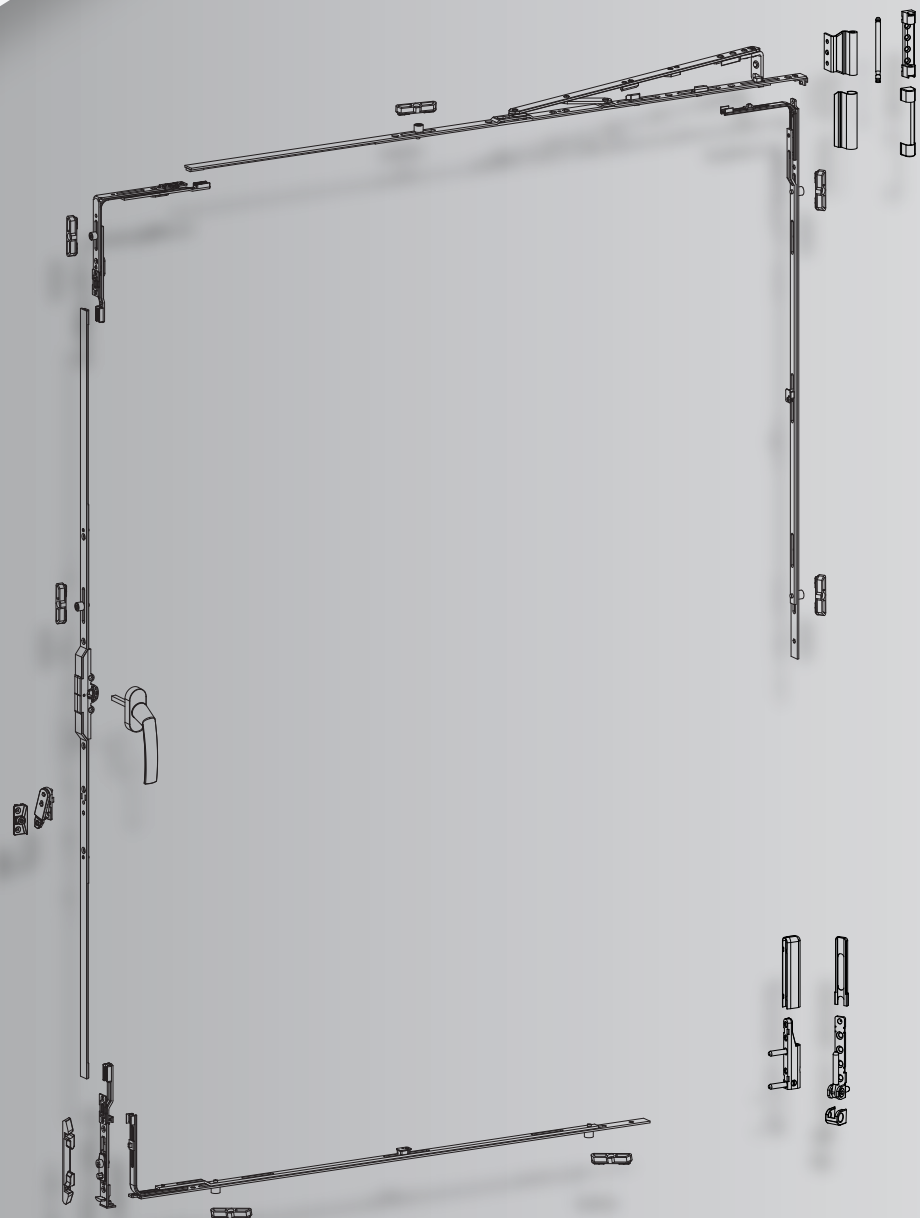


1

Fornax PvcMotion Tilt & Turn Hardware



Fornax PvcMotion
Tilt & Turn Hardware

İÇİNDEKİLER

T&T Systems Specifications	14
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Bottom Extension Piece	40
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Fornax PvcMotion Tilt & Turn Hardware

100.000 Montaj kombinasyonu ;

Fornax Pvc Channel Tilt System is located in a very innovative technology contributes to the window feature.

Installation of new hardware easily and flexible use of space with many different combination possibilities of installation.

Demand in the market are usually the standard opening. Fornax Pvc systems are standards for tilt and turn windows up to 100 kg, is a system with aesthetic appearance.

Both economically and practically available all over the world.

- Provide Easy and Faultless assembling
- Different assembling alternatives with versatile usage opportunities by a few pieces
- Sash and frame can be fitted separately
- Systems parts are fixed in centered position for easy assembling
- Stay arm can be used both for right and left hand opening by adjusting stay arm hinge.
- System has excellent corrosion protection with alkali zinc coating.
- Sash lifter on the bottom extension piece removes the problems caused by hang down of the window sash .
- Mechanism on the stay arm reaches the clutching before 25mm , during the sash is changed from tilt opening position to closed position.
- faulty usage which can be added on the T&T gear according to customer's demand , prevents faulty usage in open position.
- $\pm 0,8$ mm pressure of the gasket can be adjusted by eccentric lock bolt, bottom extension piece , stay arm and bottom hinge (Sash Part).
- Horizontal position of the sash can be adjusted by screw on the Stay arm and bottom hinge (Sash part)
- Vertical position of the sash can be adjusted by screw on the drill in Corner Hinges
- Security System Parts can be used if the security is wanted for theft.



Our Advantages

- Our system is convenient for the Fixed Handle Espagnolette
- The system is ideal with 100 kg carrying capacity of the sash for tilt and turn opening.
- Can be assembled with in short time.
- Our system features 2 types of hinges for the corner connection.
- The Micro ventilation system is available in each of our systems



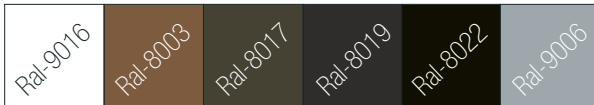
Fornax PvcMotion Tilt & Turn Hardware

Technical Specifications

- KG - Sash Width286/395mm - 1600mm
- KY - Sash Height.....262/480mm - 2400 mm
- KA.kg_{max} - Sash Weight.....Ø3 Menteşe max. 80kg / Ø6 Hinge max. 100kg
- YK - Surface CoatingAlkali-Zinc

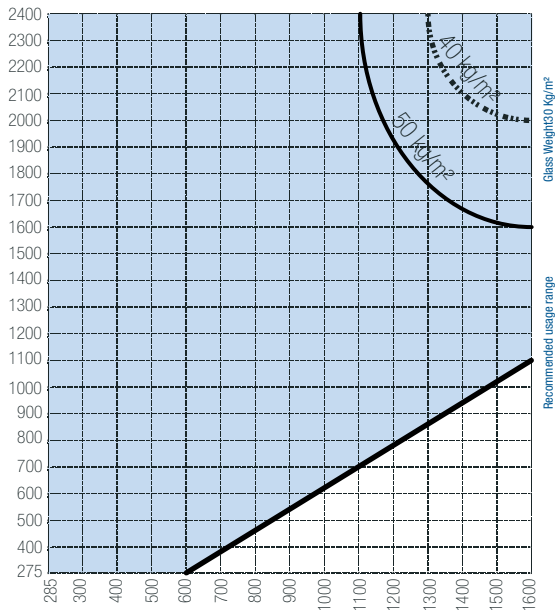
Color Options

- Standard color options are as belowed. Please have contact with your customer representative for your your other color requests.

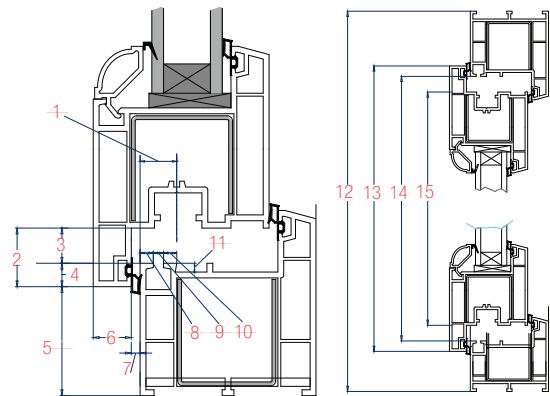


100 kg Load Diagram

Glass Weight kg/m

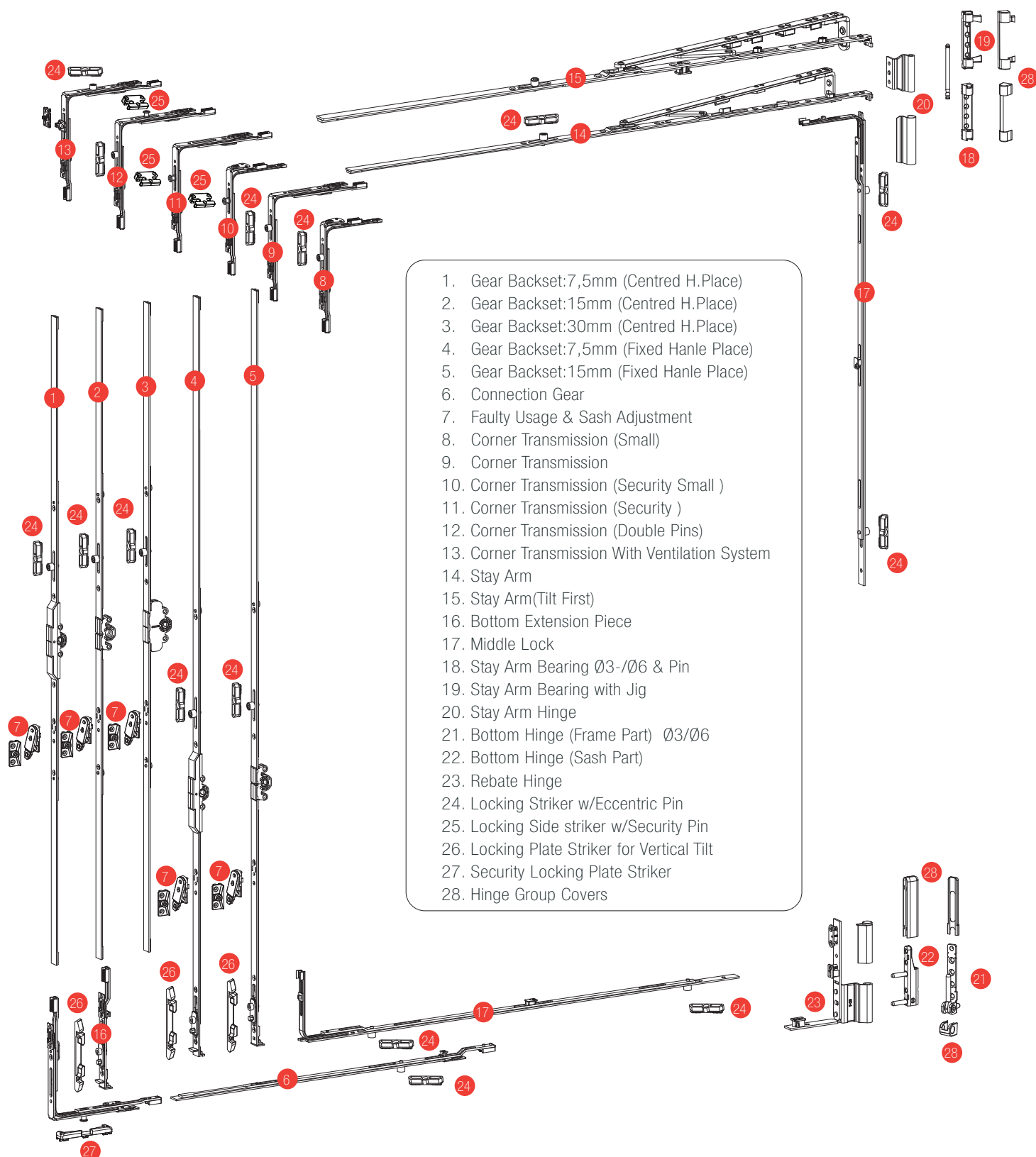


Note: The Contents in this table show the wight of the Glass kg/m²
The system is ideal with 100 - kg carrying capacity of the sash
The weight of the Glass (1mm thickness) is 2,5kg for each 1m²
The above dimensions may change according the type of the profile.



- 1 Central locking Size
- 2 Ride Height
- 3 Working in Space
- 4 Riding on the wings of the Case Size
- 5 Lockers Visible Width
- 6 Riding Thickness
- 7 Gasket Print Size
- 8-11 Size Claw money
- 12 Case Dimensions
- 13 Wing Dimensions
- 14 Case Internal Dimensions
- 15 Espagnolettes Channel Size

Fornax PvcMotion
Tilt & Turn Hardware
Hardware Table



Fornax PvcMotion Tilt & Turn Hardware Mounting Instructions

Mounting Instructions

Fornax PVC Channel Tilt System is located in a very innovative technology contributes to the window feature. Installation of new hardware easily and flexible use of space with many different combination possibilities of installation. Demand in the market are usually the standard opening. Fornax PVC systems are standards for tilt and turn windows up to 100 kg, is a system with aesthetic appearance. Both economically and practically available all over the world.

Mounting Instructions

! Weldin residue at the corners of the sash must be scraed and then start mounting the pieces

1.Firstly mount "Corner Transmission" top Comer of the sash by screws. ensure that the eccentric bolt i,s on T&T Gear side.

! Fixing piece! mustn't be screwed! (see figure 1-1)

2.Mount "Bottom Extension Piece" alone or together with "middle lock " which has suitable height (see the Tilt & turn fittings), to bottom corner of the sash.

! "Fixing piece! mustn't be screwed! (see figure 2-1)

3.Locate and mark "T&T geaf"to length , then cut and mount T&Tgear onto the sash screw the "Fixing Pieces"

4."Locate " Stay arm "to top of the sash ,then mark to length and cut. mount the stay arm alone or together with "middle Lock " which has suitable height.

! See the T&T Fittings. Screw the Fixing Piece.

5.Put "Stay arm hinge" mo the stay arm , turn the Pin 90 to lock with allen 45 key .according to demand use "stay arm hinges cover"

6.Mount "Bottom hinge (Sash PART)" to the sash. According to demand use "Bottom hinge (Sash Part)" Cover.

7.Mount "Drill in Comer Beating"to Bottom of the frame. According to demand use "Drillin Comer bearing Top Cover and Bottom Cover"

8.mount "Stay arm Bearing" to top of the frame . According to demand use "Stay arm bearing Cover "is used.

9.Sash Frame ties after assembling bottom hinge (Sash Part) and bottom hinge (Frame part)

10. Locate the pin after assembling stay arm hinge and stay arm bearing

11.Mount "T&T System Locking Plate" to bottom of the frame by screws.

12.Locate and screw " Locking Plates" to frame in possition according to eccentric bolts

13.After mountign, fit the Covers on the Hinges.



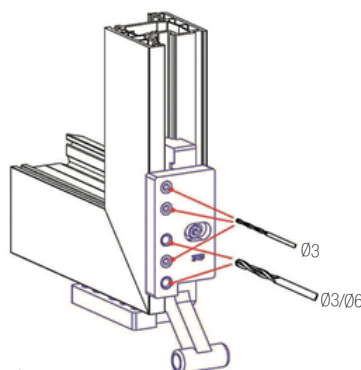
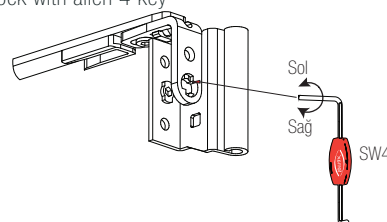
18

Fornax PvcMotion Tilt & Turn hardware Mounting Instructions

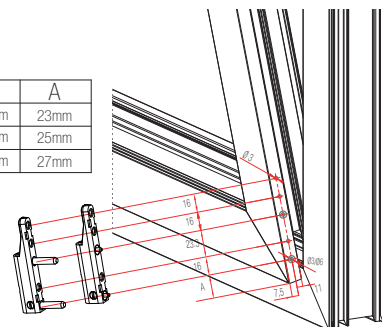
The upper and the lower hinges assembling

- The hinge have to be setted top right or left, turn the pin to lock with allen 4 key.
- The bottom sash hinge Jig have to be used accordind the measure of the profile locking can be adjusted (9mm to 13mm).
- According the side which the windows sash gone open, must the sashes lower hinge be placed.
- The jig must be placed exact in the espagnolettes channel like the picture down in the corner.
- To drill the central holes for the hinge, do it by Ø3 or Ø6 bit's.
- After drilling the necessary holes, fit the sashes lower hinge holls with the hinges holles and screw it by a screw driver.

! The Stay Arm right or left have to be setted and turned the pin to lock with allen 4 key



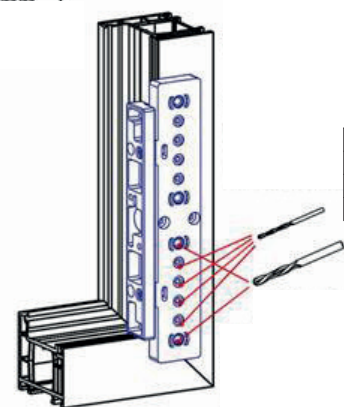
	A
18mm	23mm
20mm	25mm
22mm	27mm



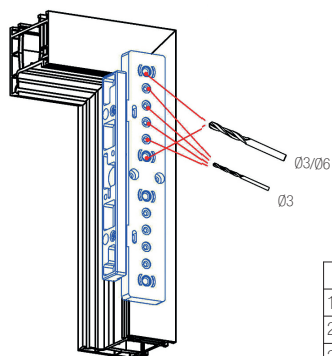
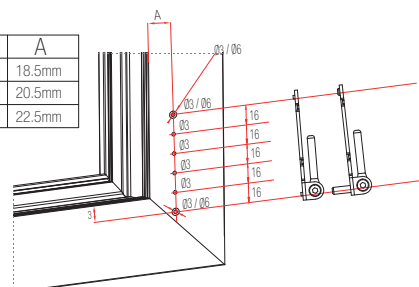
Sashes lower and upper hinges assembling

- The bottom frame hinge template have to be used accordind the measure of the profile locking (18mm or 20mm or 22mm) can be adjusted.
- According the side which the windows sash gone open, must the frames lower and upper hinges be placed.
- The jig as shown in the figure have to be placed in the frames corner.
- Drill the central holes of the frame upper and lower hinges respectively.
- After drilling the necessary holes, fit the frames lower and upper hinges holls with the hinges holles and screw it by a screw driver.

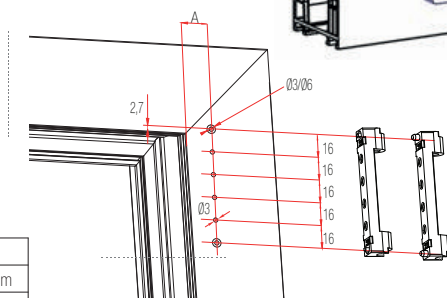
Attention:
Leave a space of 3,5mm between the sash and the frame for the pressure gasket.



