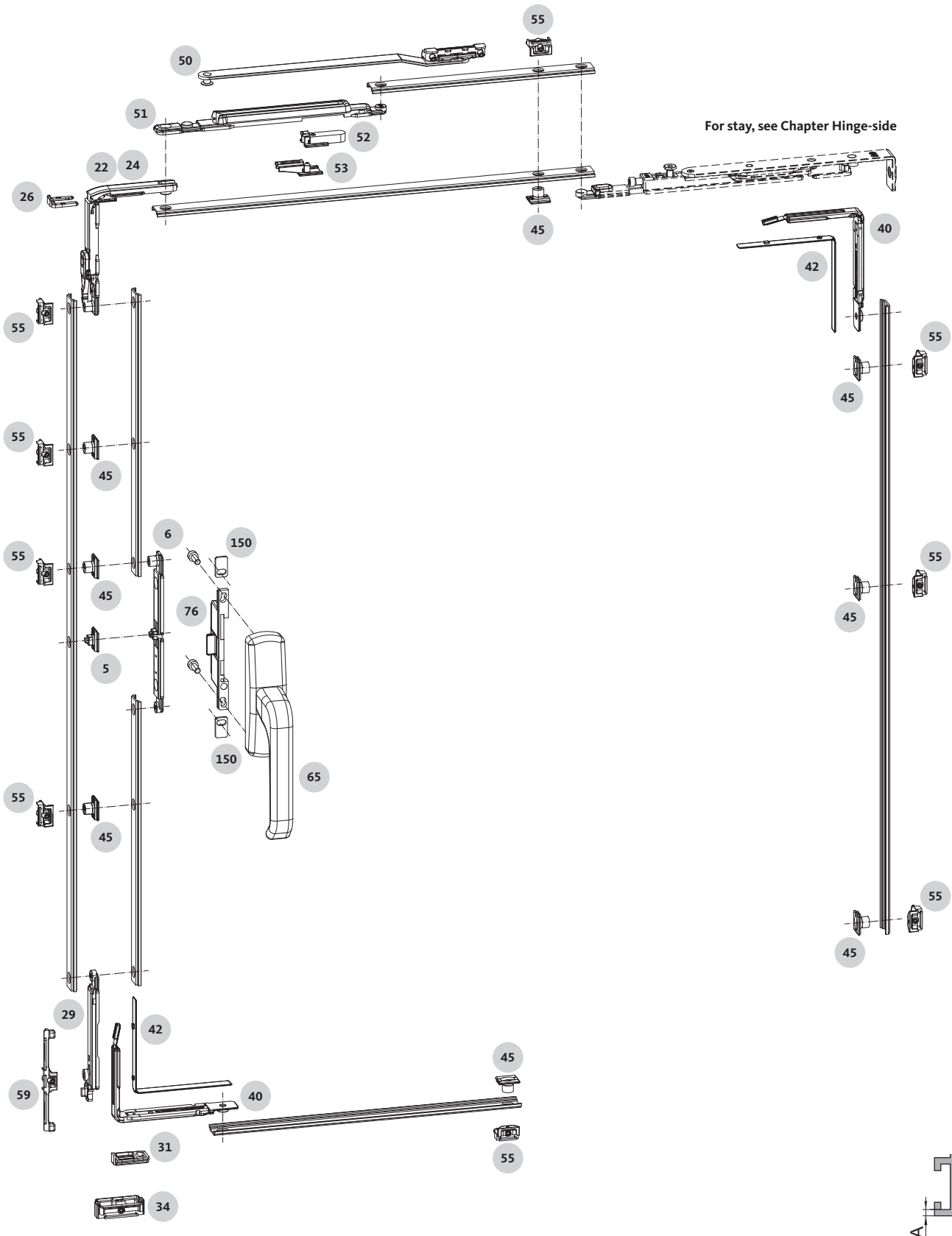
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Standard hardware set overviews

Tilt&Turn window with geared turn handle



Standard hardware set overviews

Tilt&Turn window with geared turn handle



Item	Description	Piece(s)									PU	Qty. in K- set	Order number
		SW 395-1200			SW 1201-1350			SW 1351-1700					
		SH 500-1200	SH 1201-2200	SH 2201-2800	SH 860-1200	SH 1201-2200	SH 2201-2800	SH 960-1200	SH 1201-2200	SH 2201-2800			

	T&T set, central locking system	1	1	1	1	1	1	1	1	1	10	-	K-19054-00-0-1
5	Handle connector-pin	1	1	1	1	1	1	1	1	1	-	1	6-37090-00-0-1
22	Corner-drive with M.D.	1	1	1	1	1	1	1	1	1	-	1	6-37120-00-0-1
26	Clamping bracket	1	1	1	1	1	1	1	1	1	-	1	9-48157-00-0-1
29	T&T tilter	1	1	1	1	1	1	1	1	1	-	1	6-37258-00-0-1
31	Run-up block, sash part	1	1	1	-	-	-	-	-	-	-	1	9-40404-00-0-1
34	T&T fanlight hinge	1	1	1	1	1	1	1	1	1	-	1	6-37441-00-0-1

40	Corner drive C-L	-	1	1	1	2	2	1	2	2	50	-	6-37266-00-0-1	
42	Packer for corner-drive C-L *	-	1	1	1	2	2	1	2	2	100	-	9-48466-00-0-1	
45	Locking cam	with hinge-side 510, 710	-	2	4	2	4	6	2	4	6	100	-	6-37111-00-0-8
		with hinge-side CC610	-	3	5	2	5	7	2	5	7	100	-	
		with hinge-side 510, 710 connector item 6	-	1	4	2	3	6	2	3	6	100	-	
		with hinge-side CC610 connector item 6	-	2	5	2	4	7	2	4	7	100	-	

	Set of additional stays	-	-	-	-	-	-	1	1	1	10	-	K-19013-00-0-1
50	Stay-arm, additional stay	-	-	-	-	-	-	1	1	1	-	1	6-37840-00-0-1
51	Stay-guide, additional stay	-	-	-	-	-	-	1	1	1	-	1	6-37841-00-0-1
52	Opening restrictor	with hinge-side 510, 710	-	-	-	-	-	1	1	1	-	1	6-38803-00-0-1

53	Adapter for additional stay	with hinge-side 510	-	-	-	-	-	1	1	1	10	-	9-50638-00-0-1
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55	Striker	with hinge-side 510, 710	for A=2.0	1	3	5	3	5	7	3	5	7	100	-	6-37261-01-0-1	
			for A=1.5											100	-	6-37261-02-0-1
		with hinge-side CC610	for A=2.0	1	4	6	3	6	8	3	6	8	100	-	6-37261-01-0-1	
			for A=1.5											100	-	6-37261-02-0-1
59	T&T striker		for A=2.0	1	1	1	1	1	1	1	1	1	100	-	6-37272-01-0-1	
			for A=1.5											100	-	6-37272-02-0-1
65	SPACIO geared turn handle with screws		HP 96/104	1	1	1	1	1	1	1	1	1	10	-	G-46551-96-0-1	
			HP 84/98											10	-	G-46551-00-0-1

As an alternative to item 22

76	Mishandling device	HP 96/104	1	1	1	1	1	1	1	1	1	1	10	-	6-31065-40-0-1
		HP 84/98												10	-
	Corner-drive without M.D.		1	1	1	1	1	1	1	1	1	1	50	-	K-19774-00-0-1
24	Corner-drive without M.D. (only with item 76)		1	1	1	1	1	1	1	1	1	1	-	1	6-37264-00-0-1
26	Clamping bracket		1	1	1	1	1	1	1	1	1	1	-	1	9-48157-00-0-1

As an alternative to item 5

6	Connector for divided connecting rod		1	1	1	1	1	1	1	1	1	1	50	-	6-37257-00-0-1
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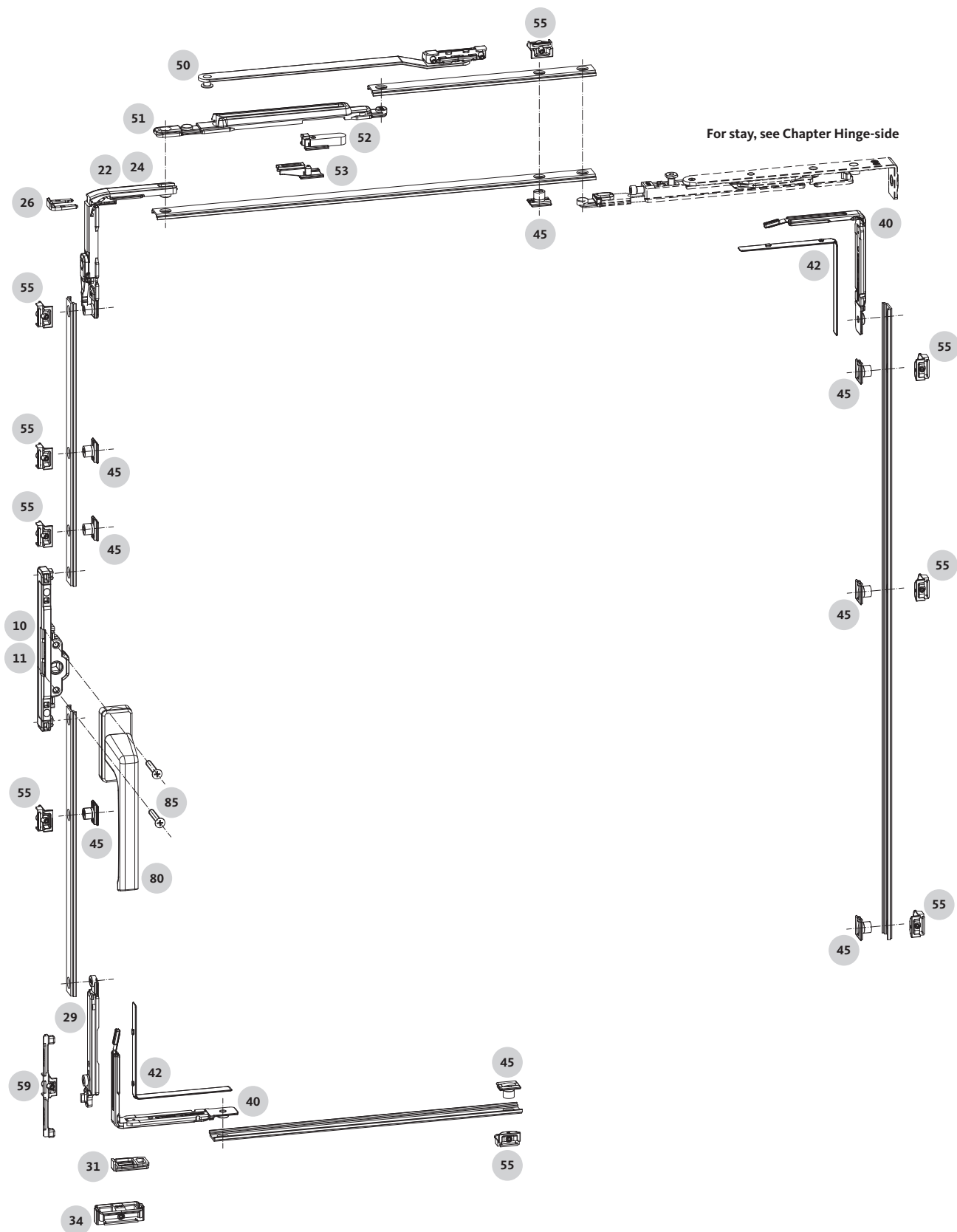
Accessories

150	Packer plate for geared turn handle **		2	2	2	2	2	2	2	2	2	2	100	-	9-50091-00-0-8
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* Only with deep groove 13.6-15 mm wide and 5.5-7 mm deep. | ** For reinforcement of the sash overlap. Recommended for larger, heavier sashes.

Standard hardware set overviews

Tilt&Turn window with insertable gear



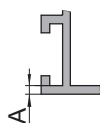
Standard hardware set overviews

Tilt&Turn window with insertable gear



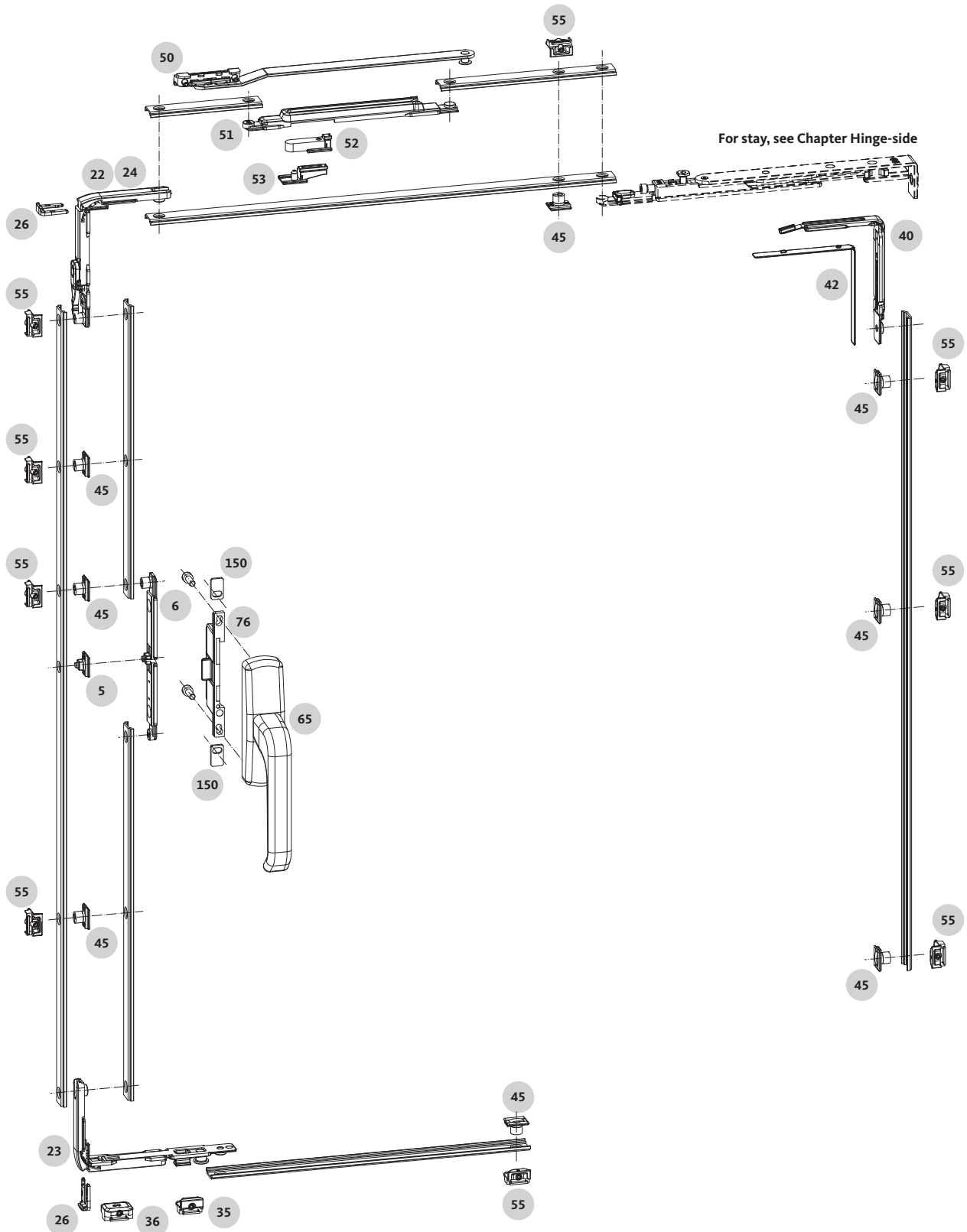
Item	Description	Piece(s)									PU	Qty. in K-set	Order number		
		SW 395-1200			SW 1201-1350			SW 1351-1700							
		SH 500-1200	SH 1201-2200	SH 2201-2800	SH 860-1200	SH 1201-2200	SH 2201-2800	SH 960-1200	SH 1201-2200	SH 2201-2800					
10	Insertable gear w/o M.D.	1	1	1	1	1	1	1	1	1	10	-	6-39385-00-0-1		
	T&T set, central locking system	1	1	1	1	1	1	1	1	1	10	-	K-19054-00-0-1		
-	Handle connector-pin	-	-	-	-	-	-	-	-	-	-	1	6-37090-00-0-1		
22	Corner-drive with M.D.	1	1	1	1	1	1	1	1	1	-	1	6-37120-00-0-1		
26	Clamping bracket	1	1	1	1	1	1	1	1	1	-	1	9-48157-00-0-1		
29	T&T tilter	1	1	1	1	1	1	1	1	1	-	1	6-37258-00-0-1		
31	Run-up block, sash part	1	1	1	-	-	-	-	-	-	-	1	9-40404-00-0-1		
34	T&T fanlight hinge	1	1	1	1	1	1	1	1	1	-	1	6-37441-00-0-1		
40	Corner drive C-L	-	1	1	1	2	2	1	2	2	50	-	6-37266-00-0-1		
42	Packer for corner-drive C-L *	-	1	1	1	2	2	1	2	2	100	-	9-48466-00-0-1		
45	Locking cam	with hinge-side 510, 710	-	2	4	2	4	6	2	4	6	100	-	6-37111-00-0-8	
		with hinge-side CC610	-	3	5	2	5	7	2	5	7	100	-		
	Set of additional stays	-	-	-	-	-	-	1	1	1	10	-	K-19013-00-0-1		
50	Stay-arm, additional stay	-	-	-	-	-	-	1	1	1	-	1	6-37840-00-0-1		
51	Stay-guide, additional stay	-	-	-	-	-	-	1	1	1	-	1	6-37841-00-0-1		
52	Opening restrictor	with hinge-side 510, 710	-	-	-	-	-	-	1	1	1	-	1	6-38803-00-0-1	
53	Adapter for additional stay	with hinge-side 510	-	-	-	-	-	-	1	1	1	10	-	9-50638-00-0-1	
55	Striker	with hinge-side 510, 710	for A=2.0	1	3	5	3	5	7	3	5	7	100	-	6-37261-01-0-1
		for A=1.5	1	3	5	3	5	7	3	5	7	100	-	6-37261-02-0-1	
	with hinge-side CC610	for A=2.0	1	4	6	3	6	8	3	6	8	100	-	6-37261-01-0-1	
		for A=1.5	1	4	6	3	6	8	3	6	8	100	-	6-37261-02-0-1	
59	T&T striker	for A=2.0	1	1	1	1	1	1	1	1	1	100	-	6-37272-01-0-1	
		for A=1.5	1	1	1	1	1	1	1	1	1	100	-	6-37272-02-0-1	
80	DIRIGENT-F turn handle		1	1	1	1	1	1	1	1	1	10	-	6-28072-25-0-11	
85	Countersunk screw M5x30		2	2	2	2	2	2	2	2	2	100	-	9-13255-30-0-1	
	Alternative to item 10 with item 22														
11	Insertable gear with M.D.	1	1	1	1	1	1	1	1	1	10	-	6-39384-00-0-1		
	Corner-drive without M.D.	1	1	1	1	1	1	1	1	1	50	-	K-19774-00-0-1		
24	Corner-drive without M.D. (only with item 11)	1	1	1	1	1	1	1	1	1	-	1	6-37264-00-0-1		
26	Clamping bracket	1	1	1	1	1	1	1	1	1	-	1	9-48157-00-0-1		

* Only with deep groove with groove width 13.6-15 mm and groove depth 5.5-7 mm.



Standard hardware set overviews

Tilt-First window with geared turn handle



Standard hardware set overviews

Tilt-First window with geared turn handle



Item	Description	Piece(s)									PU	Qty. in K-set	Order number
		SW 395-1200			SW 1201-1350			SW 1351-1700					
		SH 500-1200	SH 1201-2200	SH 2201-2800	SH 860-1200	SH 1201-2200	SH 2201-2800	SH 960-1200	SH 1201-2200	SH 2201-2800			

	TF set, central locking system	1	1	1	1	1	1	1	1	1	10	-	K-19084-00-0-1
5	Handle connector-pin	1	1	1	1	1	1	1	1	1	-	1	6-37090-00-0-1
22	Corner-drive with M.D.	1	1	1	1	1	1	1	1	1	-	1	6-37120-00-0-1
23	Tilt corner-drive TF	1	1	1	1	1	1	1	1	1	-	1	6-38687-00-0-1
26	Clamping bracket	2	2	2	2	2	2	2	2	2	-	2	9-48157-00-0-1
35	Tilt-First striker	1	1	1	1	1	1	1	1	1	-	1	6-38686-00-0-1
36	Run-up block tilt corner-drive TF	1	1	1	1	1	1	1	1	1	-	1	6-38696-00-0-1

40	Corner drive C-L	-	1	1	-	1	1	-	1	1	50	-	6-37266-00-0-1	
42	Packer for corner-drive C-L *	-	1	1	-	1	1	-	1	1	100	-	9-48466-00-0-1	
45	Locking cam	with hinge-side 510, 710	-	2	4	2	4	6	2	4	6	100	-	6-37111-00-0-8
		with hinge-side CC610	-	3	5	2	5	7	2	5	7	100	-	
		with hinge-side 510, 710 connector item 6	-	1	4	2	3	6	2	3	6	100	-	
		with hinge-side CC610 connector item 6	-	2	5	2	4	7	2	4	7	100	-	

	Set of additional stays	-	-	-	-	-	-	1	1	1	10	-	K-19013-00-0-1
50	Stay-arm, additional stay	-	-	-	-	-	-	1	1	1	-	1	6-37840-00-0-1
51	Stay-guide, additional stay	-	-	-	-	-	-	1	1	1	-	1	6-37841-00-0-1
52	Opening restrictor	with hinge-side 510, 710	-	-	-	-	-	1	1	1	-	1	6-38803-00-0-1

53	Adapter for additional stay	with hinge-side 510	-	-	-	-	-	1	1	1	10	-	9-50638-00-0-1
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55	Striker	with hinge-side 510, 710	for A=2.0	1	3	5	3	5	7	3	5	7	100	-	6-37261-01-0-1	
			for A=1.5											100	-	6-37261-02-0-1
		with hinge-side CC610	for A=2.0	1	4	6	3	6	8	3	6	8	100	-	6-37261-01-0-1	
			for A=1.5											100	-	6-37261-02-0-1
65	SPACIO geared turn handle with screws	HP 96/104		1	1	1	1	1	1	1	1	1	10	-	G-46551-96-0-1	
		HP 84/98		1	1	1	1	1	1	1	1	1	10	-	G-46551-00-0-1	

Alternative to item 22

76	Mishandling device	HP 96/104		1	1	1	1	1	1	1	1	1	10	-	6-31065-40-0-1
		HP 84/98		1	1	1	1	1	1	1	1	1	10	-	6-31065-10-0-1
	Corner-drive without M.D.			1	1	1	1	1	1	1	1	1	50	-	K-19774-00-0-1
24	Corner-drive without M.D. (only with item 76)			1	1	1	1	1	1	1	1	1	-	1	6-37264-00-0-1
26	Clamping bracket			1	1	1	1	1	1	1	1	1	-	1	9-48157-00-0-1

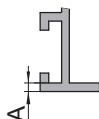
Alternative to item 5

6	Connector for divided connecting rod			1	1	1	1	1	1	1	1	1	50	-	6-37257-00-0-1
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Accessories

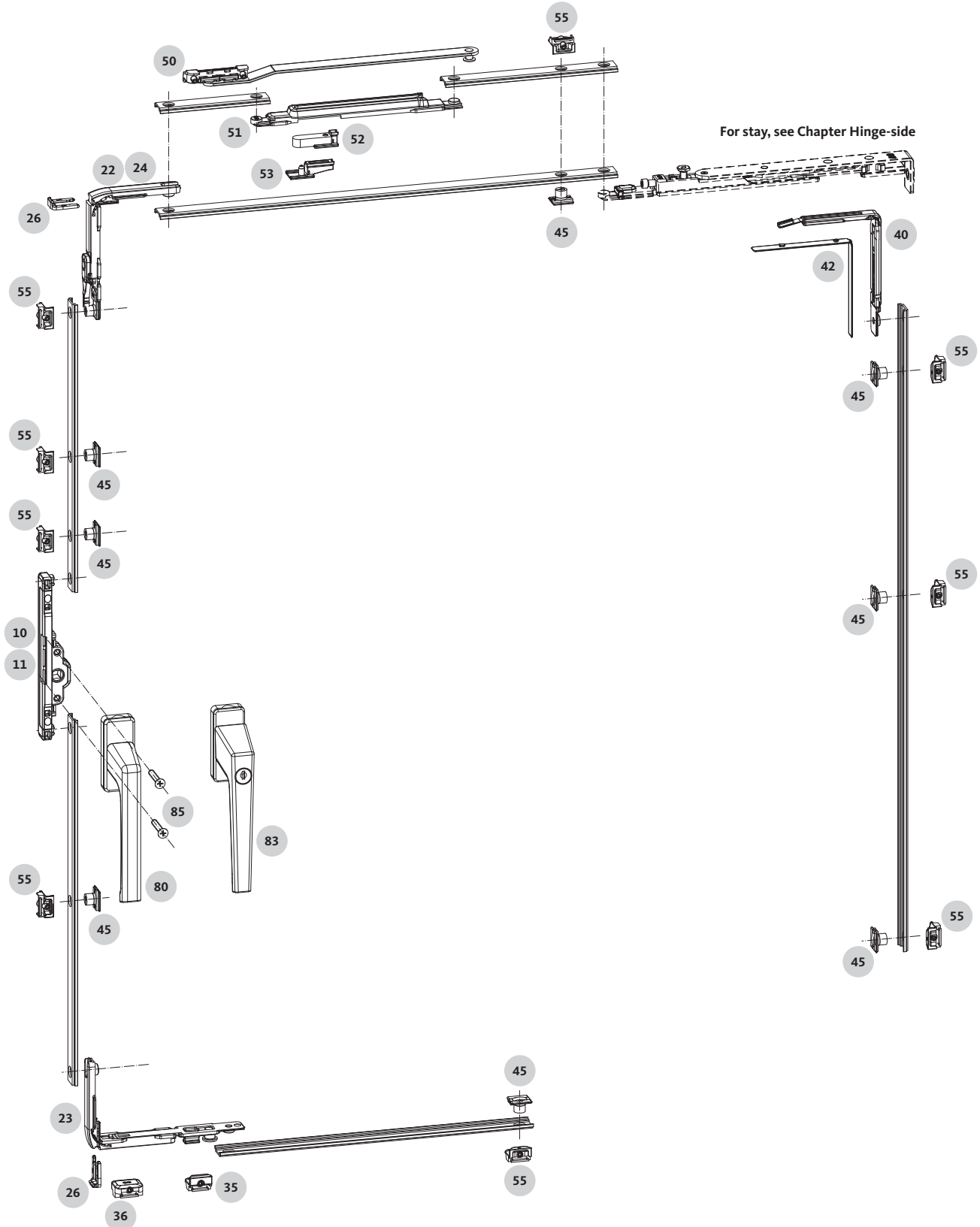
150	Packer plate for geared turn handle **			2	2	2	2	2	2	2	2	2	100	-	9-50091-00-0-8
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* Only with deep groove 13.6-15 mm wide and 5.5-7 mm deep. | ** For reinforcement of the sash overlap. Recommended for larger, heavier sashes.



Standard hardware set overviews

Tilt-First window with insertable gear



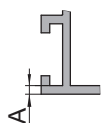
Standard hardware set overviews

Tilt-First window with insertable gear



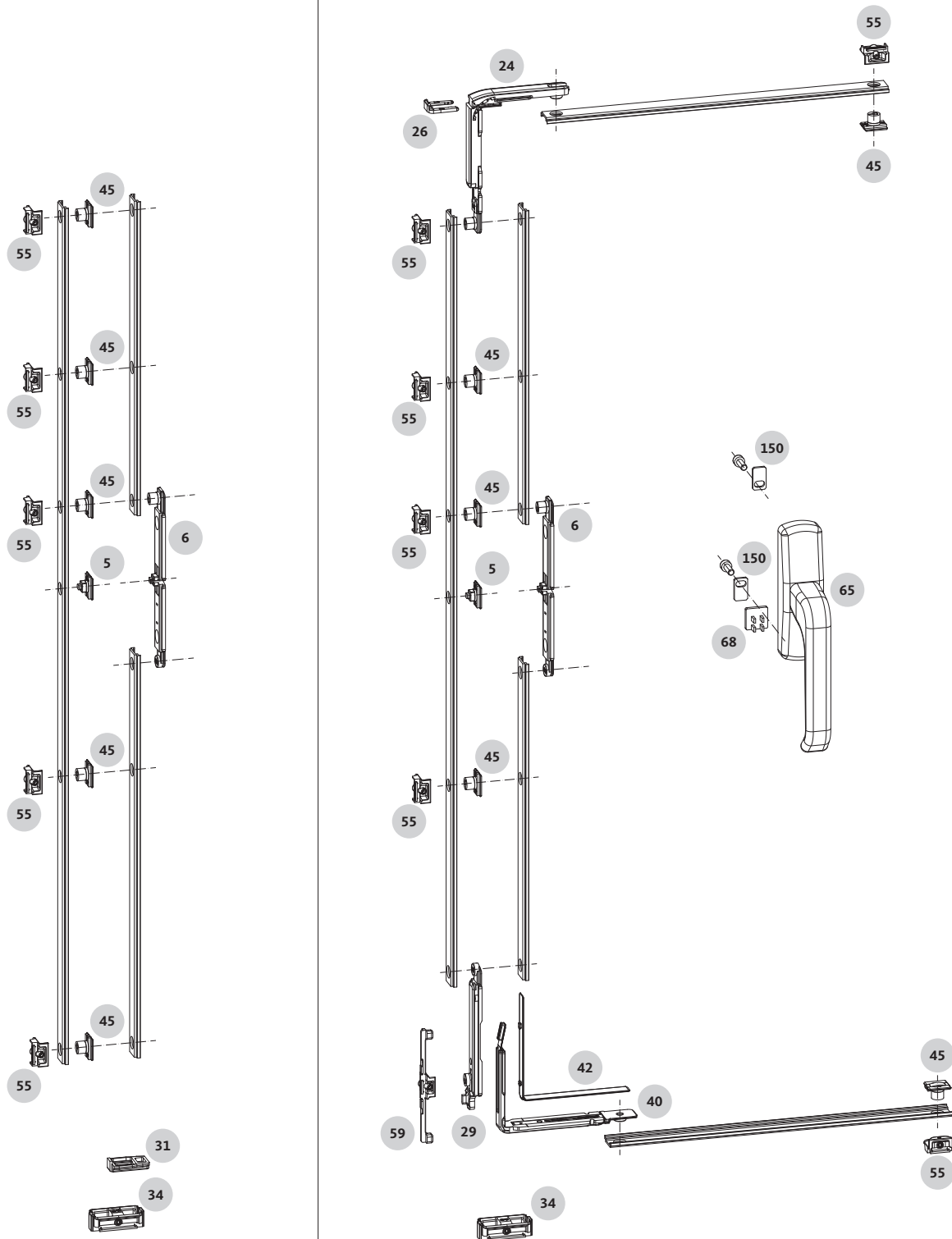
Item	Description	Piece(s)									PU	Qty. in K-set	Order number	
		SW 395-1200			SW 1201-1350			SW 1351-1700						
		SH 500-1200	SH 1201-2200	SH 2201-2800	SH 860-1200	SH 1201-2200	SH 2201-2800	SH 960-1200	SH 1201-2200	SH 2201-2800				
10	Insertable gear w/o M.D.	1	1	1	1	1	1	1	1	1	10	-	6-39385-00-0-1	
	TF set, central locking system	1	1	1	1	1	1	1	1	1	10	-	K-19084-00-0-1	
-	Handle connector-pin	-	-	-	-	-	-	-	-	-	-	1	6-37090-00-0-1	
22	Corner-drive with M.D.	1	1	1	1	1	1	1	1	1	-	1	6-37120-00-0-1	
23	Tilt corner-drive TF	1	1	1	1	1	1	1	1	1	-	1	6-38687-00-0-1	
26	Clamping bracket	2	2	2	2	2	2	2	2	2	-	2	9-48157-00-0-1	
35	Tilt-First striker	1	1	1	1	1	1	1	1	1	-	1	6-38686-00-0-1	
36	Run-up block tilt corner-drive TF	1	1	1	1	1	1	1	1	1	-	1	6-38696-00-0-1	
40	Corner drive C-L	-	1	1	-	1	1	-	1	1	50	-	6-37266-00-0-1	
42	Packer for corner-drive C-L *	-	1	1	-	1	1	-	1	1	100	-	9-48466-00-0-1	
45	Locking cam	with hinge-side 510, 710	-	2	4	2	4	6	2	4	6	100	-	6-37111-00-0-8
		with hinge-side CC610	-	3	5	2	5	7	2	5	7	100	-	
	Set of additional stays	-	-	-	-	-	-	1	1	1	10	-	K-19013-00-0-1	
50	Stay-arm, additional stay	-	-	-	-	-	-	1	1	1	-	1	6-37840-00-0-1	
51	Stay-guide, additional stay	-	-	-	-	-	-	1	1	1	-	1	6-37841-00-0-1	
52	Opening restrictor	with hinge-side 510, 710	-	-	-	-	-	-	1	1	1	-	1	6-38803-00-0-1
53	Adapter for additional stay	with hinge-side 510	-	-	-	-	-	-	1	1	1	10	-	9-50638-00-0-1
55	Striker	with hinge-side 510, 710	1	3	5	3	5	7	3	5	7	100	-	6-37261-01-0-1
		for A=1.5										100	-	6-37261-02-0-1
		with hinge-side CC610	1	4	6	3	6	8	3	6	8	100	-	6-37261-01-0-1
		for A=1.5										100	-	6-37261-02-0-1
80	DIRIGENT-F turn handle	1	1	1	1	1	1	1	1	1	10	-	6-28072-25-0-11	
83	DIRIGENT turn handle Tilt-First, lockable	1	1	1	1	1	1	1	1	1	10	-	6-31557-29-0-11	
85	Countersunk screw M5x30	2	2	2	2	2	2	2	2	2	100	-	9-13255-30-0-1	
	Alternative to item 10 with item 22													
11	Insertable gear with M.D.	1	1	1	1	1	1	1	1	1	10	-	6-39384-00-0-1	
	Corner-drive without M.D.	1	1	1	1	1	1	1	1	1	50	-	K-19774-00-0-1	
24	Corner-drive without M.D. (only with item 11)	1	1	1	1	1	1	1	1	1	-	1	6-37264-00-0-1	
26	Clamping bracket	1	1	1	1	1	1	1	1	1	-	1	9-48157-00-0-1	

* Only with deep groove with groove width 13.6-15 mm and groove depth 5.5-7 mm.



Standard hardware set overviews

Turn-Only window with standard central locking system and geared turn handle



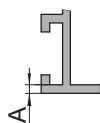
Standard hardware set overviews

Turn-Only window with standard central locking system and geared turn handle



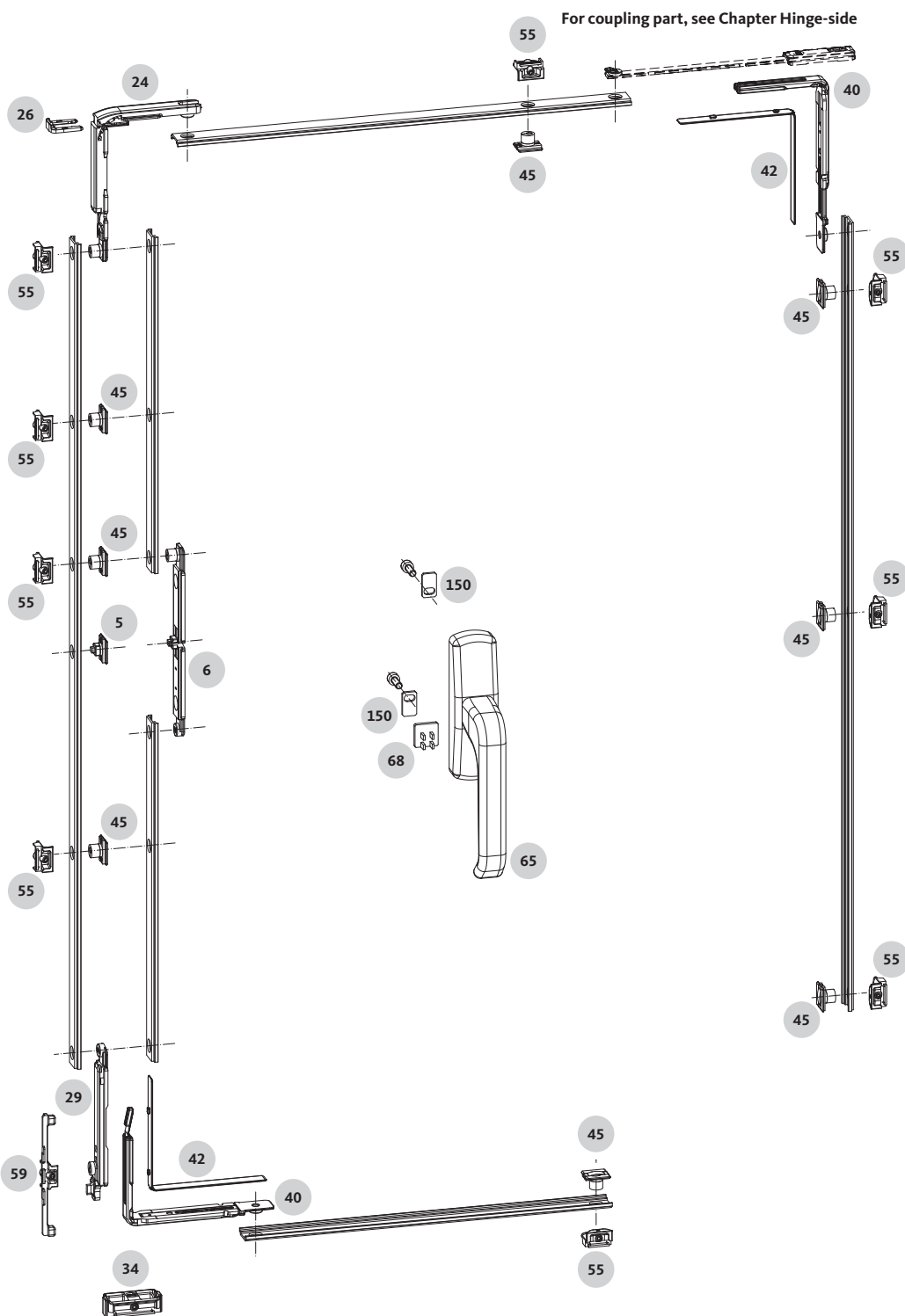
Item	Description	Piece(s)						PU	Qty. in K- set	Order number		
		SW 200-1200			SW 1201-1700							
		SH 410-1200	SH 1201-2200	SH 2201-2800	SH 860-1200	SH 1201-2200	SH 2201-2800					
5	Handle connector-pin	1	1	1	1	1	1	100	-	6-37090-00-0-1		
	Corner-drive without M.D.	-	-	-	1	1	1	50	-	K-19774-00-0-1		
24	Corner-drive without M.D.	-	-	-	1	1	1	-	1	6-37264-00-0-1		
26	Clamping bracket	-	-	-	1	1	1	-	1	9-48157-00-0-1		
29	T&T tilter	-	-	-	1	1	1	50	-	6-37258-00-0-1		
31	Run-up block, sash part	1	1	1	-	-	-	10	-	9-40404-00-0-1		
34	T&T fanlight hinge	1	1	1	1	1	1	100	-	6-37441-00-0-1		
40	Corner drive C-L	-	-	-	1	1	1	50	-	6-37266-00-0-1		
42	Packer for corner-drive C-L *	-	-	-	1	1	1	100	-	9-48466-00-0-1		
45	Locking cam	with handle connector-pin item 5		2	3	4	2	3	4	100	-	6-37111-00-0-8
		with connector item 6		2	2	4	2	2	4	100	-	
55	Striker	for A=2.0		2	3	4	3	4	5	100	-	6-37261-01-0-1
		for A=1.5									100	-
59	T&T striker	for A=2.0		-	-	-	1	1	1	100	-	6-37272-01-0-1
		for A=1.5									100	-
65	SPACIO geared turn handle with screws	HP 96/104		1	1	1	1	1	1	10	-	G-46551-96-0-1
		HP 84/98									10	-
Alternative to item 5												
6	Connector for divided connecting rod	1	1	1	1	1	1	50	-	6-37257-00-0-1		
Accessories												
68	90° turn-restrictor for SPACIO geared turn handle	1	1	1	1	1	1	10	-	9-34612-00-0-6		
150	Packer plate for geared turn handle **	2	2	2	2	2	2	100	-	9-50091-00-0-8		

* Only with deep groove 13.6-15 mm wide and 5.5-7 mm deep. | ** For reinforcement of the sash overlap. Recommended for larger, heavier sashes.



Standard hardware set overviews

Turn-Only window with standard central locking system and geared turn handle, CC610 and hinge-side locking



Standard hardware set overviews

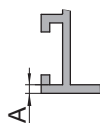


Turn-Only window with standard central locking system and geared turn handle, CC610 and hinge-side locking



Item	Description	Piece(s)				PU	Qty. in K-set	Order number	
		SW 341-1200 SH 1201-2200	SW 1201-1600 SH 2201-2800	SH 1201-2200	SH 2201-2800				
5	Handle connector-pin	1	1	1	1	100	-	6-37090-00-0-1	
	Corner-drive without M.D.	1	1	1	1	50	-	K-19774-00-0-1	
24	Corner-drive without M.D.	1	1	1	1	-	1	6-37264-00-0-1	
26	Clamping bracket	1	1	1	1	-	1	9-48157-00-0-1	
29	T&T tilter	-	-	1	1	50	-	6-37258-00-0-1	
31	Run-up block, sash part	1	1	-	-	10	-	9-40404-00-0-1	
34	T&T fanlight hinge	1	1	1	1	100	-	6-37441-00-0-1	
40	Corner drive C-L	1	1	2	2	50	-	6-37266-00-0-1	
42	Packer for corner-drive C-L *	1	1	2	2	100	-	9-48466-00-0-1	
45	Locking cam	with handle connector-pin item 5	4	6	5	7	100	-	6-37111-00-0-8
		with connector item 6	3	6	4	7	100	-	
55	Striker	for A=2.0	5	7	6	8	100	-	6-37261-01-0-1
		for A=1.5					100	-	6-37261-02-0-1
59	T&T striker	for A=2.0	-	-	1	1	100	-	6-37272-01-0-1
		for A=1.5					100	-	6-37272-02-0-1
65	SPACIO geared turn handle with screws	HP 96/104	1	1	1	1	10	-	G-46551-96-0-1
		HP 84/98					10	-	G-46551-00-0-1
Alternative to item 5									
6	Connector for divided connecting rod	1	1	1	1	50	-	6-37257-00-0-1	
Accessories									
68	90° turn-restrictor for SPACIO geared turn handle	1	1	1	1	10	-	9-34612-00-0-6	
150	Packer plate for geared turn handle **	2	2	2	2	100	-	9-50091-00-0-8	

* Only with deep groove 13.6-15 mm wide and 5.5-7 mm deep. | ** For reinforcement of the sash overlap. Recommended for larger, heavier sashes.



Standard hardware set overviews

Turn-Only window with standard central locking system and insertable gear



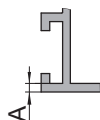
Standard hardware set overviews

Turn-Only window with standard central locking system and insertable gear



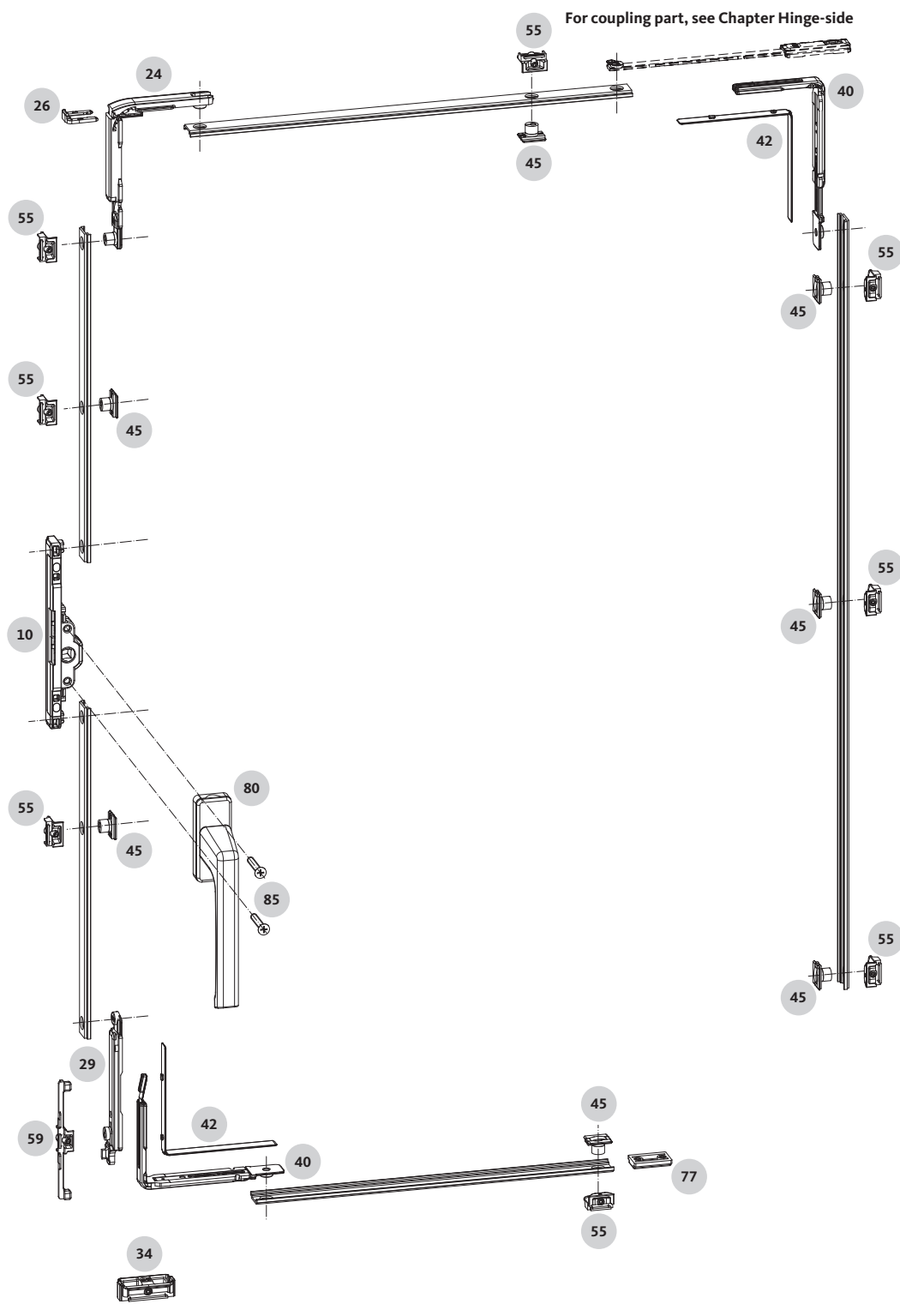
Item	Description	Piece(s)						PU	Qty. in K-set	Order number
		SW 200-1200			SW 1201-1700					
		SH 410-1200	SH 1201-2200	SH 2201-2800	SH 860-1200	SH 1201-2200	SH 2201-2800			
10	Insertable gear w/o M.D.	1	1	1	1	1	1	10	-	6-39385-00-0-1
	Corner-drive without M.D.	-	-	-	1	1	1	50	-	K-19774-00-0-1
24	Corner-drive without M.D.	-	-	-	1	1	1	-	1	6-37264-00-0-1
26	Clamping bracket	-	-	-	1	1	1	-	1	9-48157-00-0-1
29	T&T tilter	-	-	-	1	1	1	50	-	6-37258-00-0-1
31	Run-up block, sash part	1	1	1	-	-	-	10	-	9-40404-00-0-1
34	T&T fanlight hinge	1	1	1	1	1	1	100	-	6-37441-00-0-1
40	Corner drive C-L	-	-	-	1	1	1	50	-	6-37266-00-0-1
42	Packer for corner-drive C-L *	-	-	-	1	1	1	100	-	9-48466-00-0-1
45	Locking cam	2	3	4	2	3	4	100	-	6-37111-00-0-8
55	Striker	for A=2.0		4	3	4	5	100	-	6-37261-01-0-1
		for A=1.5						100	-	6-37261-02-0-1
59	T&T striker	for A=2.0		-	-	-	1	100	-	6-37272-01-0-1
		for A=1.5						100	-	6-37272-02-0-1
80	DIRIGENT-F turn handle	1	1	1	1	1	1	10	-	6-28072-25-0-11
85	Countersunk screw M5x30	2	2	2	2	2	2	100	-	9-13255-30-0-1
Accessories										
77	Stop (90° turn-restrictor)	1	1	1	1	1	1	10	-	G-12943-00-0-1

* Only with deep groove with groove width 13.6-15 mm and groove depth 5.5-7 mm.



Standard hardware set overviews

Turn-Only window with standard central locking system and insertable gear, CC610 and hinge-side locking



Standard hardware set overviews

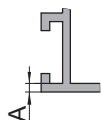


Turn-Only window with standard central locking system and insertable gear, CC610 and hinge-side locking



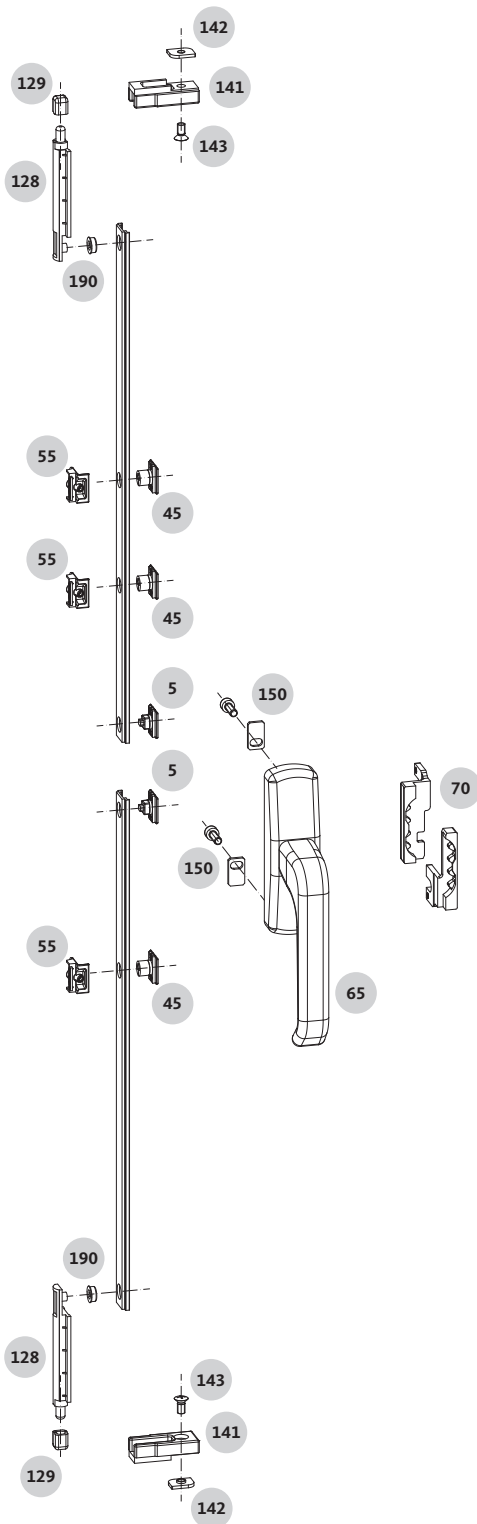
Item	Description	Piece(s)				PU	Qty. in K-set	Order number	
		SW 341-1200		SW 1201-1600					
		SH 1201-2200	SH 2201-2800	SH 1201-2200	SH 2201-2800				
10	Insertable gear w/o M.D.	1	1	1	1	10	-	6-39385-00-0-1	
	Corner-drive without M.D.	1	1	1	1	50	-	K-19774-00-0-1	
24	Corner-drive without M.D.	1	1	1	1	-	1	6-37264-00-0-1	
26	Clamping bracket	1	1	1	1	-	1	9-48157-00-0-1	
29	T&T tilter	-	-	1	1	50	-	6-37258-00-0-1	
31	Run-up block, sash part	1	1	-	-	10	-	9-40404-00-0-1	
34	T&T fanlight hinge	1	1	1	1	100	-	6-37441-00-0-1	
40	Corner drive C-L	1	1	2	2	50	-	6-37266-00-0-1	
42	Packer for corner-drive C-L *	1	1	2	2	100	-	9-48466-00-0-1	
45	Locking cam	4	6	5	7	100	-	6-37111-00-0-8	
55	Striker	for A=2.0	5	7	6	8	100	-	6-37261-01-0-1
		for A=1.5					100	-	6-37261-02-0-1
59	T&T striker	for A=2.0	-	-	1	1	100	-	6-37272-01-0-1
		for A=1.5					100	-	6-37272-02-0-1
80	DIRIGENT-F turn handle	1	1	1	1	10	-	6-28072-25-0-11	
85	Countersunk screw M5x30	2	2	2	2	100	-	9-13255-30-0-1	
Accessories									
77	Stop (90° turn-restrictor)	1	1	1	1	10	-	G-12943-00-0-1	

* Only with deep groove with groove width 13.6-15 mm and groove depth 5.5-7 mm.



