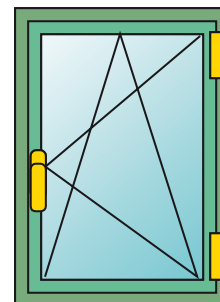


FUTURA 3D 80 FLUSH

Functions

Complete system for the construction of tilt-and-turn windows with load capacities of up to 90 kg. Available in the standard, logic and microventilation versions.



Technical Features

Making a FUTURA 3D 80 Flush tilt-and-turn window mechanism requires:

- Hinge kit
- Set of fastening mechanisms for Cremones and window handles
- Arms, available in three versions (standard, micro-ventilation and logic)
- Cremona or window handle (available in different models to choose from in the specific catalogue section)

Adjustments

The FUTURA 3D tilt-and-turn window enables micrometric adjustment in every direction, ideal after installing the casement.

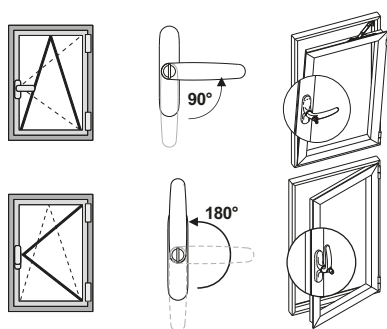
Micro-ventilation

Microventilation enables having simultaneously both the tilt-and-turn position and micro-ventilation (precision opening of the sash) on the casement. Available both as standard and with an additional device.

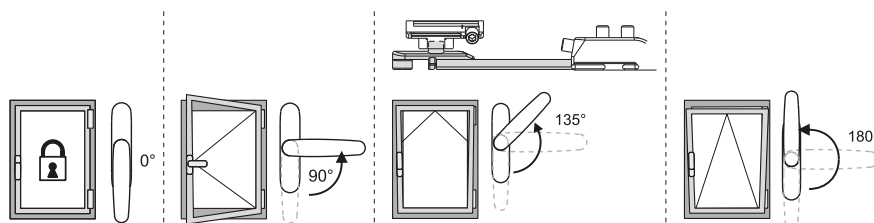
Logica

The logical operation consists in first tilt-and-turn opening (with the cremona at 90°) and secondly side-hung opening (with the cremona at 180°). Its use is particularly recommended in public buildings (schools, hospitals, etc.) in combination with a cremona with a key in order to have only tilt-and-turn window opening for safety reasons and to allow full opening only for staff with the key.

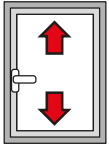
Logica mechanism operation



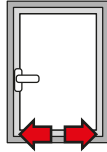
Standard microventilation



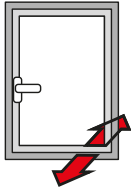
## ADJUSTMENTS [mm]



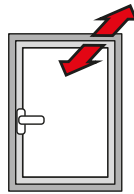
**Height:**  
+1.5 / -0.5



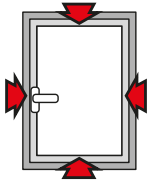
**Side:**  
±1



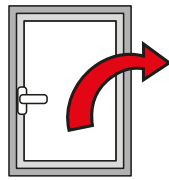
**Bottom hinge compression:**  
±0.3



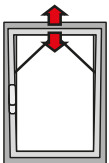
**Top hinge compression:**  
±1.5



**Striker compression:**  
±1.8



**Sash fall:**  
+3.5 / -1.5



**Micro-ventilation:**  
+3.6 / -1.8

Table of maximum glass thickness [mm]

2500	28	24	20	18	16	14	13	12	11	10	9	9	8	
2400	29	25	21	18	16	15	13	12	11	11	10	9	9	
2300	31	26	22	19	17	15	14	13	12	11	10	10	9	
2200	32	27	23	20	18	16	15	13	12	11	11	10	9	
2100	34	28	24	21	19	17	15	14	13	12	11	11	10	
2000	35	29	25	22	20	18	16	15	14	13	12	11	10	
1900	37	31	27	23	21	19	17	15	14	13	12	12	11	
1800	39	33	28	25	22	20	18	16	15	14	13	12	11	
1700	42	35	30	26	23	21	19	17	16	15	14	13	11	
1600	42	37	32	28	25	22	20	18	17	16	14	13	11	
1500	42	39	34	29	26	24	21	20	18	16	14	13	11	
1400	42	42	36	32	28	25	23	21	19	16	14	13	11	
1300	42	42	39	34	30	27	25	22	19	16	14	13		
1200	42	42	42	37	33	29	27	22	19	16	14			
1100	42	42	42	40	36	32	27	22	19	16				
1000	42	42	42	42	39	32	27	22	19					
900	42	42	42	42	40	32	27	22						
800	42	42	42	42	40	32	27							
700	42	42	42	42	40	32								
600	42	42	42	42	40	32								
	390	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700