	A
18mm	18.5mm
20mm	20.5mm
22mm	22.5mm

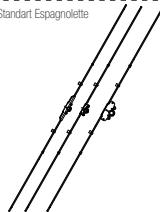

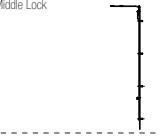



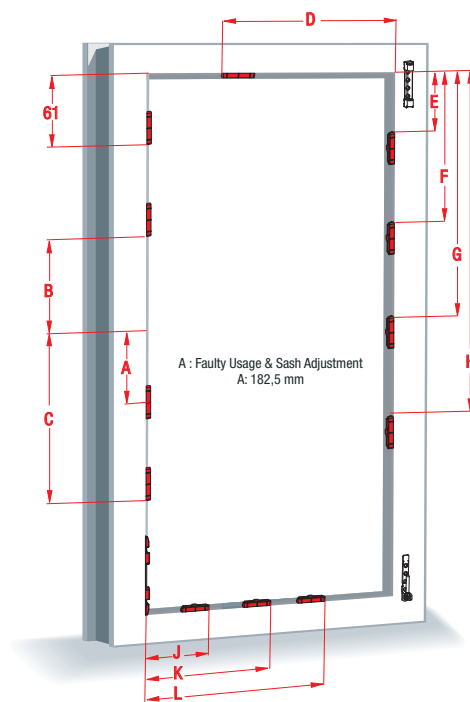
	A
18mm	18.5mm
20mm	20.5mm
22mm	22.5mm





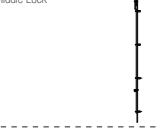

Fornax PvcMotion
Tilt & Turn hardware
Striker Mounting Instructions

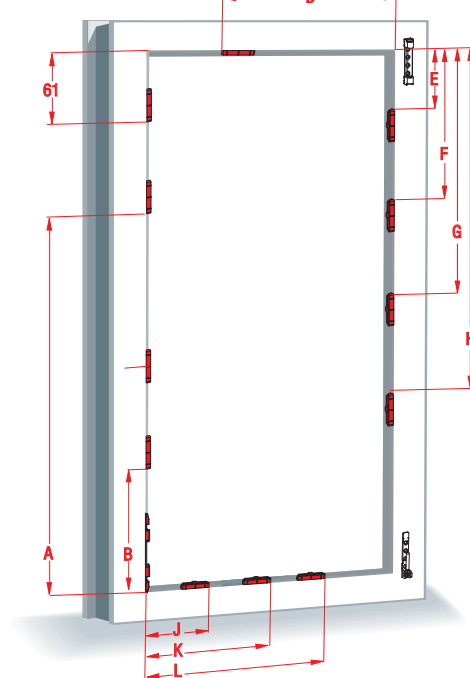
Standart Espagnolette Striker Assembling Diagram

Product	Group	Range of Use	A	B	C	
	GR 01	295-295-600	-	-	-	
	GR 02	571-701	-	-	-	
	GR 03	701-900	391	-	-	
	GR 04	901-1100	541	-	-	
	GR 05	1101-1300	641	-	-	
	GR 06	1301-1500	741	-	-	
	GR 07	1501-1700	995	352	-	
	GR 08	1701-1900	1275	632	-	
	GR 09	1901-2100	1275	632	-	
Product	Group	Range of Use	-	-	D	
	GR 01	395-600	-	-	-	
	GR 02	595-800	-	-	-	
	GR 03	795-1000	-	-	545	
	GR 04	995-1200	-	-	545	
	GR 05	1195-1400	-	-	784	
	GR 06	1395-1600	-	-	868	
Product	Group	Range of Use	E	F	G	H
	GR 00	400-800	148	-	-	-
	GR 01	700-1150	148	481	-	-
	GR 02	1150-1350	148	681	-	-
	GR 03	1350-1850	148	481	1181	-
	GR 04	1850-2100	148	695	1425	-
	GR 05	2100-2400	148	481	1081	1724
Product	Group	Range of Use	-	J	K	L
	GR 00	400-800	-	130	-	-
	GR 01	700-1150	-	130	463	-
	GR 02	1150-1350	-	130	663	-
	GR 03	1350-1850	-	130	463	1169









Fixed Handle Espagnolette Striker Assembling Diagram

Product	Group	Range of Use	A	B	C	
 Espagnolette Fixed Handle	GR 01	295-295-600	-	-	-	
	GR 02	571-701	-	-	-	
	GR 03	701-900	391	-	-	
	GR 04	901-1100	541	-	-	
	GR 05	1101-1300	641	-	-	
	GR 06	1301-1500	741	-	-	
	GR 07	1501-1700	995	352	-	
	GR 08	1701-1900	1275	632	-	
	GR 09	1901-2100	1275	632	-	
Product	Group	Range of Use	-	-	D	
 Stay Arm	GR 01	395-600	-	-	-	
	GR 02	595-800	-	-	-	
	GR 03	795-1000	-	-	545	
	GR 04	995-1200	-	-	545	
	GR 05	1195-1400	-	-	784	
	GR 06	1395-1600	-	-	868	
Product	Group	Range of Use	E	F	G	H
 Middle Lock	GR 00	400-800	148	-	-	-
	GR 01	700-1150	148	481	-	-
	GR 02	1150-1350	148	681	-	-
	GR 03	1350-1850	148	481	1181	-
	GR 04	1850-2100	148	695	1425	-
	GR 05	2100-2400	148	481	1081	1724
Product	Group	Range of Use	-	J	K	L
 Middle Lock	GR 00	400-800	-	130	-	-
	GR 01	700-1150	-	130	463	-
	GR 02	1150-1350	-	130	663	-
	GR 03	1350-1850	-	130	463	1169



Fornax PvcMotion
Tilt & Turn hardware
Strikers Compatible Profile List

Profile	Serial	axis			
ADOPEN	AKDBNZ	13	189.160.001	189.070.0LR1	189.100.001
	70 MM				
	632 (WNTech)				
	642 (WNTech)				
AKANSUPEN	AKSU	9	189.170.001	189.050.0LR1	---
	SUPER VENA	13	189.160.001	189.070.0LR1	189.100.001
	VENA	13	189.160.001	189.070.0LR1	189.100.001
AKAPEN	AKANTAJ	13	189.160.001	189.070.0LR1	189.100.001
	VEGA				
ALFAPEN	VENUS	9	189.170.001	189.050.0LR1	----
	ISN				
ALUPLAST	IDEAL 200 AD 60	13	189.160.001	189.070.0LR1	189.100.001
	IDEAL 400 AD 70				
	IDEAL 500 MD 70				
	IDEAL 600 MD 80				
	IDEAL 700 AD 80				
ARTPLAST	70 MM AD	13	189.160.001	189.070.0LR1	189.100.001
ASAŞEN	6040	13	189.160.001	189.070.0LR1	189.100.001
	6000	9	189.170.001	189.050.0LR1	---
	5200	9	189.170.001	189.050.0LR1	---
EDWIN	LARC	13	189.160.001	189.070.0LR1	189.100.001
ERFEN		13	189.160.001	189.070.0LR1	189.100.001
BRUGMAN	73 MM	13	189.160.001	189.070.0LR1	189.100.001
AD MD					
CANKAPEN		13	189.160.001	189.070.0LR1	189.100.001
DMEX	70 mm	13	189.160.001	189.070.0LR1	189.100.001
	60 mm				
DOORWIN		13	189.160.001	189.070.0LR1	189.100.001
DURUPEN		13	189.160.001	189.070.0LR1	189.100.001
EGEPEN	ZENDOW	13	189.160.001	189.070.0LR1	189.100.001
	SİSTEM (2032)	13	189.160.001	189.070.0LR1	189.100.001
		9	189.170.001	189.050.0LR1	----
ENDERPEN	70 mm	13	189.160.001	189.070.0LR1	189.100.001
	VIZYONLINE ULTRA				
	VIZYONLINE				
	56 MM				
ERFEN	EXTRALINE	13	189.160.001	189.070.0LR1	189.100.001
	SMARTLINE	13	189.160.001	189.070.0LR1	189.100.001
	ECOLINE	9	189.170.001	189.050.0LR1	---
	SOFTLINE	9	189.170.001	189.050.0LR1	----
ESSENPEN	MLENYUM	13	189.160.001	189.070.0LR1	189.100.001
EUROLINE	58 MM LUX	13	189.160.001	189.070.0LR1	189.100.001
	58 MM EKONOMİK				
EUROFEN	ELITE	9	189.170.001	189.050.0LR1	----
	FESTA	13	189.160.001	189.070.0LR1	189.100.001
EUROWIN		13	189.160.001	189.070.0LR1	189.100.001
FLFEN	UZAY	9	189.170.001	189.050.0LR1	----
FRAITEN		9	189.170.001	189.050.0LR1	---
FLASHPEN		13	189.160.001	189.070.0LR1	189.100.001
GEALAN		13	189.160.001	189.070.0LR1	189.100.001
GÜNELPEN	BEGONIA	9	189.170.001	189.050.0LR1	---
	MAGNOLIA	9	189.170.001	189.050.0LR1	---
	AZALEA	13	189.160.001	189.070.0LR1	189.100.001
KARFEN		13	189.160.001	189.070.0LR1	189.100.001
KEE	58 MM	9	189.170.001	189.050.0LR1	---
	70 MM	13	189.160.001	189.070.0LR1	189.100.001
KEBAPEN	600 BEO SERİ	9	189.170.001	189.050.0LR1	---
	6002 SUPER SERİ	13	189.160.001	189.070.0LR1	189.100.001
KIPPING		13	189.160.001	189.070.0LR1	189.100.001

Profile	Serial	axis			
KOMFEN	200 SUPERLINE	9	189.170.001	189.050.0LR1	----
	300 MEGALINE	9	189.170.001	189.050.0LR1	---
	600 TERMOLINE	13	189.160.001	189.070.0LR1	189.100.001
KOMMERLING	CLASSIC MD 70	13	189.160.001	189.070.0LR1	189.100.001
	ELEGANCE AD 70				
	MD 80				
	58 MM				
MMWIN		13	189.160.001	189.070.0LR1	189.100.001
NATUREL	SUPERNAT	13	189.160.001	189.070.0LR1	189.100.001
ÖNDERPEN		9	189.170.001	189.050.0LR1	----
ÖRNEPEN		9	189.170.001	189.050.0LR1	---
ÖZENSFEN		9	189.170.001	189.050.0LR1	----
PAKPEN	UNIVERSAL	9	189.170.001	189.050.0LR1	----
	P-200 BEO				
	OVAL				
PENSA		13	189.160.001	189.070.0LR1	189.100.001
PARPLAST	6032	13	189.160.001	189.070.0LR1	189.100.001
	6042				
PENTECH		9	189.170.001	189.050.0LR1	----
PIMAFEN	4500	9	189.170.001	189.050.0LR1	----
	5300	9	189.170.001	189.050.0LR1	---
	6000	9	189.170.001	189.050.0LR1	----
	7000	13	189.160.001	189.070.0LR1	189.100.001
	7500	13	189.160.001	189.070.0LR1	189.100.001
	QUADRO	13	189.160.001	189.070.0LR1	189.100.001
PLASFEN		9	189.170.001	189.050.0LR1	----
POLPEN		13	189.160.001	189.070.0LR1	189.100.001
PROKAL		13	189.160.001	189.070.0LR1	189.100.001
PROLINE		13	189.160.001	189.070.0LR1	189.100.001
RAMPLAST		9	189.170.001	189.050.0LR1	----
REHAU	BRILLANT DESIGN AD 70	13	189.160.001	189.070.0LR1	189.100.001
	BASIC DESIGN AD 60				
	THERMO DESIGN AD 60				
RESMAN		13	189.160.001	189.070.0LR1	189.100.001
ROPPLASTO	7001 AD	13	189.160.001	189.070.0LR1	189.100.001
ROTHOPLAST		13	189.160.001	189.070.0LR1	189.100.001
SALAMANDER	2D	13	189.160.001	189.070.0LR1	189.100.001
	3D				
SIRAFEN		13	189.160.001	189.070.0LR1	189.100.001
SECFEN		9	189.170.001	189.050.0LR1	----
SCHÖNLINE	60 MM	13	189.160.001	189.070.0LR1	189.100.001
	70 MM				
	EXOLINE				
STARFEN		9	189.170.001	189.050.0LR1	---
TAURUS		13	189.160.001	189.070.0LR1	189.100.001
TERNO PLAST		13	189.160.001	189.070.0LR1	189.100.001
TROCAL		13	189.160.001	189.070.0LR1	189.100.001
UNIPLAST		13	189.160.001	189.070.0LR1	189.100.001
VEBA	SOFTLINE AD 58	13	189.160.001	189.070.0LR1	189.100.001
	SOFTLINE AD 70				
	TOPLINE AD 70				
WINAPEX		13	189.160.001	189.070.0LR1	189.100.001
WINDER		9	189.170.001	189.050.0LR1	----
WINDOLINE		13	189.160.001	189.070.0LR1	189.100.001
WINHOUS		9	189.170.001	189.050.0LR1	---
WINPLAST		9	189.170.001	189.050.0LR1	---
WORLDPEN		13	189.160.001	189.070.0LR1	189.100.001
WYMAR		13	189.160.001	189.070.0LR1	189.100.001
YLDİZPEN		9	189.170.001	189.050.0LR1	----

Fornax PvcMotion
Tilt & Turn hardware
Care Instructions

Care Instructions

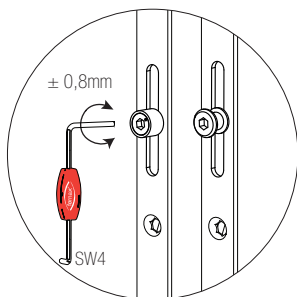
Lubricate once a year the locations shown on the right side, helps to better performance of our system works.

To prevent damage to the coating of Yelkencoat, avoid abrasive cleaning materials.

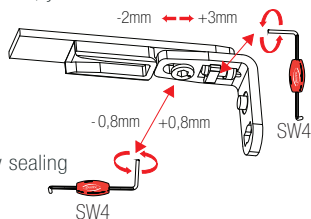
To fixing the hardware, is necessary to verify the benefits and degree, you can make the following settings.

Care instructions and Installation Settings

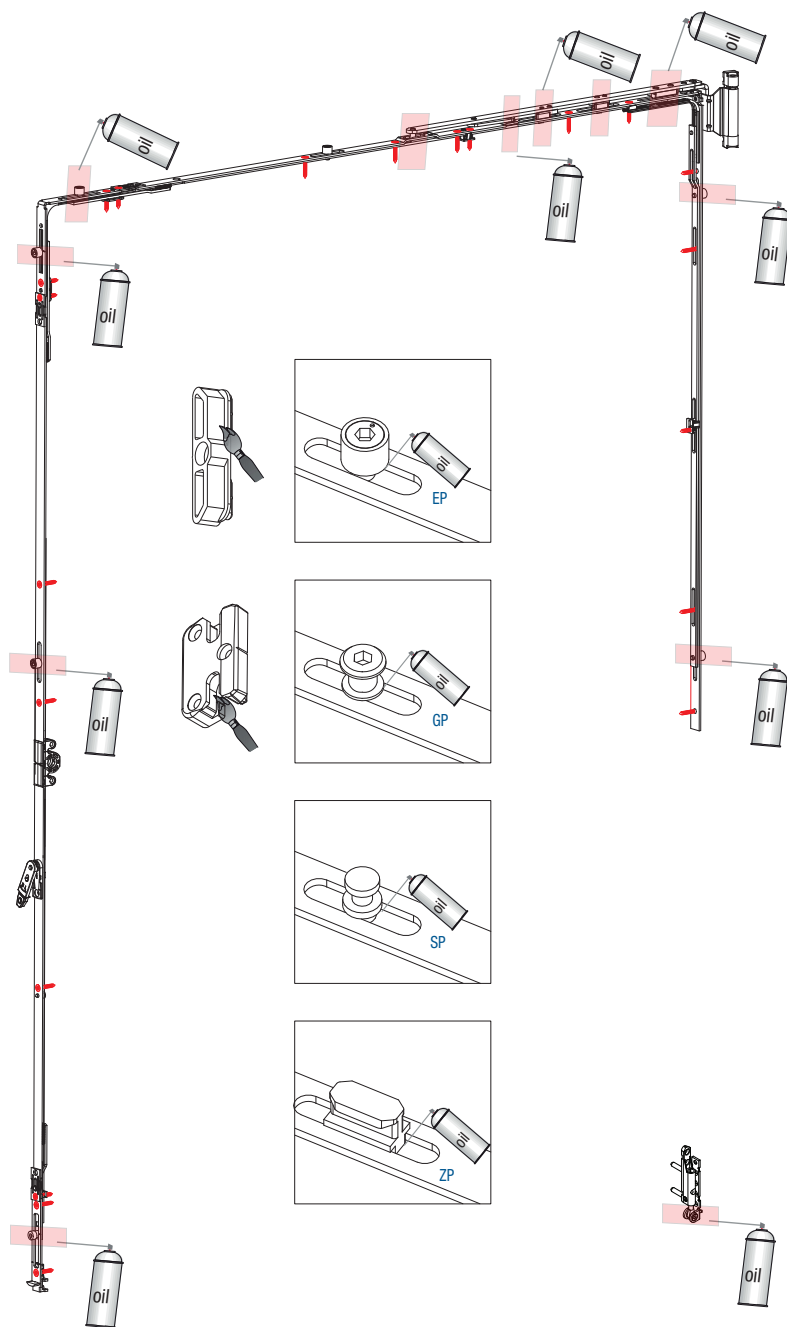
! Turning the key tongue with SW4 Allen key ± 0.8 sealing pressure is adjustable.



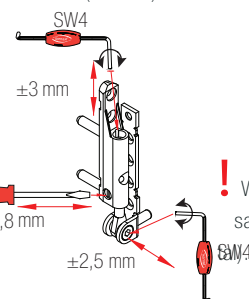
! With SW4 allen key sash plane, you can move +3mm -2mm.



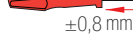
! Turning with SW4 allen key sealing pressure is



! With SW4 allen key can the sash be adjusted ± 3 mm (Vertical).



! With a flat screwdriver , can the sealing pressure be adjusted ± 1 mm.



! With SW4 allen key can the sash be adjusted ± 2 mm (Hozion-)

Fornax PvcMotion
Tilt & Turn Hardware
7,5mm Espagnolette (Centred Handle)

Hardware Technical Details

Range of use	: Min: 367mm - Max: 2400mm
Axis	: 7,5mm
Handles location	: Centred Handle
Body Type	: Zamac body
Security Level	: w/Eccentric/Security Pin
Faulty usage / sash adjustment	: Available

Hardware Description

■ **Upper Extension ;**

Standard, small, Safety Pin, security small, ventilated, double pin corner transmission is usable (see page 30)

By using the standard seri of the corner transmission, is the hight of the sash minimum: 585mm.

If you use the small corner transmission; will the sash heighth be 476mm.

■ **For the features of the Bottom Extension (Vertical)**

Bottom lock hardware offers the ability to use the equipment. (see page 39)

■ **For the features of the Bottom Extension (bottom regulated)**

The safety pins and security corner transmission offers the ability to use the equipment. (see page 30)

■ **The security of the 'Faulty usage - sash adjustment';**

Faulty usage and sash lifting device, provides increased safety.

■ **Connection Gear**

The add of this equipment assists and provid thermal insulation.

■ **To regular the gasket pressure;**

You can change the gasket pressure in a level range of +/- 0,8mm

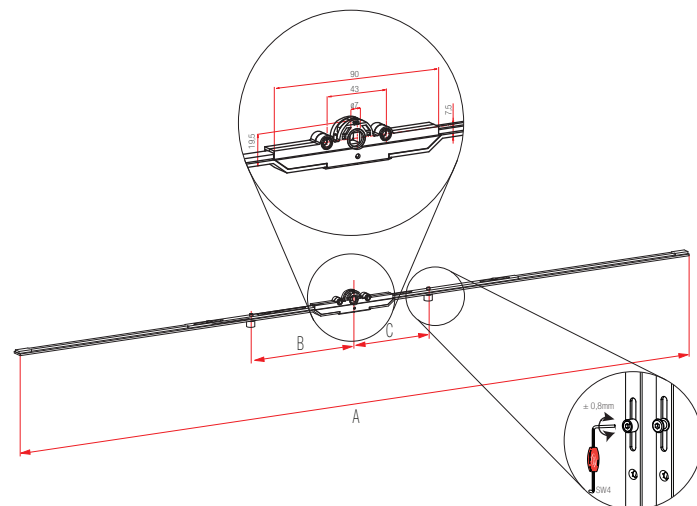
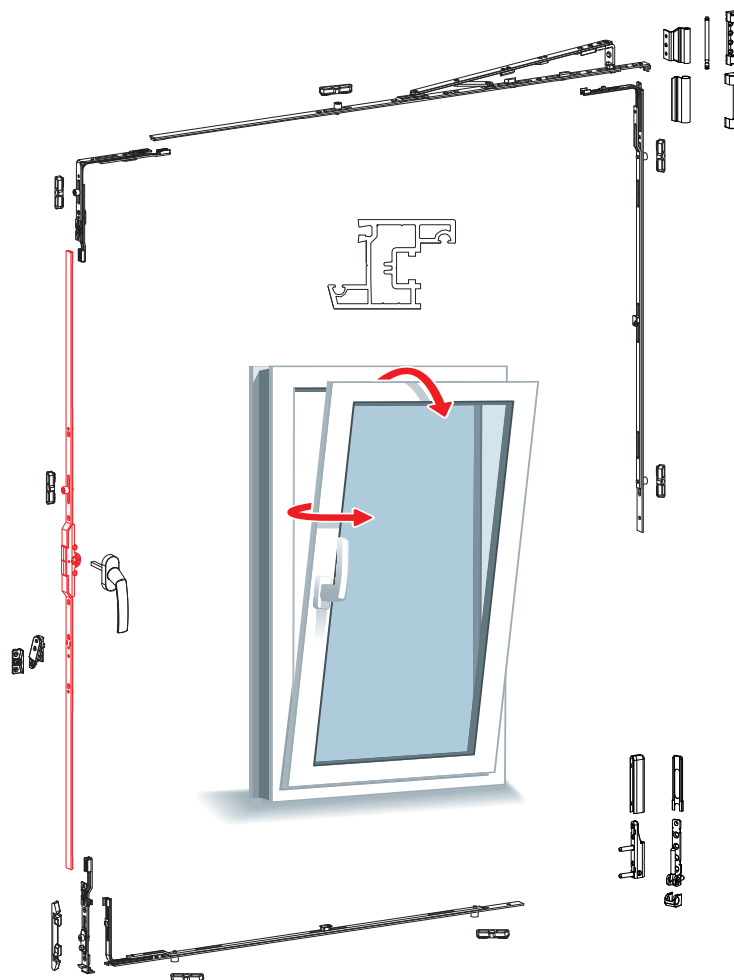
■ **Assembling;**

It helps to easy the installation and save much time.

3,9x25 Rare serrated espagnolette screws code: 449.339.025.001

■ **Coating;**

YelkenCoat gives longer durability and corrosion protection to the hardware



Order Details

			Miktar	Kg
-	-	187.010.701.000	10	3.69
187.010.801.000	187.110.801.000	-	10	4.57
187.021.001.000	187.121.001.000	-	10	5.43
187.021.101.000	187.121.101.000	-	10	5.98
187.021.301.000	187.121.301.000	-	10	6.88
187.021.501.000	187.121.501.000	-	10	7.59
187.021.701.000	187.121.701.000	-	10	8.64
187.022.101.000	187.122.101.000	-	10	10.40

Technical Details

GRUP	KA	A	B	C	D			
GR:01	585-1000	730	-	-	-	✓	2	-
GR:01-1	685-1100	830	120	-	-	✓	2	1
GR:02	885-1300	1030	120	-	-	✓	4	1
GR:02-1	985-1400	1130	120	-	-	✓	4	1
GR:03	1185-1600	1330	120	-	-	✓	6	1
GR:04	1385-1800	1530	272	272	-	✓	8	2
GR:05	1585-2000	1730	322	322	-	✓	8	2
GR:06	1985-2400	2130	372	372	-	✓	10	2

Note: Technical detail sizes are millimetric.

