

# **Roto Fermax** Hardware Portfolio

Outward Opening - Inline - Door

# Welcome to Roto Fermax



Roto Fermax headquarters in Colombo, Paraná, Brazil.

# **Our Structure**

- Manufacturing and development Site in Colombo, Brazil
- World class power painting line and processes
- Warehouse with over 4000 positions and more than 7500 SKUs
- Sales and technical support
- Expanded network thru sales and/or warehouse in Roto locations in São Paulo, Buenos Aires, Mexico city and other locations worldwide



Manufacturing





Warehouse

Today a full subsidiary of the Roto Group the company was established in 1974 under the name "FERMAX" and became a reference for window and door hardware, first in the Brazilian Market and years later in South America. With the acquisition in 2013 by Roto, the company expanded its product development reach into all Latin America and more.

With a comprehensive structure in its manufacturing plant in Colombo, Brazil the unit offers lean manufacturing, state of the art surface finishing and superior delivery services for Latin America and beyond, with established international trade channels to over 20 countries.

Product development focused on mid segment hardware and Emerging Market requirements is core of this unit, and creates value to our customers in need of cost-benefit solutions. This unique setup of lean-flexibility, both in development and production, creates the opportunity for low Capex product launch, small batch sizes and money for value when needs come development and develops products with relatively low investments and batches sizes.

Among the main products you can find single point locks, handles, rollers and many other fittings required for windows and doors in the mid segment. In Roto you find excellence in windows and door hardware. At Roto Fermax you find this same excellence for hardware to t he mid segment.

We hope this brochure gives you the idea of what we can do for you and that soon we receive your contact.

Painting line

# **Outward Opening**



Facade	
Friction stays	1
Opening restrictor	
OO Facade Handles	

# **Outward Opening**

Friction stays	26
OO Facade Handles	30

# Inline



Rollers	
Strong Fit - Tandem/Single Rollers	
Strong - Tandem/Single Rollers	
Standard - Single Rollers	
Standard - Tandem Rollers	116
Single-point locking Handles	
DUO - Single-point pull handles	121
DUO - Finger pull handles	122
Easy Touch - Single-point pull handles	
Easy Touch - Outside push buttons	125
Easy Touch - Finger pull handles	126
Standart - Single-point pull handles	
Standart - Finger pull handles	136
Standard Pull handles	138
Hooks	
Standard - Single-point locking	139
Easy Touch - Single-point locking	140

# Door



Butt Hinges	142
Locks	154
Door Handles	157
Striker plate	158

DUO - Single-point locking......140

# 

# 1. Information

# 1.1. General



**INFO** All dimensions stated in milimeters. Other values are specified.

The following markings are used in this document.

# 1.1.1. Material

Symbol	Meaning
Material	
	Timber
	PVC
	Aluminium

# 1.1.2. Opening types

Symbol	Meaning
Material	
	Inline
	Outward Opening
Π	Door

Π

# 1.1.3. Product features

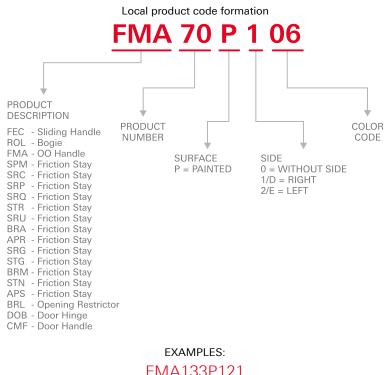
Symbol	Meaning
i	Information
	Stay Length
$\angle^{\circ}$	Opening Angle
Ī	Sash Height
←→	Sash Width
	Sash Weight
Nº	Material Number
	Description
	Length
	DIN
	Spindle Length

# 1.1.4. Colours

Colour code	Roto Fermax code	Surface	Colour	RAL number
R01.1	074	Powder coated	Natural silver	9006
R04.1	019	Powder coated	Grey brown	8019
R06.2	022	Powder coated	Jet black	9005
R07.2	061	Powder coated	Traffic white	9016
-	021	Powder coated	White	9003
-	024	Powder coated	Silver Fermax	-
-	070	Powder coated	Black varnish	-
-	068	Powder coated	Chromium	-
-	023	Powder coated	Brown Fermax	8014
-	081	Powder coated	Bronze 1001	-
-	082	Powder coated	Bronze 1002	-
-	083	Powder coated	Bronze 1003	-
-	084	Powder coated	Bronze 1004	-

NOTE: Special colors on request.

# 1.1.5. Local product code formation

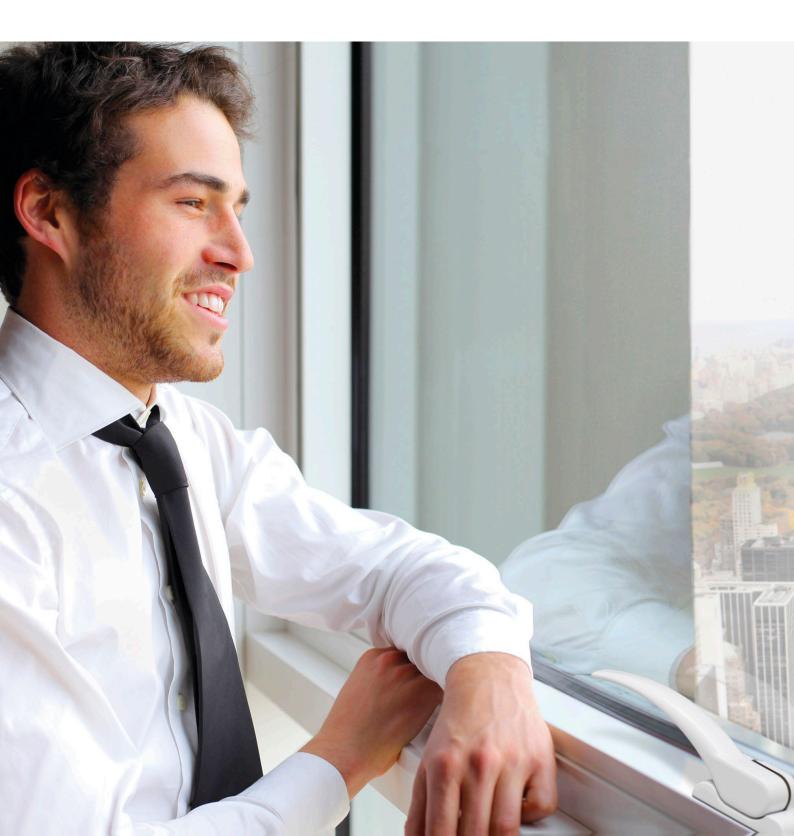


FMA133P121 SPM03P022

NOTE: Standard numeric Roto partnumbers available for some items. Creation upon request.







#### Projecting Systems SPM-BRF

Their kinematics enables, at the same time, the lower section of the wing to be moved, with the upper section following such movement and being displaced from the frame, thus enabling opening without reversal.

#### Characteristics

Can be applied in facades with box 15 and 17mm;

Meet loads up to 100kg;

Meet all market lines with or without overlap;

Manufactured in duraluminum;

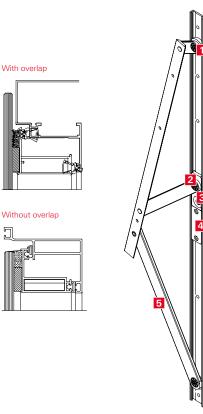
Fully corrosion-resistant;

Fastened with duraluminum rivets which avoid galvanic corrosion;

Best cost-benefit ratio;

Can be anodized or painted;

Can be applied with or without opening limit switch (BRL).



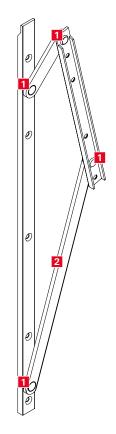
1	Aluminum rivets, protected by polyamide bushings that avoid friction between metal parts.
2	Stainless steel stiffening plate providing greater safety to assembly.
3	Braking device with numeric graduation which enables same braking on both sides.
4	Limit switch to limit opening.
5	Supporting stem without machining, such as bores or diversions thus obtaining greater resistance

#### Projecting Systems STN-APS-STG-STR

Their kinematics enables, at the same time, the lower section of the wing to be moved, with the upper section following such movement and being displaced from the frame thus enabling opening without reversal.

## Characteristics

Can be applied in window frames with box from 11 to 18mm; Meet loads up to 17kg; Manufactured in duraluminum; Fully corrosion-resistant; Best cost-benefit ratio; Can be anodized or painted.



1	Aluminum rivets, protected by polyamide bushings that avoid friction between metal parts.
2	Supporting stem without machining, such as bores or diversions thus obtaining greater resistance.



# Projecting Sliding Systems SRQ

Their kinematics enables, at the same time, the lower section of the wing to be moved, with the upper section following such movement and being displaced from the frame thus enabling opening without reversal.

# Characteristics

Can be applied in window frames with box from 14.5 to 17mm;

Meet loads up to 34kg;

Manufactured in duraluminum;

Fastened with duraluminum rivets which avoid galvanic corrosion; Fully corrosion-resistant;

Best cost-benefit ratio;

Can be anodized or painted.

1	Aluminum rivets, protected by polyamide bushings that avoid friction between metal parts.
2	System for unlocking and opening for cleaning purposes.
3	Supporting stem without machining, such as bores or diversions thus obtaining greater resistance.
4	Aluminum rivets, protected by polyamide bushings that avoid friction between metal parts.

#### Progressive Systems SRP-SRC-SRG

The system uses two sliding guides, comprising a pantographic mechanism, which enables projecting the upper section of the wing to the outer side, stabilizing the up and down movements, ensuring wing stability when opened.