Standard hardware set overviews

Turn-Only window with shoot-bolt and SPACIO geared turn handle
(only frame groove 14/18)



Standard hardware set overviews

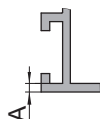


Turn-Only window with shoot-bolt and SPACIO geared turn handle (only frame groove 14/18)



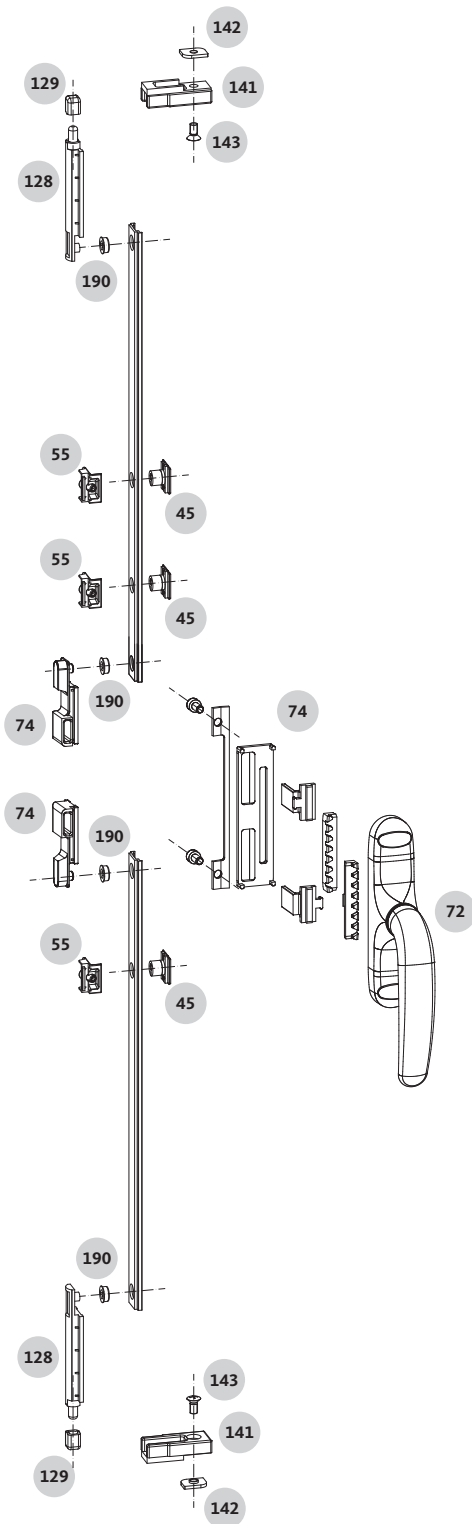
Item	Description	Piece(s)			PU	Qty. in K-set	Order number	
		SH 310-1200	SH 1201-2200	SH 2201-2800				
		SW 200-1200						
5	Handle connector-pin	2	2	2	100	-	6-37090-00-0-1	
45	Locking cam	-	1	2	100	-	6-37111-00-0-8	
55	Striker	for A=2.0	-	1	2	100	-	6-37261-01-0-1
		for A=1.5	-	1	2	100	-	6-37261-02-0-1
65	SPACIO geared turn handle with screws	HP 96/104	1	1	1	10	-	G-46551-96-0-1
		HP 84/98	1	1	1	10	-	G-46551-00-0-1
70	SPACIO conversion kit for expansion gear handle	DIN left	1	1	1	10	-	G-46550-00-L-1
		DIN right	1	1	1	10	-	G-46550-00-R-1
	TU-ON + ST-DCN connecting rod shoot-bolt set	2	2	2	10	-	K-15817-00-0-1	
128	Connecting rod shoot-bolt	2	2	2	-	1	6-31727-00-0-1	
129	CR shoot-bolt eccentric cap	2	2	2	-	1	9-41515-00-0-1	
	TU-ON connecting rod shoot-bolt striker set 14/18	2	2	2	10	-	K-15819-00-0-1	
141	CR shoot-bolt striker 14/18	2	2	2	-	1	9-41516-00-0-1	
142	Clamping piece 14/18	2	2	2	-	1	9-41517-00-0-1	
143	Raised countersunk-head screw M5x10	2	2	2	-	1	9-13369-10-R-1	
190	Adapter ring Ø6 to Ø10	2	2	2	100	-	9-48454-00-0-6	
	Accessories							
150	Packer plate for geared turn handle **	2	2	2	100	-	9-50091-00-0-8	

** For reinforcement of the sash overlap. Recommended for larger, heavier sashes.



Standard hardware set overviews

Turn-Only window with shoot-bolt and ADAGIO-A geared turn handle
(only frame groove 14/18)



Standard hardware set overviews

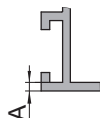


Turn-Only window with shoot-bolt and ADAGIO-A geared turn handle
(only frame groove 14/18)



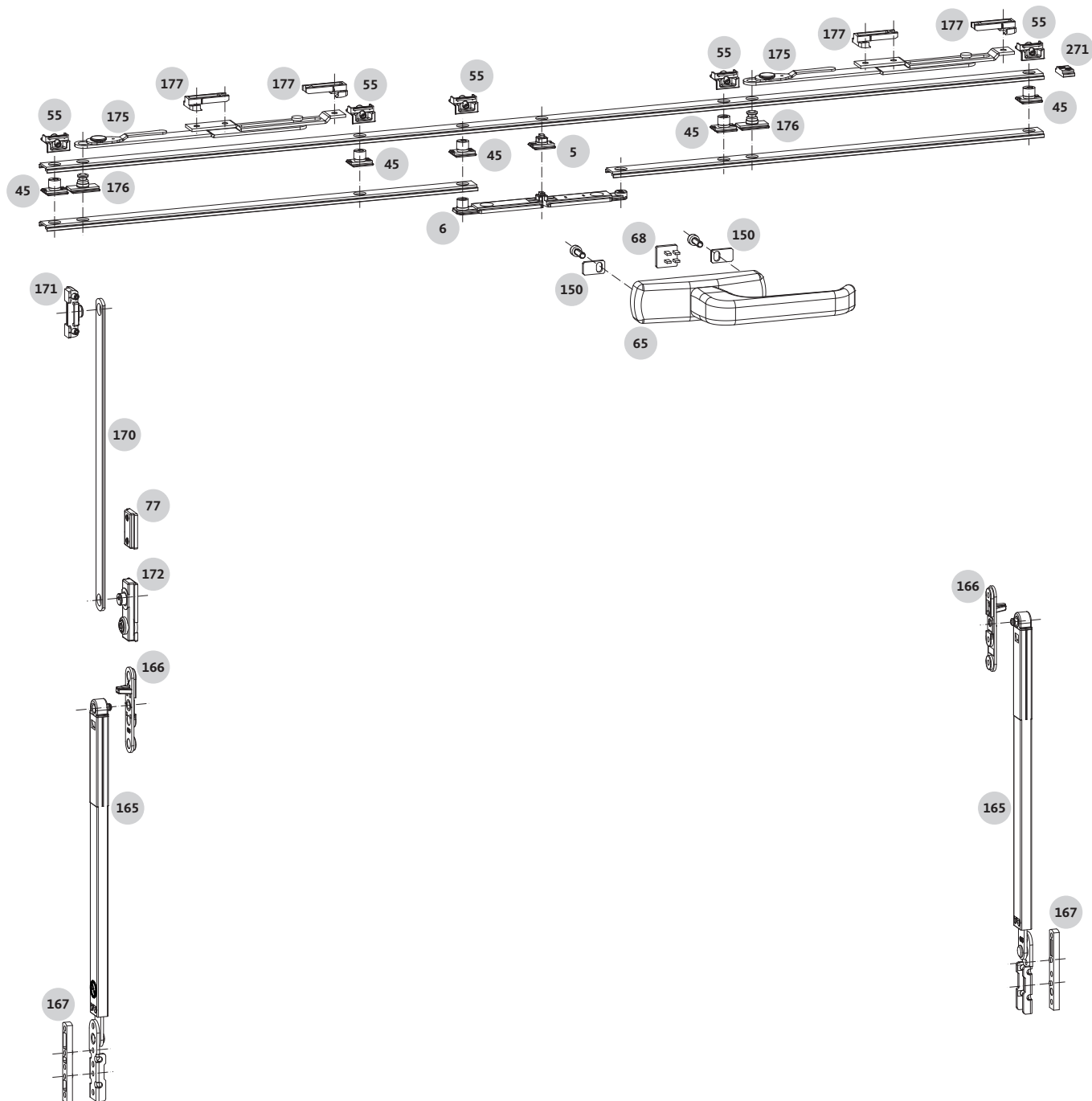
Item	Description	Piece(s)			PU	Qty. in K-set	Order number	
		SH 370-1200	SH 1201-2200	SH 2201-2800				
		SW 200-1200						
45	Locking cam	-	1	2	100	-	6-37111-00-0-8	
55	Striker	for A=2.0	-	1	2	100	-	6-37261-01-0-1
		for A=1.5	-	1	2	100	-	6-37261-02-0-1
72	ADAGIO-A geared turn handle	HP 104	1	1	1	10	-	6-31723-00-0-1
74	ADAGIO-A carrier fork set for expansion gear		1	1	1	10	-	K-15815-00-0-1
	TU-ON + ST-DCN connecting rod shoot-bolt set		2	2	2	10	-	K-15817-00-0-1
128	Connecting rod shoot-bolt		2	2	2	-	1	6-31727-00-0-1
129	CR shoot-bolt eccentric cap		2	2	2	-	1	9-41515-00-0-1
	TU-ON connecting rod shoot-bolt striker set 14/18		2	2	2	10	-	K-15819-00-0-1
141	CR shoot-bolt striker 14/18		2	2	2	-	1	9-41516-00-0-1
142	Clamping piece 14/18		2	2	2	-	1	9-41517-00-0-1
143	Raised countersunk-head screw M5x10		2	2	2	-	1	9-13369-10-R-1
190	Adapter ring Ø6 to Ø10		4	4	4	100	-	9-48454-00-0-6
Accessories								
150	Packer plate for geared turn handle **		2	2	2	100	-	9-50091-00-0-8

** For reinforcement of the sash overlap. Recommended for larger, heavier sashes.



Standard hardware set overviews

Tilt-Only window with geared turn handle



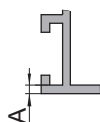
Standard hardware set overviews

Tilt-Only window with geared turn handle



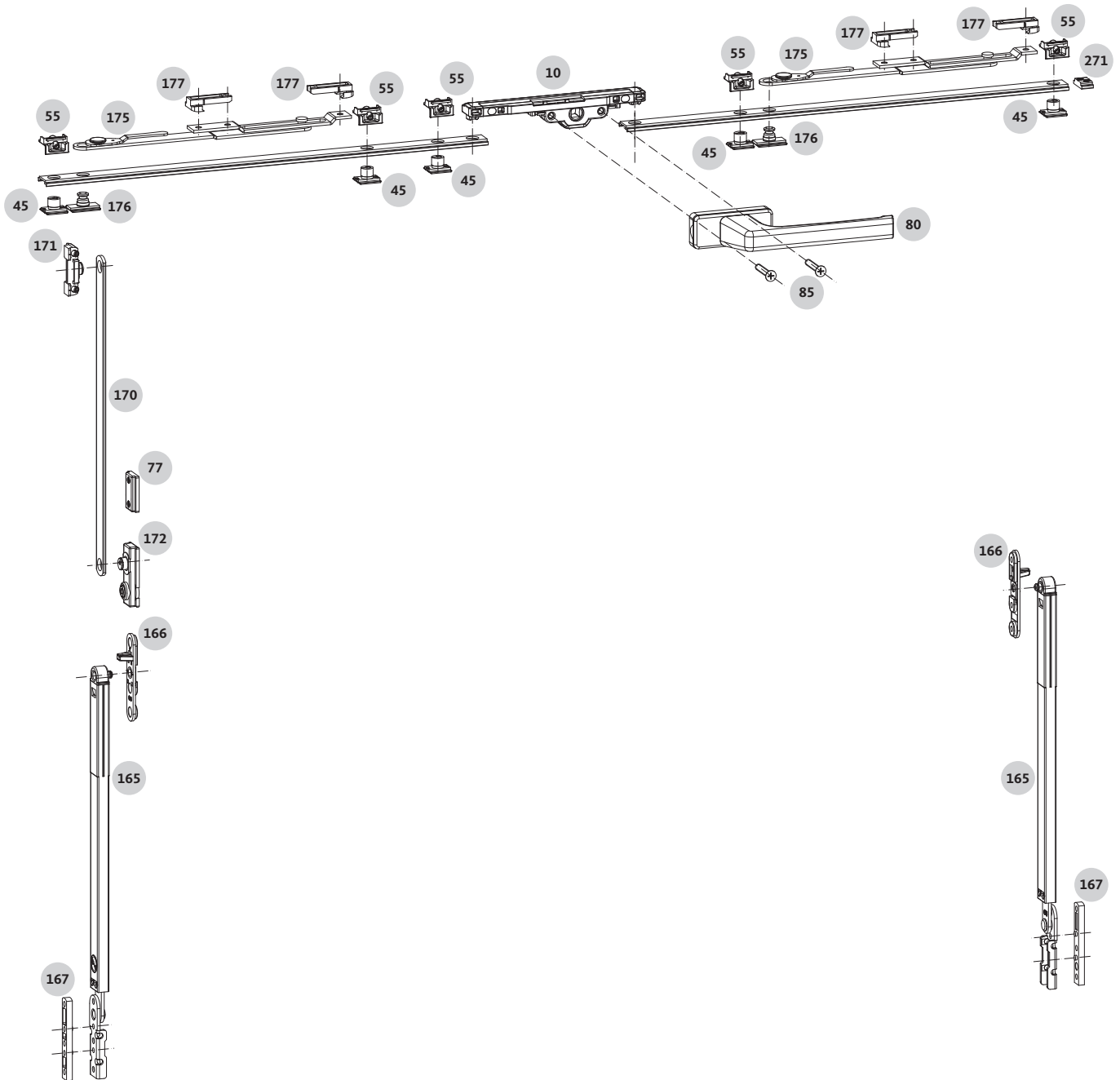
Item	Description	Piece(s)												PU	Qty. in K-set	Order number	
		with surface-mounted hinge-side															
		SW 350-1000				SW 1001-1800				SW 1801-2400							
SH 280-350	SH 351-500	SH 501-800	SH 801-1200	SH 280-350	SH 351-500	SH 501-800	SH 801-1200	SH 280-350	SH 351-500	SH 501-800	SH 801-1200						
5	Handle connector-pin	1	1	1	1	1	1	1	1	1	1	1	1	100	-	6-37090-00-0-1	
45	Locking cam	with handle connector-pin item 5	2	2	2	2	3	3	3	3	5	5	5	5	100	-	6-37111-00-0-8
		with connector item 6	2	2	2	2	2	2	2	2	4	4	4	4	100	-	
55	Striker	for A=2.0	2	2	2	2	3	3	3	3	5	5	5	5	100	-	6-37261-01-0-1
		for A=1.5													100	-	6-37261-02-0-1
65	SPACIO geared turn handle with screws	HP 96/104	1	1	1	1	1	1	1	1	1	1	1	10	-	G-46551-96-0-1	
		HP 84/98												10	-	G-46551-00-0-1	
	Limiting stay set with brake	L=150	1	1	-	-	-	-	-	-	-	-	-	10	-	K-17138-15-0-1	
		L=250	-	-	1	1	-	-	-	-	-	-	-	10	-	K-17138-25-0-1	
77	Stop (90° turn-restrictor)	1	1	1	1	-	-	-	-	-	-	-	-	1	G-12943-00-0-1		
170	Limiting stay arm	L=150	1	1	-	-	-	-	-	-	-	-	-	1	9-43127-15-0-8		
		L=250	-	-	1	1	-	-	-	-	-	-	-	1	9-43127-25-0-8		
171	Limiting stay, frame part	1	1	1	1	-	-	-	-	-	-	-	-	1	6-33596-00-0-1		
172	Limiting stay, sash part	1	1	1	1	-	-	-	-	-	-	-	-	1	6-33549-00-0-1		
175	Tilt-Only stay	-	-	-	-	2	2	2	2	2	2	2	2	10	U-76500-00-0-1		
176	Engagement pin	-	-	-	-	2	2	2	2	2	2	2	2	10	6-40477-00-0-1		
177	Packer	-	-	-	-	4	4	4	4	4	4	4	4	100	9-47202-00-0-1		
165	EURO-SOLID restrictor and cleaning stay		1	-	-	-	2	-	-	-	2	-	-	10	-	6-27995-01-0-8	
			-	1	-	-	-	2	-	-	-	2	-	10	-	6-27995-02-0-8	
			-	-	1	-	-	-	2	-	-	-	2	10	-	6-27995-03-0-8	
			-	-	-	1	-	-	-	2	-	-	-	2	10	6-27995-04-0-8	
	Accessories for EURO-SOLID restrictor and cleaning stay	1	1	1	1	2	2	2	2	2	2	2	2	10	K-14686-00-0-1		
166	Lockable keeper	1	1	1	1	2	2	2	2	2	2	2	2	-	6-27992-00-0-1		
167	Packer	1	1	1	1	2	2	2	2	2	2	2	2	-	9-36505-05-0-1		
271	Stopper	1	1	1	1	1	1	1	1	1	1	1	1	10	6-39548-00-0-0		
	Alternative to item 5																
6	Connector for divided connecting rod	1	1	1	1	1	1	1	1	1	1	1	1	50	6-37257-00-0-1		
	Alternative to item 271																
68	SPACIO 90° turn-restrictor	1	1	1	1	1	1	1	1	1	1	1	1	10	9-34612-00-0-6		
	Accessories																
150	Packer plate for geared turn handle **	2	2	2	2	2	2	2	2	2	2	2	2	100	9-50091-00-0-8		

** For reinforcement of the sash overlap. Recommended for larger, heavier sashes.



Standard hardware set overviews

Tilt-Only window with insertable gear

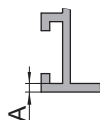


Standard hardware set overviews

Tilt-Only window with insertable gear

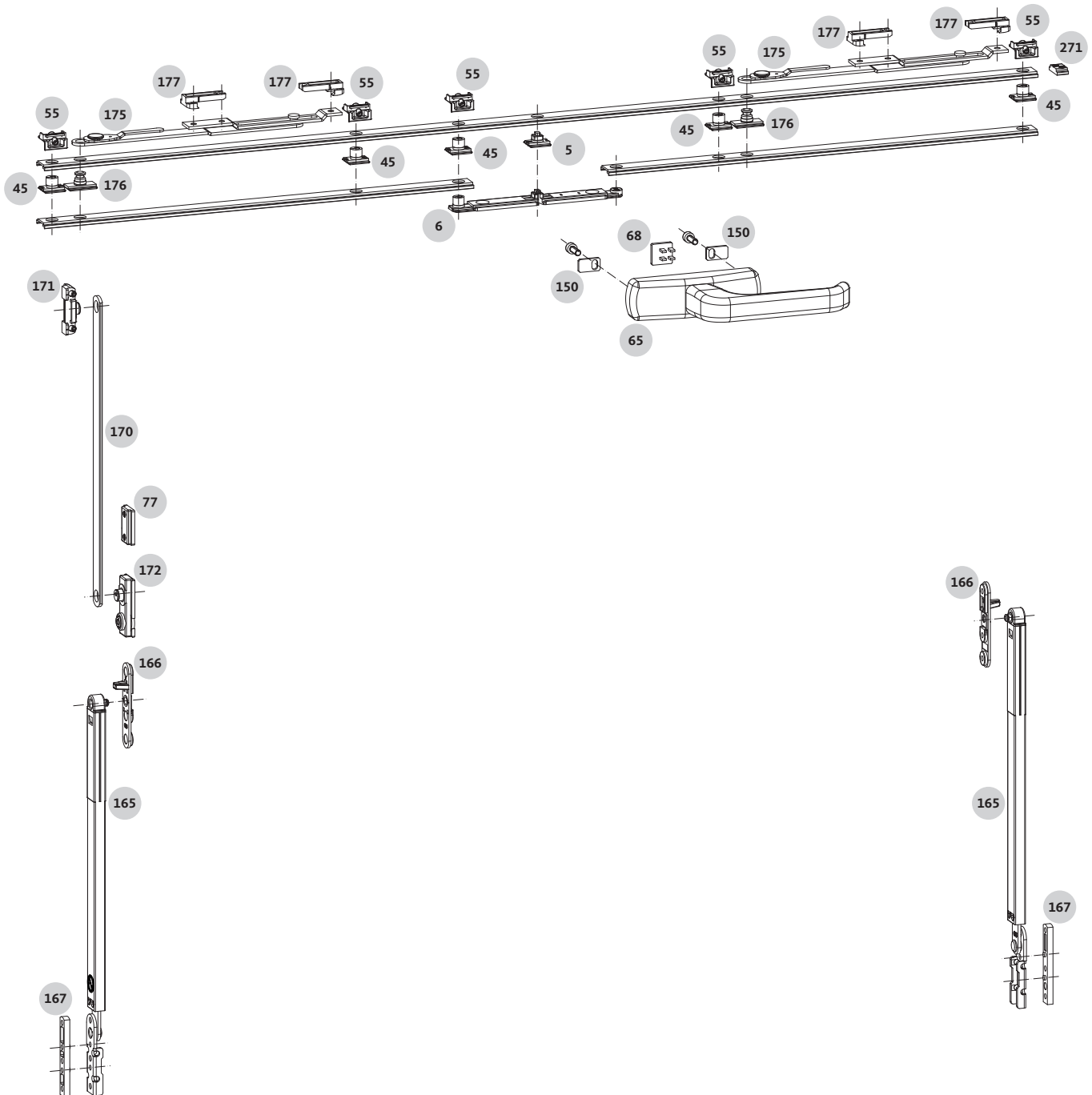


Item	Description	Piece(s)												PU	Qty. in K-set	Order number			
		with surface-mounted hinge-side																	
		SW 350-1000				SW 1001-1800				SW 1801-2400									
SH 280-350	SH 351-500	SH 501-800	SH 801-1200	SH 280-350	SH 351-500	SH 501-800	SH 801-1200	SH 280-350	SH 351-500	SH 501-800	SH 801-1200								
10	Insertable gear w/o M.D.	1	1	1	1	1	1	1	1	1	1	1	1	10	-	6-39385-00-0-1			
45	Locking cam	2	2	2	2	3	3	3	3	5	5	5	5	100	-	6-37111-00-0-8			
55	Striker	for A=2.0		2	2	2	2	3	3	3	3	3	5	5	5	5	100	-	6-37261-01-0-1
		for A=1.5															100	-	6-37261-02-0-1
80	DIRIGENT-F turn handle	1	1	1	1	1	1	1	1	1	1	1	1	10	-	6-28072-25-0-11			
85	Countersunk screw M5x30	2	2	2	2	2	2	2	2	2	2	2	2	100	-	9-13255-30-0-1			
	Limiting stay set with brake	L=150		1	1	-	-	-	-	-	-	-	-	10	-	K-17138-15-0-1			
		L=250		-	-	1	1	-	-	-	-	-	-	-	10	-	K-17138-25-0-1		
77	Stop (90° turn-restrictor)	1	1	1	1	-	-	-	-	-	-	-	-	1	-	G-12943-00-0-1			
170	Limiting stay arm	L=150		1	1	-	-	-	-	-	-	-	-	1	-	9-43127-15-0-8			
		L=250		-	-	1	1	-	-	-	-	-	-	-	1	-	9-43127-25-0-8		
171	Limiting stay, frame part	1	1	1	1	-	-	-	-	-	-	-	-	1	-	6-33596-00-0-1			
172	Limiting stay, sash part	1	1	1	1	-	-	-	-	-	-	-	-	1	-	6-33549-00-0-1			
175	Tilt-Only stay	-	-	-	-	2	2	2	2	2	2	2	2	10	-	U-76500-00-0-1			
176	Engagement pin	-	-	-	-	2	2	2	2	2	2	2	2	10	-	6-40477-00-0-1			
177	Packer	-	-	-	-	4	4	4	4	4	4	4	4	100	-	9-47202-00-0-1			
165	EURO-SOLID restrictor and cleaning stay	1	-	-	-	2	-	-	-	2	-	-	-	10	-	6-27995-01-0-8			
		-	1	-	-	-	2	-	-	-	2	-	-	10	-	6-27995-02-0-8			
		-	-	1	-	-	-	2	-	-	-	2	-	10	-	6-27995-03-0-8			
		-	-	-	1	-	-	-	2	-	-	-	2	10	-	6-27995-04-0-8			
	Accessories for EURO-SOLID restrictor and cleaning stay	1	1	1	1	2	2	2	2	2	2	2	2	10	-	K-14686-00-0-1			
166	Lockable keeper	1	1	1	1	2	2	2	2	2	2	2	2	-	1	6-27992-00-0-1			
167	Packer	1	1	1	1	2	2	2	2	2	2	2	2	-	1	9-36505-05-0-1			
271	Stopper	1	1	1	1	1	1	1	1	1	1	1	1	10	-	6-39548-00-0-0			



Standard hardware set overviews

Tilt-Only window with geared turn handle



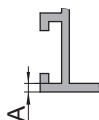
Standard hardware set overviews

Tilt-Only window with geared turn handle



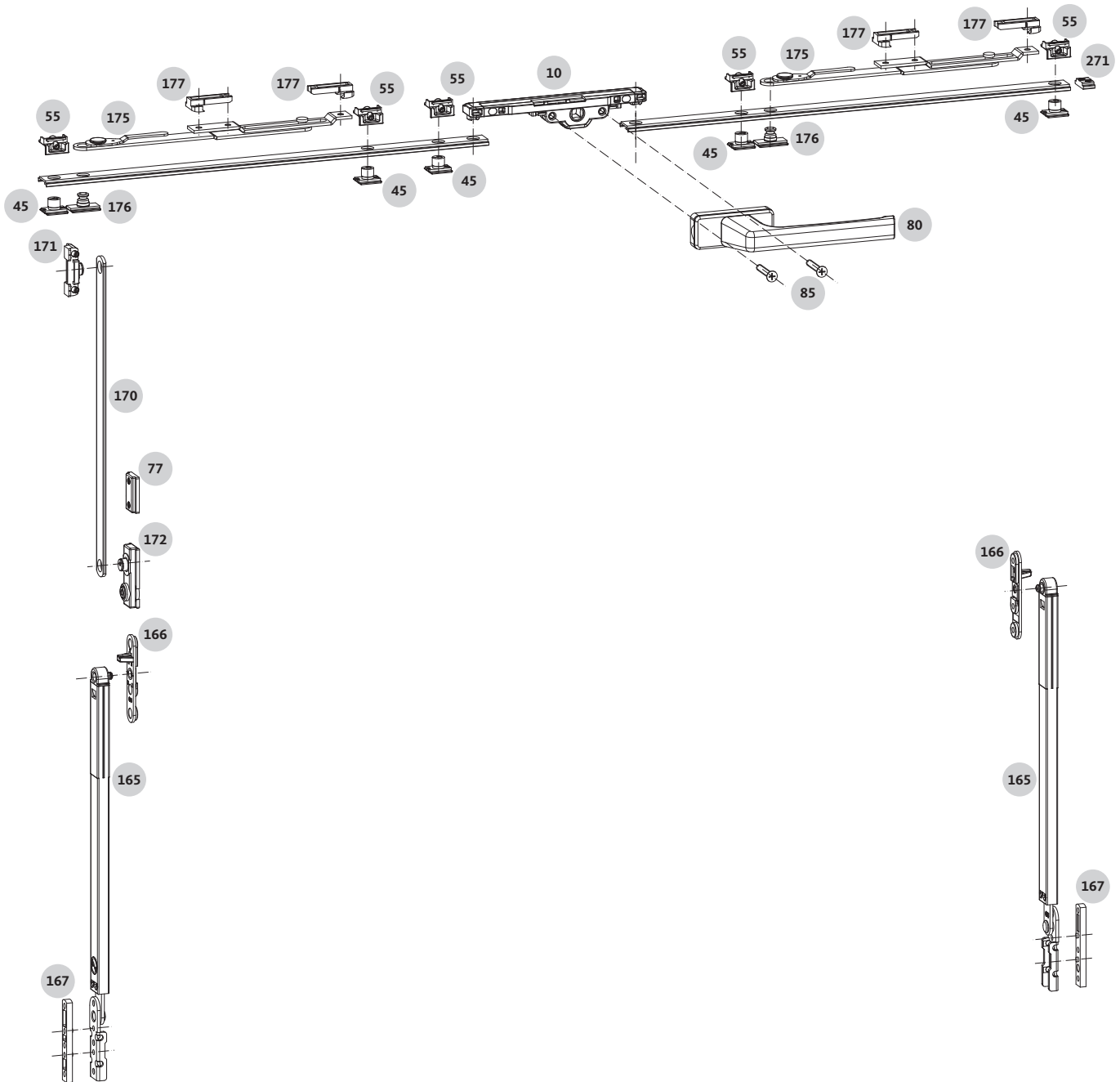
Item	Description	Piece(s)									PU	Qty. in K- set	Order number	
		with concealed hinge-side												
		SW 350-1000			SW 1001-1800			SW 1801-2400						
SH 535-614	SH 615-800	SH 801-1200	SH 535-614	SH 615-800	SH 801-1200	SH 535-614	SH 615-800	SH 801-1200						
5	Handle connector-pin	1	1	1	1	1	1	1	1	1	100	-	6-37090-00-0-1	
45	Locking cam	with handle connector-pin item 5	2	2	2	3	3	3	5	5	5	100	-	6-37111-00-0-8
		with connector item 6	2	2	2	2	2	2	4	4	4	100	-	
55	Striker	for A=2.0	2	2	2	3	3	3	5	5	5	100	-	6-37261-01-0-1
		for A=1.5										100	-	6-37261-02-0-1
65	SPACIO geared turn handle with screws	HP 96/104	1	1	1	1	1	1	1	1	1	10	-	G-46551-96-0-1
		HP 84/98										10	-	G-46551-00-0-1
	Limiting stay set with brake	L=250	1	1	1	-	-	-	-	-	10	-	K-17138-25-0-1	
77	Stop (90° turn-restrictor)		1	1	1	-	-	-	-	-	-	1	G-12943-00-0-1	
170	Limiting stay arm	L=250	1	1	1	-	-	-	-	-	-	1	9-43127-25-0-8	
171	Limiting stay, frame part		1	1	1	-	-	-	-	-	-	1	6-33596-00-0-1	
172	Limiting stay, sash part		1	1	1	-	-	-	-	-	-	1	6-33549-00-0-1	
175	Tilt-Only stay		-	-	-	2	2	2	2	2	2	10	-	U-76500-00-0-1
176	Engagement pin		-	-	-	2	2	2	2	2	2	10	-	6-40477-00-0-1
177	Packer		-	-	-	4	4	4	4	4	4	100	-	9-47202-00-0-1
165	EURO-SOLID restrictor and cleaning stay		1	-	-	1	-	-	1	-	-	10	-	6-27995-02-0-8
			-	1	-	-	1	-	-	1	-	10	-	6-27995-03-0-8
			-	-	1	-	-	2	-	-	2	10	-	6-27995-04-0-8
	Accessories for EURO-SOLID restrictor and cleaning stay		1	1	1	1	1	2	1	1	2	10	-	K-14686-00-0-1
166	Lockable keeper		1	1	1	1	1	2	1	1	2	-	1	6-27992-00-0-1
167	Packer		1	1	1	1	1	2	1	1	2	-	1	9-36505-05-0-1
271	Stopper		1	1	1	1	1	1	1	1	1	10	-	6-39548-00-0-0
	Alternative to item 5													
6	Connector for divided connecting rod		1	1	1	1	1	1	1	1	1	50	-	6-37257-00-0-1
	Alternative to item 271													
68	SPACIO 90° turn-restrictor		1	1	1	1	1	1	1	1	1	10	-	9-34612-00-0-6
	Accessories													
150	Packer plate for geared turn handle **		2	2	2	2	2	2	2	2	2	100	-	9-50091-00-0-8

** For reinforcement of the sash overlap. Recommended for larger, heavier sashes.



Standard hardware set overviews

Tilt-Only window with insertable gear

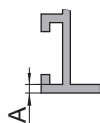


Standard hardware set overviews

Tilt-Only window with insertable gear

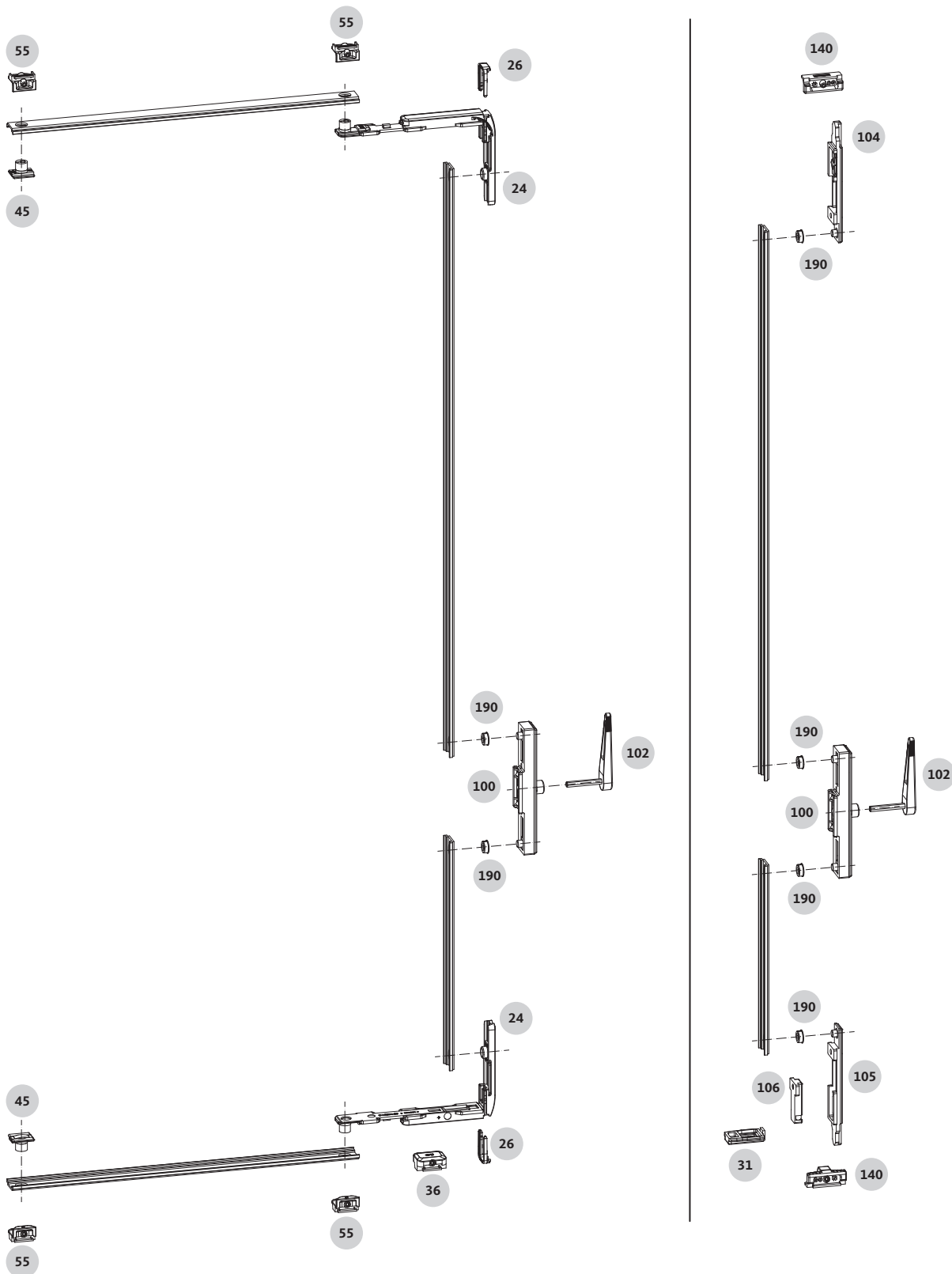


Item	Description	Piece(s)									PU	Qty. in K- set	Order number		
		with concealed hinge-side													
		SW 350-1000			SW 1001-1800			SW 1801-2400							
SH 535-614	SH 615-800	SH 801-1200	SH 535-614	SH 615-800	SH 801-1200	SH 535-614	SH 615-800	SH 801-1200							
10	Insertable gear w/o M.D.	1	1	1	1	1	1	1	1	1	10	-	6-39385-00-0-1		
45	Locking cam	2	2	2	3	3	3	5	5	5	100	-	6-37111-00-0-8		
55	Striker	for A=2.0		2	2	2	3	3	3	5	5	5	100	-	6-37261-01-0-1
		for A=1.5											100	-	6-37261-02-0-1
80	DIRIGENT-F turn handle	1	1	1	1	1	1	1	1	1	10	-	6-28072-25-0-11		
85	Countersunk screw M5x30	2	2	2	2	2	2	2	2	2	100	-	9-13255-30-0-1		
	Limiting stay set with brake	L=250	1	1	1	-	-	-	-	-	10	-	K-17138-25-0-1		
77	Stop (90° turn-restrictor)		1	1	1	-	-	-	-	-	-	1	G-12943-00-0-1		
170	Limiting stay arm	L=250	1	1	1	-	-	-	-	-	-	1	9-43127-25-0-8		
171	Limiting stay, frame part		1	1	1	-	-	-	-	-	-	1	6-33596-00-0-1		
172	Limiting stay, sash part		1	1	1	-	-	-	-	-	-	1	6-33549-00-0-1		
175	Tilt-Only stay		-	-	-	2	2	2	2	2	2	10	-	U-76500-00-0-1	
176	Engagement pin		-	-	-	2	2	2	2	2	2	10	-	6-40477-00-0-1	
177	Packer		-	-	-	4	4	4	4	4	4	100	-	9-47202-00-0-1	
165	EURO-SOLID restrictor and cleaning stay		1	-	-	1	-	-	1	-	-	10	-	6-27995-02-0-8	
			-	1	-	-	1	-	-	1	-	10	-	6-27995-03-0-8	
			-	-	1	-	-	2	-	-	2	10	-	6-27995-04-0-8	
	Accessories for EURO-SOLID restrictor and cleaning stay		1	1	1	1	1	2	1	1	2	10	-	K-14686-00-0-1	
166	Lockable keeper		1	1	1	1	1	2	1	1	2	-	1	6-27992-00-0-1	
167	Packer		1	1	1	1	1	2	1	1	2	-	1	9-36505-05-0-1	
271	Stopper		1	1	1	1	1	1	1	1	1	10	-	6-39548-00-0-0	



Standard hardware set overviews

Dummy mullion sash with central locking system in the sash groove (ST-FLN)



Standard hardware set overviews

Dummy mullion sash with central locking system in the sash groove (ST-FLN)

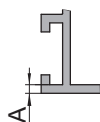


Item	Description	Piece(s)		PU	Qty. in K- set	Order number
		SW2 200- 1200	SW2 1201- 1700			
		SH 505- 2800	SH 505- 2800			

	Corner-drive without M.D.	-	2	50	-	K-19774-00-0-1
24	Corner-drive without M.D.	-	2	-	1	6-37264-00-0-1
26	Clamping bracket	-	2	-	1	9-48157-00-0-1

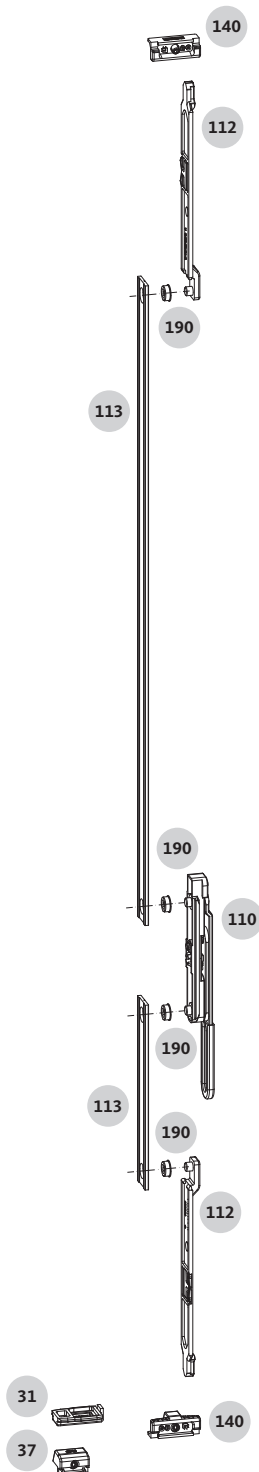
	ST-FLN lever-operated gear set	1	-	10	-	K-19589-00-0-1
31	Run-up block, sash part	1	-	-	1	9-40404-00-0-1
100	Lever-operated gear	1	1	-	1	6-24680-00-0-1
102	Hand lever	1	1	-	1	6-23903-38-0-1
104	Top connecting rod shoot-bolt	1	-	-	1	G-17509-00-0-1
105	Bottom connecting rod shoot-bolt	1	-	-	1	E-12832-00-0-1
106	Bottom keeper	1	-	-	1	G-12096-00-0-1
190	Adapter ring Ø6 to Ø10	4	2	-	5	9-48454-00-0-6

36	Run-up block tilt corner-drive TF	-	1	100	-	6-38696-00-0-1	
45	Locking cam	-	2	100	-	6-37111-00-0-8	
55	Striker	for A=2.0	-	4	100	-	6-37261-01-0-1
		for A=1.5			100	-	6-37261-02-0-1
140	CR shoot-bolt striker	+ 1.5 mm gasket pressure	2	-	100	-	6-30961-00-0-1
					100	-	G-19658-02-0-1



Standard hardware set overviews

Dummy mullion sash with central locking system with lever-operated gear in the double C groove (ST-DCN)



Standard hardware set overviews



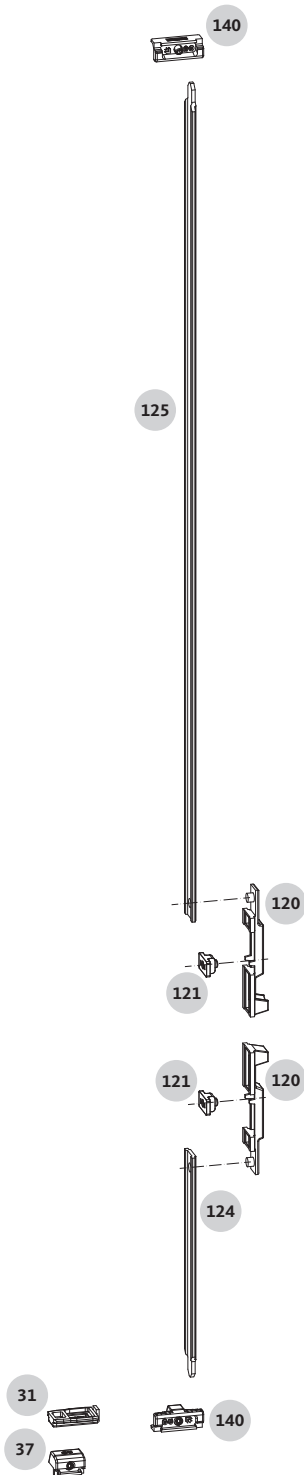
Dummy mullion sash with central locking system with lever-operated gear in the double C groove (ST-DCN)



Item	Description	Piece(s)		PU	Qty. in K-set	Order number	
		SH min.-1900	SH 1901-2400				
		SW2 200-1200					
	ST-DCN lever-operated gear set	1	1	10	-	K-19590-00-0-1	
110	Lever-operated gear	1	1	-	1	6-37102-00-0-1	
112	Connecting rod shoot-bolt	2	2	-	2	6-31038-00-0-1	
190	Adapter ring Ø6 to Ø10	4	4	-	5	9-48454-00-0-6	
113	Connecting rod profile 15/20 ST-DCN	1	2	10	-	9-40859-16-0-1	
					100	-	G-19658-02-0-1
140	CR shoot-bolt striker	2	2		100	-	6-30961-00-0-1
	- 1.5 mm gasket pressure				100	-	G-19658-03-0-1
	+ 1.5 mm gasket pressure						
Accessories							
31	Run-up block, sash part	1	1	10	-	9-40404-00-0-1	
37	Run-up block, frame part	1	1	10	-	6-30998-00-0-1	

Standard hardware set overviews

Dummy mullion sash with central locking system with shoot-bolts in the double C groove (ST-DCN)



Standard hardware set overviews



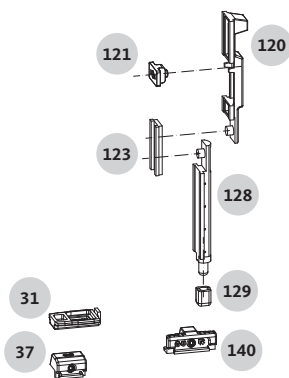
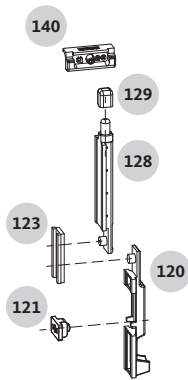
Dummy mullion sash with central locking system with shoot-bolts in the double C groove (ST-DCN)



Item	Description	Piece(s)	PU	Qty. in K-set	Order number
		SW2 200-1200			
		SH min.-2400			
	ST-DCN set of sliders	2	10	-	K-15816-00-0-1
120	Slider	2	-	1	9-41514-00-0-1
121	Stop for slider	2	-	1	6-31726-00-0-1
-	Connecting rod	-	-	1	9-41529-00-0-1
	ST-DCN locking rod set	1	10	-	K-15818-00-0-1
124	Locking rod 125 mm	1	-	1	9-41479-12-0-1
125	Locking rod 400 mm	1	-	1	9-41479-40-0-1
140	CR shoot-bolt striker	2	100	-	G-19658-02-0-1
	- 1.5 mm gasket pressure		100	-	6-30961-00-0-1
	+ 1.5 mm gasket pressure		100	-	G-19658-03-0-1
Accessories					
31	Run-up block, sash part	1	10	-	9-40404-00-0-1
37	Run-up block, frame part	1	10	-	6-30998-00-0-1

Standard hardware set overviews

Dummy mullion sash with central locking system with shoot-bolts in the double C groove (ST-DCN)



Standard hardware set overviews



Dummy mullion sash with central locking system with shoot-bolts in the double C groove (ST-DCN)

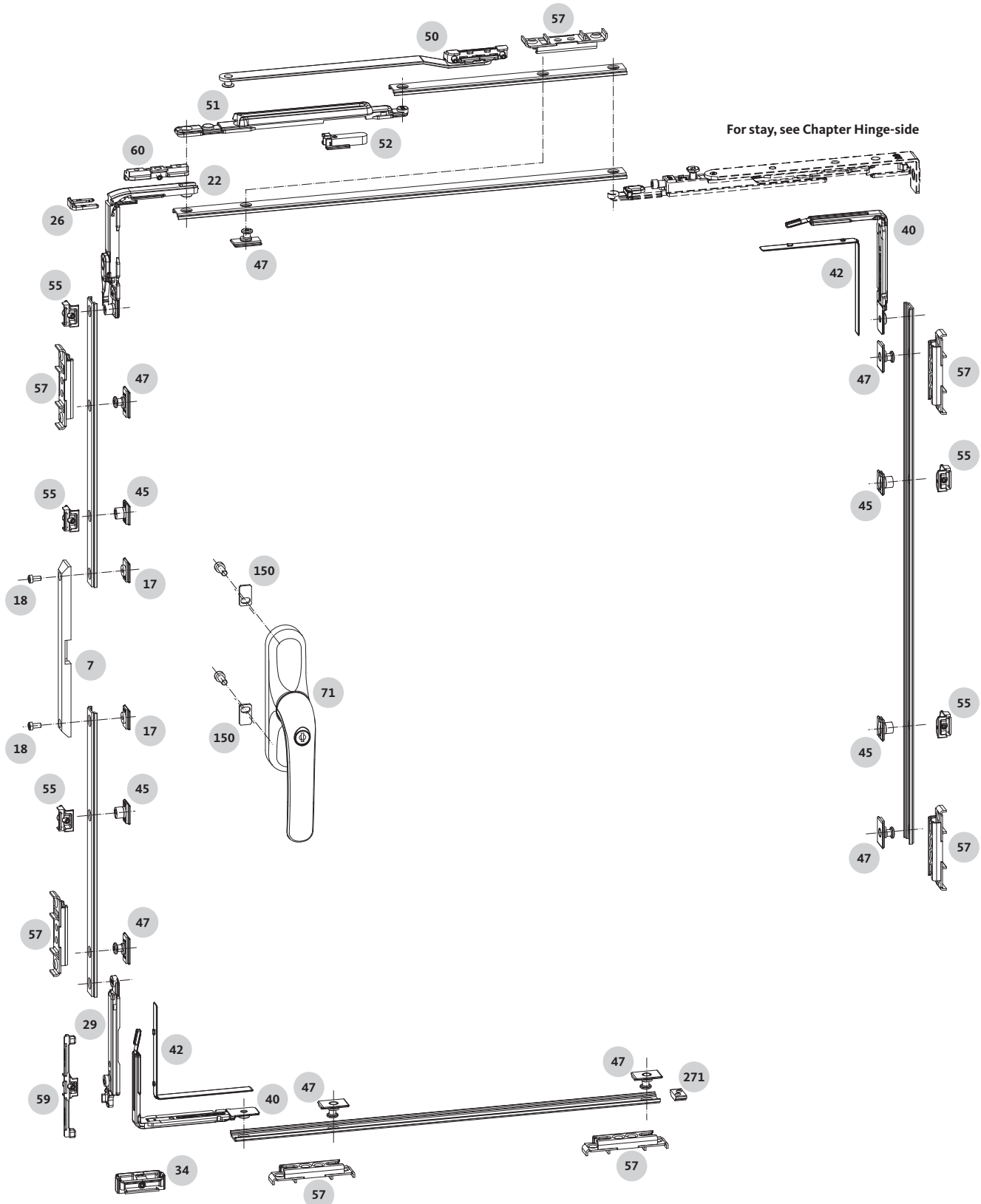


Item	Description	Piece(s)	PU	Qty. in K-set	Order number
		SW2 200-1200			
		SH min.-2400			
	ST-DCN set of sliders	2	10	-	K-15816-00-0-1
120	Slider	2	-	1	9-41514-00-0-1
121	Stop for slider	2	-	1	6-31726-00-0-1
123	Connecting rod	2	-	1	9-41529-00-0-1
	TU-ON + ST-DCN connecting rod shoot-bolt set	2	10	-	K-15817-00-0-1
128	Connecting rod shoot-bolt	2	-	1	6-31727-00-0-1
129	CR shoot-bolt eccentric cap	2	-	1	9-41515-00-0-1
140	CR shoot-bolt striker	- 1.5 mm gasket pressure	100	-	G-19658-02-0-1
			100	-	6-30961-00-0-1
			100	-	G-19658-03-0-1
Accessories					
31	Run-up block, sash part	1	10	-	9-40404-00-0-1
37	Run-up block, frame part	1	10	-	6-30998-00-0-1

For additional versions and finishes, see page 70 onwards.

RC2 Overviews of hardware sets

Tilt&Turn and Turn-Only window with geared turn handle



RC2 Overviews of hardware sets

Tilt&Turn and Turn-Only window with geared turn handle


RC2

Item	Description	Piece(s)									PU	Qty. in K-set	Order number
		SW 530-1200			SW 1201-1350			SW 1351-1700					
		SH 680-1200	SH 1201-2200	SH 2201-2800	SH 860-1200	SH 1201-2200	SH 2201-2800	SH 960-1200	SH 1201-2200	SH 2201-2800			

	RC2/RC3 handle connector set	1	1	1	1	1	1	1	1	1	10	-	K-19820-00-0-1
7	Connector RC2/RC3 for divided connecting rod	1	1	1	1	1	1	1	1	1	-	1	9-48470-00-0-D
17	Counter plate	2	2	2	2	2	2	2	2	2	-	2	9-50034-00-0-8
18	Cylinder head screw M4x8	2	2	2	2	2	2	2	2	2	-	2	9-13713-08-R-8

	T&T set, central locking system	1	1	1	1	1	1	1	1	1	10	-	K-19054-00-0-1
-	Handle connector-pin	-	-	-	-	-	-	-	-	-	-	1	6-37090-00-0-1
22	Corner-drive with M.D.	1	1	1	1	1	1	1	1	1	-	1	6-37120-00-0-1
26	Clamping bracket	1	1	1	1	1	1	1	1	1	-	1	9-48157-00-0-1
29	T&T tilter	1	1	1	1	1	1	1	1	1	-	1	6-37258-00-0-1
-	Run-up block, sash part	-	-	-	-	-	-	-	-	-	-	1	9-40404-00-0-1
34	T&T fanlight hinge	1	1	1	1	1	1	1	1	1	-	1	6-37441-00-0-1

40	Corner drive C-L	2	2	2	2	2	2	2	2	2	50	-	6-37266-00-0-1
42	Packer for corner-drive C-L *	2	2	2	2	2	2	2	2	2	100	-	9-48466-00-0-1
45	Locking cam	-	2	4	-	2	4	-	2	4	100	-	6-37111-00-0-8
47	Mushroom cam RC2	7	7	7	7	7	7	7	7	7	100	-	6-37114-00-0-8

	Set of additional stays	-	-	-	-	-	-	1	1	1	10	-	K-19013-00-0-1	
50	Stay-arm, additional stay	-	-	-	-	-	-	1	1	1	-	1	6-37840-00-0-1	
51	Stay-guide, additional stay	-	-	-	-	-	-	1	1	1	-	1	6-37841-00-0-1	
52	Opening restrictor	with hinge-side 710			-	-	-	-	1	1	1	-	1	6-38803-00-0-1

55	Striker	for A=2.0	1	3	5	1	3	5	1	3	5	100	-	6-37261-01-0-1	
		for A=1.5											100	-	6-37261-02-0-1
57	Sec striker	for frame groove 10/14	7	7	7	7	7	7	7	7	7	100	-	6-37254-10-0-8	
		for frame groove 14/18											100	-	6-37254-14-0-8
		for B=4.0 for B=3.5											100	-	6-37254-15-0-8
59	T&T striker	for A=2.0	1	1	1	1	1	1	1	1	1	100	-	6-37272-01-0-1	
		for A=1.5											100	-	6-37272-02-0-1
60	Sec clearance packer / TU-ON window run-up block	1	1	1	1	1	1	1	1	1	100	-	6-38807-00-0-1		

71	ADAGIO geared turn handle, lockable RC2/RC3	1	1	1	1	1	1	1	1	1	10	-	K-19821-00-0-1
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Accessories

150	Packer plate for geared turn handle **	2	2	2	2	2	2	2	2	2	100	-	9-50091-00-0-8	
271	Stopper	for Turn-Only windows			1	1	1	1	1	1	1	10	-	6-39548-00-0-0

* Only with deep groove 13.6-15 mm wide and 5.5-7 mm deep. | ** For reinforcement of the sash overlap. Recommended for larger, heavier sashes.