Fornax PvcMotion
Tilt & Turn Hardware
15mm Espagnolette (Centred Handle)

Hardware Technical Details

Range of use	: Min: 262mm - Max: 2400mm
Axis	: 15mm
Handles location	: Centred Handle
Body Type	: Zamac body
Security Level	: w/Eccentric-Security Pin
Faulty usage / sash adjustment	: Available

Hardware Description

■ **Upper Extension ;**

Standard, small, Safety Pin, security small, ventilated, double pin corner transmission is usable (see page 30)

By using the standard seri of the corner transmission, is the hight of the sash minimum: 585mm.

If you use the small corner transmission; will the sash heighth be 476mm.

■ **For the features of the Bottom Extension (Vertical)**

Bottom lock hardware offers the ability to use the equipment. (see page 39)

■ **For the features of the Bottom Extension (bottom regulated)**

The safety pins and security corner transmission offers the ability to use the equipment. (see page 30)

■ **The security of the 'Faulty usage - sash adjustment';**

Faulty usage and sash lifting device, provides increased safety.

■ **Connection Gear**

The add of this equipment assists and provid thermal insulation.

■ **To regular the gasket pressure;**

You can change the gasket pressure in a level range of +/- 0,8mm

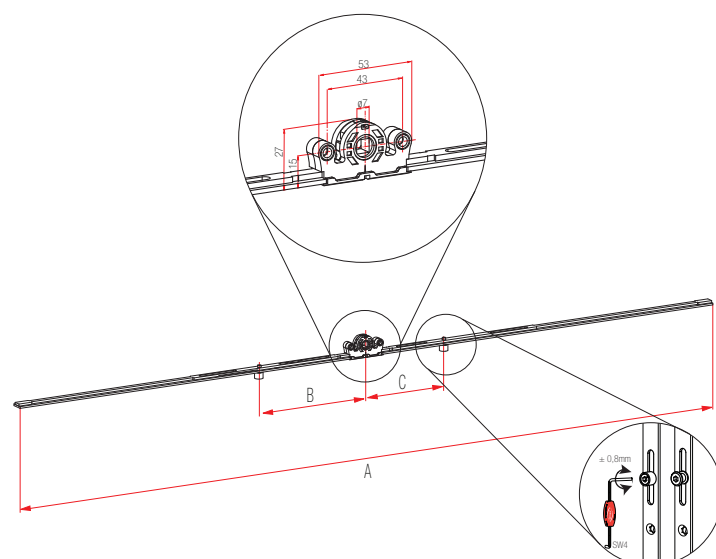
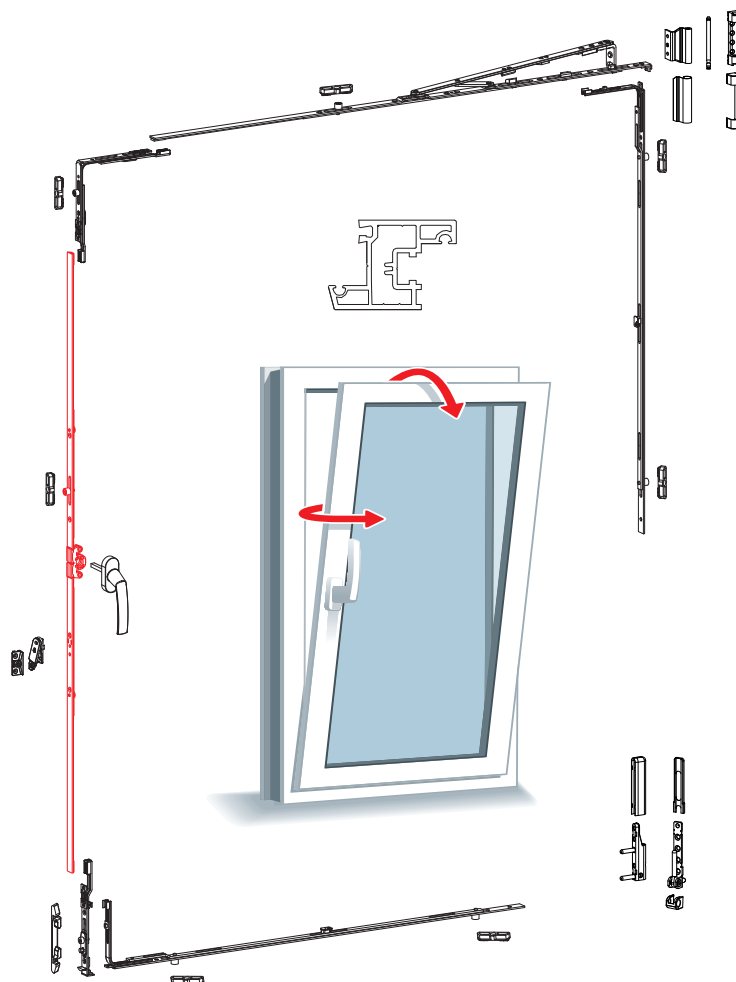
■ **Assembling;**

It helps to easy the installation and save much time.

3,9x25 Rare serrated espagnolette screws code: 449.339.025.001

■ **Coating;**

YelkenCoat gives longer durability and corrosion protection to the hardware



Technical Details

Order Details

EP	GP	X		
			Miktar	Kg
-	-	185.010.601.000	10	3.69
-	-	185.010.701.000	10	3.69
185.010.801.000	185.110.801.000	-	10	4.57
185.021.001.000	185.121.001.000	-	10	5.43
185.021.101.000	185.121.101.000	-	10	5.98
185.021.301.000	185.121.301.000	-	10	6.88
185.021.501.000	185.121.501.000	-	10	7.59
185.021.701.000	185.121.701.000	-	10	8.64
185.022.101.000	185.122.101.000	-	10	10.40

GRUP	KA	A	B	C	D			
GR:01	270/480-700	628	-	-	-	✓	2	-
GR:01	585-1000	730	-	-	-	✓	2	-
GR:01-1	685-1100	830	120	-	-	✓	2	1
GR:02	885-1300	1030	120	-	-	✓	4	1
GR:02-1	985-1400	1130	120	-	-	✓	4	1
GR:03	1185-1600	1330	120	-	-	✓	6	1
GR:04	1385-1800	1530	272	272	-	✓	8	2
GR:05	1585-2000	1730	322	322	-	✓	8	2
GR:06	1985-2400	2130	372	372	-	✓	10	2

Technical detail sizes are millimetric

Fornax PvcMotion Tilt & Turn Hardware 30mm Espagnolette (Centred Handle)

Hardware Technical Details

Range of use	: Min: 262mm - Max: 2400mm
Axis	: 30mm
Handles location	: Centred Handle
Body Type	: Zamac body
Security Level	: w/Eccentric/Security Pin
Faulty usage / sash adjustment	: Available

Hardware Description

■ Upper Extension ;

Standard, small, Safety Pin, security small, ventilated, double pin corner transmission is usable (see page 30)

By using the standard seri of the corner transmission, is the height of the sash minimum: 585mm.

If you use the small corner transmission; will the sash height be 476mm.

■ For the features of the Bottom Extension (Vertical)

Bottom lock hardware offers the ability to use the equipment. (see page 39)

■ For the features of the Bottom Extension (bottom regulated)

The safety pins and security corner transmission offers the ability to use the equipment. (see page 30)

■ The security of the 'Faulty usage - sash adjustment';

Faulty usage and sash lifting device, provides increased safety.

■ Connection Gear

The add of this equipment assists and provid thermal insulation.

■ To regular the gasket pressure;

You can change the gasket pressure in a level range of +/- 0,8mm

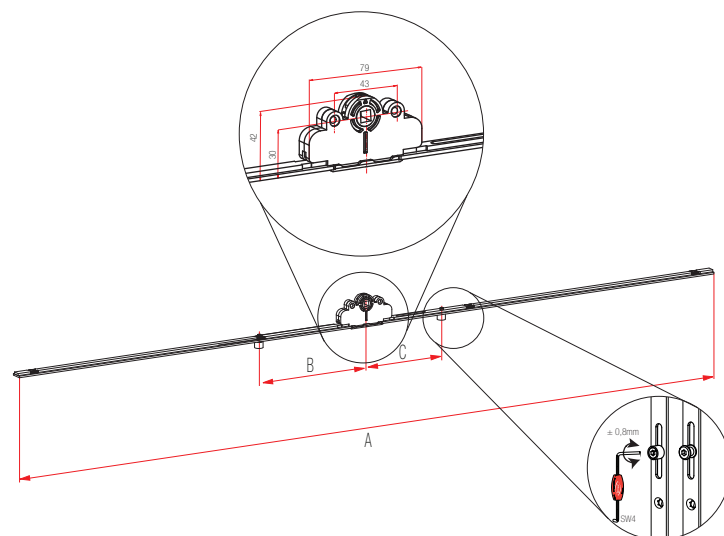
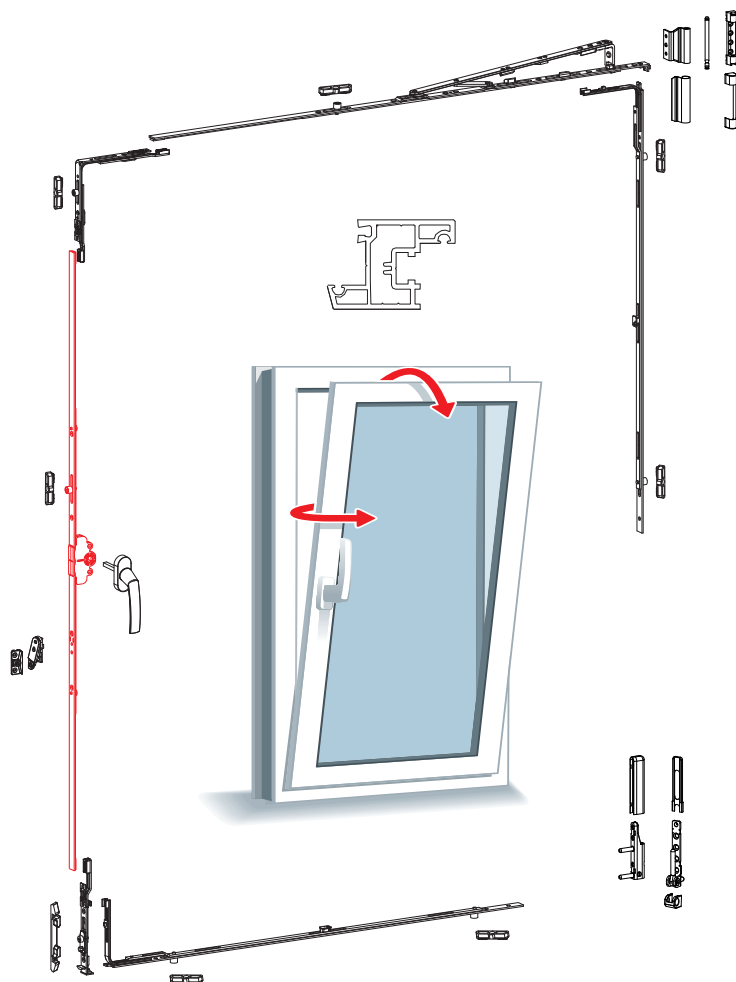
■ Assembling;

It helps to easy the installation and save much time.

3,9x25 Rare serrated espagnolette screws code: 449.339.025.001

■ Coating;

YelkenCoat gives longer durability and corrosion protection to the hardware



Order Details

EP	GP	X		
			Miktar	Kg
-	-	185.810.601.000	10	3.69
-	-	185.810.701.000	10	3.69
185.810.801.000	185.910.801.000	-	10	4.57
185.821.001.000	185.921.001.000	-	10	5.43
185.821.101.000	185.921.101.000	-	10	5.98
185.821.301.000	185.921.301.000	-	10	6.88
185.821.501.000	185.921.501.000	-	10	7.59
185.821.701.000	185.921.701.000	-	10	8.64
185.822.101.000	185.922.101.000	-	10	10.40

Technical Details

GRUP	KA	A	B	C	D			
GR:01	270/480-700	628	-	-	-	✓	2	-
GR:01	585-1000	730	-	-	-	✓	2	-
GR:01-1	685-1100	830	120	-	-	✓	2	1
GR:02	885-1300	1030	120	-	-	✓	4	1
GR:02-1	985-1400	1130	120	-	-	✓	4	1
GR:03	1185-1600	1330	120	-	-	✓	6	1
GR:04	1385-1800	1530	272	272	-	✓	8	2
GR:05	1585-2000	1730	322	322	-	✓	8	2
GR:06	1985-2400	2130	372	372	-	✓	10	2

Note: Technical detail sizes are millimetric.

Fornax PvcMotion

Tilt & Turn Hardware

30mm Espagnolette w/additional locked (Centred Handle)

Hardware Technical Details

Range of use	: Min: 262mm - Max: 2400mm
Axis	: 30mm
Handles location	: Centred Handle
Body Type	: Zamac body
Security Level	: w/additional - w/Eccentric/Security Pin
Faulty usage / sash adjustment	: Available

Hardware Description

■ Upper Extension ;

Standard, small, Safety Pin, security small, ventilated, double pin corner transmission is usable (see page 30)

By using the standard seri of the corner transmission, is the hight of the sash minimum: 585mm.

If you use the small corner transmission; will the sash heighth be 476mm.

■ For the features of the Bottom Extension (Vertical)

Bottom lock hardware offers the ability to use the equipment. (see page 39)

■ For the features of the Bottom Extension (bottom regulated)

The safety pins and security corner transmission offers the ability to use the equipment. (see page 30)

■ The security of the 'Faulty usage - sash adjustment';

Faulty usage and sash lifting device, provides increased safety.

■ Connection Gear

The add of this equipment assists and provid thermal insulation.

■ To regular the gasket pressure;

You can change the gasket pressure in a level range of +/- 0,8mm

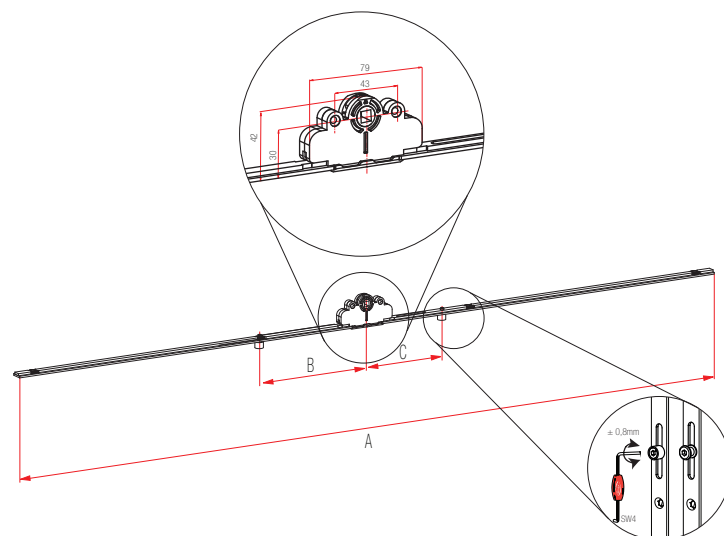
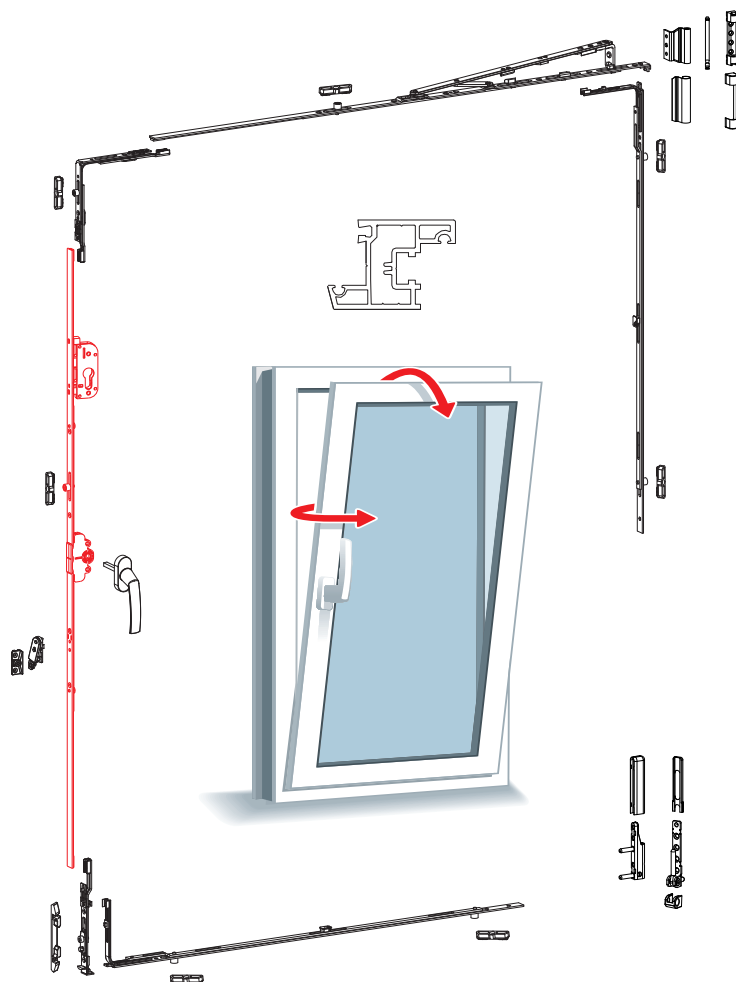
■ Assembling;

It helps to easy the installation and save much time.

3,9x25 Rare serrated espagnolette screws code: 449.339.025.001

■ Coating;

YelkenCoat gives longer durability and corrosion protection to the hardware



Order Details

EP	GP	X	Miktar	Kg
185.621.531.000	185.921.531.000	-	10	-
185.621.731.000	185.921.731.000	-	10	-
185.622.131.000	185.922.131.000	-	10	-

Technical Details

GRUP	KA	A	B	C	D			
GR:01	-	1532	-	-	-	1	2	-
GR:01	-	1732	-	-	-	1	2	-
GR:01-1	-	2132	120	-	-	1	2	1

Note: Technical detail sizes are millimetric.

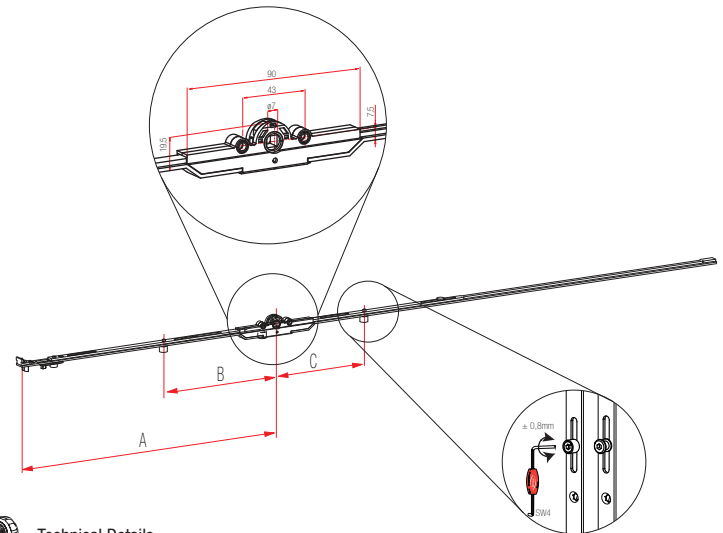
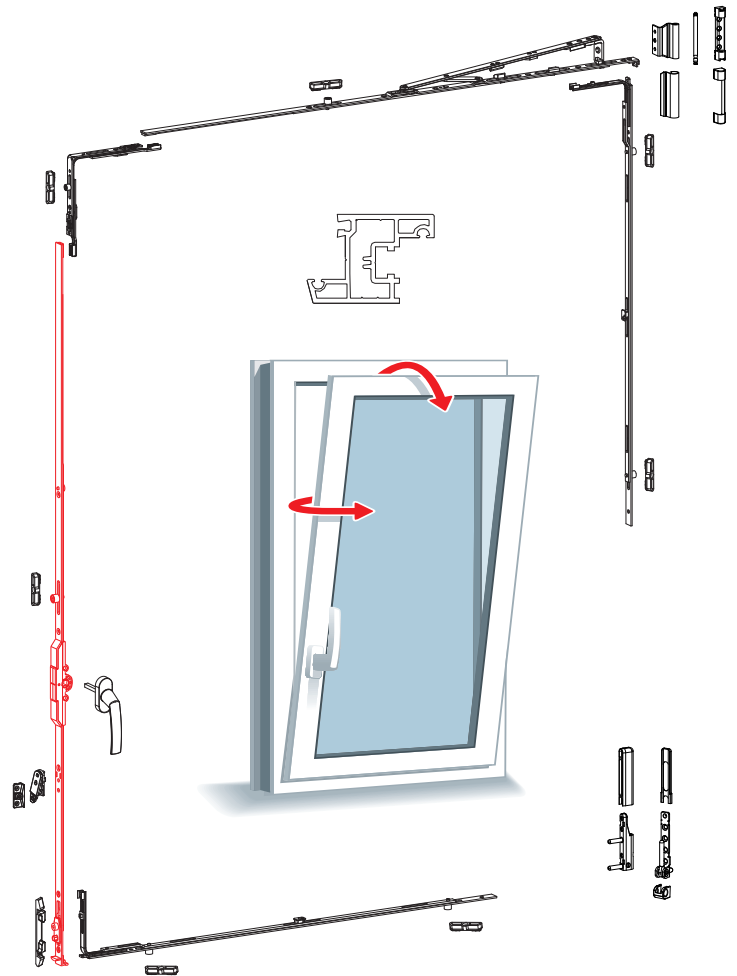
Fornax PvcMotion
Tilt & Turn Hardware
7,5mm Espagnolette (Fixed Handle)

Hardware Technical Details

Range of use	: Min: 350mm - Max: 2190mm
Axis	: 7,5mm
Handles location	: Fixed Handle (under)
Body Type	: Zamac body
Security Level	: w/Eccentric-Security Pin
Faulty usage / sash adjustment	: Available

Hardware Description

- **Upper Extension ;**
Additional Locking Espagnolette, Standard, small, Safety Pin, security small, ventilated, double pin corner transmission is usable
- **For the features of the Bottom Extension (vertical)**
Middle lock hardware offers the ability to use the equipment. (see page 40)
- **The security of the 'Faulty usage - sash adjustment';**
Faulty usage and sash lifting device, provides increased safety.
- **To regular the gasket pressure;**
You can change the gasket pressure in a level range of +/- 0,8mm
- **Assembling;**
It helps to easy the installation and save much time.
3,9x25 Rare serrated espagnolette screws code: 449.339.025.001
- **Coating;**
YelkenCoat gives longer durability and corrosion protection to the hardware.