#### Characteristics

Can be applied in facades with box 15 and 17mm;

Meet loads up to 74kg;

Meet all market lines without overlap;

Manufactured in duraluminum;

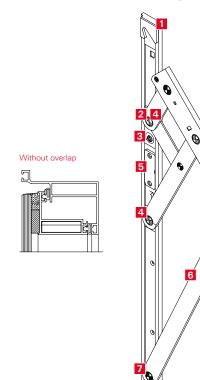
Fully corrosion-resistant;

Fastened with duraluminum rivets which avoid galvanic corrosion; Best cost-benefit ratio;

0

Can be anodized or painted;

Can be applied with or without opening limit switch (BRL).



1	Locking pointer prevents wing displacement when closed, providing perfect sealing.
2	Stainless steel stiffening plate providing greater safety to assembly.
3	Braking device with numeric graduation which enables same braking on both sides.
4	Sliding guides that move progressively providing: - Wing projection to the outer side; - Secure assembly; - Wing stability when projected; - Stability upon opening and closing movements.
5	Limit switch to limit opening.
6	Supporting stem without machining, such as bores or diversions thus obtaining greater resistance.
7	Aluminum rivets, protected by polyamide bushings that avoid friction between metal parts.

# Sliding Systems BRA-SRU-BRM

Their kinematics enables vertical displacement in parallel to the frame and reversal

# Characteristics

Can be applied in window frames with box 12 to 13 mm; Meet loads up to 32kg; Manufactured in duraluminum;

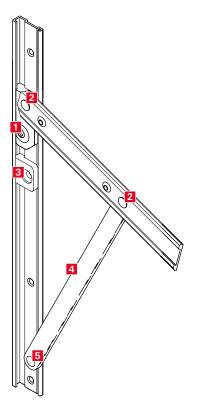
Fully corrosion-resistant;

Fastened with duraluminum rivets which avoid galvanic corrosion;

Best cost-benefit ratio;

Can be anodized or painted;

Can be applied with or without opening limit switch (BRL).



1	Braking device with numeric graduation which enables same braking on both sides.
2	Aluminum rivets, protected by polyamide bushings that avoid friction between metal parts.
3	Limit switch to limit opening
4	Supporting stem without machining, such as bores or diversions thus obtaining greater resistance.
5	Aluminum rivets, protected by polyamide bushings that avoid friction between metal parts.





# SPM

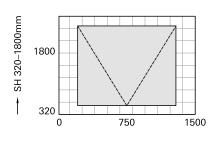
**Sliding Friction Stay** 



# Application range

SW	Sash width	max. 1500mm
SH	Sash height	
S.kg	Sash weight	max. 100 kg

# NOTE: Only friction stay model suitable for facades with Overlap Glazing System.

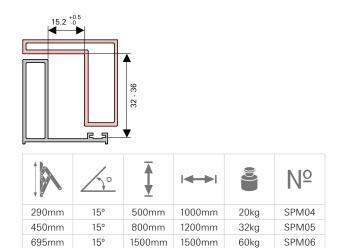


- SW max.1500mm



Required sash, frame and clearance dimensions

	<u> </u>	36 - 40			
	$\angle \circ$	Ī		(0)	N⁰
290mm	15°	500mm	1200mm	32kg	SPM01
450mm	15°	800mm	1500mm	42kg	SPM02
695mm	15°	1800mm	1500mm	100kg	SPM03



# Composition

Aluminium structure Nylon guides and sleeves Aluminium union rivets

#### Fastening

Stainless steel fixing screws - Ø 4,8 x 13 mm

#### Packaging



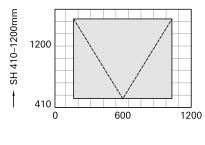
# STR

**Projecting Friction Stay** 



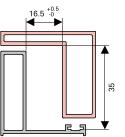
#### Application range

SW	Sash width	max. 1200mm
SH	Sash height	410 - 1200 mm
S.kg	Sash weight	max. 34 kg





# Required sash, frame and clearance dimensions



	$\angle$	<b>₹</b>	I <b>←→</b> I		N⁰
400mm	45°	600mm	1200mm	24kg	STR04
600mm	45°	1000mm	1200mm	30kg	STR05
950mm	45°	1200mm	1200mm	34kg	STR06

#### Composition

Aluminium structure Nylon guides and sleeves Aluminium union rivets

#### Fastening

Optional aluminium fixing rivets - Ø 4,8 x 10,2 mm Optional stainless steel fixing screws - Ø 4,2 x 16 mm

#### Packaging



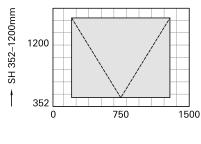


# SRC

**Progressive Friction Stay** 

#### Application range

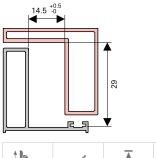
SW	Sash width	max. 1500mm
SH	Sash height	352 - 1200 mm
S.kg	Sash weight	max. 45 kg



- SW max. 1500mm

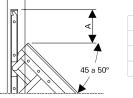


# Required sash, frame and clearance dimensions



	<u></u>	Ţ			N⁰
342mm	45 à 50°	600mm	1500mm	22kg	SRC01
600mm	45 à 50°	1000mm	1500mm	35kg	SRC02*
951mm	45 à 50°	1200mm	1500mm	45kg	SRC03*

\*Accompanying opening restrictor.



Material N°	А
SRC01	80mm
SRC02	150mm
SRC03	230mm

#### Composition

Aluminium structure Nylon guides and sleeves Aluminium union rivets Nylon limiter (SRC02 / 03)

# Fastening

Optional aluminium fixing rivets - Ø 4,8 x 10,2 mm Optional stainless steel fixing screws - Ø 4,2 x 16 mm

#### Packaging

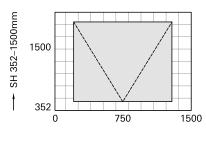


# SRP

**Progressive Friction Stay** 

#### Application range

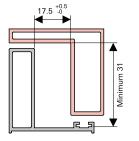
SW	Sash width	max. 1500mm
SH	Sash height	352 - 1500 mm
S.kg	Sash weight	max. 74 kg



🔶 SW max. 1500mm



#### Required sash, frame and clearance dimensions



	$\angle \circ$	<b>↓</b>	<b> </b> ←→		Nº	
342mm	45 à 50°	600mm	1500mm	22kg	SRP01	
600mm	45 à 50°	1000mm	1500mm	35kg	SRP02	
951mm	45 à 50°	1200mm	1500mm	42kg	SRP03*	
1200mm	45 à 50°	1500mm	1500mm	74kg	SRP04*	
*Accompanying opening restrictor.						

Material N° SRP01 SRP02 SRP03 SRP04

А
80mm
150mm
230mm
50mm

#### Composition

Aluminium structure Nylon guides and sleeves Aluminium union rivets Nylon limiter (SRP02 / 03 / 04)

#### Fastening

Optional aluminium fixing rivets - Ø 4,8 x 10,2 mm Optional stainless steel fixing screws - Ø 4,2 x 16 mm (SRP01 / 02 / 03 / 04)

# Packaging





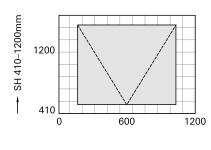
# SRQ

**Projecting Sliding Friction Stay** 



# Application range

SW	Sash width	max. 1200mm
SH	Sash height	410 - 1200 mm
S.kg	Sash weight	max. 34 kg

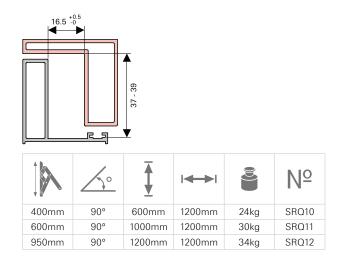


- SW max. 1200mm



	$\angle \circ$	Ī	<b> </b> ←→		Nº
400mm	90°	600mm	1200mm	24kg	SRQ01
600mm	90°	1000mm	1200mm	30kg	SRQ02
950mm	90°	1200mm	1200mm	34kg	SRQ03

Required sash, frame and clearance dimensions



## Composition

Aluminium structure Nylon guides and sleeves Aluminium union rivets

#### Fastening

Optional aluminium fixing rivets - Ø 4,8 x 10,2 mm Optional stainless steel fixing screws - Ø 4,2 x 16 mm

#### Packaging

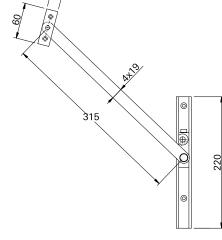


Outward Opening - Facade Accessories Opening Restrictor

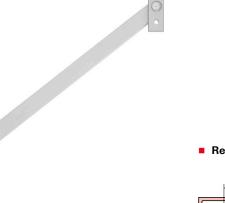
# BRL04

**Opening Restrictor - aluminium** 

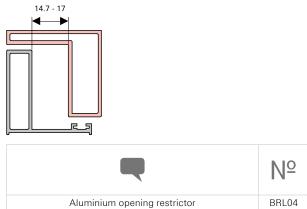




<u>19</u>



Required sash, frame and clearance dimensions



#### Composition

Aluminium structure Nylon guides and sleeves Aluminium union rivets

#### Fastening

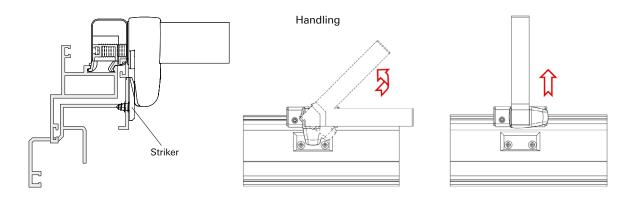
Optional aluminium fixing rivets - Ø  $4,8 \times 10,2 \text{ mm}$ Optional stainless steel fixing screws - Ø  $4,2 \times 16 \text{ mm}$ 