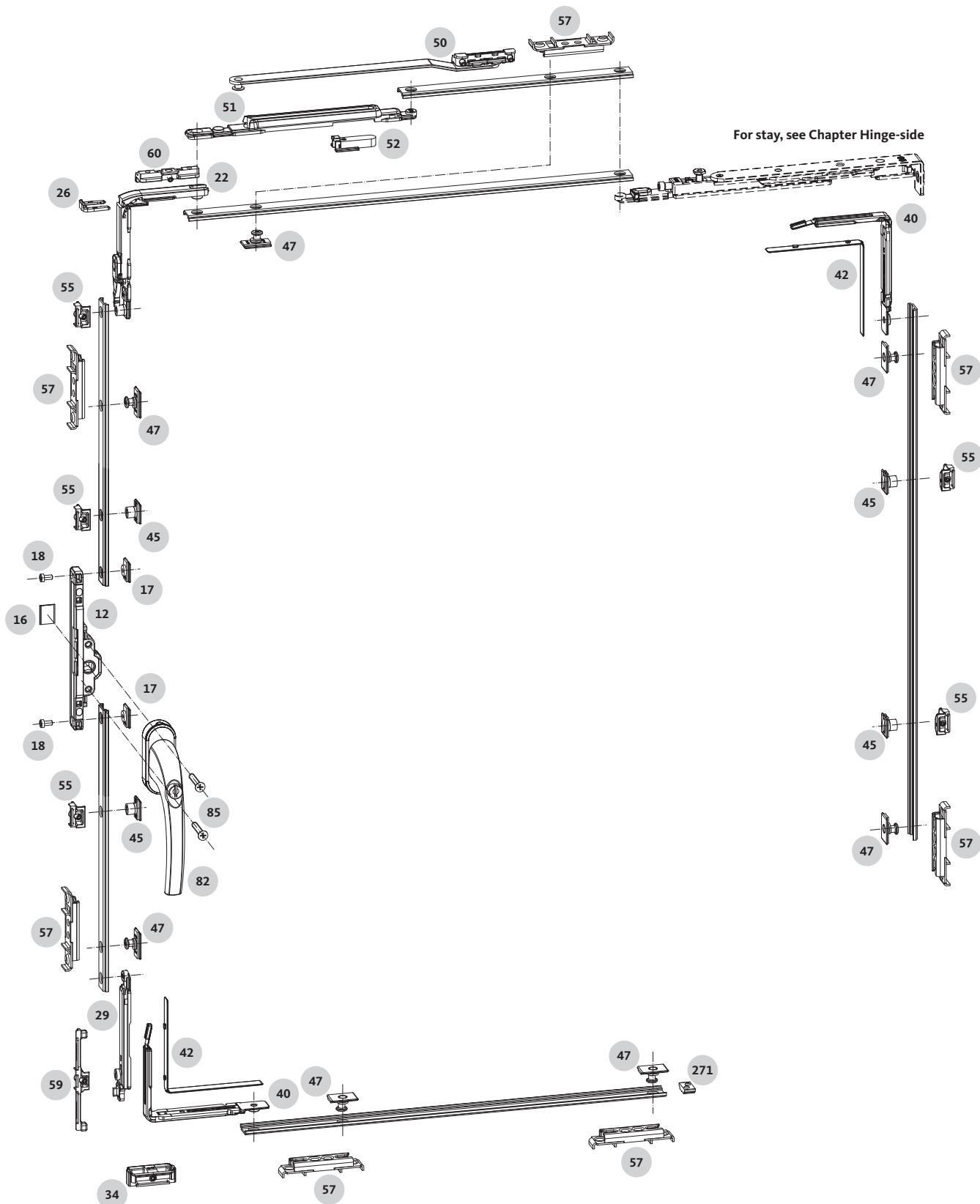


RC2 Overviews of hardware sets

Tilt&Turn and Turn-Only window with insertable gear



RC2



RC2 Overviews of hardware sets

Tilt&Turn and Turn-Only window with insertable gear


RC2

Item	Description	Piece(s)									PU	Qty. in K-set	Order number
		SW 530-1200			SW 1201-1350			SW 1351-1700					
		SH 680-1200	SH 1201-2200	SH 2201-2800	SH 860-1200	SH 1201-2200	SH 2201-2800	SH 960-1200	SH 1201-2200	SH 2201-2800			

Insertable gear w/o M.D. RC2/RC3		1	1	1	1	1	1	1	1	1	10	-	K-19575-00-0-1
12	Insertable gear RC w/o M.D.	1	1	1	1	1	1	1	1	1	-	1	6-39385-12-0-1
16	Anti-drill plate for insertable gear	1	1	1	1	1	1	1	1	1	-	1	6-39081-01-0-0
17	Counter plate	2	2	2	2	2	2	2	2	2	-	2	9-50034-00-0-8
18	Cylinder head screw M4x8	2	2	2	2	2	2	2	2	2	-	2	9-13713-08-R-8

T&T set, central locking system		1	1	1	1	1	1	1	1	1	10	-	K-19054-00-0-1
-	Handle connector-pin	-	-	-	-	-	-	-	-	-	-	1	6-37090-00-0-1
22	Corner-drive with M.D.	1	1	1	1	1	1	1	1	1	-	1	6-37120-00-0-1
26	Clamping bracket	1	1	1	1	1	1	1	1	1	-	1	9-48157-00-0-1
29	T&T tilter	1	1	1	1	1	1	1	1	1	-	1	6-37258-00-0-1
-	Run-up block, sash part	-	-	-	-	-	-	-	-	-	-	1	9-40404-00-0-1
34	T&T fanlight hinge	1	1	1	1	1	1	1	1	1	-	1	6-37441-00-0-1

40	Corner drive C-L	2	2	2	2	2	2	2	2	2	50	-	6-37266-00-0-1
42	Packer for corner-drive C-L *	2	2	2	2	2	2	2	2	2	100	-	9-48466-00-0-1
45	Locking cam	-	2	4	-	2	4	-	2	4	100	-	6-37111-00-0-8
47	Mushroom cam RC2	7	7	7	7	7	7	7	7	7	100	-	6-37114-00-0-8

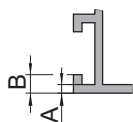
Set of additional stays		-	-	-	-	-	-	1	1	1	10	-	K-19013-00-0-1	
50	Stay-arm, additional stay	-	-	-	-	-	-	1	1	1	-	1	6-37840-00-0-1	
51	Stay-guide, additional stay	-	-	-	-	-	-	1	1	1	-	1	6-37841-00-0-1	
52	Opening restrictor	with hinge-side 710	-	-	-	-	-	-	1	1	1	-	1	6-38803-00-0-1

55	Striker	for A=2.0	1	3	5	1	3	5	1	3	5	100	-	6-37261-01-0-1
		for A=1.5										100	-	6-37261-02-0-1
57	Sec striker	for frame groove 10/14	7	7	7	7	7	7	7	7	7	100	-	6-37254-10-0-8
		for frame groove 14/18										100	-	6-37254-14-0-8
		for B=4.0										100	-	6-37254-15-0-8
		for B=3.5										100	-	6-37254-15-0-8
59	T&T striker	for A=2.0	1	1	1	1	1	1	1	1	1	100	-	6-37272-01-0-1
		for A=1.5										100	-	6-37272-02-0-1
60	Sec clearance packer / TU-ON window run-up block	1	1	1	1	1	1	1	1	1	1	100	-	6-38807-00-0-1
82	MODENA-F/Z turn handle, lockable 100 Nm	1	1	1	1	1	1	1	1	1	1	10	-	6-34397-29-0-1
85	Countersunk screw M5x30	2	2	2	2	2	2	2	2	2	2	100	-	9-13255-30-0-1

Accessories

271	Stopper	for Turn-Only windows	1	1	1	1	1	1	1	1	1	10	-	6-39548-00-0-0
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* Only with deep groove with groove width 13.6-15 mm and groove depth 5.5-7 mm.

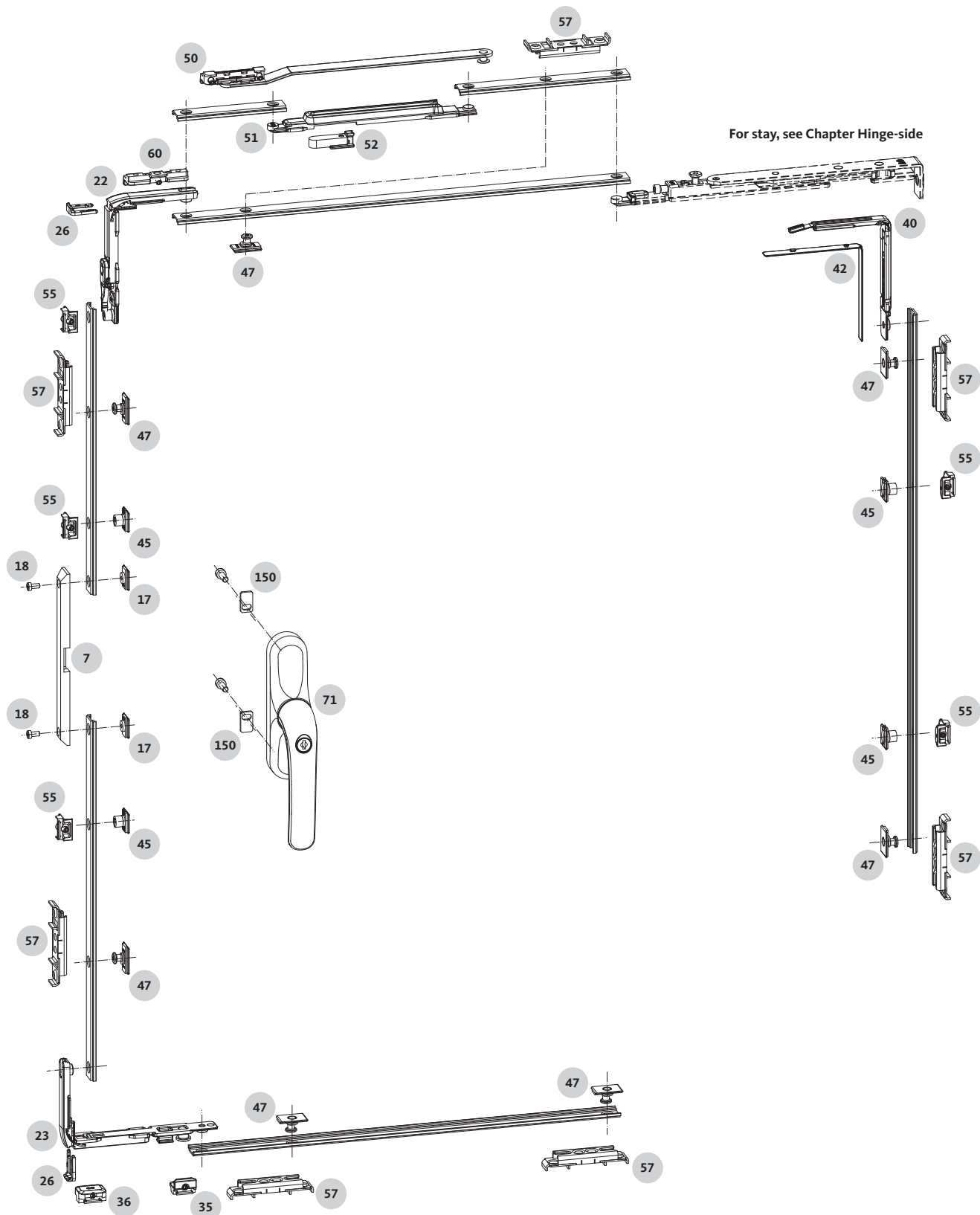


RC2 Overviews of hardware sets

Tilt-First window with geared turn handle



RC2



RC2 Overviews of hardware sets

Tilt-First window with geared turn handle


RC2

Item	Description	Piece(s)									PU	Qty. in K-set	Order number
		SW 530-1200			SW 1201-1350			SW 1351-1700					
		SH 680-1200	SH 1201-2200	SH 2201-2800	SH 860-1200	SH 1201-2200	SH 2201-2800	SH 960-1200	SH 1201-2200	SH 2201-2800			

	RC2/RC3 handle connector set	1	1	1	1	1	1	1	1	1	10	-	K-19820-00-0-1
7	Connector RC2/RC3 for divided connecting rod	1	1	1	1	1	1	1	1	1	-	1	9-48470-00-0-D
17	Counter plate	2	2	2	2	2	2	2	2	2	-	2	9-50034-00-0-8
18	Cylinder head screw M4x8	2	2	2	2	2	2	2	2	2	-	2	9-13713-08-R-8

	TF set, central locking system	1	1	1	1	1	1	1	1	1	10	-	K-19084-00-0-1
-	Handle connector-pin	-	-	-	-	-	-	-	-	-	-	1	6-37090-00-0-1
22	Corner-drive with M.D.	1	1	1	1	1	1	1	1	1	-	1	6-37120-00-0-1
23	Tilt corner-drive TF	1	1	1	1	1	1	1	1	1	-	1	6-38687-00-0-1
26	Clamping bracket	2	2	2	2	2	2	2	2	2	-	2	9-48157-00-0-1
35	Tilt-First striker	1	1	1	1	1	1	1	1	1	-	1	6-38686-00-0-1
36	Run-up block tilt corner-drive TF	1	1	1	1	1	1	1	1	1	-	1	6-38696-00-0-1

40	Corner drive C-L	1	1	1	1	1	1	1	1	1	50	-	6-37266-00-0-1
42	Packer for corner-drive C-L *	1	1	1	1	1	1	1	1	1	100	-	9-48466-00-0-1
45	Locking cam	-	2	4	-	2	4	-	2	4	100	-	6-37111-00-0-8
47	Mushroom cam RC2	7	7	7	7	7	7	7	7	7	100	-	6-37114-00-0-8

	Set of additional stays	-	-	-	-	-	-	1	1	1	10	-	K-19013-00-0-1
50	Stay-arm, additional stay	-	-	-	-	-	-	1	1	1	-	1	6-37840-00-0-1
51	Stay-guide, additional stay	-	-	-	-	-	-	1	1	1	-	1	6-37841-00-0-1
52	Opening restrictor with hinge-side 710	-	-	-	-	-	-	1	1	1	-	1	6-38803-00-0-1

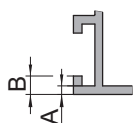
55	Striker	for A=2.0	1	3	5	1	3	5	1	3	5	100	-	6-37261-01-0-1	
		for A=1.5											100	-	6-37261-02-0-1
57	Sec striker	for frame groove 10/14	7	7	7	7	7	7	7	7	7	100	-	6-37254-10-0-8	
		for frame groove 14/18											100	-	6-37254-14-0-8
		for B=4.0 for B=3.5											100	-	6-37254-15-0-8
60	Sec clearance packer / TU-ON window run-up block	1	1	1	1	1	1	1	1	1	100	-	6-38807-00-0-1		

71	ADAGIO geared turn handle, lockable RC2/RC3	1	1	1	1	1	1	1	1	1	10	-	K-19821-00-0-1
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Accessories

150	Packer plate for geared turn handle **	2	2	2	2	2	2	2	2	2	100	-	9-50091-00-0-8
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* Only with deep groove 13.6-15 mm wide and 5.5-7 mm deep. | ** For reinforcement of the sash overlap. Recommended for larger, heavier sashes.

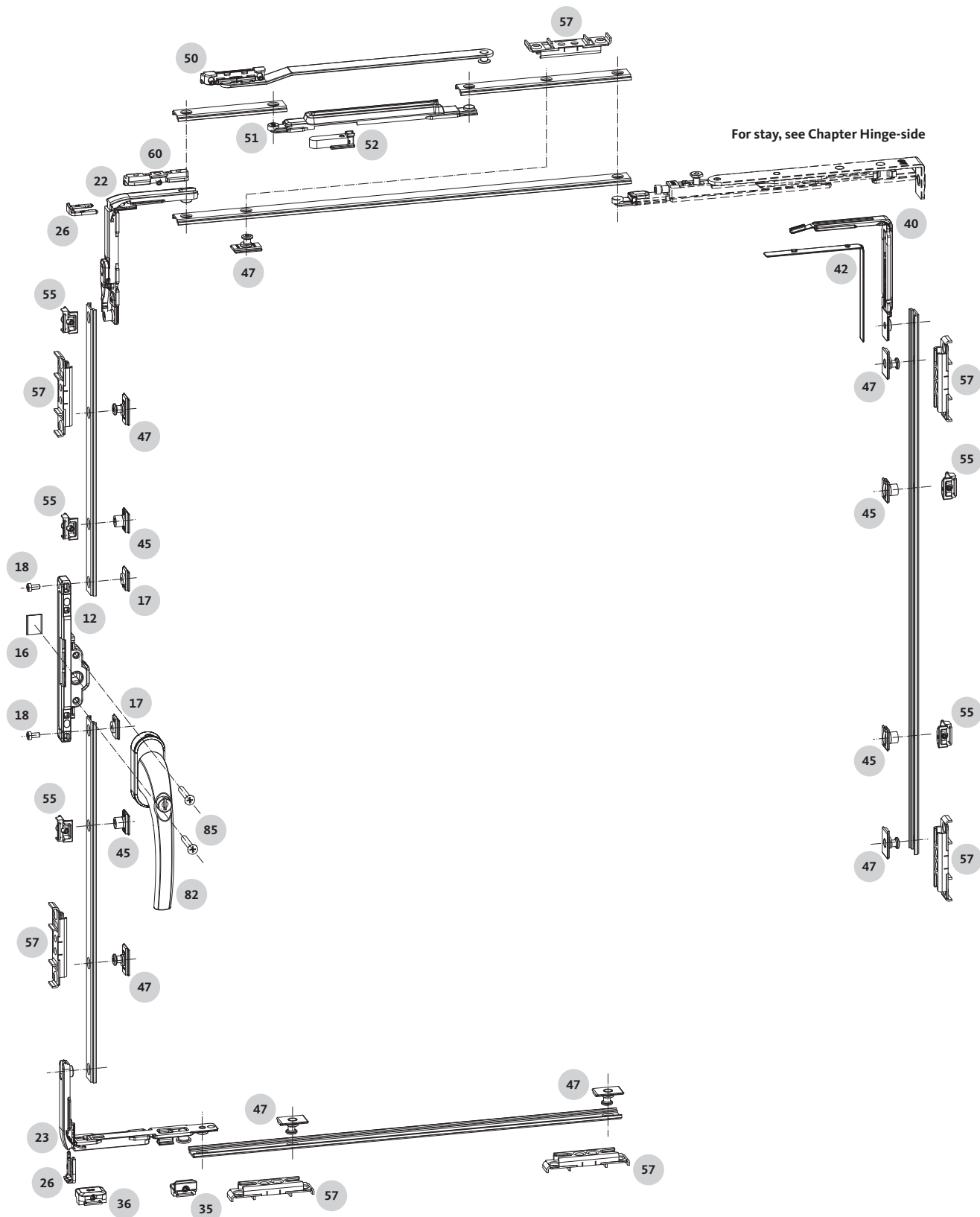


RC2 Overviews of hardware sets

Tilt-First window with insertable gear



RC2



RC2 Overviews of hardware sets

Tilt-First window with insertable gear


RC2

Item	Description	Piece(s)									PU	Qty. in K-set	Order number
		SW 530-1200			SW 1201-1350			SW 1351-1700					
		SH 680-1200	SH 1201-2200	SH 2201-2800	SH 860-1200	SH 1201-2200	SH 2201-2800	SH 960-1200	SH 1201-2200	SH 2201-2800			

	Insertable gear w/o M.D. RC2/RC3	1	1	1	1	1	1	1	1	1	10	-	K-19575-00-0-1
12	Insertable gear RC w/o M.D.	1	1	1	1	1	1	1	1	1	-	1	6-39385-12-0-1
16	Anti-drill plate for insertable gear	1	1	1	1	1	1	1	1	1	-	1	6-39081-01-0-0
17	Counter plate	2	2	2	2	2	2	2	2	2	-	2	9-50034-00-0-8
18	Cylinder head screw M4x8	2	2	2	2	2	2	2	2	2	-	2	9-13713-08-R-8

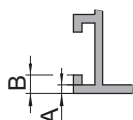
	TF set, central locking system	1	1	1	1	1	1	1	1	1	10	-	K-19084-00-0-1
-	Handle connector-pin	-	-	-	-	-	-	-	-	-	-	1	6-37090-00-0-1
22	Corner-drive with M.D.	1	1	1	1	1	1	1	1	1	-	1	6-37120-00-0-1
23	Tilt corner-drive TF	1	1	1	1	1	1	1	1	1	-	1	6-38687-00-0-1
26	Clamping bracket	2	2	2	2	2	2	2	2	2	-	2	9-48157-00-0-1
35	Tilt-First striker	1	1	1	1	1	1	1	1	1	-	1	6-38686-00-0-1
36	Run-up block tilt corner-drive TF	1	1	1	1	1	1	1	1	1	-	1	6-38696-00-0-1

40	Corner drive C-L	1	1	1	1	1	1	1	1	1	50	-	6-37266-00-0-1
42	Packer for corner-drive C-L *	1	1	1	1	1	1	1	1	1	100	-	9-48466-00-0-1
45	Locking cam	-	2	4	-	2	4	-	2	4	100	-	6-37111-00-0-8
47	Mushroom cam RC2	7	7	7	7	7	7	7	7	7	100	-	6-37114-00-0-8

	Set of additional stays	-	-	-	-	-	-	1	1	1	10	-	K-19013-00-0-1
50	Stay-arm, additional stay	-	-	-	-	-	-	1	1	1	-	1	6-37840-00-0-1
51	Stay-guide, additional stay	-	-	-	-	-	-	1	1	1	-	1	6-37841-00-0-1
52	Opening restrictor with hinge-side 710	-	-	-	-	-	-	1	1	1	-	1	6-38803-00-0-1

55	Striker	for A=2.0	1	3	5	1	3	5	1	3	5	100	-	6-37261-01-0-1	
		for A=1.5											100	-	6-37261-02-0-1
57	Sec striker	for frame groove 10/14	7	7	7	7	7	7	7	7	7	100	-	6-37254-10-0-8	
		for frame groove 14/18											100	-	6-37254-14-0-8
		for B=4.0											100	-	6-37254-15-0-8
		for B=3.5											100	-	6-37254-15-0-8
60	Sec clearance packer / TU-ON window run-up block	1	1	1	1	1	1	1	1	1	100	-	6-38807-00-0-1		
82	MODENA-F/Z turn handle, lockable 100 Nm	1	1	1	1	1	1	1	1	1	10	-	6-34397-29-0-1		
85	Countersunk screw M5x30	2	2	2	2	2	2	2	2	2	100	-	9-13255-30-0-1		

* Only with deep groove with groove width 13.6-15 mm and groove depth 5.5-7 mm.

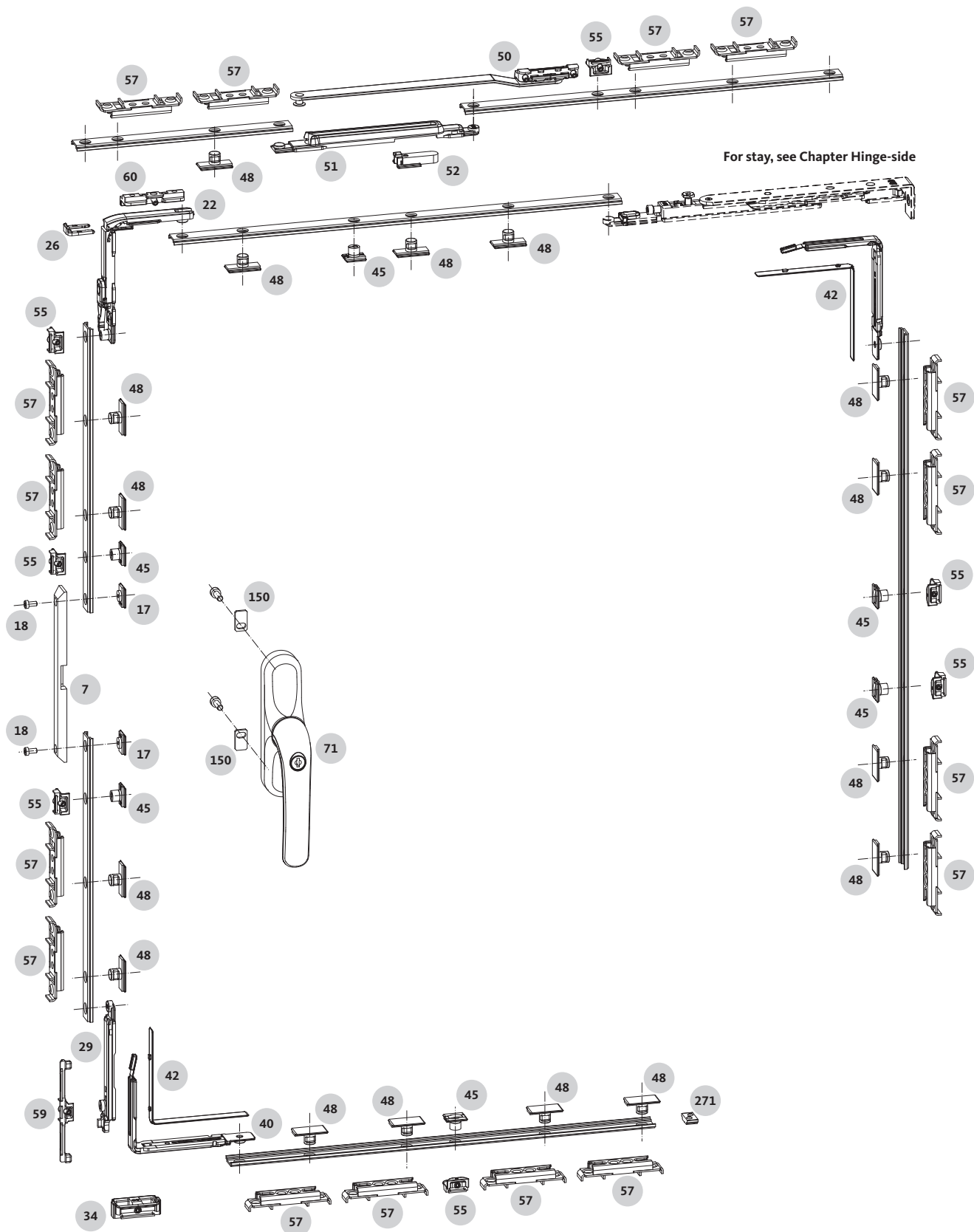


RC3 Overviews of hardware sets

Tilt&Turn and Turn-Only window with geared turn handle – SW 710–1350 mm



RC3



RC3 Overviews of hardware sets

Tilt&Turn and Turn-Only window with geared turn handle – SW 710–1350 mm


RC3

Continued on next page

Item	Description	Piece(s)									PU	Qty. in K-set	Order number
		SW 710–1050			SW 1051–1200			SW 1201–1350					
		SH 855–1200	SH 1201–2200	SH 2201–2800	SH 855–1200	SH 1201–2200	SH 2201–2800	SH 860–1200	SH 1201–2200	SH 2201–2800			

	RC2/RC3 handle connector set	1	1	1	1	1	1	1	1	1	10	–	K-19820-00-0-1
7	Connector RC2/RC3 for divided connecting rod	1	1	1	1	1	1	1	1	1	–	1	9-48470-00-0-D
17	Counter plate	2	2	2	2	2	2	2	2	2	–	2	9-50034-00-0-8
18	Cylinder head screw M4x8	2	2	2	2	2	2	2	2	2	–	2	9-13713-08-R-8

	T&T set, central locking system	1	1	1	1	1	1	1	1	1	10	–	K-19054-00-0-1
–	Handle connector-pin	–	–	–	–	–	–	–	–	–	–	1	6-37090-00-0-1
22	Corner-drive with M.D.	1	1	1	1	1	1	1	1	1	–	1	6-37120-00-0-1
26	Clamping bracket	1	1	1	1	1	1	1	1	1	–	1	9-48157-00-0-1
29	T&T tilter	1	1	1	1	1	1	1	1	1	–	1	6-37258-00-0-1
–	Run-up block, sash part	–	–	–	–	–	–	–	–	–	–	1	9-40404-00-0-1
34	T&T fanlight hinge	1	1	1	1	1	1	1	1	1	–	1	6-37441-00-0-1

40	Corner drive C-L	2	2	2	2	2	2	2	2	2	50	–	6-37266-00-0-1
42	Packer for corner-drive C-L *	2	2	2	2	2	2	2	2	2	100	–	9-48466-00-0-1
45	Locking cam	–	2	4	–	2	4	2	4	6	100	–	6-37111-00-0-8
48	Mushroom cam RC3	12	12	12	14	14	14	15	15	15	100	–	9-48458-00-0-8

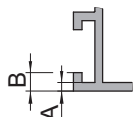
55	Striker	for A=2.0	1	3	5	1	3	5	3	5	7	100	–	6-37261-01-0-1
		for A=1.5										100	–	6-37261-02-0-1
57	Sec striker	for frame groove 10/14	12	12	12	14	14	14	15	15	15	100	–	6-37254-10-0-8
		for frame groove 14/18										100	–	6-37254-14-0-8
		for B=4.0										100	–	6-37254-15-0-8
		for B=3.5										100	–	6-37254-15-0-8
59	T&T striker	for A=2.0	1	1	1	1	1	1	1	1	1	100	–	6-37272-01-0-1
		for A=1.5										100	–	6-37272-02-0-1
60	Sec clearance packer / TU-ON window run-up block	1	1	1	1	1	1	1	1	1	1	100	–	6-38807-00-0-1

71	ADAGIO geared turn handle, lockable RC2/RC3	1	1	1	1	1	1	1	1	1	10	–	K-19821-00-0-1
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Accessories

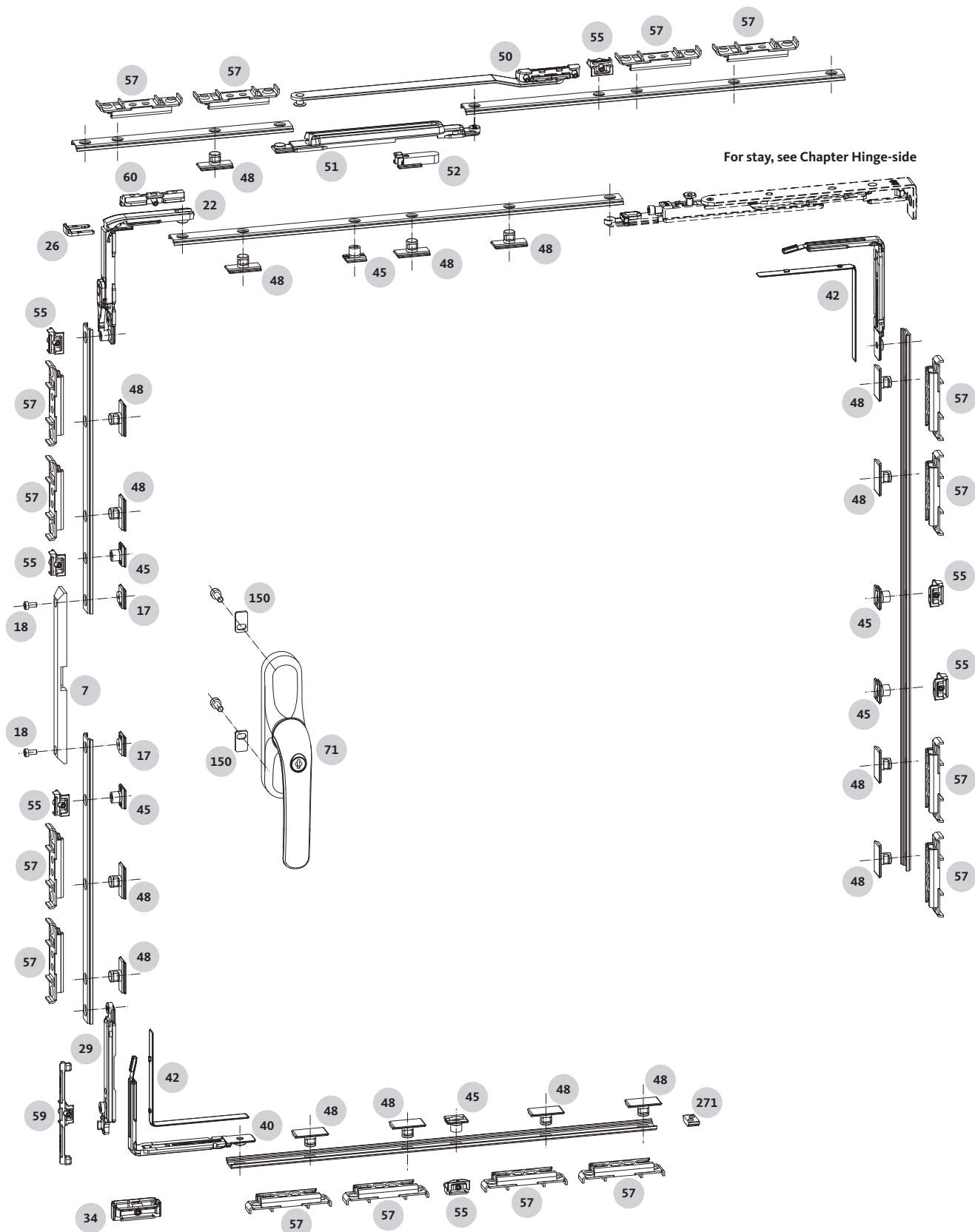
150	Packer plate for geared turn handle **	2	2	2	2	2	2	2	2	2	100	–	9-50091-00-0-8
271	Stopper for Turn-Only windows	1	1	1	1	1	1	1	1	1	10	–	6-39548-00-0-0

* Only with deep groove 13.6–15 mm wide and 5.5–7 mm deep. | ** For reinforcement of the sash overlap. Recommended for larger, heavier sashes.



RC3 Overviews of hardware sets

Tilt&Turn and Turn-Only window with geared turn handle – SW 1351–1700 mm



RC3 Overviews of hardware sets

Tilt&Turn and Turn-Only window with geared turn handle – SW 1351–1700 mm



Continued

RC3

Item	Description	Piece(s)						PU	Qty. in K-set	Order number
		SW 1351–1450			SW 1451–1700					
		SH 960–1200	SH 1201–2200	SH 2201–2800	SH 1040–1200	SH 1201–2200	SH 2201–2800			

RC2/RC3 handle connector set		1	1	1	1	1	1	10	–	K-19820-00-0-1
7	Connector RC2/RC3 for divided connecting rod	1	1	1	1	1	1	–	1	9-48470-00-0-D
17	Counter plate	2	2	2	2	2	2	–	2	9-50034-00-0-8
18	Cylinder head screw M4x8	2	2	2	2	2	2	–	2	9-13713-08-R-8

T&T set, central locking system		1	1	1	1	1	1	10	–	K-19054-00-0-1
–	Handle connector-pin	–	–	–	–	–	–	–	1	6-37090-00-0-1
22	Corner-drive with M.D.	1	1	1	1	1	1	–	1	6-37120-00-0-1
26	Clamping bracket	1	1	1	1	1	1	–	1	9-48157-00-0-1
29	T&T tilter	1	1	1	1	1	1	–	1	6-37258-00-0-1
–	Run-up block, sash part	–	–	–	–	–	–	–	1	9-40404-00-0-1
34	T&T fanlight hinge	1	1	1	1	1	1	–	1	6-37441-00-0-1

40	Corner drive C-L	2	2	2	2	2	2	50	–	6-37266-00-0-1
42	Packer for corner-drive C-L *	2	2	2	2	2	2	100	–	9-48466-00-0-1
45	Locking cam	2	4	6	2	4	6	100	–	6-37111-00-0-8
48	Mushroom cam RC3	15	15	15	16	16	16	100	–	9-48458-00-0-8

Set of additional stays		1	1	1	1	1	1	10	–	K-19013-00-0-1		
50	Stay-arm, additional stay	1	1	1	1	1	1	–	1	6-37840-00-0-1		
51	Stay-guide, additional stay	1	1	1	1	1	1	–	1	6-37841-00-0-1		
52	Opening restrictor	with hinge-side 710					1	1	1	–	1	6-38803-00-0-1

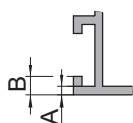
55	Striker	for A=2.0		3	5	7	3	5	7	100	–	6-37261-01-0-1
		for A=1.5								100	–	6-37261-02-0-1
57	Sec striker	for frame groove 10/14		15	15	15	16	16	16	100	–	6-37254-10-0-8
		for frame groove 14/18										
										100	–	6-37254-15-0-8
59	T&T striker	for A=2.0		1	1	1	1	1	1	100	–	6-37272-01-0-1
		for A=1.5										
60	Sec clearance packer / TU-ON window run-up block	1	1	1	1	1	1	1	1	100	–	6-38807-00-0-1

71	ADAGIO geared turn handle, lockable RC2/RC3	1	1	1	1	1	1	10	–	K-19821-00-0-1
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Accessories

150	Packer plate for geared turn handle **	2	2	2	2	2	2	100	–	9-50091-00-0-8		
271	Stopper	for Turn-Only windows					1	1	1	10	–	6-39548-00-0-0

* Only with deep groove 13.6–15 mm wide and 5.5–7 mm deep. | ** For reinforcement of the sash overlap. Recommended for larger, heavier sashes.

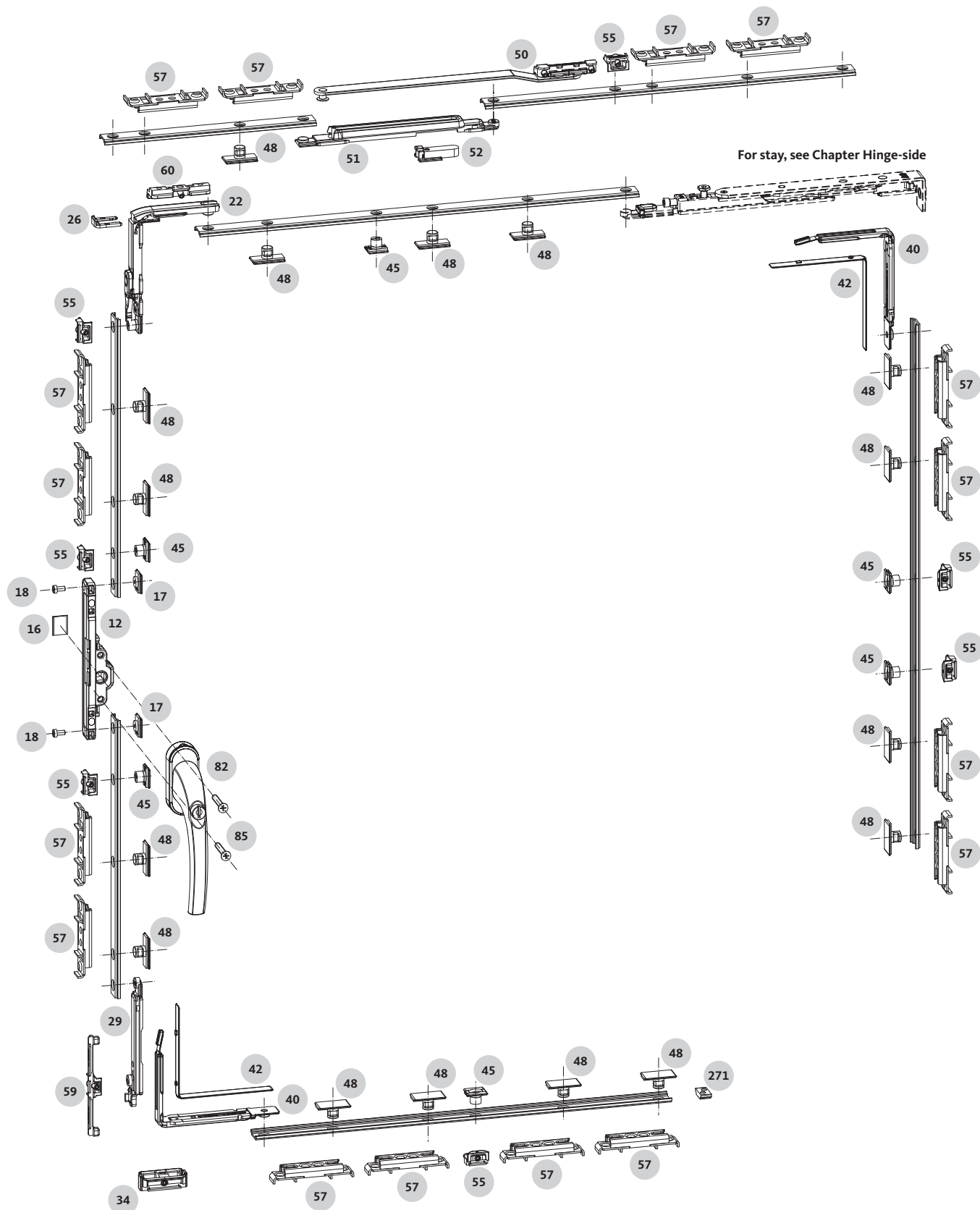


RC3 Overviews of hardware sets

Tilt&Turn window with insertable gear – SW 710–1350 mm



RC3



RC3 Overviews of hardware sets

Tilt&Turn window with insertable gear – SW 710–1350 mm


RC3

Continued on next page

Item	Description	Piece(s)									PU	Qty. in K- set	Order number
		SW 710–1050			SW 1051–1200			SW 1201–1350					
		SH 850–1200	SH 1201–2200	SH 2201–2800	SH 860–1200	SH 1201–2200	SH 2201–2800	SH 860–1200	SH 1201–2200	SH 2201–2800			

	Insertable gear w/o M.D. RC2/RC3	1	1	1	1	1	1	1	1	1	10	–	K-19575-00-0-1
12	Insertable gear RC w/o M.D.	1	1	1	1	1	1	1	1	1	–	1	6-39385-12-0-1
16	Anti-drill plate for insertable gear	1	1	1	1	1	1	1	1	1	–	1	6-39081-01-0-0
17	Counter plate	2	2	2	2	2	2	2	2	2	–	2	9-50034-00-0-8
18	Cylinder head screw M4x8	2	2	2	2	2	2	2	2	2	–	2	9-13713-08-R-8

	T&T set, central locking system	1	1	1	1	1	1	1	1	1	10	–	K-19054-00-0-1
–	Handle connector-pin	–	–	–	–	–	–	–	–	–	–	1	6-37090-00-0-1
22	Corner-drive with M.D.	1	1	1	1	1	1	1	1	1	–	1	6-37120-00-0-1
26	Clamping bracket	1	1	1	1	1	1	1	1	1	–	1	9-48157-00-0-1
29	T&T tilter	1	1	1	1	1	1	1	1	1	–	1	6-37258-00-0-1
–	Run-up block, sash part	–	–	–	–	–	–	–	–	–	–	1	9-40404-00-0-1
34	T&T fanlight hinge	1	1	1	1	1	1	1	1	1	–	1	6-37441-00-0-1

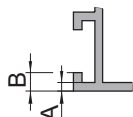
40	Corner drive C-L	2	2	2	2	2	2	2	2	2	50	–	6-37266-00-0-1
42	Packer for corner-drive C-L *	2	2	2	2	2	2	2	2	2	100	–	9-48466-00-0-1
45	Locking cam	–	2	4	–	2	4	2	4	6	100	–	6-37111-00-0-8
48	Mushroom cam RC3	12	12	12	14	14	14	15	15	15	100	–	9-48458-00-0-8

55	Striker	for A=2.0	1	3	5	1	3	5	3	5	7	100	–	6-37261-01-0-1
		for A=1.5											100	–
57	Sec striker	for frame groove 10/14	12	12	12	14	14	14	15	15	15	100	–	6-37254-10-0-8
		for frame groove B=4.0										100	–	6-37254-14-0-8
		for frame groove B=3.5										100	–	6-37254-15-0-8
59	T&T striker	for A=2.0	1	1	1	1	1	1	1	1	1	100	–	6-37272-01-0-1
		for A=1.5											100	–
60	Sec clearance packer / TU-ON window run-up block	1	1	1	1	1	1	1	1	1	100	–	6-38807-00-0-1	
82	MODENA-F/Z turn handle, lockable 100 Nm	1	1	1	1	1	1	1	1	1	10	–	6-34397-29-0-1	
85	Countersunk screw M5x30	2	2	2	2	2	2	2	2	2	100	–	9-13255-30-0-1	

Accessories

271	Stopper	for Turn-Only windows	1	1	1	1	1	1	1	1	1	10	–	6-39548-00-0-0
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* Only with deep groove with groove width 13.6–15 mm and groove depth 5.5–7 mm.

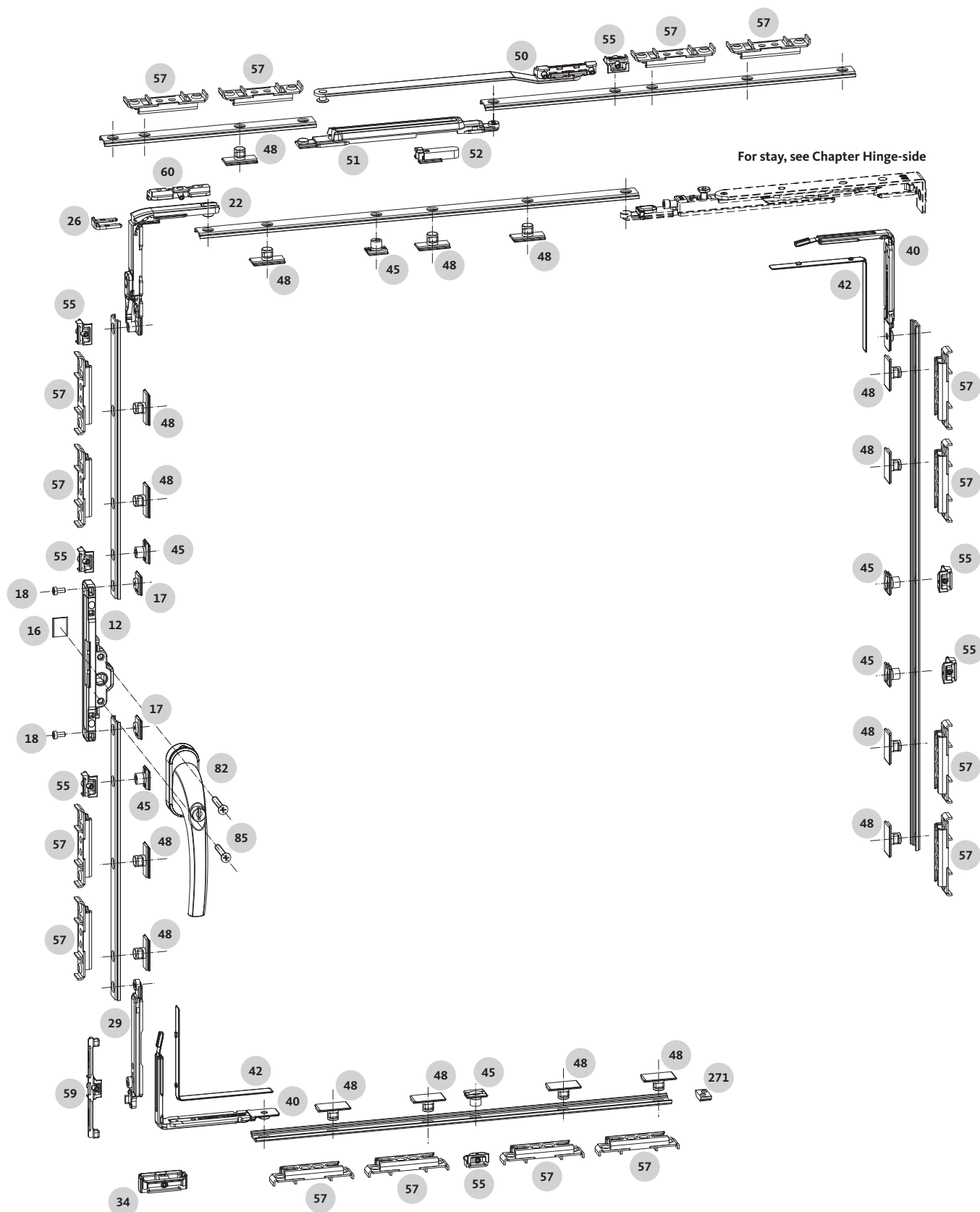


RC3 Overviews of hardware sets

Tilt&Turn window with insertable gear – SW 1351–1700 mm



RC3



RC3 Overviews of hardware sets

Tilt&Turn window with insertable gear – SW 1351–1700 mm



Continued

RC3

Item	Description	Piece(s)						PU	Qty. in K-set	Order number
		SW 1351–1450			SW 1451–1700					
		SH 960–1200	SH 1201–2200	SH 2201–2800	SH 1040–1200	SH 1201–2200	SH 2201–2800			

Insertable gear w/o M.D. RC2/RC3		1	1	1	1	1	1	10	–	K-19575-00-0-1
12	Insertable gear RC w/o M.D.	1	1	1	1	1	1	–	1	6-39385-12-0-1
16	Anti-drill plate for insertable gear	1	1	1	1	1	1	–	1	6-39081-01-0-0
17	Counter plate	2	2	2	2	2	2	–	2	9-50034-00-0-8
18	Cylinder head screw M4x8	2	2	2	2	2	2	–	2	9-13713-08-R-8

T&T set, central locking system		1	1	1	1	1	1	10	–	K-19054-00-0-1
–	Handle connector-pin	–	–	–	–	–	–	–	1	6-37090-00-0-1
22	Corner-drive with M.D.	1	1	1	1	1	1	–	1	6-37120-00-0-1
26	Clamping bracket	1	1	1	1	1	1	–	1	9-48157-00-0-1
29	T&T tilter	1	1	1	1	1	1	–	1	6-37258-00-0-1
–	Run-up block, sash part	–	–	–	–	–	–	–	1	9-40404-00-0-1
34	T&T fanlight hinge	1	1	1	1	1	1	–	1	6-37441-00-0-1

40	Corner drive C-L	2	2	2	2	2	2	50	–	6-37266-00-0-1
42	Packer for corner-drive C-L *	2	2	2	2	2	2	100	–	9-48466-00-0-1
45	Locking cam	2	4	6	2	4	6	100	–	6-37111-00-0-8
48	Mushroom cam RC3	15	15	15	16	16	16	100	–	9-48458-00-0-8

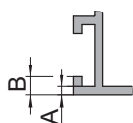
Set of additional stays		1	1	1	1	1	1	10	–	K-19013-00-0-1		
50	Stay-arm, additional stay	1	1	1	1	1	1	–	1	6-37840-00-0-1		
51	Stay-guide, additional stay	1	1	1	1	1	1	–	1	6-37841-00-0-1		
52	Opening restrictor	with hinge-side 710					1	1	1	–	1	6-38803-00-0-1

55	Striker	for A=2.0	3	5	7	3	5	7	100	–	6-37261-01-0-1	
		for A=1.5							100	–	6-37261-02-0-1	
57	Sec striker	for frame groove 10/14	15	15	15	16	16	16	100	–	6-37254-10-0-8	
		for frame groove 14/18							B=4.0	100	–	6-37254-14-0-8
									B=3.5	100	–	6-37254-15-0-8
59	T&T striker	for A=2.0	1	1	1	1	1	1	100	–	6-37272-01-0-1	
		for A=1.5							100	–	6-37272-02-0-1	
60	Sec clearance packer / TU-ON window run-up block	1	1	1	1	1	1	100	–	6-38807-00-0-1		
82	MODENA-F/Z turn handle, lockable 100 Nm	1	1	1	1	1	1	10	–	6-34397-29-0-1		
85	Countersunk screw M5x30	2	2	2	2	2	2	100	–	9-13255-30-0-1		

Accessories

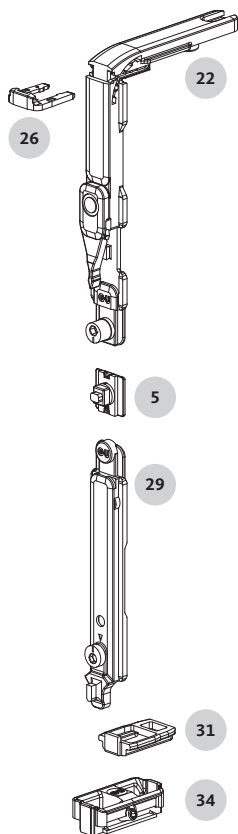
271	Stopper	for Turn-Only windows					1	1	1	1	10	–	6-39548-00-0-0
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* Only with deep groove with groove width 13.6–15 mm and groove depth 5.5–7 mm.



Individual components

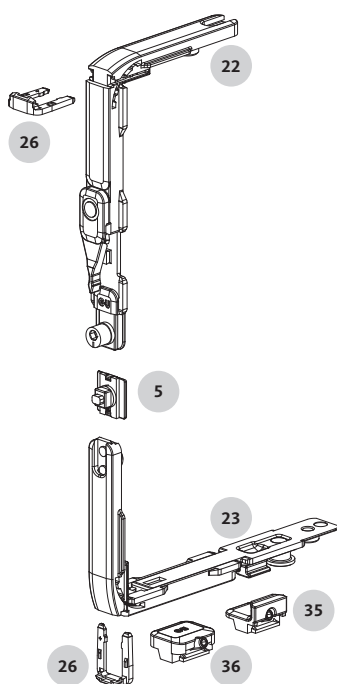
Central locking system set



T&T set, central locking system

Technical data	
Opening type	Tilt&Turn window
DIN side of hinges	left right
Frame groove [mm]	10/14 12/15 14/18
Finish	ferGUard*silver
Installation tool	Hexagon socket size 2.5
Adjusting tools	Hexagon socket size 4

	PU	Order number
	10	K-19054-00-0-1



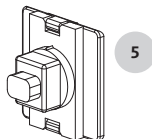
TF set, central locking system

Technical data	
Opening type	Tilt-First window
DIN side of hinges	left right
Frame groove [mm]	10/14 12/15 14/18
Finish	ferGUard*silver
Installation tool	Hexagon socket size 2.5
Adjusting tools	Hexagon socket size 4

	PU	Order number
	10	K-19084-00-0-1

Individual components

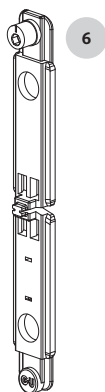
Connector for geared turn handle



Handle connector-pin

Technical data	
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Finish	ferGUard*silver
Installation tool	-

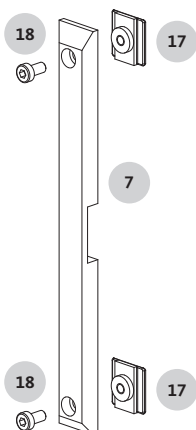
	PU	Order number
	100	6-37090-00-0-1



Connector for divided connecting rod

Technical data	
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Finish	ferGUard*silver
Distance between engagement pins [mm]	140
Installation tool	-
Adjusting tools	Hexagon socket size 4

	PU	Order number
	50	6-37257-00-0-1



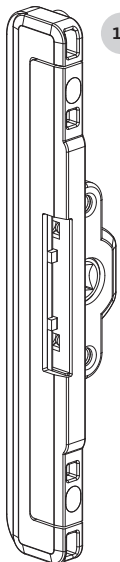
RC2/RC3 handle connector set

Technical data	
Specifications	only in conjunction with ADAGIO geared turn handle, lockable RC2/RC3 K-19821-00-0
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Burglar resistance class	RC2 RC3
Finish	ferGUard*silver
Distance between engagement pins [mm]	140
Installation tool	Hexagon socket size 2.5

	PU	Order number
	10	K-19820-00-0-1

Individual components

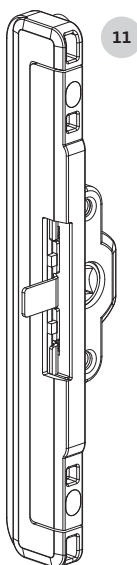
Insertable gear / insertable lock



Insertable gear w/o M.D.

Technical data	
Specifications	without mishandling device
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Finish	ferGUard*silver
Diameter of hole/engagement pin [mm]	10
Overlap up to handle axis [mm]	23
Distance between engagement pins [mm]	140
Distance between fixing holes [mm]	43

	PU	Order number
	10	6-39385-00-0-1



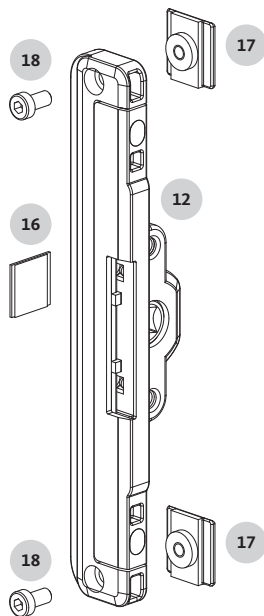
Insertable gear with M.D.

Technical data	
Specifications	with mishandling device
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Finish	ferGUard*silver
Diameter of hole/engagement pin [mm]	10
Overlap up to handle axis [mm]	23
Distance between engagement pins [mm]	140
Distance between fixing holes [mm]	43

	PU	Order number
	10	6-39384-00-0-1

Individual components

Insertable gear / insertable lock



Insertable gear w/o M.D. RC2/RC3

Technical data	
Specifications	with anti-drill plate and screw connection to the connecting rod without mishandling device
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Burglar resistance class	RC2 RC3
Finish	ferGUard*silver
Diameter of hole/engagement pin [mm]	10
Overlap up to handle axis [mm]	23
Distance between engagement pins [mm]	140
Distance between fixing holes [mm]	43

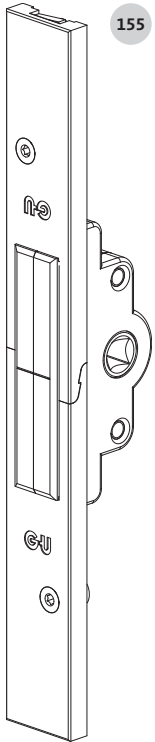
	PU	Order number
	10	K-19575-00-0-1

Individual components

Insertable gear / insertable lock



155



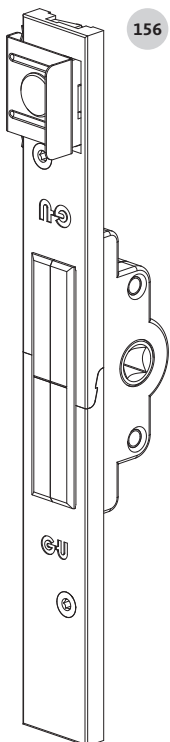
Insertable gear w/o M.D.

Technical data	
Specifications	without mishandling device
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Finish	ferGUard*silver
Diameter of hole/engagement pin [mm]	6 *
Distance between engagement pins [mm]	190
Distance between fixing holes [mm]	43

Overlap up to handle axis [mm]	PU	Order number
36	10	6-25916-25-0-1
41	10	6-25916-30-0-1
46	10	6-25916-35-0-1
51	10	6-25916-40-0-1
56	10	6-25916-45-0-1
61	10	6-25916-50-0-1

* 2 x adapter ring Ø6 to Ø10 (9-48454-00-0-6)

156



Insertable gear with M.D.

