

Turn-Tilt Fittings



Standard

Style 180°

Heavy Duty

Accessories

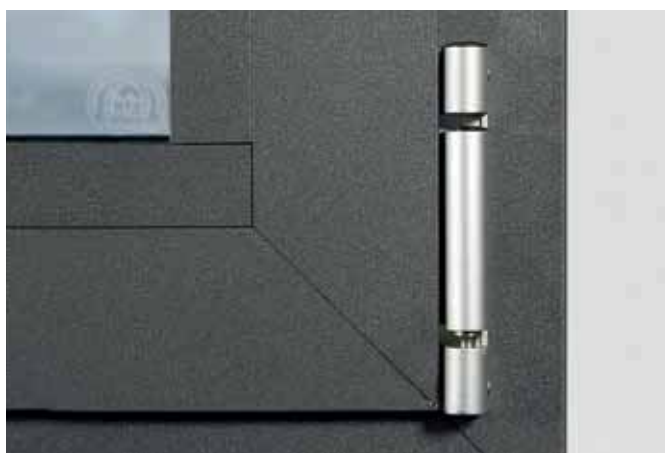


Table of contents

General Information	Page 3
Space Requirements for single-leaf Windows	Page 4
Space Requirements for French Windows (Casement Windows)	Page 4
Window Components	Page 5
Window Profile – Installation Dimensions	Page 5
Link Rod Connections	Page 6
Article Number System	Page 7
Selection of Hinges: Clamping Bar 1 (KL1) or 2 (KL2)?	Page 7
Application Diagrams: Standard	Page 8
Application Diagrams: Style 180°	Page 9
Application Diagrams: Heavy Duty	Page 10
 Overview of the Sets	 Page 11
 Standard	 Page 12
 Style 180°	 Page 22
 Heavy Duty	 Page 30
 Standard/Style 180°/Heavy Duty: French Window	 Page 38
 Accessories	 Page 40
Upgrade Kits	Page 40
Concealed Gears	Page 42
Opening Restrictors	Page 43
Gear Handles	Page 44
Window Handles	Page 47
Turn Blocker, Latch, Grab Handle	Page 53
Monitoring	Page 54
Anti-burglary components RC	Page 55
Tools	Page 58
 Appendix	 Page 61

Maximum opening widths and weight capacities

Our three new WSS Turn-Tilt fitting systems are characterised by their suitability for a broad range of applications, their modular design and their technical innovation.



Standard Design-led functionality

was the driving force of the new WSS fitting system for aluminium windows. The aesthetic design of the new WSS fitting system is highlighted by the interlocking connection pieces of the link rod, by eccentric locking points inserted from below and hinge elements that are flush with the leaf. The standard fitting can be upgraded for use with a leaf weight of up to 150kg by using one or two concealed additional components.



Style 180° Concealed but completely open

With Style 180° we can presently offer a Turn-Tilt fitting with a concealed hinge side and an opening angle of 180°. The leaf no longer projects into the room. This new concealed basic fitting is suitable for leaf weights of up to 130kg and is easily upgradable for leaf weights of up to 170kg (90° opening angle).

This unique multi-joint hinge for an opening angle of 180° also allows for 3D-adjustment by means of side, height and pressure adjustment.

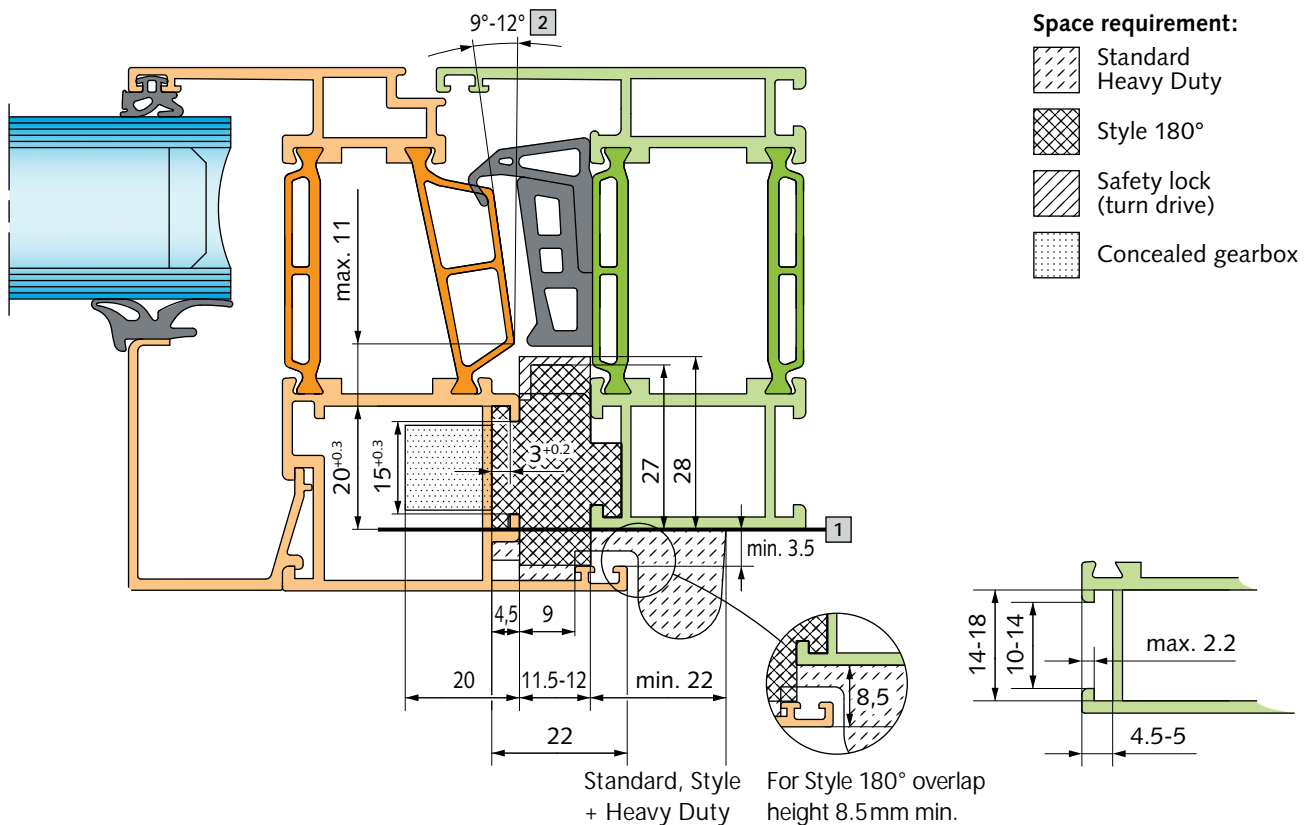


Heavy Duty Powerful elegance

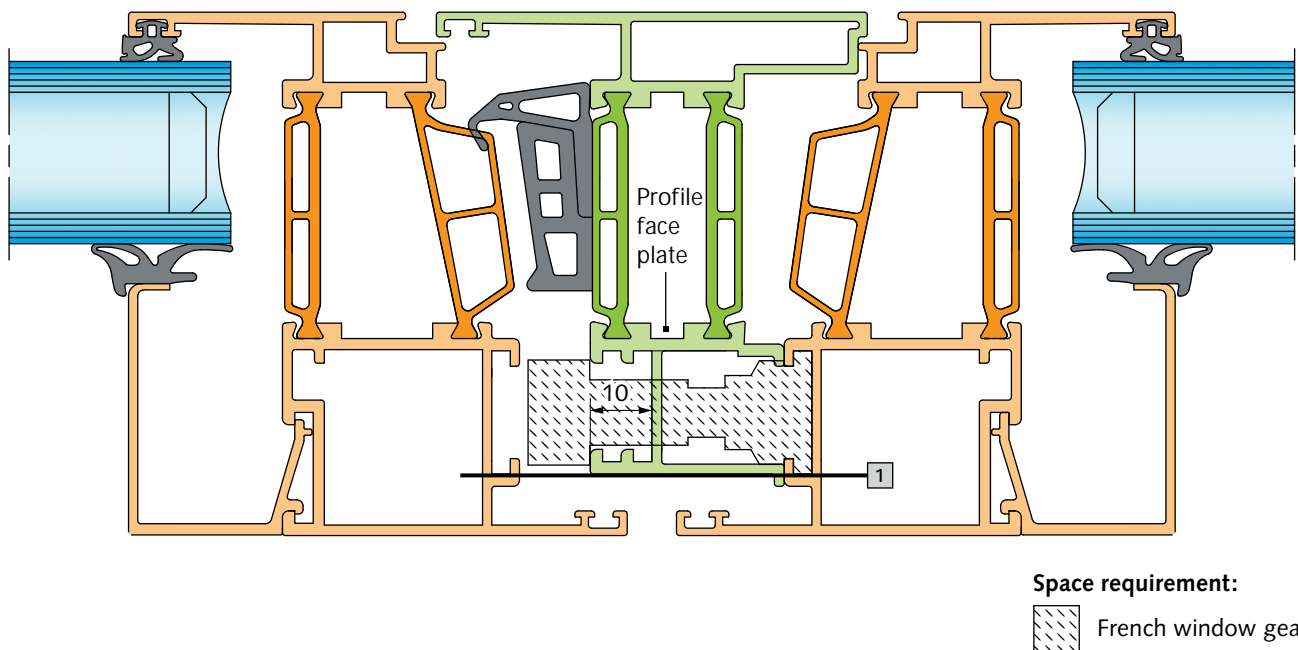
The new fitting is designed for use with heavy and robust leaf elements of up to 200kg in weight and leaf widths of between 700 and 1,700mm. Depending on the size of the window, multi-glazing or special glazing can be used, e.g. bullet-proof glazing. A special design feature: all hinge screws are concealed and allow an appealing, elegant design.

As with the Standard series, this fitting system is available as a modular system. It can be easily upgraded for use with higher resistance classes up to RC3 (WK3) by including optional components.

Space Requirements for single-leaf Windows



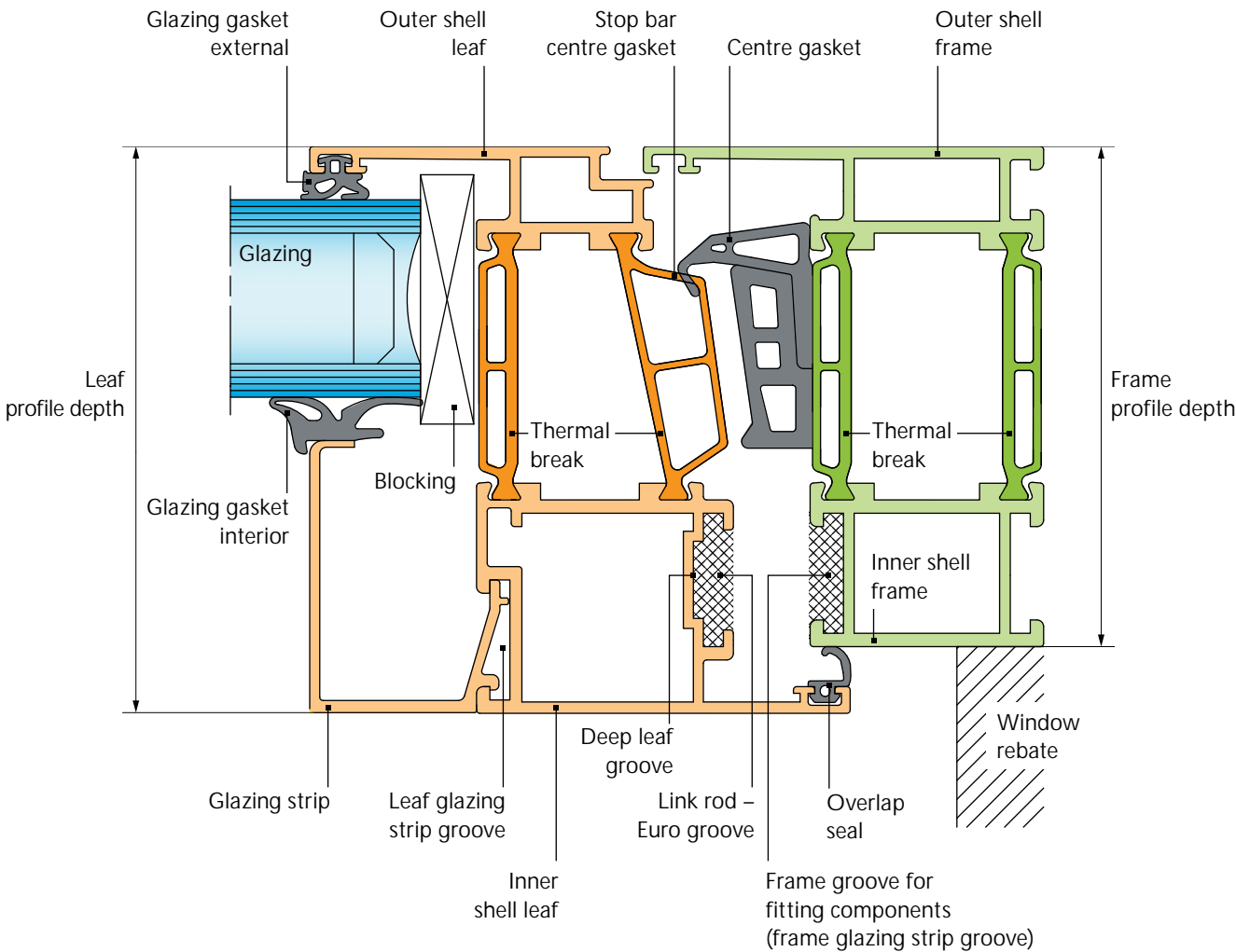
Space Requirements for French Windows (Casement Windows)



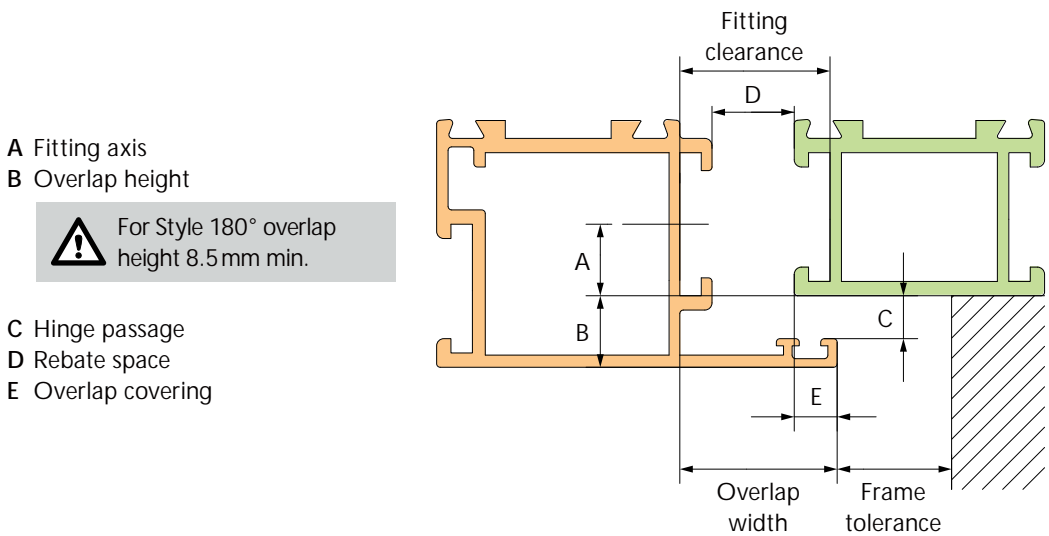
The frame components in the locking side kits are suitable for all standard Euro-groove profiles; frame groove 10–14 mm. The selection of hinge side will depend on the clamping limbs of the frame groove. Please select from the list of hinges on page 7.

- 1 The inner edge of the leaf groove must be aligned with the frame outer edge.
- 2 Note for the opening projection curve:
 - 12° for leaf widths <500mm,
 - 9° for leaf widths >500mm with a maximum profile depth of 100mm.

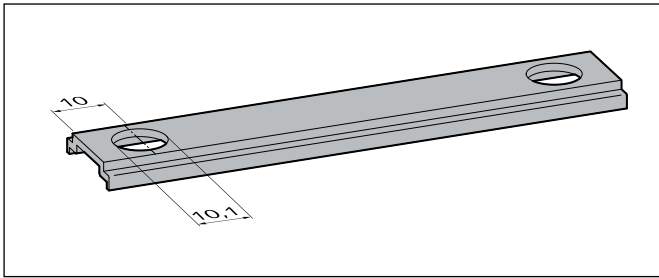
Window Components



Window Profile – Installation Dimensions



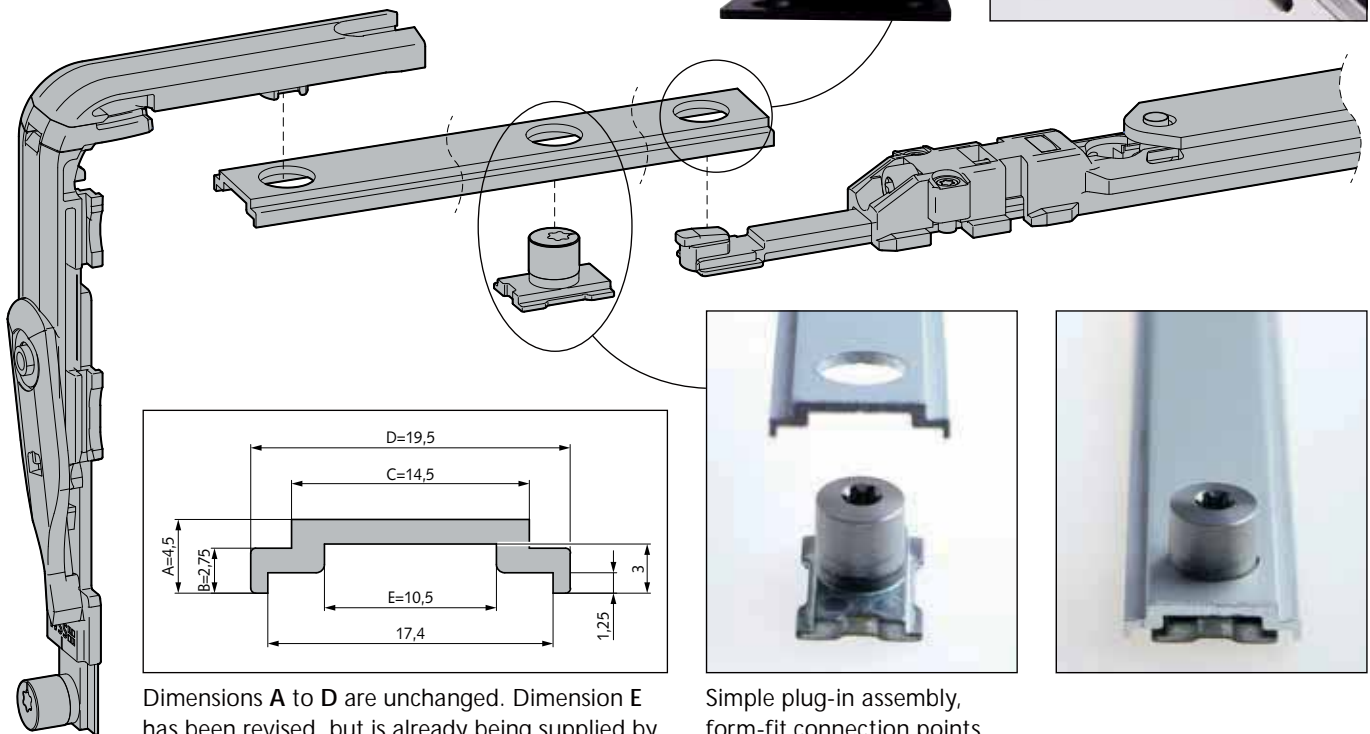
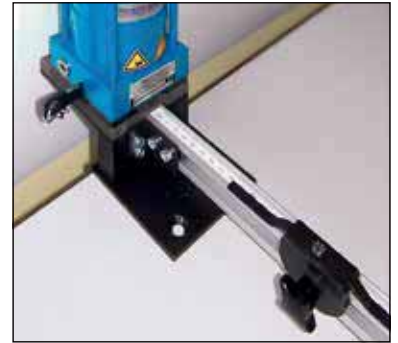
Link Rod Connections



Punch hole with a diameter of 10.1 mm



Pneumatic crimper for 10.1 mm-Ø-hole and for cutting the length of the link rods.



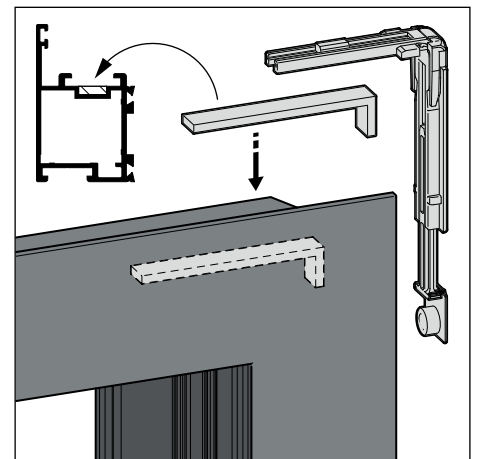
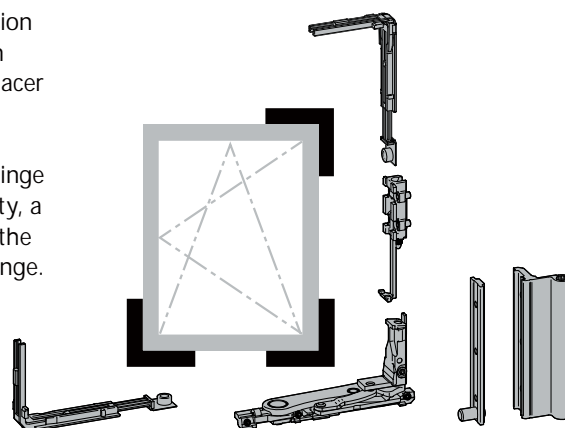
Dimensions **A** to **D** are unchanged. Dimension **E** has been revised, but is already being supplied by most system suppliers.

Simple plug-in assembly, form-fit connection points

Spacers for deep leaf grooves

When using corner transmission centre locking in conjunction with a deep leaf groove, a spacer has to be installed on site.

When using the concealed hinge side Style 180° or Heavy Duty, a spacer has to be installed in the area of the bottom corner hinge.



Article Number System

This article number system refers to all numbers for the fitting kits Standard, Style 180° and Heavy Duty and to all numbers for the accessories that are referred to on the sides of these kits.

Set	Serial Number	Version
010 = Locking side kits		0 = LH/RH
020 = Hinge kits		2 = pre-assembled RH
030 = Scissors		3 = pre-assembled LH
040 = Accessories		
Product Group		
	10.010.0100.114	
	Packaging Unit	
	0 = PU 1 piece	
	1 = PU 10 pieces	
	2 = PU 50 pieces	
	Surface Key	
	114 = Al E6/C-0 silver anodized	
	255 = Al RAL 9016 powder coat	
	299 = Al special colour powder coat	

Note:

Additional finishes, e.g. 105 = Al mill finish (for local coating) or 154 = AL E6/C-34 dark bronze are available on request.

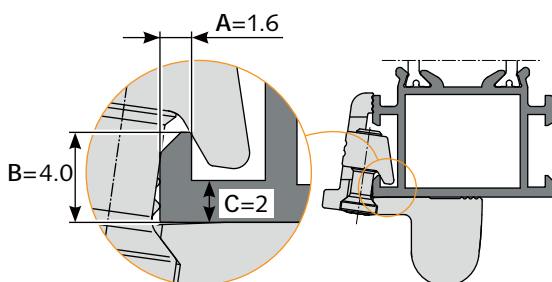
Selection of Hinges: Clamping Bar 1 (KL1) or 2 (KL2)?

Decide which KL is suitable for the profile you are using as follows:

1. Measure dimensions A, B and C.
2. Establish the intersection of dimensions A and B in the table.
3. Compare the value of the intersection with dimension C:
 - If the intersection of your dimensions A and B are in the grey part of the table, KL2 could be the right one. If it's in the white part of the table, KL1 could be the right one.
 - If your dimension $C \leq$ the intersection from the table, the ascertained clamping bar is suitable. If the value is greater, please contact WSS customer service.

Example:

1. A = 1.6 mm, B = 4 mm, C = 2 mm
2. Intersection = 2.3 in the grey part of the table
3.
 - Grey part of the table corresponds to KL2.
 - 2 mm (C) < 2.3 (intersection) means that KL2 is suitable for your profile.



KL2										KL1																	
	2.2	2.4	2.4	2.5	2.5	2.5	2.2	2.3	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
4.4	2.2	2.3	2.3	2.5	2.5	2.5	2.1	2.2	2.3	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
4.3	2.1	2.2	2.2	2.4	2.5	2.5	2.1	2.2	2.2	2.3	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
4.2	2.0	2.1	2.2	2.4	2.5	2.5	2.0	2.1	2.2	2.2	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
4.1	2.0	2.0	2.1	2.3	2.4	2.4	2.0	2.1	2.1	2.2	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
4.0	2.0	2.0	2.0	2.2	2.3	2.4	1.9	2.0	2.1	2.1	2.3	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
3.9	2.0	2.0	2.0	2.0	2.1	2.2	1.8	2.0	2.0	2.1	2.3	2.3	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
3.8	2.0	2.0	2.0	2.0	2.0	2.1	1.7	2.0	2.0	2.0	2.2	2.3	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
3.7	1.6	1.9	2.0	2.0	2.0	2.2	1.6	2.0	2.0	2.0	2.1	2.2	2.3	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
3.6	-	1.7	2.0	2.0	2.0	2.1	1.5	2.0	1.9	2.0	2.0	2.2	2.3	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
3.5	-	1.6	2.0	2.0	2.0	2.0	1.6	1.8	1.9	2.0	2.1	2.1	2.2	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
3.4	-	1.5	1.8	1.9	2.0	2.0	1.5	1.7	1.8	2.0	2.0	2.1	2.2	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
3.3	-	-	1.6	1.8	2.0	2.0	1.5	1.6	1.7	1.9	2.0	2.0	2.1	2.2	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
3.2	-	-	-	1.5	1.7	1.9	2.0	2.0	-	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
3.1	-	-	-	1.5	1.6	1.7	1.9	1.9	-	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
3.0	-	-	-	1.5	1.6	1.7	1.9	1.9	-	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2	2.1	2.2	2.3	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

$C \leq 2.3$ corresponds to KL2

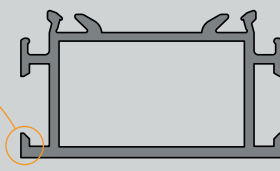
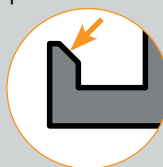
↑ B