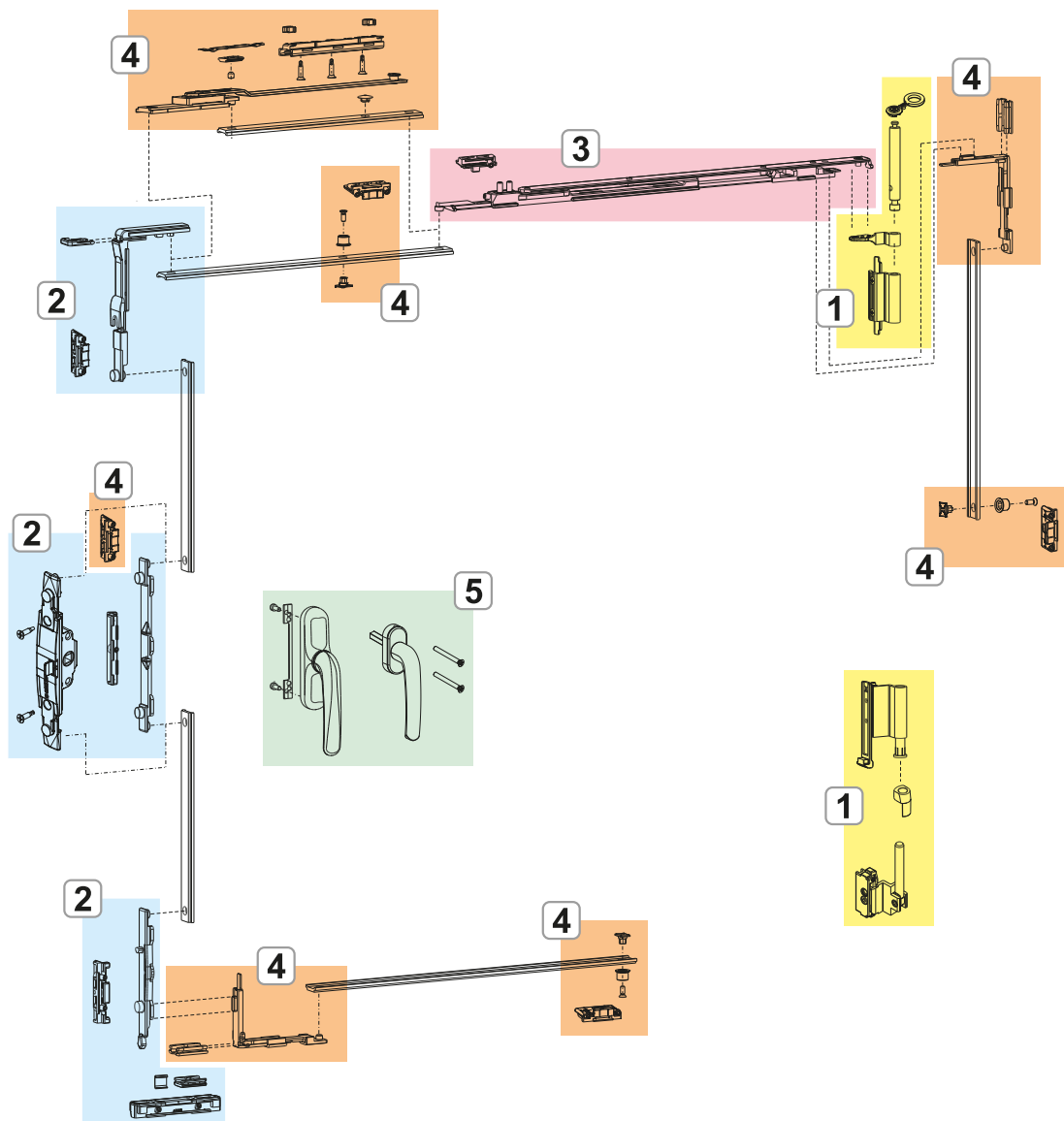
Table of maximum load capacity [kg]