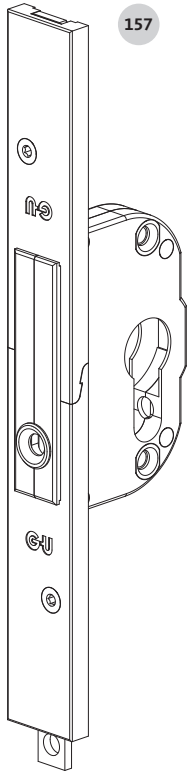
Technical data	
Specifications	with mishandling device
Opening type	Tilt&Turn window Tilt-First window
DIN side of hinges	left right
Finish	ferGUard*silver
Diameter of hole/engagement pin [mm]	6 *
Distance between engagement pins [mm]	190
Distance between fixing holes [mm]	43

Overlap up to handle axis [mm]	PU	Order number
36	10	6-25917-25-0-1
41	10	6-25917-30-0-1
46	10	6-25917-35-0-1
51	10	6-25917-40-0-1
56	10	6-25917-45-0-1

* 2 x adapter ring Ø6 to Ø10 (9-48454-00-0-6)

Individual components

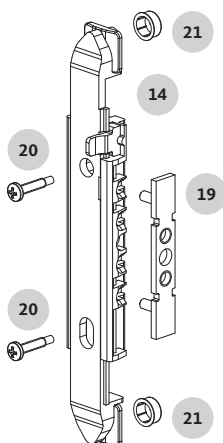
Insertable gear / insertable lock



Insertable lock for PC

Technical data	
Specifications	for profile cylinders
Opening type	Tilt&Turn window Tilt-First window Turn-Only window
DIN side of hinges	left right
Finish	ferGUard*silver
Diameter of hole/engagement pin [mm]	6
Distance between engagement pins [mm]	200
Distance between fixing holes [mm]	63

Overlap up to handle axis [mm]	PU	Order number
36	10	6-25918-25-0-1
41	10	6-25918-30-0-1
46	10	6-25918-35-0-1
51	10	6-25918-40-0-1
56	10	6-25918-45-0-1
61	10	6-25918-50-0-1



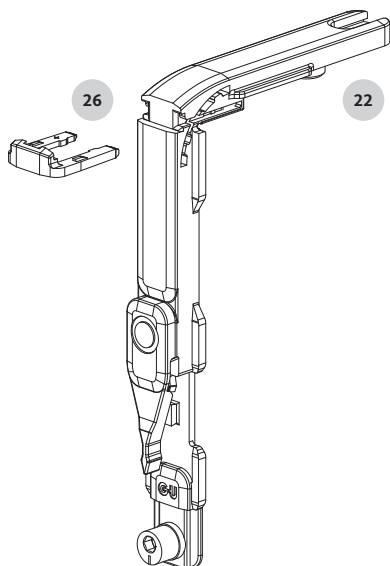
Insertable gear, rosette-free handle

Technical data	
Specifications	with mishandling device can only be used with turn handles without rosettes 6-40186, K-20048, K-20049
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Finish	ferGUard*silver
Diameter of hole/engagement pin [mm]	10
Overlap up to handle axis [mm]	14.5
Distance between engagement pins [mm]	154
Distance between fixing holes [mm]	17

	PU	Order number
	10	K-20050-00-0-1

Individual components

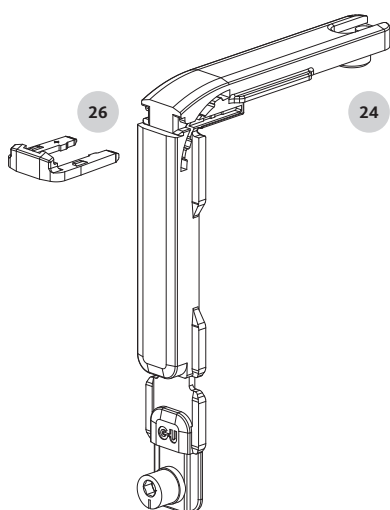
Corner-drive



Corner-drive with M.D.

Technical data	
Specifications	with mishandling device
Opening type	Tilt&Turn window Tilt-First window Turn-Only window
DIN side of hinges	left right
Finish	ferGUard*silver
Height of locking cam [mm]	6.5
Installation tool	-
Adjusting tools	Hexagon socket size 4

	PU	Order number
	50	K-19772-00-0-1



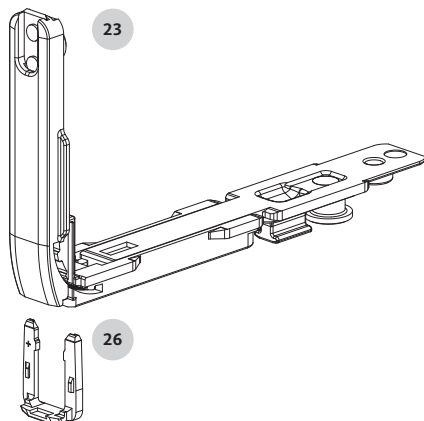
Corner-drive without M.D.

Technical data	
Specifications	without mishandling device
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	ferGUard*silver
Height of locking cam [mm]	6.5
Installation tool	-
Adjusting tools	Hexagon socket size 4

	PU	Order number
Individual pack	50	K-19774-00-0-1
Industrial packing	50	K-19775-00-0-1

Individual components

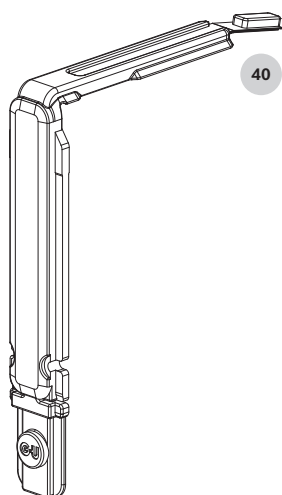
Corner-drive



Tilt corner-drive TF

Technical data	
Opening type	Tilt-First window
DIN side of hinges	left right
Finish	ferGUard*silver
Height of locking cam [mm]	6.7
Installation tool	-
Adjusting tools	Hexagon socket size 4

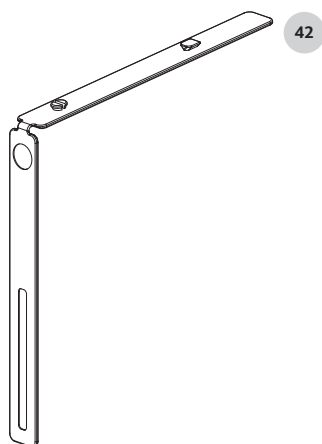
	PU	Order number
	50	K-19773-00-0-1



Corner drive C-L

Technical data	
Specifications	for centre-lock
Opening type	Tilt&Turn window Tilt-First window Turn-Only window
DIN side of hinges	left right
Finish	ferGUard*silver
Installation tool	-

	PU	Order number
	50	6-37266-00-0-1



Packer for corner-drive C-L

Technical data	
Specifications	for corner-drive C-L 6-37266 only with deep groove with groove width 13.6–15 mm and groove depth 5.5–7 mm
Opening type	Tilt&Turn window Tilt-First window Turn-Only window
DIN side of hinges	left right
Finish	grey
Type of fixing	for clipping in
Installation tool	-

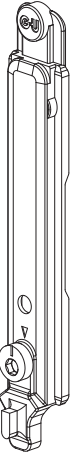
	PU	Order number
	100	9-48466-00-0-1

Individual components

Tilter



29



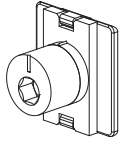
T&T tilter

Technical data	
Opening type	Tilt&Turn window Turn-Only window
DIN side of hinges	left right
Finish	ferGUard*silver
Installation tool	-
Adjusting tools	Hexagon socket size 4

	PU	Order number
	50	6-37258-00-0-1

Individual components

Locking cam

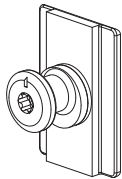


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Locking cam

Technical data	
Specifications	for insertion
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	stainless steel
Height of locking cam [mm]	6.5
Installation tool	-
Adjusting tools	Hexagon socket size 4

	PU	Order number
	100	6-37111-00-0-8

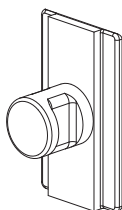


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Mushroom cam RC2

Technical data	
Specifications	for insertion
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	stainless steel
Height of locking cam [mm]	8.2
Installation tool	-
Adjusting tools	Hexalobular internal T15

	PU	Order number
	100	6-37114-00-0-8



48

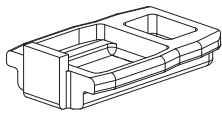
Mushroom cam RC3

Technical data	
Specifications	for insertion
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	stainless steel
Height of locking cam [mm]	8.2
Installation tool	-

	PU	Order number
	100	9-48458-00-0-8

Individual components

Run-up block, sash part



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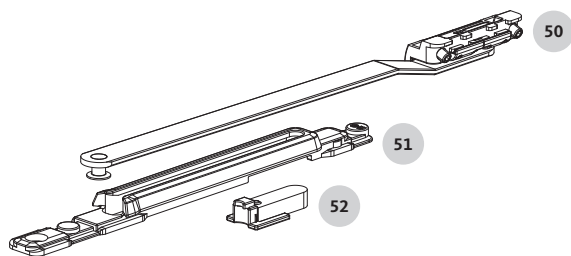
Run-up block, sash part

Technical data	
Opening type	Tilt&Turn window Turn-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	grey
Installation tool	-

	PU	Order number
	10	9-40404-00-0-1

Individual components

Additional stay



Set of additional stays

Technical data	
Opening type	Tilt&Turn window Tilt-First window
DIN side of hinges	left right
Finish	ferGUard*silver
Min. sash width [mm]	1351
Max. sash width [mm]	1700
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5

	PU	Order number
	10	K-19013-00-0-1



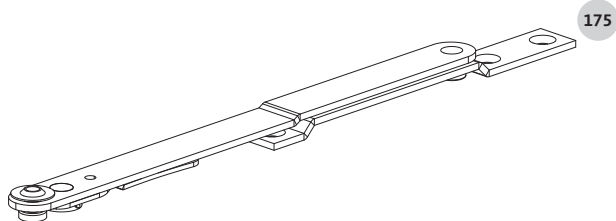
Adapter for additional stay

Technical data	
Opening type	Tilt&Turn window Tilt-First window
DIN side of hinges	left right
Finish	grey

	PU	Order number
	10	9-50638-00-0-1

Individual components

Hardware components for Tilt-Only windows

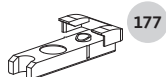


Tilt-Only stay

Technical data	
Opening type	Tilt-Only window
DIN side of hinges	left right
Frame groove [mm]	10/14 12/15 14/18
Finish	ferGUard*silver
Type of fixing	screw-on

	PU	Order number
	10	U-76500-00-0-1

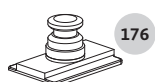
Note: for application ranges and information on the quantities required in relation to the application range, refer to the respective installation drawings: surface-mounted hinge-side 0-48937, concealed hinge-side 0-49059.



Packer for Tilt-Only stay

Technical data	
Opening type	Tilt-Only window
DIN side of hinges	left right
Finish	grey

	PU	Order number
	100	9-47202-00-0-1



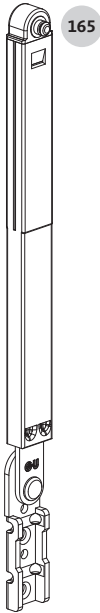
Engagement pin, Tilt-Only stay

Technical data	
Opening type	Tilt-Only window
DIN side of hinges	left right
Finish	ferGUard*silver

	PU	Order number
	10	6-40477-00-0-1

Individual components

Hardware components for Tilt-Only windows

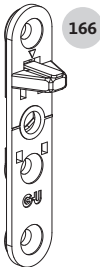


EURO-SOLID restrictor and cleaning stay

Technical data	
Opening type	Tilt-Only window
DIN side of hinges	left right
Finish	stainless steel
Type of fixing	screw-on

Size	PU	Order number
01	10	6-27995-01-0-8
02	10	6-27995-02-0-8
03	10	6-27995-03-0-8
04	10	6-27995-04-0-8

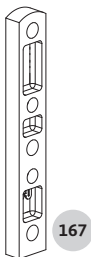
Note: for application ranges and information on the quantities required in relation to the application range, refer to the respective installation drawings: surface-mounted hinge-side 0-48937, concealed hinge-side 0-49059.



EURO-SOLID accessories set / EGO-B/ EGO-FL

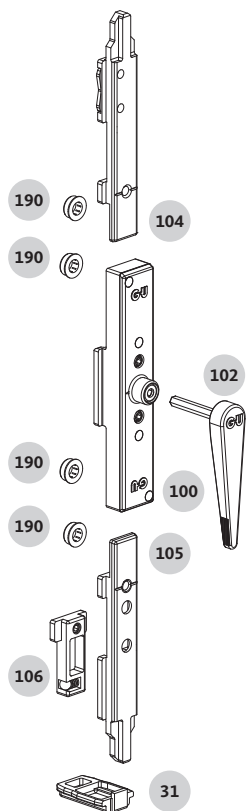
Technical data	
Opening type	Tilt-Only window
DIN side of hinges	left right
Finish	ferGUard*silver
Type of fixing	screw-on

	PU	Order number
	10	K-14686-00-0-1



Individual components

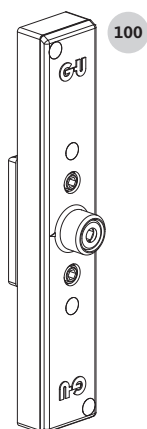
Hardware components for dummy mullion sash with central locking system in the sash groove (ST-FLN)



ST-FLN lever-operated gear set

Technical data	
Opening type	Dummy-mullion sash
for dummy-mullion sash groove	ST-FLN
DIN side of hinges	left right
Finish	ferGUard*silver
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5

	PU	Order number
	10	K-19589-00-0-1



Lever-operated gear

Technical data	
Opening type	Dummy-mullion sash
for dummy-mullion sash groove	ST-FLN
DIN side of hinges	left right
Finish	ferGUard*silver
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5

	PU	Order number
	10	6-24680-00-0-1

Individual components



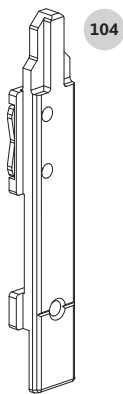
Hardware components for dummy mullion sash with central locking system in the sash groove (ST-FLN)



Hand lever

Technical data	
Specifications	for lever-operated gears 6-24680
Opening type	Dummy-mullion sash
for dummy-mullion sash groove	ST-FLN
DIN side of hinges	left right
Finish	ferGUard*silver
Type of fixing	pluggable
Installation tool	-

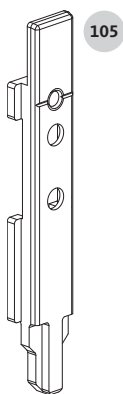
	PU	Order number
	10	6-23903-38-0-1



Top connecting rod shoot-bolt

Technical data	
Specifications	with glide brake
Opening type	Dummy-mullion sash
for dummy-mullion sash groove	ST-FLN
DIN side of hinges	left right
Finish	ferGUard*silver
Installation tool	-

	PU	Order number
	10	G-17509-00-0-1



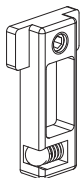
Bottom connecting rod shoot-bolt

Technical data	
Specifications	for bottom keeper G-12096
Opening type	Dummy-mullion sash
for dummy-mullion sash groove	ST-FLN
DIN side of hinges	left right
Finish	ferGUard*silver
Installation tool	-

	PU	Order number
	10	E-12832-00-0-1

Individual components

Hardware components for dummy mullion sash with central locking system in the sash groove (ST-FLN)



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Bottom keeper

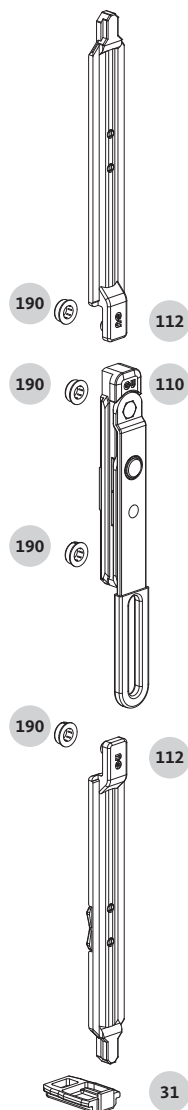
Technical data	
Specifications	for connecting rod shoot-bolt E-12832
Opening type	Dummy-mullion sash
DIN side of hinges	left right
Finish	ferGUard*silver
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5

	PU	Order number
	10	G-12096-00-0-1

Individual components



Hardware components for dummy mullion sash with central locking system in the double C groove (ST-DCN)



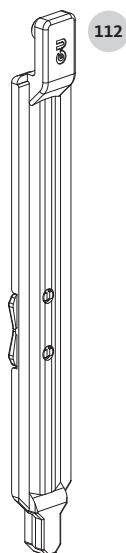
ST-DCN lever-operated gear set

Technical data	
Opening type	Dummy-mullion sash
for dummy-mullion sash groove	ST-DCN
DIN side of hinges	left right
Finish	ferGUard*silver
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5

	PU	Order number
	10	K-19590-00-0-1

Individual components

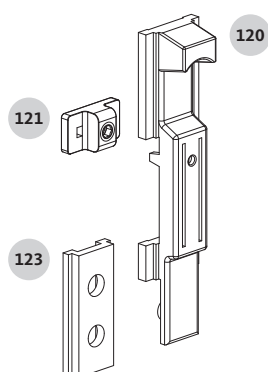
Hardware components for dummy mullion sash with central locking system in the double C groove (ST-DCN)



Connecting rod shoot-bolt

Technical data	
Opening type	Dummy-mullion sash
for dummy-mullion sash groove	ST-DCN
DIN side of hinges	left right
Finish	ferGUard*silver
Installation tool	-

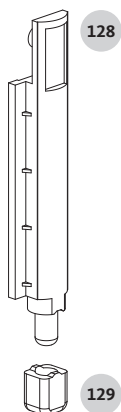
	PU	Order number
	10	6-31038-00-0-1



ST-DCN set of sliders

Technical data	
Opening type	Dummy-mullion sash
for dummy-mullion sash groove	ST-DCN
DIN side of hinges	left right
Finish	grey
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5

	PU	Order number
	10	K-15816-00-0-1



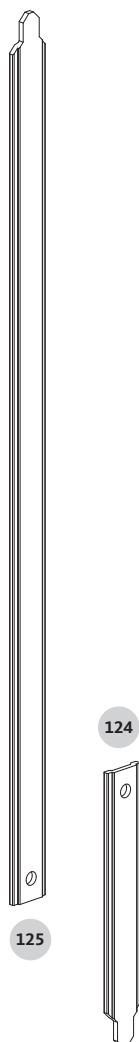
TU-ON + ST-DCN connecting rod shoot-bolt set

Technical data	
Specifications	with pressure adjustment via CR shoot-bolt eccentric cap
Opening type	Turn-Only window Dummy-mullion sash
for dummy-mullion sash groove	ST-DCN
DIN side of hinges	left right
Finish	grey
Installation tool	-
Adjusting tools	-

	PU	Order number
	10	K-15817-00-0-1

Individual components

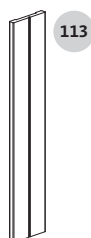
Hardware components for dummy mullion sash with central locking system in the double C groove (ST-DCN)



ST-DCN locking rod set

Technical data	
Opening type	Dummy-mullion sash
for dummy-mullion sash groove	ST-DCN
DIN side of hinges	left right
Finish	EV1 silver
Installation tool	-

	PU	Order number
	10	K-15818-00-0-1



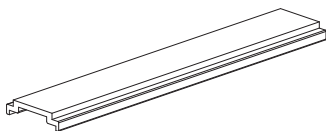
Connecting rod profile 15/20 ST-DCN

Technical data	
Opening type	Dummy-mullion sash
for dummy-mullion sash groove	ST-DCN
DIN side of hinges	left right
Finish	EV1 silver
Length in [mm]	1600

	PU	Order number
	10	9-40859-16-0-1

Individual components

Accessories



Connecting rod profile 15/20

Technical data	
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	EV1 silver
Length in [mm]	6000

PU	Order number
10	P-01975-60-0-1



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Adapter ring Ø6 to Ø10

Technical data	
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	black
Diameter of [mm]	6
Diameter [mm]	10
Installation tool	-

PU	Order number
100	9-48454-00-0-6







ALU-JET 510 up to 100 kg sash weight

Tilt&Turn window	94
Tilt-First window	96
Turn-Only window	98
Individual components	100

ALU-JET 710 up to 130 kg sash weight

Tilt&Turn window	104
Tilt-First window	106
Turn-Only window	108
Tilt-Only window	110
Individual components	112

ALU-JET 10 axial hinges

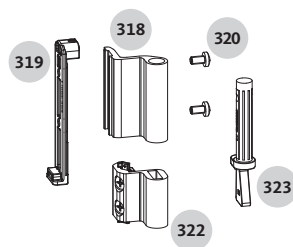
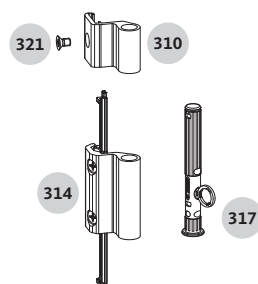
Turn-Only window / Tilt-Only window	116
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ALU-JET S800 up to 300 kg sash weight

Turn-Only window	118
Turn-Only window / Tilt-Only window	119

ALU-JET 510 up to 100 kg sash weight

Tilt&Turn window



ALU-JET 510 up to 100 kg sash weight

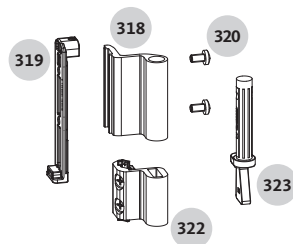
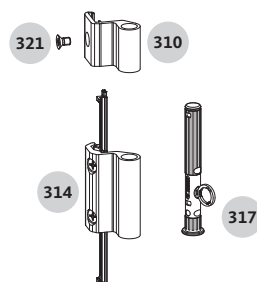
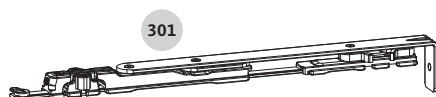
Tilt&Turn window



Item	Description	Piece(s)	PU	Qty. in K-set	Order number	
		SH 500-2400				
300	T&T stay	SW 395-700	1	10	-	6-39295-00-0-1
		SW 701-1600	1	10	-	6-39296-00-0-1
	Hinge-side set	Frame groove 10/14, 12/15, 14/18	1	10	-	K-19477-00-0-1
310	Stay-hinge		1	-	1	6-39370-00-0-1
314	Stay-bearing		1	-	1	6-39369-00-0-1
317	Stay-bearing pin		1	-	1	9-50631-00-0-6
318	Corner hinge		1	-	1	9-50620-00-0-1
319	Clamping bracket		1	-	1	6-39368-00-0-1
320	Pan-head screw with cross recess M5x9		2	-	2	9-13877-09-R-8
321	Countersunk screw M5x8		1	-	1	9-13878-08-R-8
322	Pivot-rest		1	-	1	6-39367-00-0-1
323	Pivot-rest pin		1	-	1	9-50621-00-0-6

ALU-JET 510 up to 100 kg sash weight

Tilt-First window



ALU-JET 510 up to 100 kg sash weight

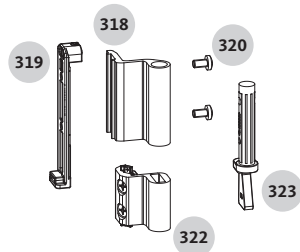
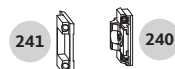
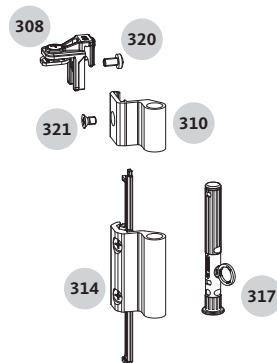
Tilt-First window



Item	Description	Piece(s)	PU	Qty. in K-set	Order number	
		SH 500-2400				
301	TF stay	SW 395-700	1	10	-	6-39297-00-0-1
		SW 701-1600	1	10	-	6-39298-00-0-1
	Hinge-side set	Frame groove 10/14, 12/15, 14/18	1	10	-	K-19477-00-0-1
310	Stay-hinge		1	-	1	6-39370-00-0-1
314	Stay-bearing		1	-	1	6-39369-00-0-1
317	Stay-bearing pin		1	-	1	9-50631-00-0-6
318	Corner hinge		1	-	1	9-50620-00-0-1
319	Clamping bracket		1	-	1	6-39368-00-0-1
320	Pan-head screw with cross recess M5x9		2	-	2	9-13877-09-R-8
321	Countersunk screw M5x8		1	-	1	9-13878-08-R-8
322	Pivot-rest		1	-	1	6-39367-00-0-1
323	Pivot-rest pin		1	-	1	9-50621-00-0-6

ALU-JET 510 up to 100 kg sash weight

Turn-Only window



ALU-JET 510 up to 100 kg sash weight

Turn-Only window



Item	Description	Piece(s)			PU	Qty. in K-set	Order number
		SH 280-1200	SH 1201-2200	SH 2201-2400			

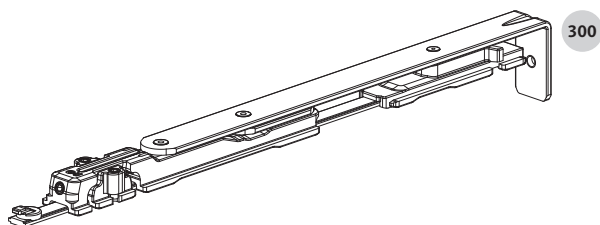
TU-ON sash part set		SW 200-1600			1	1	1	10	-	K-19785-00-0-1
308	TU-ON sash part				1	1	1	-	1	6-39299-00-0-1
320	Pan-head screw with cross recess M5x9				1	1	1	-	1	9-13877-09-R-8

Hinge-side set		Frame groove 10/14, 12/15, 14/18			1	1	1	10	-	K-19477-00-0-1
310	Stay-hinge				1	1	1	-	1	6-39370-00-0-1
314	Stay-bearing				1	1	1	-	1	6-39369-00-0-1
317	Stay-bearing pin				1	1	1	-	1	9-50631-00-0-6
318	Corner-hinge				1	1	1	-	1	9-50620-00-0-1
319	Clamping bracket				1	1	1	-	1	6-39368-00-0-1
320	Pan-head screw with cross recess M5x9				2	2	2	-	2	9-13877-09-R-8
321	Countersunk screw M5x8				1	1	1	-	1	9-13878-08-R-8
322	Pivot-rest				1	1	1	-	1	6-39367-00-0-1
323	Pivot-rest pin				1	1	1	-	1	9-50621-00-0-6

Centre-closer set 10/14		Frame groove 10/14			-	1	2	10	-	G-13527-00-0-1
Centre-closer set 14/18		Frame groove 14/18			-	1	2	10	-	G-13529-00-0-1
240	Centre-closer, frame part	Frame groove 10/14			-	1	2	-	1	G-13451-00-0-1
		Frame groove 14/18			-	1	2	-	1	G-13452-00-0-1
241	Centre-closer, sash part				-	1	2	-	1	G-13450-00-0-1

ALU-JET 510 up to 100 kg sash weight

Individual components

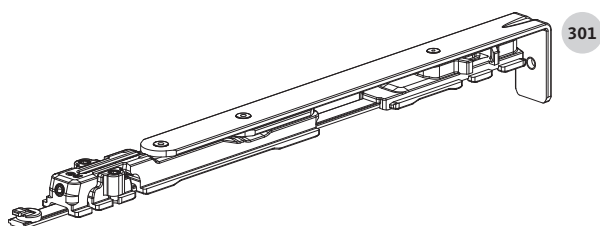


T&T stay

Technical data	
Hinge-side type	surface-mounted
Opening type	Tilt&Turn window
DIN side of hinges	left right
Finish	ferGUard*silver
Max. sash weight [kg]	100
Opening angle [°]	180
Installation tool	Hexagon socket size 4 Philips PH2
Adjusting tools	Hexagon socket size 4

Min. sash width [mm]	Max. sash width [mm]	PU	Order number
395	700	10	6-39295-00-0-1
701	1600 *	10	6-39296-00-0-1

* Sash width 1351–1600 mm with additional stay K-19013, see Chapter Central locking systems

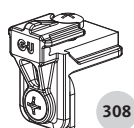


TF stay

Technical data	
Hinge-side type	surface-mounted
Opening type	Tilt-First window
DIN side of hinges	left right
Finish	ferGUard*silver
Max. sash weight [kg]	100
Opening angle [°]	180
Installation tool	Hexagon socket size 4 Philips PH2
Adjusting tools	Hexagon socket size 4

Min. sash width [mm]	Max. sash width [mm]	PU	Order number
395	700	10	6-39297-00-0-1
701	1600 *	10	6-39298-00-0-1

* Sash width 1351–1600 mm with additional stay K-19013, see Chapter Central locking systems



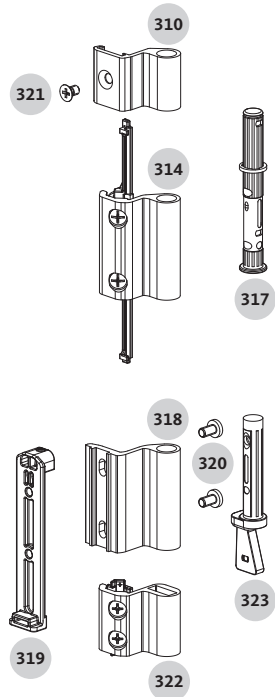
TU-ON sash part set

Technical data	
Hinge-side type	surface-mounted
Opening type	Turn-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	ferGUard*silver
Max. sash weight [kg]	100
Opening angle [°]	180
Installation tool	Hexagon socket size 4 Philips PH2
Adjusting tool	Hexagon socket size 4

PU	Order number
10	K-19785-00-0-1

ALU-JET 510 up to 100 kg sash weight

Individual components



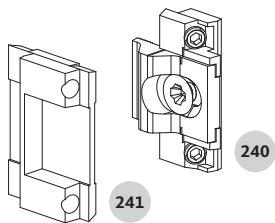
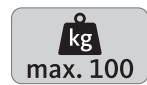
Hinge-side set

Technical data	
Hinge-side type	surface-mounted
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Dummy-mullion sash
DIN side of hinges	left right
Max. sash weight [kg]	100
Opening angle [°]	180
Frame groove [mm]	10/14 12/15 14/18
Min. hinge-passage [mm]	3.5
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5 Philips PH2

Finish	PU	Order number
untreated	10	K-19477-00-0-0
EV1 silver	10	K-19477-00-0-1
black	10	K-19477-00-0-6
traffic white	10	K-19477-00-0-7

ALU-JET 510 up to 100 kg sash weight

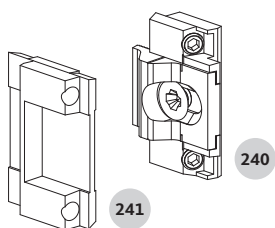
Individual components



Centre-closer set 10/14

Technical data	
Hinge-side type	surface-mounted
Opening type	Turn-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	ferGUard*silver
Frame groove [mm]	10/14
Installation tool	Hexagon socket size 2.5
Adjusting tool	Philips PH2

	PU	Order number
	10	G-13527-00-0-1



Centre-closer set 14/18

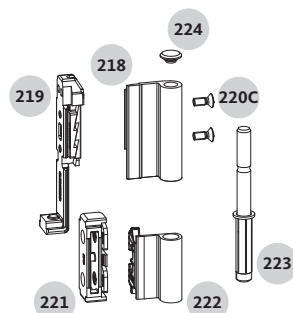
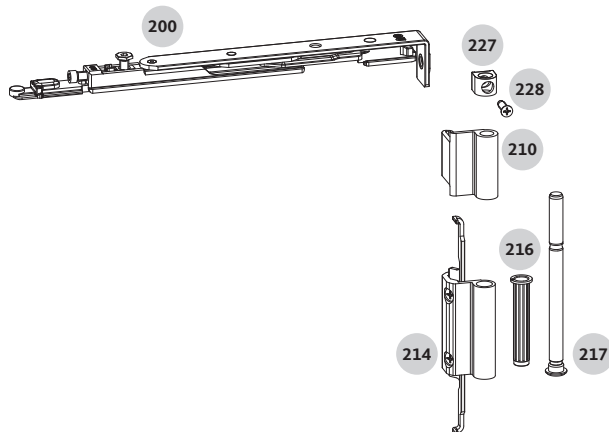
Technical data	
Hinge-side type	surface-mounted
Opening type	Turn-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	ferGUard*silver
Frame groove [mm]	14/18
Installation tool	Hexagon socket size 2.5
Adjusting tool	Philips PH2

	PU	Order number
	10	G-13529-00-0-1



ALU-JET 710 up to 130 kg sash weight

Tilt&Turn window



ALU-JET 710 up to 130 kg sash weight

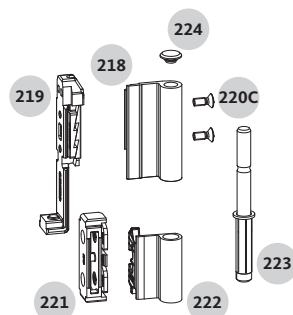
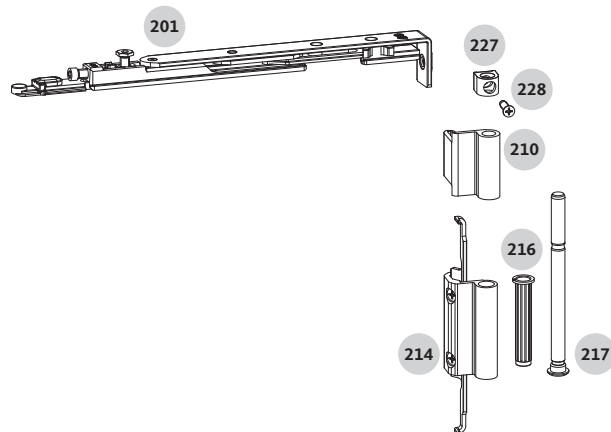
Tilt&Turn window



Item	Description	Piece(s)	PU	Qty. in K-set	Order number	
		SH 500-2800				
200	T&T stay	SW 410-700	1	10	-	K-20886-00-0-1
		SW 701-1700	1	10	-	K-20887-00-0-1
	Hinge-side set 10/14	Frame groove 10/14	1	10	-	K-20561-00-0-1
	Hinge-side set 12/15	Frame groove 12/15	1	10	-	K-20559-00-0-1
	Hinge-side set 14/18	Frame groove 14/18	1	10	-	K-20560-00-0-1
210	Stay-hinge		1	-	1	6-31088-00-0-1
214	Stay-bearing		1	-	1	6-31591-18-0-1
216	Bearing bush		1	-	1	9-39805-00-0-6
217	Stay-bearing pin		1	-	1	6-40695-00-0-6
218	Corner-hinge		1	-	1	6-31073-00-0-1
219	Clamping bracket		1	-	1	6-30873-00-0-1
220C	Countersunk screw M5x14		2	-	2	9-13489-14-R-8
221	Pivot-rest casing	Frame groove 10/14	1	-	1	6-32055-00-0-1
		Frame groove 12/15	1	-	1	6-32056-00-0-1
		Frame groove 14/18	1	-	1	6-30872-00-0-1
222	Pivot-rest		1	-	1	9-39812-00-0-1
223	Pivot-rest pin		1	-	1	6-31087-00-0-6
224	Cover cap		1	-	1	9-39807-00-0-6
227	Stay-bearing support		1	-	1	9-41710-00-0-1
228	Countersunk screw M5x16		1	-	1	9-33841-16-R-8

ALU-JET 710 up to 130 kg sash weight

Tilt-First window



ALU-JET 710 up to 130 kg sash weight

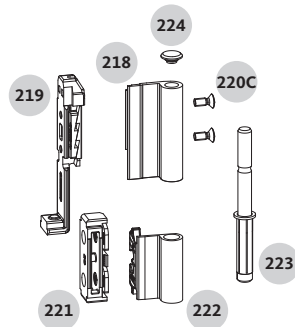
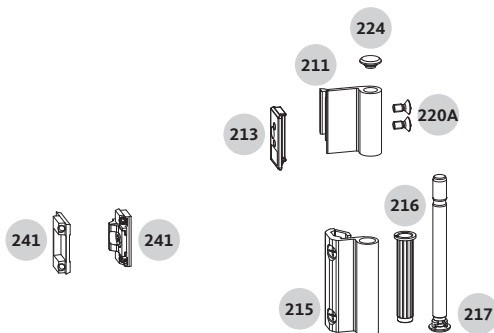
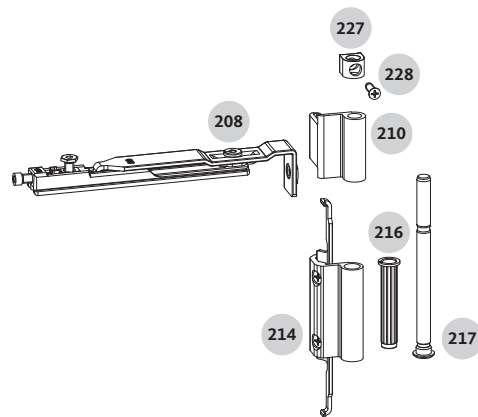
Tilt-First window



Item	Description	Piece(s)	PU	Qty. in K-set	Order number	
		SH 500-2800				
201	TF stay	SW 410-700	1	10	-	K-20888-00-0-1
		SW 701-1700	1	10	-	K-20889-00-0-1
	Hinge-side set 10/14	Frame groove 10/14	1	10	-	K-20561-00-0-1
	Hinge-side set 12/15	Frame groove 12/15	1	10	-	K-20559-00-0-1
	Hinge-side set 14/18	Frame groove 14/18	1	10	-	K-20560-00-0-1
210	Stay-hinge		1	-	1	6-31088-00-0-1
214	Stay-bearing		1	-	1	6-31591-18-0-1
216	Bearing bush		1	-	1	9-39805-00-0-6
217	Stay-bearing pin		1	-	1	6-40695-00-0-6
218	Corner-hinge		1	-	1	6-31073-00-0-1
219	Clamping bracket		1	-	1	6-30873-00-0-1
220C	Countersunk screw M5x14		2	-	2	9-13489-14-R-8
221	Pivot-rest casing	Frame groove 10/14	1	-	1	6-32055-00-0-1
		Frame groove 12/15	1	-	1	6-32056-00-0-1
		Frame groove 14/18	1	-	1	6-30872-00-0-1
222	Pivot-rest		1	-	1	9-39812-00-0-1
223	Pivot-rest pin		1	-	1	6-31087-00-0-6
224	Cover cap		1	-	1	9-39807-00-0-6
227	Stay-bearing support		1	-	1	9-41710-00-0-1
228	Countersunk screw M5x16		1	-	1	9-33841-16-R-8

ALU-JET 710 up to 130 kg sash weight

Turn-Only window



ALU-JET 710 up to 130 kg sash weight

Turn-Only window



Item	Description	Piece(s)			PU	Qty. in K-set	Order number
		SH 280-1200	SH 1201-2200	SH 2201-2800			

208	Turn-Only stay-arm	SW 220-1700	1	1	1	10	-	6-40822-00-0-1
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	Hinge-side set 10/14	Frame groove 10/14	1	1	1	10	-	K-20561-00-0-1
	Hinge-side set 12/15	Frame groove 12/15	1	1	1	10	-	K-20559-00-0-1
	Hinge-side set 14/18	Frame groove 14/18	1	1	1	10	-	K-20560-00-0-1
210	Stay-hinge		1	1	1	-	1	6-31088-00-0-1
214	Stay-bearing		1	1	1	-	1	6-31591-18-0-1
216	Bearing bush		1	1	1	-	1	9-39805-00-0-6
217	Stay-bearing pin		1	1	1	-	1	6-40695-00-0-6
218	Corner-hinge		1	1	1	-	1	6-31073-00-0-1
219	Clamping bracket		1	1	1	-	1	6-30873-00-0-1
220C	Countersunk screw M5x14		2	2	2	-	2	9-13489-14-R-8
221	Pivot-rest casing	Frame groove 10/14	1	1	1	-	1	6-32055-00-0-1
		Frame groove 12/15	1	1	1	-	1	6-32056-00-0-1
		Frame groove 14/18	1	1	1	-	1	6-30872-00-0-1
222	Pivot-rest		1	1	1	-	1	9-39812-00-0-1
223	Pivot-rest pin		1	1	1	-	1	6-31087-00-0-6
224	Cover cap		1	1	1	-	2	9-39807-00-0-6
227	Stay-bearing support		1	1	1	-	1	9-41710-00-0-1
228	Countersunk screw M5x16		1	1	1	-	1	9-33841-16-R-8

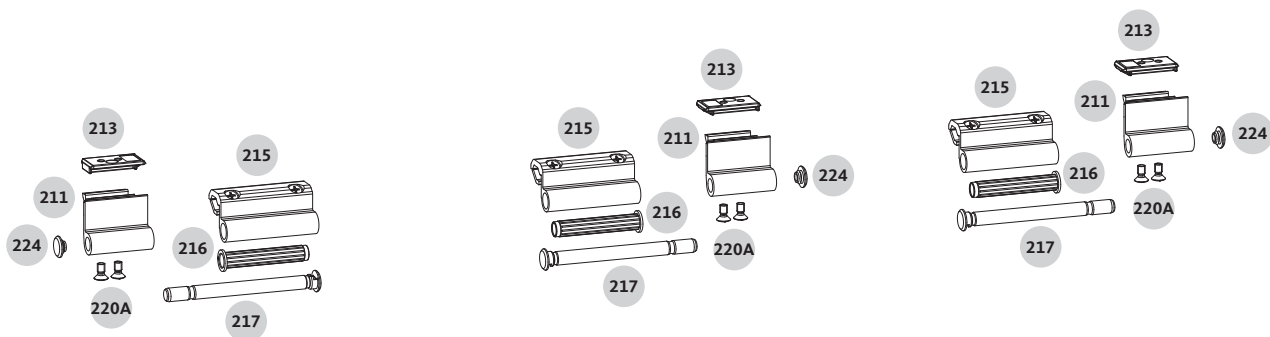
	Centre-closer set 10/14	Frame groove 10/14	-	1	2	10	-	G-13527-00-0-1
	Centre-closer set 14/18	Frame groove 14/18	-	1	2	10	-	G-13529-00-0-1
240	Centre-closer, frame part	Frame groove 10/14	-	1	2	-	1	G-13451-00-0-1
		Frame groove 14/18	-	1	2	-	1	G-13452-00-0-1
241	Centre-closer, sash part		-	1	2	-	1	G-13450-00-0-1

Alternative to item 240 and item 241

	Centre-closer set	Frame groove 10/14, 12/15, 14/18	-	1	2	10	-	K-16897-00-0-1
211	Turn-Only hinge		-	1	2	-	1	6-32249-00-0-1
213	Clamping plate		-	1	2	-	1	9-42376-02-0-1
215	Corner-hinge		-	1	2	-	1	6-33727-18-0-1
216	Bearing bush		-	1	2	-	1	9-39805-00-0-6
217	Stay-bearing pin		-	1	2	-	1	6-30874-00-0-6
220A	Countersunk screw M5x10		-	2	4	-	2	9-13489-10-R-8
224	Cover cap		-	1	2	-	1	9-39807-00-0-6

ALU-JET 710 up to 80 kg sash weight

Tilt-Only window



ALU-JET 710 up to 80 kg sash weight

Tilt-Only window

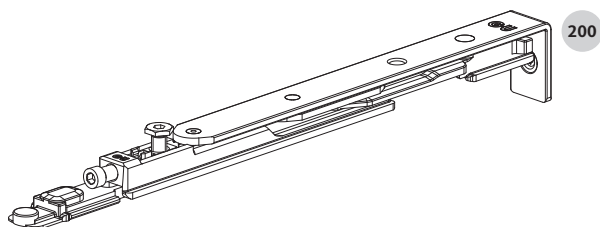


Item	Description	Piece(s)			PU	Qty. in K-set	Order number
		SW 350-400	SW 401-1200	SH 1201-2400			
		SH 280-1200					

	Centre-closer set	Frame groove 10/14, 12/15, 14/18	2	2	3	10	-	K-16897-00-0-1
211	Side-Hung hinge		2	2	3	-	1	6-32249-00-0-1
213	Clamping plate		2	2	3	-	1	9-42376-02-0-1
215	Corner-hinge		2	2	3	-	1	6-33727-18-0-1
216	Bearing bush		2	2	3	-	1	9-39805-00-0-6
217	Stay-bearing pin		2	2	3	-	1	6-30874-00-0-6
220A	Countersunk screw M5x10		4	4	6	-	2	9-13489-10-R-8
224	Cover cap		2	2	3	-	1	9-39807-00-0-6

ALU-JET 710 up to 130 kg sash weight

Individual components

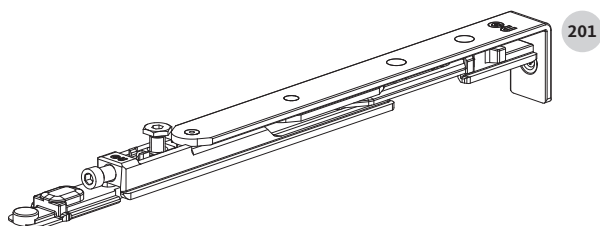


T&T stay

Technical data	
Hinge-side type	surface-mounted
Opening type	Tilt&Turn window
DIN side of hinges	left right
Finish	ferGUard*silver
Max. sash weight [kg]	130
Opening angle [°]	180
Installation tool	Hexagon socket size 4 Philips PH2
Adjusting tools	Hexagon socket size 4

Min. sash width [mm]	Max. sash width [mm]	PU	Order number
410	700	10	K-20886-00-0-1
701	1700 *	10	K-20887-00-0-1

* Sash width 1351–1700 mm with additional stay K-19013, see Chapter Central locking systems

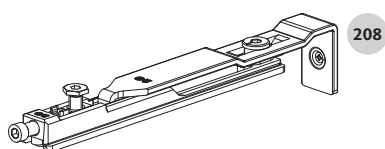


TF stay

Technical data	
Hinge-side type	surface-mounted
Opening type	Tilt-First window
DIN side of hinges	left right
Finish	ferGUard*silver
Max. sash weight [kg]	130
Opening angle [°]	180
Installation tool	Hexagon socket size 4 Philips PH2
Adjusting tools	Hexagon socket size 4

Min. sash width [mm]	Max. sash width [mm]	PU	Order number
410	700	10	K-20888-00-0-1
701	1700 *	10	K-20889-00-0-1

* Sash width 1351–1700 mm with additional stay K-19013, see Chapter Central locking systems



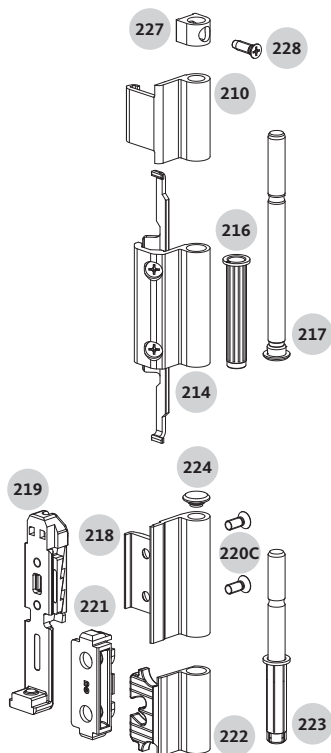
Turn-Only stay-arm

Technical data	
Hinge-side type	surface-mounted
Opening type	Turn-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	ferGUard*silver
Max. sash weight [kg]	130
Opening angle [°]	180
Installation tool	Hexagon socket size 4 Philips PH2
Adjusting tool	Hexagon socket size 4

PU	Order number
10	6-40822-00-0-1

ALU-JET 710 up to 130 kg sash weight

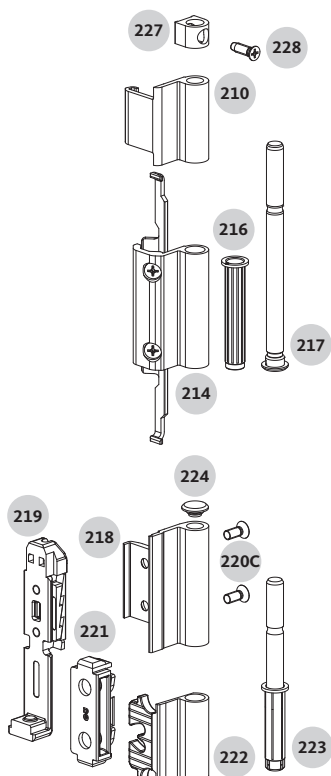
Individual components



Hinge-side set 10/14

Technical data	
Hinge-side type	surface-mounted
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Dummy-mullion sash
DIN side of hinges	left right
Max. sash weight [kg]	130
Opening angle [°]	180
Frame groove [mm]	10/14
Min. hinge-passage [mm]	3
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5 Philips PH2

Finish	PU	Order number
EV1 silver	10	K-20561-00-0-1
black	10	K-20561-00-0-6
traffic white	10	K-20561-00-0-7



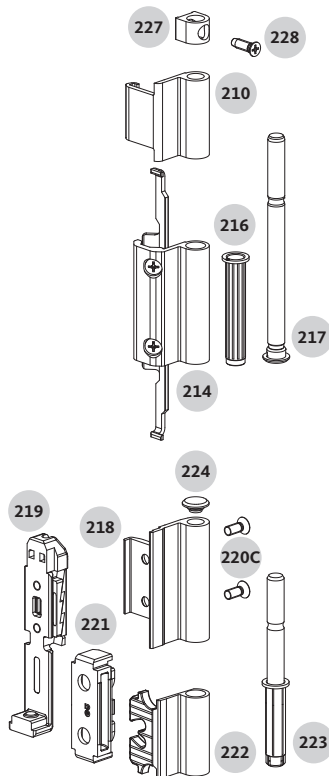
Hinge-side set 12/15

Technical data	
Hinge-side type	surface-mounted
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Dummy-mullion sash
DIN side of hinges	left right
Max. sash weight [kg]	130
Opening angle [°]	180
Frame groove [mm]	12/15
Min. hinge-passage [mm]	3
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5 Philips PH2

Finish	PU	Order number
EV1 silver	10	K-20559-00-0-1
black	10	K-20559-00-0-6
traffic white	10	K-20559-00-0-7

ALU-JET 710 up to 130 kg sash weight

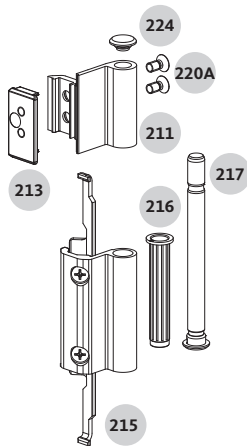
Individual components



Hinge-side set 14/18

Technical data	
Hinge-side type	surface-mounted
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Dummy-mullion sash
DIN side of hinges	left right
Max. sash weight [kg]	130
Opening angle [°]	180
Frame groove [mm]	14/18
Min. hinge-passage [mm]	3
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5 Philips PH2

Finish	PU	Order number
untreated	10	K-20560-00-0-0
EV1 silver	10	K-20560-00-0-1
black	10	K-20560-00-0-6
traffic white	10	K-20560-00-0-7



Centre-closer set

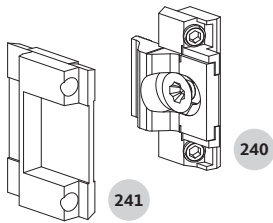
Technical data	
Hinge-side type	surface-mounted
Opening type	Turn-Only window Tilt-Only window Dummy-mullion sash
DIN side of hinges	left right
Max. sash weight [kg]	130 80*
Opening angle [°]	180
Frame groove [mm]	10/14 12/15 14/18
Min. hinge-passage [mm]	3
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5 Philips PH2

Finish	PU	Order number
untreated	10	K-16897-00-0-0
EV1 silver	10	K-16897-00-0-1
special colour available on request	10	K-16897-00-0-9

* With Tilt-Only windows max. 80 kg

ALU-JET 710 up to 130 kg sash weight

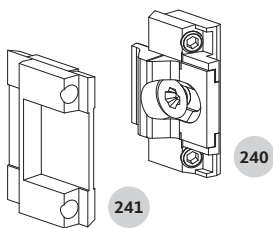
Individual components



Centre-closer set 10/14

Technical data	
Hinge-side type	surface-mounted
Opening type	Turn-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	ferGUard*silver
Frame groove [mm]	10/14
Installation tool	Hexagon socket size 2.5
Adjusting tool	Philips PH2

	PU	Order number
	10	G-13527-00-0-1

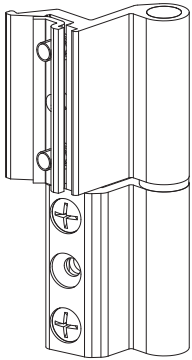


Centre-closer set 14/18

Technical data	
Hinge-side type	surface-mounted
Opening type	Turn-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	ferGUard*silver
Frame groove [mm]	14/18
Installation tool	Hexagon socket size 2.5
Adjusting tool	Philips PH2

	PU	Order number
	10	G-13529-00-0-1

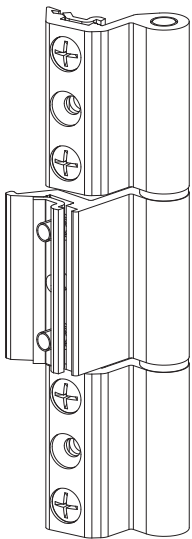
ALU-JET 10 axial hinges



Axial hinge, 2-part

Technical data	
Hinge-side type	surface-mounted
Opening type	Turn-Only window Dummy-mullion sash
Max. sash weight [kg]	80
Opening angle [°]	180
Frame groove [mm]	10/14 12/15 14/18
Hinge-passage min. [mm]	3.5
Type of fixing	clampable
Installation tool	Philips PH 2

DIN side of hinges	Finish	PU	Order number
right	EV1 silver	50	G-24885-00-R-1
	black	50	G-24885-00-R-6
	traffic white	50	G-24885-00-R-7
left	EV1 silver	50	G-24885-00-L-1
	black	50	G-24885-00-L-6
	traffic white	50	G-24885-00-L-7

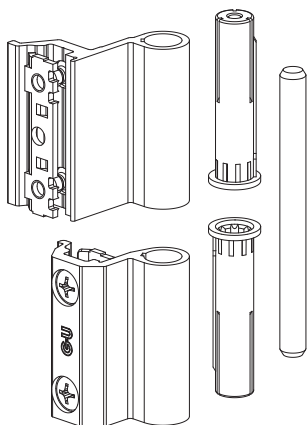


Axial hinge, 3-part

Technical data	
Hinge-side type	surface-mounted
Opening type	Turn-Only window Tilt-Only window Dummy-mullion sash
DIN side of hinges	left right
Max. sash weight [kg]	100
Opening angle [°]	180
Frame groove [mm]	10/14 12/15 14/18
Hinge-passage min. [mm]	3.5
Type of fixing	clampable
Installation tool	Philips PH 2

Finish	PU	Order number
untreated	50	G-24886-00-0-0
EV1 silver	50	G-24886-00-0-1
dark bronze	50	G-24886-00-0-5
black	50	G-24886-00-0-6
traffic white	50	G-24886-00-0-7
white	50	G-24886-00-0-7T

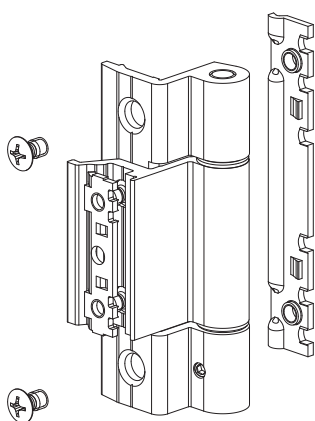
ALU-JET 10 axial hinges



Axial hinge, 2-part, 14/18

Technical data	
Hinge-side type	surface-mounted
Opening type	Turn-Only window Dummy-mullion sash
DIN stop	left right
Max. sash weight [kg]	75
Opening angle [°]	180
Frame groove [mm]	14/18
Hinge-passage min. [mm]	3.5
Type of fixing	clampable
Installation tool	Philips PH 2

Finish	PU	Order number
untreated	20	K-15820-00-0-0
EV1 silver	20	K-15820-00-0-1
black	20	K-15820-00-0-6
traffic white	20	K-15820-00-0-7