Technical Details

Order Details

EP	GP	X		
			Miktar	Kg
-	-	187.020.501.000	10	3.69
-	-	187.020.701.000	10	3.69
187.020.701.000	187.120.701.000	-	10	4.57
187.021.901.000	187.121.901.000	-	10	5.43
187.021.101.000	187.121.101.000	-	10	5.98
187.021.301.000	187.121.301.000	-	10	6.88
187.021.401.000	187.121.401.000	-	10	7.59
187.021.601.000	187.121.601.000	-	10	8.64
187.022.701.000	187.122.701.000	-	10	10.40
187.021.801.000	187.121.801.000	-	10	7.59
187.021.901.000	187.121.901.000	-	10	8.64
187.022.001.000	187.122.001.000	-	10	10.40

GRUP	KA	A	B	C	D			
GR:01	350/450-650	155	-	-	-	✓	2	-
GR:02	530-730	200	-	-	-	✓	2	-
GR:03	685-890	250	-	120	-	✓	2	1
GR:04	885-1090	400	-	120	-	✓	4	1
GR:05	1085-1290	500	-	120	-	✓	4	1
GR:06	1285-1490	500	-	120	-	✓	6	2
GR:07	1385-1590	600	390	274	-	✓	8	2
GR:08	1585-1790	600	290	354	-	✓	8	2
GR:09	1785-1990	700	370	274	-	✓	10	3
GR:10	1985-2190	700	-	-	-	✓	8	2
GR:11	1785-1990	980	-	-	-	✓	8	3
GR:12	1985-2190	980	-	-	-	✓	10	3

Note: Technical detail sizes are millimetric.

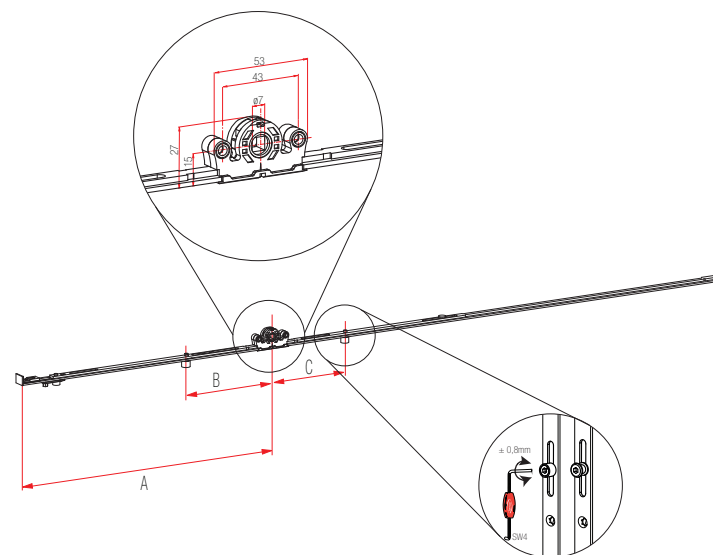
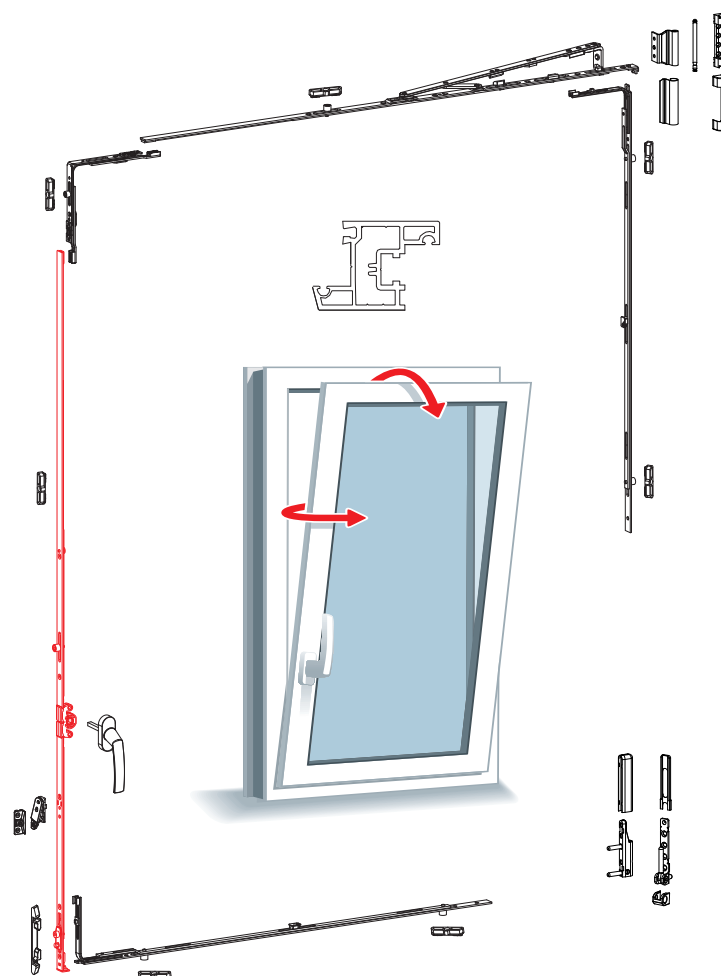
Fornax PvcMotion
Tilt & Turn Hardware
15mm Espagnolette (Fixed Handle)

Hardware Technical Details

Range of use	: Min: 286mm - Max: 2400mm
Axis	: 15mm
Handles location	: Fixed Handle (under)
Body Type	: ZamZamac bodyac
Security Level	: w/Eccentric-Security Pin
Faulty usage / sash adjustment	: Available

Hardware Description

- **Upper Extension ;**
Additional Locking Espagnolette, Standard, small, Safety Pin, security small, ventilated, double pin corner transmission is usable
- **For the features of the Bottom Extension (vertical)**
Middle lock hardware offers the ability to use the equipment. (see page 40)
- **The security of the 'Faulty usage - sash adjustment';**
Faulty usage and sash lifting device, provides increased safety.
- **To regular the gasket pressure;**
You can change the gasket pressure in a level range of +/- 0,8mm
- **Assembling;**
It helps to easy the installation and save much time.
3,9x25 Rare serrated espagnolette screws code: 449.339.025.001
- **Coating;**
YelkenCoat gives longer durability and corrosion protection to the hardware.



Order Details

EP	GP	X		
			Miktar	Kg
-	-	185.030.401.000	10	3.69
-	-	185.030.501.000	10	3.69
185.030.701.000	185.140.701.000	-	10	4.57
185.040.901.000	185.140.901.000	-	10	5.43
185.041.101.000	185.141.101.000	-	10	5.98
185.041.301.000	185.141.301.000	-	10	6.88
185.041.501.000	185.141.501.000	-	10	7.59
185.041.701.000	185.141.701.000	-	10	8.64
185.042.901.000	185.142.901.000	-	10	10.40

Technical Details

GRUP	KA	A	B	C	D			
GR:01	295/395-600	155	-	-	-	✓	2	-
GR:02	501-700	200	-	-	-	✓	2	-
GR:03	701-900	250	-	120	-	✓	2	1
GR:04	901-1100	400	-	120	-	✓	4	1
GR:05	1101-1300	500	-	120	-	✓	4	1
GR:06	1301-1500	600	-	120	-	✓	6	2
GR:07	1501-1700	500	369	274	-	✓	8	2
GR:08	1701-1900	900	290	354	-	✓	8	2
GR:09	1901-2100	980	370	274	-	✓	10	2

Note: Technical detail sizes are millimetric.

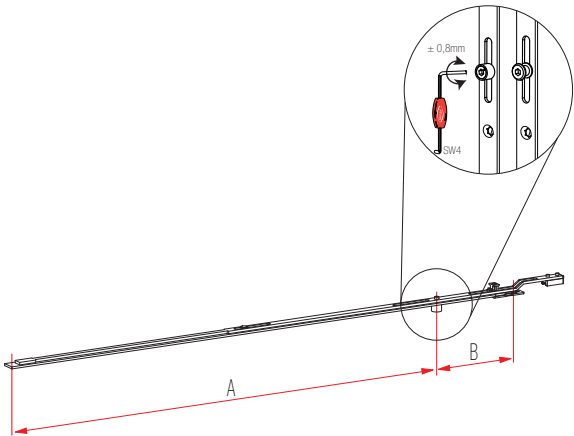
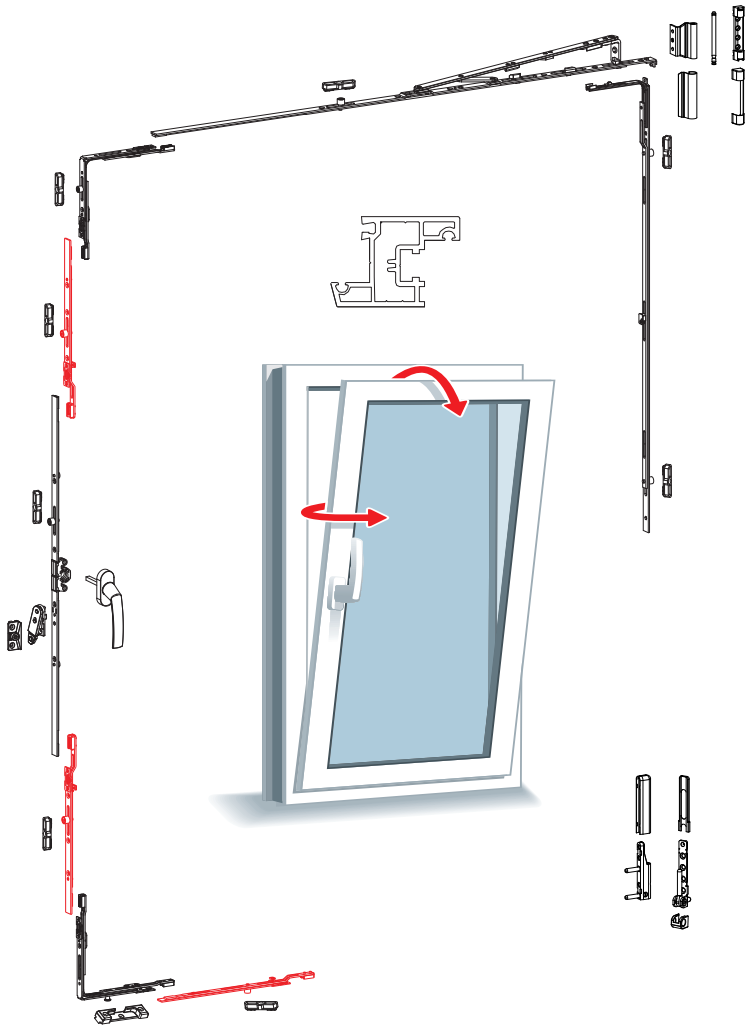
Fornax PvcMotion
Tilt & Turn Hardware
Additional Lock

Hardware Technical Details

Range of use : Min: 210mm - Max: 630mm
Security Level : w/Eccentric-Security Pin

Hardware Description

- Specifications;**
Additional Locking provides to yours windows and door better insulation.
- Usage Area;**
The Additional Locking is usable for Tilt & Turn and Double Sash, and you can use it even for the activ and passif sashes.
- The Upper Extension;**
Additional Locking Espagnolette is usable for standard,small,safety pin, security small , Double pin corner transmission
- For the features of the Bottom Extension (bottom regulated)**
The safety pins and safety pins corner transmission offers the ability to use the equipment. (see page 30)
- To regular the gasket pressure;**
You can change the gasket pressure in a level range of +/- 0,8mm
- Assembling;**
It helps to easy the installation and save much time.
3,9x25 Rare serrated espagnolette screws code: 449.339.025.001
- Coating;**
YelkenCoat gives longer durability and corrosion protection to the hardware.



Order Details

EP	GP	X		
			Miktar	Kg
189.150.401.000	189.250.402.000	-	10	2.50
189.150.601.000	189.250.601.000	-	10	3.06

Technical Details

GRUP	KA	A	B	C	D			
GR:01	210-420	420	95	-	-		2	1
GR:02	420-630	628	95	-	-		2	1

Note: Technical detail sizes are millimetric

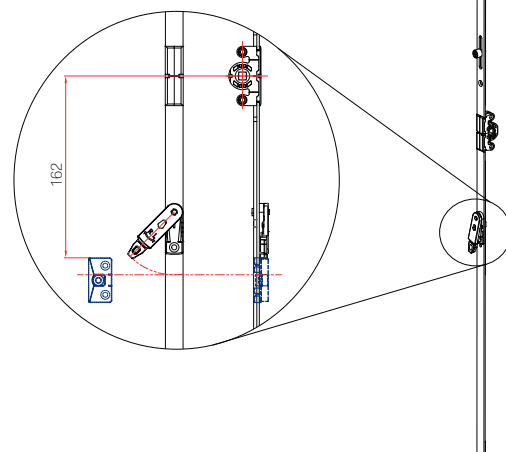
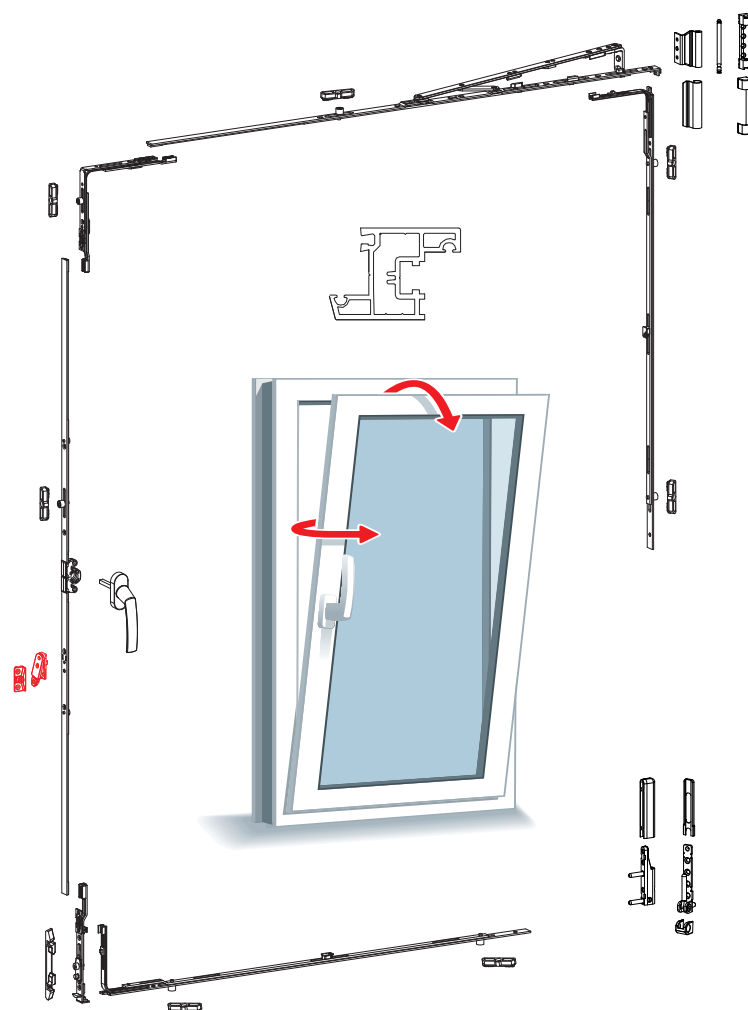
Fornax PvcMotion Tilt & Turn Hardware Faulty Usage & Sash Adjustment Device

Hardware Technical Details

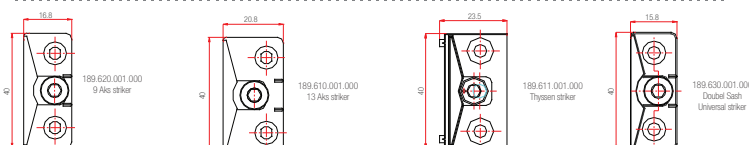
Range of use : 7,5mm , 15mm , 30 mm Espagnolettes
Striker axis : 9-13 Axis

Hardware Description

- **Connection Hardware;**
7,5mm , 15mm , 30 mm usable for Standard Espagnolette and Fixed Handle espagnolette (see page 23).
- **Striker;**
Provides easy usable for 9 axis ,13 axis ,Thyssen type and Universal Double sash (see page 50)
- **The Security of the Faulty Usage & Sash Adjustment Device;**
It provides safety usage for the using the window and door sashes . It obstacles the misuse of the door or window, this option provide longer life for the hardware.
- **Coating;**
YelkenCoat gives longer durability and corrosion protection to the hardware.
- **Assembling;**
It helps to easy the installation and save much time.
3,9x25 Rare serrated espagnolette screws code: 449.339.025.001



Accessories



Note: Technical detail sizes are millimetric.

Order Details

	Description	Amount	Kg
189.600.001.000	Faulty usage & Sash adjustment device	100	4.03

Fornax PvcMotion

Tilt & Turn Hardware

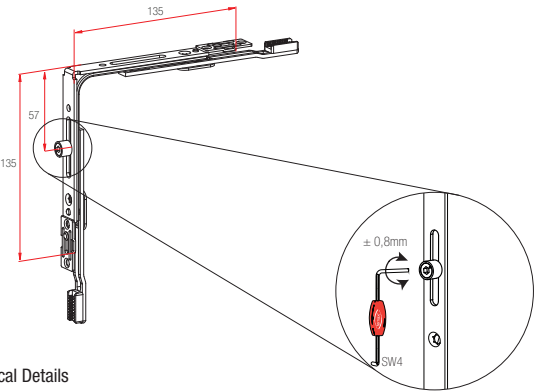
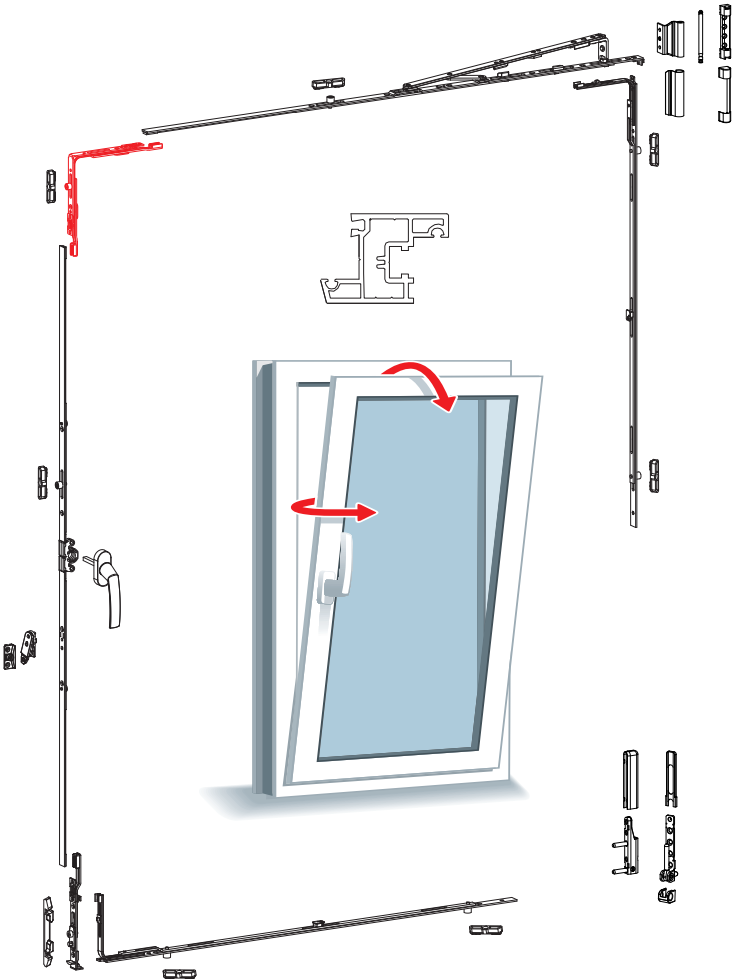
Corner Transmission (w/Eccentric Pin)

Hardware Technical Details

Security Level : w/Eccentric Pin

Hardware Description

- The Ventilation Option**
 The size of the ventilation capacity is dependent to the corner transmissions Striker.
 The Ventilation Strikers:
 9 axis 189.643.003.000
 13 axis 189.642.004.000
- Stay Arm Connection;**
 It is usable for the standard system and Tilt First system, (see page 37)
- Additional Locking Connecting;**
 Additional Locking on the on the Window of Door provide for the frame moor griğ and warmer room temprature.
- Espagnolette Connecting;**
 7,5mm , 15mm , 30 mm usable for Standard Espagnolette and Fixed Handle espagnolette . (see page 23)
- To regular the gasket pressure;**
 You can change the gasket pressure in a level range of +/- 0,8mm
- Assembling;**
 It helps to easy the installation and save much time.
 3,9x25 Rare serrated espagnolette screws code: 449.339.025.001
- Coating;**
 YelkenCoat gives longer durability and corrosion protection to the hardware.