2500	90	90	90	90	90	90	90	90	90	90	90	90	90	90
2400	90	90	90	90	90	90	90	90	90	90	90	90	90	90
2300	90	90	90	90	90	90	90	90	90	90	90	90	90	90
2200	90	90	90	90	90	90	90	90	90	90	90	90	90	90
2100	90	90	90	90	90	90	90	90	90	90	90	90	90	90
2000	90	90	90	90	90	90	90	90	90	90	90	90	90	90
1900	90	90	90	90	90	90	90	90	90	90	90	90	90	90
1800	90	90	90	90	90	90	90	90	90	90	90	90	90	87
1700	90	90	90	90	90	90	90	90	90	90	90	87	87	82
1600	90	90	90	90	90	90	90	90	90	90	88	82	77	77
1500	90	90	90	90	90	90	90	90	90	88	82	77	72	68
1400	90	90	90	90	90	90	90	90	89	82	77	72	67	
1300	90	90	90	90	90	90	90	89	82	76	71	67		
1200	90	90	90	90	90	90	90	82	76	71	66			
1100	90	90	90	90	90	90	82	75	70	65				
1000	90	90	90	90	90	82	75	69	63					
900	90	90	90	90	82	74	67	62						
800	90	90	90	90	82	73	66	60						
700	90	90	82	72	64	58								
600	390	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700