#### Packaging

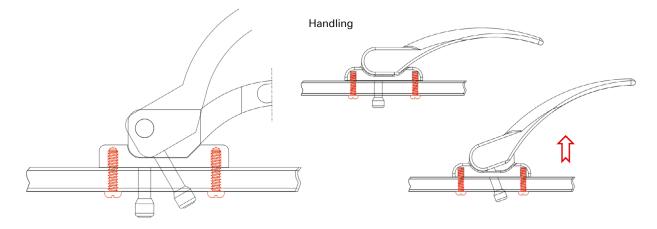




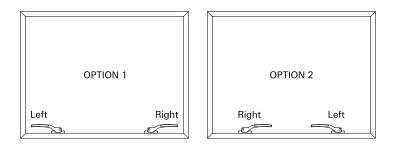
# Window Handles Types Front Handles



**Overlap Handles** 



ATTENTION! For sashs over one meter wide, it's recommended to use two handles, one right and one left. There are two installation variants for using the handles on the same sash. See illustration:

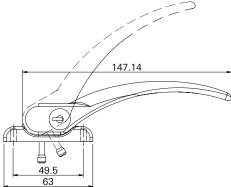




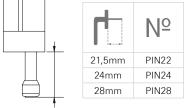
FMA133 | FMA134 OO Handle - Armoni

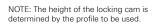






			N⁰
Handle without lock	147,14mm	left/right	FMA133
Lockable handle	147,14mm	left/right	FMA134





# Composition FMA133

Aluminium base and handle Trims, spacer, chock and nylon striker Stainless steel shaft and lock washer

# Fastening

Lock stainless steel screws - 3/16 "x 3/4" Striker stainless steel screws - 3,9 x 22 mm

Packaging

1 handle plus fastening screws and complements

# Composition FMA134

Aluminium base and handle Trims, spacer, chock and nylon striker Stainless steel shaft and lock washer Chrome cylinder and key

#### Fastening

Lock stainless steel screws - 3/16 "x 3/4" Striker stainless steel screws - 3,9 x 22 mm

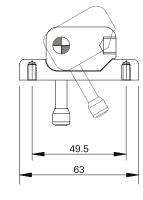
#### Packaging 1 handle



**FMA68** 

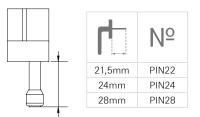












NOTE: The height of the locking cam is determined by the profile to be used.

#### Composition

Aluminium base and handle without knob Trims, spacer, wedge and nylon striker Stainless steel shaft and lock washer

# Fastening

Lock stainless steel screws - 3/16 "x 3/4" Striker stainless steel screws - 3,9 x 22 mm

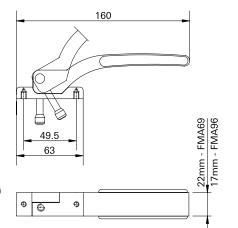
# Packaging



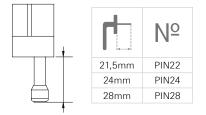
FMA69 | FMA96 OO Handle - Overlap







			N⁰
Large OO handle - with tailpiece	147,3mm	left/right	FMA69
Slim OO handle - with tailpiece	147,3mm	left/right	FMA96



NOTE: The height of the locking cam is determined by the profile to be used.

#### Composition FMA69

Aluminium base and handle Trims, spacer, wedge and nylon striker Stainless steel shaft and lock washer

#### Fastening

Lock stainless steel screws - 3/16 "x 3/4" Striker stainless steel screws - 3,9 x 22 mm

#### Packaging

1 handle plus fastening screws and complements

## Composition FMA96

Aluminium base and handle Trims, spacer, wedge and nylon striker Stainless steel shaft and lock washer

# Fastening

Lock stainless steel screws - 3/16 "x 3/4" Striker stainless steel screws - 3,9 x 22 mm

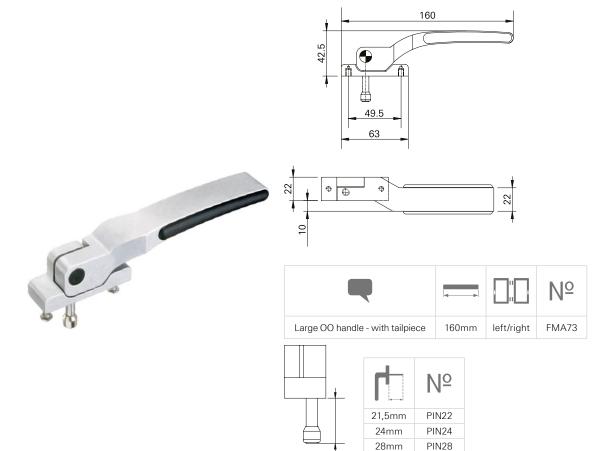
# Packaging



FMA73







NOTE: The height of the locking cam is determined by the profile to be used.

#### Composition

Aluminium base and handle Trims, spacer, wedge and nylon striker Stainless steel shaft and lock washer

# Fastening

Lock stainless steel screws - 3/16 "x 3/4" Striker stainless steel screws - 3,9 x 22 mm

# Packaging

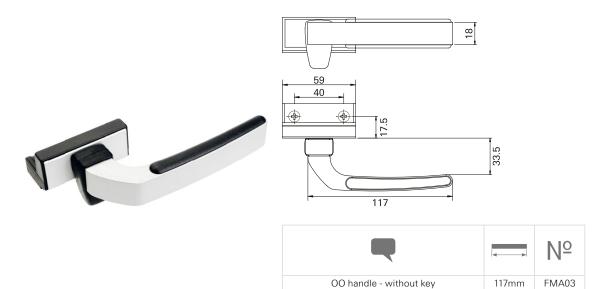




Outward Opening - Facade Handles Front

FMA03 OO Handle - Front





Armoni design optional, page 88.

#### Composition

Aluminum base, handle and sleeves Tab, washer, trims and nylon striker

# Fastening

Lock stainless steel screws - M5 x 25 mm Striker stainless steel screws - 4,2 x 8 mm

# Packaging

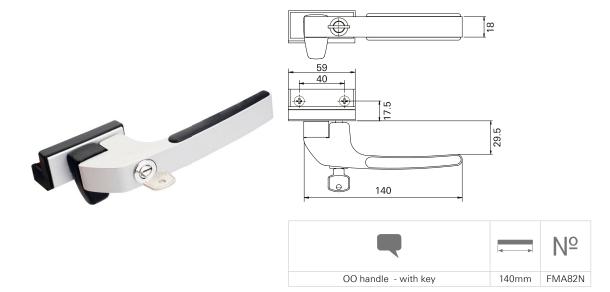


Outward Opening - Facade Handles Front

FMA82N







#### Composition

Aluminum base, handle and sleeves Tab, washer, trims and nylon striker Chrome cylinder and key

# Fastening

Lock stainless steel screws - M5 x 25 mm Striker stainless steel screws - 4,2 x 8 mm

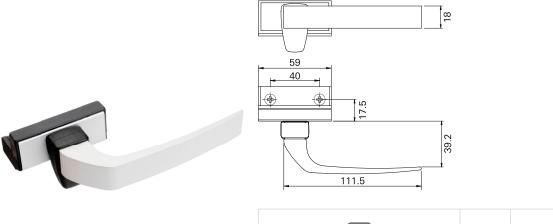
# Packaging



Outward Opening - Facade Handles Front

FMA62 OO Handle - Front





		Nº
OO handle - without key	111,5mm	FMA62

Armoni design optional, page 88.

#### Composition

Aluminum base, handle and sleeves Tab, washer, trims and nylon striker

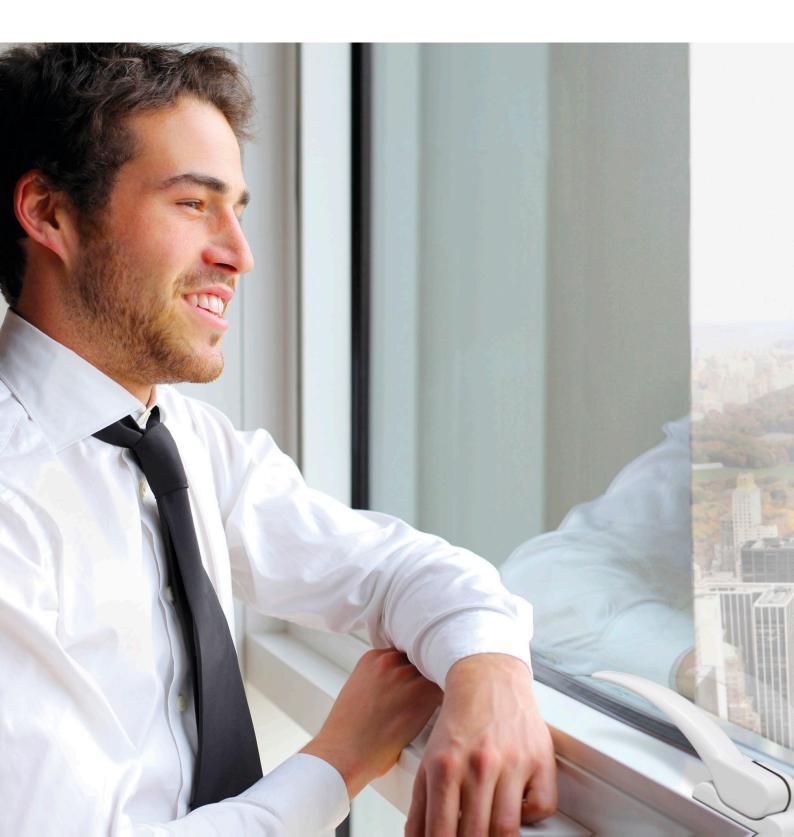
# Fastening

Lock stainless steel screws - M5 x 25 mm Striker stainless steel screws - 4,2 x 8 mm