Technical Details



Accessories



Locking Striker w/Eccentric Pin
9 Axis 220.134.001.000
13 Axis 220.998.001.000



(Optional)
Ventilated Corner Transmission Striker
9 Axis 189.643.001.000
13 Axis 189.642.001.000

Note: Technical detail sizes are millimetric.

Order Details			
EP	Description		
		Amount	Kg
181.010.001.000	Corner Transmission (Standart Pin)	100	16.55

Fornax PvcMotion Tilt & Turn Hardware Small Corner Transmissions (w/Eccentric Pin)

Hardware Technical Details

Security Level : w/Eccentric Pin

Hardware Description

■ The Ventilation Option

The size of the ventilation capacity is dependent to the corner transmissions Striker.

The Ventilation Strikers:

9 axis 189.643.003.000

13 axis 189.642.004.00

■ Stay Arm Connection;

Its usable for the standard system and Tilt First system, (see page 37)

■ Additional Locking Connecting;

Additional Locking on the on the Window of Door provide for the frame moor griğ and warmer room temprature.

■ Espagnolette Connecting;

7,5mm , 15mm , 30 mm usable for Standard Espagnolette and Fixed Handle espagnolette . (see page 23)

■ To regular the gasket pressure;

You can change the gasket pressure in a level range of +/- 0,8mm

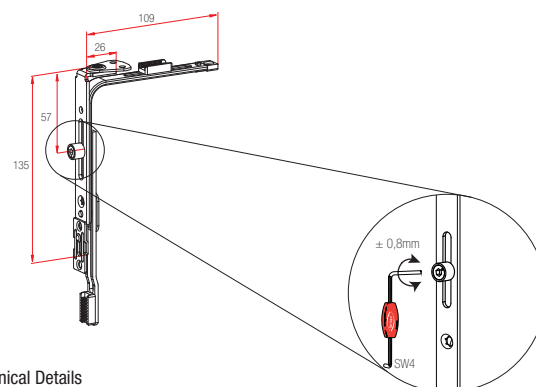
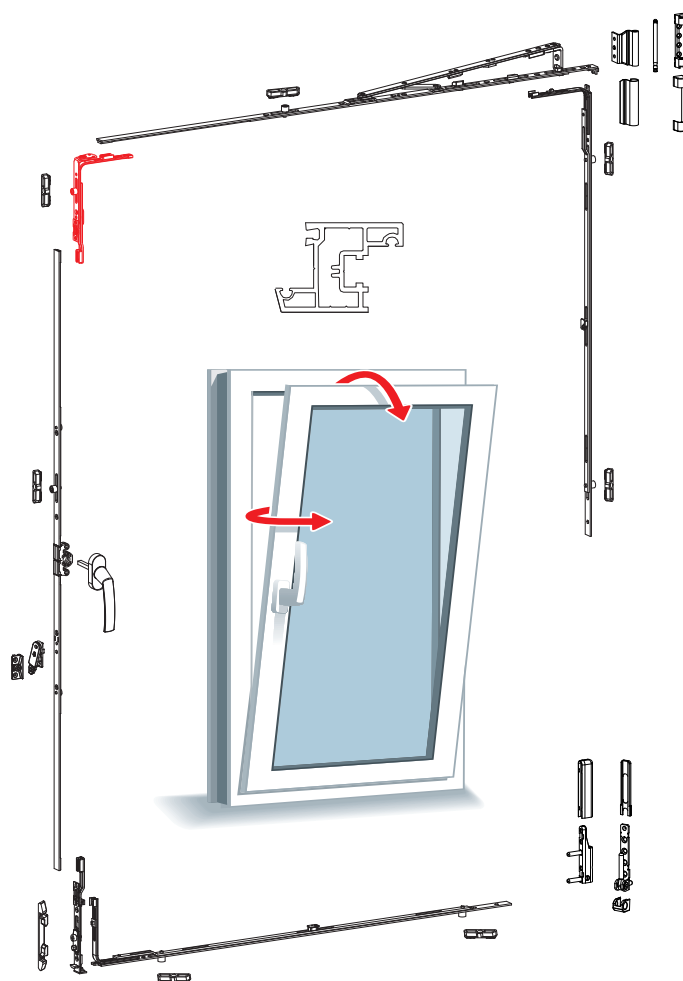
■ Assembling;

It helps to easy the installation and save much time.

3,9x25 Rare serrated espagnolette screws code: 449.339.025.001

■ Coating;

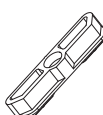
YelkenCoat gives longer durability and corrosion protection to the hardware.



Technical Details



Accessories



Locking Striker w/Eccentric Pin
9 Axis 220.134.001.000
13 Axis 220.988.001.000



(Optional)
Ventilated Corner Transmission Striker
9 Axis 189.643.003.000
13 Axis 189.642.004.000

Note: Technical detail sizes are millimetric.

Order Details

EP	Description	Amount	Kg
181.030.001.000	Small Corner Transmission	100	11.55

Fornax PvcMotion

Tilt & Turn Hardware

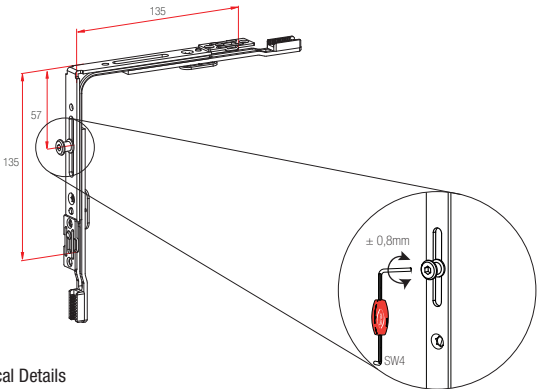
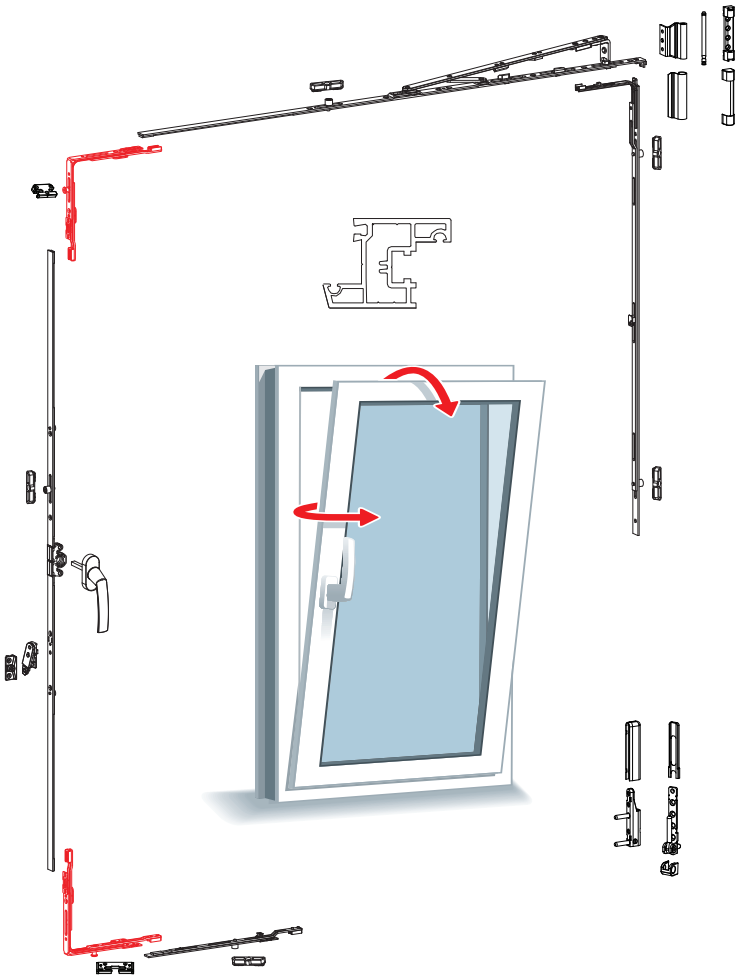
Corner Transmissions (w/Security Pin)

Hardware Technical Details

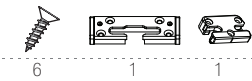
Security Level : w/Security Pin

Hardware Description

- The Ventilation Option**
 The size of the ventilation capacity is dependent to the corner transmissions Striker.
 The Ventilation Strikers:
 9 axis 189.643.003.000
 13 axis 189.642.004.00
- Stay Arm Connection;**
 Its usable for the standard system and Tilt First system, (see page 37)
- Additional Locking Connecting;**
 Additional Locking on the on the Window of Door provide for he frame moor grig and warmer room temprature.
- Espagnolette Connecting;**
 7,5mm , 15mm , 30 mm usable for Standard Espagnolette and Fixed Handle espagnolette (see page 23)
- Horizontal opening;**
 It can be use for horizontal opening.
- To regular the gasket pressure;;**
 You can change the gasket pressure in a level range of +/- 0,8mm
- Assembling;**
 It helps to easy the installation and save much time.
 3,9x25 Rare serrated espagnolette screws code: 449.339.025.001
- Coating ;**
 YelkenCoat gives longer durability and corrosion protection to the hardware.



Technical Details



Accessories



Note: Technical detail sizes are millimetric.

Order Details			
GP	Description	Amount	Kg
181.020.001.000	Corner Transmission (Security)	100	16.55

Fornax PvcMotion Tilt & Turn Hardware Small Corner Transmissions (w/Security Pin)

Hardware Technical Details

Security Level : w/Security Pin

Hardware Description

■ The Ventilation Option

The size of the ventilation capacity is dependent to the corner transmissions Striker.

The Ventilation Strikers:

9 axis 189.643.003.000

13 axis 189.642.004.00

■ Stay Arm Connection;

Its usable for the standard system and Tilt First system, (see page 37)

■ Additional Locking Connecting;

Additional Locking on the on the Window of Door provide for he frame moor griß and warmer room temperature.

■ Espagnolette Connecting;

7,5mm , 15mm , 30 mm usable for Standard Espagnolette and Fixed Handle espagnolette (see page 23)

■ Horizontal opening;

It can be use for horizontal opening.

■ To regular the gasket pressure;;

You can change the gasket pressure in a level range of +/- 0,8mm

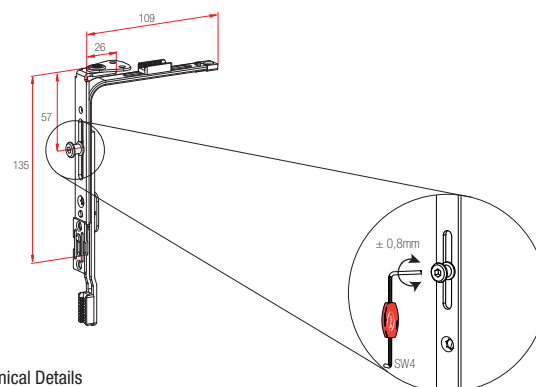
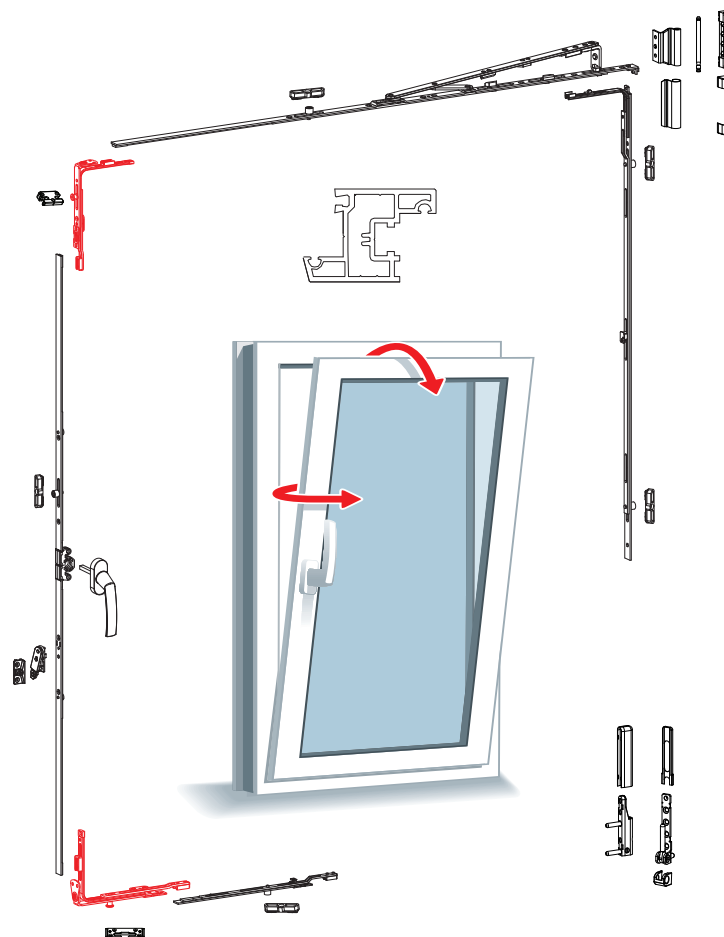
■ Assembling;

It helps to easy the installation and save much time.

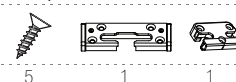
3,9x25 Rare serrated espagnolette screws code: 449.339.025.001

■ Coating ;

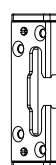
YelkenCoat gives longer durability and corrosion protection to the hardware.



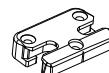
Technical Details



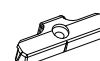
Accessories



Universal Security Locking
Striker Bottom Tilt
9 Axis 189.050.001.000
13 Axis 189.070.001.00



Security
Locking Side Striker w/3 Screw
9 Axis 189.100.002.000
13 Axis 189.100.001.00



Security
Locking Side Striker w/1 Screw
9 Axis 189.100.003.000
13 Axis 189.100.004.00

Note: Technical detail sizes are millimetric.

Order Details

GP	Description	Amount	Kg
181.040.001.000	Corner Transmission (Security Small)	100	11.55

Fornax PvcMotion Tilt & Turn Hardware Corner Transmissions (Double Pins)

Hardware Technical Details

Security Level : w/Eccentric Pin + w/Security Pin
w/Eccentric Pin + w/Eccentric Pin (Optional)
w/Security Pin + w/Security (Optional)

Hardware Description

■ The Ventilation Option

The size of the ventilation capacity is dependent to the corner transmissions Striker.

The Ventilation Strikers:

9 axis 189.643.003.000

13 axis 189.642.004.00

■ Stay Arm Connection;

Its usable for the standard system and Tilt First system, (see page 37)

Additional Locking Connecting;

■ Additional Locking on the on the Window of Door provide for he frame moor gri and warmer room temprature.

■ Espagnolette Connecting;

7,5mm , 15mm , 30 mm usable for Standard Espagnolette and Fixed Handle espagnolette (see page 23)

■ Bottom Regulated;

Altın Devrilme İçin Kullanılabilir .

■ To regular the gasket pressure;;

You can change the gasket pressure in a level range of +/- 0,8mm

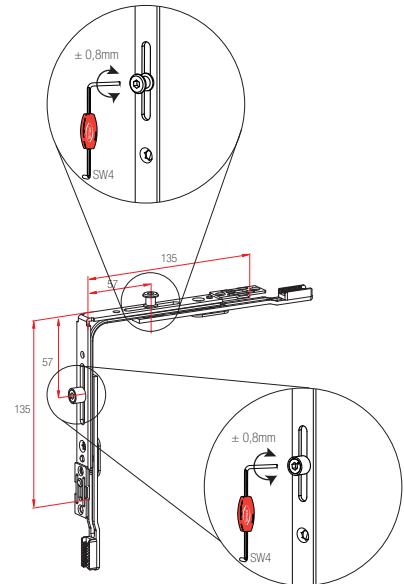
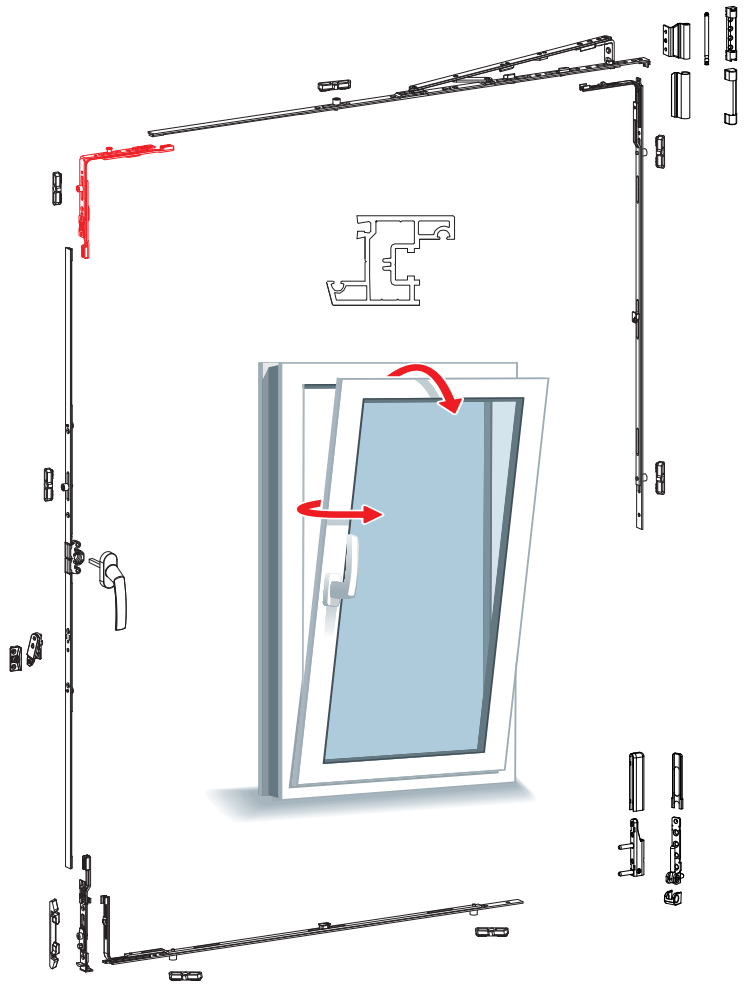
■ Assembling;

It helps to easy the installation and save much time.

3,9x25 Rare serrated espagnolette screws code: 449.339.025.001

■ Coating ;

YelkenCoat gives longer durability and corrosion protection to the hardware.



Order Details

	Description	Amount	Kg
181.060.001.000	Double Pins w/Normal /Security Pin	100	17.00
181.070.001.000	Double Pins w/Normal /Normal Pin	100	17.00
181.080.001.000	Double Pins w/Security/Security Pin	100	17.00



Technical Details

6	1	1
6	-	2
6	2	-

Note: Technical detail sizes are millimetric.