**FUTURA 3D**  
**80**

**FUTURA 3D**  
**80 micro**

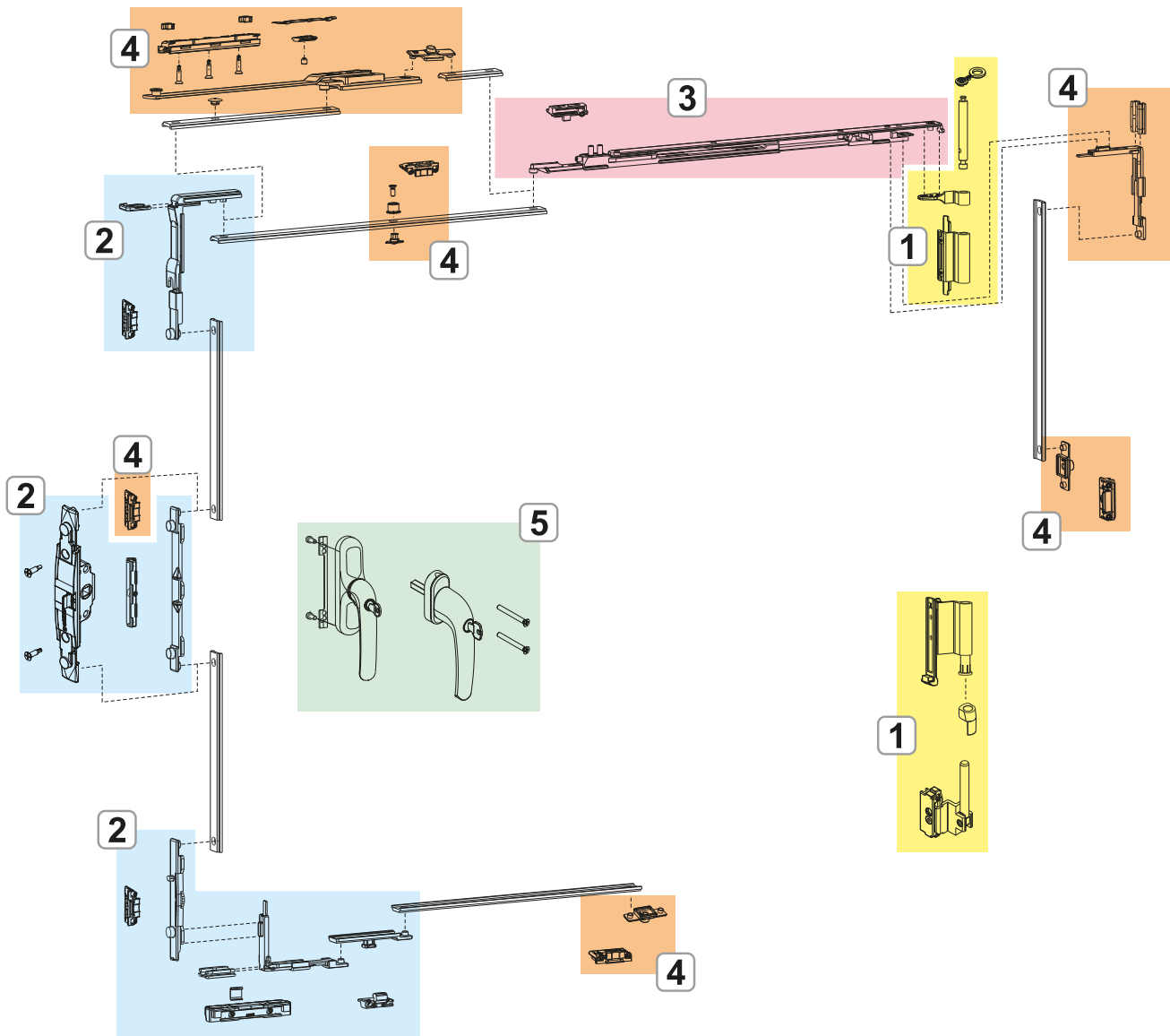
Futura 3D 80 traditional



1. FLUSH FUTURA 3D 80 HINGES
2. FUTURA 3D 80 FLUSH FASTENING MECHANISMS
3. FLUSH FUTURA 3D 80 ARMS
4. FLUSH FUTURA 3D 80 ADDITIONAL FASTENING MECHANISMS AND ACCESSORIES
5. CREMONES AND WINDOW HANDLES



Futura 3D 80 logica



1. FLUSH FUTURA 3D 80 HINGES
2. FUTURA 3D 80 FLUSH FASTENING MECHANISMS
3. FLUSH FUTURA 3D 80 ARMS
4. FLUSH FUTURA 3D 80 ADDITIONAL FASTENING MECHANISMS AND ACCESSORIES
5. CREMONES AND WINDOW HANDLES

**FLUSH FUTURA 3D 80 HINGES**

**Functions**

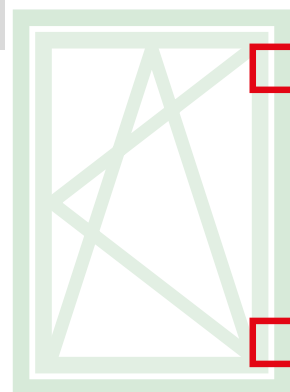
Hinge set (upper and lower), completely pre-assembled and ready to be installed on the profile.

**Materials**

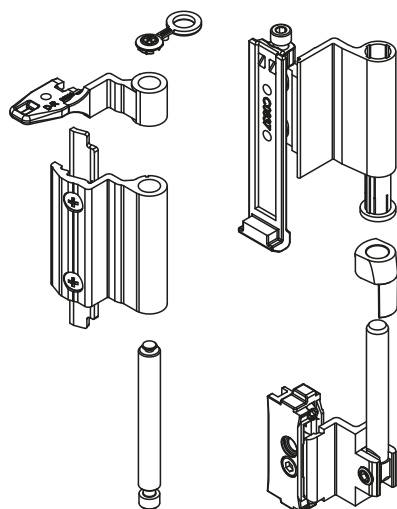
Body of hinges in extruded aluminium, stainless steel and brass.

Supports in zamak with GS Silver Plus finish (up to 500 hr corrosion resistance).

Pins, screws and grub screws in stainless steel.



04718



Item code	Description	PROFILE CROSS - SECTION	Base Raw	Anodised Elox	Painted	Trend/Gold Brass	Pieces per pack
04718	HINGE T/T FUTURA 3D	C013-C014-C015-C016-C017	X		X	X	10

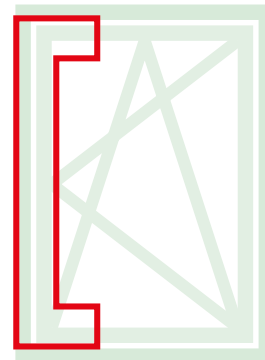
## FUTURA 3D 80 FLUSH FASTENING MECHANISMS

### Functions

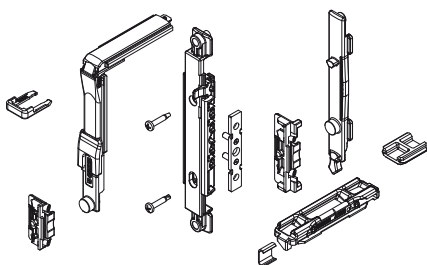
Tilt-and-turn window fastening mechanisms for cremone or window handle, available in Base and Logica versions.