# Packaging







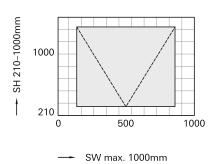
# SRU

**Sliding Friction Stay** 



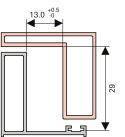
#### Application range

SW	Sash width	max. 1000mm
SH	Sash height	
S.kg	Sash weight	max. 10,8kg





# Required sash, frame and clearance dimensions



	$\angle$	Ī	I <b>←→</b> I		N⁰
250mm	90°	320mm	1000mm	6,4kg	SRU01
320mm	90°	400mm	1000mm	7,5kg	SRU02
400mm	90°	600mm	1000mm	8,7kg	SRU03
600mm	90°	1000mm	1000mm	10,8kg	SRU04
200mm	90°	260mm	1000mm	6,4kg	SRU05

#### Composition

Aluminium structure Nylon guides and sleeves Aluminium union rivets

#### Fastening

Optional aluminium fixing rivets - Ø 4,0 x 10,2 mm Optional stainless steel fixing screws - Ø 3,9 x 19 mm

# Packaging





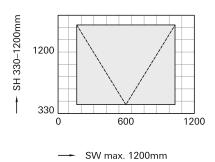
# BRA

**Sliding Friction Stay** 

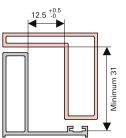


#### Application range

SW	Sash width	max. 1200mm
SH	Sash height	
S.kg	Sash weight	max. 32kg



# Required sash, frame and clearance dimensions



	$\angle$	Ŧ	I <b>←→</b> I		N⁰
320mm	90°	400mm	1200mm	12kg	BRA01
400mm	90°	650mm	1200mm	20kg	BRA02
650mm	90°	900mm	1200mm	27kg	BRA03
900mm	90°	1200mm	1200mm	32kg	BRA04*

\*Accompanying opening restrictor.

## Composition

Aluminium structure Nylon guides and sleeves Aluminium union rivets

#### Fastening

Optional aluminium fixing rivets - Ø 4,8 x 10,2 mm Optional stainless steel fixing screws - Ø 4,2 x 16 mm

# Packaging



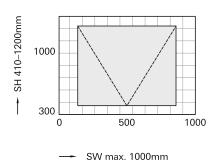
# STN

**Projecting Friction Stay** 



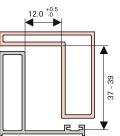
#### Application range

SW	Sash width	max. 1000mm
SH	Sash height	
S.kg	Sash weight	max. 17kg





Required sash, frame and clearance dimensions



	$\angle$	Ī	I <b>←→</b> I		N⁰
290mm	25°	450mm	1000mm	10kg	STN01
440mm	25°	650mm	1000mm	14kg	STN02
635mm	25°	1000mm	1000mm	17kg	STN03

#### Composition

Aluminium structure Nylon guides and sleeves Aluminium union rivets

#### Fastening

Optional aluminium fixing rivets - Ø 4,0 x 10,2 mm Optional stainless steel fixing screws - Ø 3,9 x 16 mm

#### Packaging





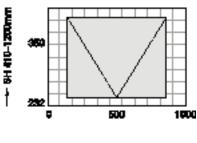
# STG

**Projecting Friction Stay** 



# Application range

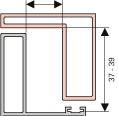
SW	Sash width	max. 1000mm
SH	Sash height	232 - 350mm
S.kg	Sash weight	max. 6kg



------ SN mp. 1000em



Required sash, frame and clearance dimensions





#### Composition

Aluminium structure Nylon guides and sleeves Aluminium union rivets

#### Fastening

Optional aluminium fixing rivets - Ø 4,0 x 10,2 mm Optional stainless steel fixing screws - Ø 4,2 x 16 mm

# Packaging

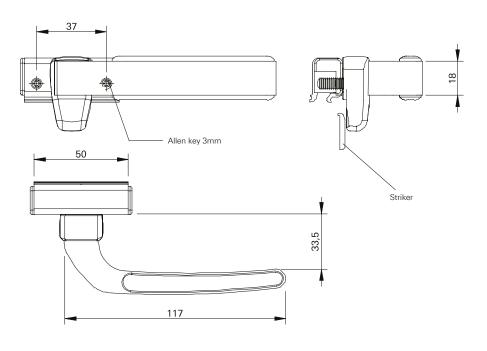


# FMA01

**OO Handle - Front Fixing** 







		-		N⁰
Saturno OO Handle	117mm	-	Left/Right	FMA01

Armoni design optional, page 88.

# Composition

Base and handle: aluminium Trims and spur: nylon

- Fastening Stainless steel screws M6 x 14
- Packaging
   1 handle (L or R) plus fastening screws

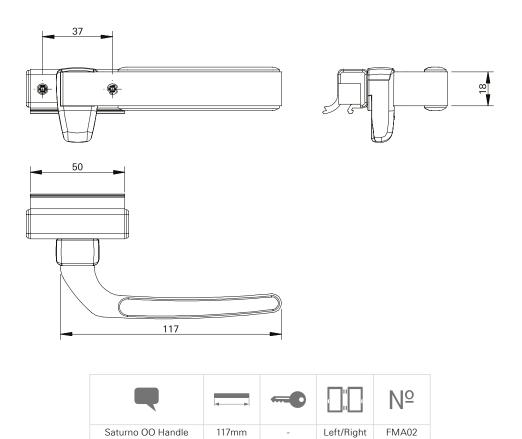


# FMA02









\_

Armoni design optional, page 88.

# Composition

- Base and handle: aluminium Trims and spur: nylon
- Fastening Stainless steel screws M6 x 14 Packaging
  - 1 handle (L or R) plus fastening screws



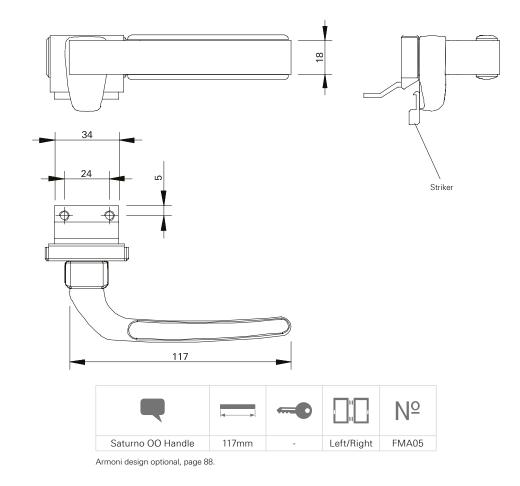
Outward Opening Handles Inside Fixing

# FMA05

**OO Handle - Inside Fixing** 







# Composition

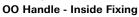
Base and handle: aluminium Trims and spur: nylon

- Fastening Stainless steel screws M5 x 12
- Packaging
   1 handle (L or R) plus fastening screws



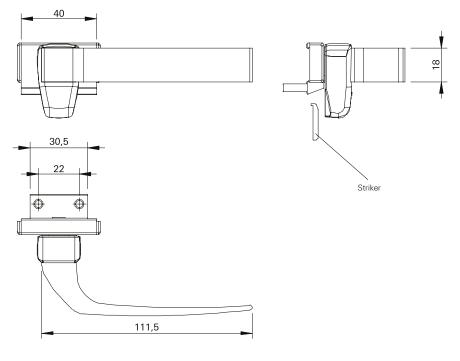
Outward Opening Handles Inside Fixing

# FMA16









				N⁰
Maxi OO Handle	111,5mm	-	Left/Right	FMA16

Armoni design optional, page 88.

# Composition

Base and handle: aluminium Trims and spur: nylon

- Fastening Stainless steel screws M5 x 18
   Packaging
  - 1 handle (L or R) plus fastening screws



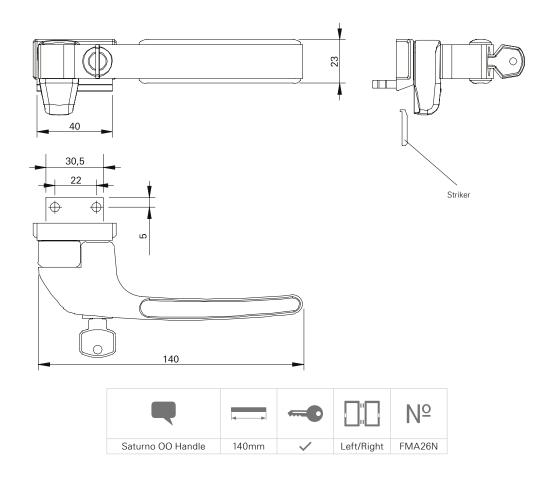
Outward Opening Handles Inside Fixing

FMA26N

**OO Handle - Inside Fixing** 







# Composition

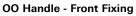
Base and handle: aluminium Trims and spur: nylon Cylinder zamak; chrome key

• Fastening Stainless steel screws M5 x 18

Packaging
 1 handle (L or R) plus fastening screws

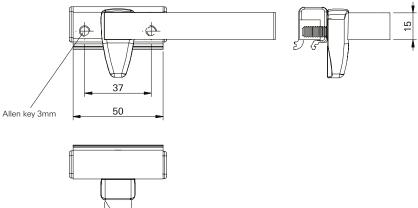


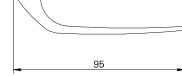
# FMA47











				N⁰
Mini OO Handle	95mm	-	Left/Right	FMA47

# Composition

Base and handle: aluminium Trims and spur: nylon

- Fastening Stainless steel screws M6 x 14
   Packaging
  - 1 handle (L or R) plus fastening screws



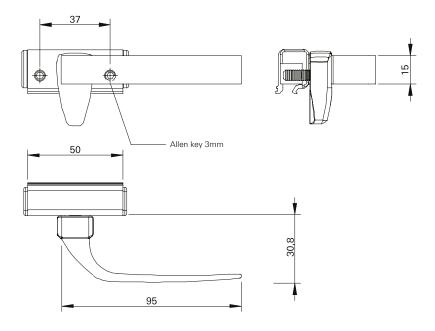


# FMA48

**OO Handle - Front Fixing** 







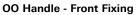
	<b></b>			N⁰
Mini OO Handle	95mm	-	Left/Right	FMA48

# Composition

Base and handle: aluminium Trims and spur: nylon

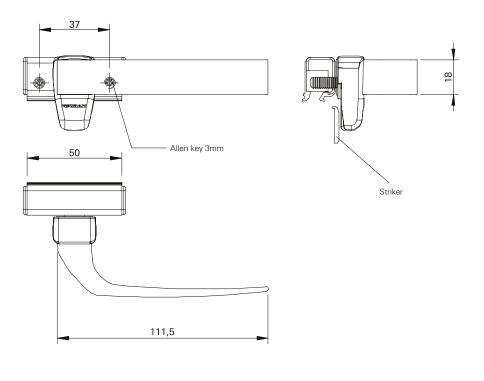
- Fastening Stainless steel screws M6 x 14
   Packaging
  - 1 handle (L or R) plus fastening screws











	<>			N⁰
Maxi OO Handle	111,5mm	-	Left/Right	FMA51

Armoni design optional, page 88.