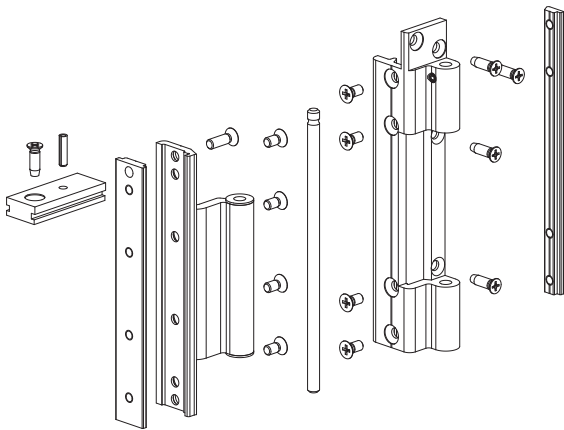
Axial hinge, 3-part, 14/18

Technical data	
Hinge-side type	surface-mounted
Opening type	Turn-Only window Tilt-Only window Dummy-mullion sash
DIN side of hinges	left right
Max. sash weight [kg]	80
Opening angle [°]	180
Frame groove [mm]	14/18
Hinge-passage min. [mm]	3.5
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5 Philips PH2

Finish	PU	Order number
EV1 silver	20	K-15887-00-0-1
black	20	K-15887-00-0-6
traffic white	20	K-15887-00-0-7

ALU-JET S800 up to 300 kg sash weight

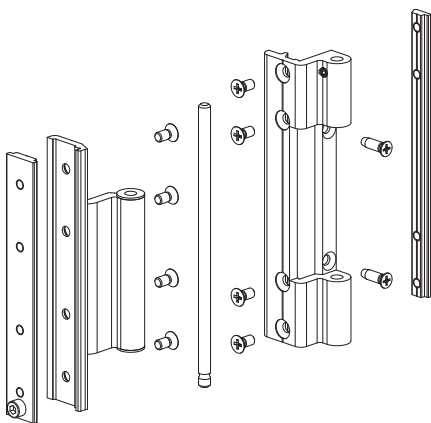
Turn-Only window



TU-ON hinge set top

Technical data	
Hinge-side type	surface-mounted
Opening type	Turn-Only window Dummy-mullion sash
Max. sash weight [kg]	300
Opening angle [°]	180
Frame groove [mm]	10/14 12/15 14/18
Min. hinge-passage [mm]	7
Type of fixing	clampable screw-on version

DIN side of hinges	Finish	PU	Order number
left	EV1 silver	10	K-19240-00-L-1
	traffic white	10	K-19240-00-L-7
	special colour available on request	10	K-19240-00-L-9
right	EV1 silver	10	K-19240-00-R-1
	traffic white	10	K-19240-00-R-7
	special colour available on request	10	K-19240-00-R-9



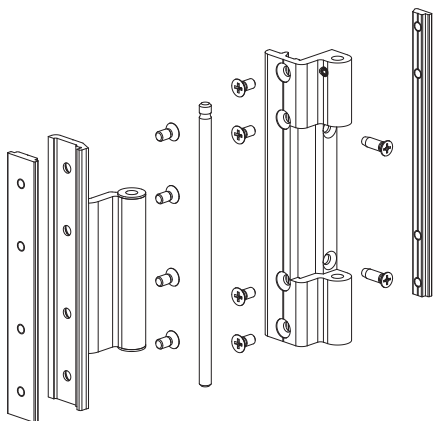
TU-ON hinge set bottom

Technical data	
Hinge-side type	surface-mounted
Opening type	Turn-Only window Dummy-mullion sash
DIN side of hinges	left right
Max. sash weight [kg]	300
Opening angle [°]	180
Frame groove [mm]	10/14 12/15 14/18
Min. hinge-passage [mm]	7
Type of fixing	clampable screw-on version

Finish	PU	Order number
EV1 silver	10	K-19241-00-0-1
traffic white	10	K-19241-00-0-7
special colour available on request	10	K-19241-00-0-9

ALU-JET S800 up to 300 kg sash weight

Turn-Only window / Tilt-Only window



TU-ON centre-hinge set

Technical data	
Hinge-side type	surface-mounted
Opening type	Turn-Only window Tilt-Only window Dummy-mullion sash
DIN side of hinges	left right
Max. sash weight [kg]	300
Opening angle [°]	180
Frame groove [mm]	10/14 12/15 14/18
Min. hinge-passage [mm]	7
Type of fixing	clampable screw-on version

Finish	PU	Order number
EV1 silver	10	K-19242-00-0-1
traffic white	10	K-19242-00-0-7
special colour available on request	10	K-19242-00-0-9



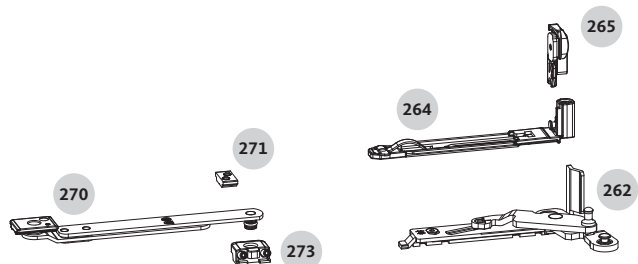
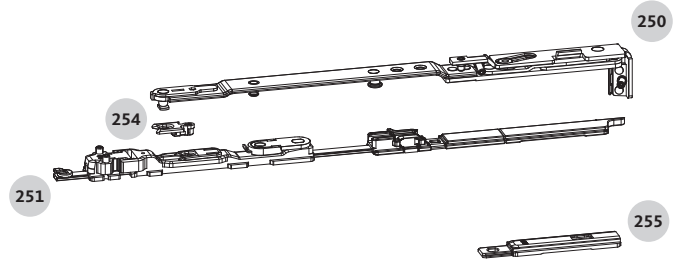
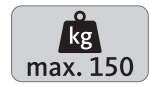


ALU-JET CC610 up to 150 kg sash weight

Tilt&Turn window / Tilt-First window	122
Turn-Only window	124
Tilt-Only window	126
Individual components	128

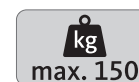
ALU-JET CC610 up to 150 kg sash weight

Tilt&Turn window / Tilt-First window



ALU-JET CC610 up to 150 kg sash weight

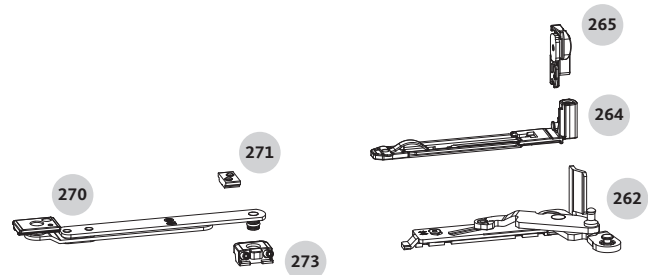
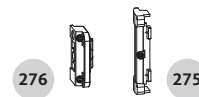
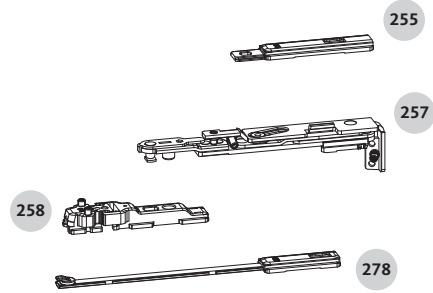
Tilt&Turn window / Tilt-First window



Item	Description	Piece(s)						PU	Qty. in K- set	Order number	
		SW 500-800			SW 801-1600						
		SH 500-1000	SH 1001-1200	SH 1201-2800	SH 500-1000	SH 1000-1200	SH 1201-2800				
250	T&T+TF stay-arm	DIN left	1	1	1	-	-	-	10	-	6-37470-00-L-1
		DIN right	1	1	1	-	-	-	10	-	6-37470-00-R-1
		DIN left	-	-	-	1	1	1	10	-	6-37471-00-L-1
		DIN right	-	-	-	1	1	1	10	-	6-37471-00-R-1
251	T&T+TF stay-guide	DIN left	1	1	1	-	-	-	10	-	6-37472-00-L-1
		DIN right	1	1	1	-	-	-	10	-	6-37472-00-R-1
		DIN left	-	-	-	1	1	1	10	-	6-37473-00-L-1
		DIN right	-	-	-	1	1	1	10	-	6-37473-00-R-1
254	Tilt-width limiter 180 > 120 mm	-	-	-	1	-	-	10	-	9-48773-00-0-1	
255	T&T+TF connection, corner-drive	Standard	-	-	1	-	-	1	10	-	9-48772-00-0-1
		RC2/RC3	1	1	1	1	1	1	10	-	
262	Pivot-rest 10/14+14/18	DIN left	1	1	1	1	1	1	10	-	6-37059-00-L-1
		DIN right	1	1	1	1	1	1	10	-	6-37059-00-R-1
	Pivot-rest 12/15	DIN left	1	1	1	1	1	1	10	-	6-37059-12-L-1
		DIN right	1	1	1	1	1	1	10	-	6-37059-12-R-1
	Corner-hinge	DIN left	1	1	1	1	1	1	10	-	K-19471-00-L-1
		DIN right	1	1	1	1	1	1	10	-	K-19471-00-R-1
264	Corner-hinge, pivot part	DIN left	1	1	1	1	1	1	-	1	6-37060-00-L-1
		DIN right	1	1	1	1	1	1	-	1	6-37060-00-R-1
265	Corner-hinge, adjustment part	DIN left	1	1	1	1	1	1	-	1	6-39285-00-L-1
		DIN right	1	1	1	1	1	1	-	1	6-39285-00-R-1
	Turn-restrictor	-	-	-	1	1	1	10	-	K-19644-00-0-1	
270	Turn-restrictor	-	-	-	1	1	1	-	1	6-39547-00-0-1	
271	Turn-restrictor, stopper	-	-	-	1	1	1	-	1	6-39548-00-0-0	
273	Turn-restrictor, frame part	-	-	-	1	1	1	-	1	6-38875-00-0-1	

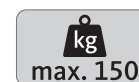
ALU-JET CC610 up to 150 kg sash weight

Turn-Only window



ALU-JET CC610 up to 150 kg sash weight

Turn-Only window

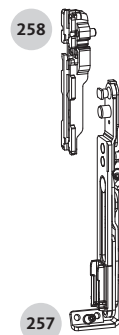
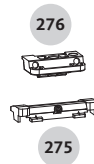
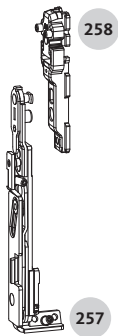


Item	Description	Piece(s)						PU	Qty. in K-set	Order number	
		SW 235-800			SW 801-1600						
		SH 500-1200	SH 1201-2200	SH 2201-2800	SH 500-1200	SH 1201-2200	SH 2201-2800				
257	TU-ON+TI-ON stay-arm	DIN left	1	1	1	1	1	1	10	-	6-37474-00-L-1
		DIN right	1	1	1	1	1	1	10	-	6-37474-00-R-1
258	TU-ON+TI-ON stay-guide		1	1	1	1	1	1	10	-	6-37475-00-0-1
262	Pivot-rest 10/14+14/18	DIN left	1	1	1	1	1	1	10	-	6-37059-00-L-1
		DIN right	1	1	1	1	1	1	10	-	6-37059-00-R-1
	Pivot-rest 12/15	DIN left	1	1	1	1	1	1	10	-	6-37059-12-L-1
		DIN right	1	1	1	1	1	1	10	-	6-37059-12-R-1
	Corner-hinge	DIN left	1	1	1	1	1	1	10	-	K-19471-00-L-1
		DIN right	1	1	1	1	1	1	10	-	K-19471-00-R-1
264	Corner-hinge, pivot part	DIN left	1	1	1	1	1	1	-	1	6-37060-00-L-1
		DIN right	1	1	1	1	1	1	-	1	6-37060-00-R-1
265	Corner-hinge, adjustment part	DIN left	1	1	1	1	1	1	-	1	6-39285-00-L-1
		DIN right	1	1	1	1	1	1	-	1	6-39285-00-R-1
	Turn-restrictor		-	-	-	1	1	1	10	-	K-19644-00-0-1
270	Turn-restrictor		-	-	-	1	1	1	-	1	6-39547-00-0-1
271	Stopper		-	-	-	1	1	1	-	1	6-39548-00-0-0
273	Turn-restrictor, frame part		-	-	-	1	1	1	-	1	6-38875-00-0-1
275	Centre-closer, frame part		-	1	2	-	1	2	10	-	6-35845-09-0-1
276	Centre-closer, sash part, adjustable		-	1	2	-	1	2	10	-	6-38884-00-0-1
Alternative for more stringent tightness requirements											
278	TU-ON+TI-ON coupling part CD C-L hinge-side *	Standard	-	1	1	-	1	1	1	-	6-37476-00-0-1
		RC2/RC3	1	1	1	1	1	1	1	-	

* in combination with central locking system on the hinge side from sash width 341 mm

ALU-JET CC610 up to 80 kg sash weight

Tilt-Only window



ALU-JET CC610 up to 80 kg sash weight

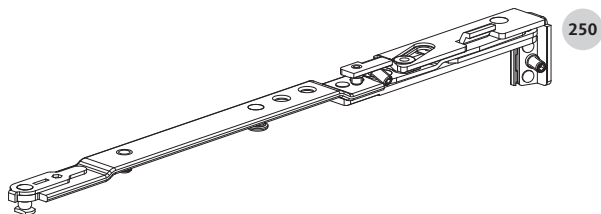
Tilt-Only window



Item	Description	Piece(s)									PU	Qty. in K-set	Order number	
		with concealed hinge-side												
		SW 350-1000			SW 1001-1800			SW 1801-2400						
SH 535-614	SH 615-800	SH 801-1200	SH 535-614	SH 615-800	SH 801-1200	SH 535-614	SH 615-800	SH 801-1200						
257	TU-ON+TI-ON stay-arm	DIN left	1	1	1	1	1	1	1	1	1	10	-	6-37474-00-L-1
		DIN right	1	1	1	1	1	1	1	1	1	10	-	6-37474-00-R-1
258	TU-ON+TI-ON stay-guide		2	2	2	2	2	2	2	2	2	10	-	6-37475-00-0-1
275	Centre-closer, frame part		-	-	-	1	1	1	1	1	1	10	-	6-35845-09-0-1
276	Centre-closer, sash part		-	-	-	1	1	1	1	1	1	10	-	6-38884-00-0-1

ALU-JET CC610 up to 150 kg sash weight

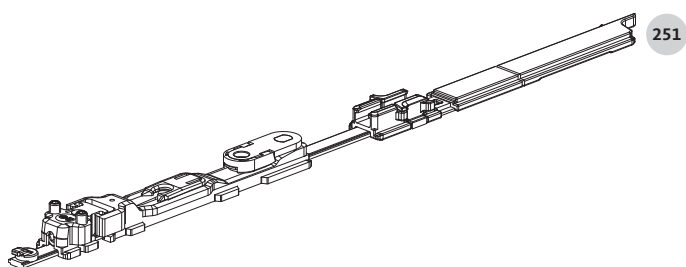
Individual components



T&T+TF stay-arm

Technical data	
Hinge-side type	concealed
Opening type	Tilt&Turn window Tilt-First window
Finish	ferGUard*silver
Max. sash weight [kg]	150
Opening angle [°]	90
Frame groove [mm]	10/14 12/15 14/18
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5
Adjusting tools	Hexagon socket size 4

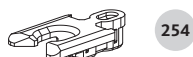
Min. sash width [mm]	Max. sash width [mm]	DIN side of hinges	PU	Order number
500	800	left	10	6-37470-00-L-1
		right	10	6-37470-00-R-1
801	1600	left	10	6-37471-00-L-1
		right	10	6-37471-00-R-1



T&T+TF stay-guide

Technical data	
Hinge-side type	concealed
Opening type	Tilt&Turn window Tilt-First window
Finish	ferGUard*silver
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5
Adjusting tools	Hexagon socket size 4

Min. sash width [mm]	Max. sash width [mm]	DIN side of hinges	PU	Order number
500	800	left	10	6-37472-00-L-1
		right	10	6-37472-00-R-1
801	1600	left	10	6-37473-00-L-1
		right	10	6-37473-00-R-1



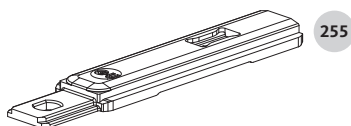
Tilt-width limiter 180 -> 120 mm

Technical data	
Hinge-side type	concealed
Opening type	Tilt&Turn window Tilt-First window
DIN side of hinges	left right
Finish	grey
Min. sash width [mm]	801
Max. sash width [mm]	1600
Installation tool	-

	PU	Order number
	10	9-48773-00-0-1

ALU-JET CC610 up to 150 kg sash weight

Individual components

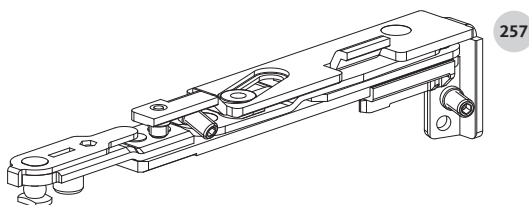


255

T&T+TF connection corner-drive

Technical data	
Hinge-side type	concealed
Opening type	Tilt&Turn window Tilt-First window
DIN side of hinges	left right
Finish	ferGUard*silver
Min. sash width [mm]	500
Max. sash width [mm]	1600
Installation tool	-

	PU	Order number
	10	9-48772-00-0-1



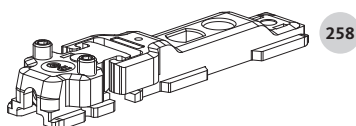
257

TU-ON+TI-ON stay-arm

Technical data	
Hinge-side type	concealed
Opening type	Turn-Only window Tilt-Only window Dummy-mullion sash
Finish	ferGUard*silver
Max. sash weight [kg]	150 80*
Opening angle [°]	90
Frame groove [mm]	10/14 12/15 14/18
Min. sash width [mm]	235
Max. sash width [mm]	1600
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5
Adjusting tools	Hexagon socket size 4

DIN side of hinges	PU	Order number
left	10	6-37474-00-L-1
right	10	6-37474-00-R-1

* With Tilt-Only windows max. 80 kg



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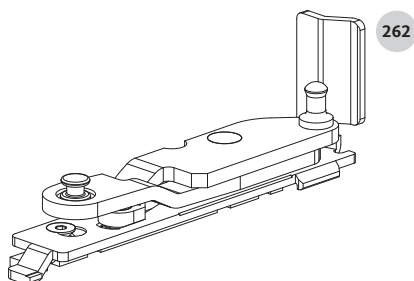
TU-ON+TI-ON stay-guide

Technical data	
Hinge-side type	concealed
Opening type	Turn-Only window Tilt-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	ferGUard*silver
Min. sash width [mm]	235
Max. sash width [mm]	1600
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5
Adjusting tools	Hexagon socket size 4

	PU	Order number
	10	6-37475-00-0-1

ALU-JET CC610 up to 150 kg sash weight

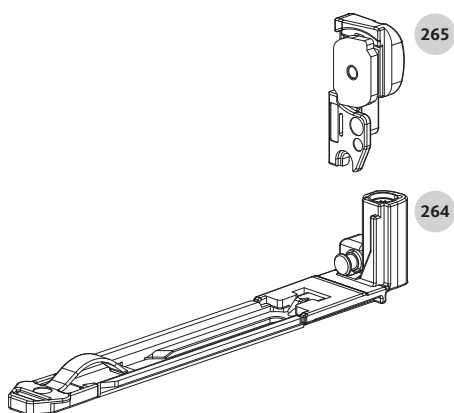
Individual components



Pivot-rest

Technical data	
Hinge-side type	concealed
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Dummy-mullion sash
Finish	ferGUard*silver
Min. sash width [mm]	235
Max. sash width [mm]	1600
Max. sash weight [kg]	150
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5
Adjusting tool	Hexagon socket size 2.5

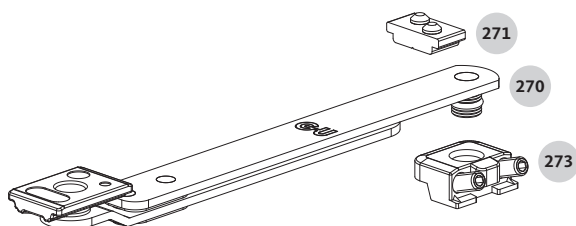
Frame groove [mm]	DIN side of hinges	PU	Order number
10/14 14/18	left	10	6-37059-00-L-1
	right	10	6-37059-00-R-1
12/15	left	10	6-37059-12-L-1
	right	10	6-37059-12-R-1



Corner-hinge

Technical data	
Hinge-side type	concealed
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Dummy-mullion sash
Finish	ferGUard*silver
Min. sash width [mm]	235
Max. sash width [mm]	1600
Max. sash weight [kg]	150
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5
Adjusting tool	Hexagon socket size 2.5 Hexagon socket size 4

DIN side of hinges	PU	Order number
left	10	K-19471-00-L-1
right	10	K-19471-00-R-1



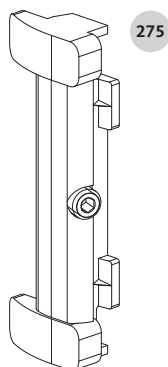
Turn-restrictor

Technical data	
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	ferGUard*silver
Frame groove [mm]	10/14 12/15 14/18
Max. sash width [mm]	1600
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5
Adjusting tool	Hexagon socket size 2.5

	PU	Order number
	10	K-19644-00-0-1

ALU-JET CC610 up to 150 kg sash weight

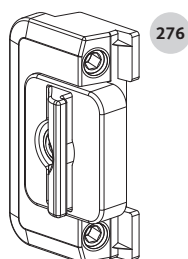
Individual components



Centre-closer, frame part

Technical data	
Hinge-side type	concealed
Opening type	Turn-Only window Tilt-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	ferGUard*silver
Frame groove [mm]	10/14 12/15 14/18
Installation tool	Hexagon socket size 2.5

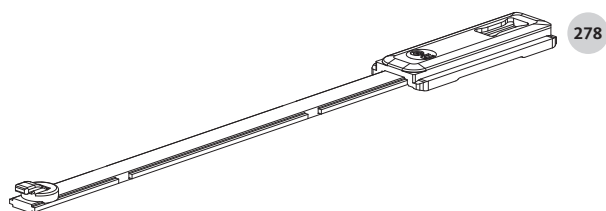
	PU	Order number
	10	6-35845-09-0-1



C-C sash part, adjustable

Technical data	
Hinge-side type	concealed
Opening type	Turn-Only window Tilt-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	ferGUard*silver
Installation tool	Hexagon socket size 2.5
Adjusting tools	Hexagon socket size 2.5

	PU	Order number
	10	6-38884-00-0-1



TU-ON+TI-ON coupling part CD C-L hinge-side

Technical data	
Hinge-side type	concealed
Opening type	Turn-Only window Tilt-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	ferGUard*silver
Min. sash width [mm]	325
Max. sash width [mm]	1600
Installation tool	-

	PU	Order number
	10	6-37476-00-0-1





Strikers

134

T&T strikers and fanlight hinges

136

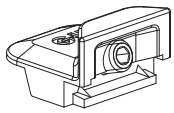
Connecting rod shoot-bolt strikers

137

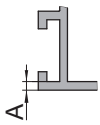
Run-up block / clearance packer

138

Strikers

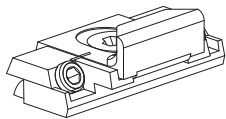
55



Striker

Technical data	
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	ferGUard*silver
Frame groove [mm]	10/14 12/15 14/18
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5

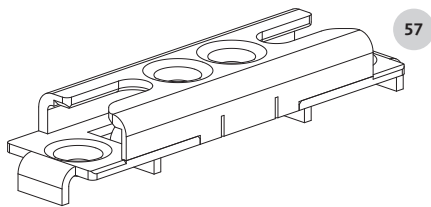
Frame groove dimension A min. [mm]	PU	Order number
2	100	6-37261-01-0-1
1.5	100	6-37261-02-0-1



Adjustable striker

Technical data	
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	ferGUard*silver
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5
Adjusting tools	Philips PH 2

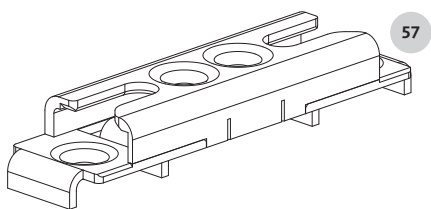
Frame groove [mm]	PU	Order number
10/14	100	G-11065-00-0-1
12/15	100	G-11800-00-0-1
14/18	100	G-11071-00-0-1



Sec striker 10/14

Technical data	
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Burglar resistance class	RC2 RC3
Finish	stainless steel
Frame groove [mm]	10/14
Type of fixing	screw-on

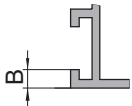
	PU	Order number
	100	6-37254-10-0-8



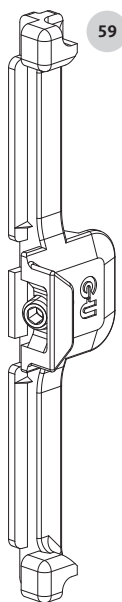
Sec striker 14/18

Technical data	
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Burglar resistance class	RC2 RC3
Finish	stainless steel
Frame groove [mm]	14/18
Type of fixing	screw-on

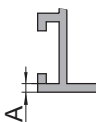
Frame groove dimension B min. [mm]	PU	Order number
4	100	6-37254-14-0-8
3.5	100	6-37254-15-0-8



T&T strikers and fanlight hinge



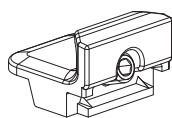
59



T&T striker

Technical data	
Opening type	Tilt&Turn window Turn-Only window
DIN side of hinges	left right
Finish	ferGUard*silver
Frame groove [mm]	10/14 12/15 14/18
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5

Frame groove dimension A min. [mm]	PU	Order number
2	100	6-37272-01-0-1
1.5	100	6-37272-02-0-1

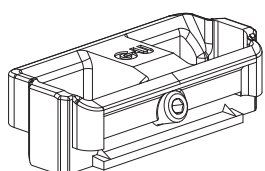


35

Tilt-First striker

Technical data	
Opening type	Tilt-First window
DIN side of hinges	left right
Finish	ferGUard*silver
Frame groove [mm]	10/14 12/15 14/18
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5

	PU	Order number
	100	6-38686-00-0-1



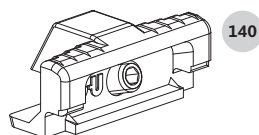
34

T&T fanlight hinge

Technical data	
Opening type	Tilt&Turn window Turn-Only window
DIN side of hinges	left right
Finish	ferGUard*silver
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5

	PU	Order number
	100	6-37441-00-0-1

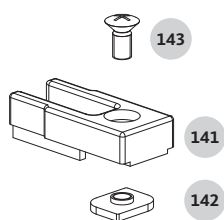
Connecting rod shoot-bolt strikers



CR shoot-bolt striker

Technical data	
Opening type	Dummy-mullion sash
DIN side of hinges	left right
Finish	ferGUard*silver
Frame groove [mm]	10/14 12/15 14/18
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5
Adjusting tools	Hexagon socket size 2.5

	PU	Order number
	100	6-30961-00-0-1
+ 1.5 mm gasket pressure (compared to 6-30961-00-0)	100	G-19658-02-0-1
+ 3.0 mm gasket pressure (compared to 6-30961-00-0)	100	G-19658-03-0-1

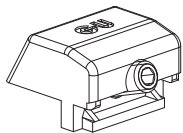


TU-ON connecting rod shoot-bolt striker set 14/18

Technical data	
Opening type	Turn-Only window
DIN side of hinges	left right
Finish	grey
Frame groove [mm]	14/18
Type of fixing	clampable
Installation tool	Philips PH 2

	PU	Order number
	10	K-15819-00-0-1

Run-up block / clearance packer

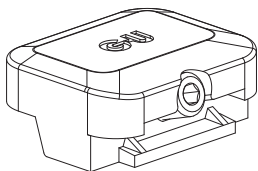


37

Run-up block, frame part

Technical data	
Opening type	Dummy-mullion sash
DIN side of hinges	left right
Finish	grey
Frame groove [mm]	10/14 12/15 14/18
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5

	PU	Order number
	10	6-30998-00-0-1

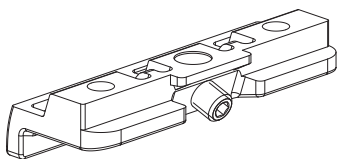


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Run-up block tilt corner-drive TF

Technical data	
Opening type	Tilt-First window Dummy-mullion sash
DIN stop	left right
Finish	grey
Frame groove [mm]	10/14 12/15 14/18
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5

	PU	Order number
	10	6-38696-00-0-1



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Sec clearance packer / TU-ON window run-up block

Technical data	
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Dummy-mullion sash
DIN stop	left right
Finish	grey
Burglar resistance class	RC2 RC3
Type of fixing	clampable screw-on version
Installation tool	Hexagon socket size 2.5

	PU	Order number
	100	6-38807-00-0-1







Geared turn handles

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Turn handles

Aluminium turn handles

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Geared turn handles

SPACIO



SPACIO geared turn handle

Technical data	
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Min. sash overlap height [mm]	7
Max. sash overlap height [mm]	12
Type of fixing	screw-on version
Installation tool	Hexagon socket size 4

Hole pattern, distance between fastening points [mm]	Finish	PU	Order number
84 98	untreated	10	G-46551-00-0-0
	EV1 silver	10	G-46551-00-0-1
	dark bronze	10	G-46551-00-0-5
	black	10	G-46551-00-0-6
	traffic white	10	G-46551-00-0-7
96 104	untreated	10	G-46551-96-0-0
	EV1 silver	10	G-46551-96-0-1
	dark bronze	10	G-46551-96-0-5
	black	10	G-46551-96-0-6
	traffic white	10	G-46551-96-0-7
	special colour available on request	10	G-46551-96-0-9



SPACIO geared turn handle, lockable

Technical data	
Version	lockable
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Min. sash overlap height [mm]	7
Max. sash overlap height [mm]	12
Installation tool	Hexagon socket size 4

Hole pattern, distance between fastening points [mm]	Finish	PU	Order number
84 98	untreated	10	G-46553-00-0-0
	dark bronze	10	G-46553-00-0-5
	black	10	G-46553-00-0-6
	traffic white	10	G-46553-00-0-7
96 104	untreated	10	G-46553-96-0-0
	EV1 silver	10	G-46553-96-0-1
	dark bronze	10	G-46553-96-0-5
	black	10	G-46553-96-0-6
	traffic white	10	G-46553-96-0-7

Geared turn handles

SPACIO



SPACIO geared rosette

Technical data	
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Min. sash overlap height [mm]	7
Max. sash overlap height [mm]	12
Installation tool	Hexagon socket size 4

Hole pattern, distance between fastening points [mm]	Finish	PU	Order number
84 98	untreated	10	G-46555-00-0-0
	EV1 silver	10	G-46555-00-0-1
	dark bronze	10	G-46555-00-0-5
	traffic white	10	G-46555-00-0-7
96 104	EV1 silver	10	G-46555-96-0-1
	black	10	G-46555-96-0-6



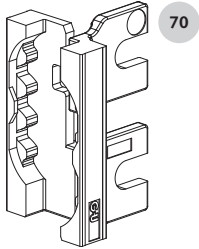
SPACIO service handle

Technical data	
Version	in conjunction with geared rosette G-46555
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Finish	EV1 silver
Min. sash overlap height [mm]	7
Max. sash overlap height [mm]	12
Type of fixing	pluggable
Installation tool	-

PU	Order number
10	G-18888-00-0-1

Geared turn handles

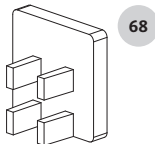
SPACIO accessories



SPACIO conversion kit for expansion gear handle

Technical data	
Version	for geared turn handle G-46551 and geared rosette G-46555
Opening type	Turn-Only window
Finish	untreated
Min. sash overlap height [mm]	7
Max. sash overlap height [mm]	12
Installation tool	–

DIN side of hinges	PU	Order number
left	10	G-46550-00-L-1
right	10	G-46550-00-R-1



SPACIO 90° turn-restrictor

Technical data	
Version	for geared turn handle G-46551, G-46553 and geared rosette G-46555
Opening type	Turn-Only window Tilt-Only window
DIN side of hinges	left right
Finish	black
Min. sash overlap height [mm]	7
Max. sash overlap height [mm]	23
Installation tool	–

	PU	Order number
	10	9-34612-00-0-6

Geared turn handles

ADAGIO



ADAGIO-A geared turn handle

Technical data	
Version	only in combination with ADAGIO-A carrier fork set K-15814 or ADAGIO-A connector set K-15815
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Min. sash overlap height [mm]	7
Max. sash overlap height [mm]	12
Hole pattern, distance between fastening points [mm]	104
Installation tool	-

Finish	PU	Order number
untreated	10	6-31723-00-0-0
EV1 silver	10	6-31723-00-0-1
black	10	6-31723-00-0-6
traffic white	10	6-31723-00-0-7
special colour available on request	10	6-31723-00-0-9



ADAGIO-A geared turn handle, lockable

Technical data	
Version	only in combination with ADAGIO-A carrier fork set K-15814 or ADAGIO-A connector set K-15815
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Min. sash overlap height [mm]	7
Max. sash overlap height [mm]	12
Hole pattern, distance between fastening points [mm]	104
Installation tool	-

Finish	PU	Order number
EV1 silver	10	6-31724-00-0-1
black	10	6-31724-00-0-6
traffic white	10	6-31724-00-0-7

Geared turn handles

ADAGIO



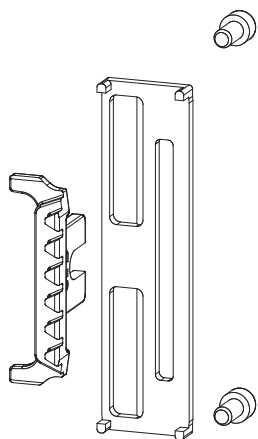
ADAGIO geared turn handle, lockable RC2/RC3

Technical data	
Specifications	only in conjunction with RC2/RC3 handle connector set K-19820
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Burglar resistance class	RC2 RC3
Min. sash overlap height [mm]	7
Max. sash overlap height [mm]	12
Distance between fixing holes [mm]	104 84 98
Installation tool	Hexagon socket size 4

Finish	PU	Order number
EV1 silver	10	K-19821-00-0-1
black	10	K-19821-00-0-6
traffic white	10	K-19821-00-0-7
white	10	K-19821-00-0-7T
special colour available on request	10	K-19821-00-0-9

Geared turn handles

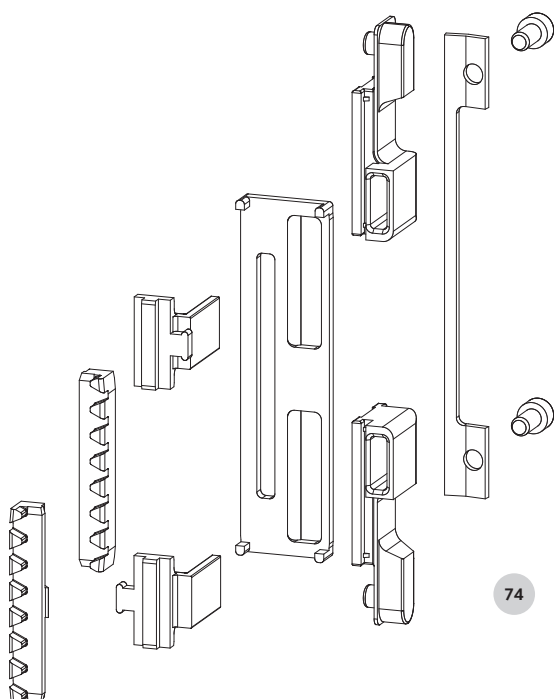
ADAGIO accessories



ADAGIO-A carrier fork set

Technical data	
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Finish	ferGUard*silver
Min. sash overlap height [mm]	7
Max. sash overlap height [mm]	12
Type of fixing	screw-on version
Installation tool	Hexagon socket size 4

	PU	Order number
	10	K-15814-00-0-1



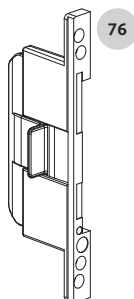
ADAGIO-A carrier fork set for reverse-action gear

Technical data	
Opening type	Turn-Only window
DIN side of hinges	left right
Finish	ferGUard*silver
Min. sash overlap height [mm]	7
Max. sash overlap height [mm]	12
Type of fixing	screw-on version
Installation tool	Hexagon socket size 4

	PU	Order number
	10	K-15815-00-0-1

Geared turn handles

Geared handles, accessories



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Mishandling device

Technical data	
Opening type	Tilt&Turn window Tilt-First window
DIN side of hinges	left right
Finish	ferGUard*silver
Min. sash overlap height [mm]	7
Max. sash overlap height [mm]	10.5
Installation tool	-

Hole pattern, distance between fastening points [mm]	PU	Order number
84 98	10	6-31065-10-0-1
96 104	10	6-31065-40-0-1



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Packer plate for geared turn handle

Technical data	
Version	for reinforcement of sash overlap 2 pcs required per geared turn handle
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Finish	stainless steel
Min. sash overlap height [mm]	7
Max. sash overlap height [mm]	23
Hole pattern, distance between fastening points [mm]	84 96 98 104
Installation tool	-

	PU	Order number
	100	9-50091-00-0-8



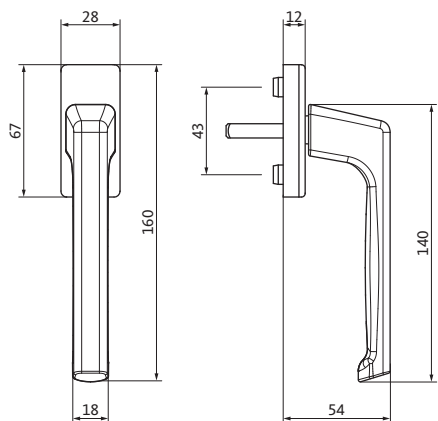
Packer plate for geared turn handle HP 104

Technical data	
Version	for reinforcement of sash overlap
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Finish	stainless steel
Min. sash overlap height [mm]	7
Max. sash overlap height [mm]	23
Hole pattern, distance between fastening points [mm]	104
Installation tool	-

	PU	Order number
	100	9-41506-00-0-8

Aluminium turn handles

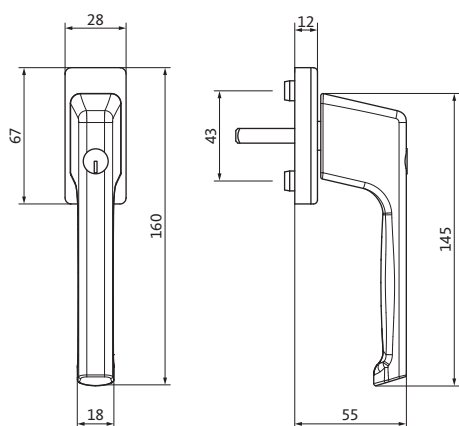
DIRIGENT



DIRIGENT-F turn handle

Technical data	
Material	Aluminium
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

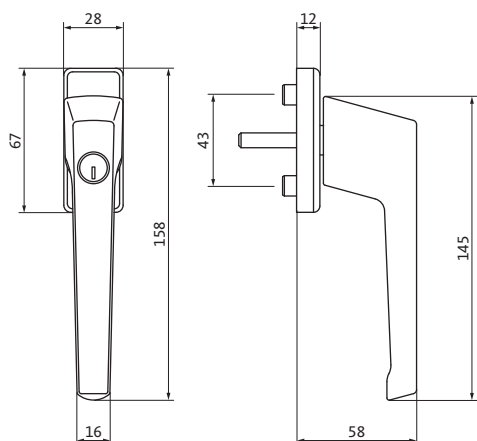
Finish	PU	Order number
EV1 silver	20	6-28072-29-0-11
brown	20	6-28072-29-0-5
traffic white	20	6-28072-29-0-7



DIRIGENT-F/Z turn handle, lockable

Technical data	
Material	Aluminium
Specifications	with push lock
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

Finish	PU	Order number
EV1 silver	20	6-28075-29-0-11
brown	20	6-28075-29-0-5
traffic white	20	6-28075-29-0-7



DIRIGENT turn handle Tilt-First, lockable

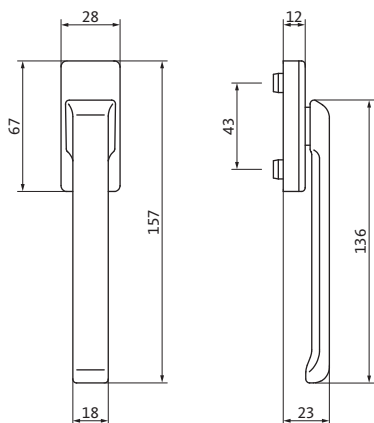
Technical data	
Material	Aluminium
Opening type	Tilt-First window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

Finish	PU	Order number
EV1 silver	20	6-31557-29-0-11
brown	20	6-31557-29-0-5
traffic white	20	6-31557-29-0-7

Additional finishes and spindle lengths available on request.

Aluminium turn handles

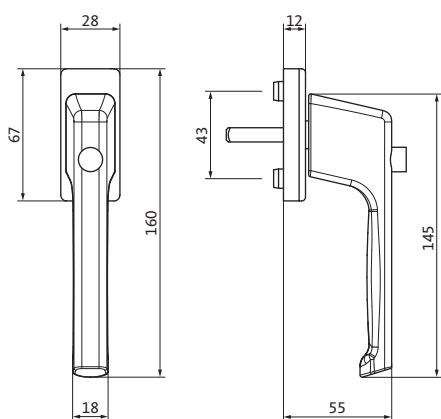
DIRIGENT



DIRIGENT-F/F turn handle

Technical data	
Material	Aluminium
Specifications	flat
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	-

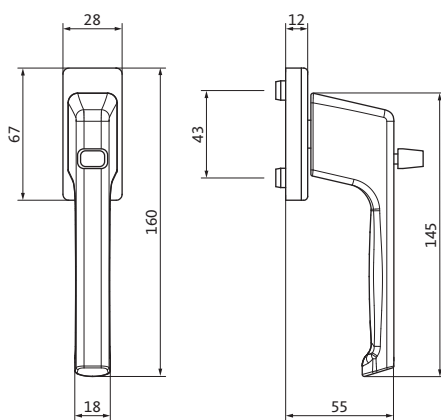
Finish	PU	Order number
EV1 silver	20	6-28101-00-0-11
brown	20	6-28101-00-0-5
traffic white	20	6-28101-00-0-7



DIRIGENT-F/KD turn handle

Technical data	
Material	Aluminium
Specifications	with push-button
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

Finish	PU	Order number
traffic white	20	6-30268-29-0-7



DIRIGENT-F/CHK turn handle

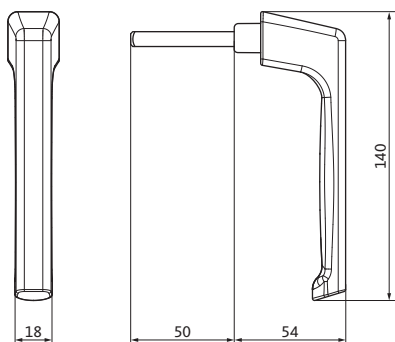
Technical data	
Material	Aluminium
Specifications	with Swiss night lock
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	-

Finish	PU	Order number
EV1 silver	20	6-28096-00-0-11
brown	20	6-28096-00-0-5
traffic white	20	6-28096-00-0-7

Additional finishes and spindle lengths available on request.

Aluminium turn handles

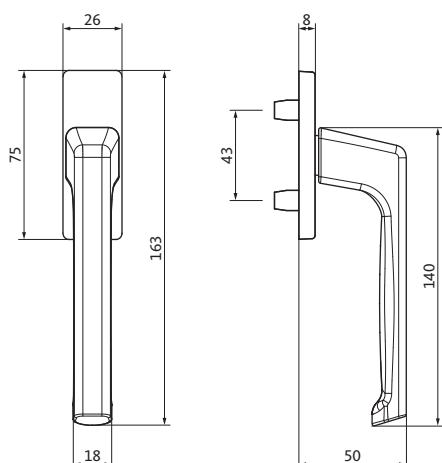
DIRIGENT



DIRIGENT-F/SG turn handle

Technical data	
Material	Aluminium
Specifications	Service handle
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	-
Width of square spindle [mm]	7
Length of square spindle [mm]	50

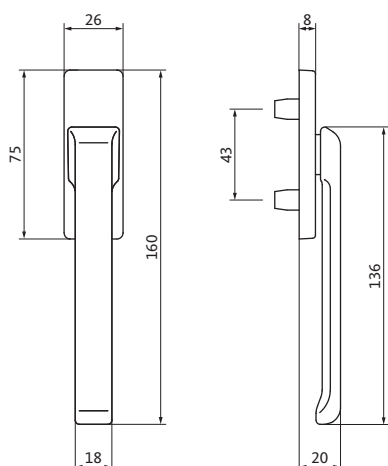
Finish	PU	Order number
traffic white	20	8-00694-50-0-7



DIRIGENT-F/A exterior turn handle

Technical data	
Material	Aluminium
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	-

Finish	PU	Order number
EV1 silver	20	6-25993-00-0-1
brown	20	6-25993-00-0-5
traffic white	20	6-25993-00-0-7



DIRIGENT-F/AF exterior turn handle

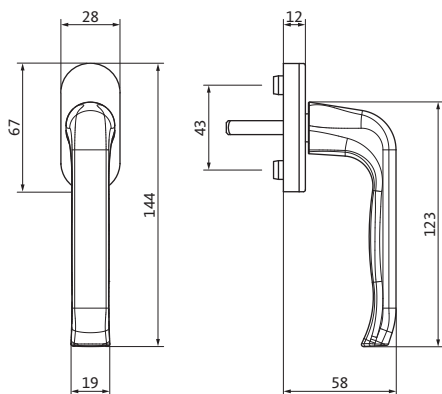
Technical data	
Material	Aluminium
Specifications	flat
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	-

Finish	PU	Order number
EV1 silver	20	6-25223-00-0-1
brown	20	6-25223-00-0-5
traffic white	20	6-25223-00-0-7

Additional finishes and spindle lengths available on request.

Aluminium turn handles

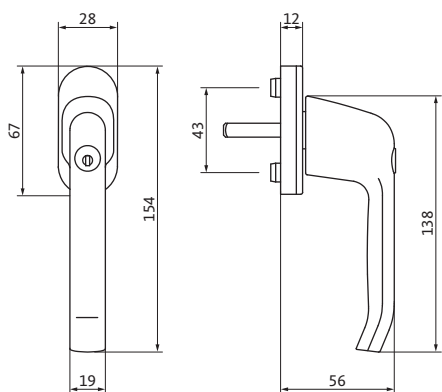
ADAGIO



ADAGIO-F turn handle

Technical data	
Material	Aluminium
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

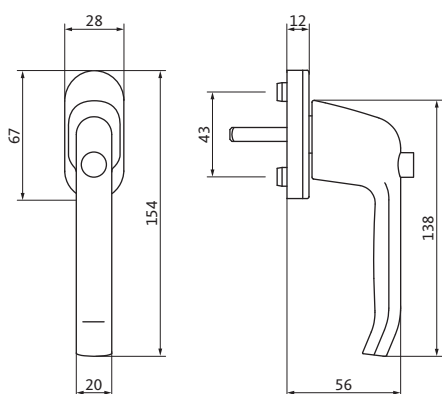
Finish	PU	Order number
brown	20	6-29548-29-0-5
traffic white	20	6-29548-29-0-7



ADAGIO-F/Z turn handle, lockable

Technical data	
Material	Aluminium
Specifications	with push lock
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

Finish	PU	Order number
traffic white	20	6-29549-29-0-7



ADAGIO-F/KD turn handle

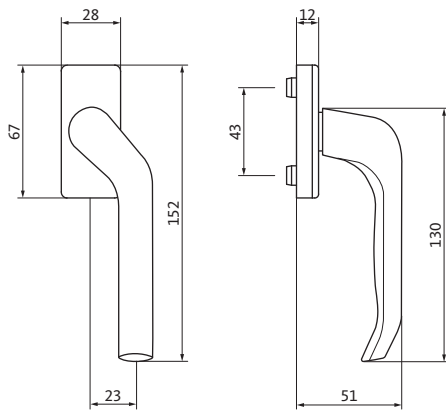
Technical data	
Material	Aluminium
Specifications	with push-button
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

Finish	PU	Order number
traffic white	20	6-29890-29-0-7

Additional finishes and spindle lengths available on request.

Aluminium turn handles

ADAGIO



ADAGIO-F/G turn handle

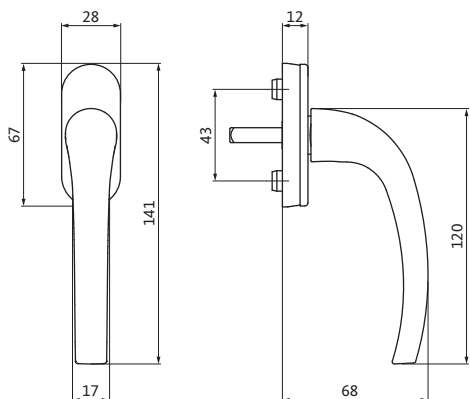
Technical data	
Material	Aluminium
Specifications	cranked
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	-

DIN side of hinges	Finish	PU	Order number
left	EV1 silver	20	6-31323-00-0-11
	brown	20	6-31323-00-0-5
	traffic white	20	6-31323-00-0-7
right	EV1 silver	20	6-31221-00-0-11
	brown	20	6-31221-00-0-5
	traffic white	20	6-31221-00-0-7

Additional finishes and spindle lengths available on request.

Aluminium turn handles

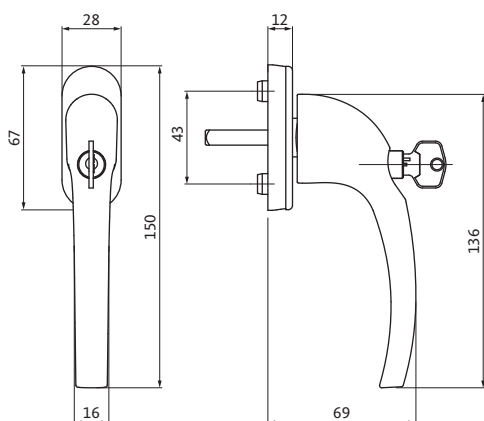
MODENA



MODENA-F turn handle

Technical data	
Material	Aluminium
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

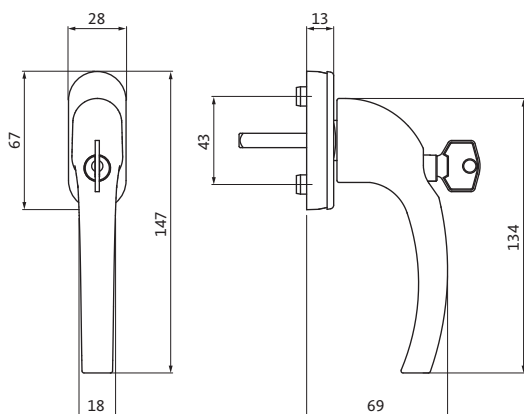
Finish	PU	Order number
EV1 silver	20	6-31977-29-0-11
brown	20	6-31977-29-0-5
traffic white	20	6-31977-29-0-7



MODENA-F/Z turn handle, lockable

Technical data	
Material	Aluminium
Specifications	with push lock
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

Finish	PU	Order number
EV1 silver	20	6-31978-29-0-11
traffic white	20	6-31978-29-0-7



MODENA-F/Z turn handle, lockable 100 Nm

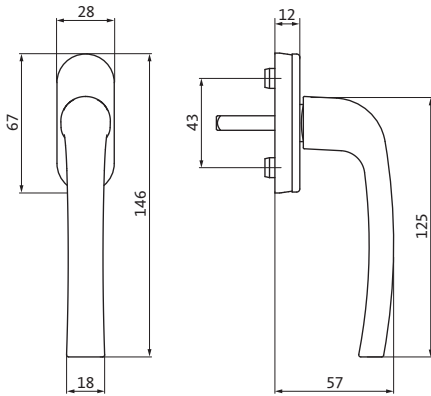
Technical data	
Material	Aluminium
Specifications	with push lock
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Burglar resistance class	RC2 RC3
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

Finish	PU	Order number
traffic white	20	6-34397-29-0-7

Additional finishes and spindle lengths available on request.

Aluminium turn handles

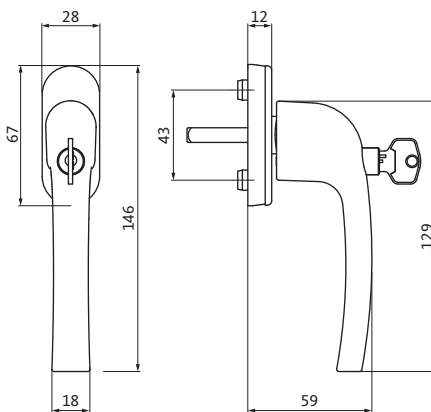
SOPRANO



SOPRANO-F turn handle

Technical data	
Material	Aluminium
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

Finish	PU	Order number
EV1 silver	20	U-71984-29-0-11
brown	20	U-71984-29-0-5
traffic white	20	U-71984-29-0-7



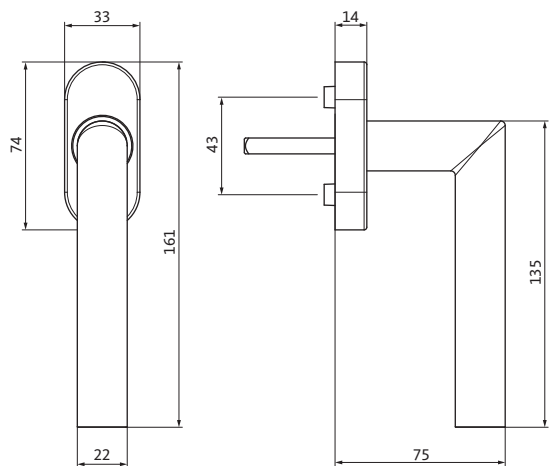
SOPRANO-F/Z turn handle, lockable

Technical data	
Material	Aluminium
Specifications	with push lock
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

Finish	PU	Order number
EV1 silver	20	U-71987-29-0-11
brown	20	U-71987-29-0-5
traffic white	20	U-71987-29-0-7

Aluminium turn handles

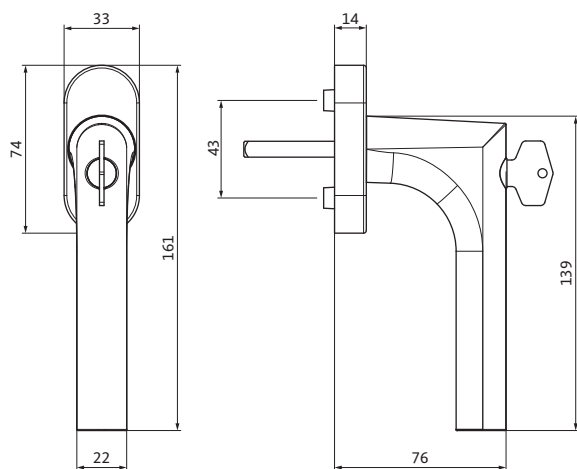
BELCANTO



BELCANTO-F turn handle

Technical data	
Material	Aluminium
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

Finish	PU	Order number
EV1 silver	2	H-01941-29-0-1
brown	2	H-01941-29-0-5
black	2	H-01941-29-0-6
traffic white	2	H-01941-29-0-7
titanium colour	2	H-01941-29-0-C



BELCANTO-F/Z turn handle, lockable

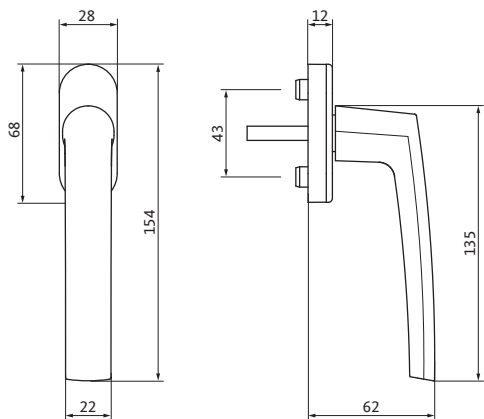
Technical data	
Material	Aluminium
Specifications	with push lock
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

Finish	PU	Order number
EV1 silver	2	H-01942-29-0-1
brown	2	H-01942-29-0-5
black	2	H-01942-29-0-6
traffic white	2	H-01942-29-0-7
titanium colour	2	H-01942-29-0-C

Additional finishes and spindle lengths available on request.