### Materials

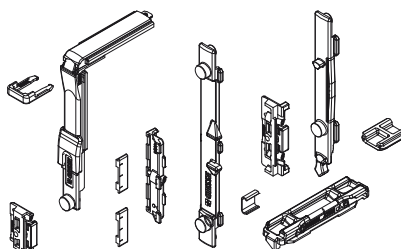
Drive, drive rod, mechanism bolt tip and strikers in zamak with GS Silver Plus finish (up to 500 h of corrosion resistance).  
Screws and grub screws in stainless steel.  
Polyamide raiser.



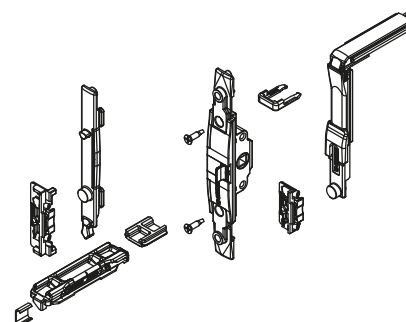
03955



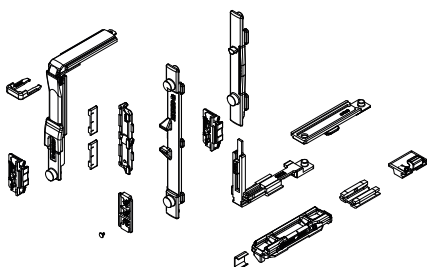
04704



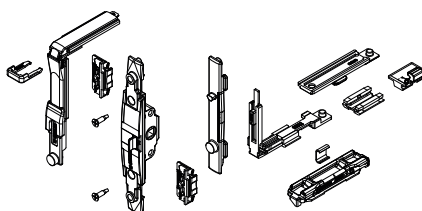
04705N



04706N



04707V



Item code	Description	PROFILE CROSS - SECTION	Window handle	Version	Base Raw	Anodised Elox	Painted	Trend/Gold Brass	Pieces per pack
03955	T/T FASTENING MECHANISM	C001-C002-C004-C005-C006-C013-C014-C015-C016-C017	NP SUPRA	-	X				10
04704	T/T FASTENING MECHANISM	C001-C002-C004-C005-C006-C013-C014-C015-C016-C017	Cremone	-	X				10
04705N	T/T M 180 FASTENING MECHANISM	C001-C002-C004-C005-C006-C013-C014-C015-C016-C017	Window handle	-	X				10
04706N	T/T LOGICA FASTENING MECHANISM	C001-C002-C004-C005-C006-C013-C014-C015-C016-C017	Cremone	Logica	X				10
04707V	T/T M 180 LOGICA FASTENING MECHANISM	C001-C002-C004-C005-C006-C013-C014-C015-C016-C017	Window handle	Logica	X				10

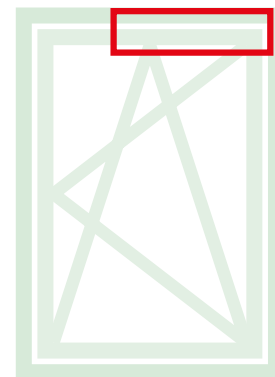
FLUSH FUTURA 3D 80 ARMS

Functions

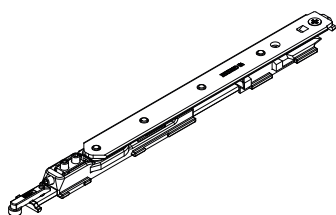
They enable tilt-and-turn opening in conjunction with the mechanisms and are available in three versions (standard, microventilation and logic).

Materials

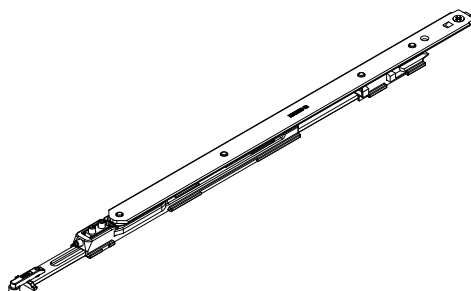
Body, fixing block and slider in zamak with GS Silver Plus finish (up to 500 h of corrosion resistance). Rod, connecting bracket, grub screws and screws in stainless steel. Stop disk in polyamide.