#### Composition

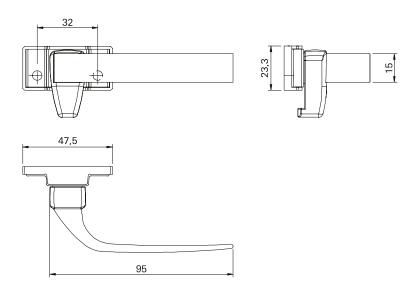
- Base and handle: aluminium Trims and spur: nylon
- Fastening Stainless steel screws M6 x 14
- Packaging
   1 handle (L or R) plus fastening screws



**OO Handle - Front Fixing** 





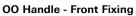


				N⁰
Mini OO Handle	95mm	-	Left/Right	FMA63

#### Composition

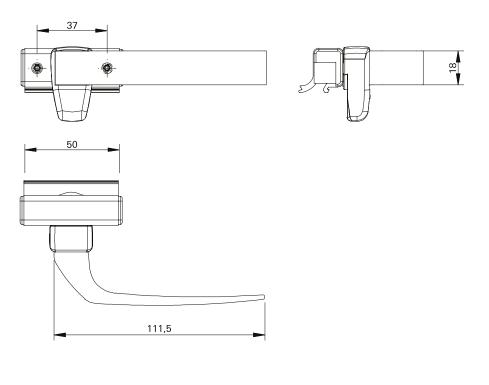
- Fastening Stainless steel screws 4,2 x 16
  Packaging
  - 1 handle (L or R) plus fastening screws











				N⁰
Maxi OO Handle	111,5mm	-	Left/Right	FMA70

Armoni design optional, page 88.

 Composition Base and handle: aluminium Trims and spur: nylon

- Fastening Stainless steel screws M6 x 14 Packaging
- 1 handle (L or R) plus fastening screws

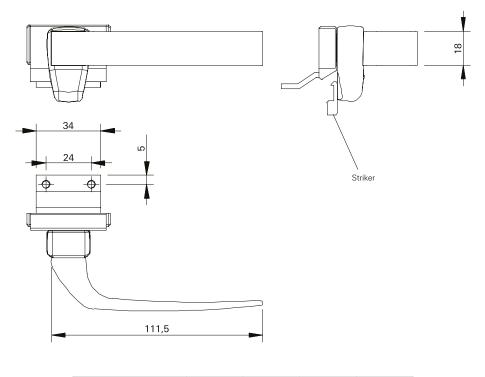


#### FMA71

**OO Handle - Inside Fixing** 







				N⁰
Maxi OO Handle	111,5mm	-	Left/Right	FMA71

Armoni design optional, page 88.

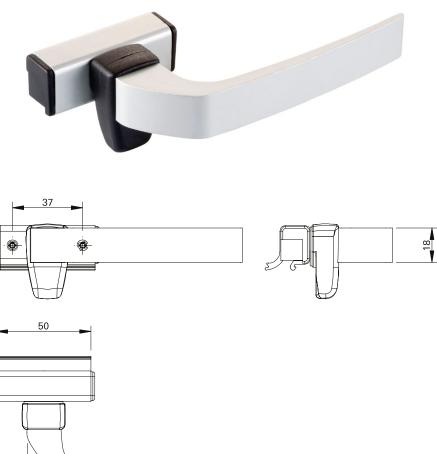
#### Composition

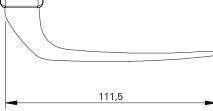
- Fastening Stainless steel screws M5 x 12
- Packaging
   1 handle (L or R) plus fastening screws











	<b>∢</b> →			N⁰
Maxi OO Handle	111,5mm	-	Left/Right	FMA78

Armoni design optional, page 88.

 Composition Base and handle: aluminium Trims and spur: nylon

- Fastening Stainless steel screws M6 x 14
- Packaging 1 handle (L or R) plus fastening screws

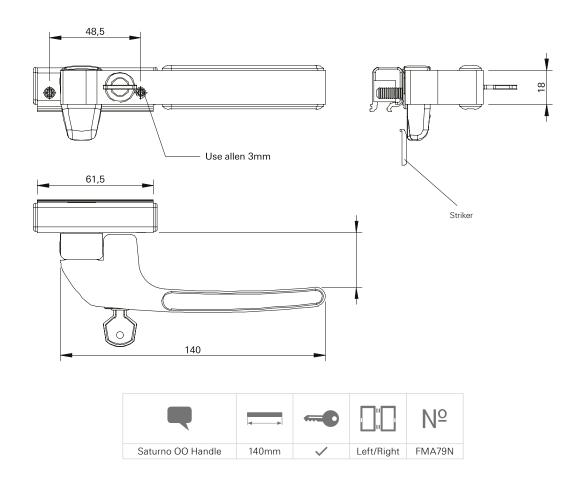


#### FMA79N

**OO Handle - Front Fixing** 







## Composition

Base and handle: aluminium Trims and spur: nylon Cylinder zamak; chrome key

- Fastening Stainless steel screws M6 x 14
- Packaging

1 handle (L or R) plus fastening screws



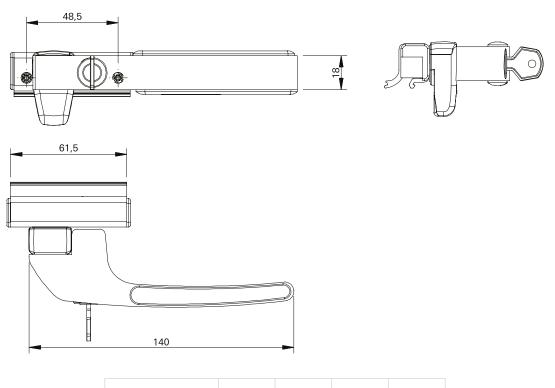
### FMA80N



**OO Handle - Front Fixing** 







					N⁰
Saturno	00 Handle	140mm	$\checkmark$	Left/Right	FMA80N

## Composition

Base and handle: aluminium Trims and spur: nylon Cylinder zamak; chrome key

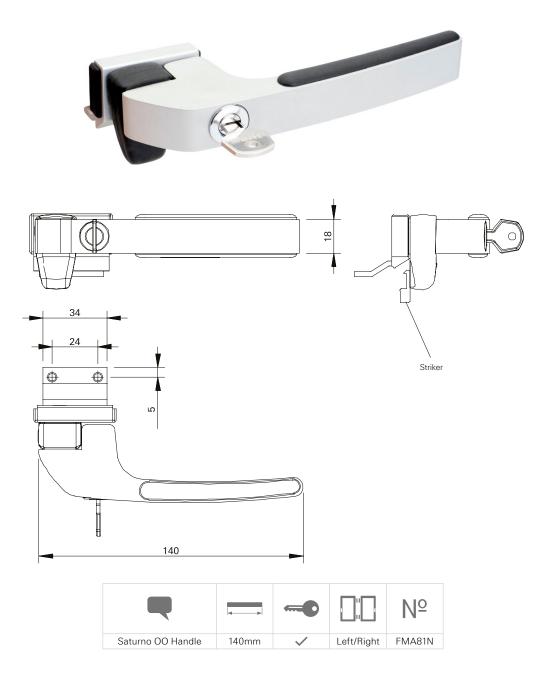
- Fastening Stainless steel screws M6 x 14
- Packaging
   1 handle (L or R) plus fastening screws



FMA81N

**OO Handle - Inside Fixing** 





#### Composition

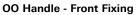
Base and handle: aluminium Trims and spur: nylon Cylinder zamak; chrome key

• Fastening Stainless steel screws M6 x 14

Packaging
 1 handle (L or R) plus fastening screws

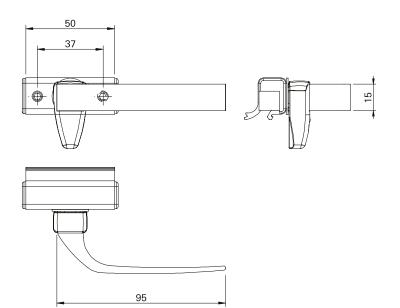


## **FMA83**









	<b></b>			N⁰
Mini OO Handle	95mm	-	Left/Right	FMA83

Composition Base and handle: aluminium Trims and spur: nylon

- Fastening Stainless steel screws M6 x 14 Packaging
  - 1 handle (L or R) plus fastening screws



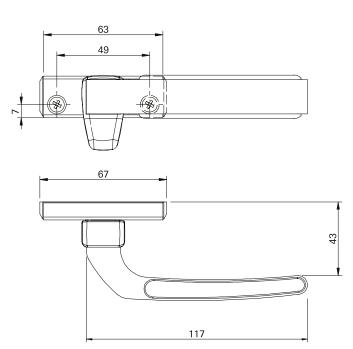


#### **FMA87**

**OO Handle - Front Fixing** 







	•			N⁰
Saturno OO Handle	117mm	-	Left/Right	FMA87

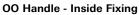
Armoni design optional, page 88.