A →

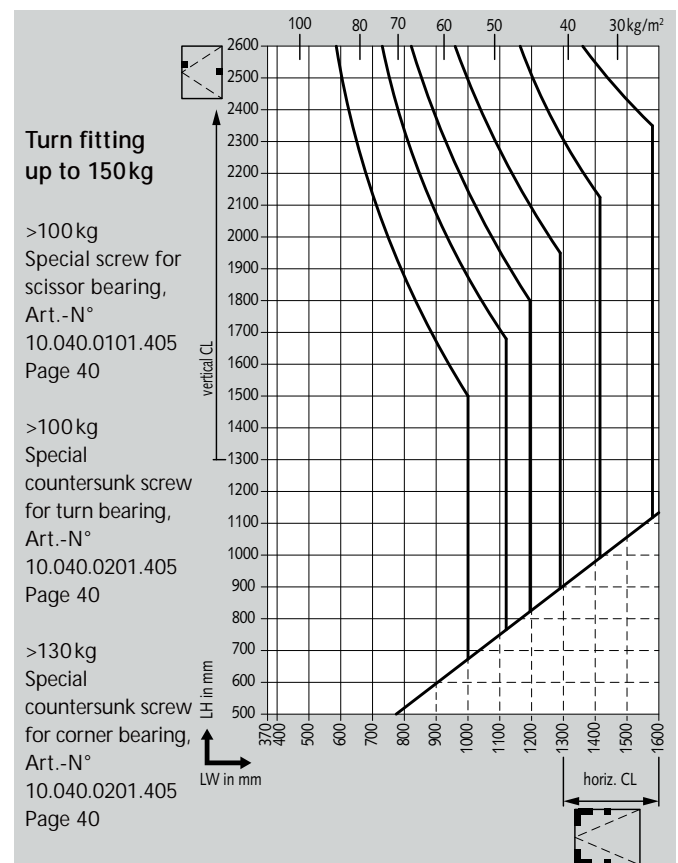
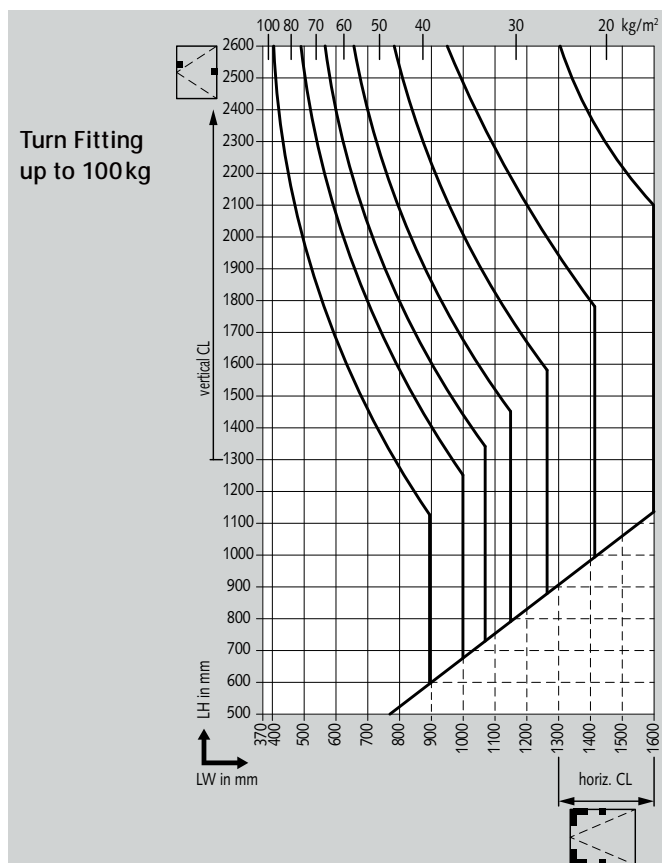
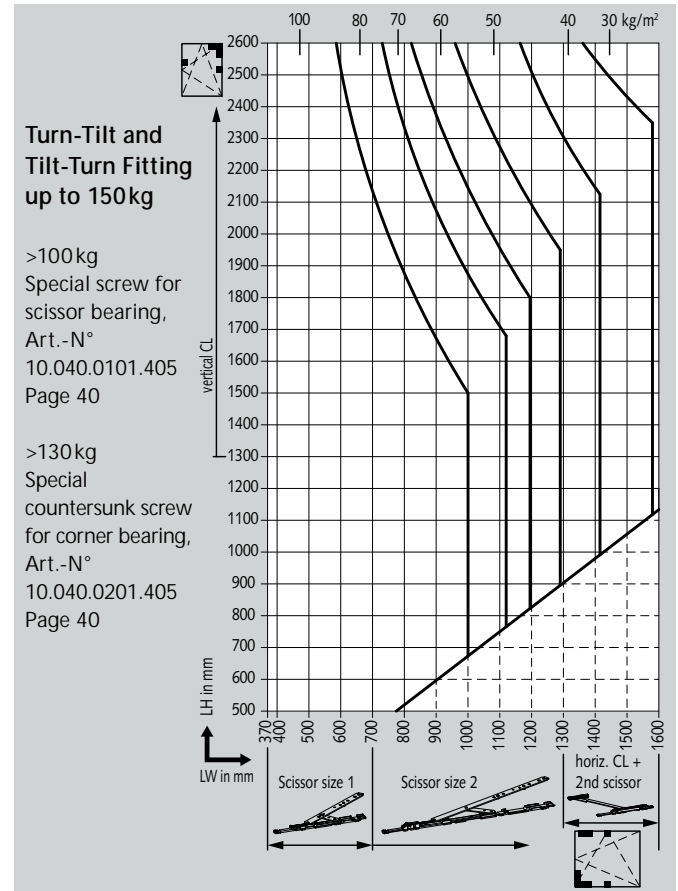
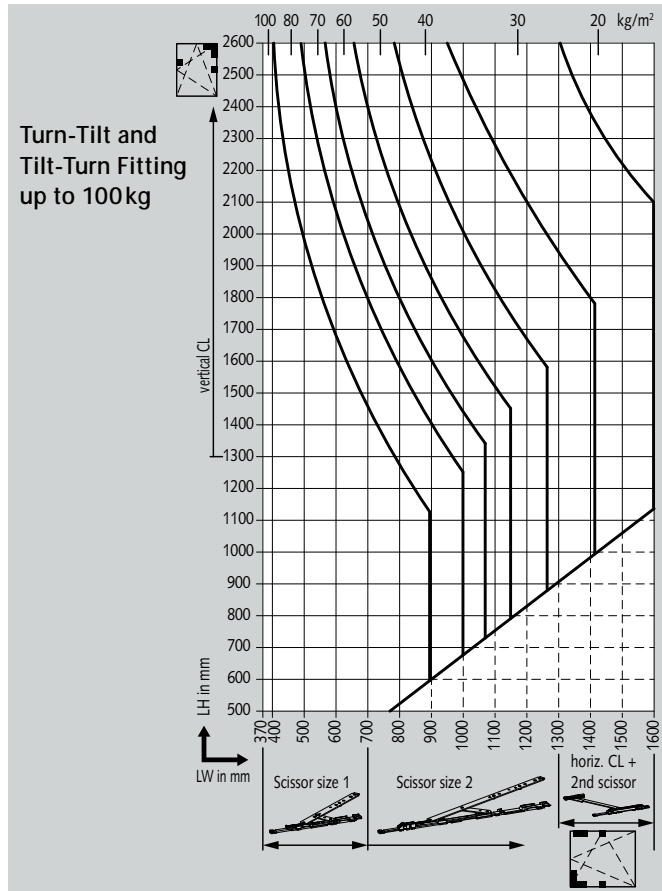
$C \leq 2.3$
corresponds
to KL2



For profiles with angled inner side,
please contact WSS!

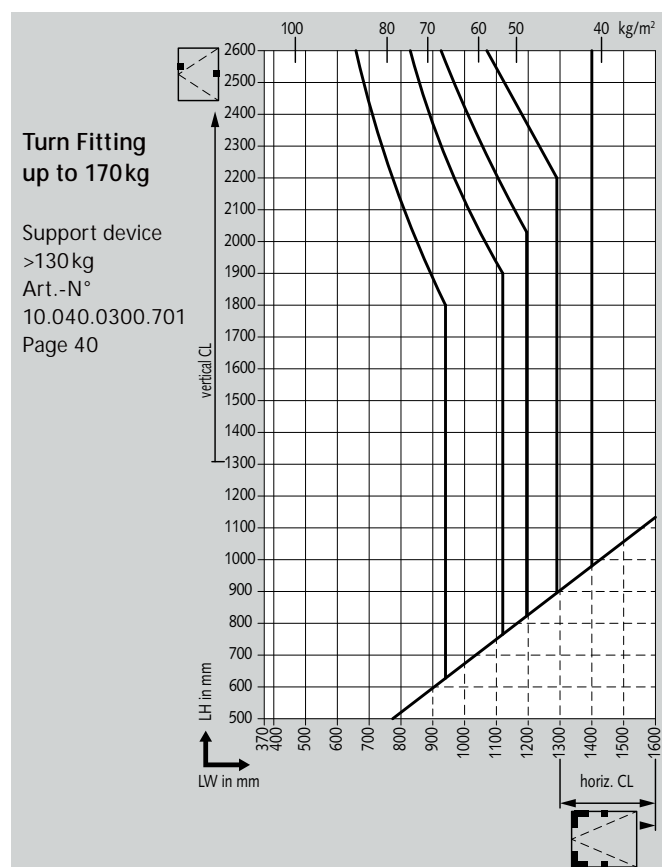
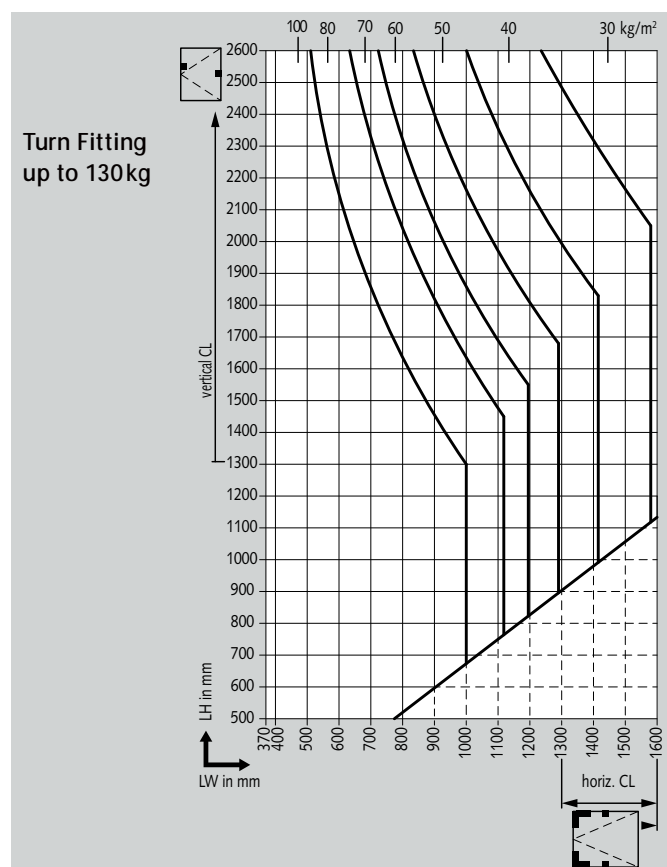
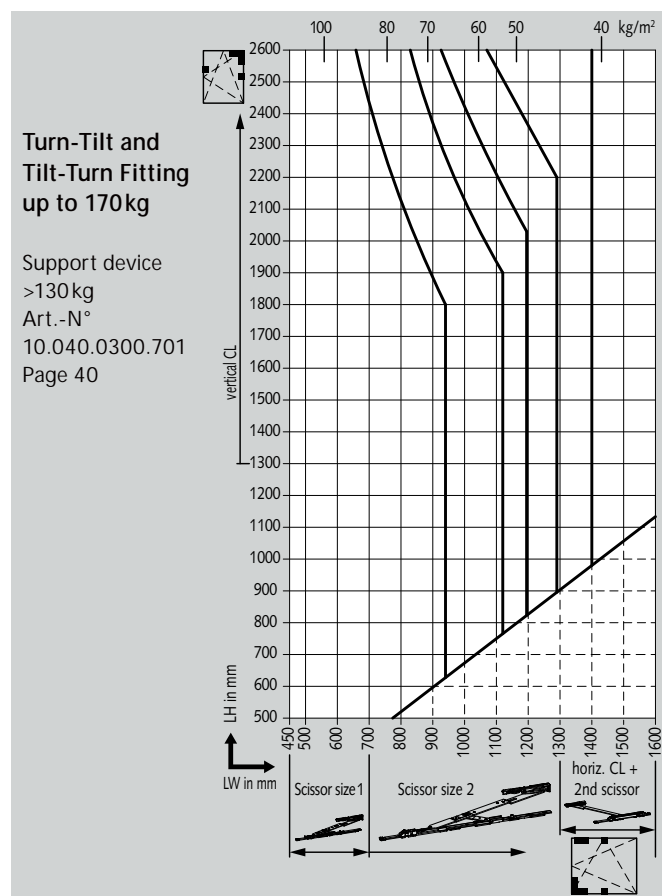
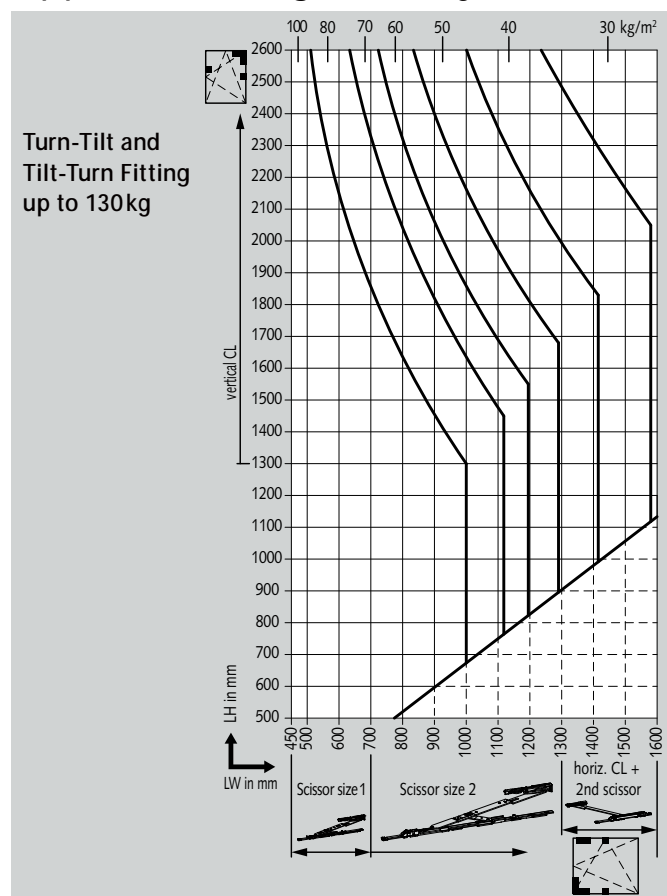


Application Diagrams: Standard



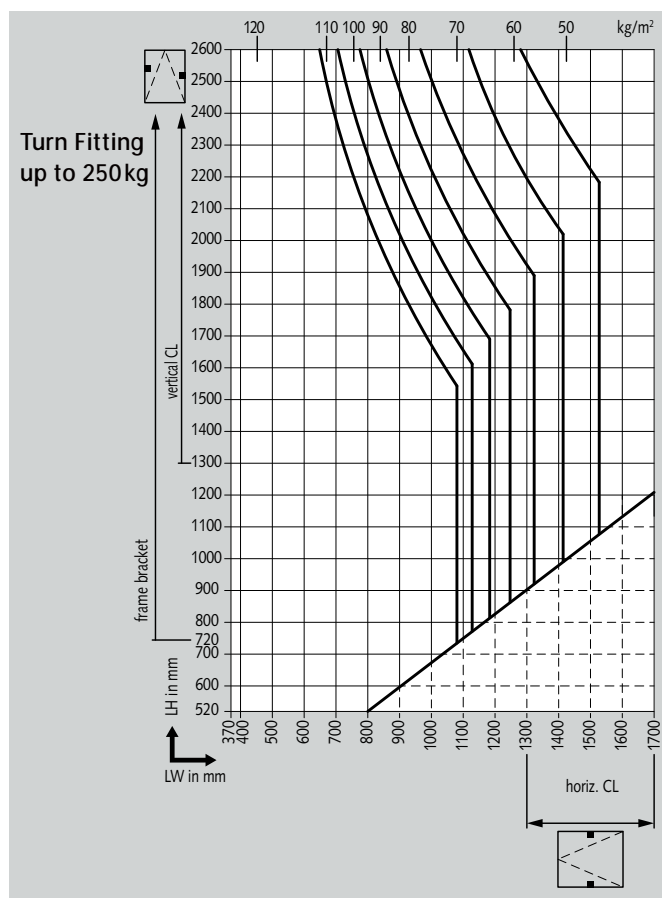
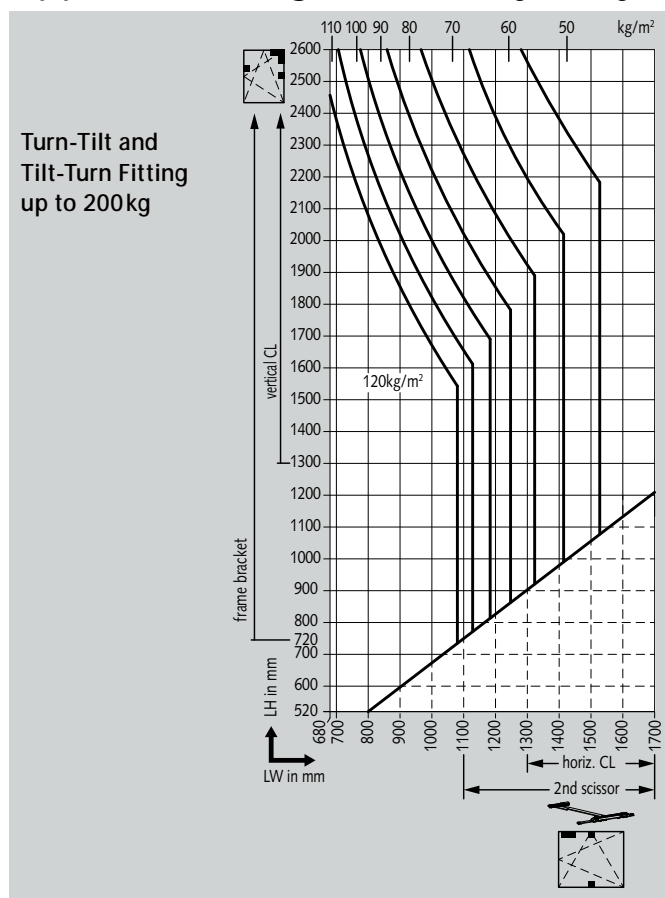
Tilt fittings: leaf weight max. 150kg, additional locking systems similar to Turn fittings $\geq 1,300$ mm leaf width and height.

Application Diagrams: Style 180°



Tilt fittings: leaf weight max. 130kg, additional locking systems similar to Turn fittings $\geq 1,300$ mm leaf width and height.




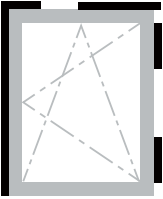



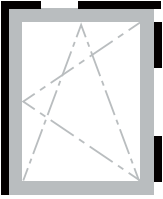



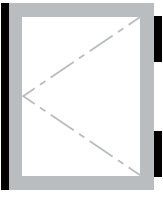



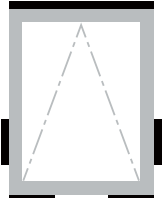



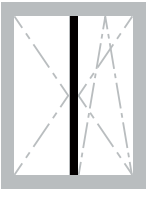



Application Diagrams: Heavy Duty

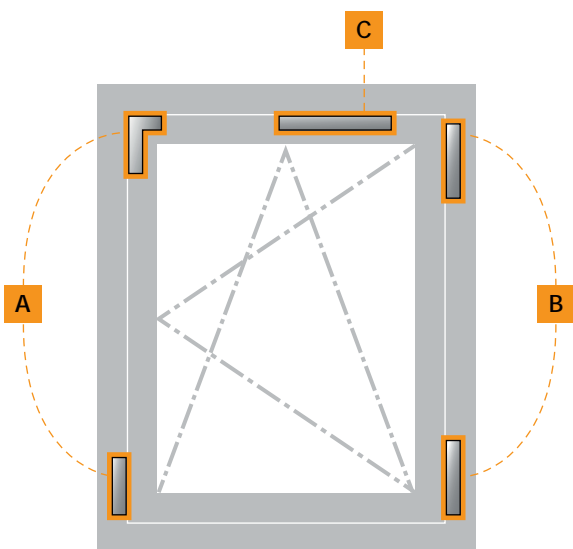


Tilt fittings: leaf weight max. 200kg, additional locking systems similar to Turn fittings $\geq 1,300$ mm leaf width and height.

In preparation: Heavy Duty PLUS

for leaf weights up to 400kg

	Standard	Style 180°	Heavy Duty
	 up to 150 kg	 up to 170 kg, concealed hinge side	 up to 200 kg
 Turn-Tilt Fittings	>>>  >>>	>>>  >>>	>>>  >>>
 Tilt-Turn Fittings	>>>  >>>	>>>  >>>	>>>  >>>
 Turn Fittings	>>>  >>>	>>>  >>>	>>>  >>>
 Tilt Fittings	>>>  >>>	>>>  >>>	>>>  >>>
 French Window	>>>  >>>	>>>  >>>	>>>  >>>



Turn-Tilt Fitting

- Eurogroove 15/20 with 11.5 mm (12 mm) rebate space
- RH or LH
- materials all non-rusting
- max. leaf weight: 150 kg

Adjustment range:

Scissor-1.5 mm (Size 1) or
 ±2 mm (Size 2) side adjustment

Corner bearing ±1 mm side adjustment

Corner hinge +1.5/-1 mm height adjustment

Locking cam ±1 mm pressure



A Locking Side Kit

Art.-N°	Version	PU
10.010.0100.000	Locking side kit Turn-Tilt with mish. dev.	1
10.010.0200.000	Locking side kit Turn-Tilt without mish. dev.	1
10.010.0101.000	Locking side kit Turn-Tilt with mish. dev.	10
10.010.0102.000	Locking side kit Turn-Tilt with mish. dev.	50
10.010.0201.000	Locking side kit Turn-Tilt without mish. dev.	10
10.010.0202.000	Locking side kit Turn-Tilt without mish. dev.	50

B Hinge Kit

Art.-N°	Version	PU
10.020.0100.---	Hinge kit Turn-Tilt/Tilt-Turn KL1	1
10.020.0200.---	Hinge kit Turn-Tilt/Tilt-Turn KL2	1
10.020.0101.---	Hinge kit Turn-Tilt/Tilt-Turn KL1	10
10.020.0102.---	Hinge kit Turn-Tilt/Tilt-Turn KL1	50
10.020.0201.---	Hinge kit Turn-Tilt/Tilt-Turn KL2	10
10.020.0202.---	Hinge kit Turn-Tilt/Tilt-Turn KL2	50

C Scissor

Art.-N°	Version	LW mm	PU
10.030.0100.000	Turn-Tilt scissor size 1	370-700	1
10.030.0200.000	Turn-Tilt scissor size 2	>700-1,600	1
10.030.0101.000	Turn-Tilt scissor size 1	370-700	10
10.030.0102.000	Turn-Tilt scissor size 1	370-700	50
10.030.0201.000	Turn-Tilt scissor size 2	>700-1,600	10
10.030.0202.000	Turn-Tilt scissor size 2	>700-1,600	50

Surface Key	Material/Finish
---.114	Al E6/C-0 silver anodized
---.255	Al RAL 9016 powder coat
---.299	Al special colour powder coat

Required accessories:

Concealed gear with mishandling device.....	Page 42
Concealed gear without mishandling device	Page 42
Gear handle	Page 44
Drive connector, single piece.....	Page 42
Drive connector, separable**	Page 42
2nd scissor Turn-Tilt for leaf widths >1,300 mm	Page 40
Corner transmission and centre locking >1,300mm* ...	Page 40
Special screw for scissor bearing >100 kg	Page 40
Special countersunk screw for corner bearing >130kg	Page 40

Optional accessories:

Mishandling device for gear handle..... Page 42

Window handlesfrom Page 48

Anti-burglary components RC.....from Page 55

Additional accessoriesfrom Page 40

French window..... Page 38

Note:

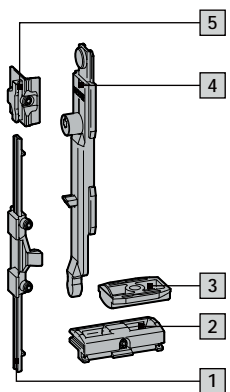
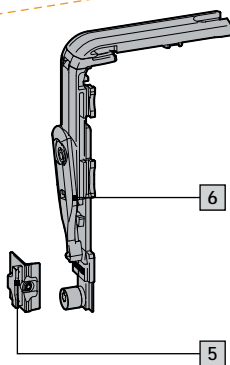
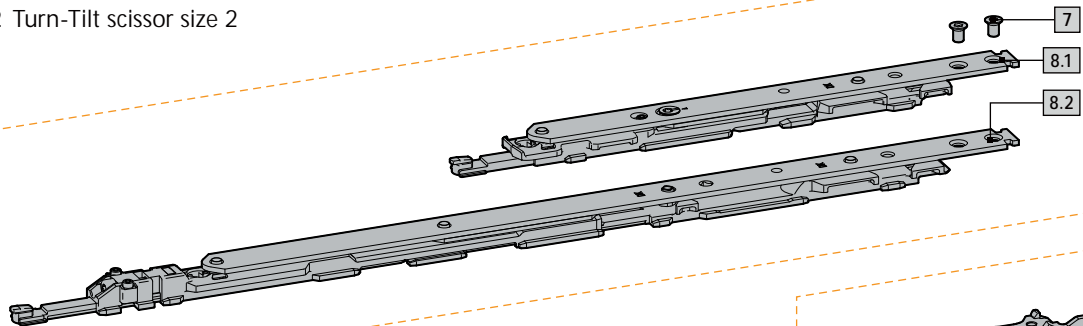
* The use of centre locking depends on the structure of the profile and the installation position.
Recommended for leaf height/width from approx. 1,300mm.

** A separable drive connector is always required in the case of a split link rod in conjunction with a gear handle, with or without horizontal centre locking.

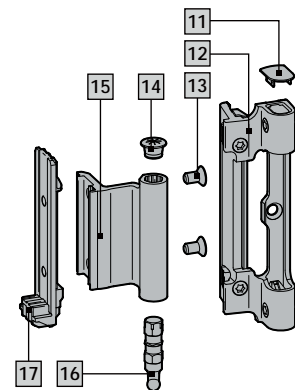
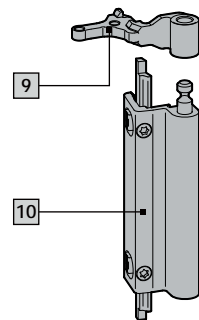
Attention: Please take note of the ratio of leaf size to leaf weight as outlined in our application diagram on page 8.

C Scissors:

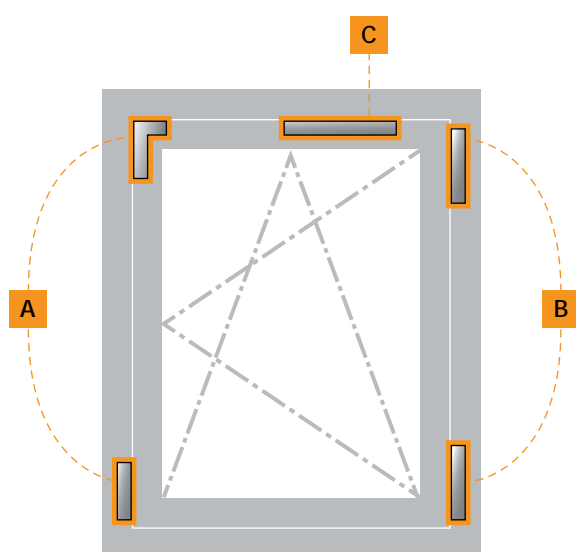
- 7 Countersunk screw M5x8, red
- 8.1 Turn-Tilt scissor size 1
- 8.2 Turn-Tilt scissor size 2

**A Locking Side Kit:**

- 1 Anti-jemmy device Turn-Tilt
- 2 Tilt bearing
- 3 Leaf ramp
- 4 Tilt lock bolt Turn-Tilt
- 5 Striker
- 6 Corner transmission with/without mishandling device

**B Hinge Kit:**

- 9 Scissor hinge
- 10 Scissor bearing KL1 or KL2
- 11 End cap corner bearing
- 12 Corner bearing KL1 or KL2
- 13 Countersunk screw M5x9, blue
- 14 End cap corner hinge
- 15 Corner hinge
- 16 Corner bearing pin
- 17 Clamping angle



Turn-Tilt Fitting, pre-assembled

- Eurogroove 15/20 with 11.5 mm (12 mm) rebate space
- RH or LH pre-assembled
- materials all non-rusting
- max. leaf weight: 150 kg

Adjustment range:

Scissor -1.5 mm (Size 1) or
 ±2 mm (Size 2) side adjustment
 Corner bearing ±1 mm side adjustment
 Corner hinge +1.5/-1 mm height adjustment
 Locking cam ±1 mm pressure



A Locking Side Kit

Art.-N°	Version	PU
10.010.0121.000	Locking side kit Turn-Tilt with mish. dev., RH	10
10.010.0122.000	Locking side kit Turn-Tilt with mish. dev., RH	50
10.010.0131.000	Locking side kit Turn-Tilt with mish. dev., LH	10
10.010.0132.000	Locking side kit Turn-Tilt with mish. dev., LH	50
10.010.0221.000	Locking side kit Turn-Tilt without mish. dev., RH	10
10.010.0222.000	Locking side kit Turn-Tilt without mish. dev., RH	50
10.010.0231.000	Locking side kit Turn-Tilt without mish. dev., LH	10
10.010.0232.000	Locking side kit Turn-Tilt without mish. dev., LH	50

B Hinge Kit

Art.-N°	Version	PU
10.020.0121.---	Hinge kit Turn-Tilt/Tilt-Turn KL1, RH	10
10.020.0122.---	Hinge kit Turn-Tilt/Tilt-Turn KL1, RH	50
10.020.0131.---	Hinge kit Turn-Tilt/Tilt-Turn KL1, LH	10
10.020.0132.---	Hinge kit Turn-Tilt/Tilt-Turn KL1, LH	50
10.020.0221.---	Hinge kit Turn-Tilt/Tilt-Turn KL2, RH	10
10.020.0222.---	Hinge kit Turn-Tilt/Tilt-Turn KL2, RH	50
10.020.0231.---	Hinge kit Turn-Tilt/Tilt-Turn KL2, LH	10
10.020.0232.---	Hinge kit Turn-Tilt/Tilt-Turn KL2, LH	50

C Scissor

Art.-N°	Version	LWmm	PU
10.030.0121.---	Turn-Tilt scissor size 1, RH	370-700	10
10.030.0122.---	Turn-Tilt scissor size 1, RH	370-700	50
10.030.0131.---	Turn-Tilt scissor size 1, LH	370-700	10
10.030.0132.---	Turn-Tilt scissor size 1, LH	370-700	50
10.030.0221.---	Turn-Tilt scissor size 2, RH	>700-1,600	10
10.030.0222.---	Turn-Tilt scissor size 2, RH	>700-1,600	50
10.030.0231.---	Turn-Tilt scissor size 2, LH	>700-1,600	10
10.030.0232.---	Turn-Tilt scissor size 2, LH	>700-1,600	50

Surface Key

Surface Key	Material/Finish
---.114	Al E6/C-0 silver anodized***
---.255	Al RAL 9016 powder coat
---.299	Al special colour powder coat

Required accessories:

Concealed gear with mishandling device..... Page 42
 Concealed gear without mishandling device Page 42
 Gear handle Page 44
 Drive connector, single piece..... Page 42
 Drive connector, separable** Page 42
 2nd scissor Turn-Tilt for leaf widths >1,300 mm Page 40
 Corner transmission and centre locking >1,300 mm* ... Page 40
 Special screw for scissor bearing >100 kg Page 40
 Special countersunk screw for corner bearing >130 kg Page 40

Optional accessories:

Mishandling device for gear handle..... Page 42
 Window handlesfrom Page 47
 Anti-burglary components RC.....from Page 55
 Additional accessoriesfrom Page 40
 French window..... Page 38

Note:

* The use of centre locking depends on the structure of the profile and the installation position.
 Recommended for leaf height/width from approx. 1,300 mm.