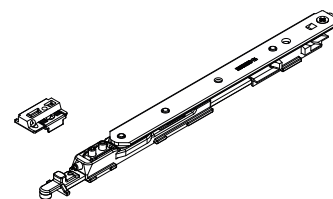
04202



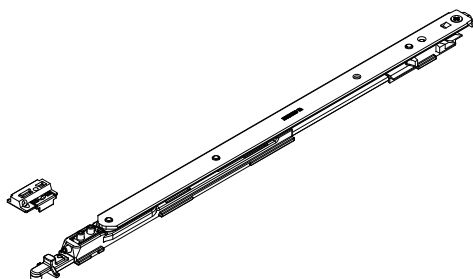
04203



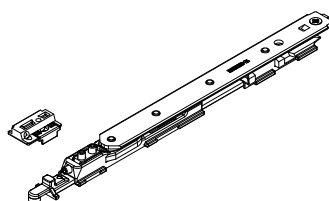
04284



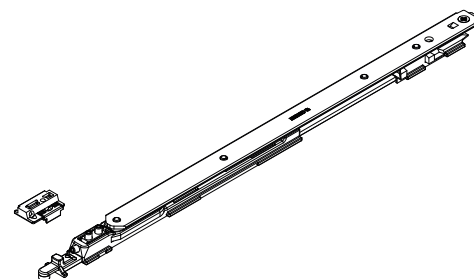
04285



04344



04345



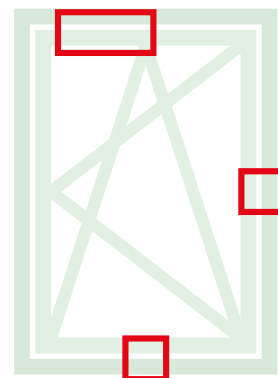
Item code	Description	PROFILE CROSS - SECTION	Range (mm)	Version	A (mm)	Base Raw	Anodised Elox	Painted	Order
04202	ARM TYPE 1 T/T FUTURA LOGICA 130	C001-C002-C003-C004-C005-C006-C013-C014-C015-C016-C017	W 390 ÷ 700	Logica	120				
04203	ARM TYPE 2 T/T FUTURA LOGICA 130	C001-C002-C003-C004-C005-C006-C013-C014-C015-C016-C017	W 701 ÷ 1800	Logica	175				
04284	ARM T1 130 WITH MICROVENTILATION	C001-C002-C003-C004-C005-C006-C013-C014-C015-C016-C017	W 410 ÷ 700	Micro	120				
04285	ARM T2 130 WITH MICROVENTILATION	C001-C002-C003-C004-C005-C006-C013-C014-C015-C016-C017	W 701 ÷ 1800	Micro	175				
04344	ARM T1 130 MICROVENTILATION LOGIC	C001-C002-C003-C004-C005-C006-C013-C014-C015-C016-C017	W 410 ÷ 700	Logica Micro	120				
04345	ARM T2 130 MICROVENTILATION LOGIC	C001-C002-C003-C004-C005-C006-C013-C014-C015-C016-C017	W 701 ÷ 1800	Logica Micro	175				

## FLUSH FUTURA 3D 80 ADDITIONAL FASTENING MECHANISMS AND ACCESSORIES

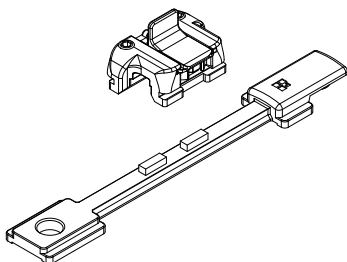
### Functions

The additional fasteners make it possible to add further fastening elements that either increase the dimensions of the casement or that can be used when locking points are needed on the cross beams or hinge-side upright.

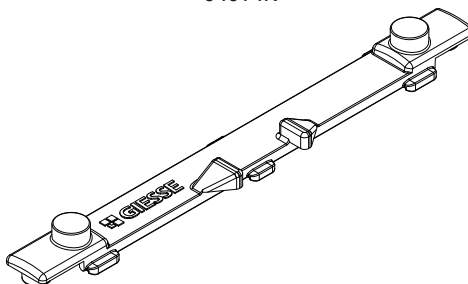
On the basis of the dimensions of the casement, additional fasteners (for H>1200 mm and W>1000 mm) and the additional arm (which is mandatory for W>1000 mm) are to be used in combination with this mechanism