Fornax PvcMotion
Tilt & Turn Hardware
Corner Transmissions (w/Micro Vantilation)

Hardware Technical Details

Security Level : w/Eccentric Pin

Hardware Description

- Usable for 4 positions;
 1. Closed position
 2. Only Tilt open Position
 3. Tilt & Turn (Tilt Position) and Micro Ventilation Position
 4. Tilt & Turn tilt Position
- Additional Locking Connecting;

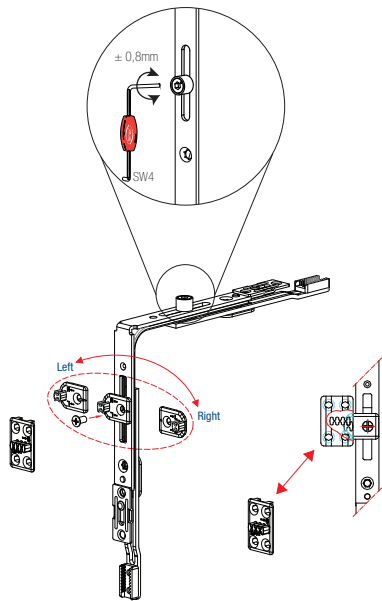
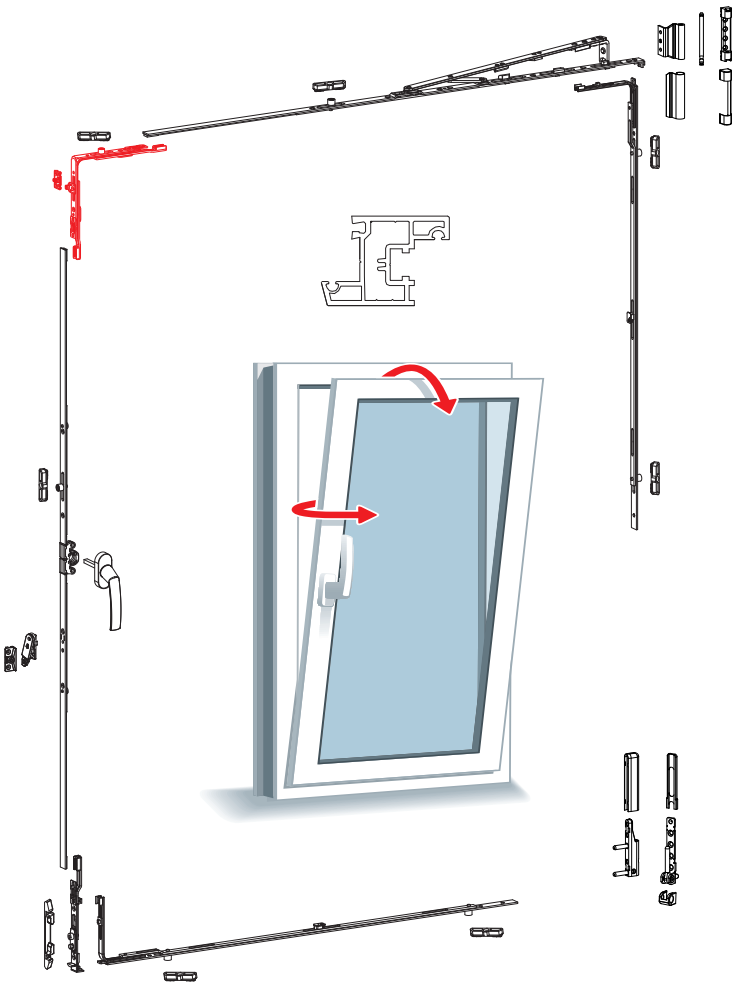
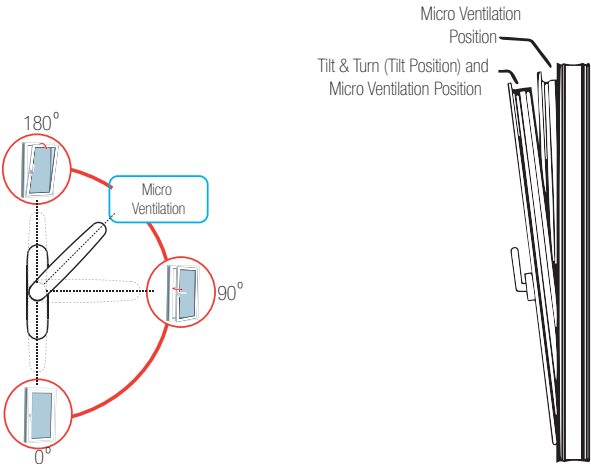
Additional Locking on the on the Window of Door provide for the frame moor grig and warmer room temprature.
- Espagnolette Connecting;

7,5mm , 15mm , 30 mm usable for Standard Espagnolette and Fixed Handle espagnolette (see page 23)
- To regular the gasket pressure;

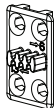
You can change the gasket pressure in a level range of +/- 0,8mm
- Assembling;

It helps to easy the installation and save much time.
3,9x25 Rare serrated espagnolette screws code: 449.339.025.001
- Coating;

YelkenCoat gives longer durability and corrosion protection to the hardware



Accessories



189.640.001.000
(94x6 / 13.4x6)



Technical Details



6

1

1

Note: Technical detail sizes are millimetric.

Order Details

EP	Description	Amount	Kg
181.050.001.000	Corner Transmission(Micro Ventilation))	100	19.50
181.051.001.000	Corner Transmission(Micro Ventilation) Thyssen	100	19.50

Fornax PvcMotion
Tilt & Turn Hardware
Stay Arm

Technical Details

Usage Range	: Min: 286mm - Max: 1600mm
Security Level	: w/Eccentric/Security Pin

Hardware Description

- **25 mm Clutching before for the Wide Sashes;**
Mechanism on the Stay Arm reaches the clutching before 25 mm, during the sash is changed from tilt opening position to closed position.: (see figure 1)
- **Movement Limitations ;**
During the assembling process of middle lock and stay arm, bottom part of stay arm avoids right - left, up and down movement of the middle lock (see Figure 3-4)

Extra Screwing;;

- as you see in figure (3,4) the Stay Arm binds the Fornax productions and in the same time it gives the flexibility between them, and gives also the possibility for the Middle lock to move to the 4 directions (above, down, right and left)

The Corner Connection;;

- Usable for: Standard, Small, Security Pin, Small Security, Ventilationing, Corner Transmission with double Pins (see page 30)

By using the standard Corner Transmission, the width will be minimum:395mm.
By using the Small Corner Transmission, the width will be minimum 286mm.

Hinge Connection;

- For the upper hinge connection 9-20 mm , 10-20 mm , 13-20 mm , 14-22 mm , 13-22 mm , (see page 46).

Additional Locking Connecting;

- Additional Locking on the on the Window of Door provide isolation and warmer room temperature.

To regular the gasket pressure;

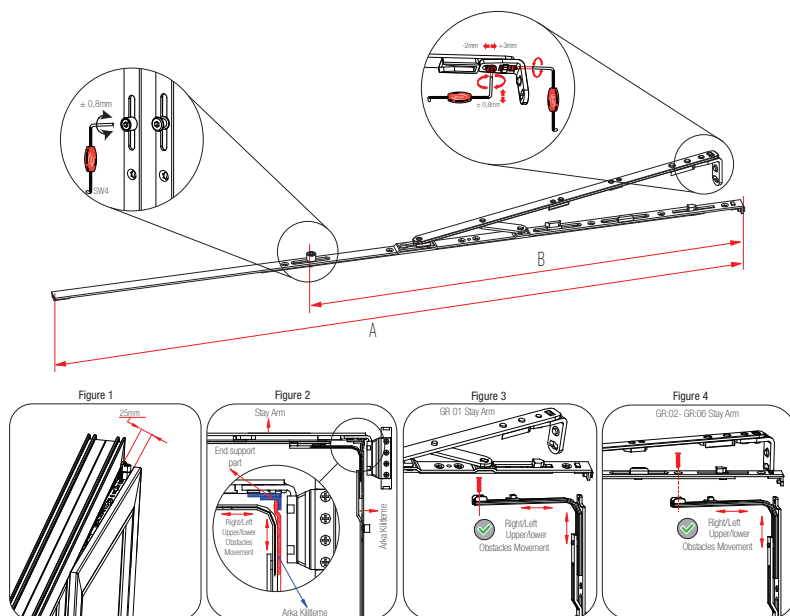
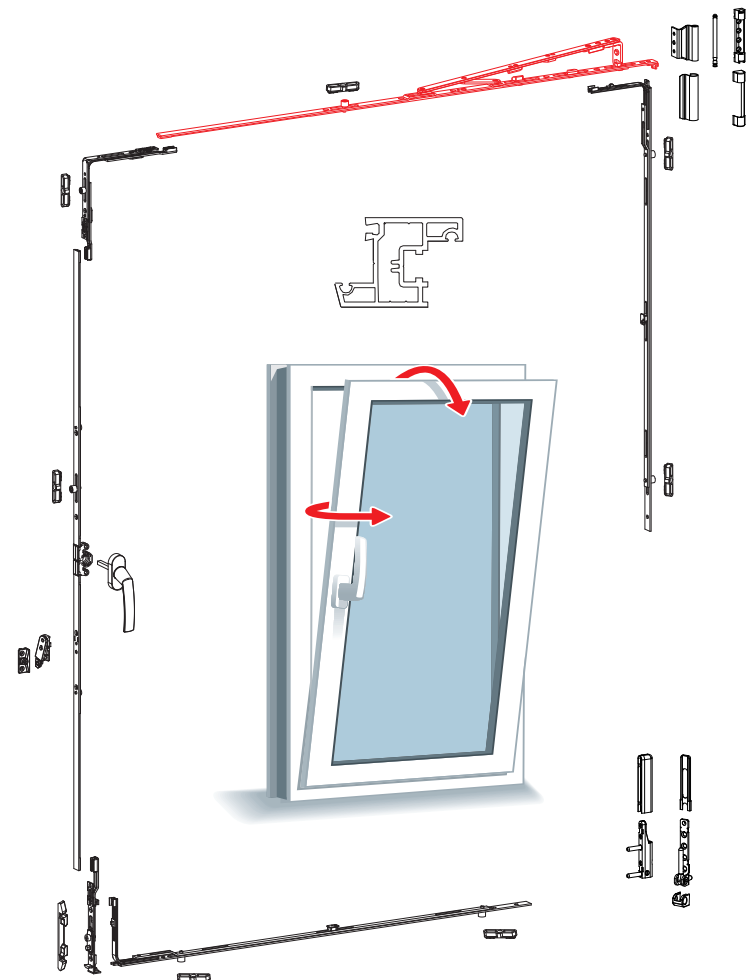
- You can change the gasket pressure in a level range of +/- 0,8mm

Assembling;

- It helps to easy the installation and save much time.
3,9x25 Rare serrated espagnolette screws code: 449.339.025.001

Coating;

- YelkenCoat gives longer durability and corrosion protection to the hardware



Order Details

EP	GP	X		
			Amount	Kg
-	-	182.010.401.000	10	3.55
-	-	182.010.410.000	10	4.15
-	-	182.010.501.000	10	4.98
182.010.501.000	182.110.501.000	-	10	4.87
182.010.801.000	182.110.801.000	-	10	6.12
182.010.001.000	182.110.001.000	-	10	7.06
182.011.201.000	182.111.201.000	-	10	8.88
182.011.101.000	182.111.101.000	-	10	9.76

Technical Details

GRUP	KA	A	B	C	D		
GR:01	395-600	495	-	-	-	8	-
GR:01-1	400-650	565	-	-	-	5	-
GR:02	595-800	665	-	-	-	5	-
GR:02-1	595-800	665	392	-	-	5	1
GR:03	795-1000	865	542	-	-	7	1
GR:04	995-1200	1065	542	-	-	8	1
GR:05	1195-1400	1265	781	-	-	9	1
GR:06	1395-1600	1465	865	-	-	10	1

Note: Technical detail sizes are millimetric.

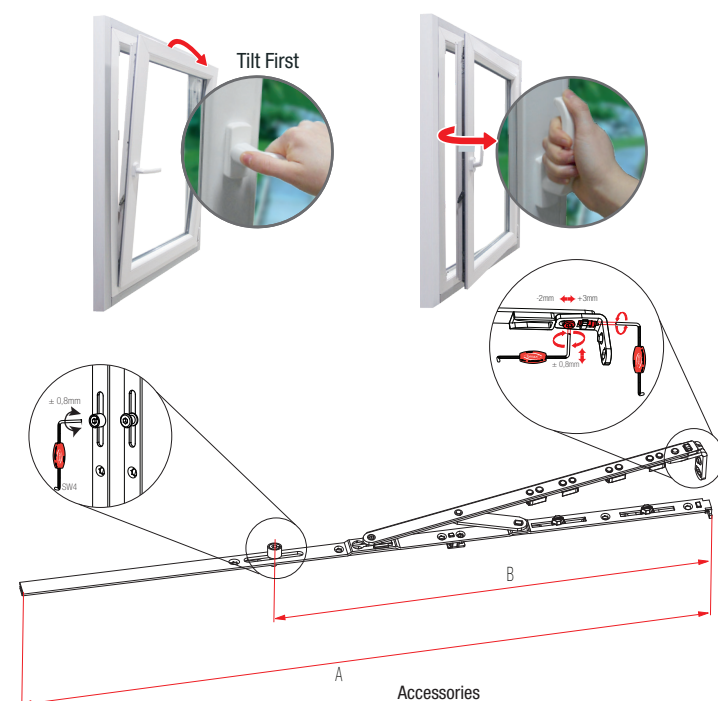
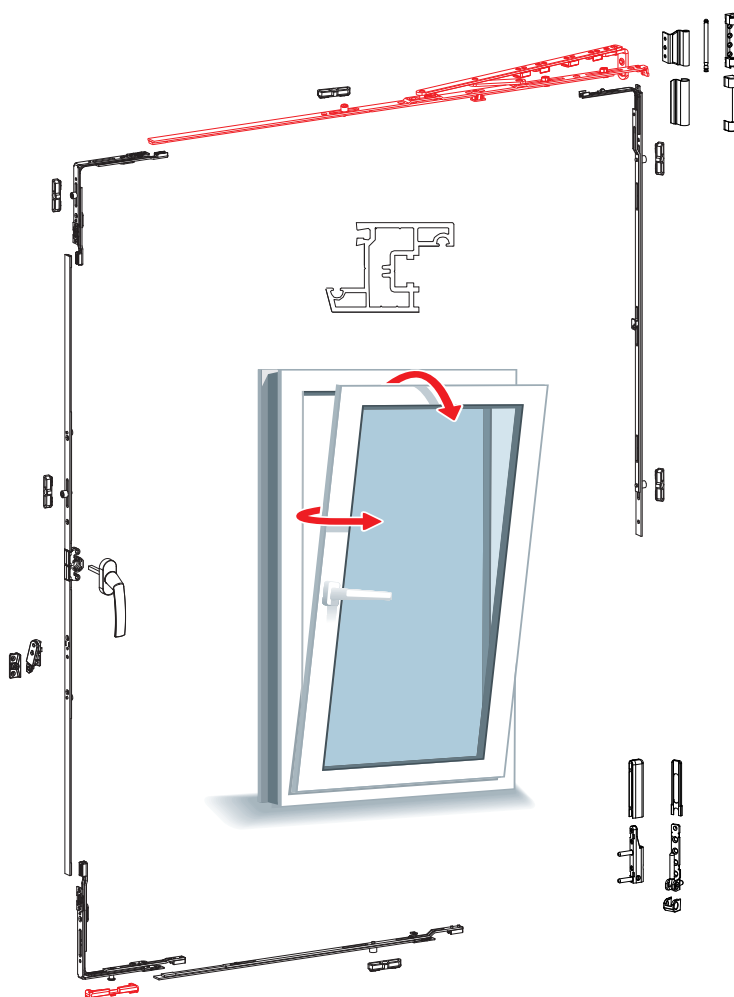
Fornax PvcMotion Tilt & Turn Hardware Stay Arm (Tilt First)

Hardware Technical Details

Usage Range	:	Min: 495mm - Max: 1200mm
Security Level	:	w/Eccentric/Security Pin

Hardware Description

- **Range of use;**
it developed specially for kids rooms, kinder gartens, scholls, hospitals and the faciities in which windows are not to recommended to open wide.
- **The Corner Connection;**
Usable for: Standard, Small, Security Pin, Small Security, Ventilationing, Corner Transmission with double Pins (see page 30)
- **Hinges Connection;**
Its usable for the following dimensions of Stay Arms 9-20 mm , 10-20 mm , 13-20 mm , 14-22 mm , 13-22 mm (see page 46)
- **Additional Locking Connecting;**
Additional Locking on the on the Window or Door provides isolation and warmer room temperature.
- **To regular the gasket pressure;**
You can change the gasket pressure in a level range of +/- 0,8mm
- **Assembling;**
It helps to easy the installation and save much time.
3,9x25 Rare serrated espagnolette screws code: 449.339.025.001
- **Coating;**
YelkenCoat gives longer durability and corrosion protection to the hardware



Order Details

EP	GP	X	Amount	Kg
-	-	182.310.401.000	10	3.55
-	-	182.310.410.000	10	4.15
-	-	182.310.501.000	10	4.98
182.310.501.000	182.310.501.000	-	10	4.87
182.310.801.000	182.310.801.000	-	10	6.12
182.311.001.000	182.311.001.000	-	10	7.06

Technical Details

GRUP	KA	A	B	C	D	Accessories
GR:01	395-600	495	-	-	-	3
GR:01-1	400-650	565	-	-	-	5
GR:02	595-800	665	-	-	-	5
GR:02-1	595-800	665	392	-	-	5
GR:03	795-1000	865	542	-	-	7
GR:04	995-1200	1065	542	-	-	8

Note: Technical detail sizes are millimetric.

Fornax PvcMotion

Tilt & Turn Hardware

Top Extension Piece (for Turn-Only)

Hardware Technical Details

Usage Range

:

Turn Only (For Tilt & Turn hardwares)

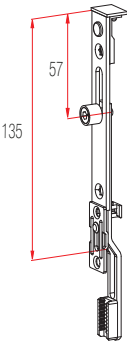
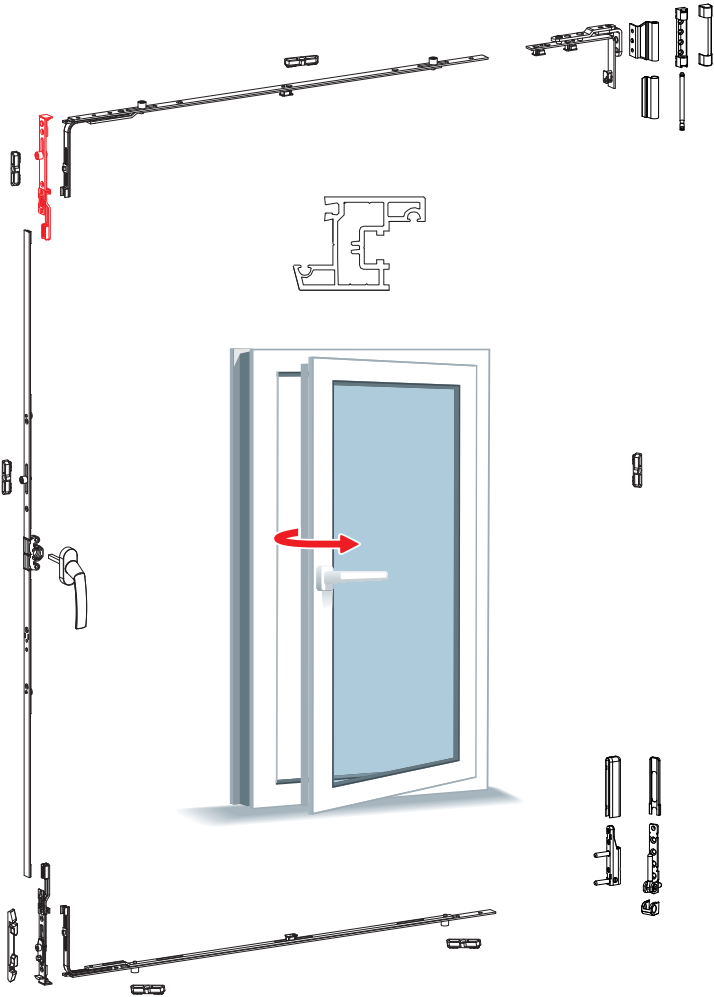
Security Level

:

w/Eccentric/Security Pin

Hardware Description

- **Espagnolette Connection;**
Additional Espagnolette Locking is usable for the following dimensions, 7,5mm , 15mm , 30mm standard espagnolettes (see page 23)
- **Middle Lock Connection;**
Usable for middle locking. (see page 40)
- **To regular the gasket pressure;**
You can change the gasket pressure in a level range of +/- 0,8mm
- **Assembling;**
It helps to easy the installation and save much time.
3,9x25 Rare serrated espagnolette screws code: 449.339.025.001
- **Coating;**
YelkenCoat gives longer durability and corrosion protection to the hardware



Order Details

EP	Description	Amount	
		Amount	Kg
184.020.001.000	Top Extension Piece (for Turn-Only System)	100	7,70

Accessories



Eccentric Pin Striker
9/As 220.134.001.000
13/As 220.998.001.000

Note: Technical detail sizes are millimetric

Fornax PvcMotion Tilt & Turn Hardware Bottom Extension Piece

Hardware Technical Details

Range of use	:	Side Regular Tilt & Turn
Security Level	:	w/Eccentric/Security Pin

Hardware Description

- **Pressured Fixing;**
The Joint Piece is readily available on the Bottom Extension; This Joint piece helps for better pressure in the Tilt position, and of course that help for anti leak of water or air. "see figure 5"
- **Espagnolette Connection;**
Additional Espagnolett Locking is usable for the following dimensions, 7,5mm ,15mm , 30mm standard espagnolettes (see page 23)
- **Middle Lock Connection;**
Usable for the middle locking. (see page 39)
- **Strikers;**
According to your profile you can choose the following strikers:

Double Nail 9mm	Right/Left	189.110.001.000
Double Nail 13mm	Right/Left	189.110.001.000
9mm	Right/Left	189.170.001.000
13mm	Right/Left	189.160.001.000
9+1mm	Right/Left	189.190.001.000
13+1mm	Right/Left	189.180.001.000
13/22 Thyssen	Right/Left	189.161.001.000

Are compatible for the following Strikers (see page 50)
- **To regular the gasket pressure;**
You can change the gasket pressure in a level range of +/- 0,8mm
- **Assembling;**
It helps to easy the installation and save much time.
3,9x25 Rare serrated espagnolette screws code: 449.339.025.001
- **Coating;**
YelkenCoat gives longer durability and corrosion protection to the hardware

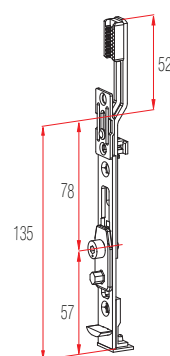
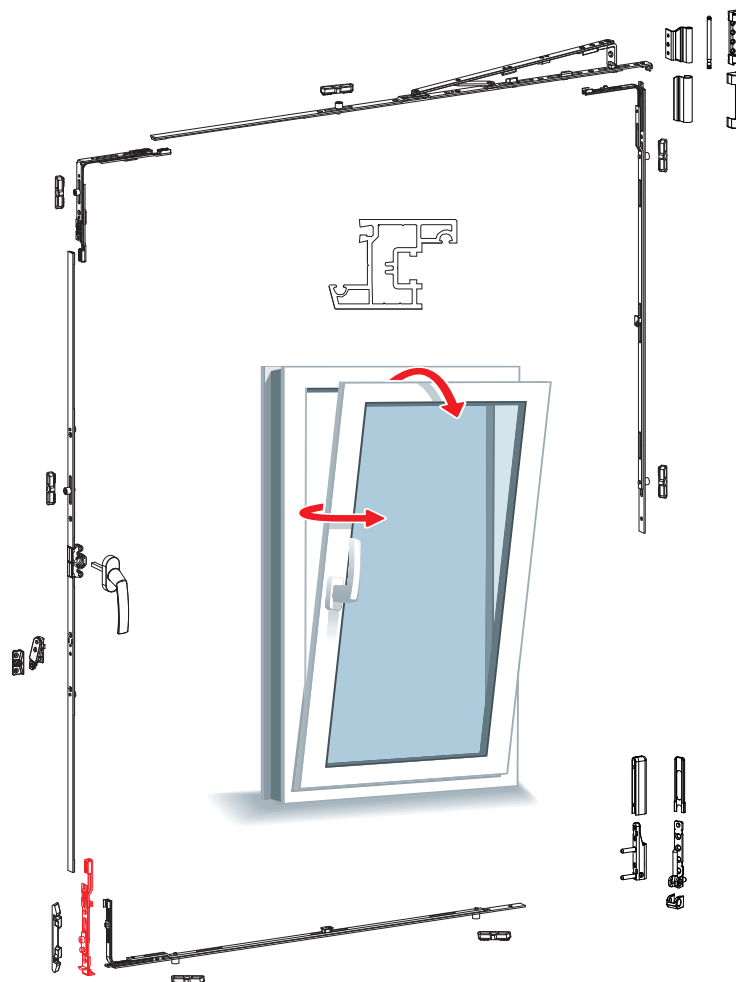
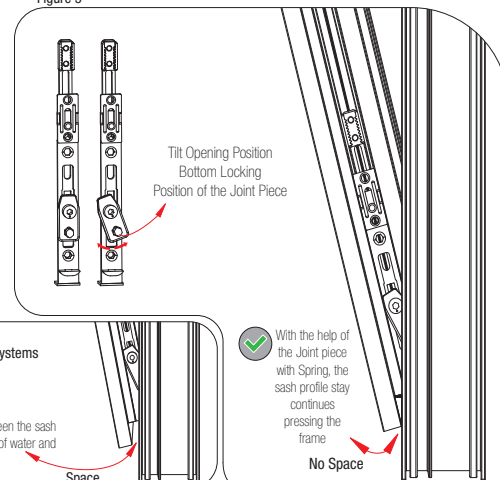


Figure 5



Accessories



Double Teeth
9mm Right/Left 189.110.001.000
13mm Right/Left 189.110.001.000



Pivot Striker
9mm Right/Left 189.170.001.000
13mm Right/Left 189.160.001.000
9+1mm Right/Left 189.190.001.000
13+1mm Right/Left 189.180.001.000



Thyssen
13/22 Right/Left 189.161.001.000

Note: Technical detail sizes are millimetric.