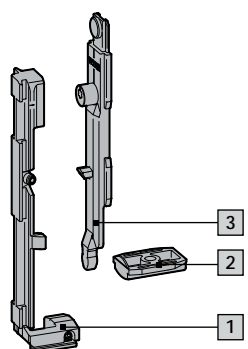
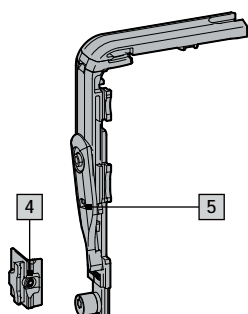
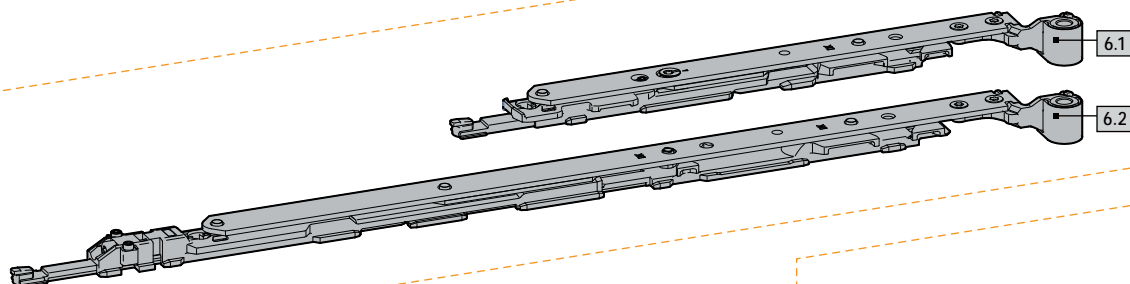
** A separable drive connector is always required in the case of a split link rod in conjunction with a gear handle, with or without horizontal centre locking.

*** Scissor hinge, coated.

Attention: Please take note of the ratio of leaf size to leaf weight as outlined in our application diagram on page 8.

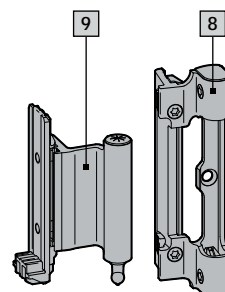
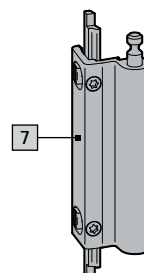
C Scissors:

- 6.1 Turn-Tilt scissor size 1 with scissor hinge
- 6.2 Turn-Tilt scissor size 2 with scissor hinge



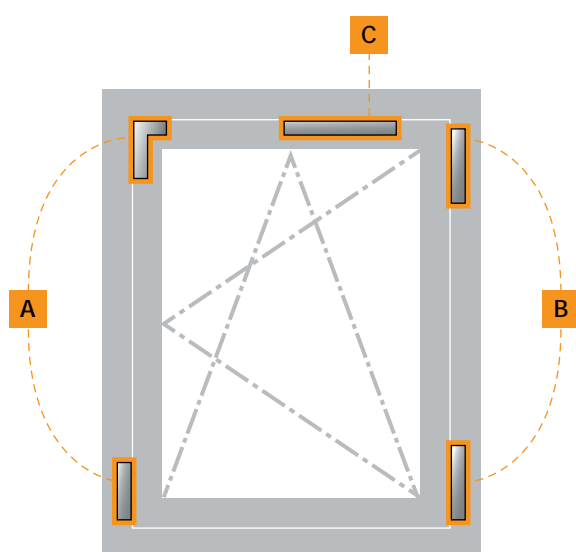
A Locking Side Kit:

- 1 Combi-Tilt bearing
- 2 Leaf ramp
- 3 Tilt lock bolt Turn-Tilt
- 4 Striker
- 5 Corner transmission with/without mishandling device



B Hinge Kit:

- 7 Scissor bearing KL1 or KL2
- 8 Corner bearing KL1 or KL2
- 9 Corner hinge



Tilt-Turn Fitting

- Eurogroove 15/20 with 11.5 mm (12 mm) rebate space
- RH or LH
- materials all non-rusting
- max. leaf weight: 150 kg

Adjustment range:

Scissor -1.5 mm (Size 1) or
 ±2 mm (Size 2) side adjustment
 Corner bearing ±1 mm side adjustment
 Corner hinge +1.5/-1 mm height adjustment
 Locking cam ±1 mm pressure



A Locking Side Kit

Art.-N°	Version	PU
10.010.0300.000	Locking side kit Tilt-Turn with mish. dev.	1
10.010.0400.000	Locking side kit Tilt-Turn without mish. dev.	1

B Hinge Kit

Art.-N°	Version	PU
10.020.0100.---	Hinge kit Turn-Tilt/Tilt-Turn KL1	1
10.020.0200.---	Hinge kit Turn-Tilt/Tilt-Turn KL2	1

C Scissor

Art.-N°	Version	LW mm	PU
10.030.0300.000	Tilt-Turn scissor size 1	370-700	1
10.030.0400.000	Tilt-Turn scissor size 2	>700-1,600	1

Surface Key

Material/Finish

---.114	Al E6/C-0 silver anodized
---.255	Al RAL 9016 powder coat
---.299	Al special colour powder coat

Required accessories:

Concealed gear with mishandling device.....	Page 42
Concealed gear without mishandling device	Page 42
Gear handle Tilt-Turn	Page 46
Drive connector, single piece.....	Page 42
Drive connector, separable**	Page 42
2nd scissor Tilt-Turn for leaf widths >1,300 mm.....	Page 40
Corner transmission and centre locking >1,300 mm* ...	Page 40
Special screw for scissor bearing >100 kg	Page 40
Special countersunk screw for corner bearing >130 kg	Page 40

Optional accessories:

Mishandling device for gear handle.....	Page 42
Window handles	from Page 47
Anti-burglary components RC.....	from Page 55
Additional accessories	from Page 40

French window..... Page 38

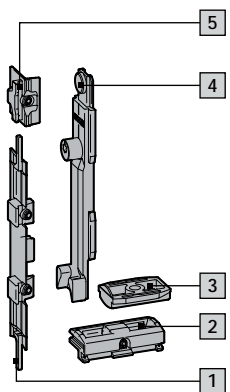
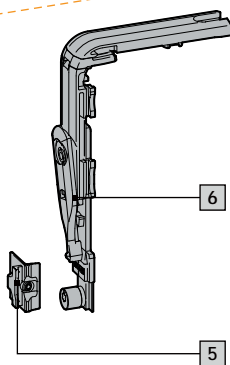
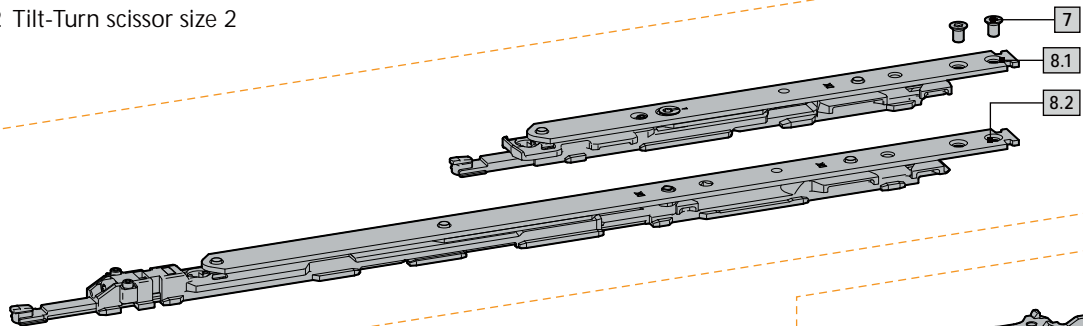
Note:

* The use of centre locking depends on the structure of the profile and the installation position.
 Recommended for leaf height/width from approx. 1,300 mm.
 ** A separable drive connector is always required in the case of a split link rod in conjunction with a gear handle, with or without horizontal centre locking.

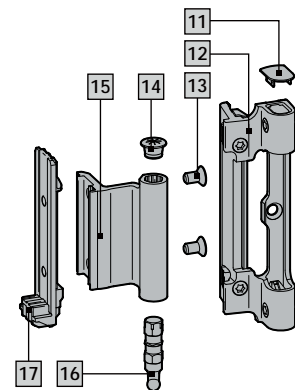
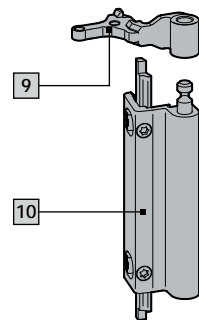
Attention: Please take note of the ratio of leaf size to leaf weight as outlined in our application diagram on page 8.

C Scissors:

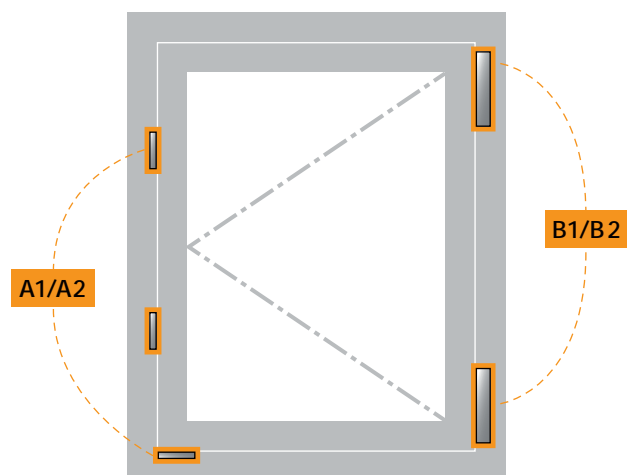
- 7 Countersunk screw M5x8, red
- 8.1 Tilt-Turn scissor size 1
- 8.2 Tilt-Turn scissor size 2

**A Locking Side Kit:**

- 1 Anti-jemmy device Tilt-Turn
- 2 Tilt bearing
- 3 Leaf ramp
- 4 Tilt lock bolt Tilt-Turn
- 5 Striker
- 6 Corner transmission with/without mishandling device

**B Hinge Kit:**

- 9 Scissor hinge
- 10 Scissor bearing KL1 or KL2
- 11 End cap corner bearing
- 12 Corner bearing KL1 or KL2
- 13 Countersunk screw M5x9, blue
- 14 End cap corner hinge
- 15 Corner hinge
- 16 Corner bearing pin
- 17 Clamping angle



Turn Fitting

- Eurogroove 15/20 with 11.5 mm (12 mm) rebate space
- RH or LH
- materials all non-rusting
- max. leaf weight: 150 kg

Adjustment range:

Corner bearing ±1 mm side adjustment
 Turn leaf hinge adjustable ±2 mm side adjustment
 Corner hinge +1.5/-1 mm height adjustment
 Locking cam ±1 mm pressure



A Locking Side Kit

Art.-N°	Version	PU
10.010.0500.000	Locking side kit Turn fitting >1,300 mm LW, A1	1
10.010.0600.000	Locking side kit Turn fitting >1,300 mm LW incl. horizontal centre locking, A2	1

B Hinge Kit

Art.-N°	Version	PU
10.020.0400.---	Hinge kit Turn fitting, KL1, B1	1
10.020.0500.---	Hinge kit Turn fitting, KL2, B1	1
10.020.0600.---	Hinge kit Turn fitting, adjustable, KL1, B2	1
10.020.0700.---	Hinge kit Turn fitting, adjustable, KL2, B2	1

Surface Key	Material/Finish
---.114	Al E6/C-0 silver anodized
---.255	Al RAL 9016 powder coat
---.299	Al special colour powder coat

Required accessories:

Concealed gear without mishandling device	Page 42
Gear handle	Page 44
Drive connector, single piece	Page 42
Drive connector, separable**	Page 42
Concealed centre locking Standard*	Page 41
Turn bearing/centre hinge Standard*	Page 41
Special screw for scissor bearing >100 kg	Page 40
Special countersunk screw for corner bearing >130 kg ...	Page 40
Special countersunk screw for turn bearing >100 kg	Page 40

Optional accessories:

Stroke limiter 90°	Page 42
Window handles	from Page 48
Anti-burglary components RC	from Page 55
Additional accessories	from Page 40

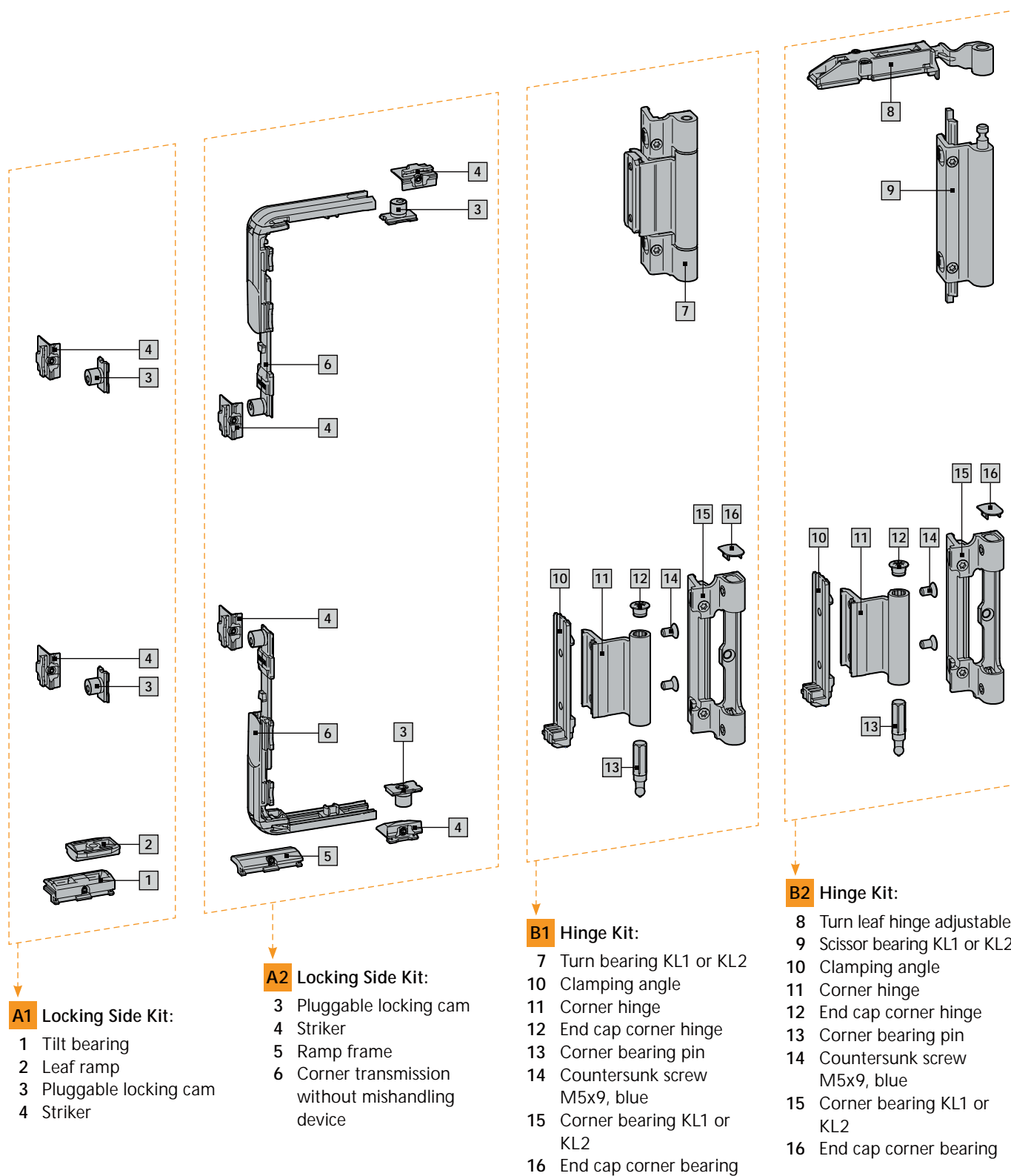
French window Page 38

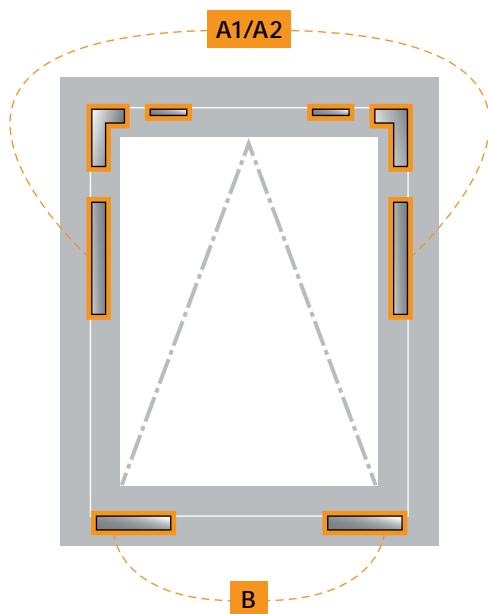
Note:

* The use of centre locks/centre hinges will depend on the structure of the profile and the installation position.
Recommended for leaf height/width from approx. 1,300 mm.

** A separable drive connector is always required in the case of a split link rod in conjunction with a gear handle, with or without horizontal centre locking.

Attention: Please take note of the ratio of leaf size to leaf weight as outlined in our application diagram on page 8.





Tilt Fitting

- Eurogroove 15/20 with 11.5 mm (12 mm) rebate space
- RH or LH
- materials all non-rusting
- max. leaf weight: 150 kg

Adjustment range:

Locking cam ±1 mm pressure



A Locking Side Kit

Art.-N°	Version	PU
10.010.0700.000	Locking side kit, horizontal operation <1,300 mm LH, A1	1
10.010.0900.000	Locking side kit, vertical operation, incl. vertical centre lock, A2	1

B Hinge Kit

Art.-N°	Version	PU
10.020.0900.---	Hinge kit Tilt fitting, KL1	1
10.020.1000.---	Hinge kit Tilt fitting, KL2	1

Surface Key

Material/Finish

---.114	Al E6/C-0 silver anodized
---.255	Al RAL 9016 powder coat
---.299	Al special colour powder coat

Required accessories:

Concealed gear without mishandling device	Page 42
Gear handle	Page 44
Drive connector, single piece.....	Page 42
Drive connector, separable**	Page 42
Concealed centre locking Standard*	Page 41
Turn bearing/centre hinge Standard*	Page 41

Optional accessories:

Stroke limiter 90°	Page 42
Window handles	from Page 48
Anti-burglary components RC.....	from Page 55
Additional accessories	from Page 40

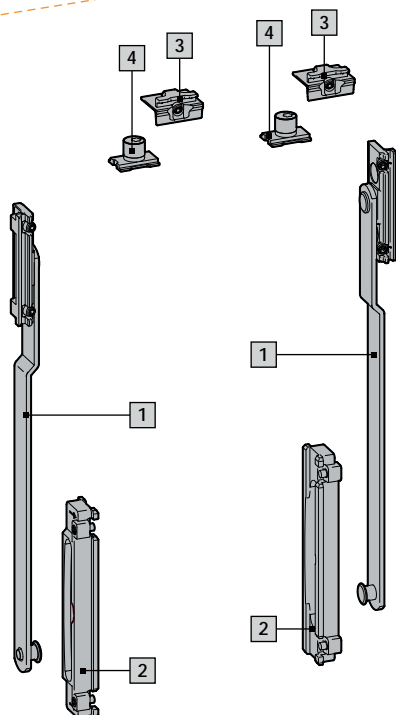
Note:

* The use of centre locks/centre hinges will depend on the structure of the profile and the installation position. Recommended for leaf width from approx. 1,300 mm.

** A separable drive connector is always required in the case of a split link rod in conjunction with a gear handle.

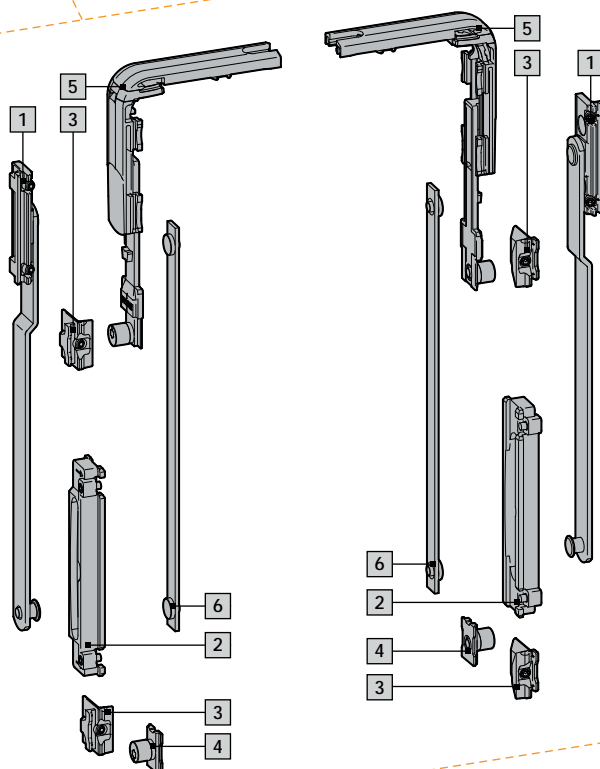
A1 Locking Side Kit:

- 1 Tilt scissors arm
- 2 Tilt scissors guide
- 3 Striker
- 4 Pluggable locking cam



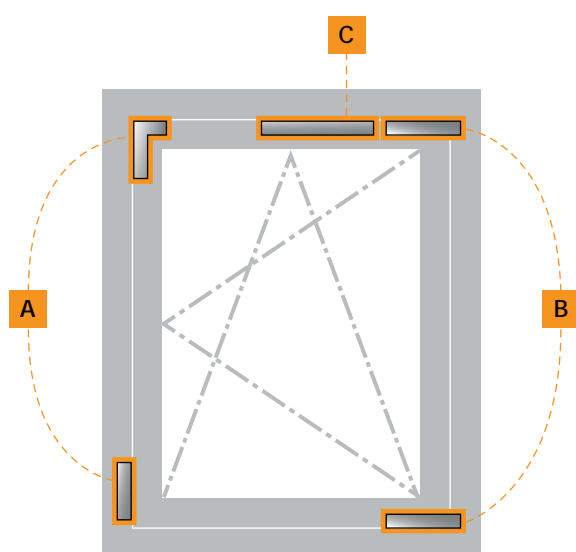
A2 Locking Side Kit:

- 1 Tilt scissors arm
- 2 Tilt scissors guide
- 3 Striker
- 4 Pluggable locking cam
- 5 Corner transmission without mishandling device
- 6 Connecting rod



B Hinge Kit:

- 7 Turn bearing KL1 or KL2



Turn-Tilt Fitting

- Eurogroove 15/20 with 11.5 mm (12 mm) rebate space
- materials all non-rusting
- max. leaf weight: 170 kg

Adjustment range:

Scissor -1.5 mm (Size 1) or
 ±2 mm (Size 2) side adjustment
 Corner bearing +2/-1.5 mm side adjustment,
 +1.5/-1 mm height adjustment,
 ±1 mm pressure
 Locking cam ±1 mm pressure



A Locking Side Kit

Art.-N°	Version	PU
10.010.0100.000	Locking side kit Turn-Tilt with mish. dev.	1
10.010.0200.000	Locking side kit Turn-Tilt without mish. dev.	1

B Hinge Kit

Art.-N°	Version	Groove ¹ mm	PU
10.020.0320.000	Hinge kit Turn-Tilt/Tilt-Turn, RH	10-12	1
10.020.0330.000	Hinge kit Turn-Tilt/Tilt-Turn, LH	10-12	1
10.020.9320.000	Hinge kit Turn-Tilt/Tilt-Turn, RH	>12-14	1
10.020.9330.000	Hinge kit Turn-Tilt/Tilt-Turn, LH	>12-14	1

C Scissor

Art.-N°	Version	LW mm	Groove ¹ mm	PU
10.030.0620.000	Turn-Tilt scissor size 2, RH	>700-1,600	10-12	1
10.030.0630.000	Turn-Tilt scissor size 2, LH	>700-1,600	10-12	1
10.030.0520.000	Turn-Tilt scissor size 1, RH	450-700	10-12	1
10.030.0530.000	Turn-Tilt scissor size 1, LH	450-700	10-12	1
10.030.9520.000	Turn-Tilt scissor size 1, RH	450-700	>12-14	1
10.030.9530.000	Turn-Tilt scissor size 1, LH	450-700	>12-14	1
10.030.9620.000	Turn-Tilt scissor size 2, RH	>700-1,600	>12-14	1
10.030.9630.000	Turn-Tilt scissor size 2, LH	>700-1,600	>12-14	1

Required accessories:

Concealed gear with mishandling device.....	Page 42
Concealed gear without mishandling device	Page 42
Gear handle	Page 44
Drive connector, single piece.....	Page 42
Drive connector, separable**	Page 42
2nd scissor Turn-Tilt for leaf widths >1,300 mm	Page 40
Corner transmission and centre locking >1,300 mm* ...	Page 40
Centre locking/additional locking*	Page 41
Support device >130 kg (opening angle 90° max.)	Page 40
Opening restrictor Style 180° >130 kg.....	Page 43
Opening restrictor, force absorbing Style 180° >130 kg .	Page 43

Optional accessories:

Mishandling device for gear handle.....	Page 42
Window handles	from Page 48
Anti-burglary components RC.....	from Page 55
Additional accessories	from Page 40

French window..... Page 38

Note:

* The use of centre locking depends on the structure of the profile and the installation position.

Recommended for leaf height/width from approx. 1,300 mm.

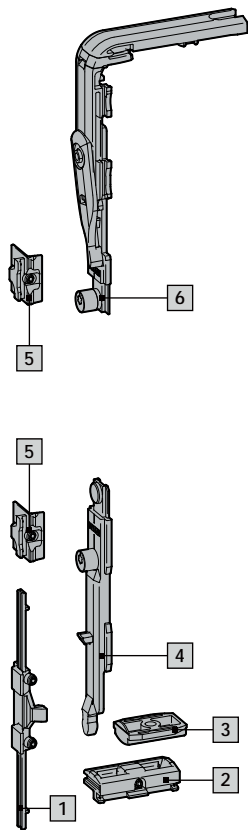
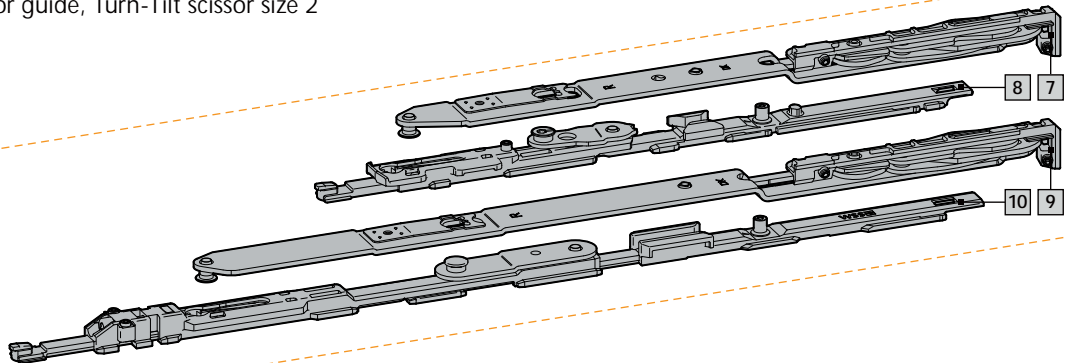
** A separable drive connector is always required in the case of a split link rod in conjunction with a gear handle, with or without horizontal centre locking.

¹ For further details, see page 4.

Attention: Please take note of the ratio of leaf size to leaf weight as outlined in our application diagram on page 9.