Aluminium turn handles

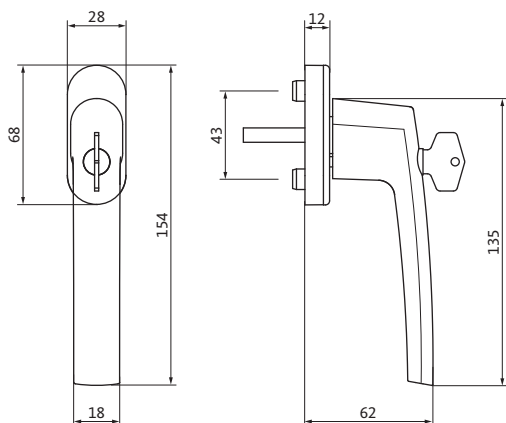
TENUTO



TENUTO-F turn handle

Technical data	
Material	Aluminium
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

Finish	PU	Order number
EV1 silver	20	H-01944-29-0-1
brown	20	H-01944-29-0-5
black	20	H-01944-29-0-6
traffic white	20	H-01944-29-0-7
titanium colour	20	H-01944-29-0-C



TENUTO-F/Z turn handle, lockable

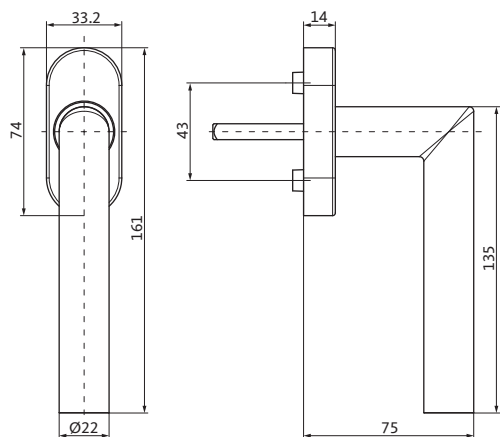
Technical data	
Material	Aluminium
Specifications	with push lock
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

Finish	PU	Order number
EV1 silver	2	H-01943-29-0-1
brown	2	H-01943-29-0-5
black	2	H-01943-29-0-6
traffic white	2	H-01943-29-0-7
titanium colour	2	H-01943-29-0-C

Additional finishes and spindle lengths available on request.

Stainless-steel turn handles

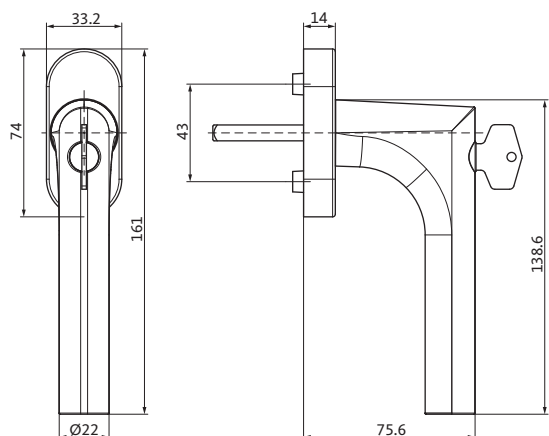
BELCANTO



BELCANTO turn handle

Technical data	
Material	Satin stainless steel
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

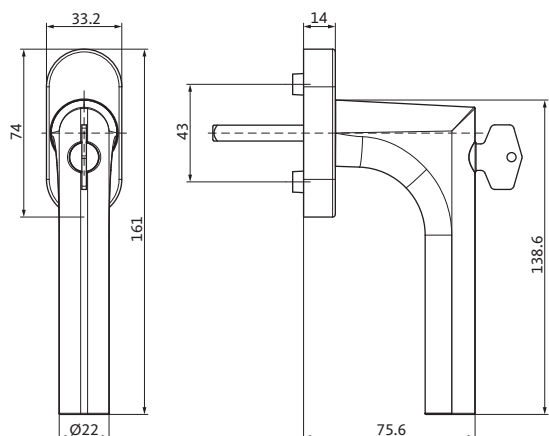
	PU	Order number
	1	B-78820-0W-0-8
	20	B-78820-0W-2-8



BELCANTO turn handle, lockable, 100 Nm

Technical data	
Material	Satin stainless steel
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

	PU	Order number
	1	B-78820-10-0-8



BELCANTO turn handle Tilt-First, lockable

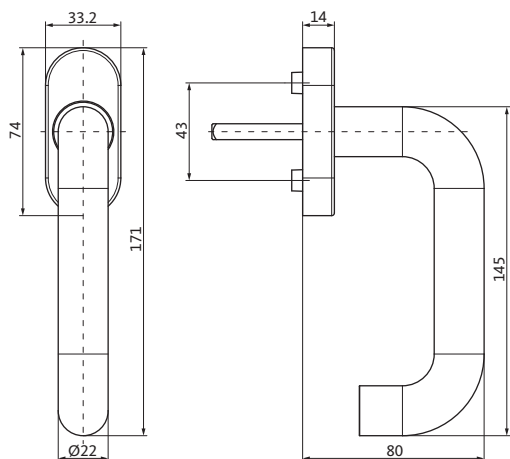
Technical data	
Material	Satin stainless steel
Opening type	Tilt-First window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

	PU	Order number
	1	B-78820-14-0-8

Additional spindle lengths available on request.

Stainless-steel turn handles

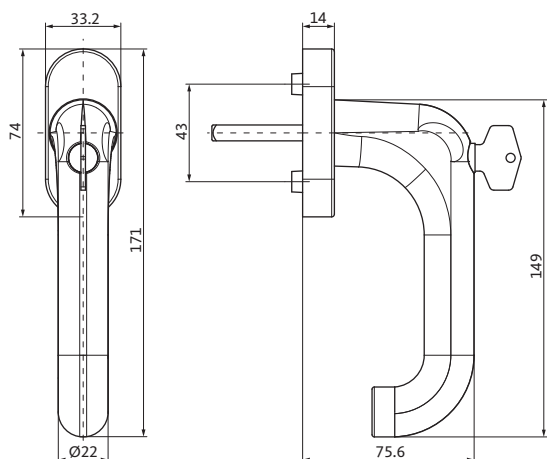
RONDO



RONDO turn handle

Technical data	
Material	Satin stainless steel
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

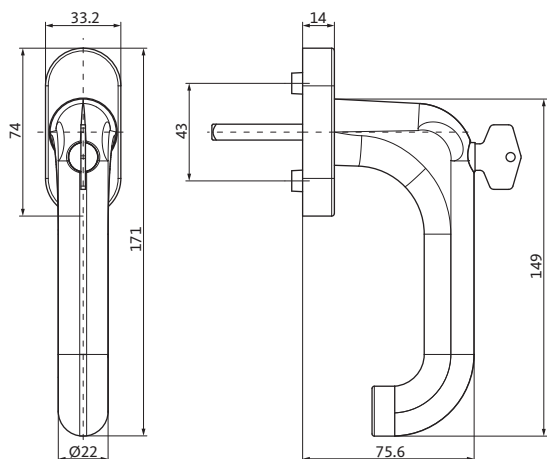
	PU	Order number
	1	B-78820-18-0-8
	20	B-78820-18-2-8



RONDO turn handle, lockable, 100 Nm

Technical data	
Material	Satin stainless steel
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

	PU	Order number
	1	B-78820-22-0-8



RONDO turn handle Tilt-First, lockable

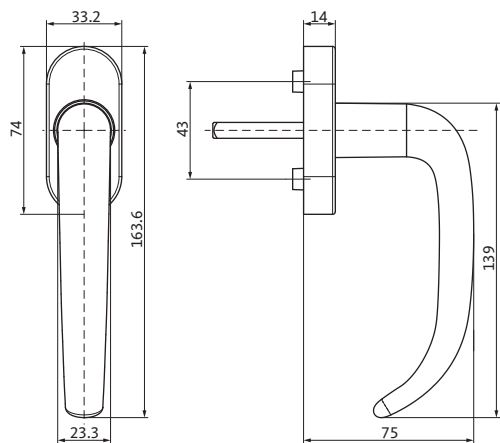
Technical data	
Material	Satin stainless steel
Opening type	Tilt-First window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

	PU	Order number
	1	B-78820-26-0-8

Additional spindle lengths available on request.

Stainless-steel turn handles

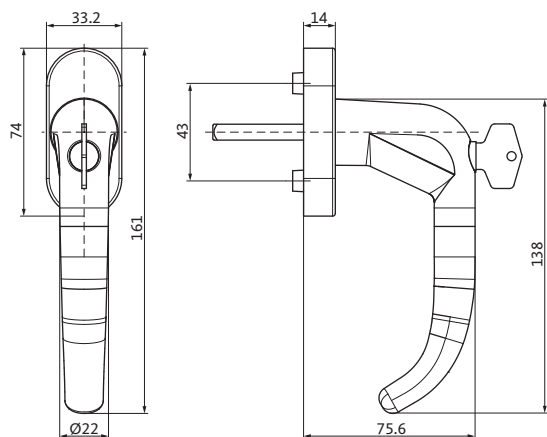
TREMOLO



TREMOLO turn handle

Technical data	
Material	Satin stainless steel
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

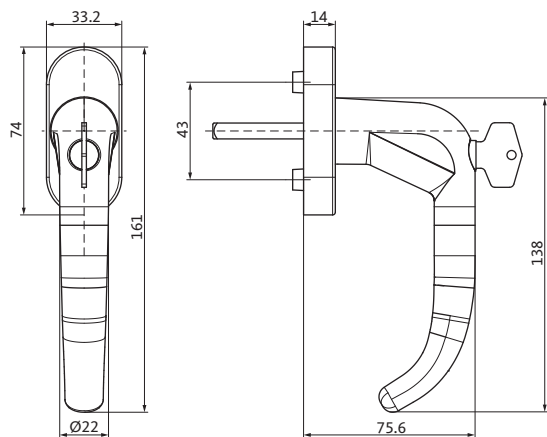
	PU	Order number
	1	B-78820-30-0-8



TREMOLO turn handle, lockable, 100 Nm

Technical data	
Material	Satin stainless steel
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

	PU	Order number
	1	B-78820-34-0-8



TREMOLO turn handle Tilt-First, lockable

Technical data	
Material	Satin stainless steel
Opening type	Tilt-First window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	43
Width of square spindle [mm]	7
Length of square spindle [mm]	29

	PU	Order number
	1	B-78820-38-0-8

Additional spindle lengths available on request.

Accessories for turn handles

Surface-mounted lock



Retrofittable security for Turn-Only and Tilt&Turn windows

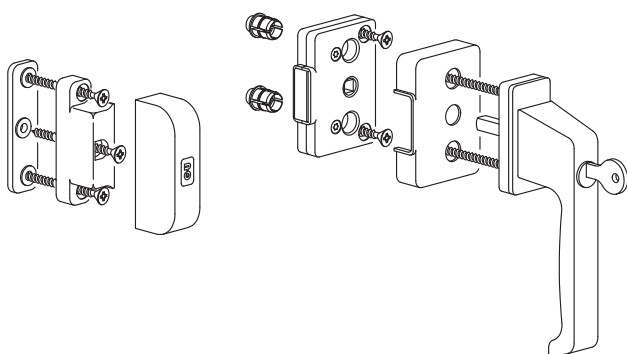
This product provides effective burglar protection and is easy to install. The lockable turn handle locks the window's central locking system. If the glass is broken or the window frame is drilled through, the locking system cannot be unlocked from the outside.

The metal deadbolt engages in the stable strike box with a deadbolt throw of 18 mm. This effectively prevents the window sash from being lifted out and forced open. The combined action of the lockable turn handle and the window surface-mounted lock produces a strong burglar-inhibiting effect.

The surface-mounted lock can be retrofitted to Turn-Only and Tilt&Turn sashes equipped with insertable gears. Suitable packers are used to compensate for the overlap height.

The surface-mounted lock locks the sash in the closed position in addition to the central locking system.

Installation is straightforward – the surface-mounted lock is screwed to the sash under the turn handle, then the strike box is positioned on the frame and securely fastened with screws. Installation instructions are enclosed.

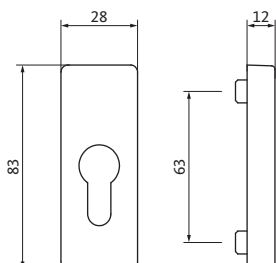


Surface-mounted lock set with DIRIGENT F/Z turn handle

Technical data		
Overlap height [mm]	9.5–12	
Lateral space requirement [mm]	32	
For detailed information on the space requirement at the side, refer to the assembly drawing M-00009-00.		
Finish	PU	Order number
EV1/F1	2	K-14662-00-0-11
dark brown	2	K-14662-00-0-5
white (RAL 9016)	2	K-14662-00-0-7
Contains: 1 x turn handle, 1 x square spindle, 1 x surface-mounted lock, 2 x cover cap, 4 x bushing, 1 x strike box, 4 x packer, 9 x fixing screw		

Accessories for turn handles

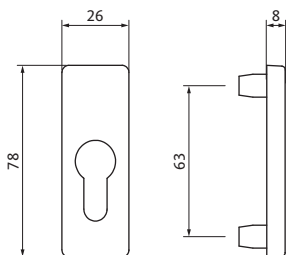
Rosettes, pull handle



PC inside rosette

Technical data	
Specifications	with lug Ø 10 mm

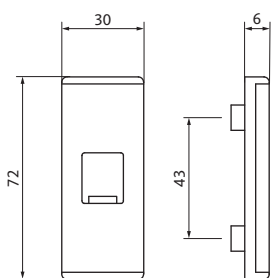
Shape	Finish	PU	Order number
square	silver	20	K-17205-02-0-1
	brown	20	K-17205-02-0-5
	white	20	K-17205-02-0-7
oval	silver	20	K-17204-02-0-1
	brown	20	K-17204-02-0-5
	white	20	K-17204-02-0-7



PC outside rosette

Technical data	
Specifications	Threaded lug Ø 10 mm

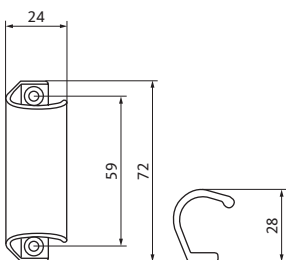
Shape	Finish	PU	Order number
square	silver	20	9-43605-02-0-1
	brown	20	9-43605-02-0-5
	white	20	9-43605-02-0-7
oval	silver	20	9-43582-02-0-1
	white	20	9-43582-02-0-7



Interior cover rosette/F

Technical data	
Version	with slide shutter for service handle

Finish	PU	Order number
silver	20	6-24913-00-0-11
brown	20	6-24913-00-0-5
white	20	6-24913-00-0-7

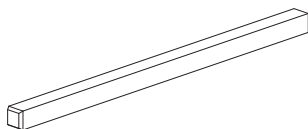


Pull handle, outside

Finish	PU	Order number
silver	50	9-22921-00-0-1
brown	50	9-22921-00-0-5
White	50	9-22921-00-0-7

Accessories for turn handles

Square spindles, countersunk screws



Square spindle

Technical data	
Width of square spindle [mm]	7

Length of square spindle [mm]	Sash thickness [mm]	PU	Order number
118	56-68	20	9-26874-56-0-1
131	69-80	20	9-26874-69-0-1
143	81-92	20	9-26874-81-0-1



Countersunk screw M5

Technical data	
Use	For fastening the turn handles

Operation inside			
Dimensions [mm]	Length of square spindle [mm]	PU	Order number
M5 x 40	29 and 33	400	9-13255-40-0-1
M5 x 50	38	400	9-13255-50-R-1

Operation from both sides			
Dimensions [mm]	Sash thickness [mm]	PU	Order number
M5 x 60	50-54	400	9-13255-60-0-1
M5 x 65	55-59	400	9-13255-65-R-1
M5 x 70	60-64	400	9-13255-70-R-1
M5 x 75	65-69	400	9-13255-75-R-1
M5 x 80	70-74	400	9-13255-80-R-1
M5 x 90	75-80	400	9-13255-90-R-1



Adapter sleeve

Technical data	
Use	For increasing the size of the threaded lugs from Ø 10 to Ø 12 mm

	PU	Order number
	100	9-40496-00-0-0

Rosette-free turn handles



Rosette-free turn handle

Technical data	
Version	can only be used with insertable gear K-20050
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	17
Min. sash overlap height [mm]	7
Max. sash overlap height [mm]	12
Installation tool	Hexagon socket size 3

Finish	PU	Order number
EV1 silver	10	6-40186-00-0-1
black	10	6-40186-00-0-6



Rosette-free turn handle, lockable

Technical data	
Version	can only be used with insertable gear K-20050
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window
DIN side of hinges	left right
Hole pattern, distance between fastening points [mm]	17
Finish	EV1 silver
Min. sash overlap height [mm]	7
Max. sash overlap height [mm]	12
Installation tool	Hexagon socket size 3

	PU	Order number
	10	K-20048-00-0-1



Rosette-free Tilt-First turn handle, lockable

Technical data	
Version	can only be used with insertable gear K-20050
Opening type	Tilt-First window
Hole pattern, distance between fastening points [mm]	17
Finish	EV1 silver
Min. sash overlap height [mm]	7
Max. sash overlap height [mm]	12
Installation tool	Hexagon socket size 3

DIN side of hinges	PU	Order number
left	10	K-20049-00-L-1
right	10	K-20049-00-R-1







Limiting stays

168

Turn blockers

170

Bullet-catches

171

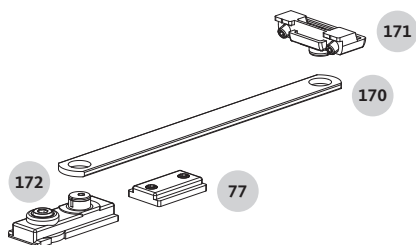
Locking and opening monitoring

172

Mounting tools

Adjustment tools	174
Drilling jigs	175
Punches	177
Positioning jigs	178

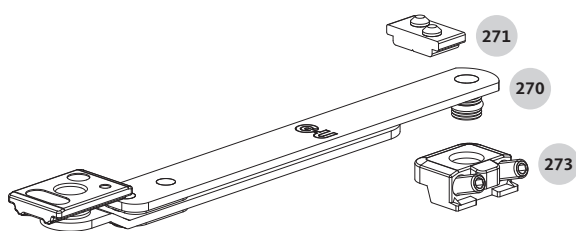
Limiting stays



Limiting stay set with brake

Technical data	
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	ferGUard*silver
Frame groove [mm]	10/14 12/15 14/18
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5
Adjusting tools	Hexagon socket size 2.5 Hexagon socket size 4

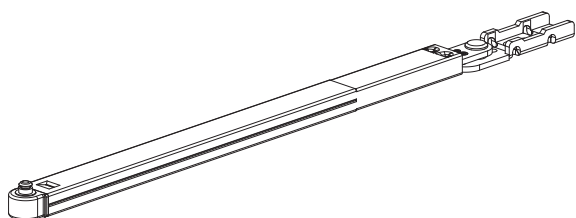
Specifications	PU	Order number
Stay arm length 150 mm	10	K-17138-15-0-1
Stay arm length 250 mm	10	K-17138-25-0-1



Turn-restrictor

Technical data	
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	ferGUard*silver
Frame groove [mm]	10/14 12/15 14/18
Type of fixing	clampable
Installation tool	Hexagon socket size 2.5
Adjusting tools	Hexagon socket size 2.5

	PU	Order number
	10	K-19644-00-0-1

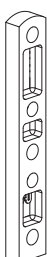
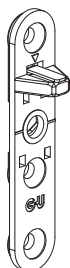


EGO-FL window friction stay

Technical data	
Version	only in combination with accessories set EURO-SOLID / EGO-B/-FL K-14686
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	stainless steel
Frame groove [mm]	10/14 12/15 14/18
Type of fixing	screw-on version
Installation tool	-

Min. sash width [mm]	Max. sash width [mm]	PU	Order number
500	750	10	6-28730-01-0-8
751	1700	10	6-28730-00-0-8

Limiting stays

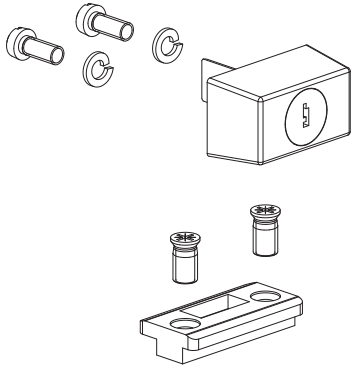


Accessories set EURO-SOLID / EGO-B / EGO-FL

Technical data	
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window Dummy-mullion sash
DIN side of hinges	left right
Finish	ferGUard*silver
Frame groove [mm]	10/14 12/15 14/18
Type of fixing	screw-on
Installation tool	-

	PU	Order number
	10	K-14686-00-0-1

Turn blockers

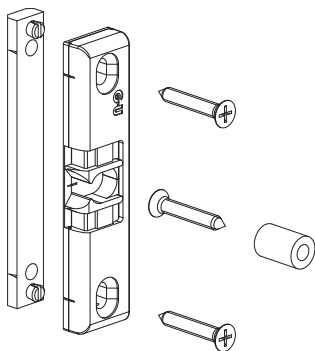


Turn blocker set, aluminium

Technical data	
Version	surface-mounted with key
Opening type	Tilt&Turn window Tilt-First window
DIN side of hinges	left right
Frame groove [mm]	10/14 12/15 14/18
Min. sash overlap height [mm]	7.5
Max. sash overlap height [mm]	8.5
Type of fixing	screw-on version
Installation tool	Philips PZ2 slot

Finish	PU	Order number
EV1 silver	10	K-12968-00-0-1
dark bronze	10	K-12968-00-0-5
traffic white	10	K-12968-00-0-7
special colour available on request	10	K-12968-00-0-9

Bullet-catches

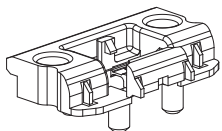


Bullet-catch set

Technical data	
Opening type	Tilt&Turn window Tilt-First window Turn-Only window
DIN side of hinges	left right
Finish	ferGUard*silver
Frame groove [mm]	10/14 12/15 14/18
Type of fixing	screw-on
Installation tool	Philips PH 2

	PU	Order number
	10	K-12962-00-0-1

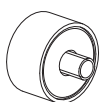
Locking and opening monitoring



Installation set ALU-JET sensor

Technical data	
Use	with change-over contact VdS B VdS C
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window Dummy-mullion sash

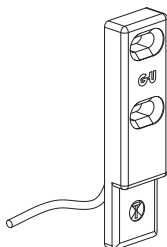
	PU	Order number
	10	K-20557-00-0-0



Magnet opening and locking monitoring

Technical data	
Use	with changeover contact VdS B
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window Dummy-mullion sash

	PU	Order number
	10	9-45175-00-0-7

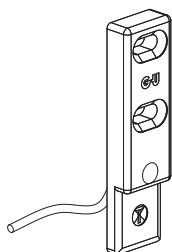


Sensor opening monitoring

Technical data	
Use	with changeover contact
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window Dummy-mullion sash
Cable length [m]	4

	PU	Order number
	10	K-14970-01-0-1

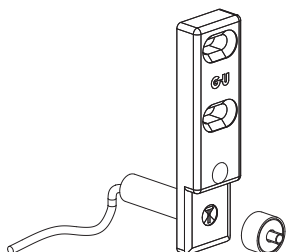
Locking and opening monitoring



Sensor opening and locking monitoring

Technical data	
Use	VdS B
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window Dummy-mullion sash

Cable length [m]	PU	Order number
4	10	K-14970-00-0-1
6	10	K-14970-06-0-1
10	10	K-14970-10-0-1



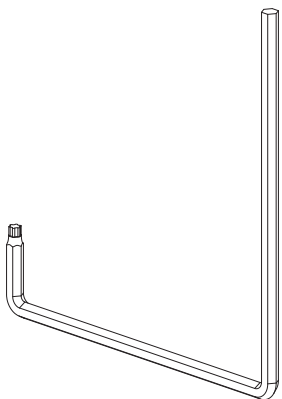
Sensor opening and locking monitoring

Technical data	
Use	VdS C
Opening type	Tilt&Turn window Tilt-First window Turn-Only window Tilt-Only window Dummy-mullion sash

Cable length [m]	PU	Order number
4	10	K-14970-03-0-1
6	10	K-14970-36-0-1
10	10	K-14970-40-0-1

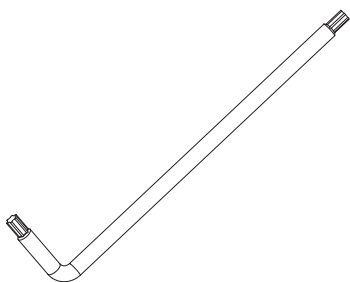
Mounting tools

Adjustment tools



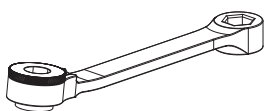
Allen key size 4

	PU	Order number
	1	9-43631-64-0-6



Hexalobular key L-shaped T15

	PU	Order number
	1	9-42886-00-0-0



Switchable ratchet (90 mm without bits)

	PU	Order number
	1	H-00821-00-0-0



Bit size 4

	PU	Order number
	1	H-01501-50-0-0

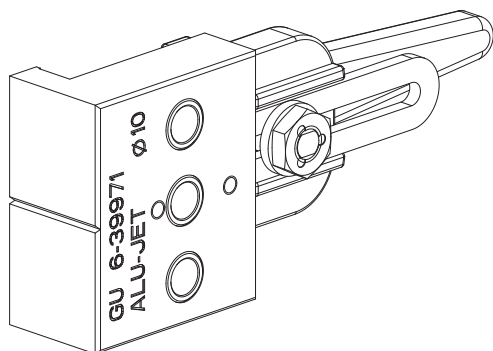


Bit T15

	PU	Order number
	1	H-00822-15-0-0

Mounting tools

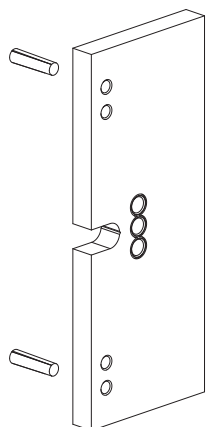
Drilling jigs



Drilling jig for insertable gear

Technical data	
Specifications	for insertable gear 6-39384 and 6-39385
Finish	black

	PU	Order number
	1	6-39971-00-0-6



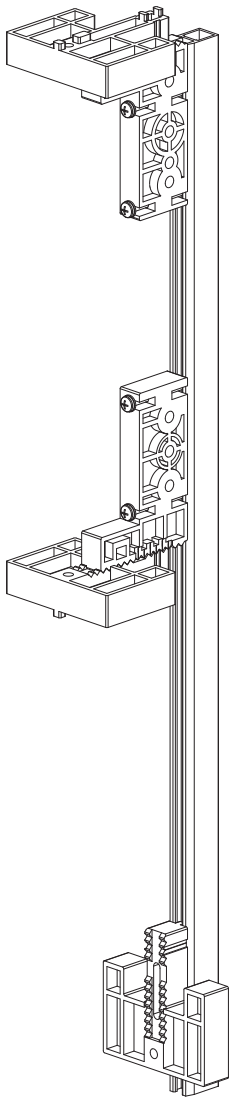
Drilling jig for insertable gear, rosette-free handle

Technical data	
Specifications	for insertable gear K-20050
Finish	EV1 silver

	PU	Order number
	1	K-20051-00-0-1

Mounting tools

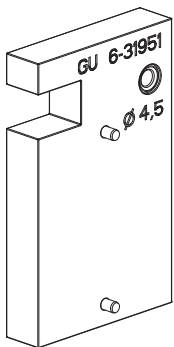
Drilling jigs



Drilling jig for insertable gear and centre-lock

Technical data	
Specifications	for insertable gear 6-25916, 6-25917 and centre-lock 6-25918
Finish	blue

	PU	Order number
	1	6-26191-00-0-2



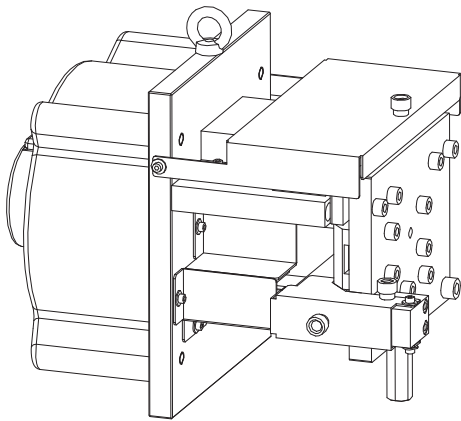
Drilling / mounting jig, stay-bearing support

Technical data	
Specifications	for stay-bearing support 9-41710 from set of additional parts for hinge-side K-16595
Finish	black

	PU	Order number
	1	6-31951-00-0-6

Mounting tools

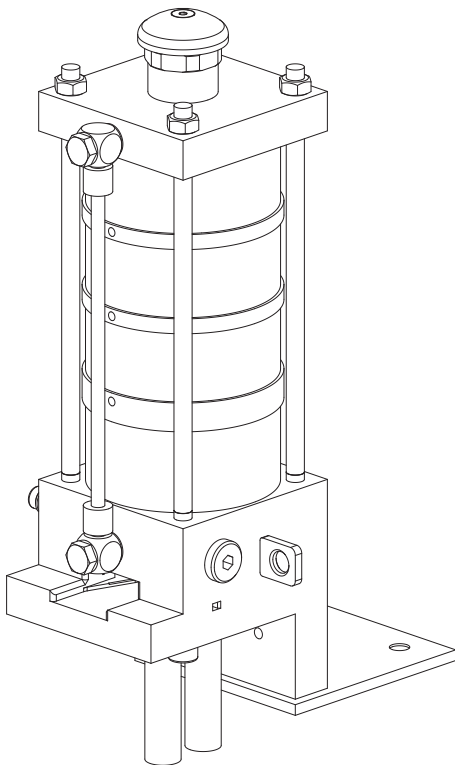
Punches



Pneumatic punch for profile machining

Technical data	
Specifications	for geared turn handle punching (HP 104), opening the connecting rod channel and punching of ALU-JET 06 connecting rod (Ø 6 mm)
Diameter of hole/engagement pin [mm]	6

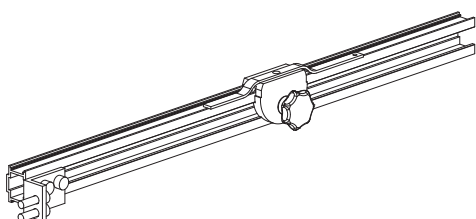
	PU	Order number
	1	6-31957-00-0-0



Pneumatic punch

Technical data	
Specifications	for punching and cutting to length of connecting rod (Ø 10 mm)
Diameter of hole/engagement pin [mm]	10

	PU	Order number
	1	6-39858-00-0-0



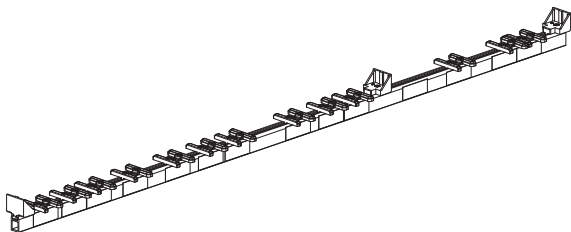
Stop rail for punch

Technical data	
Specifications	for pneumatic punch 6-39858

	PU	Order number
	1	6-39859-00-0-0

Mounting tools

Positioning jigs



Positioning jig for strikers

Technical data	
Finish	blue yellow

Version	PU	Order number
for strikers up to SH/SW 1200	1	6-39879-01-0-1
for strikers from SH/SW 1201	1	6-39879-02-0-1
for strikers RC2/RC3	1	6-39879-04-0-1
for strikers RC2/RC3	1	6-39879-05-0-1
for strikers RC3	1	6-39879-06-0-1







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Application diagrams

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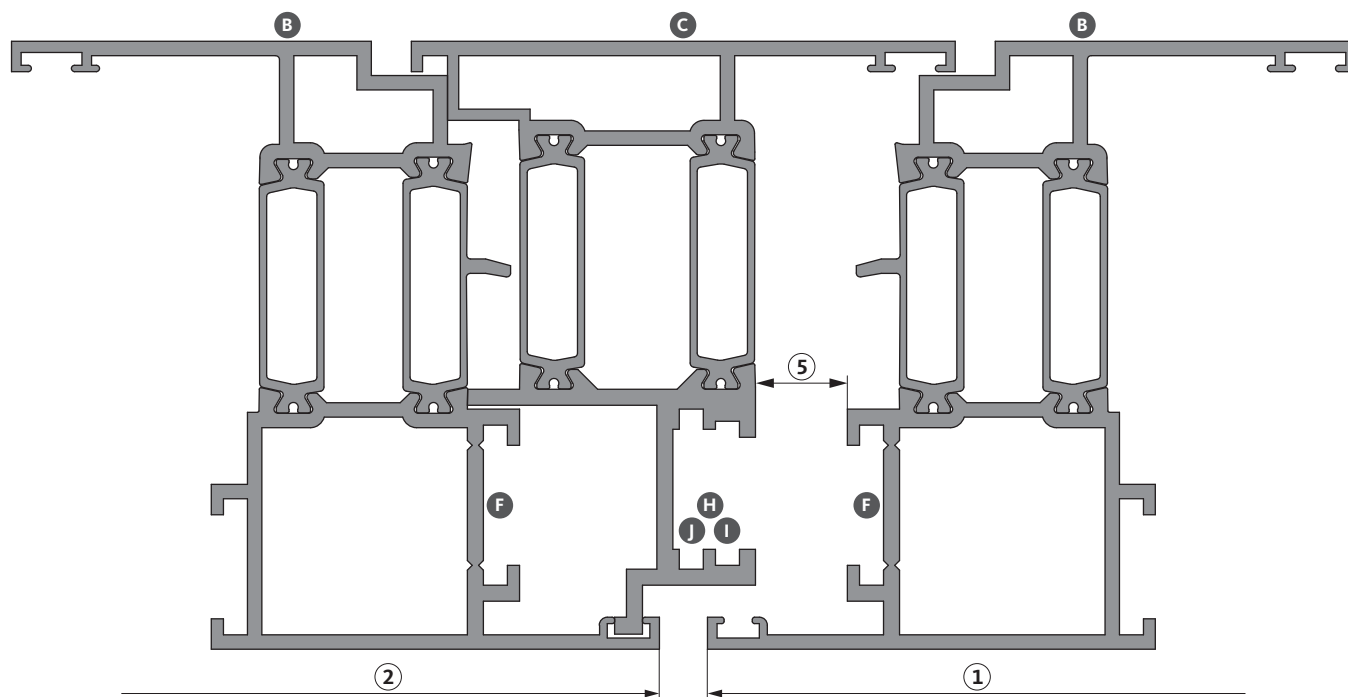
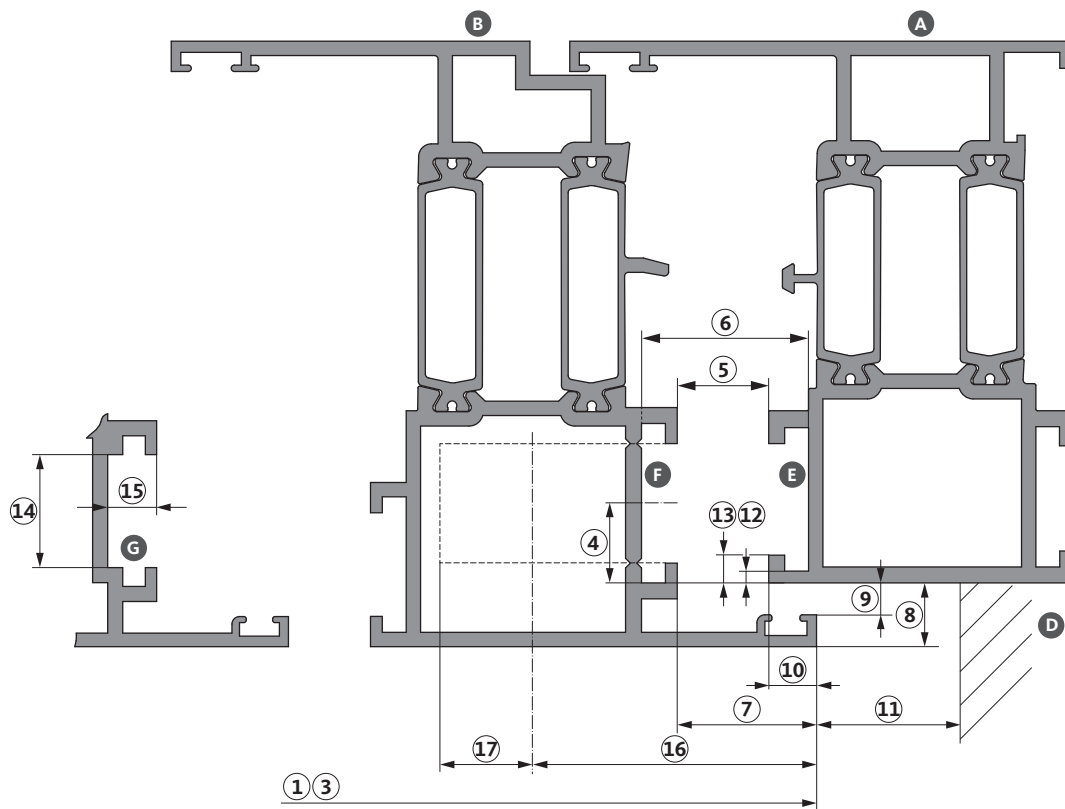
Documentation

208

Guidelines/advice on product and liability

210

List of abbreviations / Definition of terms



List of abbreviations / Definition of terms



Dimensions		
①	Sash width	SW
②	Dummy-mullion sash width	SW2
③	Sash height	SH
④	Axis	AX
⑤	Clearance	CL
⑥	Rebate clearance	RC
⑦	Overlap width	OL
⑧	Overlap height	OH
⑨	Hinge-passage	HI
⑩	Overlap coverage	O-CO
⑪	Free space on frame	FSOF
⑫	Frame groove dimension A	A
⑬	Frame groove dimension B	B
⑭	Groove width with deep Euro-groove 15/20	W-DG
⑮	Groove depth with deep Euro-groove 15/20	D-DG
⑯	Overlap up to handle axis (with insertable gears)	OHA
⑰	Clearance behind backset (for insertable gears)	CBB

Designations	
A	Frame profile
B	Sash profile
C	Dummy-mullion profile
D	Reveal
E	Frame groove (versions 10/14, 12/15, 14/18)
F	Euro-groove 15/20 (connecting rod groove)
G	Recessed Euro-groove 15/20 (deepened connecting rod groove)
H	Double C groove of the dummy-mullion profile
I	Striker groove (with double C groove)
J	Central locking groove (with double C groove)

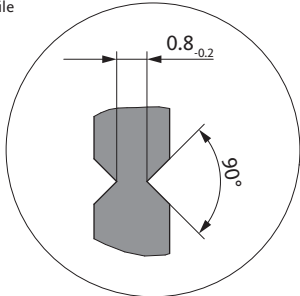
List of abbreviations	
AX	Axis
CBB	Clearance behind backset (for insertable gears)
C-C	Centre-closer
CD	Corner-drive
CL	Clearance
C-L	Centre-lock
GTH	Geared turn handle
HH	Handle height
HI	Hinge-passage
HP	Hole pattern (for geared turn handle)
IG	Insertable gear
LC-M	Mushroom locking cam
M.D.	Mishandling device
OH	Overlap height
OHA	Overlap up to handle axis (with insertable gears)
OL	Overlap width
PU	Packing unit
RC	Resistance Class according to EN 1627
SB	Shoot-bolt
SH	Sash height
SR	Centre-of-gravity position of filling
ST	Dummy-mullion sash
ST-DCN	Dummy-mullion sash with central locking system in the double C groove of the dummy-mullion profile
ST-FLN	Dummy-mullion sash with central locking system in the sash groove
ST-FLN1	Dummy-mullion sash with central locking system in the sash groove, installation variant 1
ST-FLN2	Dummy-mullion sash with central locking system in the sash groove, installation variant 2
STG	Height of lever-operated gear
SW	Sash width (of the active sash with 2-sash windows)
SW2	Dummy-mullion sash width
T&T	Tilt&Turn
TF	Tilt-First
TI-ON	Tilt-Only window
TU-ON	Turn-Only window

Installation dimensions and space requirement

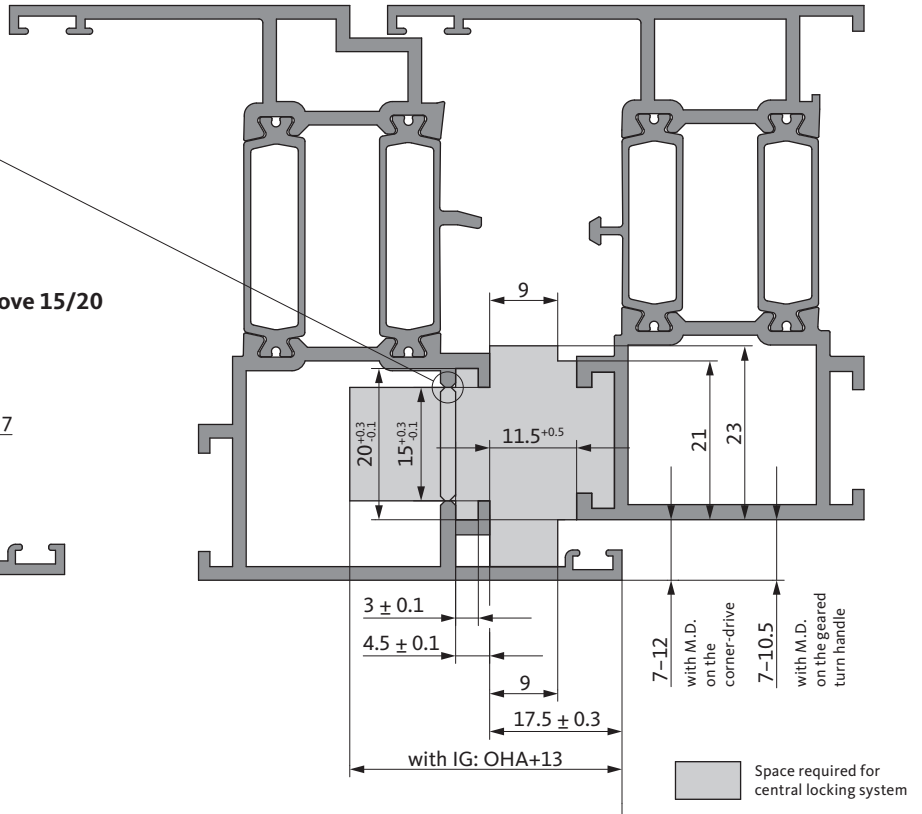
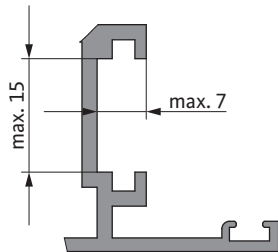
Central locking system



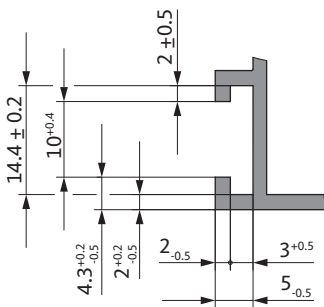
Required if the profile is machined for IG using punches.



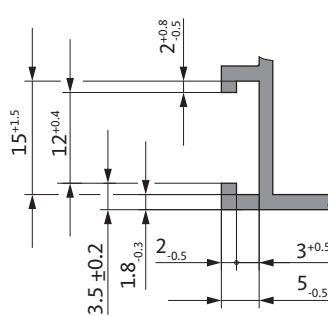
Recessed Euro-groove 15/20



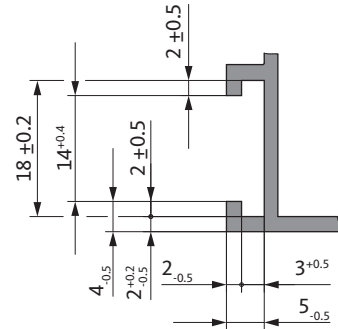
Frame groove 10/14



Frame groove 12/15

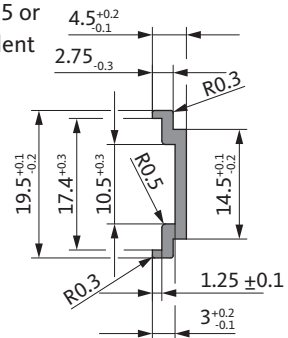


Frame groove 14/18



Connecting rod

P-01975 or equivalent



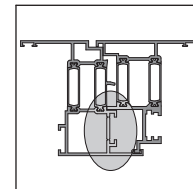
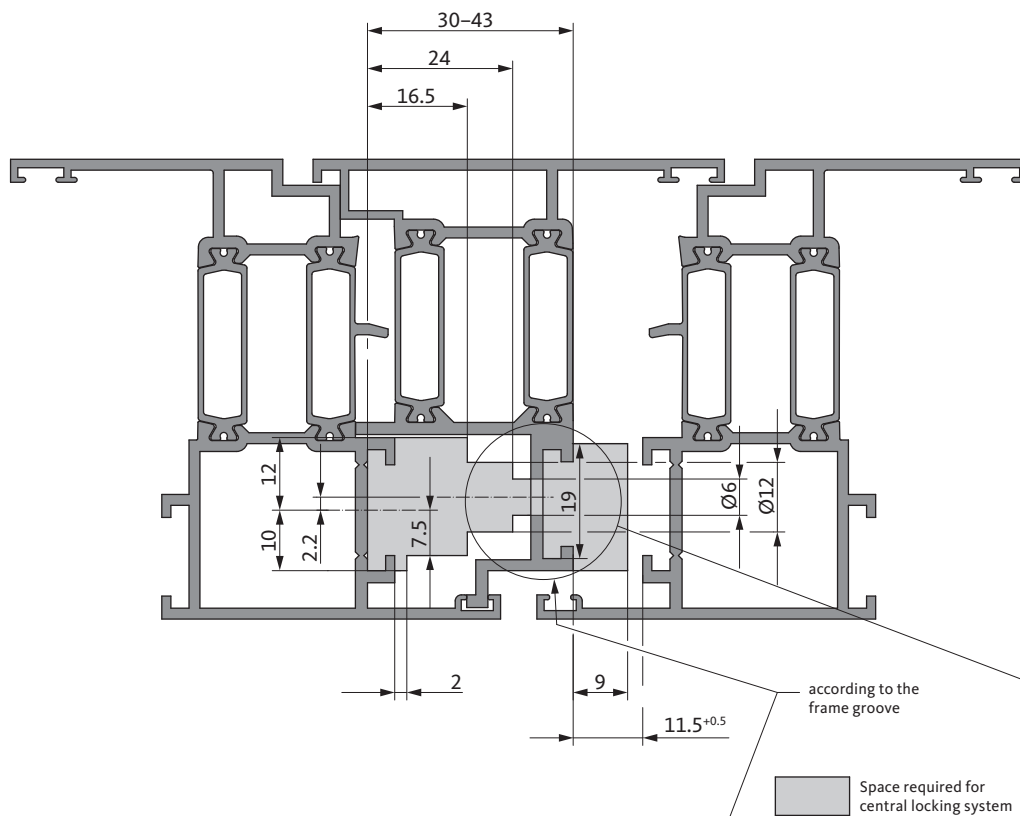
Installation dimensions and space requirement



Central locking dummy mullion sash with central locking system in the sash groove (ST-FLN)

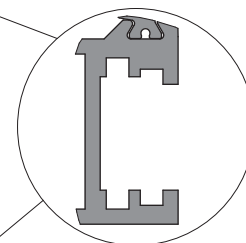
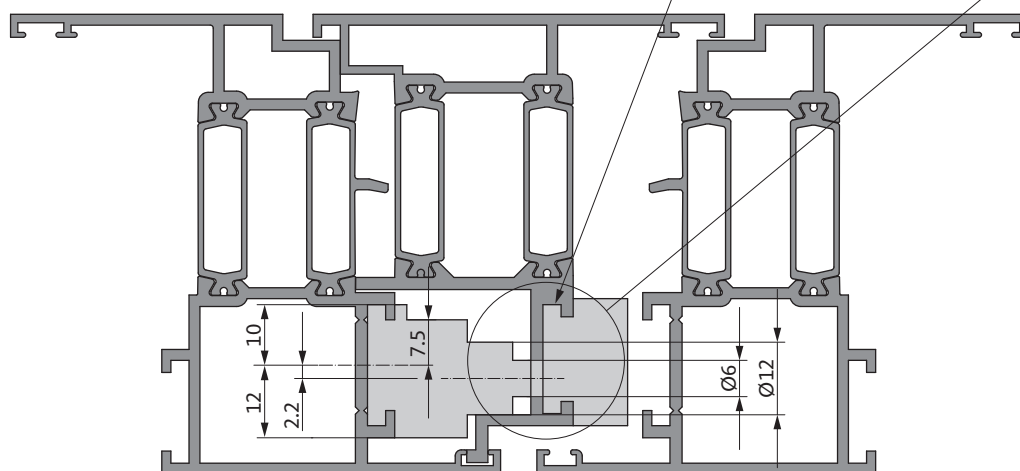


ST-FLN1



ST-FLN2

For dimensions not shown see section above



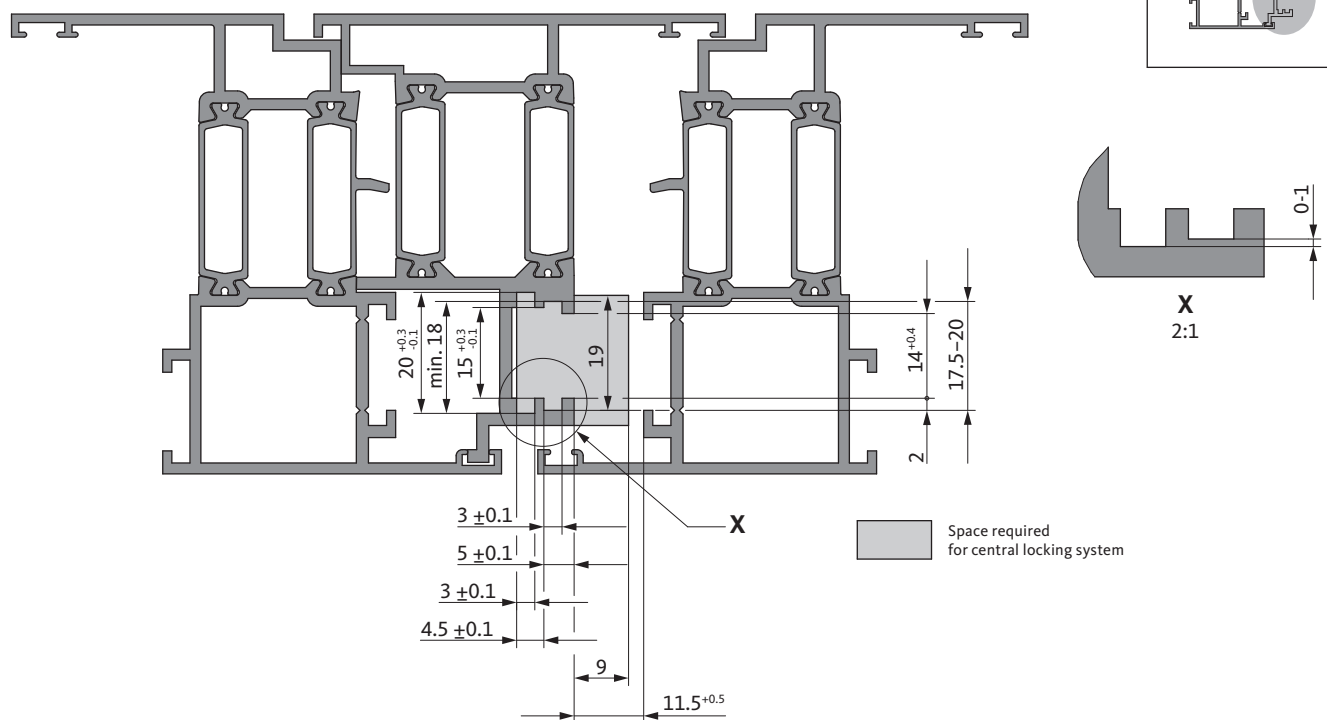
Alternative dummy-mullion profile design

Installation dimensions and space requirement

Central locking dummy mullion sash with central locking system in the double C groove (ST-DCN)



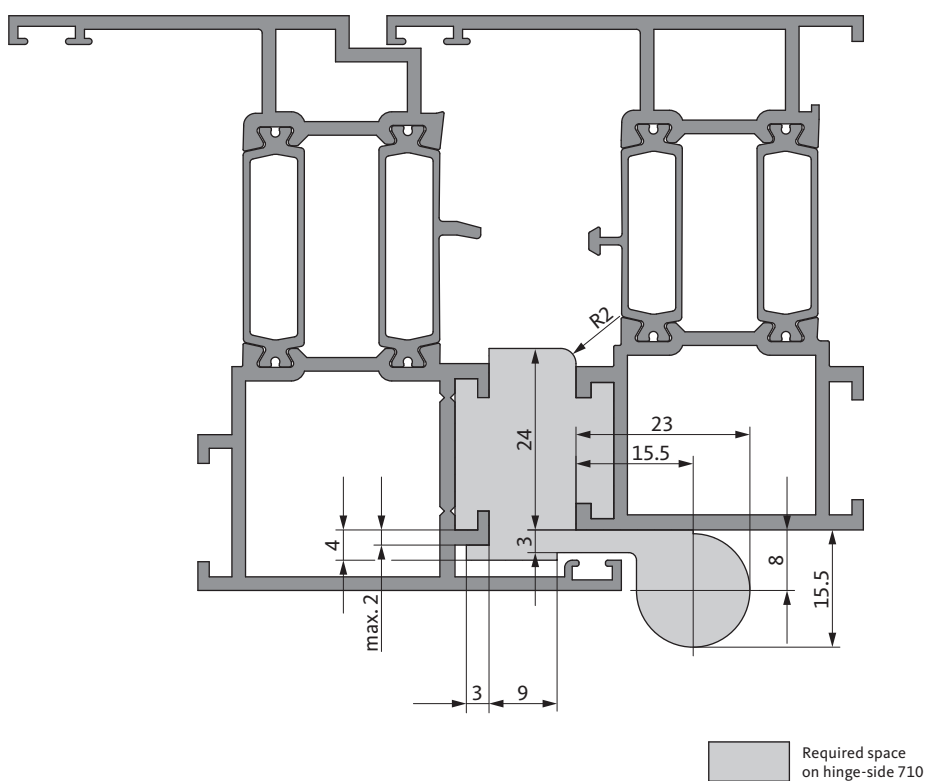
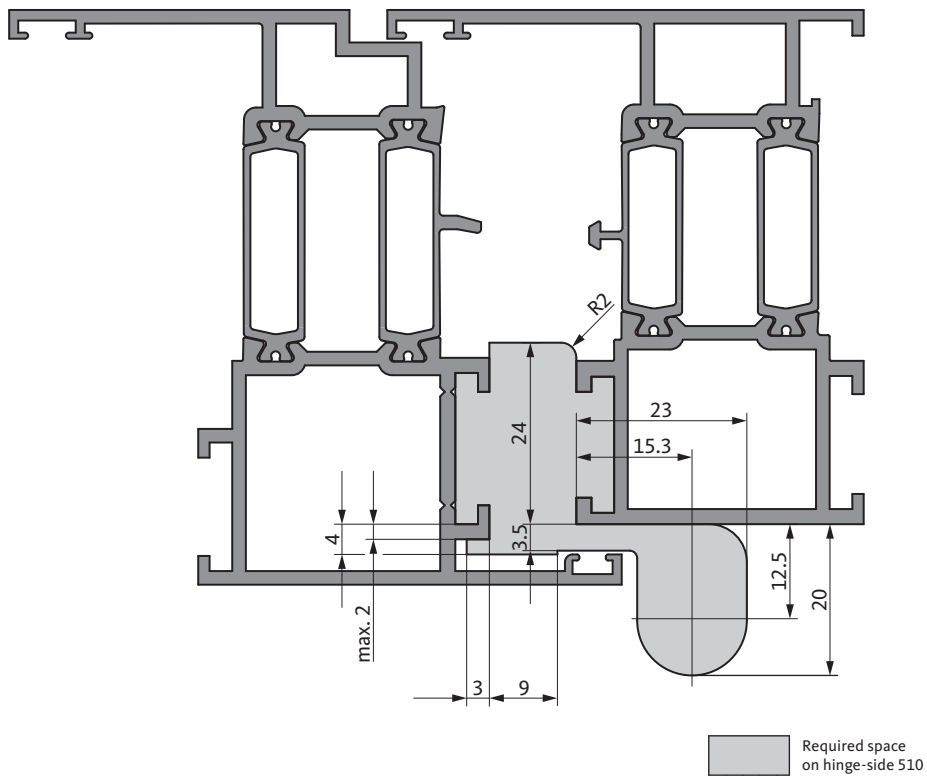
ST-DCN