#### Composition

- Fastening Stainless steel screws 4,2 x 25
   Packaging
  - 1 handle (L or R) plus fastening screws

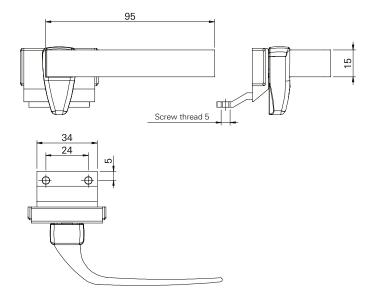


## FMA95









				N⁰
Mini OO Handle	95mm	-	Left/Right	FMA95

Composition Base and handle: aluminium Trims and spur: nylon

- Fastening Stainless steel screws M5 x 12 Packaging
  - 1 handle (L or R) plus fastening screws

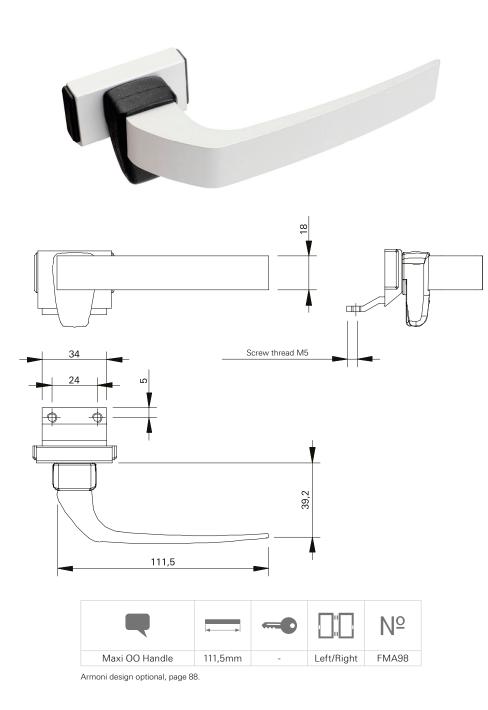




#### FMA98

**OO Handle - Inside Fixing** 



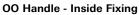


#### Composition

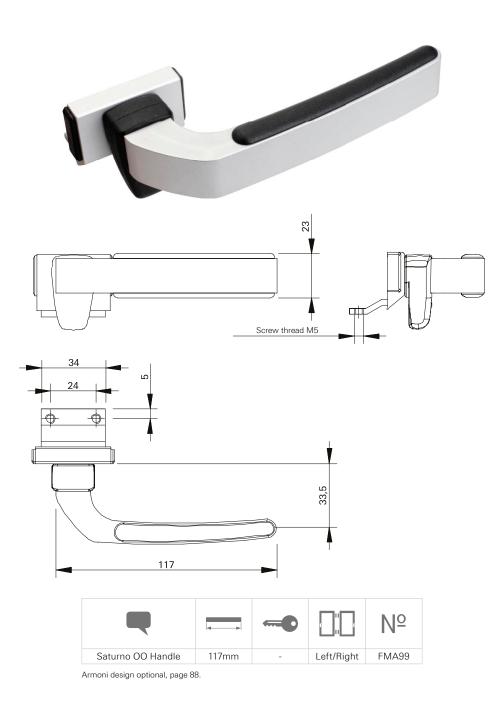
- Fastening Stainless steel screws M5 x 12
- Packaging
   1 handle (L or R) plus fastening screws



### FMA99







#### Composition

- Fastening Stainless steel screws M5 x 12
   Packaging
  - 1 handle (L or R) plus fastening screws

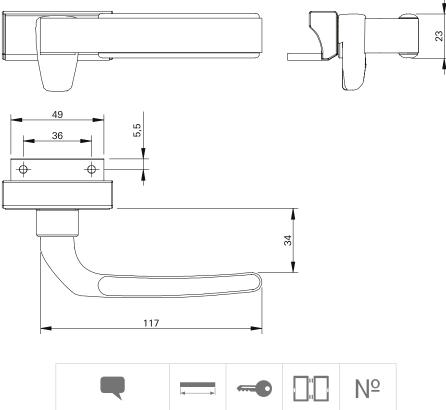




**OO Handle - Inside Fixing** 







Saturno OO Handle 117mm - Left/Right FMA100

Armoni design optional, page 88.

#### Composition

- Fastening Stainless steel screws M5 x 18
   Packaging
  - 1 handle (L or R) plus fastening screws

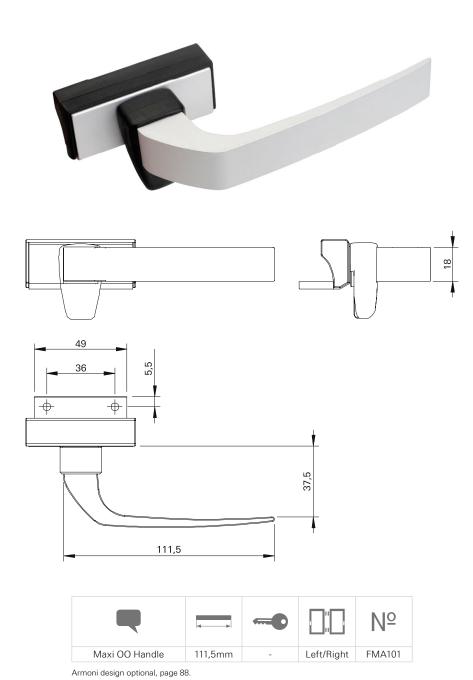




#### FMA101

**OO Handle - Inside Fixing** 





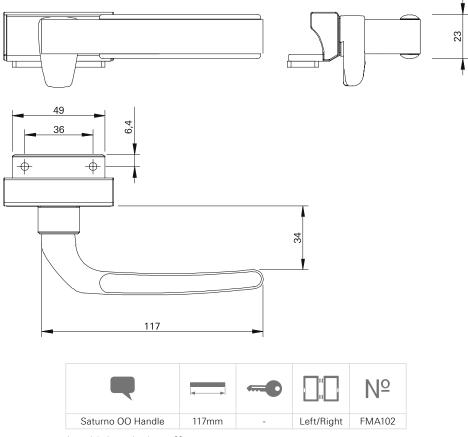
- Base and handle: aluminium Trims and spur: nylon
- Fastening Stainless steel screws M5 x 18
   Besterring
- Packaging
   1 handle (L or R) plus fastening screws



**OO Handle - Inside Fixing** 







Armoni design optional, page 88.

#### Composition

- Fastening Stainless steel screws M5 x 18
   Packaging
  - 1 handle (L or R) plus fastening screws





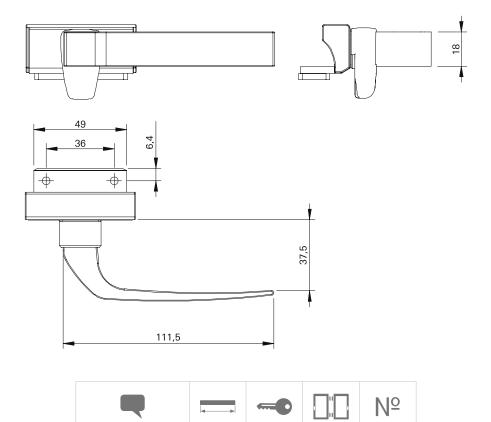


### FMA103

**OO Handle - Inside Fixing** 







111,5mm

Left/Right

FMA103

Maxi OO Handle Armoni design optional, page 88.

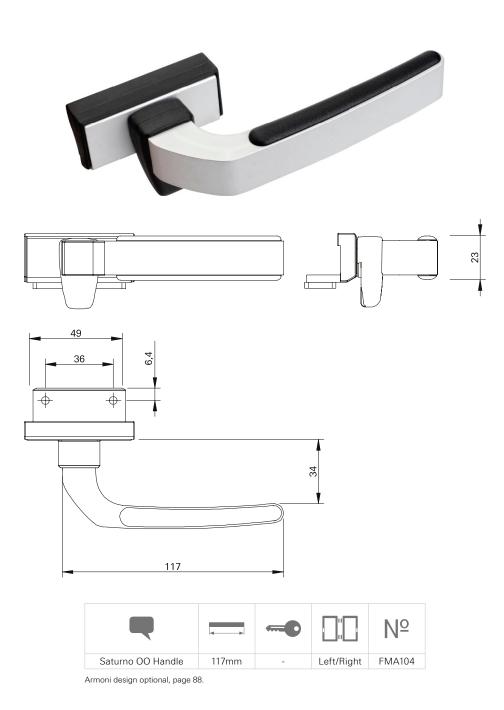
#### Composition

- Fastening Stainless steel screws M5 x 18
   Packaging
  - 1 handle (L or R) plus fastening screws



**OO Handle - Inside Fixing** 





#### Composition

- Fastening Stainless steel screws M5 x 18
- Packaging
   1 handle (L or R) plus fastening screws



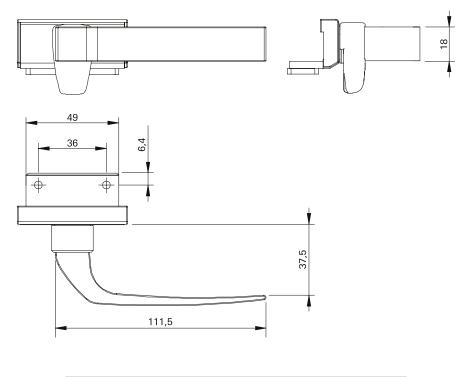


## FMA105

**OO Handle - Inside Fixing** 







				N⁰
Maxi OO Handle	111,5mm	-	Left/Right	FMA105

Armoni design optional, page 88.