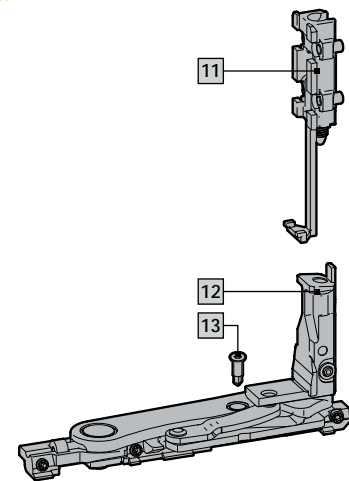
C Scissors:

- 7 Scissor arm, Turn-Tilt scissor size 1, frame groove 10-12 or >12-14 mm
- 8 Scissor guide, Turn-Tilt scissor size 1
- 9 Scissor arm, Turn-Tilt scissor size 2, frame groove 10-12 or >12-14 mm
- 10 Scissor guide, Turn-Tilt scissor size 2



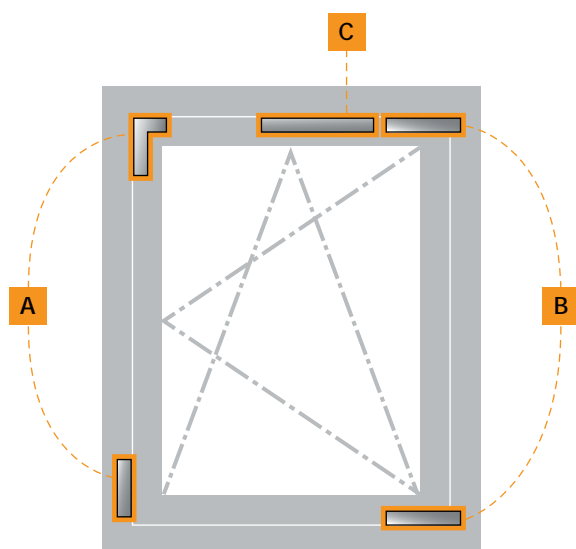
A Locking Side Kit:

- 1 Anti-jemmy device Turn-Tilt
- 2 Tilt bearing
- 3 Leaf ramp
- 4 Tilt lock bolt Turn-Tilt
- 5 Striker
- 6 Corner transmission with/without mishandling device



B Hinge Kit:

- 11 Corner hinge
- 12 Corner bearing, frame groove 10-12 or >12-14 mm
- 13 Special self-tapping screw



Tilt-Turn Fitting

- Eurogroove 15/20 with 11.5 mm (12 mm) rebate space
- materials all non-rusting
- max. leaf weight: 170 kg

Adjustment range:

Scissor -1.5 mm (Size 1) or ± 2 mm (Size 2)
side adjustment
Corner bearing +2/-1.5 mm side adjustment,
+1.5/-1 mm height adjustment,
 ± 1 mm pressure
Locking cam ± 1 mm pressure



A Locking Side Kit

Art.-N°	Version	PU
10.010.0300.000	Locking side kit Tilt-Turn with mish. dev.	1
10.010.0400.000	Locking side kit Tilt-Turn without mish. dev.	1

B Hinge Kit

Art.-N°	Version	Groove ¹ mm	PU
10.020.0320.000	Hinge kit Turn-Tilt/Tilt-Turn, RH	10-12	1
10.020.0330.000	Hinge kit Turn-Tilt/Tilt-Turn, LH	10-12	1
10.020.9320.000	Hinge kit Turn-Tilt/Tilt-Turn, RH	>12-14	1
10.020.9330.000	Hinge kit Turn-Tilt/Tilt-Turn, LH	>12-14	1

C Scissor

Art.-N°	Version	LW mm	Groove ¹ mm	PU
10.030.0730.000	Tilt-Turn scissor size 1, LH	450-700	10-12	1
10.030.0830.000	Tilt-Turn scissor size 2, LH	>700-1,600	10-12	1
10.030.0720.000	Tilt-Turn scissor size 1, RH	450-700	10-12	1
10.030.0820.000	Tilt-Turn scissor size 2, RH	>700-1,600	10-12	1
10.030.9720.000	Tilt-Turn scissor size 1, RH	450-700	>12-14	1
10.030.9730.000	Tilt-Turn scissor size 1, LH	450-700	>12-14	1
10.030.9820.000	Tilt-Turn scissor size 2, RH	>700-1,600	>12-14	1
10.030.9830.000	Tilt-Turn scissor size 2, LH	>700-1,600	>12-14	1

Required accessories:

Concealed gear with mishandling device.....	Page 42
Concealed gear without mishandling device	Page 42
Gear handle	Page 46
Drive connector, single piece.....	Page 42
Drive connector, separable**	Page 42
2nd scissor Tilt-Turn for leaf widths >1,300 mm.....	Page 40
Corner transmission and centre locking >1,300 mm* ...	Page 40
Centre locking/additional locking*	Page 41
Support device >130 kg (opening angle 90° max.)	Page 40
Opening restrictor Style 180° >130 kg.....	Page 43
Opening restrictor, force absorbing Style 180° >130 kg .	Page 43

Optional accessories:

Mishandling device for gear handle.....	Page 42
Window handles	from Page 47
Anti-burglary components RC.....	from Page 55
Additional accessories	from Page 40

French window..... Page 38

Note:

* The use of centre locking depends on the structure of the profile and the installation position.

Recommended for leaf height/width from approx. 1,300 mm.

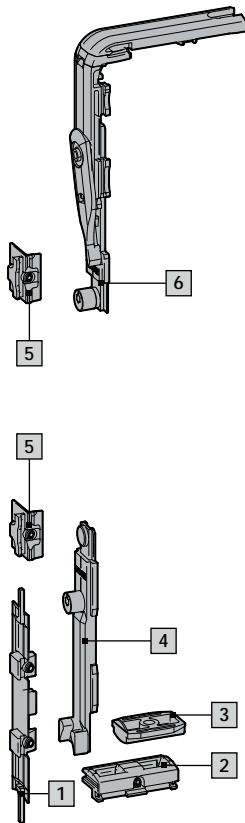
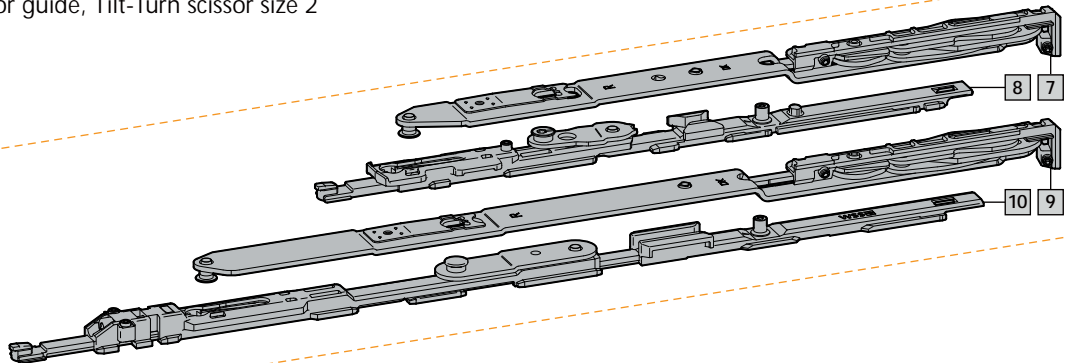
** A separable drive connector is always required in the case of a split link rod in conjunction with a gear handle, with or without horizontal centre locking.

¹ For further details, see page 4.

Attention: Please take note of the ratio of leaf size to leaf weight as outlined in our application diagram on page 9.

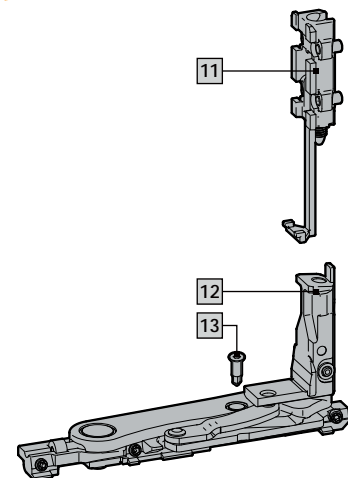
C Scissors:

- 7 Scissor arm, Tilt-Turn scissor size 1, frame groove 10-12 or >12-14 mm
- 8 Scissor guide, Tilt-Turn scissor size 1
- 9 Scissor arm, Tilt-Turn scissor size 2, frame groove 10-12 or >12-14 mm
- 10 Scissor guide, Tilt-Turn scissor size 2



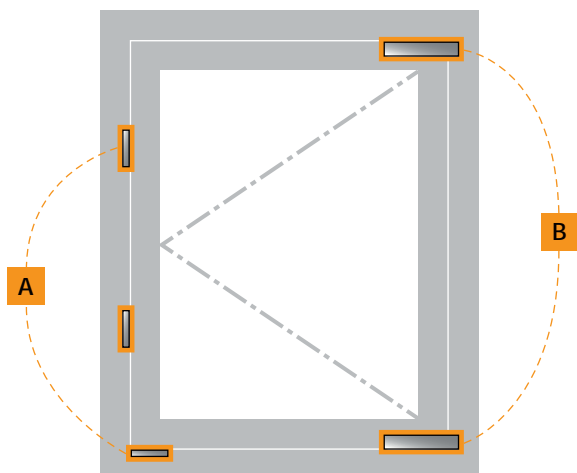
A Locking Side Kit:

- 1 Anti-jemmy device Tilt-Turn
- 2 Tilt bearing
- 3 Leaf ramp
- 4 Tilt lock bolt Tilt-Turn
- 5 Striker
- 6 Corner transmission with/without mishandling device



B Hinge Kit:

- 11 Corner hinge
- 12 Corner bearing, frame groove 10-12 or >12-14 mm
- 13 Special self-tapping screw



Turn Fitting

- Eurogroove 15/20 with 11.5 mm (12 mm) rebate space
- materials all non-rusting
- max. leaf weight: 170 kg

Adjustment range:

Turn hinge +1/-1,5 mm side adjustment
 Corner bearing +2/-1,5 mm side adjustment,
 +1,5/-1 mm height adjustment,
 ±1 mm pressure
 Locking cam ±1 mm pressure



A Locking Side Kit

Art.-N°	Version	PU
10.010.0500.000	Locking side kit Turn fitting >1,300 mm LW, A1	1
10.010.0600.000	Locking side kit Turn fitting >1,300 mm LW incl. horizontal centre locking, A2	1

B Hinge Kit

Art.-N°	Version	Groove ¹ mm	PU
10.020.0820.000	Hinge kit Turn fitting, RH	10-12	1
10.020.0830.000	Hinge kit Turn fitting, LH	10-12	1
10.020.9820.000	Hinge kit Turn fitting, RH	>12-14	1
10.020.9830.000	Hinge kit Turn fitting, LH	>12-14	1

Required accessories:

Concealed gear without mishandling device	Page 42
Gear handle	Page 44
Drive connector, single piece.....	Page 42
Drive connector, separable**	Page 42
Centre locking/additional locking*	Page 41
Concealed centre locking Style 180°*	Page 41
Support device >130 kg (opening angle 90° max.)	Page 40
Opening restrictor Style 180° >130 kg.....	Page 43
Opening restrictor, force absorbing Style 180° >130 kg ..	Page 43

Optional accessories:

Stroke limiter 90°	Page 42
Window handles	from Page 48
Anti-burglary components RC.....	from Page 55
Additional accessories	from Page 40

French window..... Page 38

Note:

Anti-burglar turn fittings Style 180° are available only as turn-/tilt fittings Style 180° with a rotation limit of 90°.

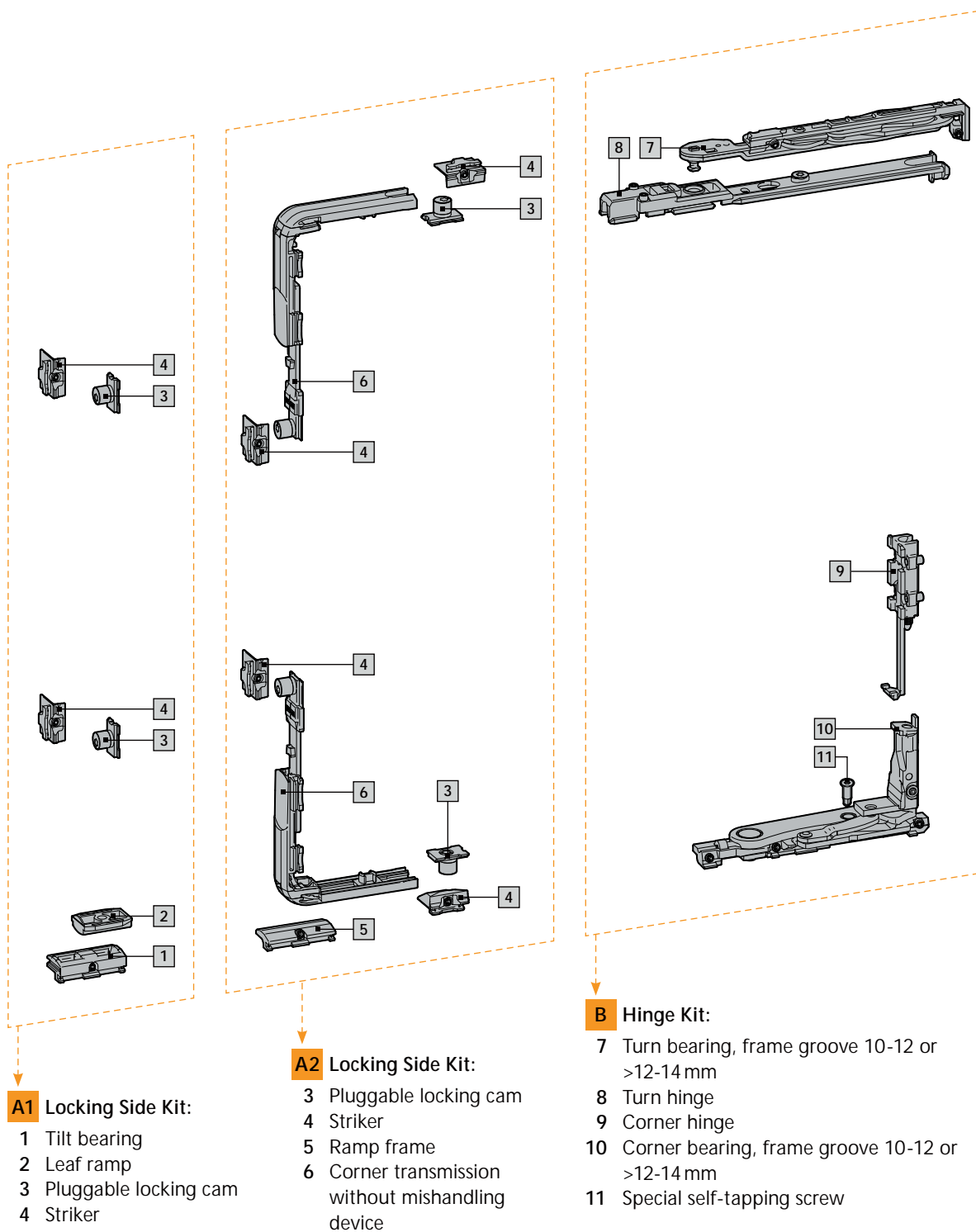
* The use of centre locking depends on the structure of the profile and the installation position.

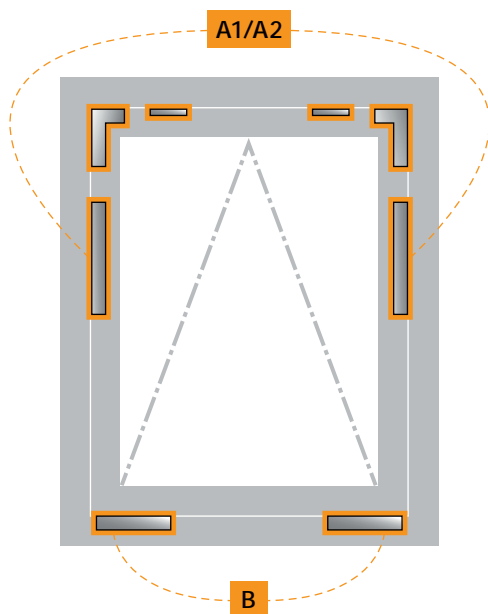
Recommended for leaf height/width from approx. 1,300 mm.

** A separable drive connector is always required in the case of a split link rod in conjunction with a gear handle, with or without horizontal centre locking.

¹ For further details, see page 4.

Attention: Please take note of the ratio of leaf size to leaf weight as outlined in our application diagram on page 9.





Tilt Fitting

- Eurogroove 15/20 with 11.5 mm (12 mm) rebate space
- materials all non-rusting
- max. leaf weight: 130kg

Adjustment range:

Turn bearing.....±1 mm pressure

Turn hinge.....+1/-1,5 mm height adjustment

Locking cam.....±1 mm pressure



A Locking Side Kit

Art.-N°	Version	PU
10.010.0700.000	Locking side kit, horizontal operation <1,300 LH, A1	1
10.010.0900.000	Locking side kit, vertical operation, incl. vertical centre lock, A2	1

B Hinge Kit

Art.-N°	Version	Groove ¹ mm	PU
10.020.1100.000	Hinge kit Tilt fitting	10-12	1
10.020.9100.000	Hinge kit Tilt fitting	>12-14	1

Required accessories:

Concealed gear without mishandling device	Page 42
Gear handle	Page 44
Drive connector, single piece.....	Page 42
Drive connector, separable**	Page 42
Centre locking/additional locking*	Page 41
Concealed centre locking Style 180°*	Page 41

Optional accessories:

Stroke limiter 90°	Page 42
Window handles	from Page 48
Anti-burglary components RC.....	from Page 55
Additional accessories	from Page 40

Note:

* The use of centre locking depends on the structure of the profile and the installation position.

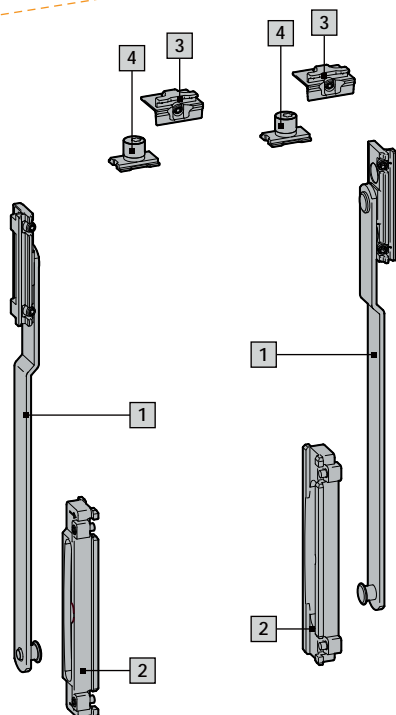
Recommended for leaf width from approx. 1,300 mm.

** A separable drive connector is always required in the case of a split link rod in conjunction with a gear handle.

¹ For further details, see page 4.

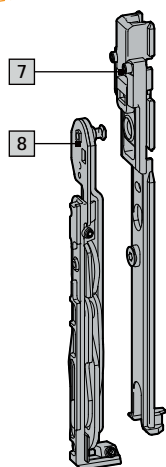
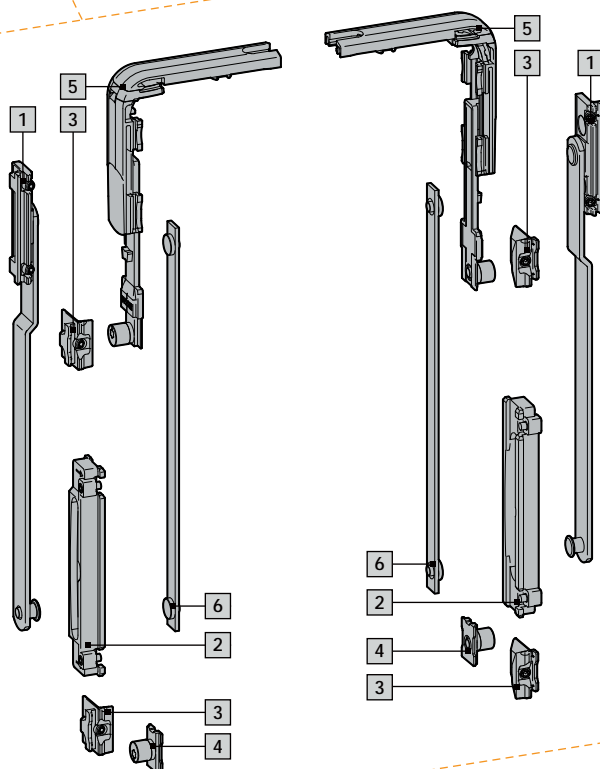
A1 Locking Side Kit:

- 1 Tilt scissors arm
- 2 Tilt scissors guide
- 3 Striker
- 4 Pluggable locking cam



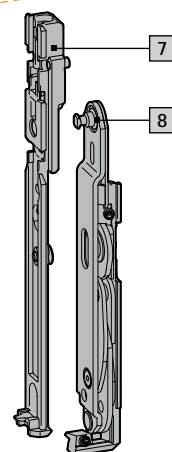
A2 Locking Side Kit:

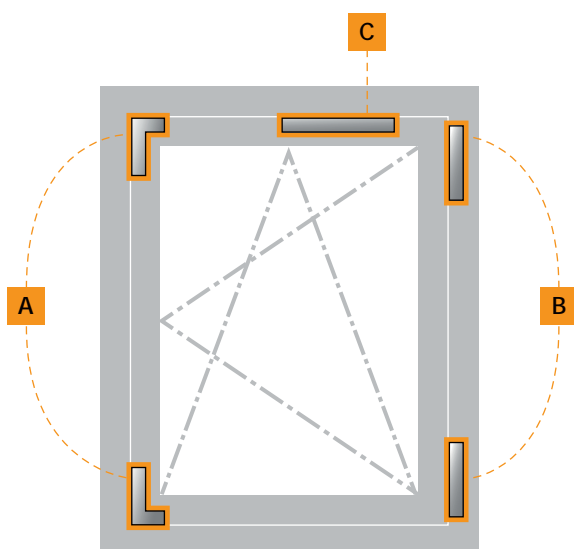
- 1 Tilt scissors arm
- 2 Tilt scissors guide
- 3 Striker
- 4 Pluggable locking cam
- 5 Corner transmission without mishandling device
- 6 Connecting rod



B Hinge Kit:

- 7 Turn hinge
- 8 Turn bearing, frame groove 10-12 or >12-14 mm





Turn-Tilt Fitting

- Eurogroove 15/20 with 11.5 mm (12 mm) rebate space
- materials all non-rusting
- max. leaf weight: 200 kg

Adjustment range:

Scissor ± 2 mm side adjustment
 Corner hinge +1.5/-1 mm height adjustment
 Locking cam ± 1 mm pressure



A Locking Side Kit

Art.-N°	Version	PU
10.010.1100.000	Locking side kit Turn-Tilt/Tilt-Turn with mish. dev.	1

B Hinge Kit

Art.-N°	Version	PU
10.020.1120.---	Hinge kit Turn-Tilt/Tilt-Turn, RH	1
10.020.1130.---	Hinge kit Turn-Tilt/Tilt-Turn, LH	1

C Scissor

Art.-N°	Version	PU
10.030.0900.000	Turn-Tilt scissor, RH/LH	1

Surface Key

Material/Finish

---.114	Al E6/C-0 silver anodized
---.255	Al RAL 9016 powder coat
---.299	Al special colour powder coat

Required accessories:

Concealed gear with mishandling device.....	Page 42
Concealed gear without mishandling device	Page 42
Gear handle	Page 44
Drive connector, separable**	Page 42
2nd scissor Turn-Tilt for leaf widths >1.100 mm	Page 40
Corner transmission and centre locking >1,300 mm* ...	Page 40
Centre locking/additional locking*	Page 41

Optional accessories:

Window handles	from Page 48
Anti-burglary components RC.....	from Page 55
Additional accessories	from Page 40

French window..... Page 38

Note:

* The use of centre locking depends on the structure of the profile and the installation position.

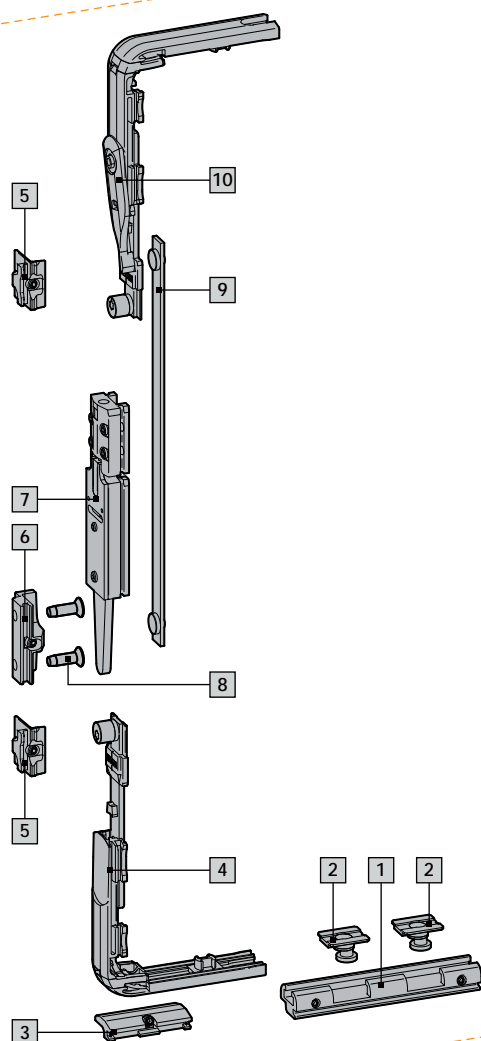
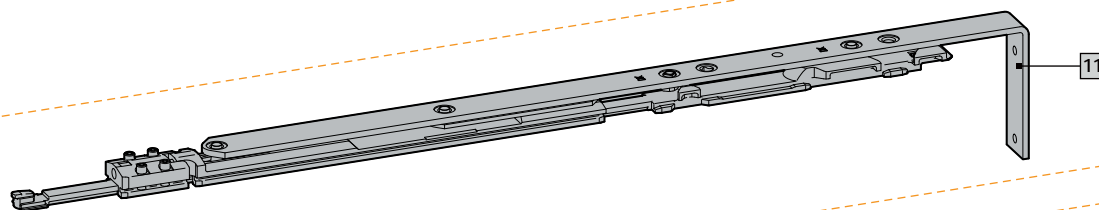
Recommended for leaf height/width from approx. 1,300 mm.

** A separable drive connector is always required in the case of a split link rod in conjunction with a gear handle.

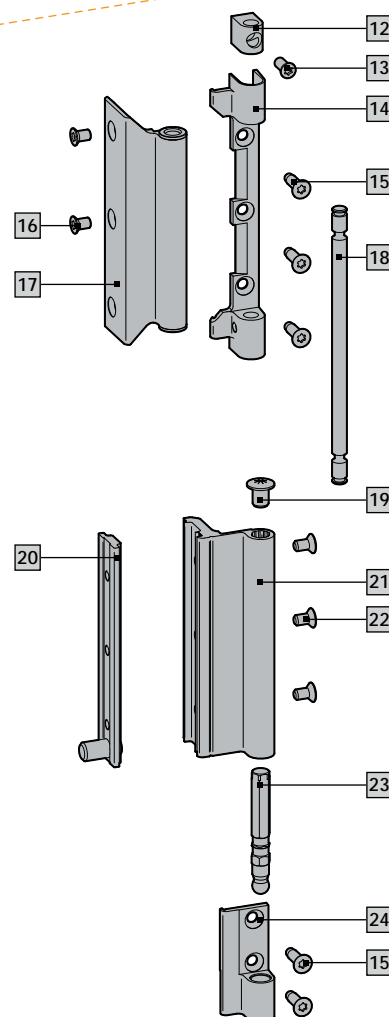
Attention: Please take note of the ratio of leaf size to leaf weight as outlined in our application diagram on page 10.

C Scissor:

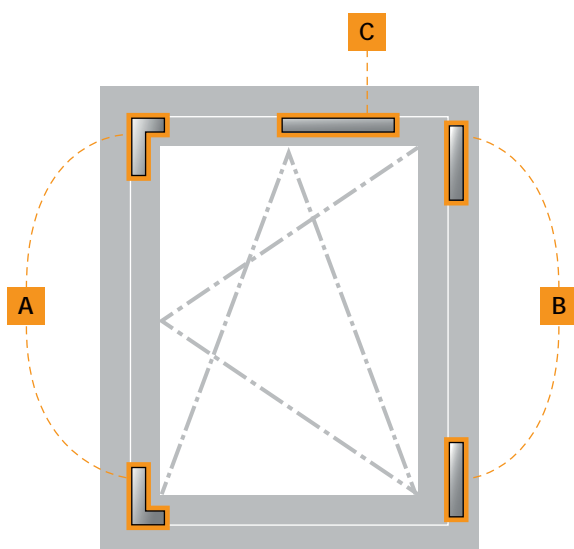
11 Turn-Tilt scissor

**A Locking Side Kit:**

- | | |
|--|--|
| 1 Tilt bearing Heavy Duty | 7 Frame bracket |
| 2 Tilt lock bolt pin | 8 Countersunk screw M5x16 |
| 3 Ramp frame | 9 Connecting rod |
| 4 Corner transmission without mishandling device | 10 Corner transmission with/without mishandling device |
| 5 Striker | |
| 6 Frame bracket, leaf lever | |

**B Hinge Kit:**

- | | |
|--|---------------------------------|
| 12 Counter bearing | 20 Clamping bar |
| 13 Special screw for counter bearing (mini head) | 21 Corner hinge |
| 14 Scissor bearing | 22 Countersunk screw M5x9, blue |
| 15 Countersunk screw M5x16 | 23 Corner bearing pin |
| 16 Countersunk screw M5x8, red | 24 Corner bearing |
| 17 Scissor hinge | |
| 18 Hinge pin | |
| 19 End cap corner hinge | |



Tilt-Turn Fitting

- Eurogroove 15/20 with 11.5 mm (12 mm) rebate space
- materials all non-rusting
- max. leaf weight: 200 kg

Adjustment range:

Scissor ± 2 mm side adjustment
 Corner hinge $+1.5/-1$ mm height adjustment
 Locking cam ± 1 mm pressure



A Locking Side Kit

Art.-N°	Version	PU
10.010.1100.000	Locking side kit Turn-Tilt/Tilt-Turn with mish. dev.	1

B Hinge Kit

Art.-N°	Version	PU
10.020.1120.---	Hinge kit Turn-Tilt/Tilt-Turn, RH	1
10.020.1130.---	Hinge kit Turn-Tilt/Tilt-Turn, LH	1

C Scissor

Art.-N°	Version	PU
10.030.1000.000	Tilt-Turn scissor, RH/LH	1

Surface Key

Material/Finish

---.114	Al E6/C-0 silver anodized
---.255	Al RAL 9016 powder coat
---.299	Al special colour powder coat

Required accessories:

Concealed gear with mishandling device.....	Page 42
Concealed gear without mishandling device	Page 42
Gear handle	Page 46
Drive connector, separable**	Page 42
2nd scissor Tilt-Turn for leaf widths >1.100 mm	Page 40
Corner transmission and centre locking >1,300 mm* ...	Page 40
Centre locking/additional locking*	Page 41

Optional accessories:

Window handles	from Page 47
Anti-burglary components RC.....	from Page 55
Additional accessories	from Page 40

French window..... Page 38

Note:

* The use of centre locking depends on the structure of the profile and the installation position.