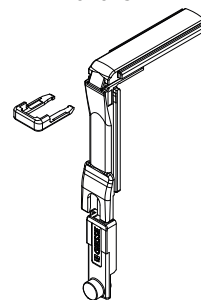
01299



04014K



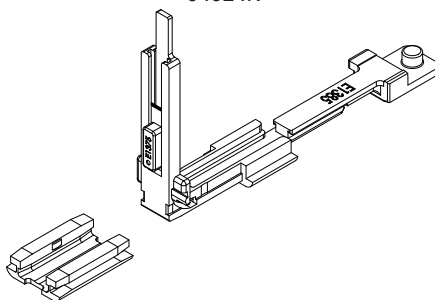
04019K



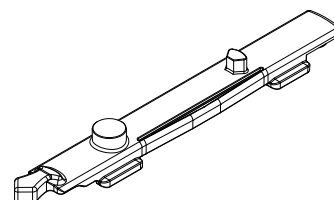
04020K



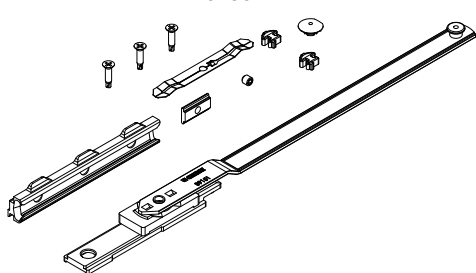
04024K



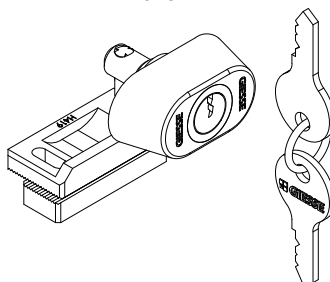
04026K



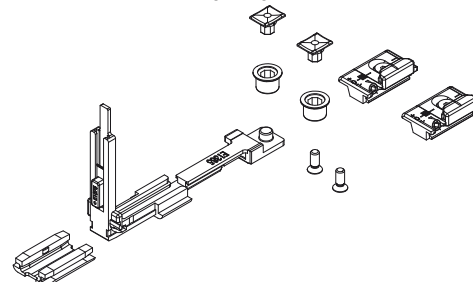
04301K



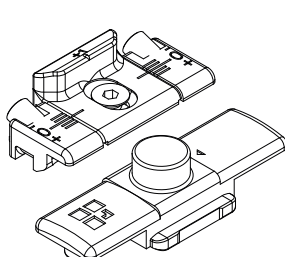
04311



04770K



04777K





Item code	Description	Interface type	Range (mm)	Version	Base Raw	Anodised Elox	Painted	Trend/Gold Brass	Pieces per pack
01299	INCORRECT MOVEMENT SAFETY DEVICE	C001-C002-C003-C004-C005-C006-C013-C014-C015-C016-C017	H > 620 HC > 250	-	X				10
04014K	FUTURA T/T DRIVE ROD	C001-C002-C003-C004-C005-C006-C013-C014-C015-C016-C017	-	-	X				10
04019K	CORNER DRIVE GROOVE 15/20 FUTURA	C001-C002-C003-C004-C005-C006-C009-C010-C011-C012-C013-C014-C015-C016-C017	-	-	X				10
04020K	FUTURA CORNER DRIVE	C001-C002-C003-C004-C005-C006-C009-C010-C011-C012-C013-C014-C015-C016-C017-P001-P002-P003-P004-P005-P006-P007-P008-P009-P010	-	-	X				50
04024K	CORNER DRIVE FOR FUTURA BURGLAR-PROOF FUNCTION	C001-C002-C003-C004-C005-C006-C013-C014-C015-C016-C017	-	-	X				10
04026K	FUTURA T/T BOLT TIP	C001-C002-C003-C004-C005-C006-C013-C014-C015-C016-C017	-	-	X				10
04301K	T/T FUTURA ADDITIONAL ARM	C001-C002-C003-C004-C005-C006	W > 1000	-	X				5
04311	SASH OPENING BLOCK LOCK	C001-C002-C003-C004-C005-C006-C007-C013-C014-C015-C016-C017	-	-	X				10
04770K	FUTURA ADDITIONAL FASTENING MECHANISM	C001-C002-C003-C004-C005-C006-C013-C014-C015-C016-C017	H > 1200 L > 1000	-	X				10
04777K	FUTURA ADDITIONAL FASTENING MECHANISM	C001-C002-C003-C004-C005-C006-C013-C014-C015-C016-C017	H > 1200 L > 1000	Logica	X				50