 Composition Base and handle: aluminium Trims and spur: nylon

- Fastening Stainless steel screws M5 x 18 Packaging
  - 1 handle (L or R) plus fastening screws



### FMA108

**OO Handle - Front Fixing** 





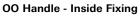


#### Composition

- Fastening Stainless steel screws 3,9 x 16
  Packaging
  - 1 handle (L or R) plus fastening screws

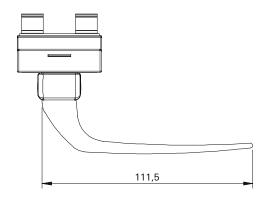














Armoni design optional, page 88.

#### Composition

- Fastening Stainless steel screws M4 x 6
- Packaging
   1 handle (L or R) plus fastening screws

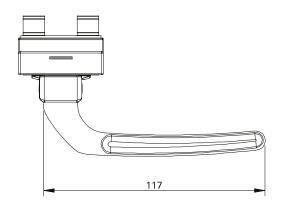


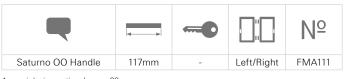
## FMA111

**OO Handle - Inside Fixing** 









Armoni design optional, page 88.

#### Composition

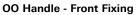
Base and handle: aluminium Trims and spur: nylon

Fastening Stainless steel screws M4 x 6
Packaging

1 handle (L or R) plus fastening screws

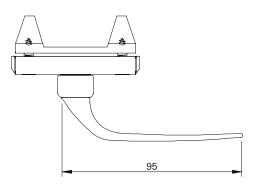


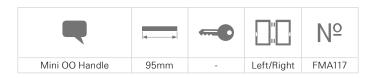
# FMA117











#### Composition

- Fastening Stainless steel screws 4,2 x 19
- Packaging
   1 handle (L or R) plus fastening screws



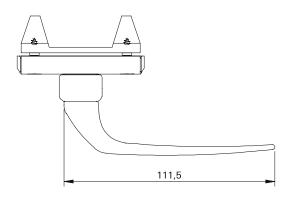


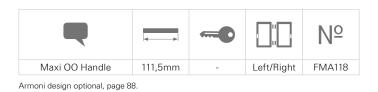
## FMA118

**OO Handle - Front Fixing** 







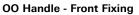


#### \_ ...

• Composition Base and handle: aluminium Trims and spur: nylon

- Fastening Stainless steel screws 4,2 x 19
  Packaging
- 1 handle (L or R) plus fastening screws

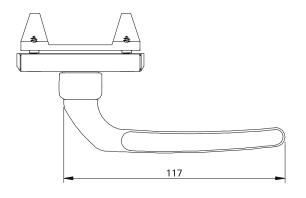


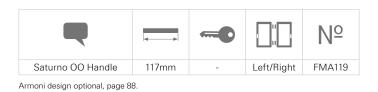












#### Composition

- Fastening Stainless steel screws 4,2 x 19
- Packaging
   1 handle (L or R) plus fastening screws

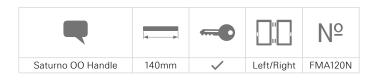


## **FMA120N**

OO Handle - Front Fixing







## Composition

Base and handle: aluminium Trims and spur: nylon Cylinder zamak; chrome key

- Fastening Stainless steel screws 4,2 x 19
- Packaging
   1 handle (L or R) plus fastening screws



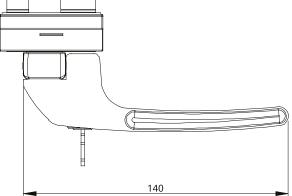


# FMA121N

**OO Handle - Inside Fixing** 







				N⁰
Saturno OO Handle	140mm	$\checkmark$	Left/Right	FMA121N

## Composition

Base and handle: aluminium Trims and spur: nylon Cylinder zamak; chrome key

- Fastening Stainless steel screws M4 x 6
- Packaging
   1 handle (L or R) plus fastening screws



## FMA122

**OO Handle - Front Fixing** 

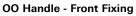




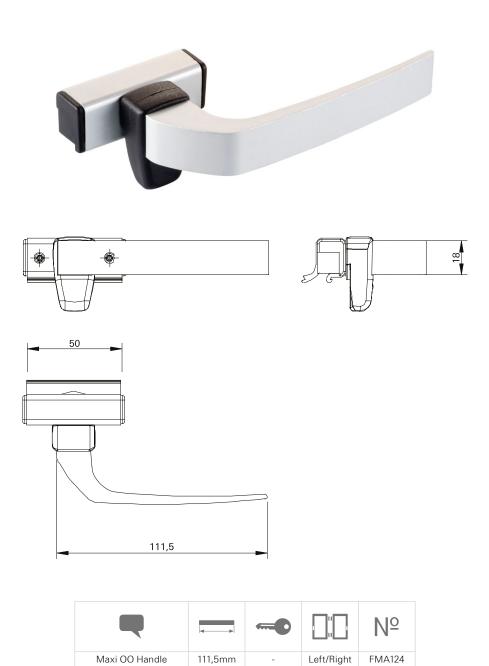


- Composition
  - Base and handle: aluminium Trims and spur: nylon
- Fastening Stainless steel screws 3,9 x 16
  Packaging
  - 1 handle (L or R) plus fastening screws









Armoni design optional, page 88.

#### Composition

- Base and handle: aluminium Trims and spur: nylon
- Fastening Stainless steel screws M6 x 14
   Packaging
  - 1 handle (L or R) plus fastening screws

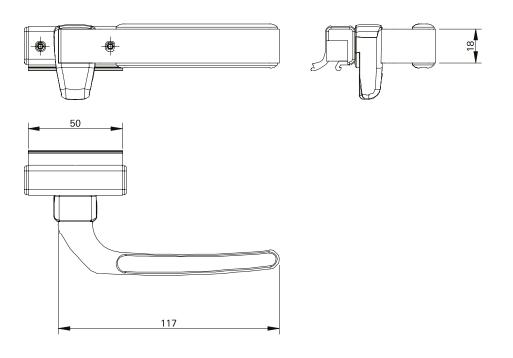




**OO Handle - Front Fixing** 







				N⁰
Saturno OO Handle	117mm	-	Left/Right	FMA125

Armoni design optional, page 88.

#### Composition

- Fastening Stainless steel screws M6 x 14
  Packaging
  - 1 handle (L or R) plus fastening screws

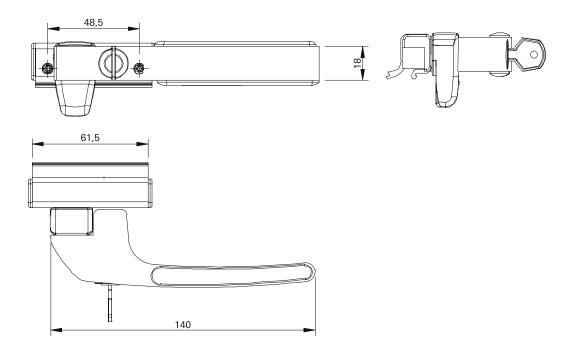


## FMA126N









				N⁰
Saturno OO Handle	140mm	$\checkmark$	Left/Right	FMA126N

## Composition

Base and handle: aluminium Trims and spur: nylon Cylinder zamak; chrome key

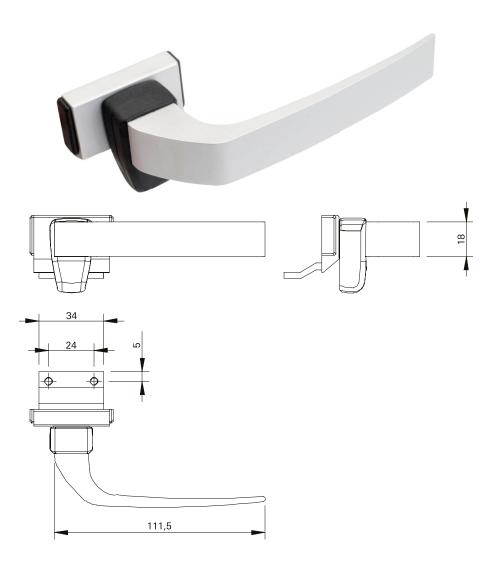
- Fastening Stainless steel screws M6 x 14
- Packaging
   1 handle (L or R) plus fastening screws



## FMA127

**OO Handle - Inside Fixing** 





				N⁰
Maxi OO Handle	111,5mm	-	Left/Right	FMA127

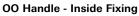
Armoni design optional, page 88.

#### Composition

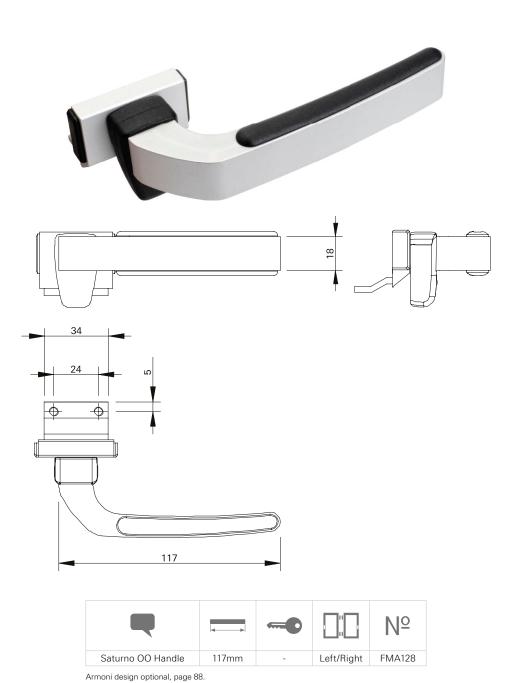
- Fastening Stainless steel screws M5 x 12
- Packaging
   1 handle (L or R) plus fastening screws



## **FMA128**







- Composition Base and handle: aluminium Trims and spur: nylon
- Fastening Stainless steel screws M5 x 12 Packaging
  - 1 handle (L or R) plus fastening screws