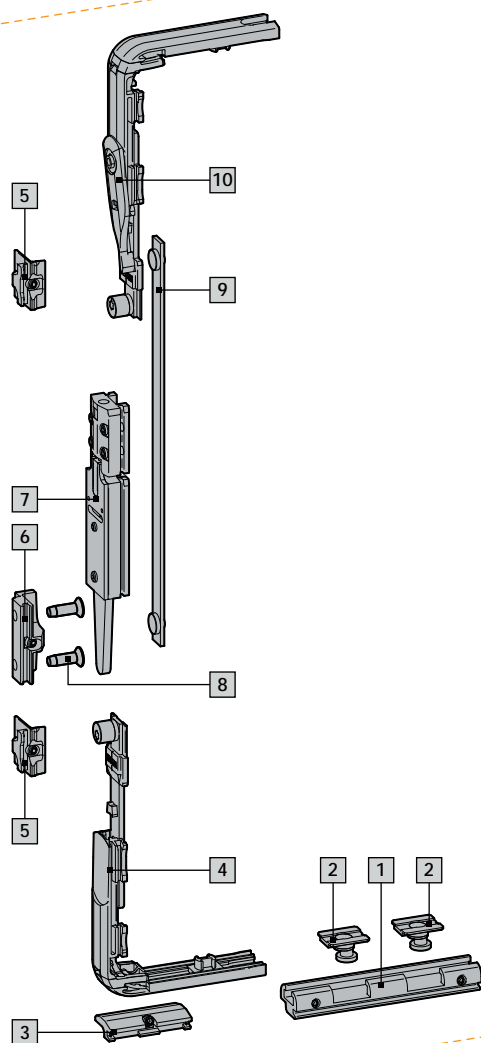
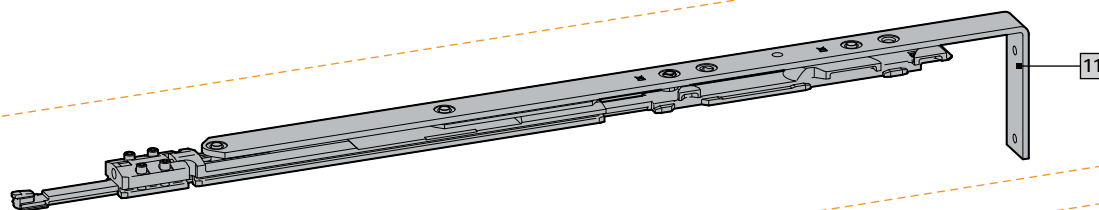
Recommended for leaf height/width from approx. 1,300 mm.

** A separable drive connector is always required in the case of a split link rod in conjunction with a gear handle.

Attention: Please take note of the ratio of leaf size to leaf weight as outlined in our application diagram on page 10.

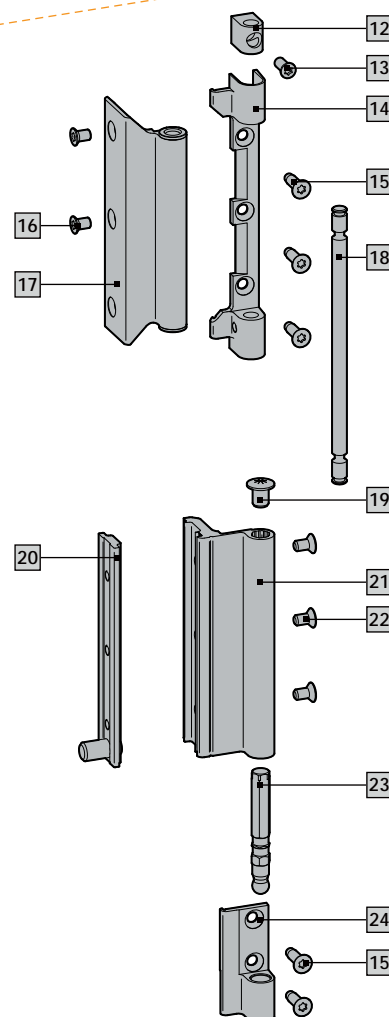
C Scissor:

11 Tilt-Turn scissor



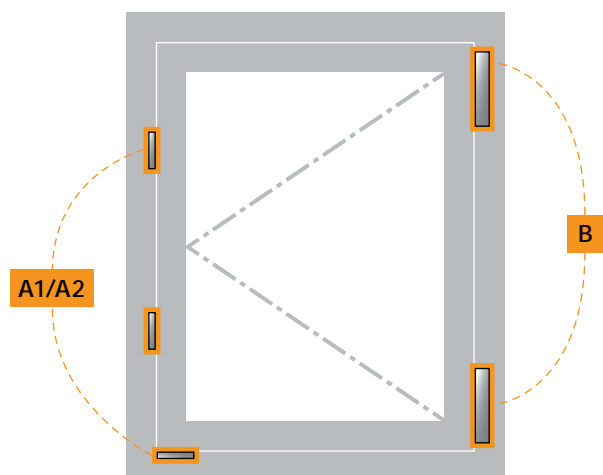
A Locking Side Kit:

- | | |
|--|--|
| 1 Tilt bearing Heavy Duty | 7 Frame bracket |
| 2 Tilt lock bolt pin | 8 Countersunk screw M5x16 |
| 3 Ramp frame | 9 Connecting rod |
| 4 Corner transmission without mishandling device | 10 Corner transmission with/without mishandling device |
| 5 Striker | |
| 6 Frame bracket, leaf lever | |



B Hinge Kit:

- | | |
|--|---------------------------------|
| 12 Counter bearing | 20 Clamping bar |
| 13 Special screw for counter bearing (mini head) | 21 Corner hinge |
| 14 Scissor bearing | 22 Countersunk screw M5x9, blue |
| 15 Countersunk screw M5x16 | 23 Corner bearing pin |
| 16 Countersunk screw M5x8, red | 24 Corner bearing |
| 17 Scissor hinge | |
| 18 Hinge pin | |
| 19 End cap corner hinge | |



Turn Fitting

- Eurogroove 15/20 with 11.5 mm (12 mm) rebate space
- materials all non-rusting
- max. leaf weight: 250 kg

Adjustment range:

Corner hinge +1.5/-1 mm height adjustment

Locking cam ±1 mm pressure



A Locking Side Kit

Art.-N°	Version	PU
10.010.1300.000	Locking side kit Turn fitting, A1	1
10.010.1400.000	Locking side kit Turn fitting incl. horizontal centre locking, A2	1

B Hinge Kit

Art.-N°	Version	PU
10.020.1220.---	Hinge kit Turn fitting, RH	1
10.020.1230.---	Hinge kit Turn fitting, LH	1

Surface Key	Material/Finish
---.114	Al E6/C-0 silver anodized
---.255	Al RAL 9016 powder coat
---.299	Al special colour powder coat

Required accessories:

Concealed gear with mishandling device.....	Page 42
Concealed gear without mishandling device	Page 42
Gear handle	Page 44
Drive connector, single piece.....	Page 42
Drive connector, separable**	Page 42
Centre locking/additional locking*	Page 41
Centre hinge Heavy Duty*	Page 41

Optional accessories:

Stroke limiter 90°	Page 42
Window handles	from Page 48
Anti-burglary components RC.....	from Page 55
Additional accessories	from Page 40

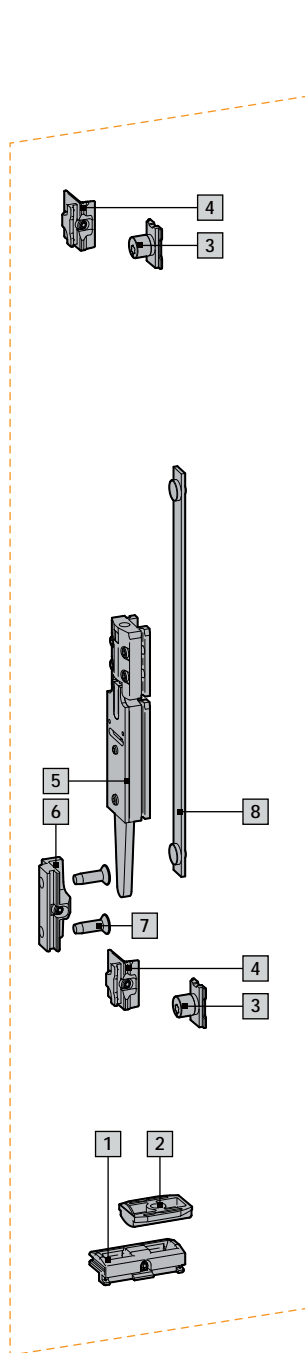
French window..... Page 38

Note:

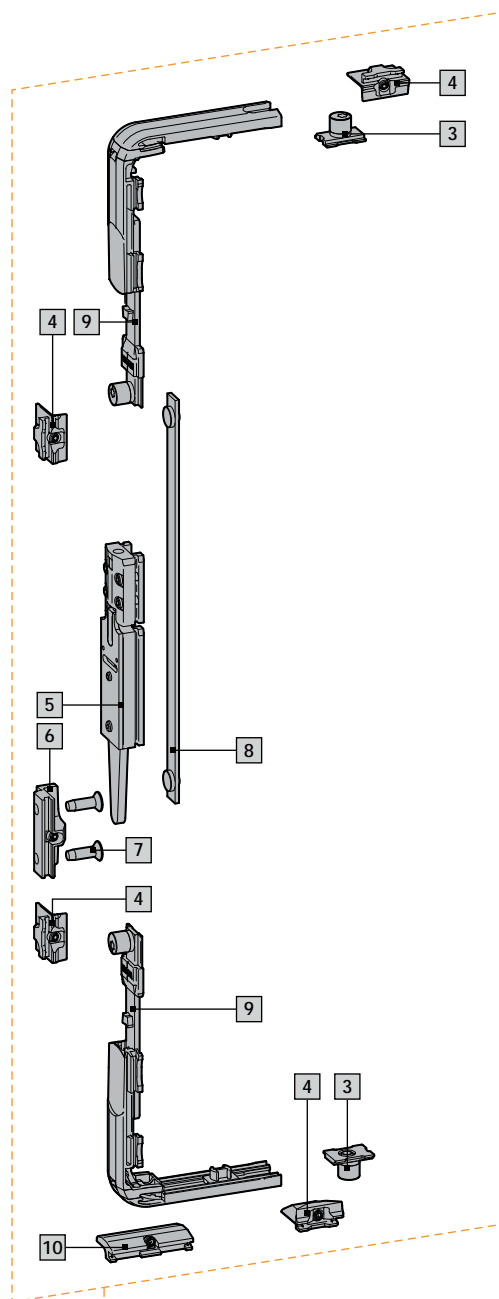
* The use of centre locks/centre hinges will depend on the structure of the profile and the installation position. Recommended for leaf height/width from approx. 1,300 mm.

** A separable drive connector is always required in the case of a split link rod in conjunction with a gear handle, with or without horizontal centre locking.

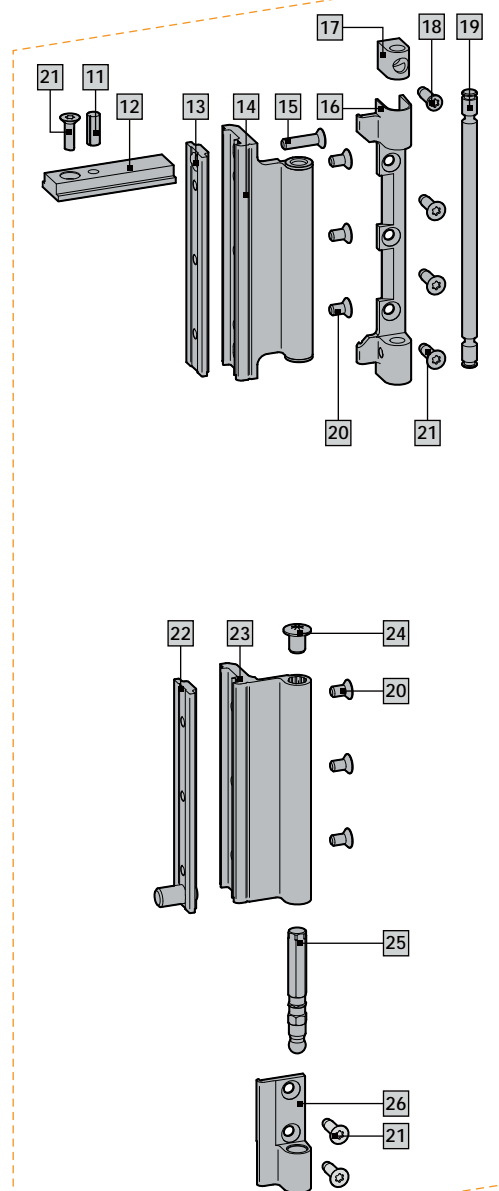
Attention: Please take note of the ratio of leaf size to leaf weight as outlined in our application diagram on page 10.

**A1 Locking Side Kit:**

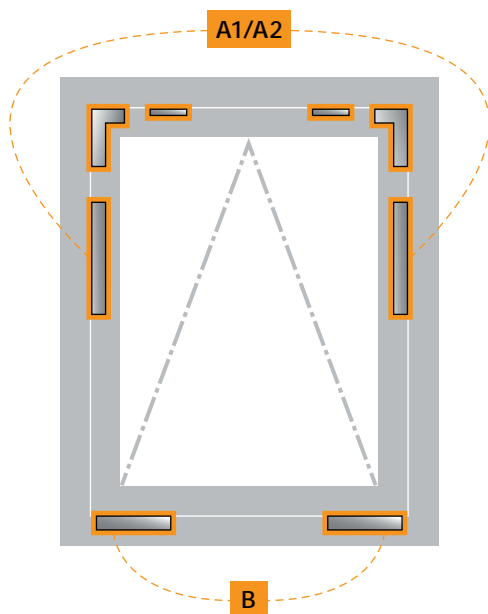
- 1 Tilt bearing
- 2 Leaf ramp
- 3 Pluggable locking cam
- 4 Striker
- 5 Frame bracket
- 6 Frame bracket, leaf lever
- 7 Countersunk screw M5x16
- 8 Connecting rod

**A2 Locking Side Kit:**

- 3 Pluggable locking cam
- 4 Striker
- 5 Frame bracket
- 6 Frame bracket, leaf lever
- 7 Countersunk screw M5x16
- 8 Connecting rod
- 9 Corner transmission without mishandling device
- 10 Ramp frame

**B Hinge Kit:**

- 11 Grooved pin
- 12 Clamp block
- 13 Clamping bar
- 14 Turn hinge
- 15 Countersunk screw M5x20
- 16 Scissor bearing
- 17 Counter bearing
- 18 Special screw for counter bearing (mini head)
- 19 Hinge pin
- 20 Countersunk screw M5x9, blue
- 21 Countersunk screw M5x16
- 22 Clamping bar
- 23 Corner hinge
- 24 End cap corner hinge
- 25 Corner bearing pin
- 26 Corner bearing



Tilt Fitting

- Eurogroove 15/20 with 11.5 mm (12 mm) rebate space
- RH or LH
- materials all non-rusting
- max. leaf weight: 200 kg

Adjustment range:

Locking cam ± 1 mm pressure

**A** Locking Side Kit

Art.-N°	Version	PU
10.010.0700.000	Locking side kit, horizontal operation <1,300 LH, A1	1
10.010.0900.000	Locking side kit, vertical operation, incl. vertical centre lock, A2	1

B Hinge Kit

Art.-N°	Version	PU
10.020.1300.---	Hinge kit Tilt fitting	1

Surface Key	Material/Finish
---.114	Al E6/C-0 silver anodized
---.255	Al RAL 9016 powder coat
---.299	Al special colour powder coat

Required accessories:

C concealed gear without mishandling device	Page 42
Gear handle	Page 44
Drive connector, single piece.....	Page 42
Drive connector, separable**	Page 42
Centre locking/additional locking*	Page 41
Centre hinge Heavy Duty*	Page 41

Optional accessories:

Stroke limiter 90°	Page 42
Mishandling device for gear handle.....	Page 42
Window handles	from Page 48
Anti-burglary components RC.....	from Page 55
Additional accessories	from Page 40

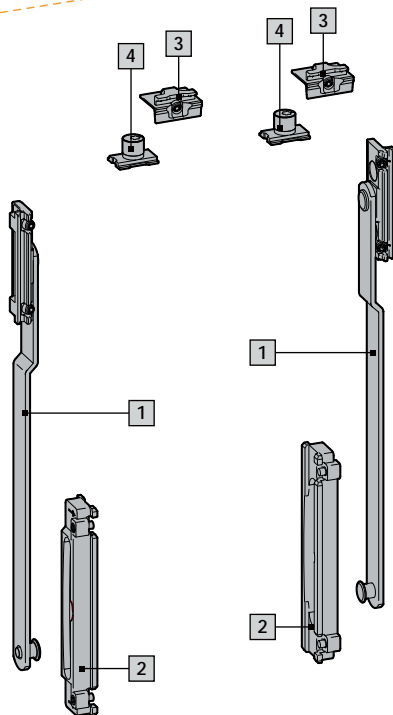
Note:

* The use of centre locks/centre hinges will depend on the structure of the profile and the installation position.
Recommended for leaf height/width from approx. 1,300?mm.

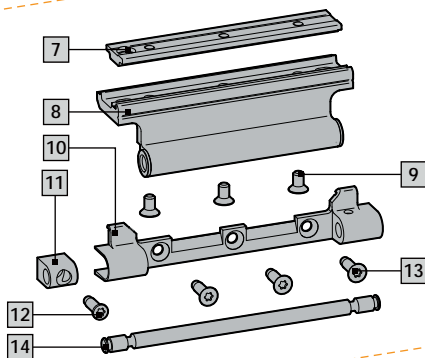
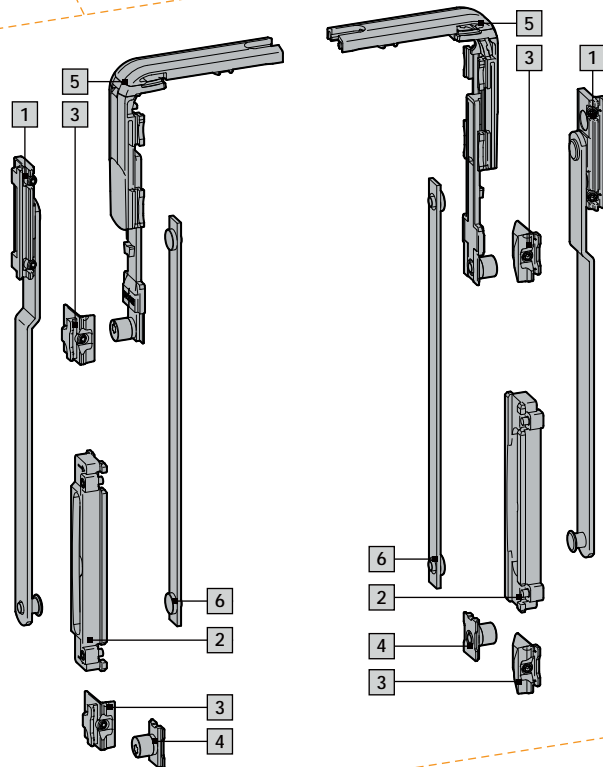
** A separable drive connector is always required in the case of a split link rod in conjunction with a gear handle.

A1 Locking Side Kit:

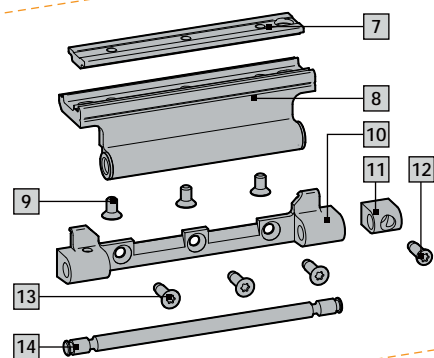
- 1 Tilt scissors arm
- 2 Tilt scissors guide
- 3 Striker
- 4 Pluggable locking cam

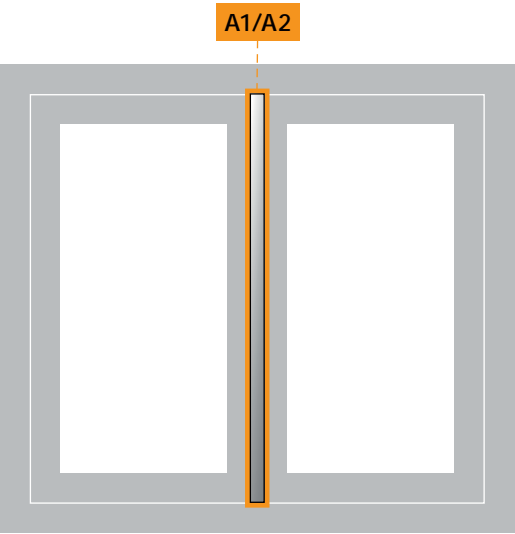
**A2 Locking Side Kit:**

- 1 Tilt scissors arm
- 2 Tilt scissors guide
- 3 Striker
- 4 Pluggable locking cam
- 5 Corner transmission without mishandling device
- 6 Connecting rod

**B Hinge Kit:**

- | | |
|--------------------------------|--|
| 7 Clamping bar | 12 Special screw for counter bearing (mini head) |
| 8 Turn hinge | 13 Countersunk screw M5x16 |
| 9 Countersunk screw M5x9, blue | 14 Hinge pin |
| 10 Scissor bearing | |
| 11 Counter bearing | |





French Window

- Eurogroove 15/20 with 11.5 mm (12 mm) rebate space
- RH or LH
- materials all non-rusting

Adjustment range:
Tilt bearing.....±1 mm pressure



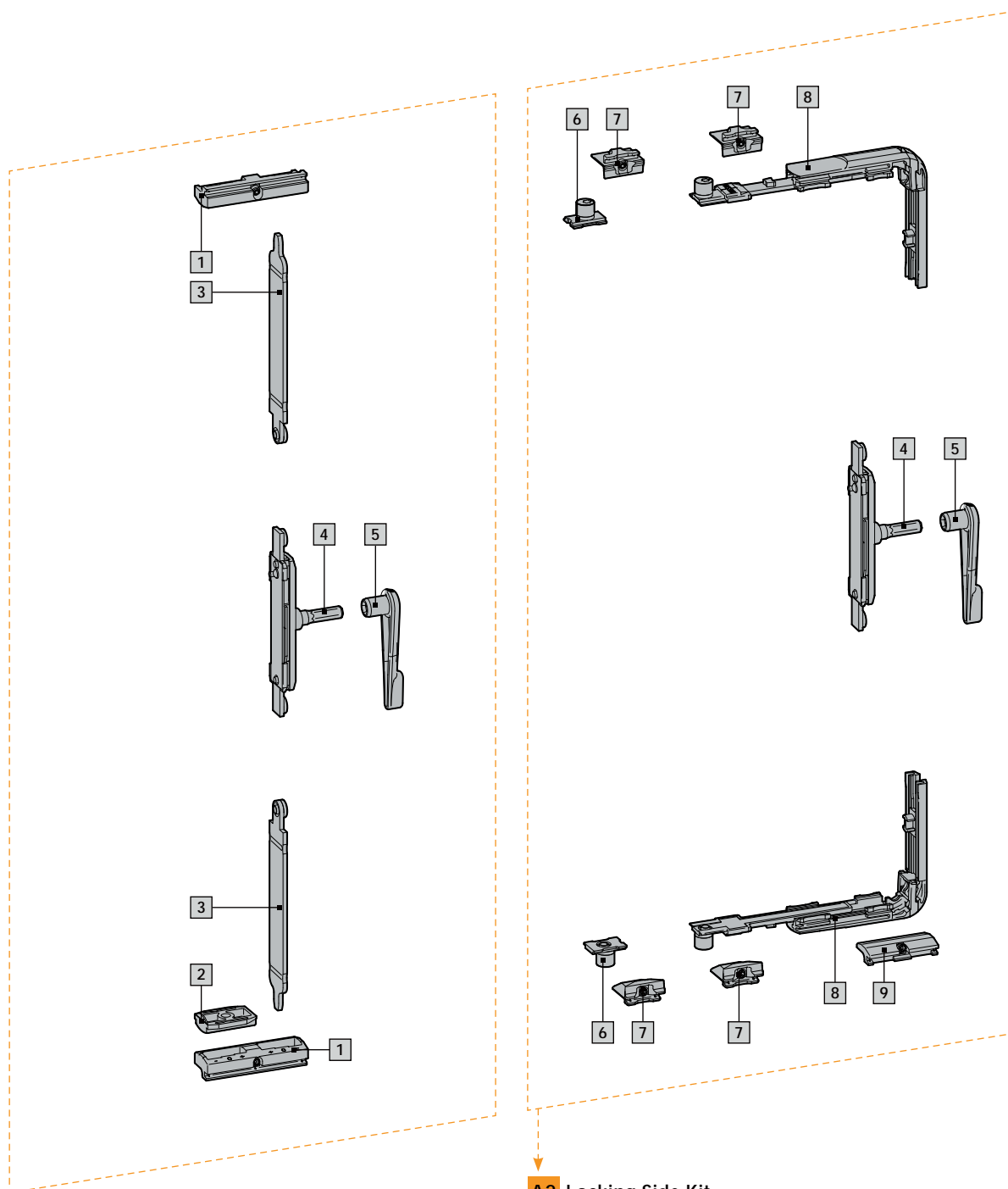
A Locking Side Kit

Art.-N°	Version	PU
10.010.1000.000	Locking side kit for french window, A1, < 1,300mm leaf width	1
10.010.2000.000	Locking side kit for french window incl. horizontal centre locking, A2, > 1,300mm leaf width*	1

For hinge sides, see:
Hinge kit B1 + B2, Standard Turn fitting..... Page 18
Hinge kit B, Style 180° Turn fitting..... Page 26
Hinge kit B, Heavy Duty Turn fitting Page 34

Additional accessoriesfrom Page 40

Note:
* Locking side kit A2 for leaf height/width > approx. 1,300mm.