Order Details

EP	Description	Amount	Kg
184.010.001.000	Bottom Extension Piece	100	7.62

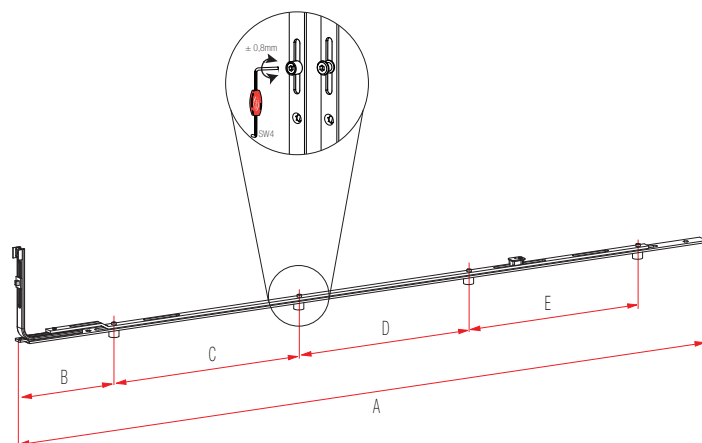
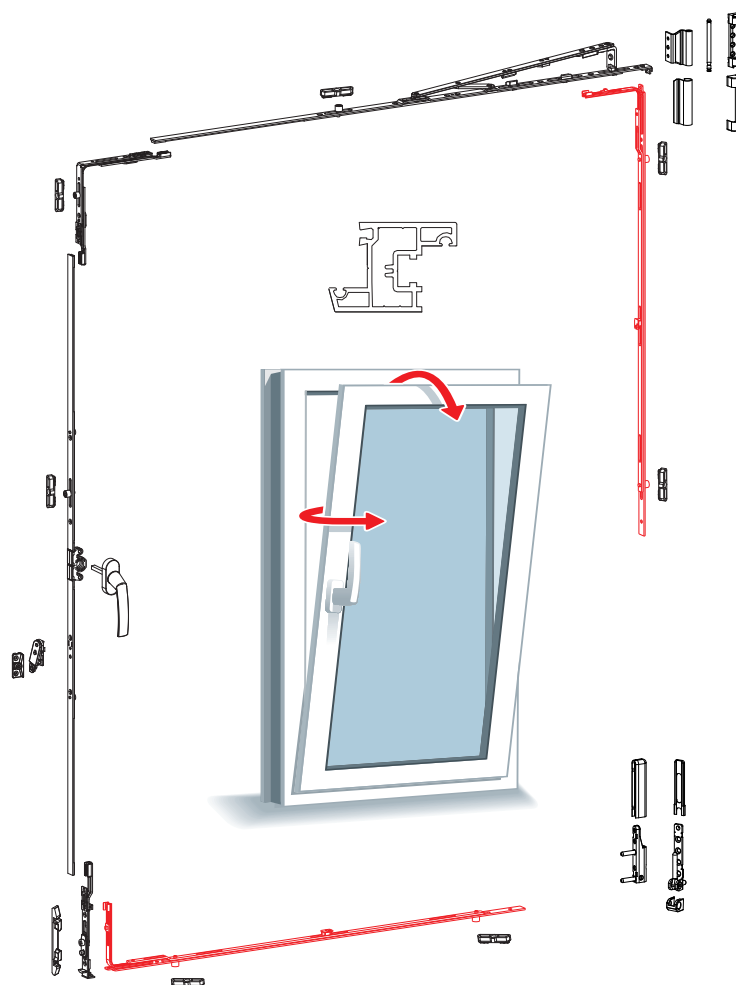
Fornax PvcMotion
Tilt & Turn Hardware
Middle Lock

Hardware Technical Details

Usage Range : Min: 400mm - Max: 2400mm
Security Level : w/Eccentric/Security Pin

Hardware Description

- **Bottom Extension ;**
Usable for Bottom Locking and Fixed Handle Espagnolette
- **Back Extension;**
Usable for the Stay Arm. (see page 36)
- **Additional Locking Connecting;**
Additional Locking on the on the Window or Door provide isolation and warmer room temperature.
- **To regular the gasket pressure;**
You can change the gasket pressure in a level range of +/- 0,8mm
- **Assembling;**
It helps to easy the installation and save much time.
3,9x25 Rare serrated espagnolette screws code: 449.339.025.001
- **Coating;**
YelkenCoat gives longer durability and corrosion protection to the hardware.



Order Details

			Miktar	Kg
183.010.401.000	183.110.401.000	-	10	1.11
183.010.601.000	183.110.601.000	-	10	2.52
183.010.701.000	183.110.701.000	-	10	3.45
183.010.901.000	183.110.901.000	-	10	4.56
183.011.101.000	183.111.101.000	-	10	5.87
183.011.401.000	183.111.401.000	-	10	7.03
183.011.801.000	183.111.801.000	-	10	8.40

Technical Details

GROUP	KA	A	B	C	D	E		
GR-00	400-800	220	127	-	-	-	2	1
GR-01	700-1150	537	127	333	-	-	3	2
GR-02	1150-1500	737	127	533	-	-	7	2
GR-02-1	1350-1600	987	127	333	-	450	7	3
GR-03	1500-1850	1237	127	333	-	700	7	3
GR-04	1500-2100	1481	127	547	-	730	8	3
GR-05	2100-2400	1780	127	333	643	600	10	4

Note: Technical detail sizes are millimetric.

Fornax PvcMotion
Tilt & Turn Hardware
Stay Arm Bearing & pin

Hardware Technical Details

Carrying Capacity	:	Ø3 80 Kg / Ø6 100 Kg
Pins	:	Ø3 / Ø6
Body Type	:	Zamac

Hardware Description

- Stay Arms connection ;

All Stay Arms are usable.

9-20 axis 186.052.001.000

10-20 axis 186.053.001.000

13-20 axis 186.082.001.000

13-22 axis 186.084.001.000

14-22 axis 186.083.001.000

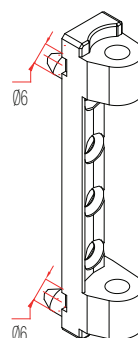
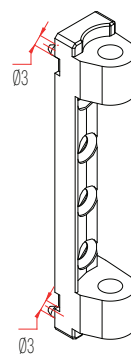
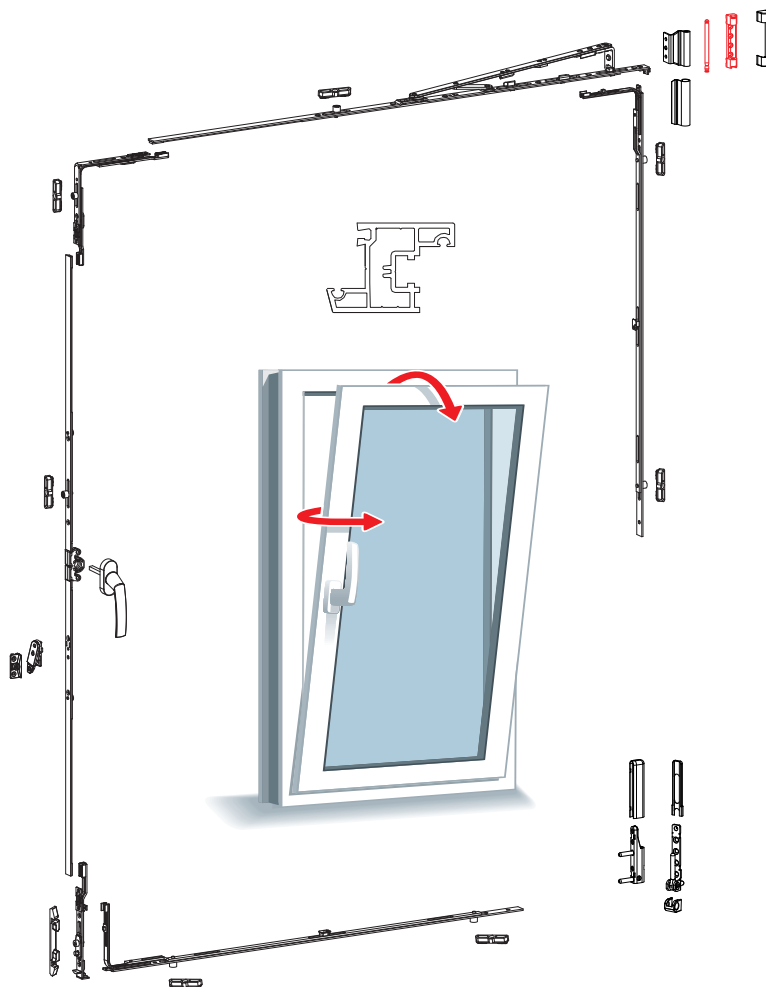
- **Assembling:**

It helps to easy the installation and save much time.

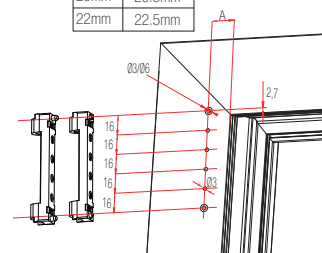
3,9x25 Rare serrated espagnolette screws code: 449.339.025.001

- Coating;

YelkenCoat gives longer durability and corrosion protection to the hardware.



	A
18mm	18.5mm
20mm	20.5mm
22mm	22.5mm



Accessories



Stay Arm Bearing Pin Ø6
499 013 001 000



Stay Arm Bearing Bearing Cover	189 211 000 000
--------------------------------	-----------------

Color Options
Standard color options are as below:

Standard color options are as belowed.
Please have contact with your customer representative for your other color requests.



Drillin Jig for Stay Arm Bearing /
Bottom Hinge (Frame Part)
189.120.000.000

Order Details			
Ø3	Description		
		Amount	Kg
186.032.001.000	Ø3 Stay Arm Bearing & pin	100	4.50
186.031.001.000	Ø6 Stay Arm Bearing & Pin	100	4.50

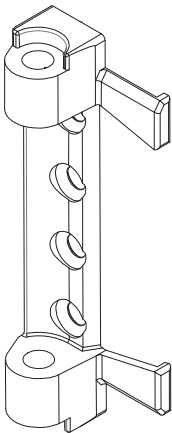
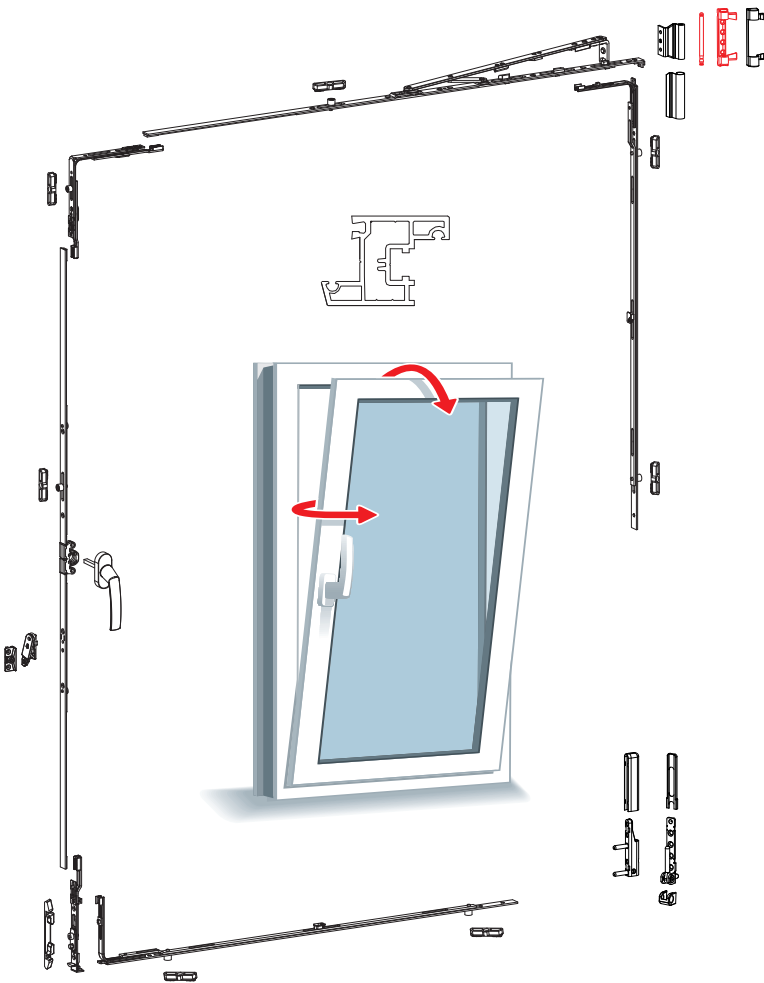
Fornax PvcMotion
Tilt & Turn Hardware
Self Jigged Stay Arm Bearing

Hardware Technical Details

Carrying Capacity	:	100 KG
Pins	:	-
Body Type	:	Zamac

Hardware Description

- Stay Arms connection ;
All Stay Arms are usable.
9-20 axis 186.052.001.000
10-20 axis 186.053.001.000
13-20 axis 186.082.001.000
13-22 axis 186.084.001.000
14-22 axis 186.083.001.000
- Assembling;
It helps to easy the installation and save much time.
3,9x25 Rare serrated espagnolette screws code: 449.339.025.001
- Coating;
YelkenCoat gives longer durability and corrosion protection to the hardware



Accessories



Stay arm bearing Pin Ø6
499.013.001.000



Self jigged stay arm bearing Cover
189.211.000.000

Color Options
Standard color options are as followed.
Please have contact with your customer representative for your other color requests

RAL-9016	RAL-8003	RAL-8017	RAL-9019	RAL-8022	RAL-8005
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Note: Technical detail sizes are millimetric



Order Details

Ø6	Description	Amount	Kg
186.033.001.000	Self jigged stay arm bearing	100	4.93

Fornax PvcMotion

Tilt & Turn Hardware

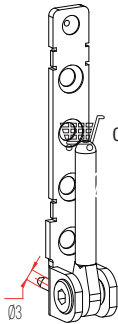
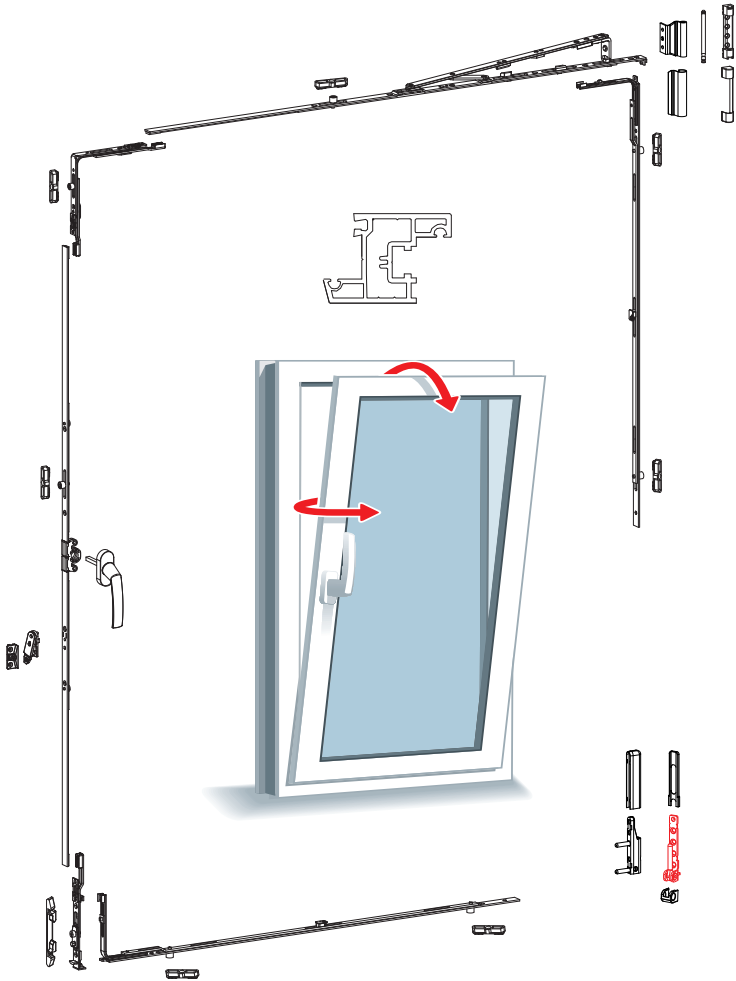
Bottom Hinge (Frame Part)

Hardware Technical Details

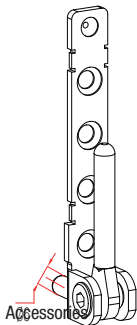
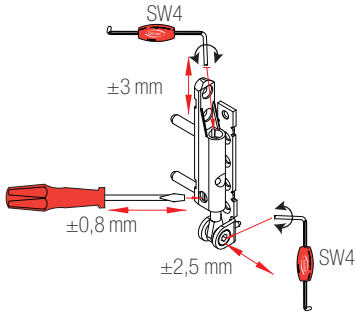
Carrying Capacity	: Ø3 80 Kg / Ø6 100 Kg
Pins	: Ø3 / Ø6
Body Type	: Zamac

Hardware Description

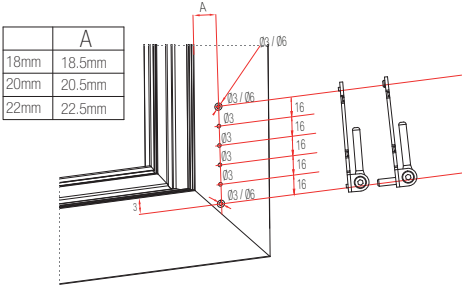
- L Hinge**
Usables to the L Hinge
- Stay Arms connection ;**
All Stay Arms are usable.
Ø3 186.011.001.000
Ø6 186.010.001.000
- Assembling;**
It helps to easy the installation and save much time.
3,9x25 Rare serrated espagnolette screws code: 449.339.025.001
- Coating;**
YelkenCoat gives longer durability and corrosion protection to the hardware.



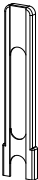
Order Details



Accessories



	Description	Amount	Kg
186.021.001.000	Ø3 Bottom Hinge (Frame Part)	100	4.24
186.020.001.000	Ø6 Bottom Hinge (Frame Part)	100	4.24



Bottom Hinge (Frame Part) Top Cover
189.220.000.000



Bottom Hinge (Frame Part) Bottom Cover
189.230.000.000

Color Options
Standard color options are as followed.
Please have contact with your customer representative for your other color requests.