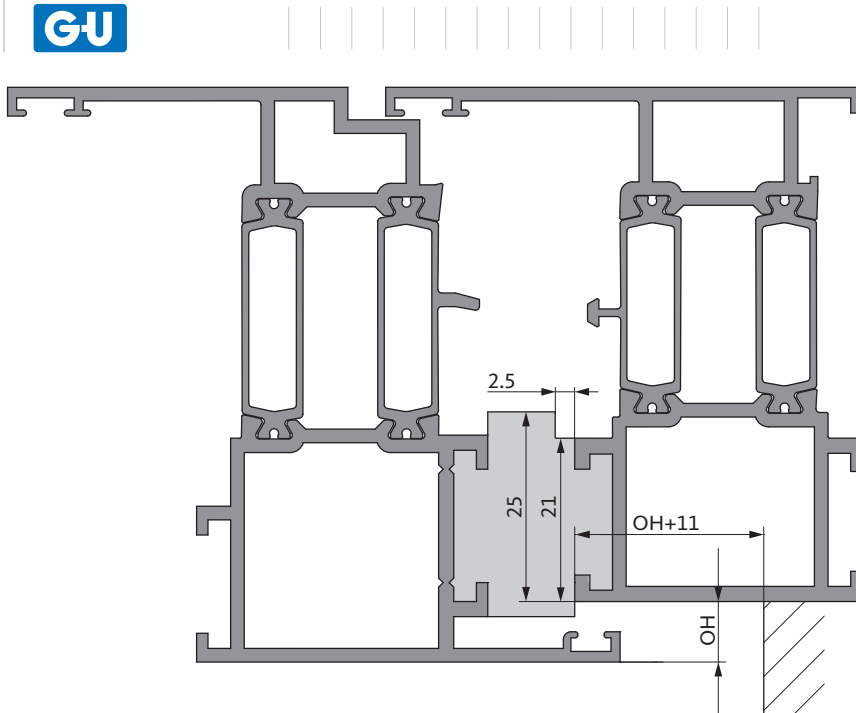
Installation dimensions and space requirement

ALU-JET 510 / ALU-JET 710 surface-mounted hinge-sides



Installation dimensions and space requirement

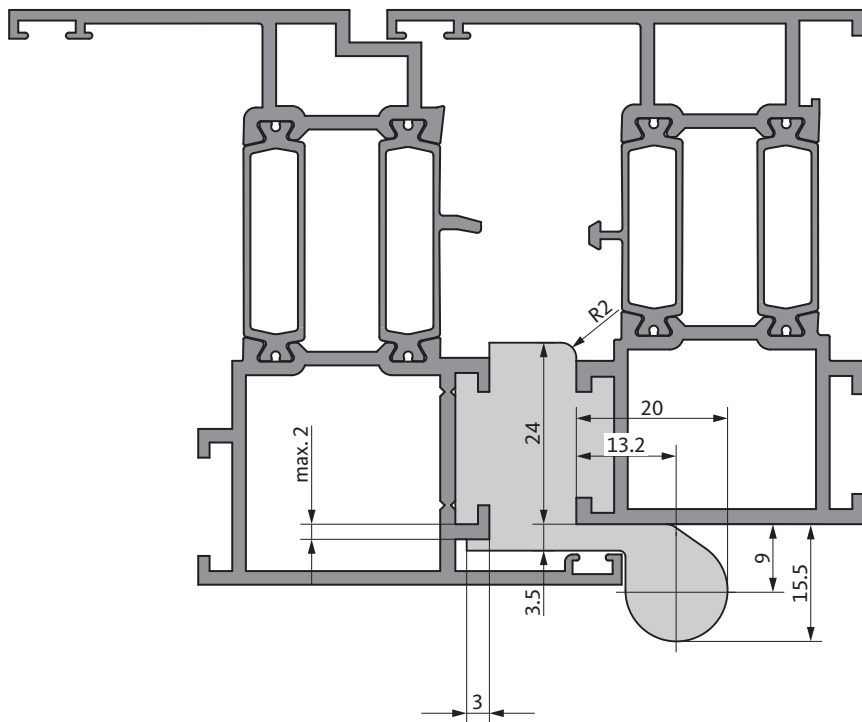
ALU-JET CC610 concealed hinge-side



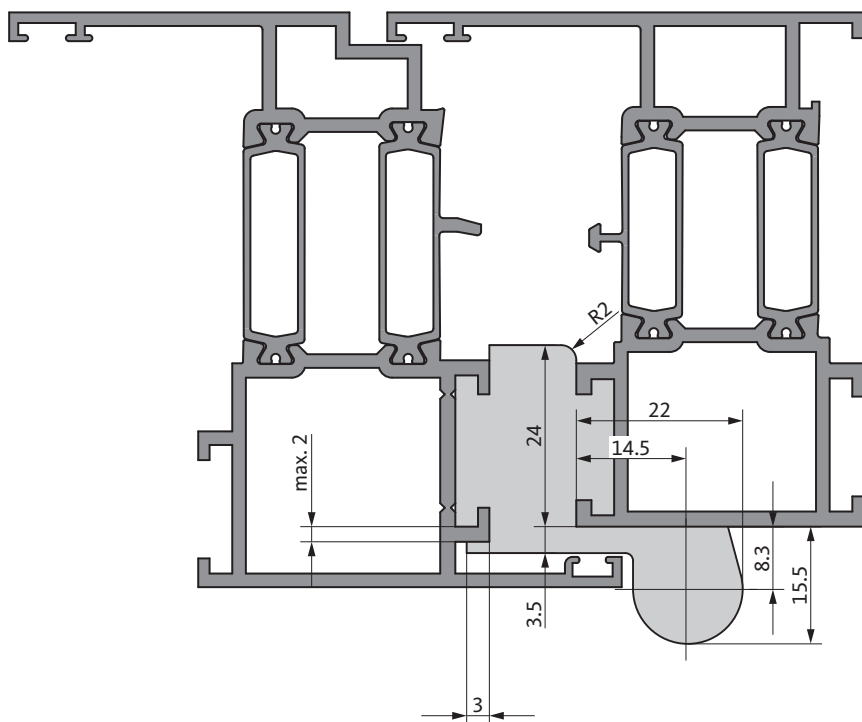
Required space on hinge-side CC610

Installation dimensions and space requirement

Surface-mounted hinge-side, ALU-JET 10 axial hinges



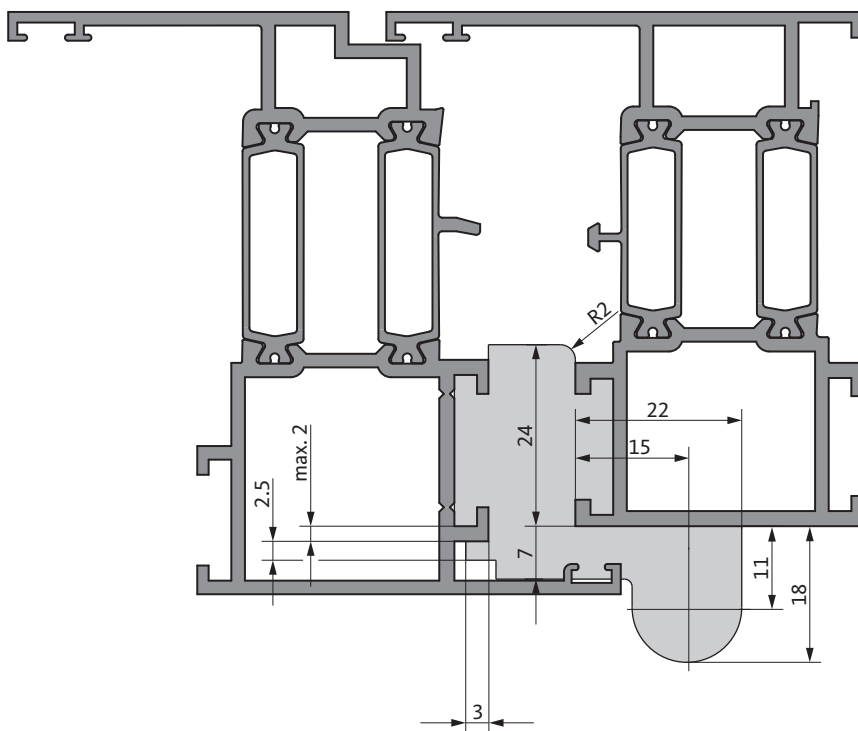
Space requirement for G-24885 / G-24886 axial hinges



Space requirement for K-15820 / K-15887 axial hinges

Installation dimensions and space requirement

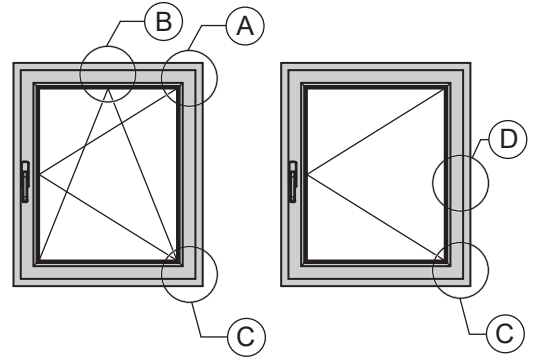
ALU-JET S800 surface-mounted hinge-side



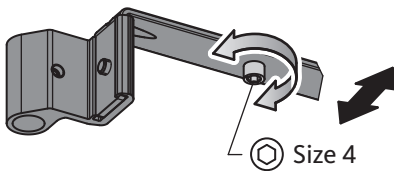
Required space on hinge-side S800

Adjustment options

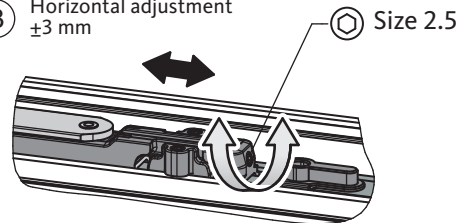
ALU-JET 510 surface-mounted hinge side



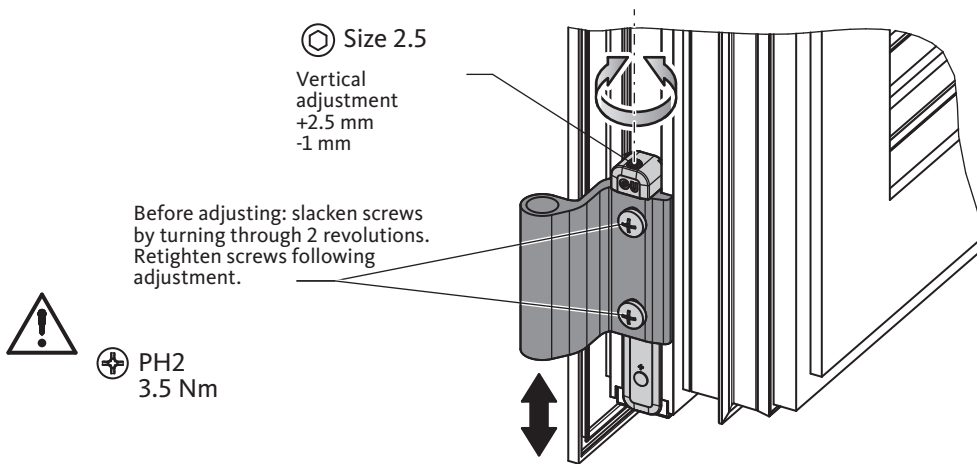
A Gasket pressure adjustment
±1 mm



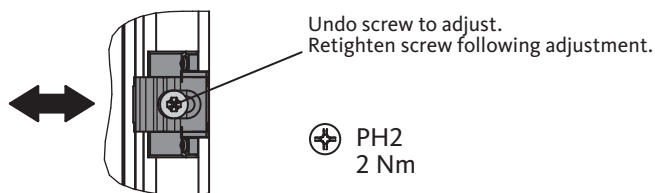
B Horizontal adjustment
±3 mm



C

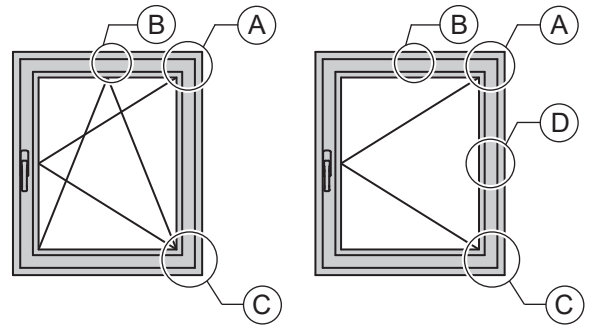


D Gasket pressure adjustment
+2 mm
-1 mm

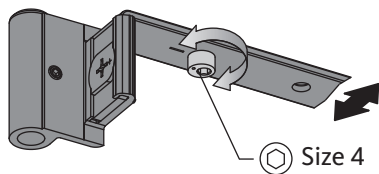


Adjustment options

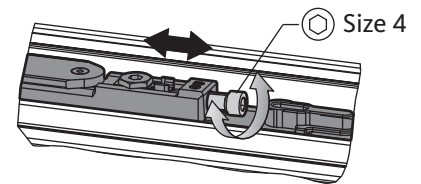
ALU-JET 710 surface-mounted hinge side



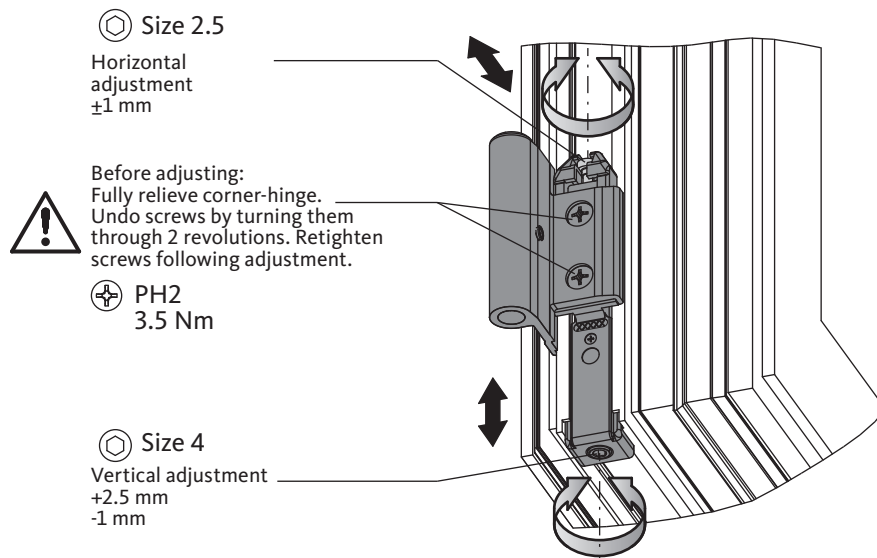
A Gasket pressure adjustment
±1 mm



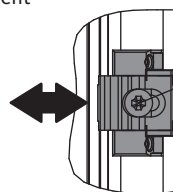
B Horizontal adjustment
±3 mm



C



D Gasket pressure adjustment
+2 mm
-1 mm



Undo screw to adjust.
Retighten screw following adjustment.

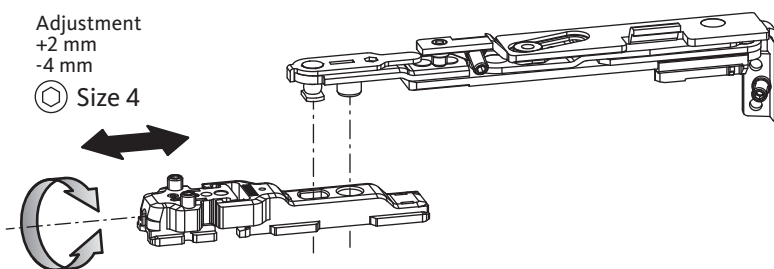
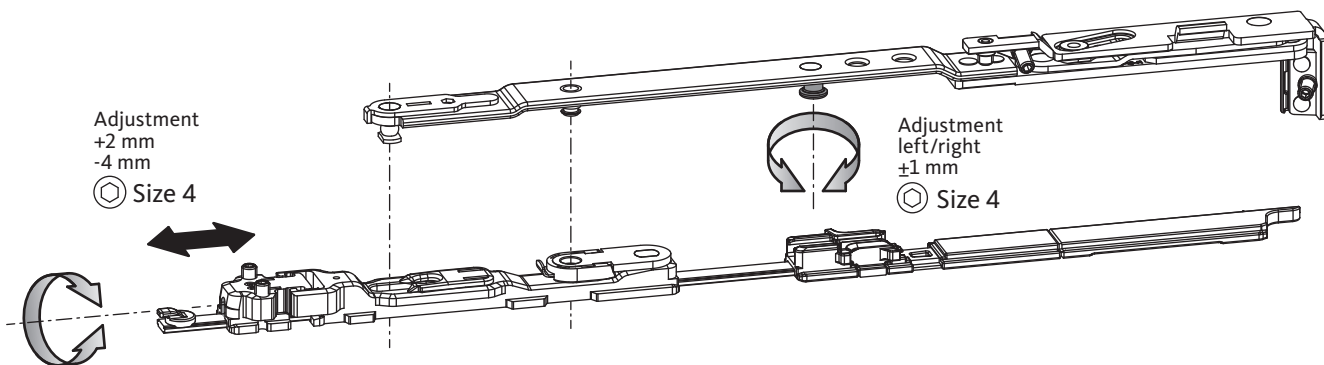
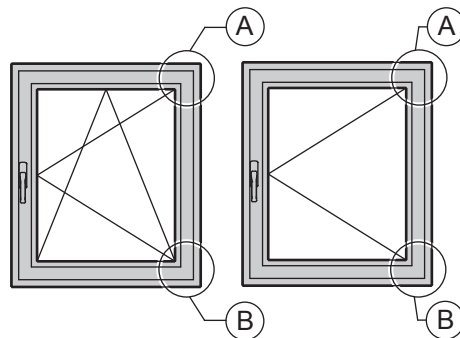
⊕ PH2
2 Nm

Adjustment options

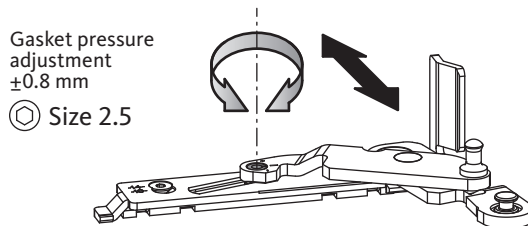
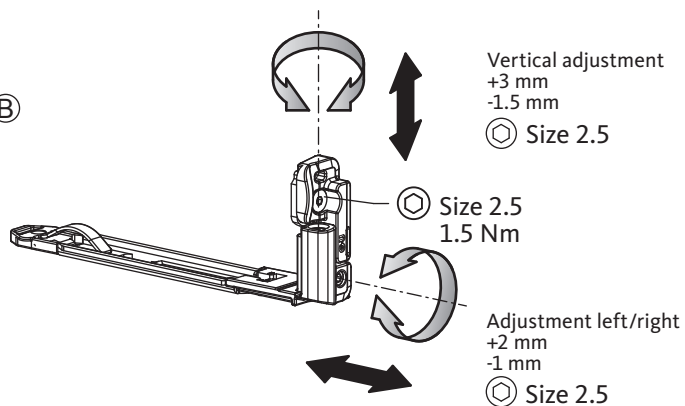
ALU-JET CC610 concealed hinge-side



Ⓐ

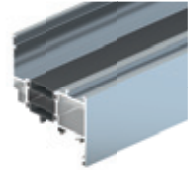
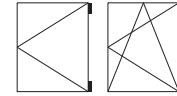


Ⓑ



ALU-JET 510 application diagram

Tilt&Turn window, Tilt-First window, Turn-Only window



Prerequisites for using the application diagram:

- Verifications regarding the attachment of load-bearing components to the window system by the window fabricator according to TBDK with the following forces:
 - 2200 N at the stay-bearing
 - 2890 N at the pivot-rest
- Glass reduction GR ≥ 20 mm
- Profile weight PW ≤ 3,6 kg/m

Attention:

The maximum sash weight of 100 kg is only permitted in certain areas of the application diagram.

Only sash formats to the left of the respective glass weight graph are permissible.

format not permitted

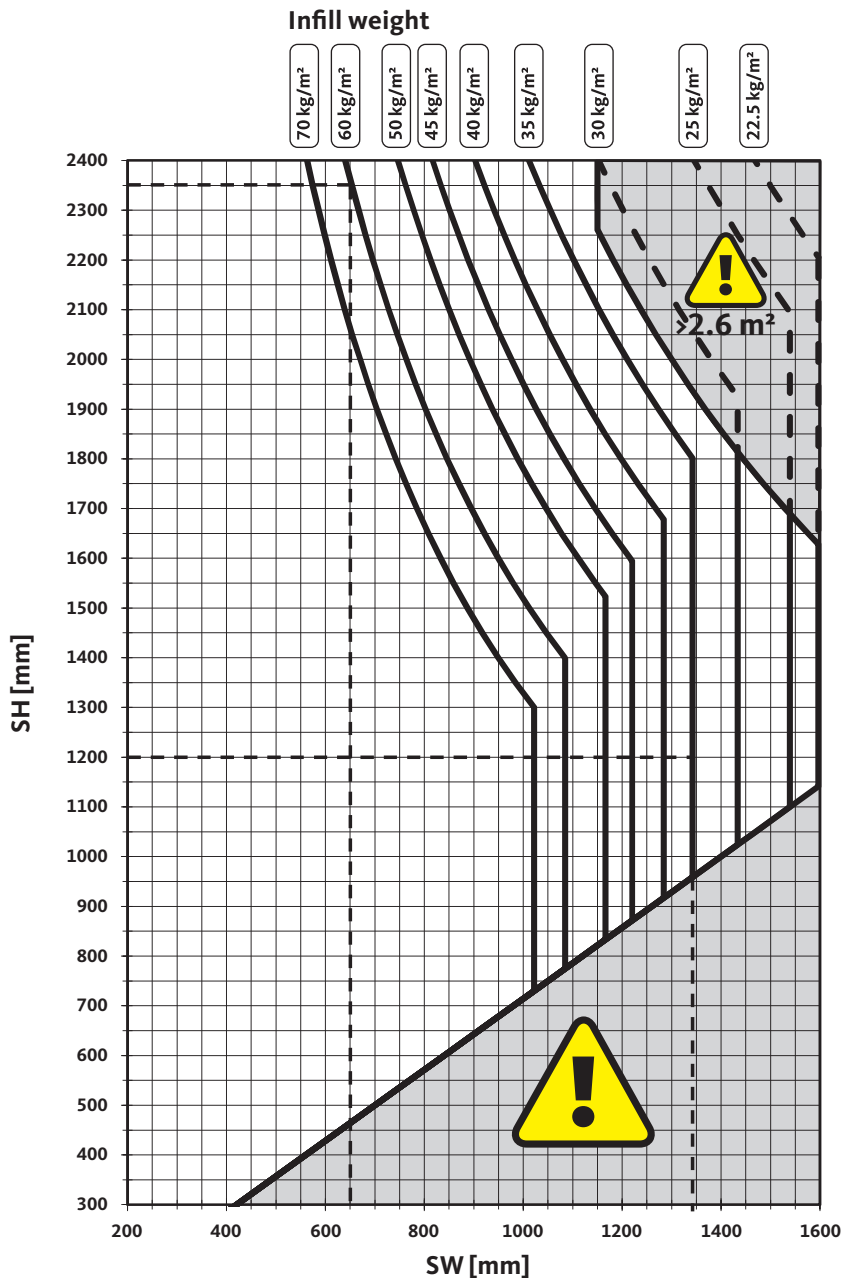
Reading examples

1. Infill weight = 60 kg/m²
With an SW = 650 mm, the max. SH = 2350 mm, which corresponds to a maximum sash weight of 100 kg.
2. Infill weight = 35 kg/m²
With an SH = 1200 mm, the max. SW = 1340 mm, which corresponds to a maximum sash weight of 69 kg.

For notes on intended use, see 0-46789.

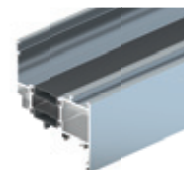
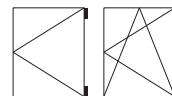
Test and calculation basis

- Tilt&Turn test acc. to EN 13126-8:2017
 - Class H2 (10.000 Tilt&Turn and Turn-Only cycles)
- Test format:
 - SRW 900 x SRH 2300 : 100 kg
 - SRW 1300 x SRH 1200 : 80 kg



ALU-JET 710 application diagram

Tilt&Turn window, Tilt-First window, Turn-Only window



Prerequisites for using the application diagram:

- Verifications regarding the attachment of load-bearing components to the window system by the window fabricator according to TBDK with the following forces:

- 3525 N at the stay-bearing
- 3760 N at the pivot-rest

- Glass reduction GR ≥ 20 mm
- Profile weight PW ≤ 3,6 kg/m

Attention:

The maximum sash weight of 130 kg is only permitted in certain areas of the application diagram.

Only sash formats to the left of the respective glass weight graph are permissible.

format not permitted

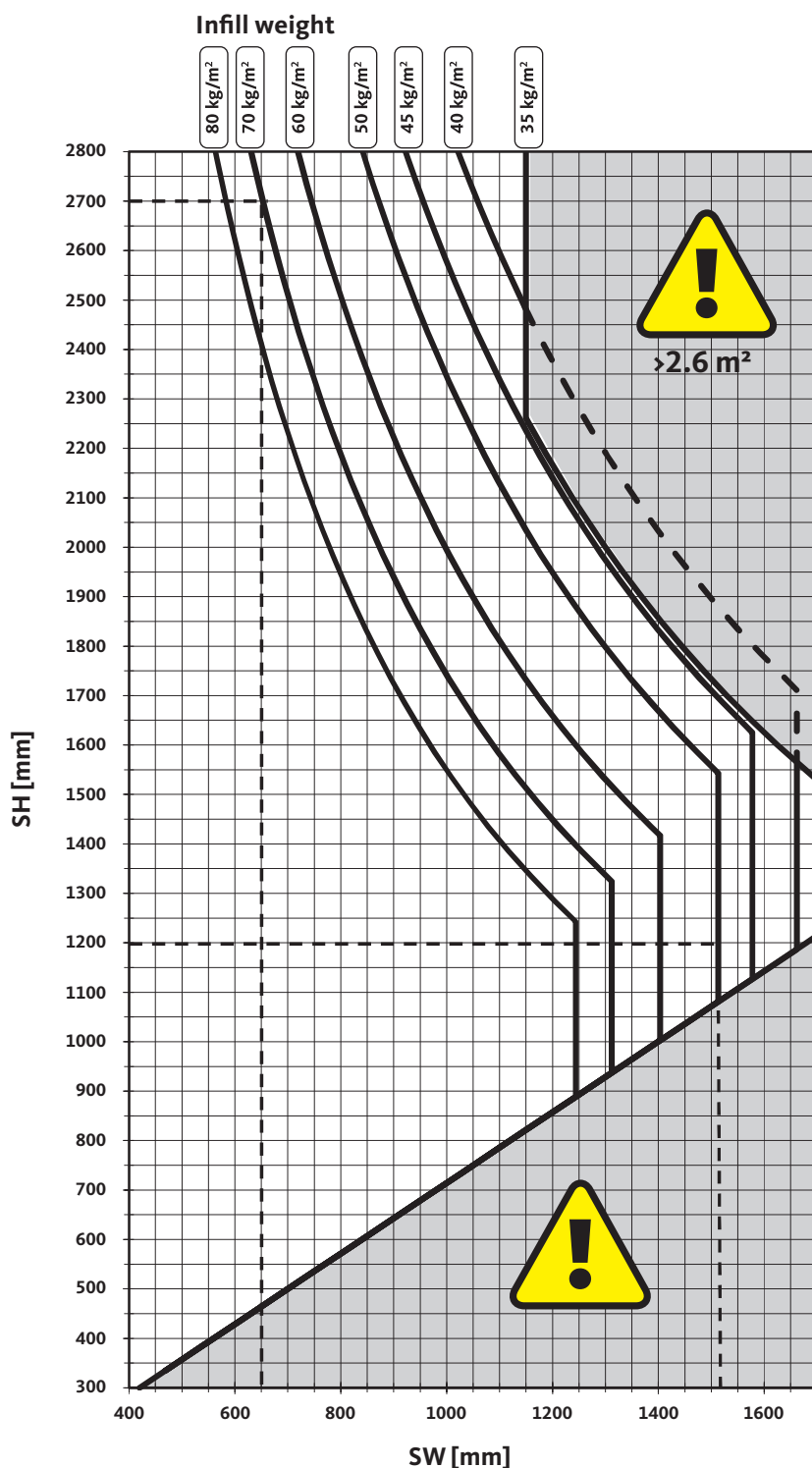
Reading examples

1. Infill weight = 70 kg/m²
With an SW = 650 mm, the max. SH = 2700 mm, which corresponds to a maximum sash weight of 130 kg.
2. Infill weight = 50 kg/m²
With an SH = 1200 mm, the max. SW = 1515 mm, which corresponds to a maximum sash weight of 100 kg.

For notes on intended use, see 0-46789.

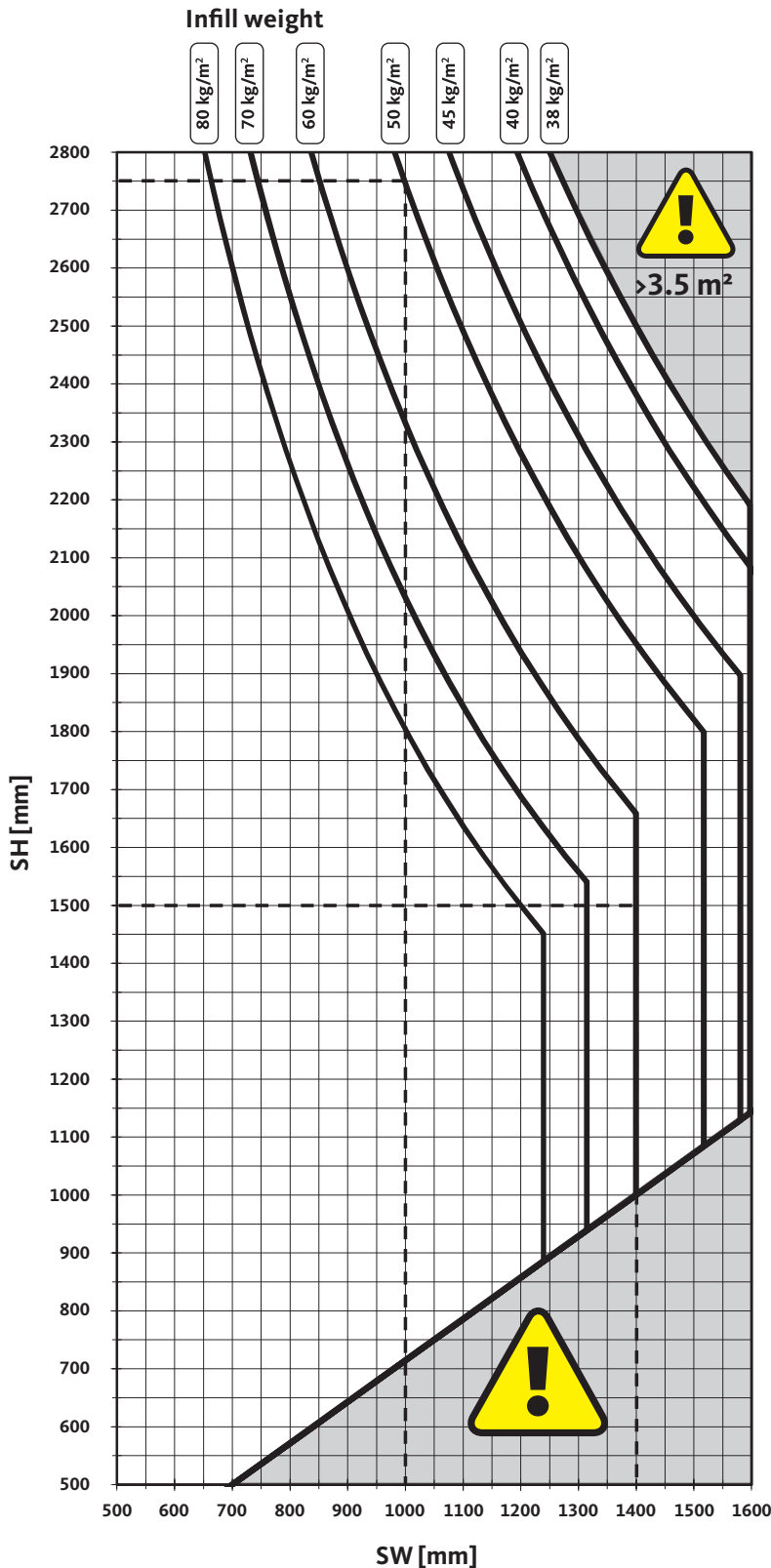
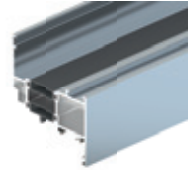
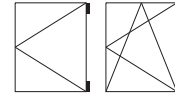
Test and calculation basis

- Tilt&Turn test acc. to EN 13126-8:2017 and EN 1191:2012
 - Class H3 (20,000 Tilt&Turn and Turn-Only cycles)
- Test format:
 - SRW 1300 x SRH 1200 : 130 kg



ALU-JET CC610 application diagram

Tilt&Turn window, Tilt-First window, Turn-Only window



Prerequisites for using the application diagram:

- Verifications regarding the attachment of load-bearing components to the window system by the window fabricator according to TBDK with the following forces:
 - 3525 N at the stay-bearing
 - 4340 N at the pivot-rest
- Glass reduction GR ≥ 20 mm
- Profile weight PW ≤ 3,6 kg/m

Attention

The maximum sash weight of 150 kg is only permitted in certain areas of the application diagram.

Only sash formats to the left of the respective glass weight graph are permissible.

■ format not permitted

Reading examples

1. Infill weight = 50 kg/m²
With an SW = 1000 mm, the max. SH = 2750 mm, which corresponds to a maximum sash weight of 150 kg.
2. Infill weight = 60 kg/m²
With an SH = 1500 mm, the max. SW = 1400 mm, which corresponds to a maximum sash weight of 133 kg.

For notes on intended use, see 0-46789.

Test and calculation basis

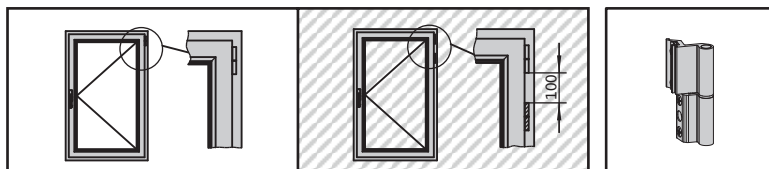
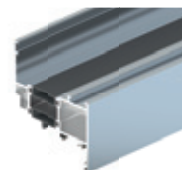
- Tilt&Turn test acc. to EN 13126-8:2017 and EN 1191:2012
 - Class H2 (10.000 Tilt&Turn and Turn-Only cycles)
- Test formats:
 - SRW 900 x SRH 2300 : 150 kg
 - SRW 1300 x SRH 1200 : 130 kg

Application diagram, ALU-JET 10 axial hinges

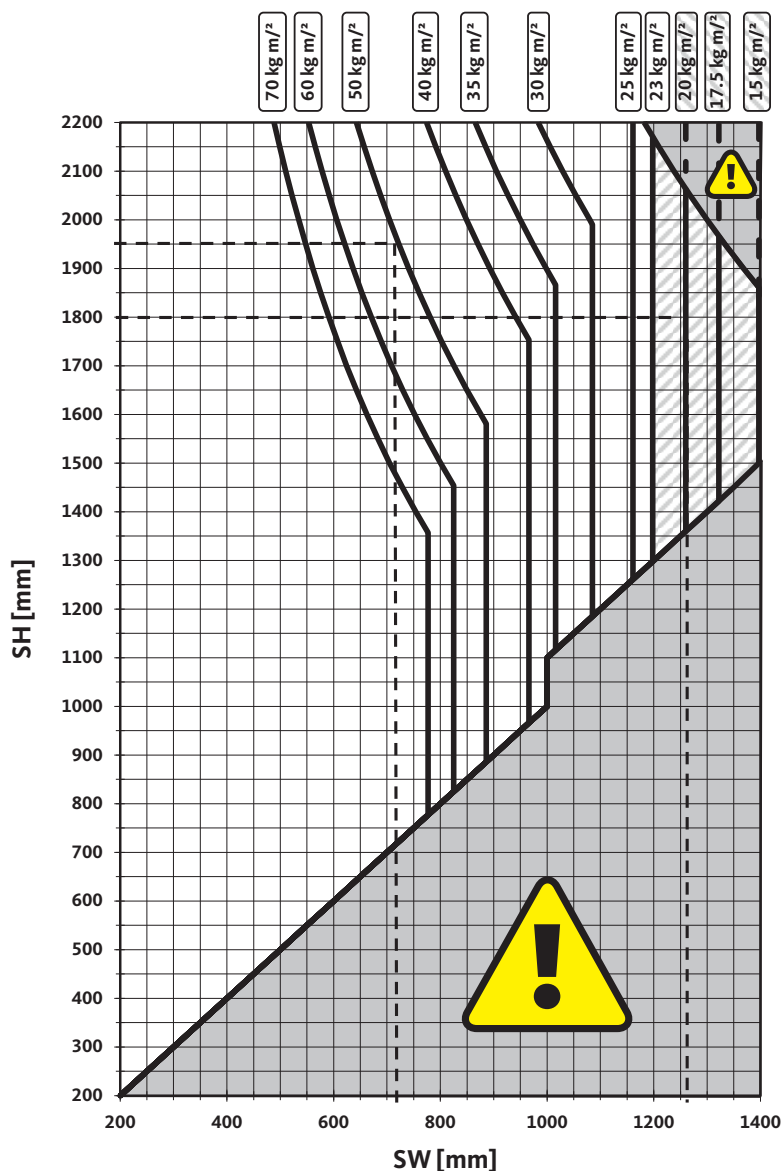
Turn-Only window – axial hinges G-24885



kg
max. 80



Infill weight



Prerequisites for using the application diagram:

- Verifications regarding the attachment of load-bearing components to the window system by the window fabricator according to TBDK with the following forces:
 - 1235 N at the stay-bearing
 - 2310 N at the pivot-rest
- Glass reduction GR ≥ 20 mm
- Profile weight PW ≤ 3,6 kg/m

Attention:

The maximum sash weight of 80 kg is only permitted in certain areas of the application diagram.

Only sash formats to the left of the respective glass weight graph are permissible.

- format not permitted
- ▨ additional centre-closer at top

Reading examples

1. Infill weight = 50 kg/m²
With an SW = 720 mm, the max. SH = 1950 mm, which corresponds to a maximum sash weight of 80 kg.
2. Infill weight 20 kg/m²
in the hatched area
(additional hinge at top)
With an SH = 1800 mm, the max. SW = 1260 mm, which corresponds to a maximum sash weight of 62 kg.

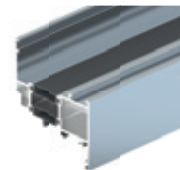
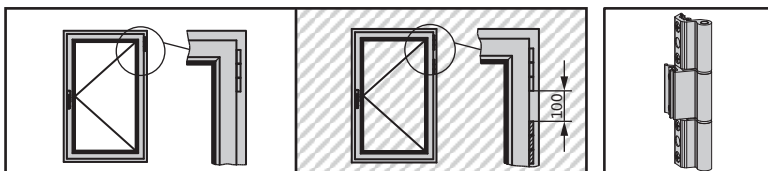
For notes on intended use, see 0-46789.

Application diagram, ALU-JET 10 axial hinges

Turn-Only window – axial hinges G-24886



kg
max. 100



Prerequisites for using the application diagram:

- Verifications regarding the attachment of load-bearing components to the window system by the window fabricator according to TBDK with the following forces:
 - 1545 N at the stay-bearing
 - 2890 N at the pivot-rest
- Glass reduction GR ≥ 20 mm
- Profile weight PW ≤ 3,6 kg/m

Attention:

The maximum sash weight of 100 kg is only permitted in certain areas of the application diagram.

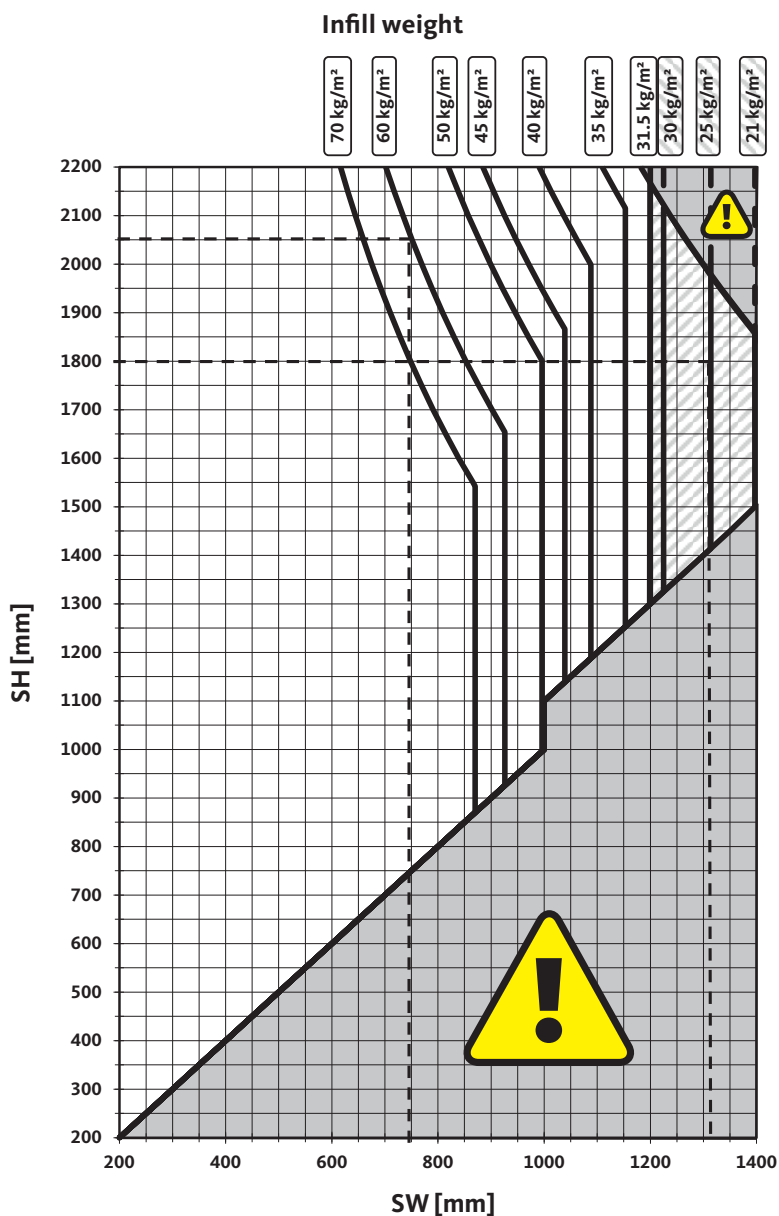
Only sash formats to the left of the respective glass weight graph are permissible.

- format not permitted
- additional hinge at the top

Reading examples

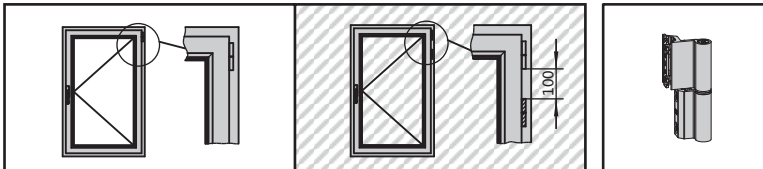
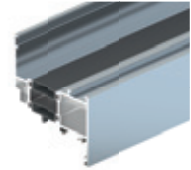
1. Infill weight = 60 kg/m²
With an SW = 750 mm, the max. SH = 2050 mm, which corresponds to a maximum sash weight of 100 kg.
2. Infill weight 20 kg/m²
in the hatched area (additional hinge at top)
With an SH = 1800 mm, the max. SW = 1335 mm, which corresponds to a maximum sash weight of 75 kg.

For notes on intended use, see 0-46789.

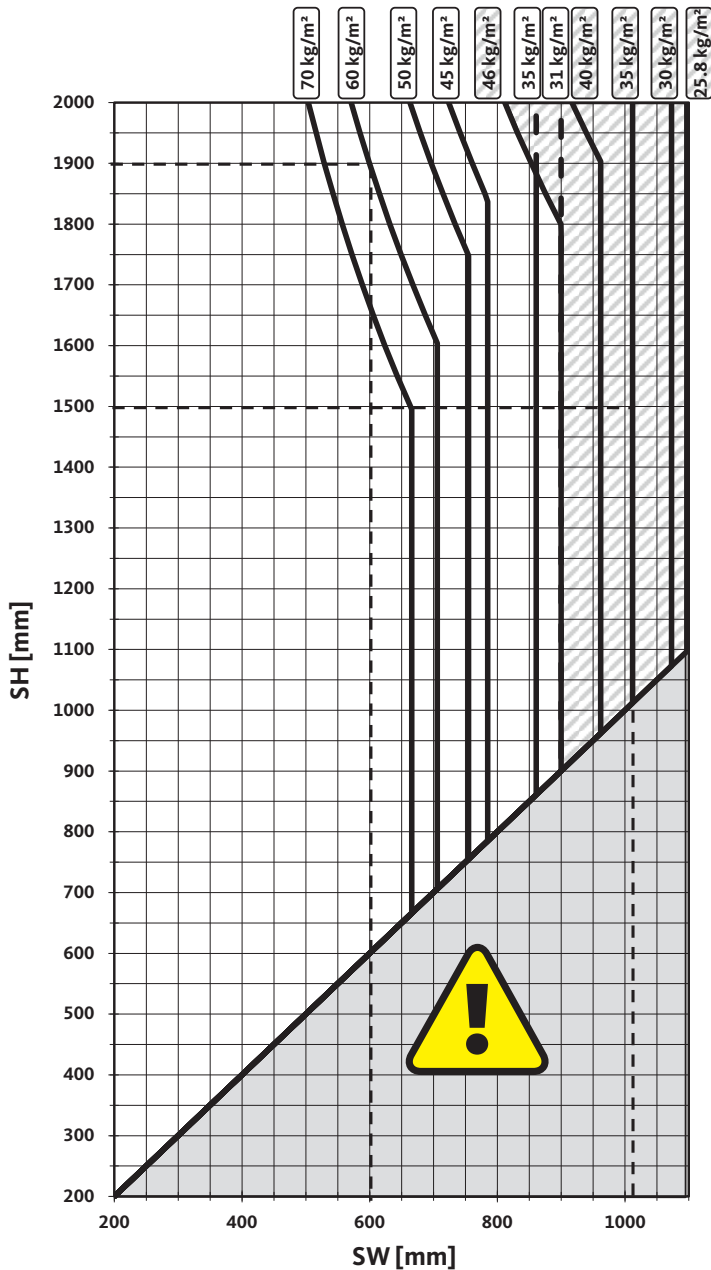


Application diagram, ALU-JET 10 axial hinges

Turn-Only window – axial hinges K-15820



Infill weight



Prerequisites for using the application diagram:

■ Verifications regarding the attachment of load-bearing components to the window system by the window fabricator according to TBDK with the following forces:

□ - 920 N at the stay-bearing
 - 2165 N at the pivot-rest

▨ - 1225 N at the stay-bearing
 - 2455 N at the pivot-rest

■ Glass reduction GR ≥ 20 mm

■ Profile weight PW ≤ 3,6 kg/m

Attention:

The maximum sash weight of 75 / 85 kg is only permitted in certain areas of the application diagram.

Only sash formats to the left of the respective glass weight graph are permissible.

▨ format not permitted

▨ additional hinge at the top

Reading examples

1. Infill weight = 60 kg/m²
 With an SW = 600 mm, the max. SH = 1900 mm, which corresponds to a maximum sash weight of 75 kg.

2. Infill weight 35 kg/m²
 in the hatched area
 (additional hinge at top)
 With an SH = 1500 mm, the max. SW = 1012 mm, which corresponds to a maximum sash weight of 64 kg.

For notes on intended use, see 0-46789.

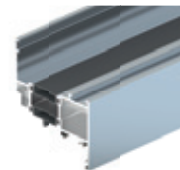
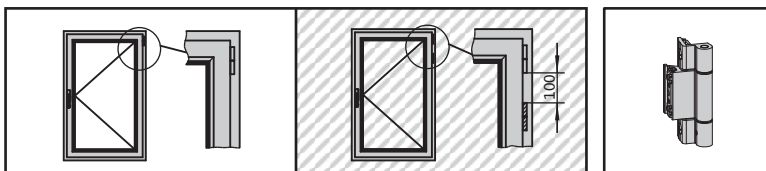
Application diagram, ALU-JET 10 axial hinges

Turn-Only window – axial hinges K-15887



kg
max. 80

kg
max. 100



Prerequisites for using the application diagram:

■ Verifications regarding the attachment of load-bearing components to the window system by the window fabricator according to TBDK with the following forces:

□ -920 N at the stay-bearing
-2310 N at the pivot-rest

▨ -1445 N at the stay-bearing
-2890 N at the pivot-rest

■ Glass reduction GR ≥ 20 mm

■ Profile weight PW ≤ 3,6 kg/m

Attention:

The maximum sash weight of 80 / 100 kg is only permitted in certain areas of the application diagram.

Only sash formats to the left of the respective glass weight graph are permissible.

□ format not permitted

▨ additional hinge at the top

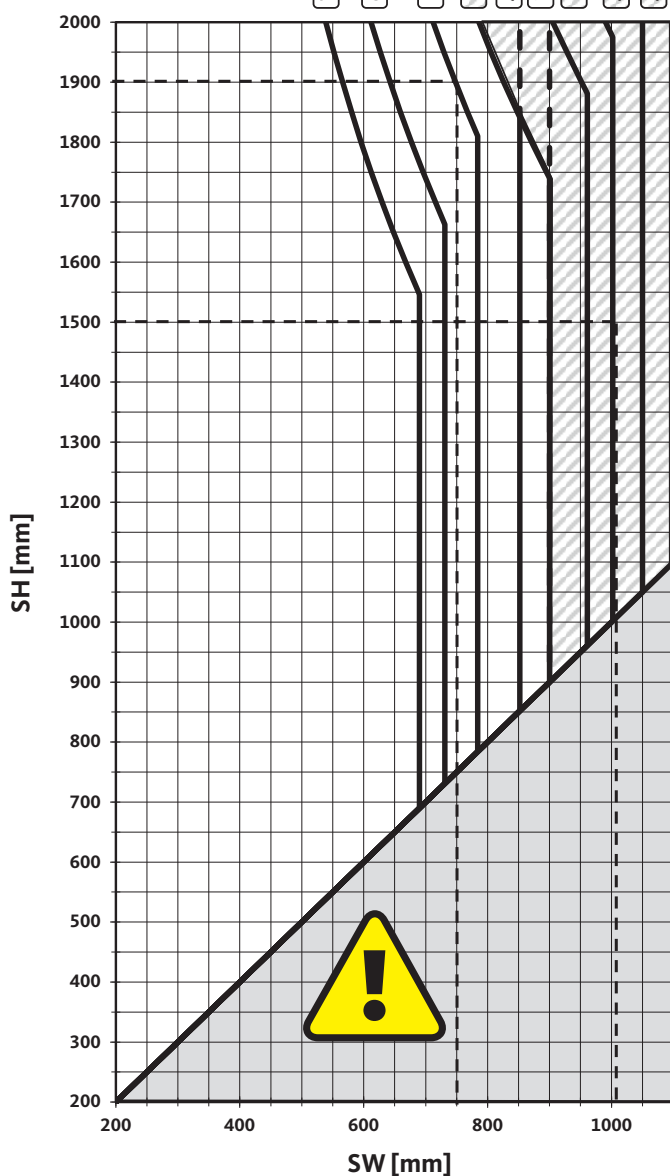
Reading examples

1. Infill weight = 50 kg/m²
With an SW = 750 mm, the max. SH = 1900 mm, which corresponds to a maximum sash weight of 80 kg.
2. Infill weight 45 kg/m²
in the hatched area (additional hinge at top)
With an SH = 1500 mm, the max. SW = 1002 mm, which corresponds to a maximum sash weight of 77 kg.

For notes on intended use, see 0-46789.

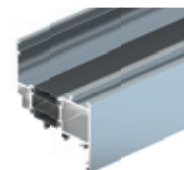
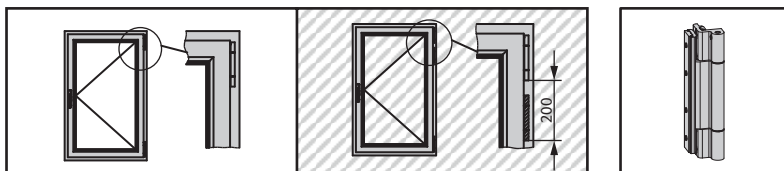
Infill weight

70 kg/m² 60 kg/m² 50 kg/m² 59 kg/m² 40 kg/m² 34 kg/m² 50 kg/m² 45 kg/m² 40 kg/m² 36 kg/m²



ALU-JET S800 application diagram

Turn-Only window



Prerequisites for using the application diagram:

- Verifications regarding the attachment of load-bearing components to the window system by the window fabricator according to TBDK with the following forces:
 - 2575 N at the stay-bearing
 - 5780 N at the pivot-rest
- Glass reduction GR ≥ 20 mm
- Profile weight PW ≤ 3,6 kg/m

Attention:

The maximum sash weight of 200 kg is only permitted in certain areas of the application diagram.

Only sash formats to the left of the respective glass weight graph are permissible.