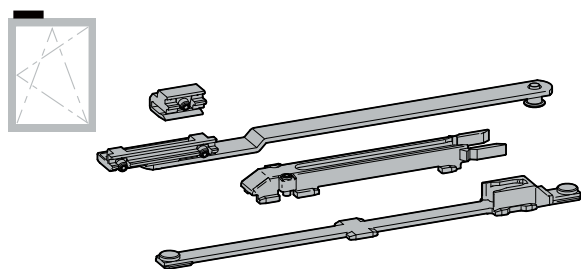


A1 Locking Side Kit:

- 1 Tilt bearing
- 2 Leaf ramp
- 3 French window bolt
- 4 Espagnolette gear
- 5 Lever handle

A2 Locking Side Kit:

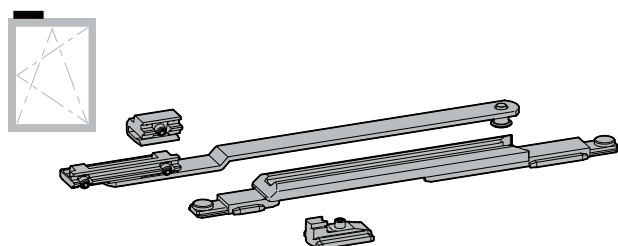
- 4 Espagnolette gear
- 5 Lever handle
- 6 Pluggable locking cam
- 7 Striker
- 8 Corner transmission without mishandling device
- 9 Ramp frame



2nd Scissor Turn-Tilt

- required for leaf width $\geq 1,300$ mm for Turn-Tilt fittings Standard and Style 180°
- required for leaf width $\geq 1,100$ mm for Turn-Tilt fittings Heavy Duty

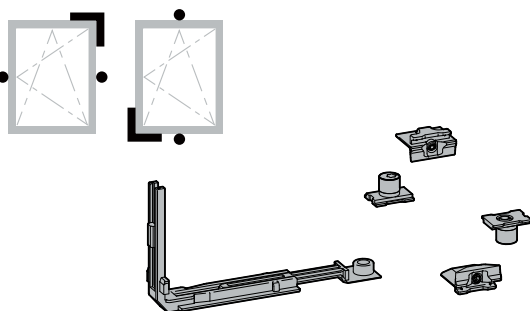
Art.-N°	Material/Finish
10.030.1100.701	Zinc cast raw



2nd Scissor Tilt-Turn

- required for leaf width $\geq 1,300$ mm for Tilt-Turn fittings Standard and Style 180°
- required for leaf width $\geq 1,100$ mm for Tilt-Turn fittings Heavy Duty

Art.-N°	Material/Finish
10.030.1200.701	Zinc cast raw



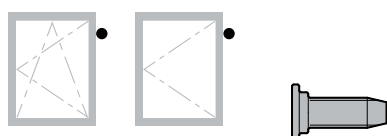
Corner transmission and Centre Locking

- for Standard, Style and Heavy Duty
- recommended for leaf width/height $\geq 1,300$ mm
- pressure adjustment ± 1 mm via locking point possible

Kit consists of:

- Corner transmission centre locking, 1x
- Closing angle, complete, 2x
- Locking point, complete, 2x

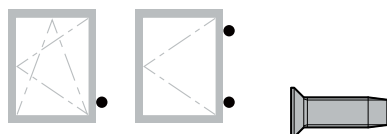
Art.-N°	Material/Finish
10.040.0500.701	Zinc cast raw



Special Screw >100 kg

- for Turn-Tilt, Tilt-Turn and Turn fittings Standard with adjustable turn leaf hinge
- for scissor bearing

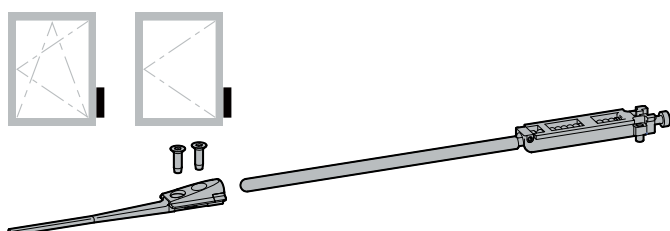
Art.-N°	Material/Finish	PU
10.040.0101.405	304 mill finish	10



Special Countersunk Screw

- for corner bearing Standard >130 kg
- for turn bearing Standard >100 kg

Art.-N°	Material/Finish	PU
10.040.0201.405	304 mill finish	10



Support Device >130 kg

- for Turn-Tilt, Tilt-Turn and Turn fitting Style 180° (opening angle 90° max.)

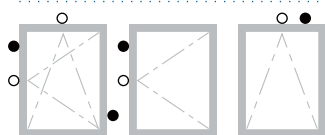
Art.-N°	Material/Finish
10.040.0300.701	Zinc cast raw

Note:

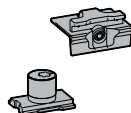


An opening restrictor is required if using support device!

Please see page 62 for installation position of support device.



- Centre locking
- Additional locking



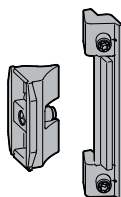
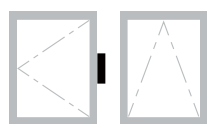
Centre Locking/Additional Locking*

- Centre locking for all types of opening
- for Standard, Style 180° and Heavy Duty
- pressure adjustment ± 1 mm possible via locking point

Kit consists of:

- Closing angle, 1x
- Locking point, pluggable, 1x

Art.-N°	Material/Finish
10.040.1600.701	Zinc cast raw



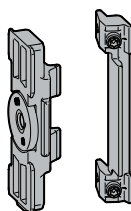
Concealed Centre Locking Standard*

- Centre locking for Turn- or Tilt leaves
- required for adjustable hinge side

Kit consists of:

- Frame bracket, 1x
- Leaf bracket, 1x

Art.-N°	Material/Finish
10.040.1800.701	Zinc cast raw



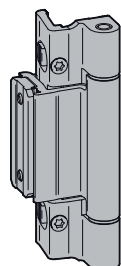
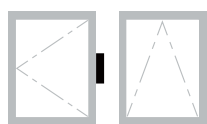
Concealed Centre Locking Style 180°*

- Centre locking, adjustable, for turn- or tilt leaves

Kit consists of:

- Frame bracket, 1x
- Leaf bracket, 1x

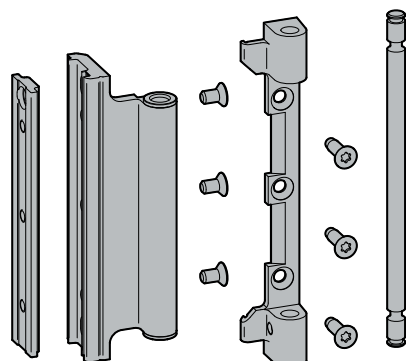
Art.-N°	Material/Finish
10.040.2200.701	Zinc cast raw



Turn Bearing/Centre Hinge Standard*

- as centre hinge for Turn- or Tilt leaves
- cannot be used with adjustable hinge side

Art.-N°	Clamping bar	Material/Finish
10.040.0600.114	KL1	Al E6/C-0 silver anod.
10.040.0600.255	KL1	Al RAL 9016 powder coat
10.040.0600.299	KL1	Al special colour powder coat
10.040.0700.114	KL2	Al E6/C-0 silver anod.
10.040.0700.255	KL2	Al RAL 9016 powder coat
10.040.0700.299	KL2	Al special colour powder coat

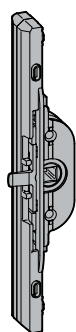


Centre Hinge Heavy Duty*

- Centre hinge for Turn- or Tilt leaves

Art.-N°	Material/Finish
10.040.1000.114	Al E6/C-0 silver anod.
10.040.1000.255	Al RAL 9016 powder coat
10.040.1000.299	Al special colour powder coat

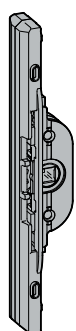
*The use of centre hinges will depend on the structure of the profile and the installation position.
Recommended for leaf height/width from approx. 1,300mm.



Concealed Gear with Mishandling Device

- for Turn-Tilt, Tilt-Turn, Turn and Tilt fittings
- for Standard, Style 180° and Heavy Duty
- max. torque 10Nm acc.to RAL
- stroke 38mm

Art.-N°	Material/Finish
10.040.2600.701	Zinc cast raw



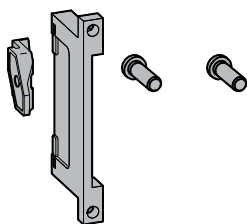
Concealed Gear without Mishandling Device

- for Turn-Tilt, Tilt-Turn, Turn and Tilt fittings
- for Standard, Style 180° and Heavy Duty
- max. torque 10Nm acc.to RAL
- stroke 38mm

Art.-N°	Material/Finish
10.040.3000.701	Zinc cast raw

Note:

When used with Turn-Tilt or Tilt-Turn fittings the mishandling device must be included in the locking side kit.



Mishandling Device for Gear Handles

- available on request, please provide details of profile series
- with clampable, frame-side stop

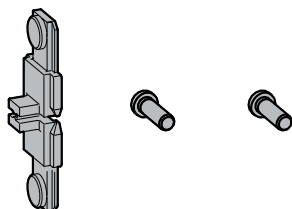
Art.-N°	Material/Finish
10.345.-----710	Zinc cast raw



Drive Connector, single piece

- for all types of fitting with gear handle
- including 2 lense head screws for gear handle

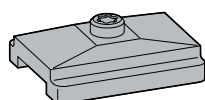
Art.-N°	Material/Finish
10.040.4000.701	Zinc cast raw



Drive Connector, separable

- for all types of fitting with gear handle
- required when using a second, bottom corner transmission at the handle side
- including 2 lense head screws for gear handle

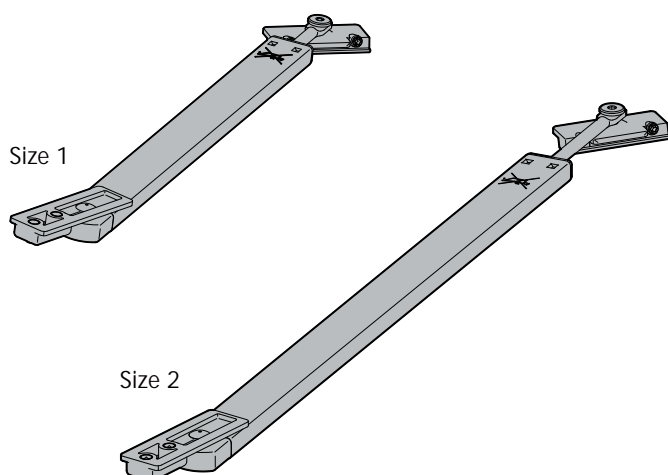
Art.-N°	Material/Finish
10.040.4400.701	Zinc cast raw



Stroke Limiter 90°

- for Turn or Tilt fitting
- for Standard, Style 180° and Heavy Duty
- limits the stroke and stops the handle at a 90° turn.
- includes fixing screw

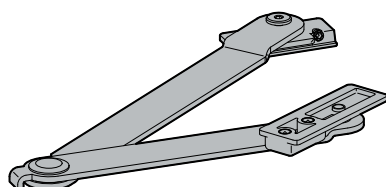
Art.-N°	Material/Finish
10.040.4800.701	Zinc cast raw



Opening Restrictor, force absorbing Standard / Heavy Duty

- Opening angle 90°
- for Standard and Heavy Duty
- relieves the load off the hinges by force-absorbing effect in the open position (stop position)
- reduces movement of the leaf
- non-rusting materials: housing aluminium E6/C-0 anodised, stainless steel piston rod
- maintenance-free
- RH and LH usable
- frame and leaf bracket clampable

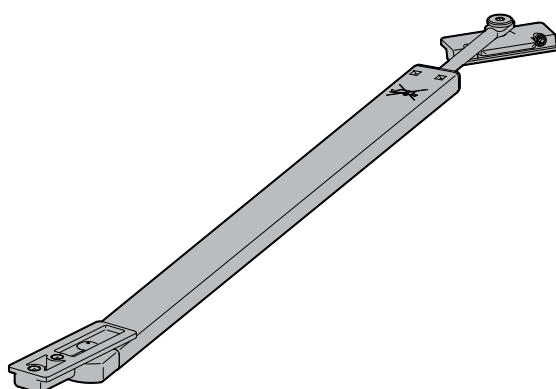
Art.-N°	Size	Leaf width	Material/Finish
10.041.0100.114	1	460- 999	Al E6/C-0 silver anod.
10.041.0400.114	2	1.000-1.700	Al E6/C-0 silver anod.



Opening Restrictor Style 180°

- Opening angle 90°
- non-rusting materials
- RH and LH usable
- frame and leaf bracket clampable

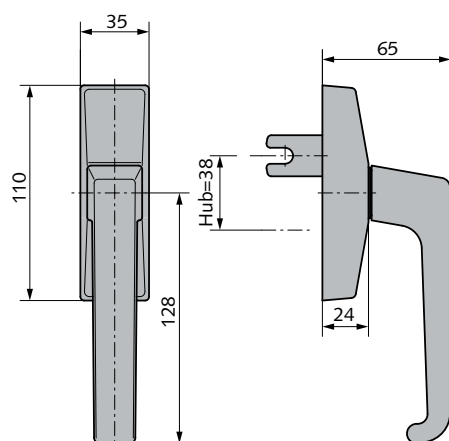
Art.-N°	Leaf width	Material/Finish
10.041.5000.405	410- 699	304 mill finish



Opening Restrictor, force absorbing Style 180°

- Opening angle 90°
- non-rusting materials
- RH and LH usable
- frame and leaf bracket clampable

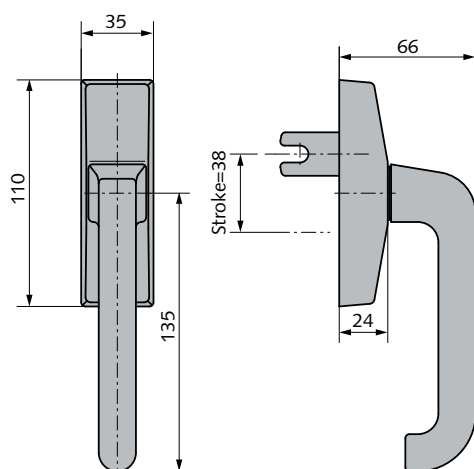
Art.-N°	Leaf width	Material/Finish
10.041.5400.114	700-1.600	Al E6/C-0 silver anod.



Gear Handle, angular handle

- RH and LH usable
- 24 mm fork projection
- max. torque 10Nm acc.to RAL

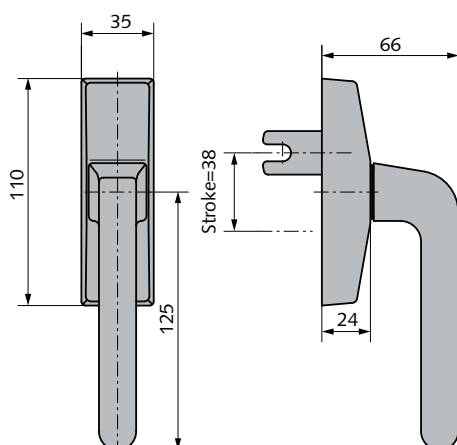
Art.-N°	Material/Finish
10.180.0024.112	Al E4/C-0 silver anod.
10.180.0024.255	Al RAL 9016 powder coat
10.180.0024.299	Al special colour powder coat



Gear Handle, round handle, curved

- RH and LH usable
- 24 mm fork projection
- max. torque 10Nm acc.to RAL

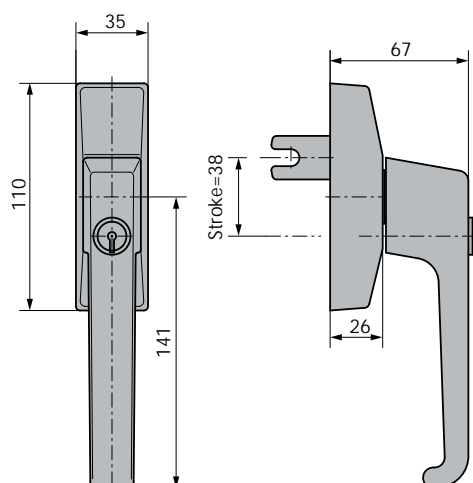
Art.-N°	Material/Finish
10.181.0024.112	Al E4/C-0 silver anod.
10.181.0024.255	Al RAL 9016 powder coat
10.181.0024.299	Al special colour powder coat



Gear Handle, round handle, straight

- RH and LH usable
- 24 mm fork projection
- max. torque 10Nm acc.to RAL

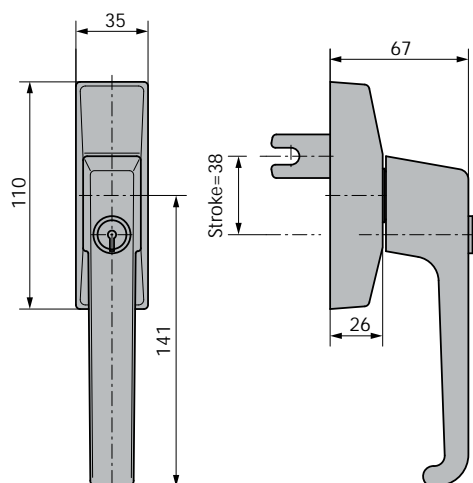
Art.-N°	Material/Finish
10.182.0024.112	Al E4/C-0 silver anod.
10.182.0024.255	Al RAL 9016 powder coat
10.182.0024.299	Al special colour powder coat



Gear Handle, lockable

- same keyway, keys 2x
- RH and LH usable
- 24 mm fork projection
- max. torque 10Nm acc.to RAL

Art.-N°	Material/Finish
10.190.0024.112	Al E4/C-0 silver anod.
10.190.0024.255	Al RAL 9016 powder coat
10.190.0024.299	Al special colour powder coat

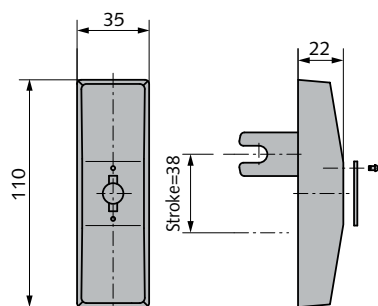


Gear Handle, lockable, RC2 tested



- same keyway, keys 2x
- with anti-jemmy protection
- RC2 tested acc.to EN 1627
- RH and LH usable
- 24 mm fork projection
- max. torque 10Nm acc.to RAL

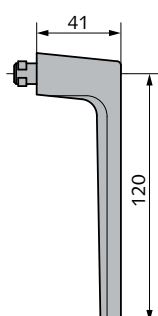
Art.-N°	Material/Finish
10.190.1024.112	Al E4/C-0 silver anod.
10.190.1024.255	Al RAL 9016 powder coat
10.190.1024.299	Al special colour powder coat



Socket Handle Drive

- RH and LH usable
- 24 mm fork projection
- max. torque 10Nm acc.to RAL

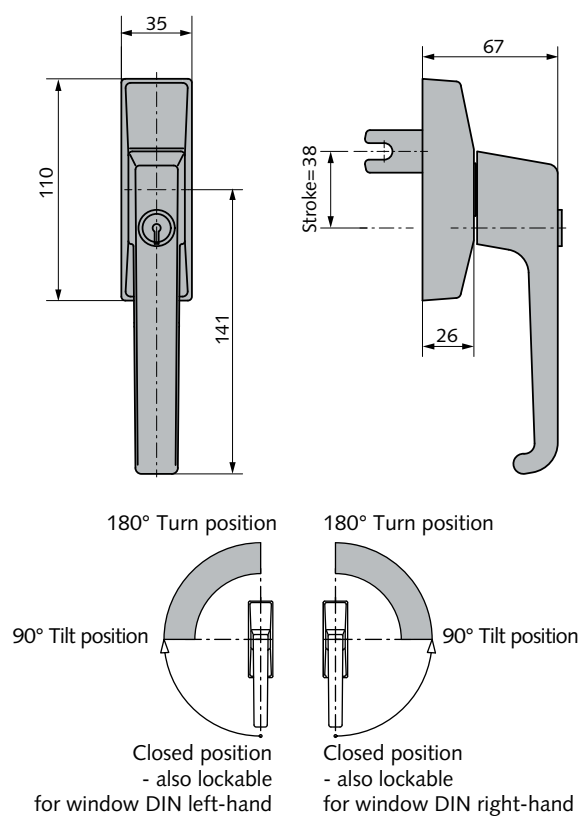
Art.-N°	Material/Finish
10.191.0024.112	Al E4/C-0 silver anod.
10.191.0024.255	Al RAL 9016 powder coat
10.191.0024.299	Al special colour powder coat



Socket Handle

- for socket handle drive

Art.-N°	Material/Finish
10.192.0000.112	Al E4/C-0 silver anod.
10.192.0000.255	Al RAL 9016 powder coat
10.192.0000.299	Al special colour powder coat



Gear Handle Tilt-Turn, lockable

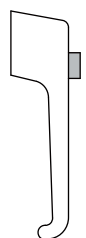
- same keyway, keys 2x
- 24 mm fork projection
- max. torque 10Nm acc.to RAL

Art.-N°	Direction	Material/Finish
10.226.0024.255	DIN right	Al RAL 9016 powder coat
10.227.0024.255	DIN left	Al RAL 9016 powder coat

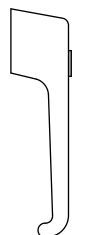
Function:



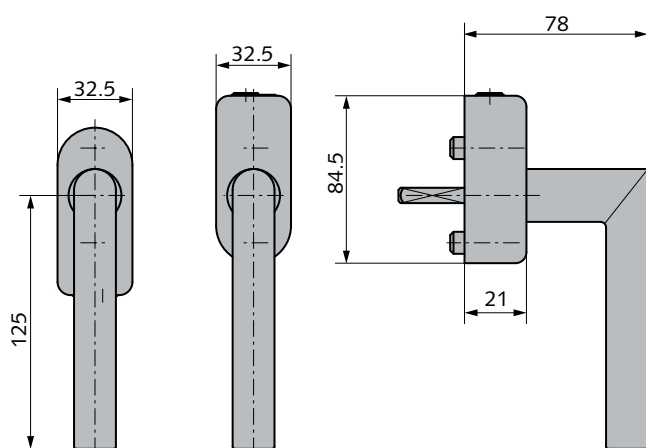
Closed position 1: not locked
The handle can be turned 180°. Tilt and Turn position possible.



Closed position 2: Turn position locked
The cylinder is pushed in half-way without a key; the handle can only be turned 90°. Only the Tilt position is possible.



Closed position 3: fully locked
Only possible with a key.

Cylinder position
belowCylinder position
above

FSB Window Handle Tilt-Turn Model 34 1076

- lockable
- same keyway, keys 2x
- with 7 mm pin, 24 mm protruding

Art.-N°	Direction	Cylinder	Material/Finish
10.230.2400.113	DIN right	above	Al E5/C-0 silver anod.
10.230.2400.426	DIN right	above	304 matt brushed
10.230.2401.113	DIN right	below	Al E5/C-0 silver anod.
10.230.2401.426	DIN right	below	304 matt brushed
10.231.2400.113	DIN left	above	Al E5/C-0 silver anod.
10.231.2400.426	DIN left	above	304 matt brushed
10.231.2401.113	DIN left	below	Al E5/C-0 silver anod.
10.231.2401.426	DIN left	below	304 matt brushed

Caution:

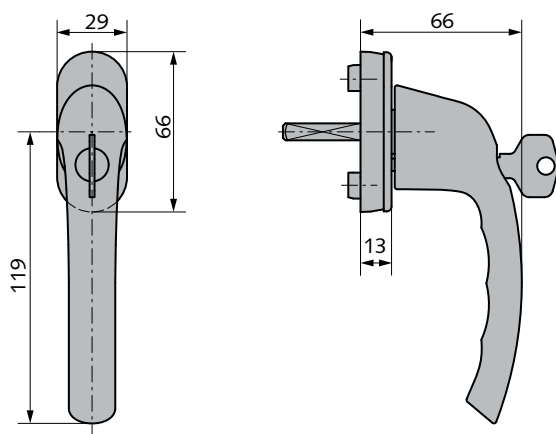
Details of the cylinder position and DIN direction of the windows are required.

Function:

- Cylinder excluded: not locked
The handle can be turned from 0°–180°.
Tilt and Turn position possible.
- Cylinder in Tilt or locked position included: Turn position locked.
The handle can only be turned from 0°–90°. Only the Tilt position is possible.
- Cylinder in turn position included:
The handle can only be released again using the key.
The handle can be locked without a key in any position.

Note:

The handle part can be replaced by other mishandling device models.



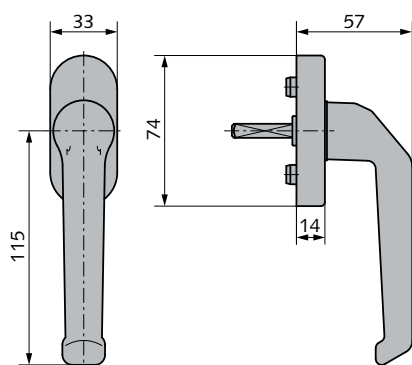
Hoppe Window Handle Tilt-Turn Model Tokyo

- lockable
- same keyway, key 1x
- with 7 mm pin, 24 mm protruding

Art.-N°	Material/Finish
10.235.0024.114	Al E6/C-0 silver anod.
10.235.0024.255	Al RAL 9016 powder coat

Function:

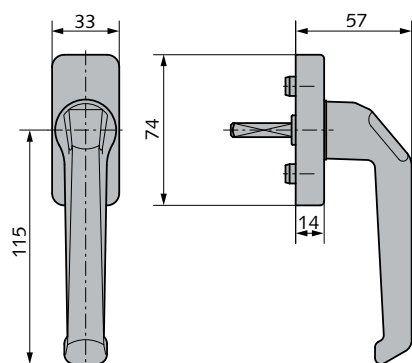
- The handle is equipped with freewheel between the closed and the tilt position.
- It is not necessary to unlock the cylinder.
- It is only possible to further change from the Tilt to the Turn position after unlocking the cylinder lock.



WSS Window Handle Model 100

- ovale rose
- with 7 mm pin, 24 mm protruding

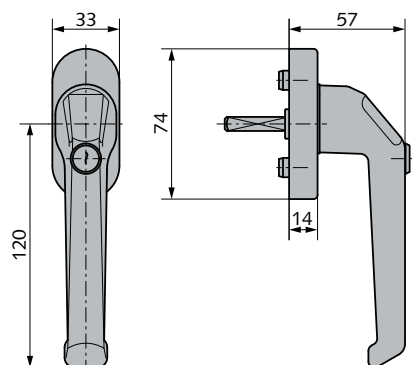
Art.-N°	Material/Finish
10.445.0024.112	Al E4/C-0 silver anod.
10.445.0024.255	Al RAL 9016 powder coat
10.445.0024.426	304 matt brushed



WSS Window Handle Model 100

- rectangular rose
- with 7 mm pin, 24 mm protruding

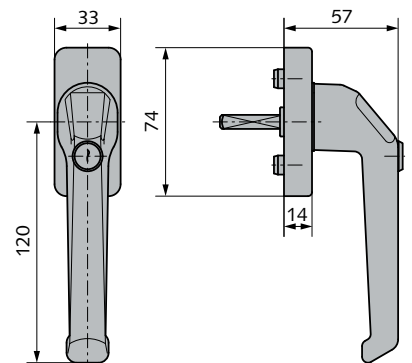
Art.-N°	Material/Finish
10.446.0024.112	Al E4/C-0 silver anod.
10.446.0024.255	Al RAL 9016 powder coat
10.446.0024.426	304 matt brushed



WSS Window Handle Model 100, lockable

- same keyway, key 1x
- oval rose
- with 7 mm pin, 24 mm protruding

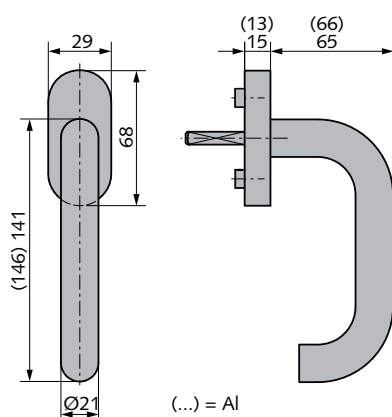
Art.-N°	Material/Finish
10.447.0024.112	Al E4/C-0 silver anod.
10.447.0024.255	Al RAL 9016 powder coat
10.447.0024.426	304 matt brushed



WSS Window Handle Model 100, lockable

- same keyway, key 1x
- rectangular rose
- with 7 mm pin, 24 mm protruding

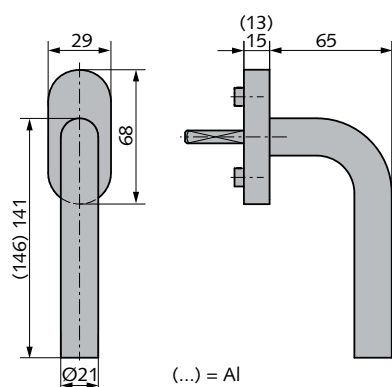
Art.-N°	Material/Finish
10.448.0024.112	Al E4/C-0 silver anod.
10.448.0024.255	Al RAL 9016 powder coat
10.448.0024.426	304 matt brushed



WSS Window Handle Model 108

- U-shaped curved
- with 7 mm pin, 24 mm protruding

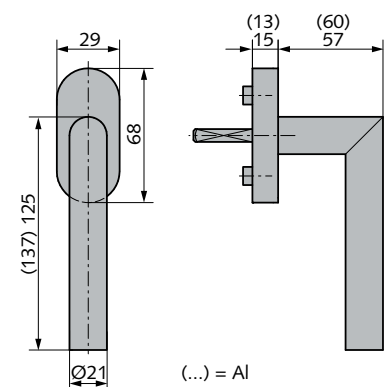
Art.-N°	Material/Finish
10.460.0024.112	Al E4/C-0 silver anod.
10.460.0024.426	304 matt brushed



WSS Window Handle Model 109

- L-shaped curved
- with 7 mm pin, 24 mm protruding

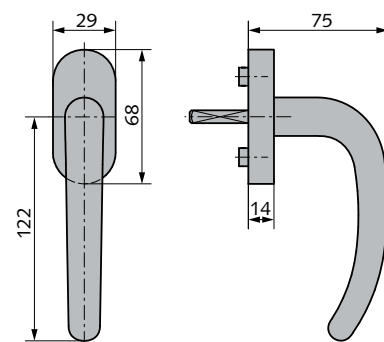
Art.-N°	Material/Finish
10.461.0024.112	Al E4/C-0 silver anod.
10.461.0024.426	304 matt brushed



WSS Window Handle Model 110

- L-shaped mitred
- with 7 mm pin, 24 mm protruding

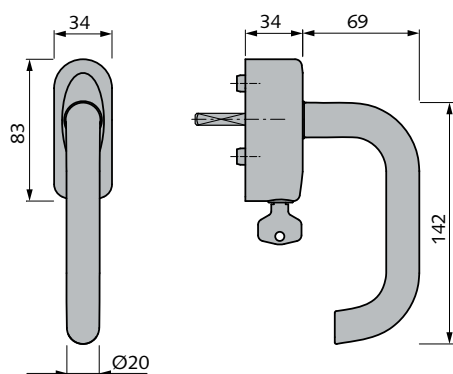
Art.-N°	Material/Finish
10.462.0024.112	Al E4/C-0 silver anod.
10.462.0024.426	304 matt brushed



WSS Window Handle Model 116

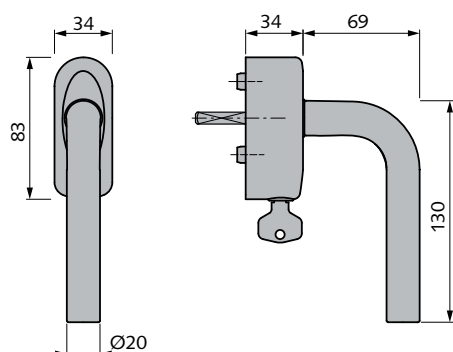
- Sabre-shaped
- with 7 mm pin, 24 mm protruding

Art.-N°	Material/Finish
10.463.0024.426	304 matt brushed

**WSS Window Handle Model 108, lockable**

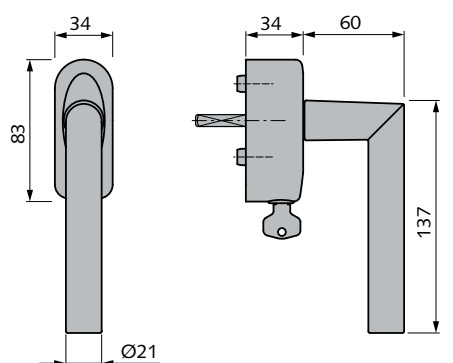
- same keyway, key 1x
- U-shaped curved
- with 7 mm pin, 24 mm protruding
- Turn-/Tilt version according to DIN EN 1627 ff., suitable for anti-burglary.