Ral 9016	Ral 9003	Ral 9017	Ral 9018	Ral 9022	Ral 9006
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Drillin Jig for Stay Arm Bearing /
Bottom Hinge (Frame Part)
189.120.000.000

Fornax PvcMotion

Tilt & Turn Hardware

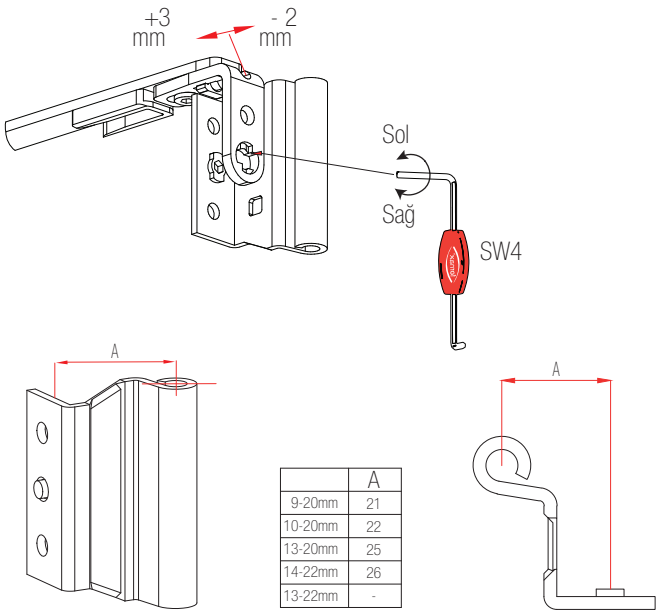
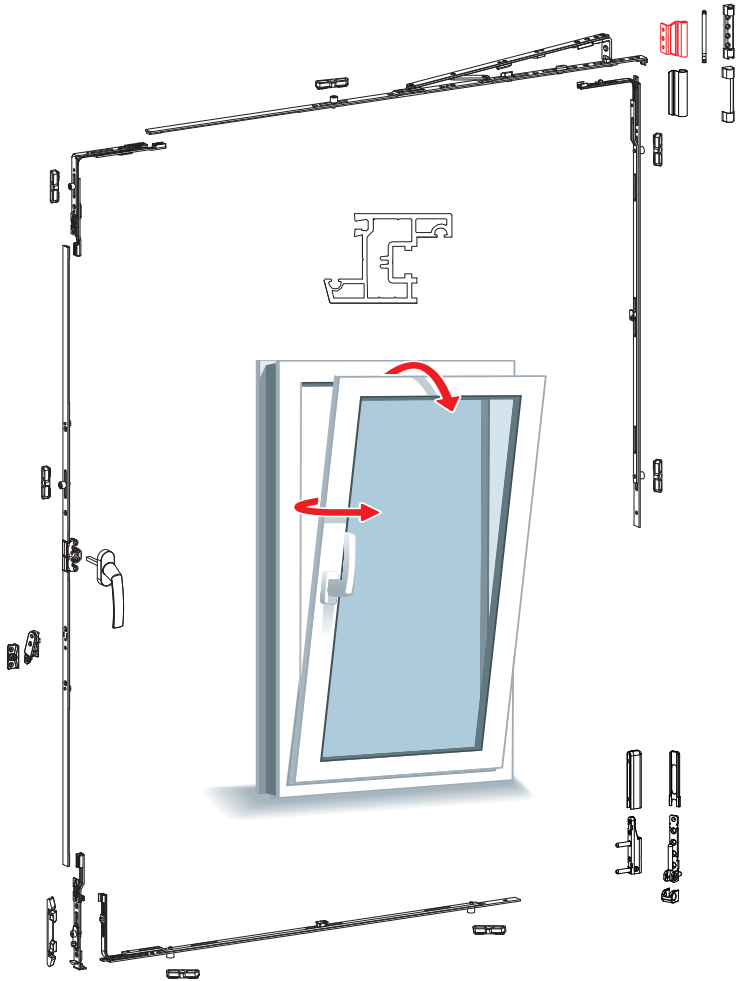
Stay Arm Hinge

Hardware Technical Details

Carrying Capacity	: 100 KG
Pins	: -
Body Type	: Sac

Hardware Description

- Stay Arm Connection;**
Usable for all tps of Stay Arms. (see page 36)
- Assembling;**
It helps to easy the installation and save much time.
3,9x25 Rare serrated espagnolette screws code: 449.339.025.001
- Coating;**
YelkenCoat gives longer durability and corrosion protection to the hardware

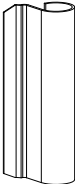


	A
9-20mm	21
10-20mm	22
13-20mm	25
14-22mm	26
13-22mm	-

Order Details

	Description	Amount	Kg
186.052.001.000	9-20mm Stay Arm Hinge	100	7.15
186.053.001.000	10-20mm Stay Arm Hinge	100	7.15
186.082.001.000	13-20mm Stay Arm Hinge	100	7.15
186.083.001.000	14-22mm Stay Arm Hinge	100	7.15
186.084.001.000	13-22mm Stay Arm Hinge	100	7.15

Accessories



Stay Arm Hinge Cover

189.220.000.000

Color Options

Standard color options are as belowed.
Please have contact with your customer representative for your other color requests.



Note: Technical detail sizes are millimetric.

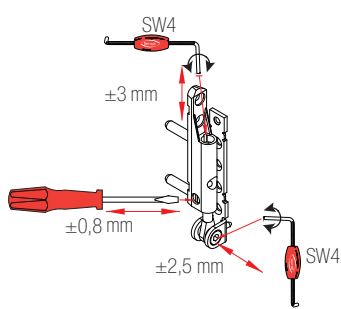
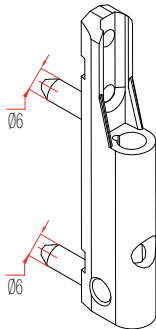
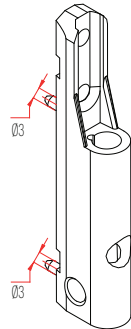
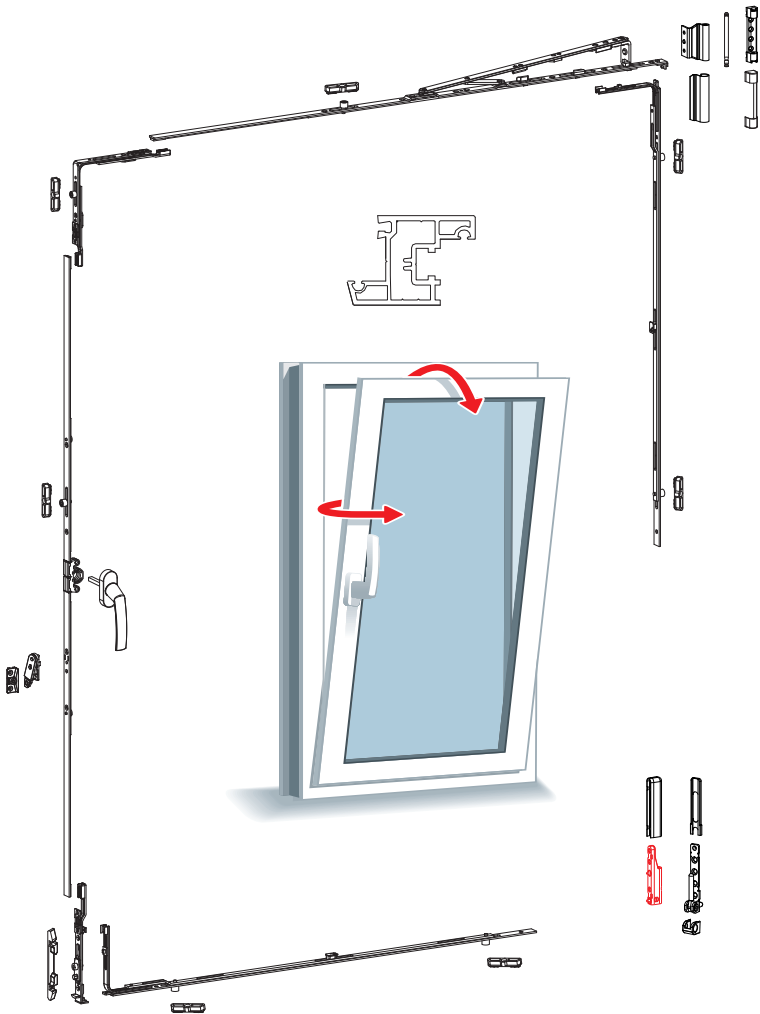
Fornax PvcMotion
Tilt & Turn Hardware
Bottom Hinge (Sash Part) Ø3

Hardware Technical Details

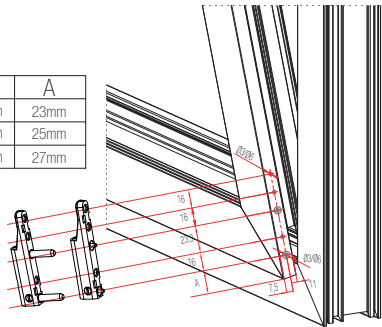
Carrying Capacity	: 80 KG
Pins	: Ø3
Body Type	: Zamac

Hardware Description

- **Bottom Hinge (Frame Part) Connection;**
Usables for the Frames lower Hinge
- **Assembling;**
It helps to easy the installation and save much time.
3,9x25 Rare serrated espagnolette screws code: 449.339.025.001
- **Coating;**
YelkenCoat gives longer durability and corrosion protection to the hardware



	A
18mm	23mm
20mm	25mm
22mm	27mm

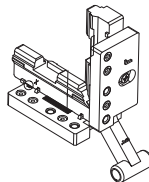


Accessories



Bottom Hinge (Sash Part) Cover
189.240.000.000

Color Options
Standard color options are as followed.
Please have contact with your customer representative for your other color requests.



Drilling Jig for Bottom Hinge (Sash Part)
189.110.000.000

Note: Technical detail sizes are millimetric.

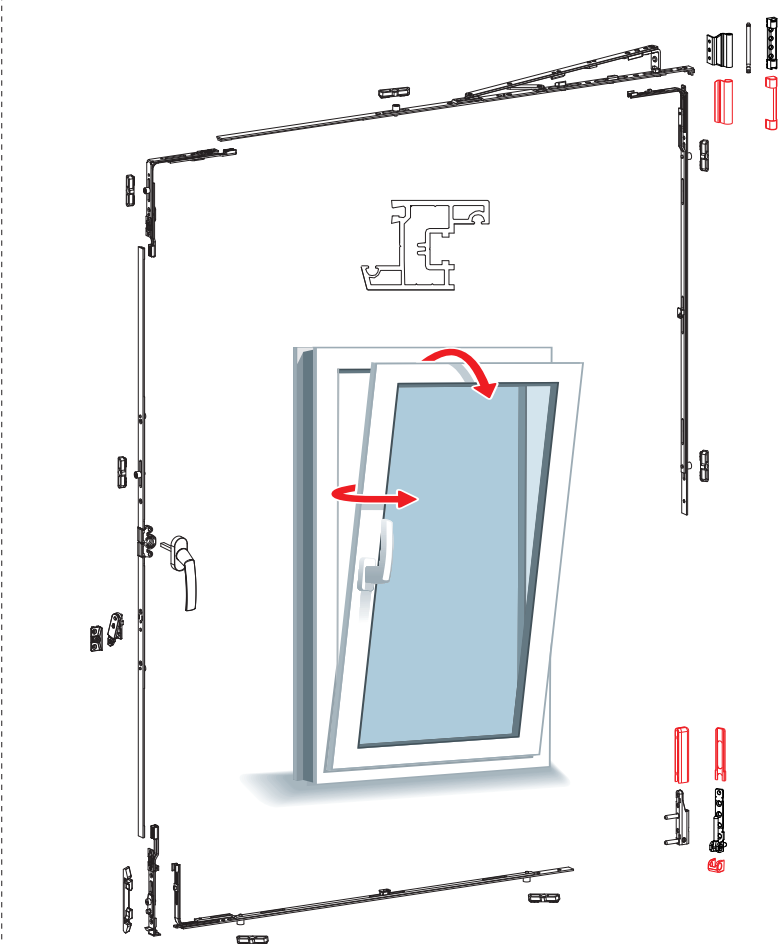
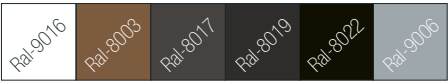
Order Details

Ø3	Description	Amount	Kg
186.011.001.000	Ø3 Bottom Hinge (Sash Part)	100	5.94
186.010.001.000	Ø6 Bottom Hinge (Sash Part)	100	5.94

Fornax PvcMotion
Tilt & Turn Hardware
Hinge Covers

Hardware Technical Details

Color Options
Standard color options are as belowed.
Please have contact with your customer representative for your other color requests.



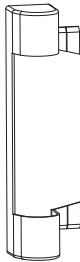
189.200.000.000
Stay Arm Hinge Cover



189.211.000.000
Stay Arm Bearing Bearing



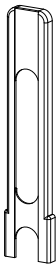
189.211.001.000
Self Jigged stay arm bearing Cover



189.240.000.000
Bottom Hinge (Sash Part) Cover



189.220.000.000
Bottom Hinge (Frame Part) Top Cover



189.230.000.000
Bottom Hinge (Frame Part) Bottom Cover

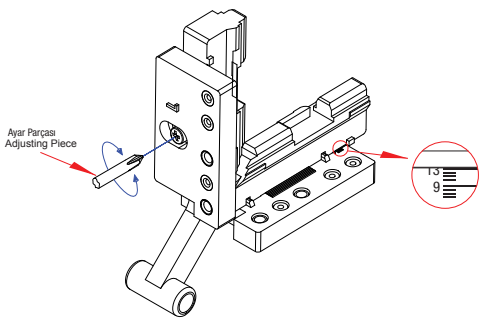


Fornax PvcMotion
Tilt & Turn Hardware
Drilling Jig

189.110.000.000

Drilling Jig for Bottom Hinge (Sash Part)

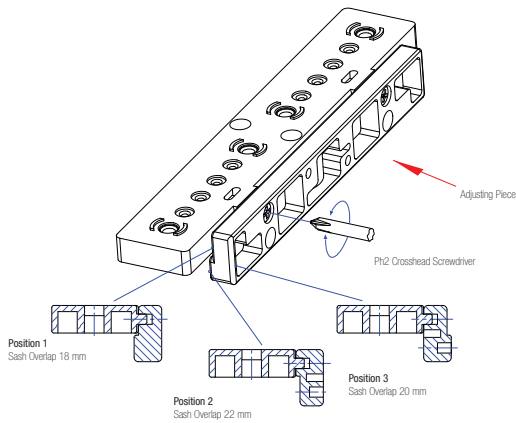
10



189.120.000.000

Drillin Jig for Stay Arm Bearing / Bottom Hinge (Frame Part)

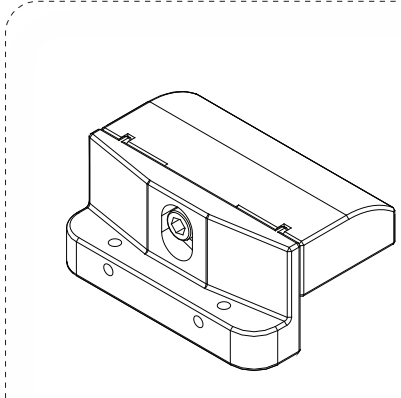
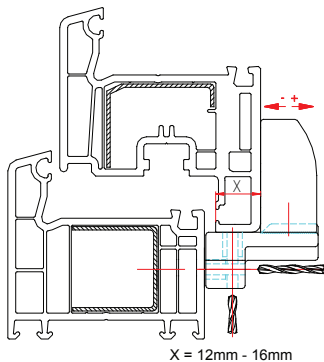
10



189.140.000.000

Drilling Jig for Double Sash Pressure Hinge with Cover

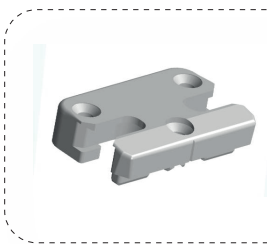
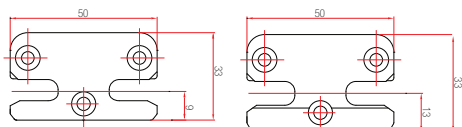
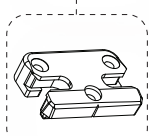
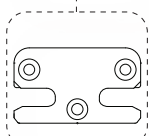
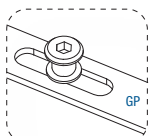
10



Fornax PvcMotion
Tilt & Turn Hardware
Strikers

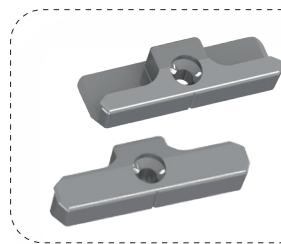
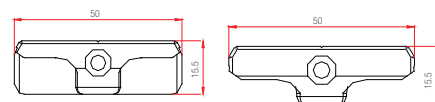
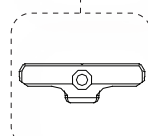
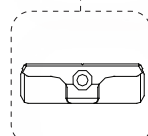
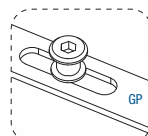
Security Locking Side striker 9-13 Axis w/3 Screw

9 Axis 189.100.002.000 | 13 Axis 189.100.002.000



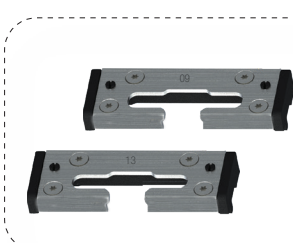
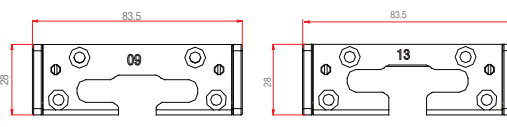
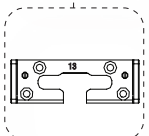
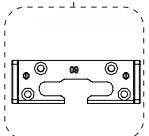
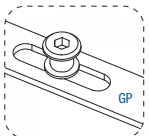
Security Locking Side striker 9-13 Axis w/1 Screw

9 Axis 189.100.003.000 | 13 Axis 189.100.004.000



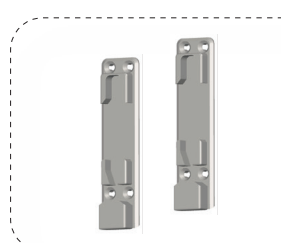
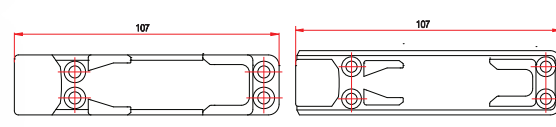
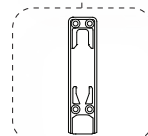
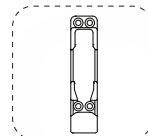
Universal Security Locking Striker Bottom Tilt 9-13 Axis

9 Axis 189.050.0021.000 | 13 Axis 189.070.002.000



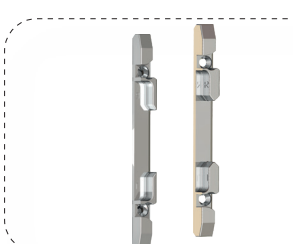
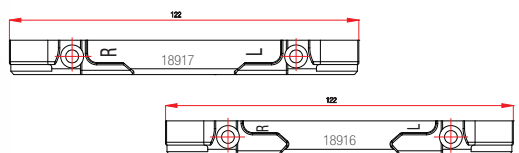
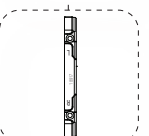
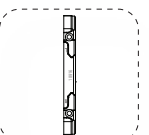
Security Locking Plate 9-13 Axis (Double Teeth)

9 Aks 189.120.001.000 | 13 Aks 189.130.001.000



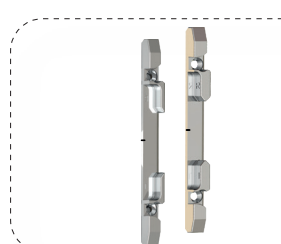
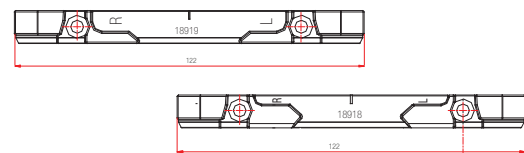
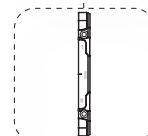
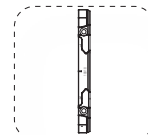
Locking Plate for Side Tilt R/L 9-13Axis

9 xis 189.170.0001.000 | 13 Axis 189.160.001.000



Locking Plate for Side Tilt R/L 9-13 Axis (+1 Plus)

9+1 Axis 189.190.001.000 | 13+1 Axis 189.180.001.000



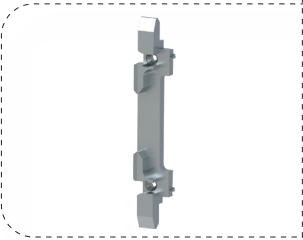
Fornax PvcMotion

Tilt & Turn Hardware

Strikers

Locking Plate for Side Tilt (Thyssen)

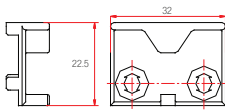
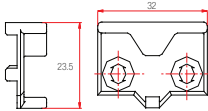
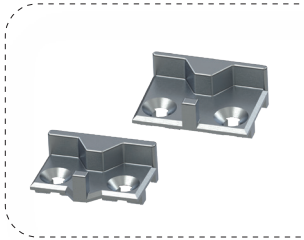
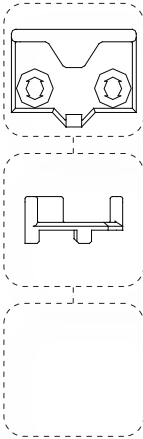
189.161.001.000



Ventilated Corner Transission Striker 9-13 Axis

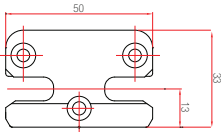
9 Axis 189.642.001.000

13 Axis 189.643.001.000



Security Locking Side striker w/ironSheet13 Axis

13 Axis 189.080.001.000



Yelken Kalıp Pencere Kapı Aksesuarları
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