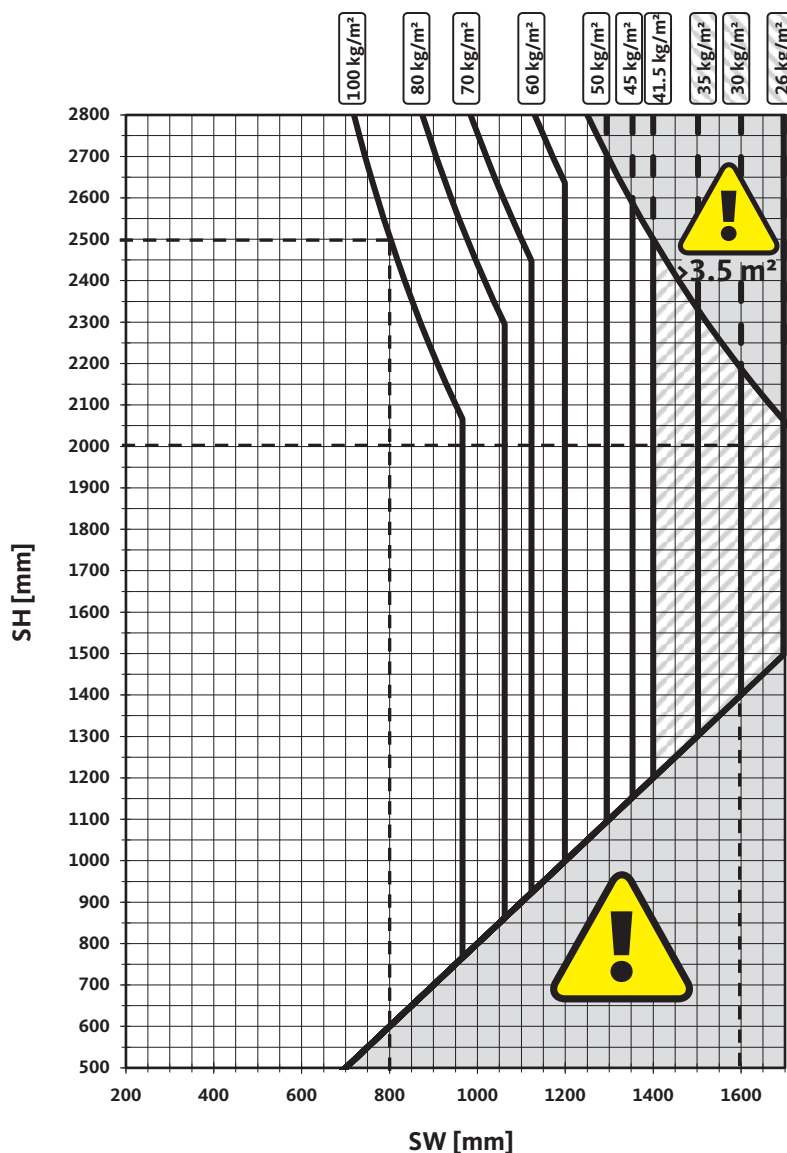
- format not permitted
- additional hinge at the top

Reading examples

1. Infill weight = 100 kg/m²
With an SW = 800 mm, the max. SH = 2500 mm, which corresponds to a maximum sash weight of 200 kg.
2. Infill weight 30 kg/m²
in the hatched area
(additional hinge at top)
With an SH = 2000 mm, the max. SW = 1600 mm, which corresponds to a maximum sash weight of 113 kg.

For notes on intended use, see 0-46789.

Infill weight

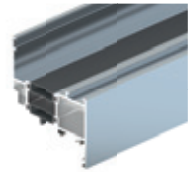
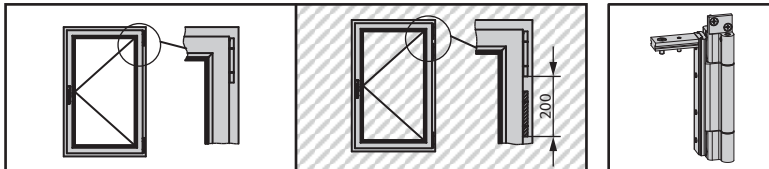


ALU-JET S800 application diagram

Turn-Only window



kg
max. 300



Prerequisites for using the application diagram:

- Verifications regarding the attachment of load-bearing components to the window system by the window fabricator according to TBDK with the following forces:
 - 3860 N at the stay-bearing
 - 8660 N at the pivot-rest
- Glass reduction GR ≥ 20 mm
- Profile weight PW ≤ 3,6 kg/m

Attention:

The maximum sash weight of 300 kg is only permitted in certain areas of the application diagram.

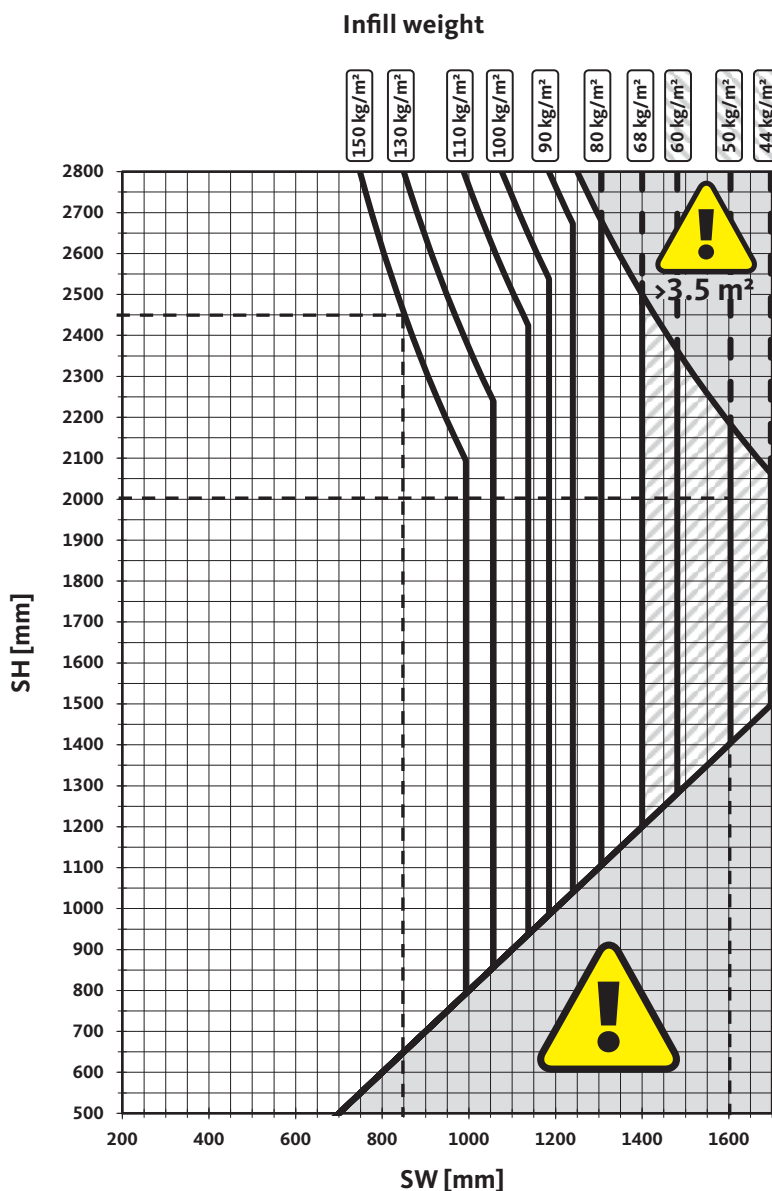
Only sash formats to the left of the respective glass weight graph are permissible.

- format not permitted
- additional hinge at the top

Reading examples

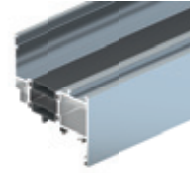
1. Infill weight = 150 kg/m²
With an SW = 850 mm, the max. SH = 2450 mm, which corresponds to a maximum sash weight of 300 kg.
2. Infill weight 50 kg/m²
in the hatched area
(additional hinge at top)
With an SH = 2000 mm, the max. SW = 1604 mm, which corresponds to a maximum sash weight of 172 kg.

For notes on intended use, see 0-46789.

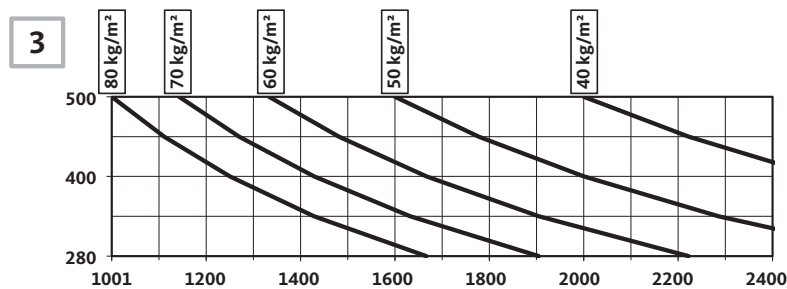
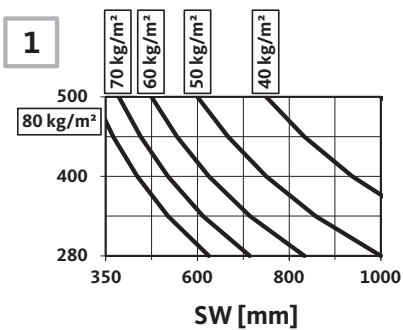
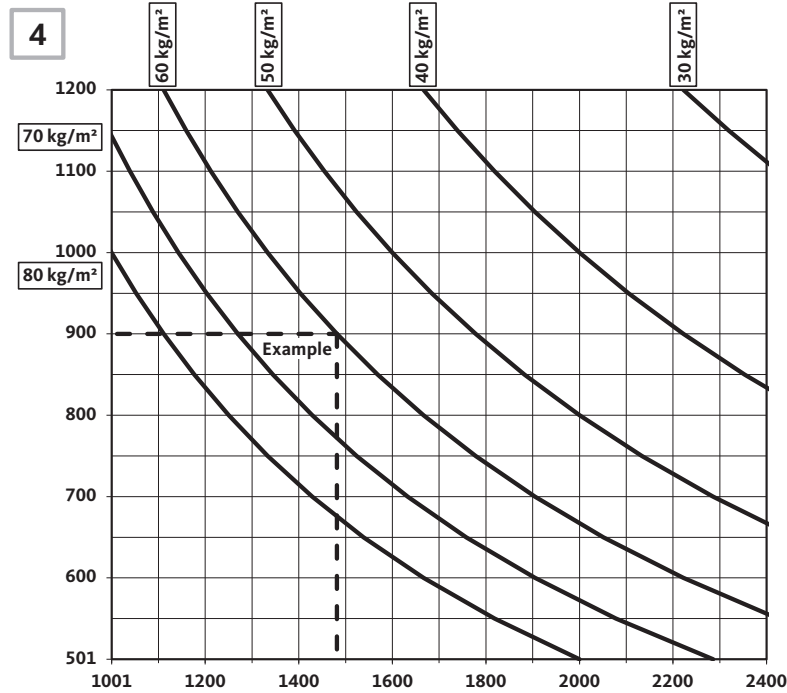
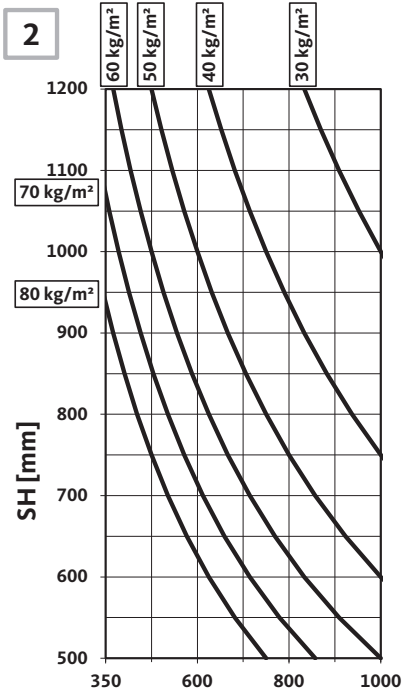


ALU-JET 10 application diagram

Tilt-Only window – surface-mounted hinge-side – based on the maximum permissible sash weight



Infill weight



Only sash formats below the respective glass weight graph are permissible.

2 Max. sash weight 30 kg
1x Tilt-Only stay K-17138 lateral
1x EURO-SOLID 6-27995 lateral

1 Max. sash weight 15 kg
1x Tilt-Only stay K-17138 lateral
1x EURO-SOLID 6-27995 lateral

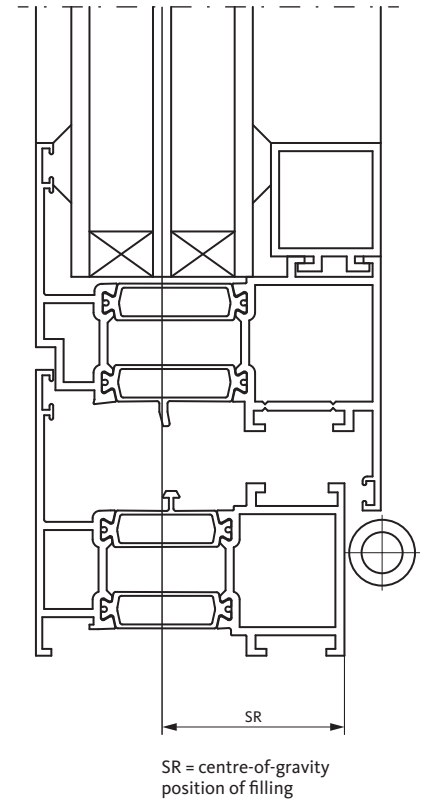
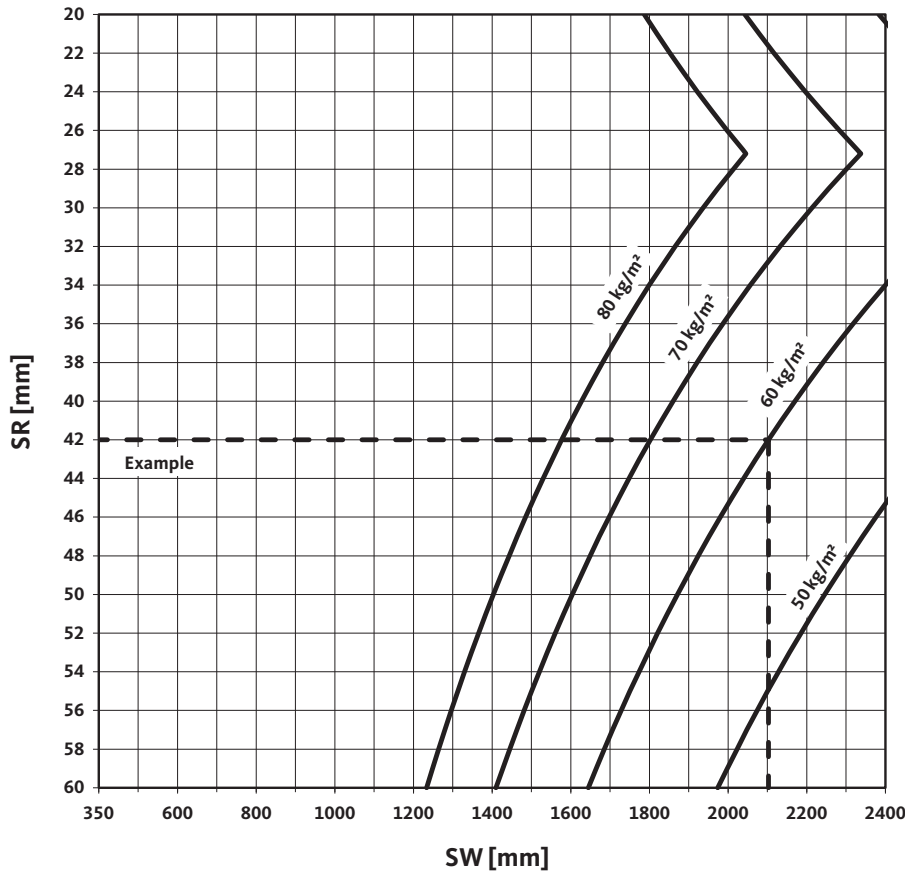
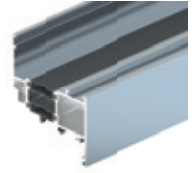
4 Max. sash weight 80 kg
2 x Tilt-Only stay U-76500 at the top
2x EURO-SOLID 6-27995 lateral

3 Max. sash weight 40 kg
2 x Tilt-Only stay U-76500 at the top
2x EURO-SOLID 6-27995 lateral

Example:
Infill weight = 60 kg/m²
SH = 900 mm, SR = 42 mm, SW > 1000 mm
Result:
1. A max. SW of 1480 mm
2. For SW up to 2103 mm the opening and closing force does not exceed approx. 100 N.
The smaller max. SW must be complied with. In this case 1480 mm.

ALU-JET 10 application diagram

Tilt-Only window – surface-mounted hinge-side – based on a maximum opening and closing actuation force of roughly 100 N



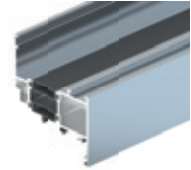
If sash formats to the right of the corresponding infill weight curve are selected, higher opening and closing forces (over 100 N) are to be expected.

Attention:

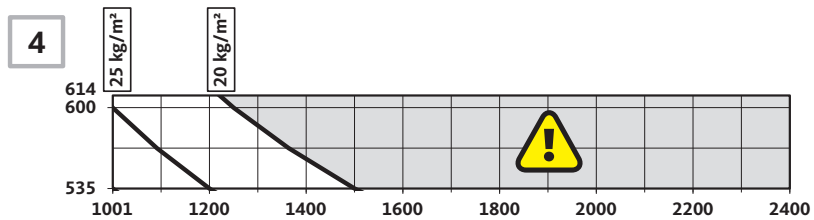
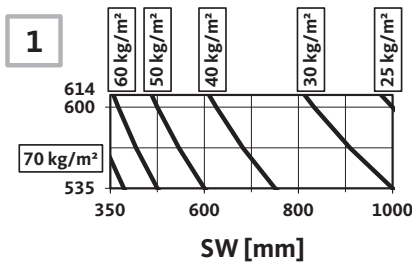
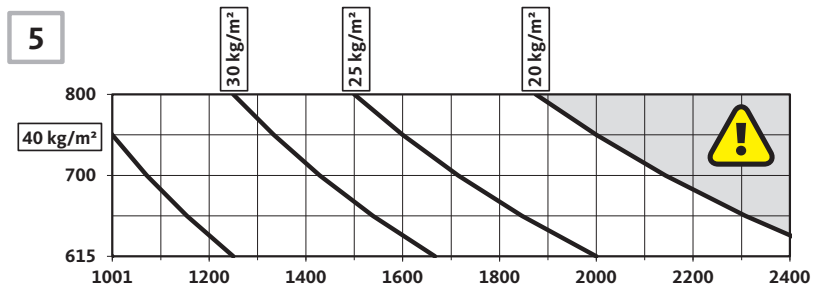
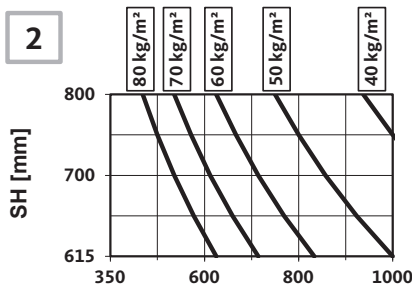
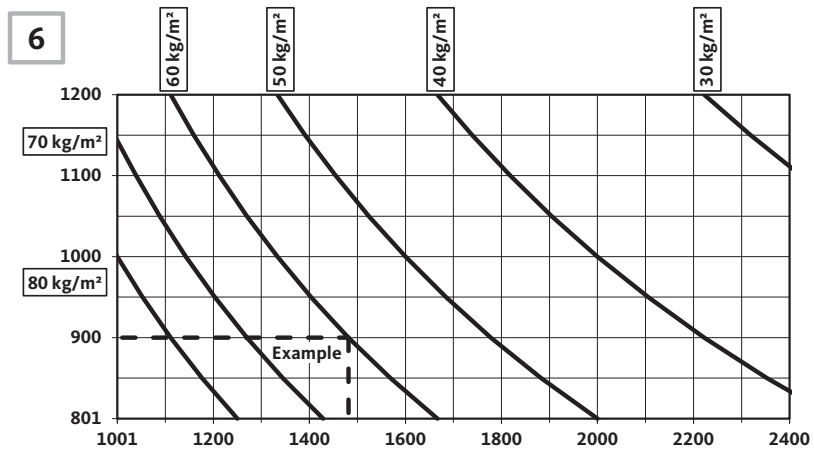
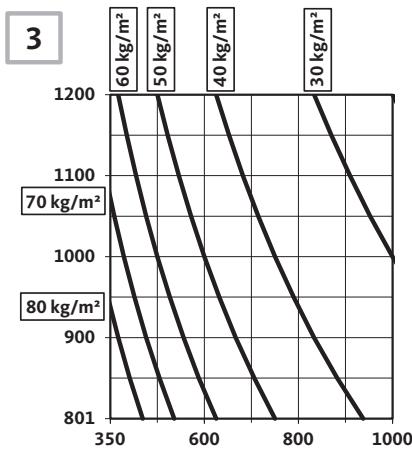
The forces for opening to the cleaning position and closing from the cleaning position may exceed 100 N!

ALU-JET 10 application diagram

Tilt-Only window – concealed hinge-side – based on the maximum permissible sash weight



Infill weight



Only sash formats below the respective glass weight graph are permissible.

3 Max. sash weight 30 kg
1x Tilt-Only stay K-17138 lateral
1x EURO-SOLID 6-27995 lateral

2 Max. sash weight 30 kg
1x Tilt-Only stay K-17138 lateral
1x EURO-SOLID 6-27995 lateral

1 Max. sash weight 15 kg
1x Tilt-Only stay K-17138 lateral
1x EURO-SOLID 6-27995 lateral

6 Max. sash weight 80 kg
2 x Tilt-Only stay U-76500 at the top
2x EURO-SOLID 6-27995 lateral

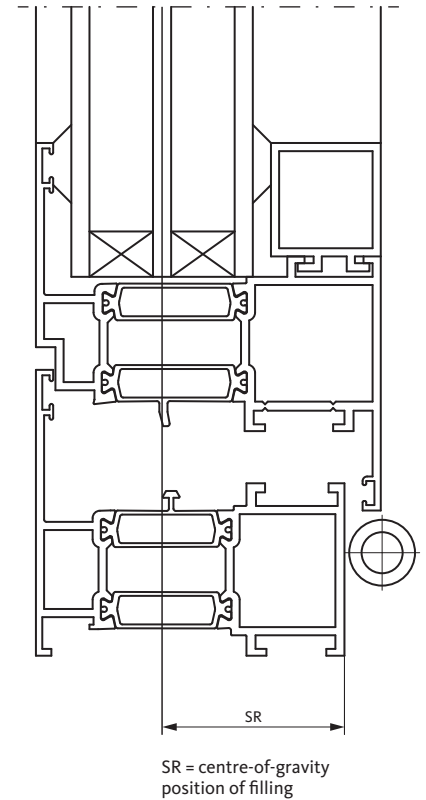
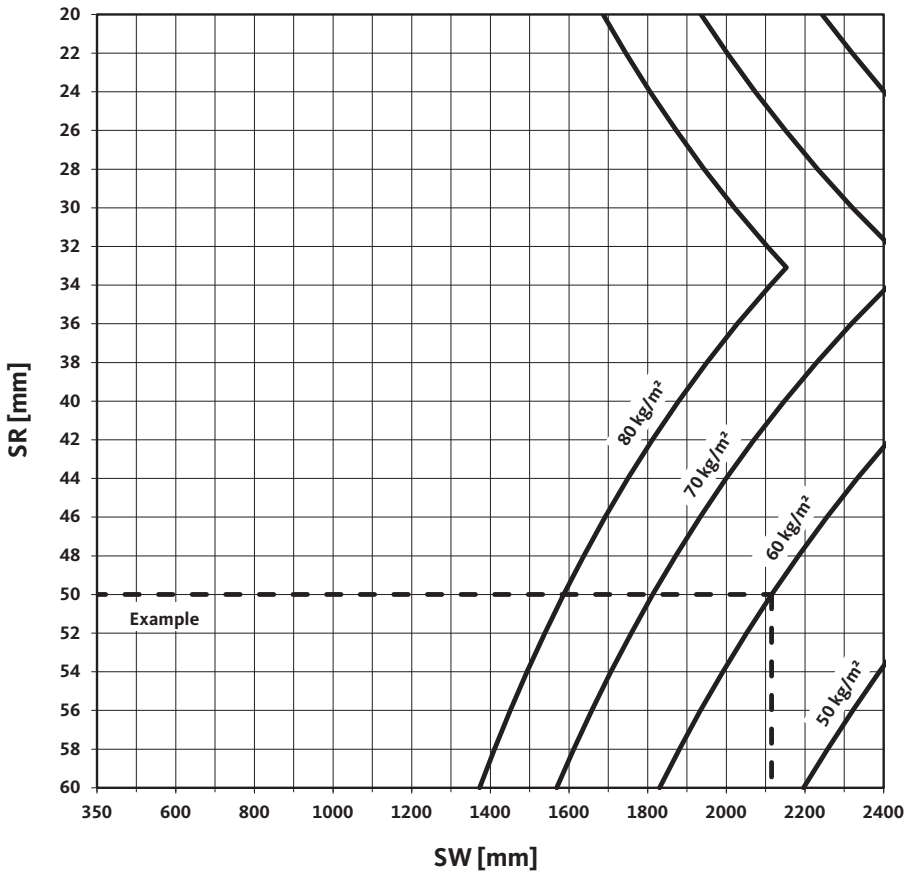
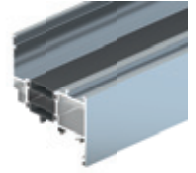
5 Max. sash weight 30 kg
2 x Tilt-Only stay U-76500 at the top
1x EURO-SOLID 6-27995 lateral

4 Max. sash weight 15 kg
2 x Tilt-Only stay U-76500 at the top
1x EURO-SOLID 6-27995 lateral

Example:
Infill weight = 60 kg/m²
SH = 900 mm, SR = 50 mm, SW > 1000 mm
Result:
1. A max. SW of 1480 mm
2. For SW up to 2115 mm the opening and closing force does not exceed approx. 100 N.
The smaller max. SW must be complied with. In this case 1480 mm.

ALU-JET 10 application diagram

Tilt-Only window – concealed hinge-side –
based on a maximum opening and closing actuation force of roughly 100 N



If sash formats to the right of the corresponding infill weight curve are selected, higher opening and closing forces (over 100 N) are to be expected.

Attention:

The forces for opening to the cleaning position and closing from the cleaning position may exceed 100 N!

Documentation



	Reference No.	Description
Brochure		
	WP00374-04-1-2	The ALU-JET 10 Tilt&Turn hardware range
Installation instructions and installation drawings		
Standard central locking system Tilt&Turn window Tilt-First window Turn-Only window Dummy-mullion sash	0-48088-DL-0-0	ALU-JET 10 T&T central locking system
	0-48089-DF-0-0	ALU-JET 10 TF central locking system
	0-48090-DF-0-0	ALU-JET 10 TU-ON central locking system
	0-48091-DF-0-0	ALU-JET 10 F&S central locking system
	0-48665-DF-0-0	ALU-JET 10 T&T+F&S central locking system (depending on profile system)
	0-48936-DF-0-0	ALU-JET 10 insertable gear backset
	0-48682-DF-0-0	ALU-JET 10 rosette-free turn handle
Central locking system RC Tilt&Turn window Tilt-First window Turn-Only window	0-48092-DF-0-0	ALU-JET 10 T&T + TU-ON central locking system - RC2
	0-48716-DF-0-0	ALU-JET 10 TF central locking system - RC2
	0-48093-DF-0-0	ALU-JET 10 T&T + TU-ON central locking system - RC3
Hinge-sides Tilt&Turn window Tilt-First window Turn-Only window	0-48704-DF-0-0	ALU-JET 510 surface-mounted hinge-side
	0-49154-DF-0-0	ALU-JET 710 surface-mounted hinge-side
	0-47136-DF-0-0	ALU-JET CC610 concealed hinge-side
	0-48941-DF-0-0	ALU-JET axial hinges and ALU-JET S800
Central locking system and hinge-sides Tilt-Only window	0-48937-DF-0-0	ALU-JET 10 surface-mounted hinge side and central locking system TI-ON
	0-49059-DF-0-0	ALU-JET 10 concealed hinge side and central locking system TI-ON
	0-48940-DF-0-0	ALU-JET S810 surface-mounted hinge side and central locking system TI-ON
	0-48986-NF-0-0	EURO-SOLID restrictor and cleaning stay
Accessories	0-49151-DF-0-0	ALU-JET turn-restrictor
	0-48976-DF-0-0	ALU-JET 10 bullet-catch
	0-49091-DF-0-0	ALU-JET 10 turn blocker
	0-49160-DF-0-0	ALU-JET locking and opening monitoring
	0-43471-NE-0-0	EGO-B and EGO-FL window friction stay
Supplementary documents		
	0-48838-DF-0-0	Operation and maintenance instructions ALU-JET



Product information and intended use



1.1 Hardware versions

1.1.1 Turn-Only and Tilt&Turn hardware

Definition

For the purpose of this definition, Turn-Only and Tilt&Turn hardware is single-handle Turn-Only and Tilt&Turn hardware for windows and balcony-doors in building construction. Their purpose is to put window and balcony-door sashes in a turn-only position, or a tilt position which is restricted by the design of the stay, by operating a hand lever.

Intended use

Turn-Only and Tilt&Turn hardware is used for vertically installed windows and balcony-doors made of timber, PVC, aluminium or steel and combinations of these materials. For the purpose of this definition, conventional Turn-Only and Tilt&Turn hardware locks window and balcony-door sashes, or puts them into different ventilation positions. As a rule the opposing force of a gasket must be overcome when closing. The ALU-JET Turn-Only and Tilt&Turn hinge sides are not approved for use with outward-opening windows and balcony-doors.

1.1.2 Slide hardware

Definition

For the purpose of this definition, slide hardware is hardware for sliding sashes of doors and windows that are predominantly used as external terminations and are usually glazed. In combination with sliding sashes, fixed panels and/or additional sashes, e.g. cleaning revolving sashes, can be incorporated into one window element.

Intended use

Slide hardware is used in vertically-installed windows and balcony-doors made of timber, PVC, aluminium or steel, and corresponding combinations of these materials. For the purpose of this definition, slide hardware is hardware that is equipped with a locking system that locks the sliding sash as well as rollers that are located on the lower horizontal flange of the sliding sash. In addition, stay arms for tilting and mechanisms for lifting and parallel parking of leaves can be provided. The sashes are locked, put into the ventilation position and slid to one side via the hardware. Depending on the outdoor temperature, relative humidity of the room air and the installation situation of the sliding element, condensation may form temporarily on the aluminium rails on the inside of the room. This is particularly likely to occur if the circulation of air is obstructed, e.g. by deep reveals or curtains, and if radiators or similar fixtures are in unfavourable locations.

1.1.3 Fanlight hardware

Definition

Fanlight hardware opens and closes windows or flaps with different opening types – especially Tilt-Only and Top-Hung sashes – used in building construction. Their purpose is to effect non-positive opening and closing of window sashes that are out of human reach by operating a hand lever connected to an opening stay via a linkage. The hand lever is mounted on the frame or masonry. As before, the opening stay can be operated via a crank mechanism, an electric motor, compressed air cylinder or via hydraulic cylinders. The surface of the fanlight hardware is rustproof.

Intended use

Fanlight hardware is used with windows made of timber, PVC, aluminium or steel and corresponding combinations of these materials. Opening stays that are adapted to the corresponding conditions and feature a range of scissor systems are used to achieve different window opening types and in accordance with the different installation options in the building. The opening stays put the window sashes into the various ventilation positions and lock them. Any other use is not in accordance with the intended use. Burglar-inhibiting windows, windows for damp rooms and for use in environments with aggressive corrosive air contents require special hardware. Open windows can only perform a shielding function and do not satisfy the requirements for impermeability of joints, resistance to driving rain, sound insulation, thermal insulation and burglar inhibition. The guidelines for power-operated doors and gates must be observed for windows that are within human reach – below 2500 mm above finished floor level – and that are driven by electric motors, compressed air cylinders or hydraulic cylinders. Once the window has been cleaned, the opening stay must be attached in accordance with the manufacturer's instructions and secured. With inwards or outwards-opening tilt sashes, restrictor stays that restrict the tilting movement of the leaf once the opening stay has been detached (catch position) must be provided in addition to fanlight hardware. The catch position is slightly larger than the opening width of the opening stay. Tilt sashes must be secured in the cleaning position so that the hinges cannot be subjected to impermissibly high loads. The windows must be closed if it is windy or draughty. To prevent damage, the hand lever must be brought into the envisaged final position.



1.1.4 Horizontal-Pivot and Vertical-Pivot hardware

Definition

For the purpose of this definition, Horizontal-Pivot and Vertical-Pivot hardware is used for one-handle operation of windows in building construction. Their purpose is to put windows into a ventilation position using a hand lever; this position can also be limited by the operating handle or a block in the horizontal pivot.

Intended use

Horizontal-Pivot and Vertical-Pivot hardware is used with vertically-installed windows made of timber, PVC, aluminium or steel and corresponding combinations of these materials. For the purpose of this definition, conventional Horizontal-Pivot and Vertical-Pivot hardware locks the windows and puts them in different ventilation positions. When closing, the opposing force of a gasket may need to be overcome.

1.1.5 Additional hardware for Turn-Only and Tilt&Turn hardware, fanlight hardware

Definition and intended use

For the purpose of this definition, rebate stays as well as rebate and cleaning stays in fanlight openers limit the tilting movement of the window sash once the stay has been detached. The catch position thus achieved is slightly larger than the opening width achieved by the opening stay. Rebate and cleaning stays also hold the window sash in the cleaning position. For the purpose of this definition, hardware for coupled sashes consists of hinges that allow the coupled sash to be opened to clean the inner surfaces of the glass and couplings that lock the coupled sash on the side opposite the hinge. Operation of the coupled sash hardware for any other purpose other than cleaning the glass does not correspond to the intended use. For the purpose of this definition, window friction stays restrict the movement of Turn-Only sashes and of Tilt&Turn sashes in turning position – e.g. by means of friction. Depending on the intensity of the friction, they have the effect of fixing the sash in position without limiting the opening. For the purpose of this definition, hanging bearings are Tilt-Only hinges that, due to the position of their centre of rotation and because a maximum dimension for the sash overlap of the window sash below is taken into account, allow the tilt sash to be opened by 180°. When this additional hardware is used, the product information on the main hardware and information on its intended use must be observed.

1.2 Deviating usage – Exclusion of liability

Any use other than the intended use is considered as unintended use and leads to exclusion of liability.

1.3 Notes regarding use restrictions

Opened balcony-door and window sashes as well as window and balcony-door sashes that are not locked or put in the tilt position only provide a shielding function and do not satisfy the requirements for joint impermeability, resistance to driving rain, sound insulation, thermal insulation and burglar inhibition. Windows and balcony-doors must be closed and locked if wind or draughts are present. Wind and draughts are present if the window or balcony-door opens and closes of its own accord without control in one of the opening positions due to air pressure/suction. Window and balcony-door sashes can only be fixed in the open position with additional locking hardware.

1.4 Necessity of special agreements in case of extended requirements

Burglar-inhibiting windows and balcony-doors and windows and balcony-doors for damp rooms and for use in environments whose air contains aggressive and corrosive substances require hardware with performance characteristics that are harmonised and agreed separately for each individual application. Their resistance to wind loads when closed and locked depends on the construction of the relevant window and balcony-door. If it is necessary to absorb specified wind loads (according to EN 12210 for example – especially testing pressure p_3), suitable hardware combinations must be coordinated and agreed on the basis of the window or balcony-door construction and frame material. Generally the hardware as defined in 1.1 meets the requirements of barrier-free apartments (e.g. according to DIN 18040). However, corresponding hardware combinations and installations are required in the windows and balcony-doors that must be coordinated and agreed separately.

1.5 Hardware for openable, fall-arresting construction elements

The hardware components listed in this document are not suitable for use in openable, fall-arresting construction elements according to the ISAB publication of the Quality Assurance Association for Locks and Hardware.

Misuse, liability and product performance



2. Misuse

Misuse – i.e. use of the product not in accordance with the intended use – of the hardware described under 1:1 for balcony-doors and windows specifically refers to the following cases in particular.

- if obstructions are placed in the opening area between the frame and sash thus making its intended use more difficult or preventing it altogether,
- if additional loads act on the window or balcony-door sashes (i.e. children swinging on these),
- if window and balcony-door sashes are pushed or even slammed in a manner which is not in accordance with their intended purpose or is not controlled (e.g. due to wind) with the result that either the hardware, frame materials or other individual parts of the window sashes or balcony-doors are damaged or destroyed or where consequential damage could occur,
- if persons reach between the sash and frame or if a person or part of their body are in this area (danger to life and limb) when closing (or pushing shut).

Additional points to observe in relation to fanlight hardware

- if the stay-arms are not attached and secured in compliance with the manufacturer's instructions,
- if the window sash is not carefully put into the cleaning position when the opening stay is released.

3. Liability

The entire hardware set in each case may only consist of GU hardware components. Liability is excluded where combinations not approved by Gretsche-Unitas GmbH are used, and/or the hardware is installed incorrectly and/or non-genuine or non factory-approved accessory parts are used.

In order to establish screw connections correctly, refer to the instructions on the GU working drawings and the GU installation instructions. If PVC or light metal profiles are used, the specifications of the profile manufacturer or system owner must be observed. The window manufacturer is fundamentally responsible for ensuring that the specified system dimensions (e.g. gasket gap dimensions) are complied with. These must be regularly checked, especially when using for the first time. As a basic rule, the hardware components must be configured so that the system dimensions, if influenced by the hardware, can be adjusted. If a deviation from these dimensions is identified once the window has been installed and a defect occurs as a result, liability will not be assumed for the additional expenditure incurred.

4. Product performance – information on application by manufacturer

4.1 Maximum sash weight

The sash weights and maximum sash dimensions prescribed by the manufacturer for the individual hardware versions must not be exceeded. The component with the lowest permissible load-bearing capacity determines the max. sash weight. Application diagrams and assignment of components must be observed.

Additional points to observe in relation to fanlight hardware

Apart from the sash weight, the distance between the sash's centre of gravity and its pivot point is decisive for determining the maximum permissible sash dimensions. When determining the maximum sash size and the number of coupled sashes, it is important to observe the manufacturer's instructions for the various types of drive.

4.2 Sash sizes

The application diagrams in the planning documents, product catalogues or hardware installation instructions show the relationships between the permissible sash widths and sash heights and different glass weights or total glass thicknesses. The sash dimensions or orientation (portrait or landscape format) thus determined – as well as the maximum sash weight – must on no account whatsoever be exceeded.

4.3 Composition of hardware

The specifications of the manufacturer regarding hardware configuration (e.g. use of additional stays, design of hardware for burglar-inhibiting window and balcony-door sashes, etc.), are binding.



5. Product maintenance

5.1 General notes

Safety-relevant hardware components must be checked at least once a year to ensure they are secure and not worn. If necessary, fixing screws must be re-tightened or the parts replaced. Furthermore the following verifiable maintenance work must be carried out at least once a year:

- Operational check and lubrication of all moving parts and locking points.
- Only cleaning agents and care products that do not interfere with the corrosion protection of the hardware may be used.

Adjustment work on the hardware – particularly in the area of pivot rests, bogies or stays – as well as parts replacement and hinging/unhinging of the opening sashes, must be carried out by specialists only. When a surface treatment is applied – e.g. painting or varnishing – to the window and balcony-doors, all hardware components must be excluded from the treatment and therefore protected against contamination.

5.2 Maintaining the quality of the surface finish

Electrolytically applied zinc coatings are not affected by normal room climates, providing condensation does not form on the hardware components or that condensation that occasionally forms is able to quickly dry. To maintain the surface quality of the hardware components on a lasting basis and prevent defects as a result of corrosion, observe the following points without fail:

- The hardware or rebate areas must be sufficiently ventilated – especially in the construction phase – to ensure they are not exposed directly to the effects of moisture or condensation. Ensure by taking appropriate (and lasting) measures that moist room air cannot condense in the rebate areas.
- The hardware must be kept free of deposits and contamination by construction materials (building dust, gypsum plaster, cement, etc.). Any plaster, mortar or similar must be removed prior to hydration with water.
- Aggressive vapours (e.g. caused by formic acid or acetic acid, ammonia, amine or ammonia compounds, aldehyde, phenols, chlorine, tannic acid, etc.) may promote rapid corrosion of the hardware components when combined with even small amounts of condensation. These kind of vapours must therefore be kept away from the window without fail.
- With windows and balcony-doors made of oak timber or another species containing a high proportion of (tannic) acid, make sure by applying a suitable surface treatment to the window that these substances cannot evaporate from the timber. The hardware must not come into direct contact with an untreated timber surface.
- Furthermore, acetic or acid cure sealants or sealants containing the ingredients referred to above must not be used as both direct contact with the sealant as well as the vapours it produces can attack the surface of the hardware.
- The hardware must only be cleaned using mild, pH-neutral cleaning agents in diluted form. Aggressive cleaners containing acid with all the ingredients referred to above or scouring agents must never be used.

Duty to inform and to instruct

Use for similar hardware



6. Duty to inform and to instruct

In order to fulfil the duty to inform and instruct and also carry out maintenance work, the following documents in particular are available and must be forwarded via every intermediary and fabricator through to the end customer:

- Planning documents
- Product catalogues
- Hardware installation instructions
- Maintenance and care instructions as well as operating instructions for building owners and users

hereafter referred to as a whole or in part as "Product information" only for short.

In order to ensure the reliability of the corresponding function of windows and balcony-doors:

- planners must obtain and observe the "Product information" from the manufacturer or specialist retailer,
- specialist retailers must observe the "Product information" – particularly in relation to advertising measures – and hand this to the next specialist dealer and/or fabricator with the instructions also to pass these on to their purchaser,
- fabricators must observe the "Product information" and in particular pass the maintenance and care instructions and operating instructions to the clients and users.

7. Use for similar hardware

The possible variants within the individual hardware systems – e.g. Tilt-Only and Top-Hung sash hardware, or those that offer a ventilation position instead of or in addition to the tilt position where the sash is parked parallel in order to produce a continuous all-round gap – must be dealt with, depending on the relevant characteristics, in a similar fashion in terms of product information and intended use, misuse, product performance, product maintenance and duty to inform and instruct.

Information from the Lock and Hardware Industry Trade Association e.V., Velbert

Velbert POB 10 03 70, 42503 Velbert, Germany

The following documentation concerning the correct handling of hardware for windows and balcony-doors with detailed information and explanatory pictograms can be downloaded from the association's website:

- Hardware for windows and balcony-doors – guidelines/advice on product and liability.
- Hardware for windows and balcony-doors – guidelines/advice for end users.
- Attachment of load-bearing components for Turn-Only and Tilt&Turn hardware with definitions for Turn-Only and Tilt&Turn hardware and also possible installation positions.

<http://www.fvsb.de/ggsb/richtlinien.asp>

10-year guarantee, exclusion of liability



10 year guarantee – ALU-JET for aluminium window systems

In addition to the statutory rights in accordance with general sales, supply & payment conditions, Gretsch-Unitas GmbH Baubeschläge offers its contractual partners in purchase contracts the following guarantee on all load-bearing parts (with the exception of electronic components) supplied within the scope of the GU ALU-JET hardware programme:

Guarantee promise

Gretsch-Unitas GmbH Baubeschläge guarantees all load-bearing parts against breakage during the guarantee period, providing the guarantee conditions are complied with.

The **guarantee period** is 10 years, beginning with the delivery of the goods (§ 477 German Civil Code).

We agree to provide the following guarantee

In the event of any material breakage, a replacement will be delivered free of charge (the parts must be installed by a specialist, damage arising from inappropriate installation shall not be chargeable to Gretsch-Unitas GmbH Baubeschläge). Should any parts be discontinued, then an alternative part of equal specification will be delivered. Any such parts claimed under the terms of this guarantee will be delivered to the delivery address of the original sales invoice.

Terms of guarantee

The guarantee is deemed valid only on condition that the hardware has been installed by a competent person and operated correctly and in full accordance with the manufacturers' guidelines and that it can be demonstrated that the following maintenance works have been carried out at least once a year:

- Operational check and lubrication of all moving parts and locking points. Only cleaning agents that do not affect the corrosion protection may be used.
- The surface is subject to guarantee only if the hardware has not been affected by aggressive substances from the frame material, the paint finish or the environment.
- All size and weight limitations as specified in the installation instructions must be observed. All security-relevant hardware components must be checked regularly for secure fixing and wear and tear. If necessary, fixing screws must be re-tightened or the parts replaced. Adjustment, parts replacement and hinging/unhinging of opening sashes are to be carried out by specialists only.

In the event of any claim, a written notification within the guarantee period and within 6 months of the product failure is required. Claims under the guarantee shall be time-barred after 6 months following the incident which led to the claim.

Our guarantee liability in accordance with the provisions in our General Terms and Conditions is not limited by this promise of guarantee within the duration of the statutory warranty period. Likewise, the statutory warranty liability is not extended by this guarantee promise. Claims arising from this additional guarantee promise can only be derived on the basis of the guarantee stated above and do not cover any compensation claims, assembly/disassembly costs or similar.

Exclusion of liability

The products of the Gretsch-Unitas group are permanently adapted and developed to meet the growing demands of the market.

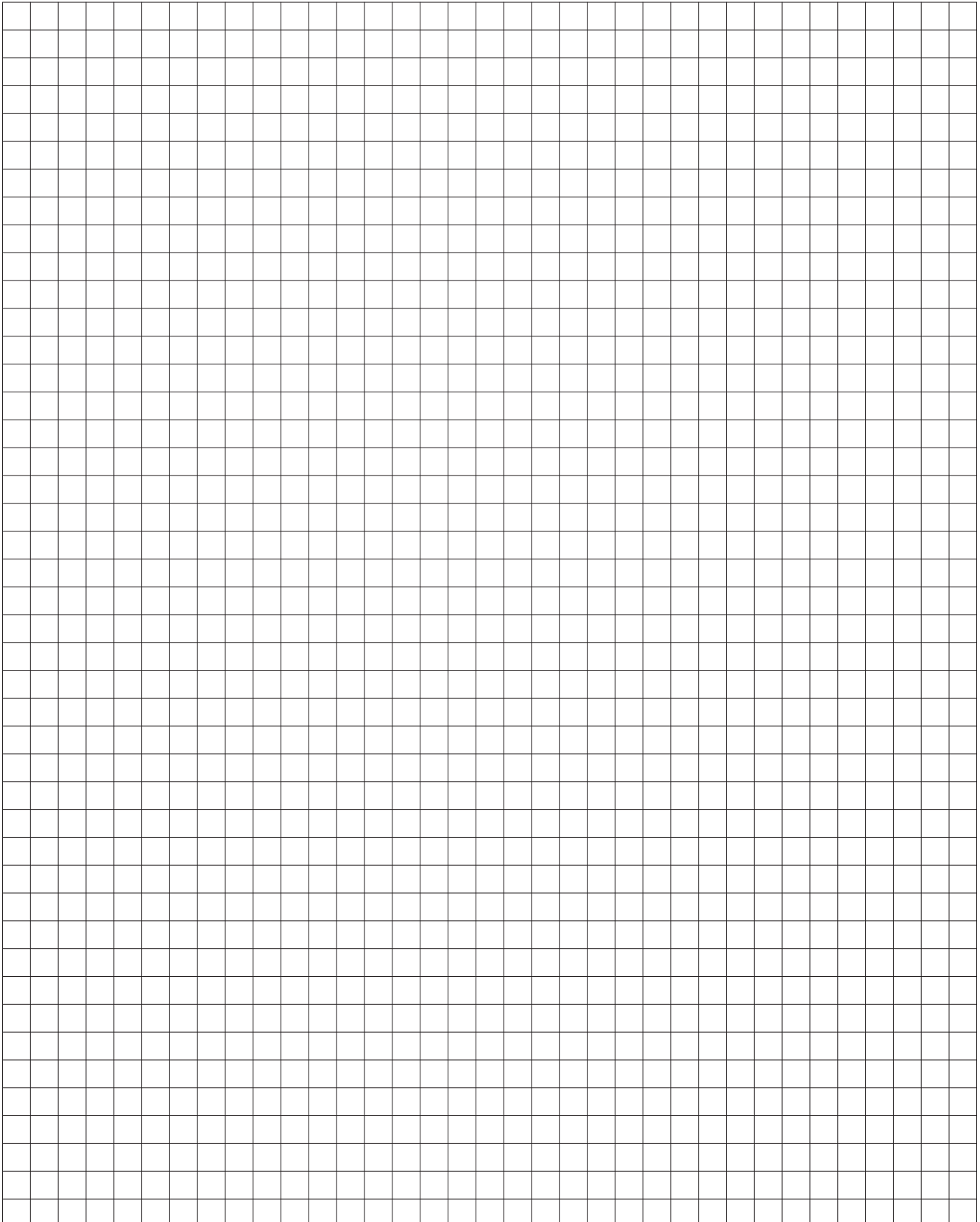
We also reserve the right to make changes during the course of technical development.

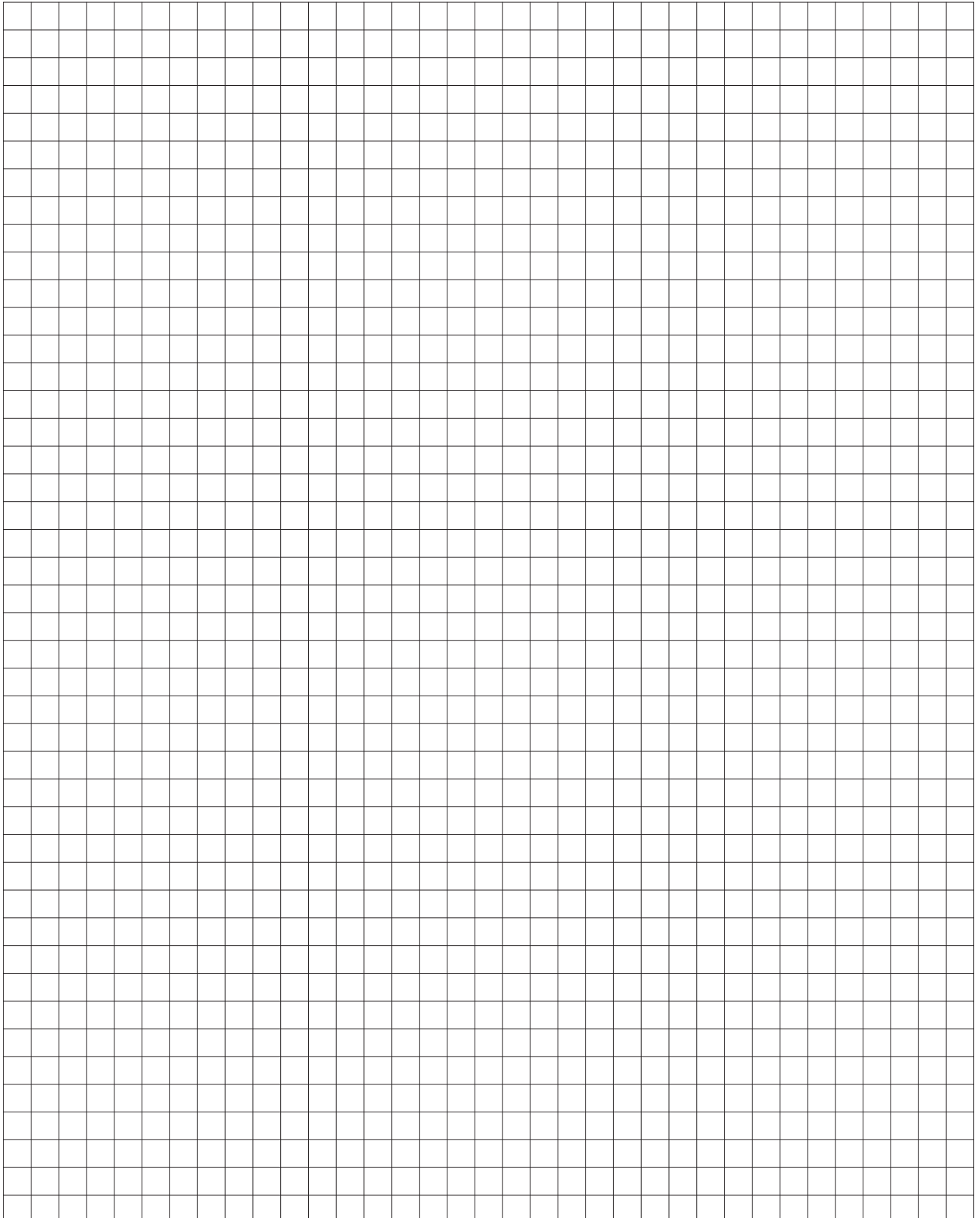
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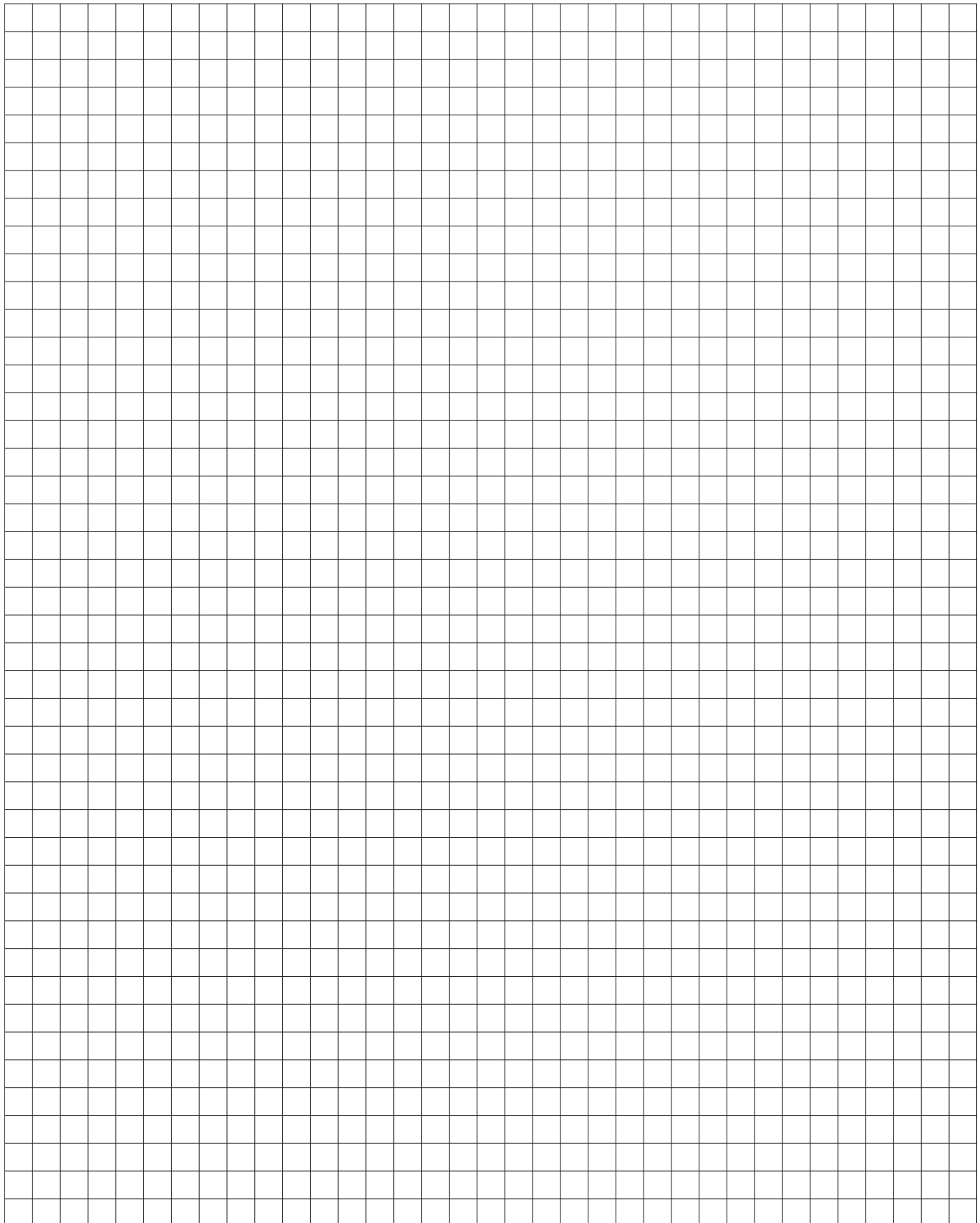
- Technical development
- Changes and adaptations in the product range
- Adaptation to changes in legislation and technical standards

The content of our documents was compiled with the greatest possible care. However, we accept no responsibility for errors or inaccuracies in relation to representation and description of the products.

Thank you for your understanding.









Indication character of the technical information, exclusion of liability

The technical documents are general information based on our experience and tests and therefore do not take any specific application into account. They are intended as general information and for initial orientation only, and must not be used as the decision-making basis. They reflect the version of the catalogue at the time of going to press. Although we have made every attempt to ensure the information provided here is accurate, it is non-binding. It should be adapted to the respective construction projects, usage and specific on-site demands. As a consequence of further developments, but also in order to take current developments into account and to exclude printing errors or other mistakes, you will find the current version of the binding technical documents at www.g-u.com. Be sure to use the latest edition of our technical documents.

The product images shown in the publication may differ from the actual product, particularly as a result of technical improvements. We would also like to draw your attention to the current information at the website mentioned above.

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