Art.-N°	Execution	Material/Finish
10.465.0024.112	Turn-Tilt	Al E4/C-0 silver anod.
10.465.0024.426	Turn-Tilt	304 matt brushed
10.465.1024.112	Tilt-Turn	Al E4/C-0 silver anod.
10.465.1024.426	Tilt-Turn	304 matt brushed

**WSS Window Handle Model 109, lockable**

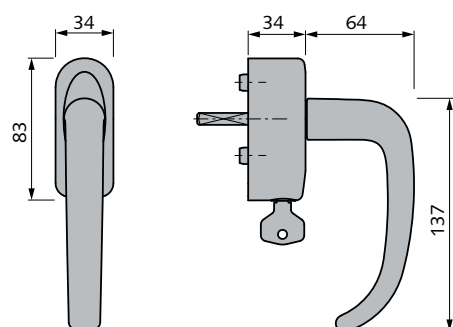
- same keyway, key 1x
- L-shaped curved
- with 7 mm pin, 24 mm protruding
- suitable for anti-burglary acc. to DIN EN 1627 ff.

Art.-N°	Material/Finish
10.466.0024.112	Al E4/C-0 silver anod.
10.466.0024.426	304 matt brushed

**WSS Window Handle Model 110, lockable**

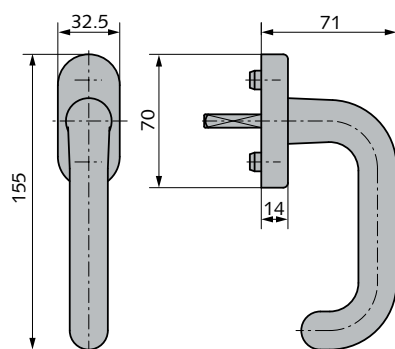
- same keyway, key 1x
- L-shaped mitred
- with 7 mm pin, 24 mm protruding
- Turn-/Tilt version according to DIN EN 1627 ff., suitable for anti-burglary.

Art.-N°	Execution	Material/Finish
10.467.0024.112	Turn-Tilt	Al E4/C-0 silver anod.
10.467.0024.426	Turn-Tilt	304 matt brushed
10.467.1024.112	Tilt-Turn	Al E4/C-0 silver anod.
10.467.1024.426	Tilt-Turn	304 matt brushed

**WSS Window Handle Model 116, lockable**

- same keyway, key 1x
- Sabre-shaped
- with 7 mm pin, 24 mm protruding
- suitable for anti-burglary acc. to DIN EN 1627 ff.

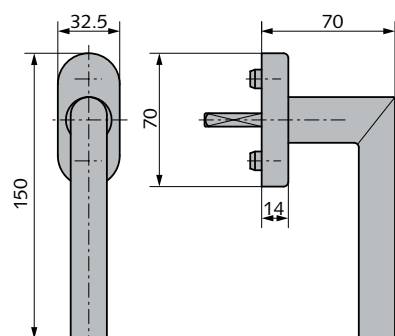
Art.-N°	Material/Finish
10.468.0024.112	Al E4/C-0 silver anod.
10.468.0024.426	304 matt brushed



FSB Window Handle Model 34 1070

- U-shaped curved
- with 7 mm pin, 24 mm protruding

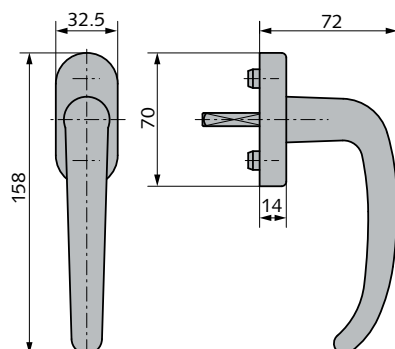
Art.-N°	Material/Finish
10.471.0024.113	Al E5/C-0 silver anod.
10.471.0024.426	304 matt brushed



FSB Window Handle Model 34 1076

- L-shaped mitred
- with 7 mm pin, 24 mm protruding

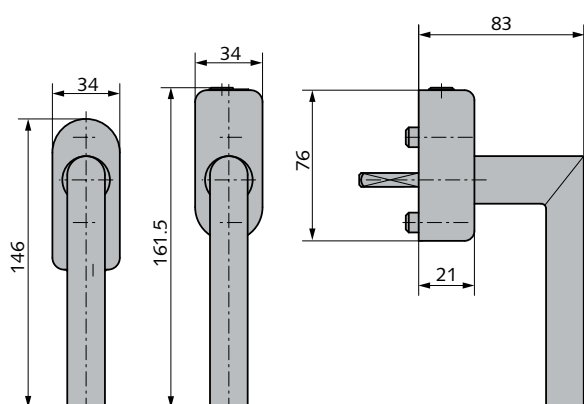
Art.-N°	Material/Finish
10.472.0024.113	Al E5/C-0 silver anod.
10.472.0024.426	304 matt brushed



FSB Window Handle Model 34 1023

- Sabre-shaped
- with 7 mm pin, 24 mm protruding

Art.-N°	Material/Finish
10.470.0024.113	Al E5/C-0 silver anod.
10.470.0024.426	304 matt brushed



Cylinder position below Cylinder position above

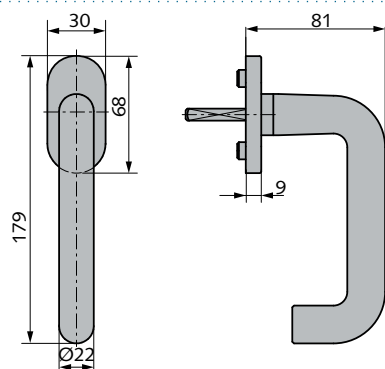
FSB Window Handle Model 34 1076, lockable

- same keyway, keys 2x
- L-shaped mitred
- with 7 mm pin, 24 mm protruding
- suitable for anti-burglary acc. to DIN EN 1627 ff.

Art.-N°	Material/Finish
10.474.0024.113	Al E5/C-0 silver anod.
10.474.0024.426	304 matt brushed

Note:

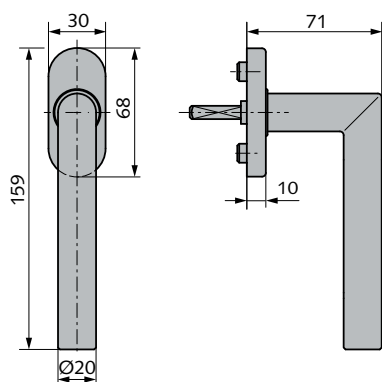
Additional FSB handles, lockable, available on request.



OGRO Window Handle Model FE 4100

- U-shaped curved
- with 7 mm pin, 20-40mm variable

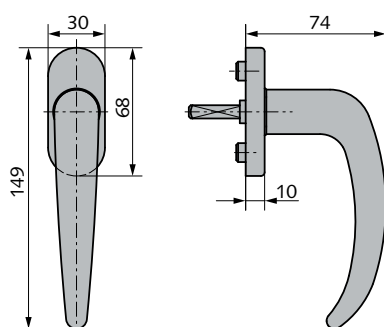
Art.-N°	Material/Finish
10.479.0000.112	Al E4/C-0 silver anod.
10.479.0000.426	304 matt brushed



OGRO Window Handle Model FE 4906

- L-shaped mitred
- with 7 mm pin, 20-40mm variable

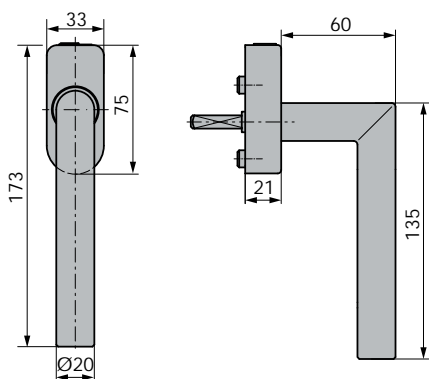
Art.-N°	Material/Finish
10.481.0000.112	Al E4/C-0 silver anod.
10.481.0000.426	304 matt brushed



OGRO Window Handle Model FE 4998

- Sabre-shaped
- with 7 mm pin, 20-40mm variable

Art.-N°	Material/Finish
10.482.0000.112	Al E4/C-0 silver anod.
10.482.0000.426	304 matt brushed



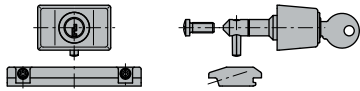
OGRO Window Handle Model FE 4906, lockable

- with safety module SI 4099
- same keyway, keys 2x
- L-shaped mitred
- with 7 mm pin, 20-40mm variable
- anti-burglary protection acc.to DIN V EN V 1627:1999-04

Art.-N°	Material/Finish
10.484.0000.112	Al E4/C-0 silver anod.
10.484.0000.426	304 matt brushed

Note:

Additional OGRO handles, lockable, available on request.



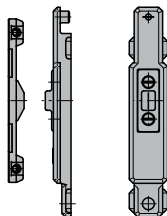
Turn Blocker with Cylinder Lock

- to block the turn opening of a Turn-Tilt window

Kit consists of:

- Turn blocker
- Keys, 2x
- Lock bracket, 1x
- Fixing screw, 2x

Art.-N°	Overlap height	Groove ¹ mm	Material/Finish
10.320.0005.730	9-11,2	>12-14	Zinc cast silver powder coat
10.320.0005.755	9-11,2	>12-14	Zinc cast RAL 9016 powder coat
10.320.0005.799	9-11,2	>12-14	Zinc cast in special finish
10.320.0010.730	9-11,2	10-12	Zinc cast silver powder coat
10.320.0010.755	9-11,2	10-12	Zinc cast RAL 9016 powder coat
10.320.0010.799	9-11,2	10-12	Zinc cast in special finish
10.320.0015.730	7-9	10-12	Zinc cast silver powder coat
10.320.0015.755	7-9	10-12	Zinc cast RAL 9016 powder coat
10.320.0015.799	7-9	10-12	Zinc cast in special finish
10.320.0020.730	7-9	>12-14	Zinc cast silver powder coat
10.320.0020.755	7-9	>12-14	Zinc cast RAL 9016 powder coat
10.320.0020.799	7-9	>12-14	Zinc cast in special finish



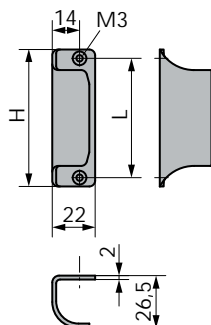
Latch Lock for Balcony Doors

- used for Turn-Tilt, Tilt-Turn and Turn fittings and operated by central or gear handle

Kit consists of:

- Latch piece, 1x
- Striker, 1x

Art.-N°	Material/Finish
10.325.0105.710	Zinc cast galvanized



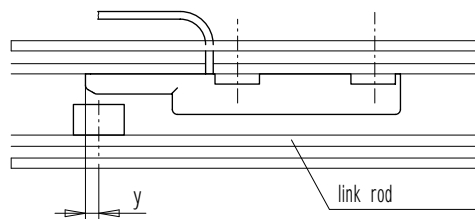
Grab Handle for Balcony Windows

- aluminium

Art.-N°	H	L	Material/Finish
10.328.0070.114	70	61	Al E6/C-0 silver anod.
10.328.0070.255	70	61	Al RAL 9016 powder coat
10.328.0070.299	70	61	Al special colour powder coat
10.328.0090.114	90	81	Al E6/C-0 silver anod.
10.328.0090.255	90	81	Al RAL 9016 powder coat
10.328.0090.299	90	81	Al special colour powder coat

¹ For further details, see page 4.

$y = \min 0.5 \text{ mm}/\max. 4 \text{ mm}$



Closure Monitoring Standard

- for concealed assembly in the area between the window frame and leaf
- solenoid switch housing, galvanised
- round DYM magnet to be screwed into the link rod with galvanised surface and white plastic cover cap

Technical Specifications:

Contact load: max. 10 W, purely resistive load

Switching voltage: 100 V DC

Switching current: 0.5 V DC

Contact transmission resistance: max. 150 mOhm

Temperature range: -25°C to 75°C

Environmental class acc. to VDS 2110: III

Protection type acc. to DIN 40050: IP 68

Cycles: min. 1,000,000 x

Application Options:

Closure monitoring VdS Class "C"

Opening monitoring VdS Class "B"

Combined opening and closure monitoring Class "B"

Kit consists of:

- Solenoid switch, frame side, 1x
- Round magnet, leaf side, 1x
- Countersunk screw M3 x 20 mm, 1x

Art.-N°

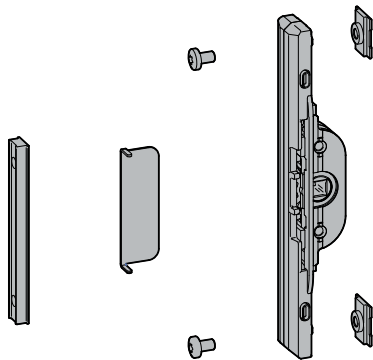
10.337.0000.710

Anti-burglary Components RC

RC window elements are to be installed in line with the relevant test certificates and expert reports.

The number of safety elements and any additional components required will depend on the size and the weight of the elements and safety requirements.

The fitting is to be installed in line with the installation instructions provided by WSS. When requesting documentation please provide us with details of the profile (system and profile type) used and the required classification.



Concealed Gear without Mishandling Device



- with drilling protection
- for Turn-Tilt, Tilt-Turn, Turn and Tilt fittings
- for Standard, Style 180° and Heavy Duty
- max. torque 10Nm acc.to RAL

Kit consists of:

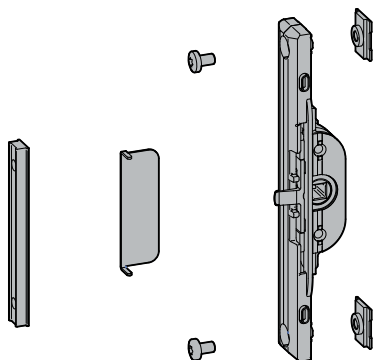
- Mortise, 1x
- Drilling protection, 1x
- Drive protection, 1x
- Counter plate, 2x
- Screw M5, 2x

Art.-Nr.

10.040.2700.701

Material/Oberfläche

Zinc cast raw



Concealed Gear with Mishandling Device



- with drilling protection
- for Turn-Tilt, Tilt-Turn, Turn and Tilt fittings
- for Standard, Style 180° and Heavy Duty
- max. torque 10Nm acc.to RAL

Kit consists of:

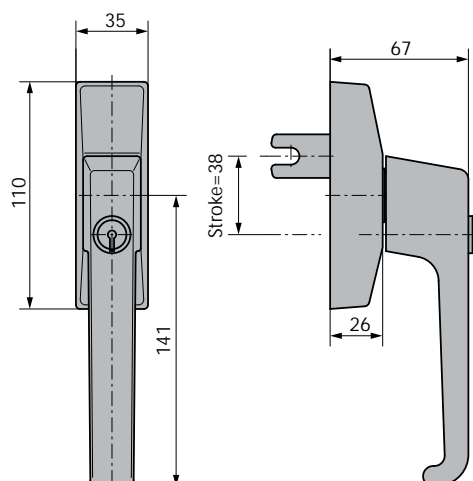
- Mortise, 1x
- Drilling protection, 1x
- Drive protection, 1x
- Counter plate, 2x
- Screw M5, 2x

Art.-Nr.

10.040.2800.701

Material/Oberfläche

Zinc cast raw

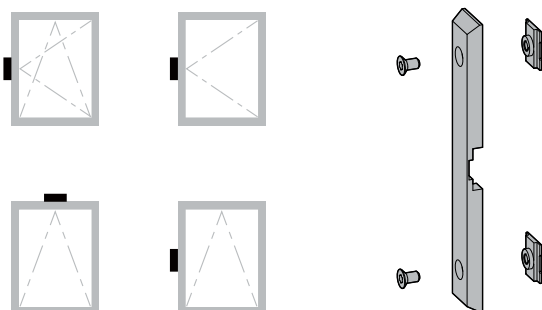


Gear Handle, lockable, RC2 tested



- same keyway, keys 2x
- with anti-jimmy protection
- RC2 tested acc.to EN 1627
- RH and LH usable
- 24 mm fork projection
- max. torque 10Nm acc.to RAL

Art.-N°	Material/Finish
10.190.1024.112	Al E4/C-0 silver anod.
10.190.1024.255	Al RAL 9016 powder coat
10.190.1024.299	Al special colour powder coat



Drilling Protection for Gear Handle

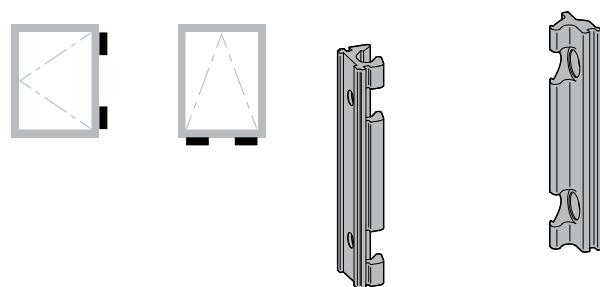


- steel, hardened
- Kit consists of:**
- Drilling protection, 1x
 - Countersunk screw M5x9, blue, 2x
 - Support plate, 2x

Art.-N°	Material/Finish
10.040.5900.015	St black passivated

Note:

- When using Turn-Tilt Fittings the mishandling device must be included on the corner transmission.
- The drilling protection must be used in combination with the drive connector Art.-N° 10.040.440.701 (page 42).

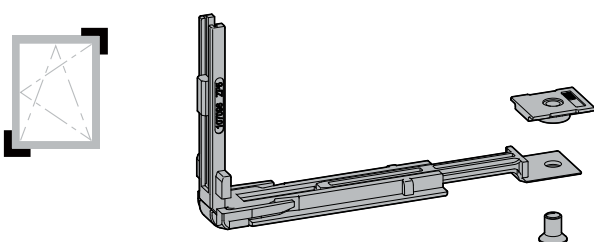


Hinge Side Safety Kit



- Kit consists of:**
- Support bracket frame, 1x
 - Leaf bracket, 1x
 - Flat-head metal screw 4.8x32, 4x

Art.-N°	Material/Finish
10.040.8000.114	Al E6/C-0 silver anod.

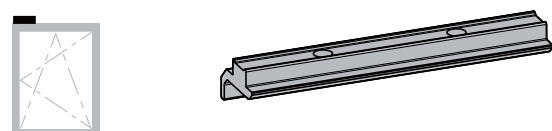


Corner transmission for safety locking



- for centre locking RC2 and RC3
- with countersunk screw and counter plate

Art.-N°
10.040.8200.000

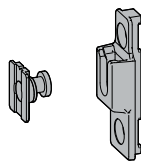


Rebate Safeguard



- for RC2 and RC3

Art.-N°
10.040.8600.000



Safety Locking Kit RC2



- Type of mounting depends on profile system.
Please contact WSS for details.

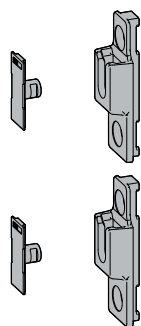
Kit consists of:

- Locking point, 1x
- Safety lock bracket, 1x

Art.-N°	Groove ¹ mm
10.040.6400.000	10-14

Note:

- The number and positioning of the safety pins can be found in the WSS installation manual.
- Also required for Turn-Tilt leaf:
Corner transmission and centre locking (page 40) for Standard 2x, for Style 180° 2x, for Heavy Duty 1x.
Turning leaf always in conjunction with lock kit A2.
The mounting material is not provided with the kit.



Safety Locking Kit RC3



- Type of mounting depends on profile system.
Please contact WSS for details.

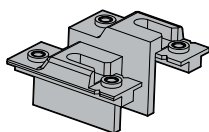
Kit consists of:

- Locking point, 2x
- Safety lock bracket, 2x

Art.-N°	Groove ¹ mm
10.040.6500.000	10-14

Note:

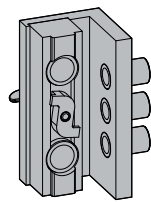
- The number and positioning of the safety pins can be found in the WSS installation manual.
- Also required for Turn-Tilt leaf:
Corner transmission and centre locking (page 40) for Standard 2x, for Style 180° 2x, for Heavy Duty 1x.
Turning leaf always in conjunction with lock kit A2.
The mounting material is not provided with the kit.



Drill Jig for Safety Locking

- for frame components of Art.-N° 10.040.6400.00 und 10.040.6500.000

Art.-N°
10.049.0700.000

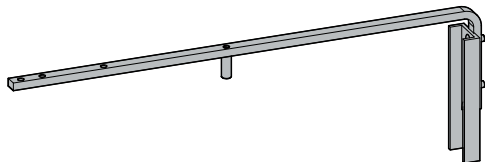


Drill Jig for Concealed Gear

- for Turn-Tilt and Tilt-Turn concealed gear

Art.-N°

10.049.0000.000

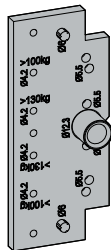


Assembly Jig for Scissors

- for Turn-Tilt and Tilt-Turn scissor and 2nd scissor

Art.-N°

10.049.0200.000

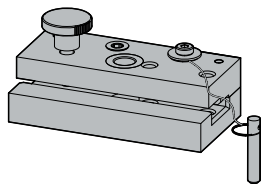


Drill and Assembly Jig universal

- for Standard and Heavy Duty
- for Turn-Tilt and Tilt-Turn fittings
- for Turn blocker
- for gear handle

Art.-N°

10.049.0400.000

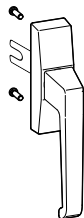


Drill Jig for Link Rod

- Punch hole 10.1 mm

Art.-N°

10.049.0600.000



Stamping Tool for Gear Handle

- for pneumatic stamp

Art.-N°

10.049.2000.000

Note:

Please specify profile series when ordering.



Stamping Tool for Link Rod

- for operating tool separation and perforation
- with integrated pneumatic cylinder

Art.-N°

Description

10.049.2800.000

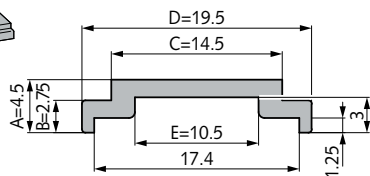
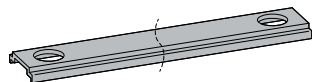
Stamping tool

10.049.2900.000

Measuring Device

10.049.3000.000

Adjustment foot for Measuring Device



Link Rod

- for C-groove

Art.-N°

Length

Material/Finish

10.049.3400.114

3.000

Al E6/C-0 silver anod.

10.049.3600.114

6.000

Al E6/C-0 silver anod.

Certification

QM 328



Certified in accordance to EN 13126-8 and DIN EN 1191
In order to ensure the highest standard of quality of our products, we install the certification programme QM 328 for the series Standard and Style 180° (far beyond the statutory requirements for construction products). In this case, production control is carried out as part of in-house production monitoring. This involves strength verification, testing the dimensional accuracy of the components, durability testing, corrosion protection and much more. In addition, external monitoring is carried out at regular intervals using samples taken from current production.

RAL-RG 607/3



The fitting series Heavy Duty is also tested in accordance to RAL-RG 607/3, taking DIN EN 13126-8 and DIN EN 1191 into consideration, and using strict test criteria. 15,000 cycles for Turn-Tilt and Tilt-Turn fittings are tested and additional tests are carried out in accordance to DIN EN 13126-8 with additional load 1,000 N.



Anti-burglary resistance classes

RC2 (WK2)



Standard Security

In addition to physical force, the perpetrator attempts to open the closed and locked element using simple tools such as two screwdrivers, a pliers and two wedges.

Suitable for windows in upper storeys that are not easily accessible.

RC3 (WK3)



Increased Security

In addition, the perpetrator attempts to open the closed and locked element using a second screwdriver and a 70cm long crowbar.

Suitable for windows and patio doors on the ground floor and basement and for balcony doors on the first floor.

Testing for WK and RC classification is system-bound. Cross-system testing is not possible.

Assembly Instructions: Standard



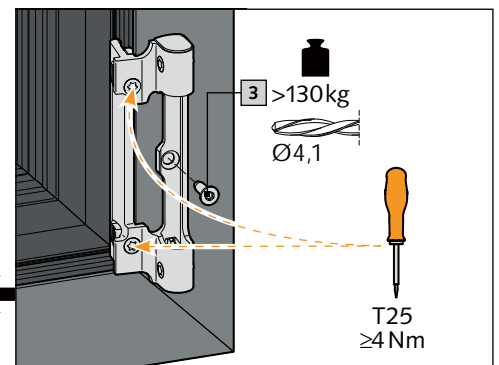
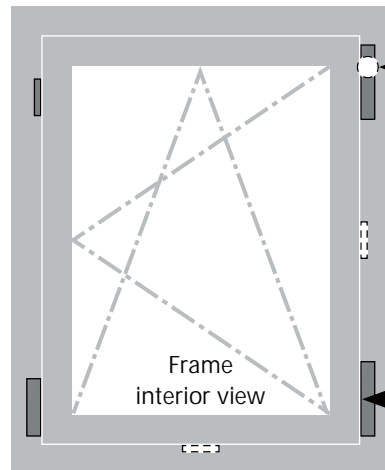
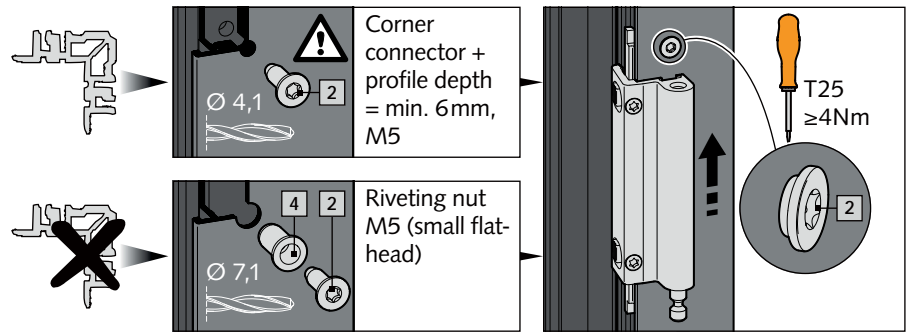
Safety Instructions

- To secure the scissor bearing pin, fully insert the threaded pin 1 flush using screwdriver T10.
- For leaf weights >100kg, special screw 2 at the scissor bearing can be omitted.
- For leaf weights >130kg, special countersunk screw 3 at the corner bearing is essential.
- Use only the hinge side (clamping bar KL1 or KL2) intended for the profile system. Please see the hinge selection matrix for the correct allocation (see "Selection of Hinges" page 7).
- VOB-DIN18360 requires the installation of a mishandling device.
- We recommend the use of an additional lock for window widths or heights upwards of 1,300mm.
- Please adhere to the specified torques when assembling the fitting components (see illustration or assembly instructions).
- Only a combination of original WSS parts may be used.
- When using corner transmission centre locking in conjunction with a deep leaf groove, a spacer has to be installed on side.
- It is advisable to use opening limiters when window leaves hit uncontrollably against the window rebate or aluminium column profiles (e.g. by wind) in order to avoid any damage or destroy of the fittings.

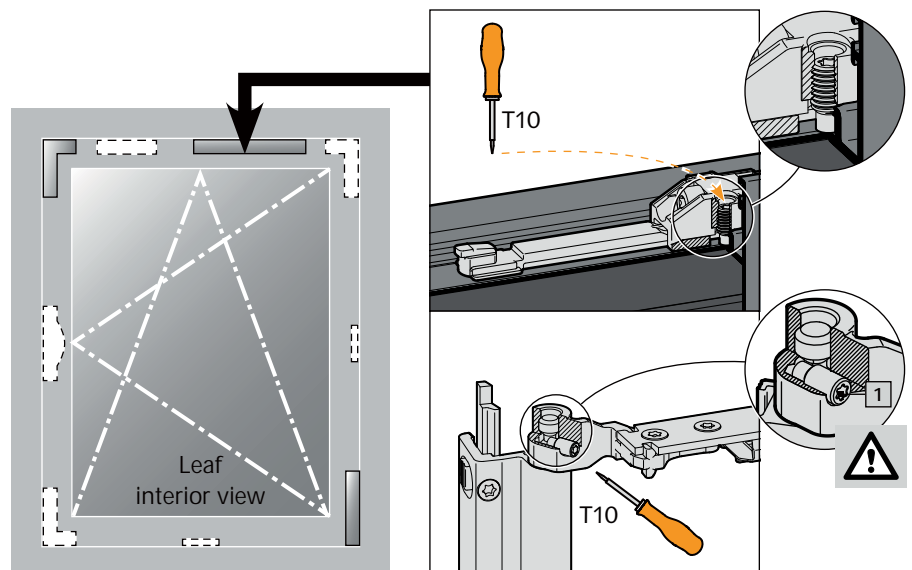
Assembly Instructions Frame



Special screw 2 is required on the scissor bearing for leaf weights >100kg and a special countersunk screw 3 is required on the corner bearing for leaf weights >130kg. If there is no corner connector available or the screw cannot be inserted directly into the corner connector, riveting nut 4 is to be used.

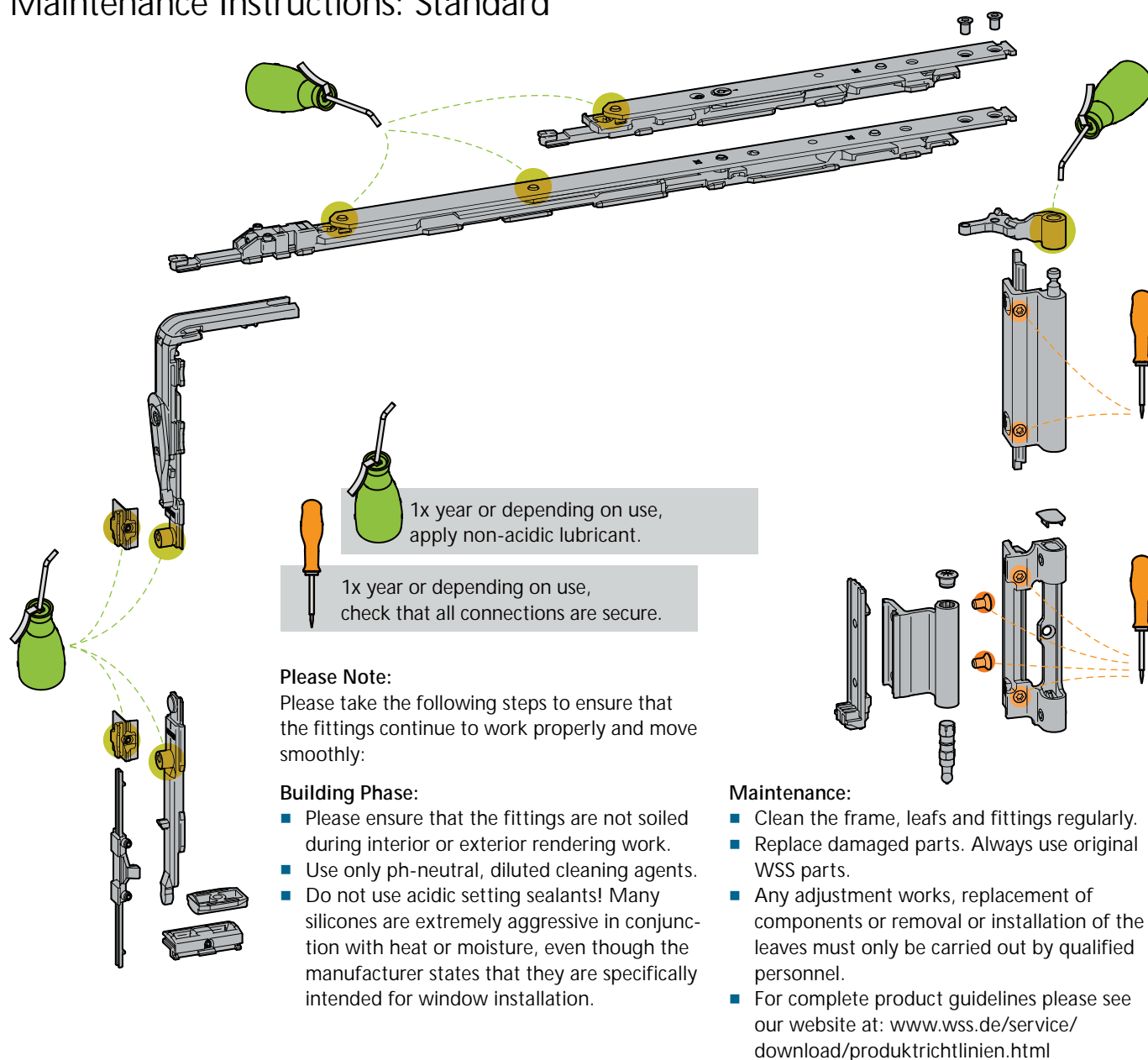


Assembly Instructions Leaf

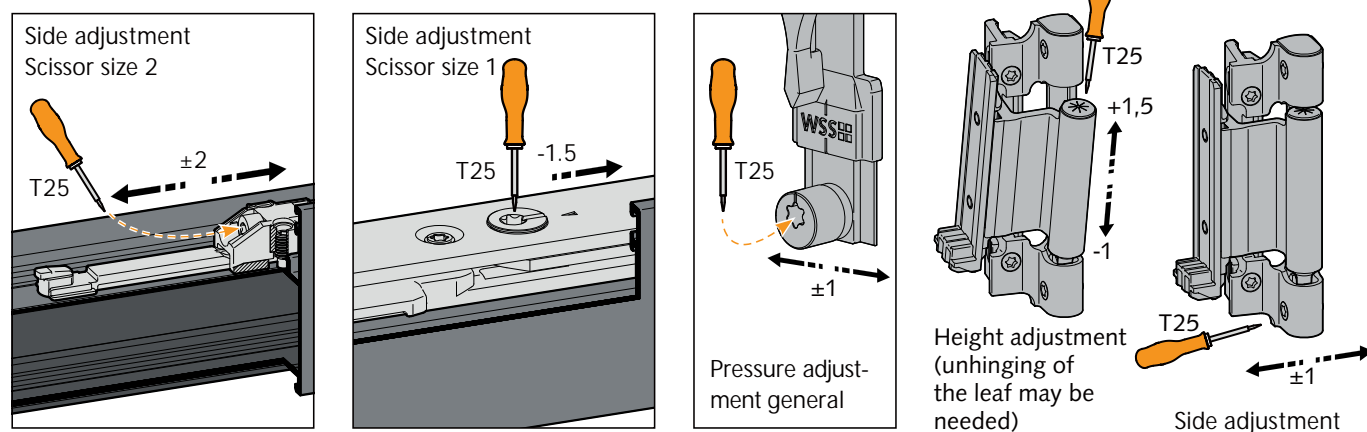


— = basic fitting
 - - - = accessories

Maintenance Instructions: Standard



Adjustment: Standard



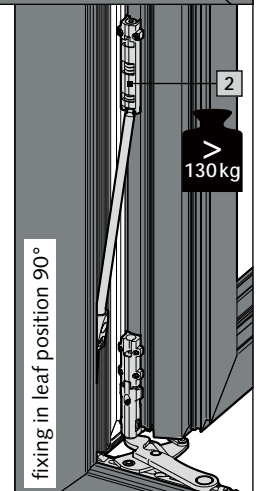
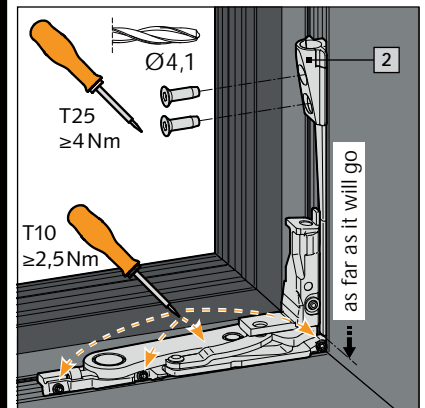
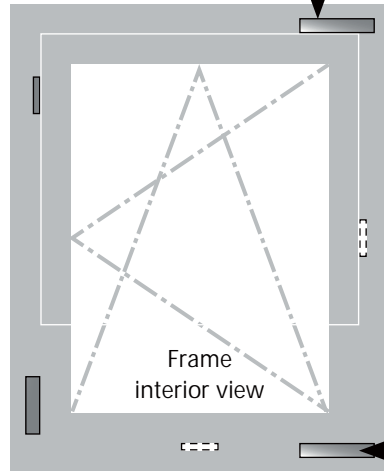
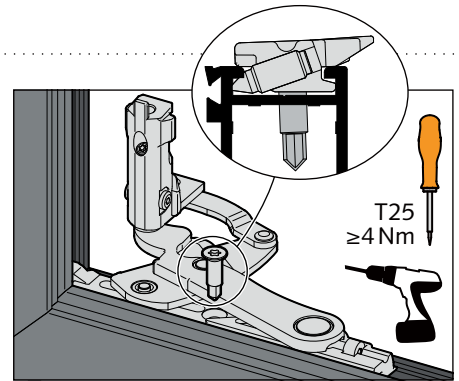
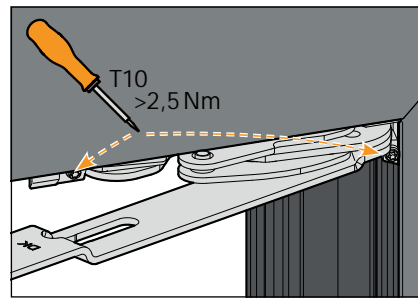
Assembly Instructions: Style 180°



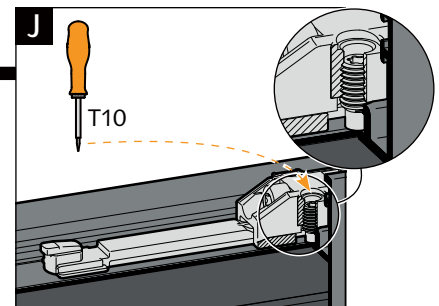
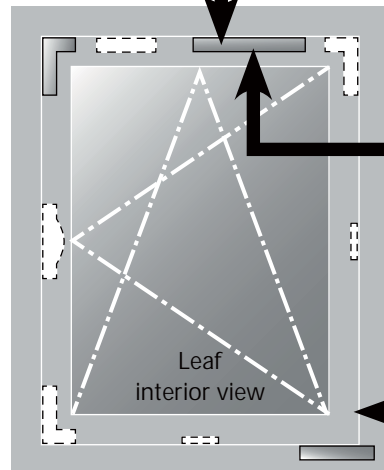
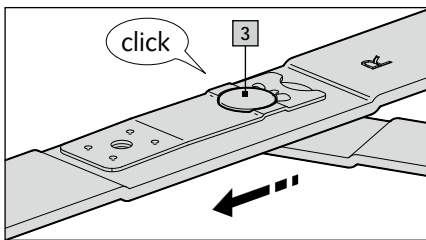
Safety Instructions

- Support device 2 is to be used for leaf weights >130 kg.
- If using support device >130 kg, a stopper or opening limiter Style 180° is mandatory. (no illustration)
- When mounting the leaf, the mounting bolt 3 must be heard engaging with the scissor.
- VOB-DIN18360 requires the installation of a mishandling device. If using a 2nd scissor or hinge-side centre locking, the use of a mishandling device is mandatory.
- We recommend the use of an additional lock for window widths or heights upwards of 1,300 mm.
- Please adhere to the specified torques when assembling the fitting components (see illustration or assembly instructions).
- Only a combination of original WSS parts may be used.
- When using corner transmission centre locking in conjunction with a deep leaf groove, a spacer has to be installed on side.
- It is advisable to use opening limiters when window leaves hit uncontrollably against the window rebate or aluminium column profiles (e.g. by wind) in order to avoid any damage or destroy of the fittings.

Assembly Instructions Frame

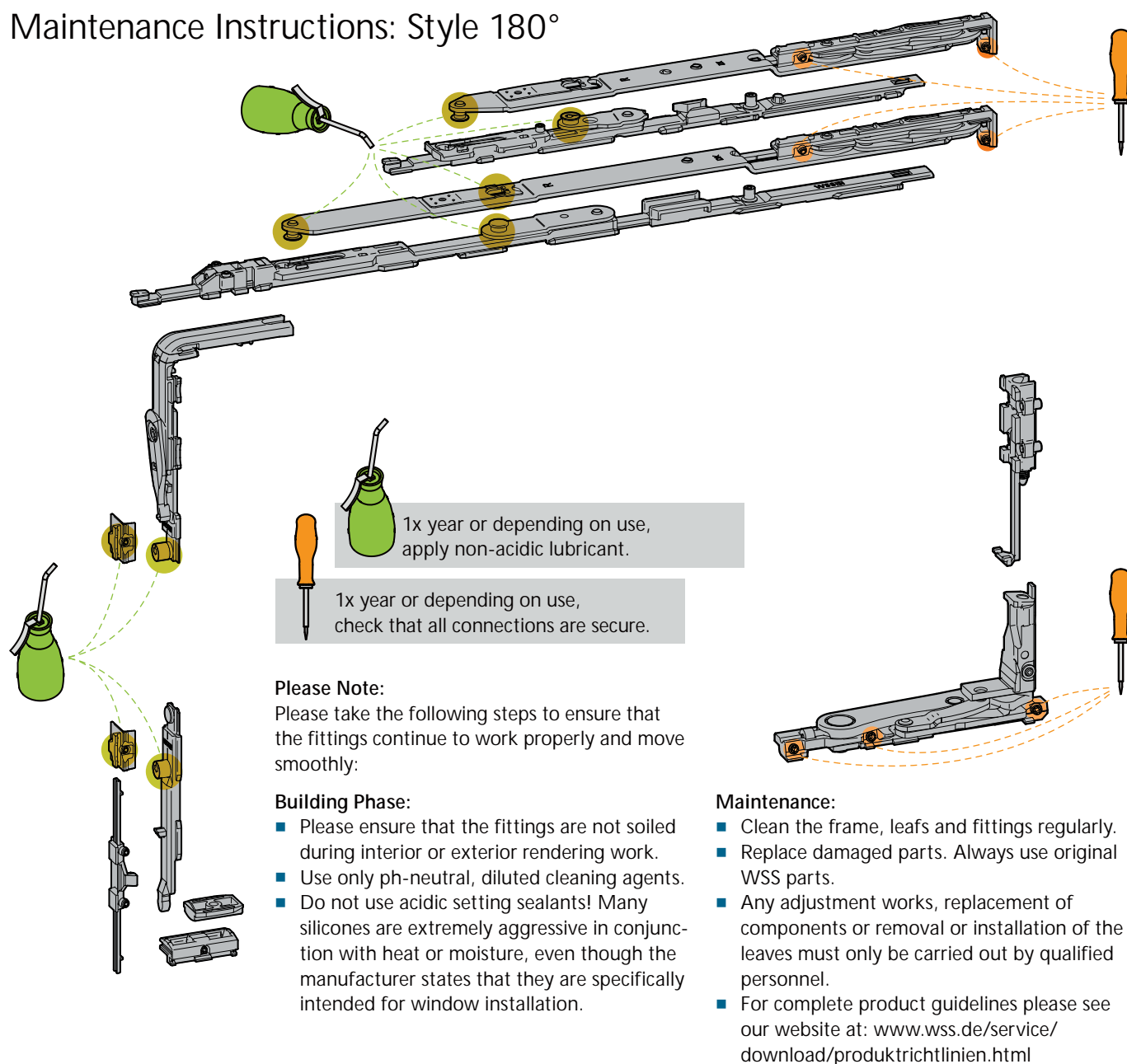


Assembly Instructions Leaf

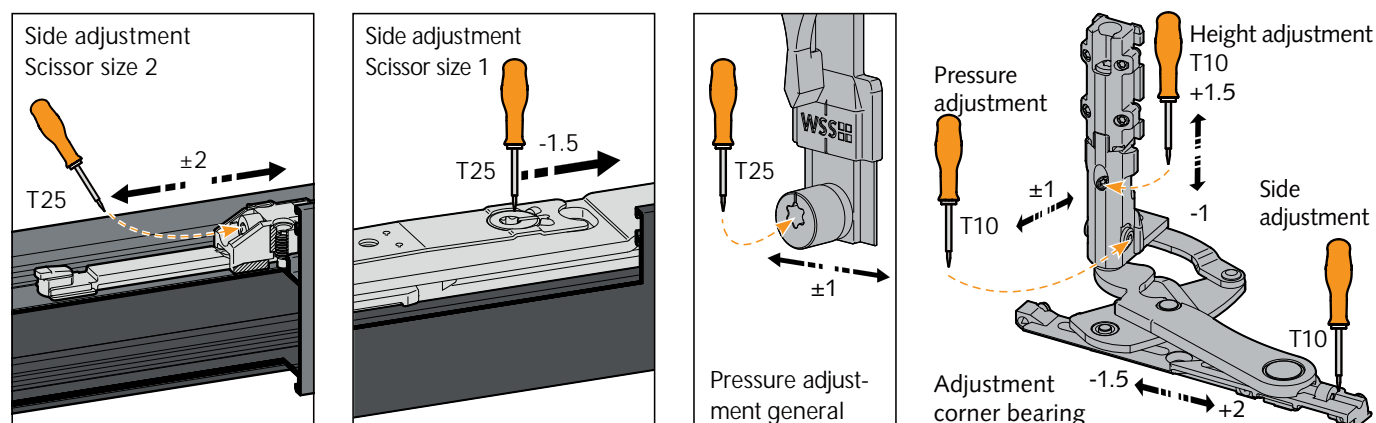


— = basic fitting
 - - - = accessories

Maintenance Instructions: Style 180°



Adjustment: Style 180°



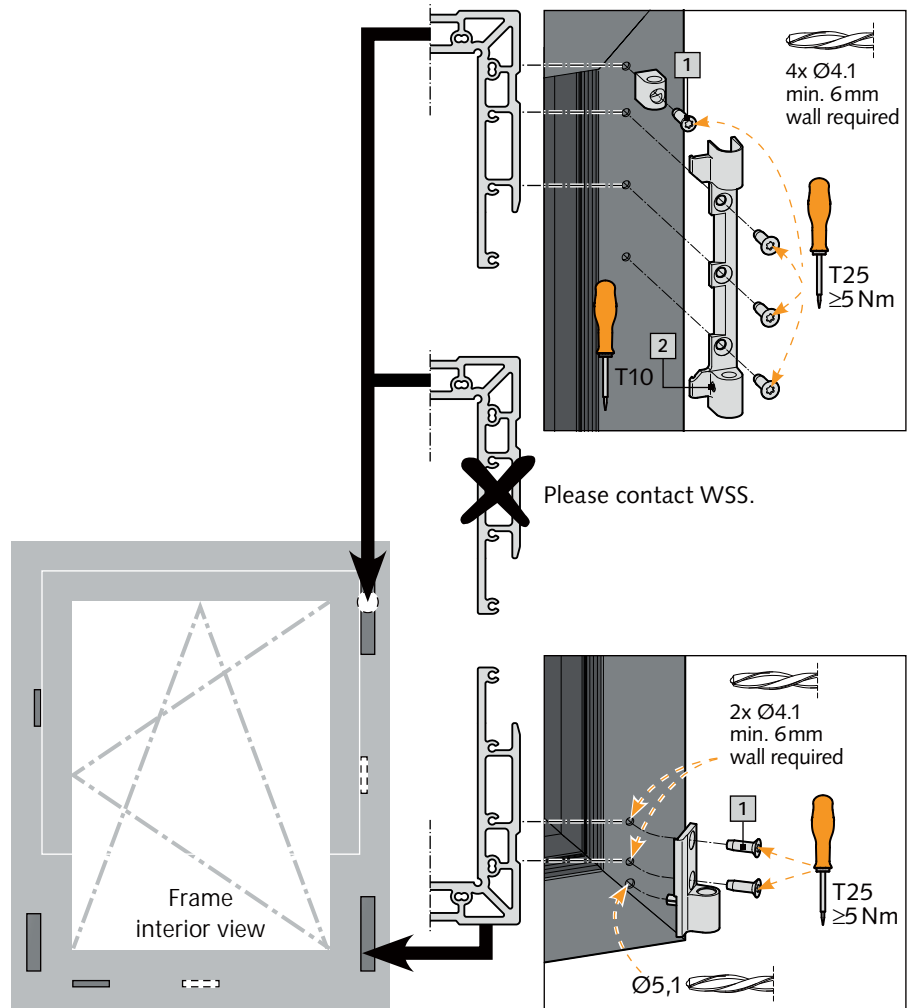
Assembly Instructions: Heavy Duty



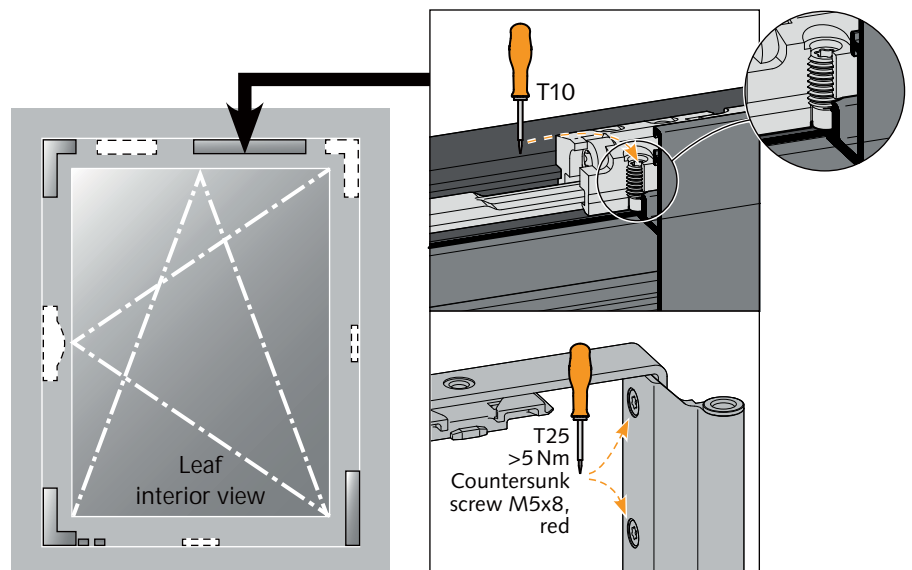
Safety Instructions

- The four upper screws **1** at the scissor bearing and the two lower screws **1** at the corner bearing are required to have a minimum depth of 6 mm. If no corner connector is available, the profile must be underpinned as required.
- To secure the scissor bearing pin, fully insert the threaded pin **2** flush using screwdriver T10.
- A 2nd scissor is required for leaf widths of 1,100 mm and above.
- VOB-DIN18360 requires the installation of a mishandling device.
- We recommend the use of an additional lock for window widths or heights upwards of 1,300 mm.
- Please adhere to the specified torques when assembling the fitting components (see illustration or assembly instructions).
- Only a combination of original WSS parts may be used.
- When using corner transmission centre locking in conjunction with a deep leaf groove, a spacer has to be installed on side.
- It is advisable to use opening limiters when window leaves hit uncontrollably against the window rebate or aluminium column profiles (e.g. by wind) in order to avoid any damage or destroy of the fittings.

Assembly Instructions Frame

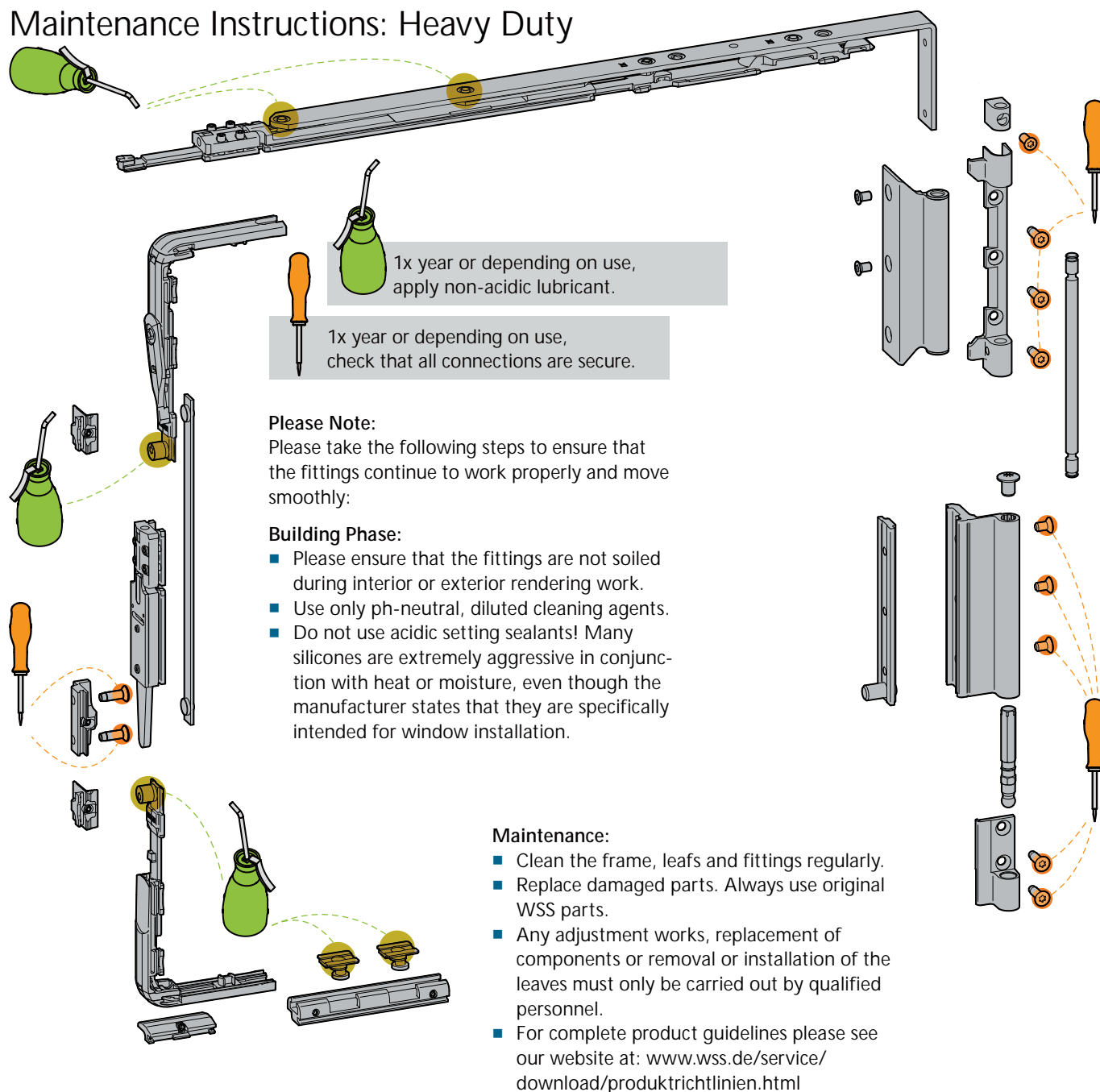


Assembly Instructions Leaf

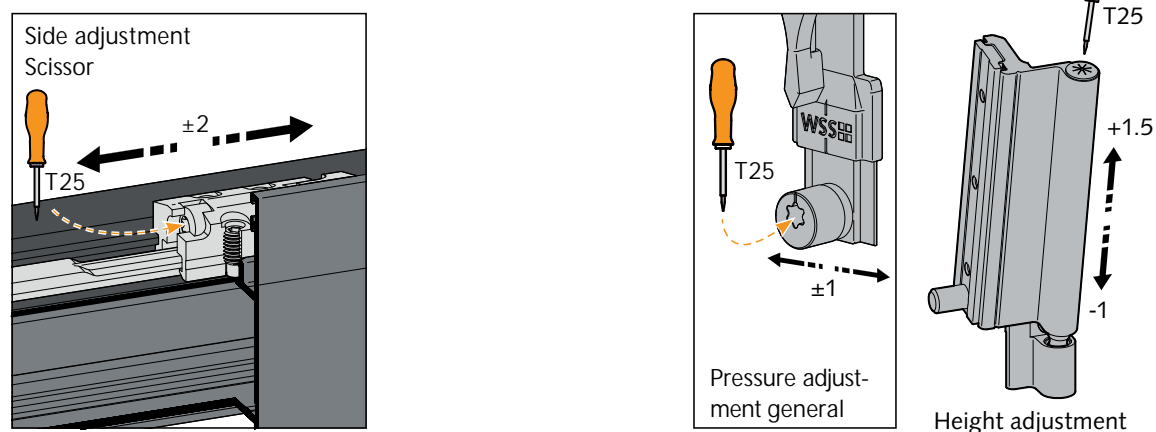


■ = basic fitting
□ = accessories

Maintenance Instructions: Heavy Duty



Adjustment: Heavy Duty



Abbreviations

LHmm.....	Leaf hight mm
LH	left-hand
LWmm.....	Leaf width mm
mish. dev.....	Mishandling Device
PU	Packaging Unit
RH.....	right-hand



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