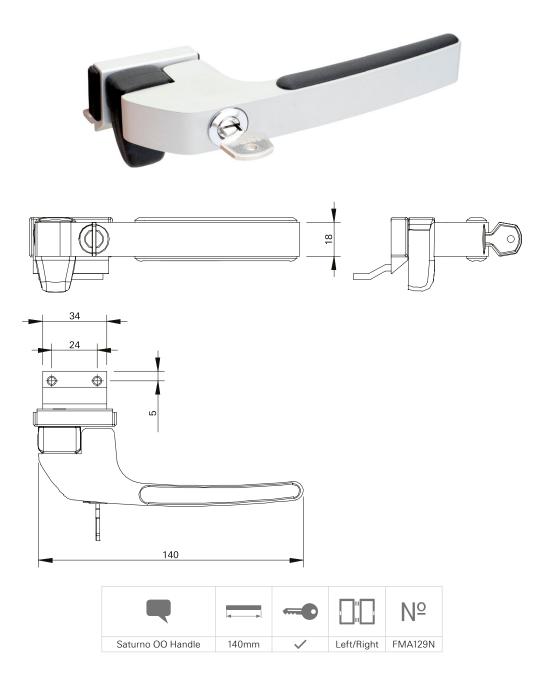




**FMA129N** 

**OO Handle - Inside Fixing** 





## Composition

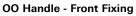
Base and handle: aluminium Trims and spur: nylon Cylinder zamak; chrome key

 Fastening Stainless steel screws M5 x 8

Packaging
 1 handle (L or R) plus fastening screws

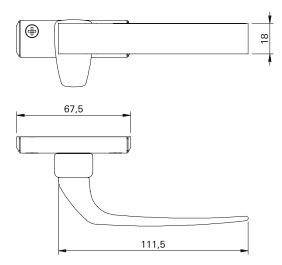


## FMA130









	<>			N⁰
Maxi OO Handle	111,5mm	-	Left/Right	FMA130

Armoni design optional, page 88.

#### Composition

- Fastening Stainless steel screws M5 x 16
   Packaging
  - 1 handle (L or R) plus fastening screws

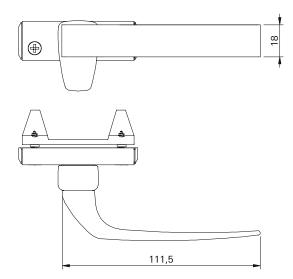


## FMA131

**OO Handle - Front Fixing** 







	<b>↓</b>			N⁰
Maxi OO Handle	111,5mm	-	Left/Right	FMA131

Armoni design optional, page 88.

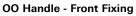
#### Composition

- Fastening Stainless steel screws 4,2 x 19
  Packaging
  - 1 handle (L or R) plus fastening screws



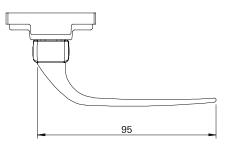
Outward Opening Handles Front Fixing

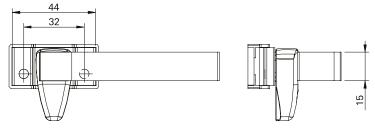
### FMA132













#### Composition

- Fastening Stainless steel screws 4,2 x 16
   Packaging
  - 1 handle (L or R) plus fastening screws





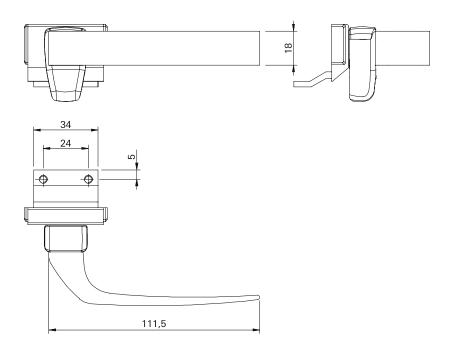
Outward Opening Handles Inside Fixing

#### FMA135

**OO Handle - Inside Fixing** 







				N⁰
Maxi OO Handle	111,5mm	-	Left/Right	FMA135

Armoni design optional, page 88.

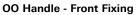
#### Composition

- Fastening Stainless steel screws M5 x 12
   Packaging
  - 1 handle (L or R) plus fastening screws



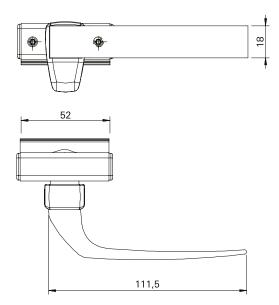


### FMA142









				N⁰
Maxi OO Handle	111,5mm	-	Left/Right	FMA142

Armoni design optional, page 88.

#### Composition

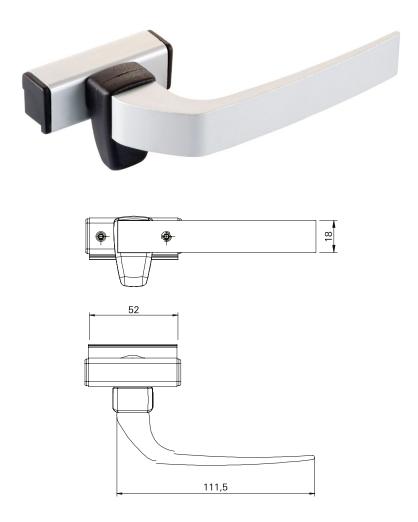
- Fastening Stainless steel screws M6 x 14
  Packaging
  - 1 handle (L or R) plus fastening screws



#### **FMA143**

**OO Handle - Front Fixing** 





	<>			N⁰
Maxi OO Handle	111,5mm	-	Left/Right	FMA143

Armoni design optional, page 88.

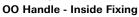
#### Composition

- Fastening Stainless steel screws M6 x 14
   Packaging
  - 1 handle (L or R) plus fastening screws



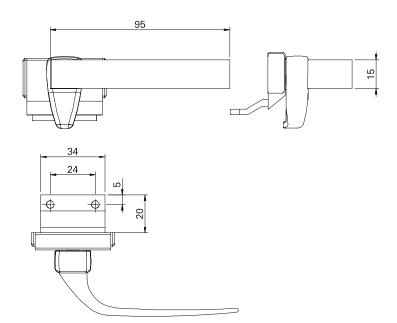
Outward Opening Handles Inside Fixing

#### FMA145









				N⁰
Mini OO Handle	95mm	-	Left/Right	FMA145

 Composition Base and handle: aluminium Trims and spur: nylon

- Fastening Stainless steel screws M5 x 12 Packaging
  - 1 handle (L or R) plus fastening screws





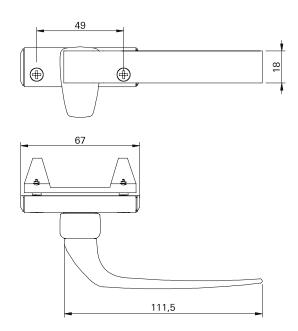
Outward Opening Handles Front Fixing

#### FMA149

**OO Handle - Front Fixing** 







				N⁰
Maxi OO Handle	111,5mm	-	Left/Right	FMA149

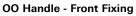
Armoni design optional, page 88.

#### Composition

- Fastening Stainless steel screws 4,2 x 19
   Packaging
  - 1 handle (L or R) plus fastening screws

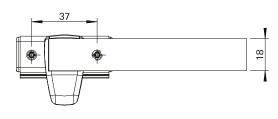


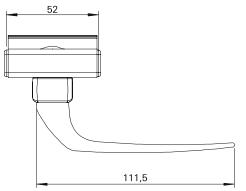
### FMA150











	<b>∢</b> →	-		N⁰
Maxi OO Handle	111,5mm	-	Left/Right	FMA150

Armoni design optional, page 88.

 Composition Base and handle: aluminium Trims and spur: nylon

- Fastening Stainless steel screws M6 x 14 Packaging
  - 1 handle (L or R) plus fastening screws

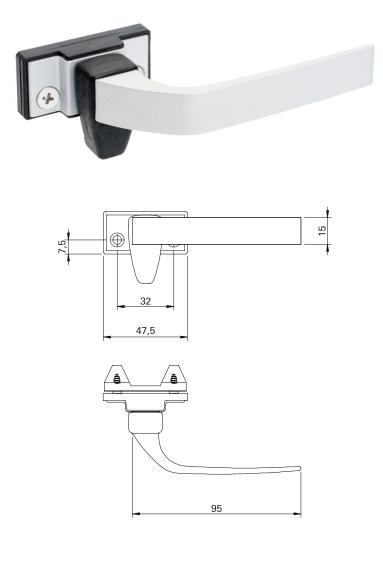


Outward Opening Handles Front Fixing

#### FMA151

**OO Handle - Front Fixing** 





				N⁰
Mini OO Handle	95mm	-	Left/Right	FMA151

#### Composition

- Fastening Stainless steel screws 3,9 x 16
   Packaging
  - 1 handle (L or R) plus fastening screws

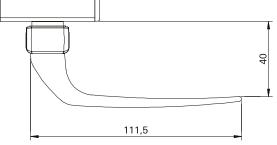


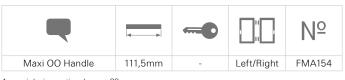
#### FMA154











Armoni design optional, page 88.

#### Composition

- Fastening Stainless steel screws M6 x 16 Packaging
- 1 handle (L or R) plus fastening screws



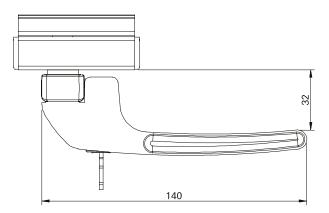


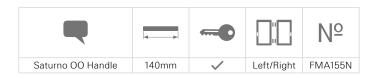
#### FMA155N

OO Handle - Front Fixing









#### Composition

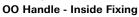
Base and handle: aluminium Trims and spur: nylon Cylinder zamak; chrome key

- Fastening Stainless steel screws M6 x 16
- Packaging
   1 handle (L or R) plus fastening screws



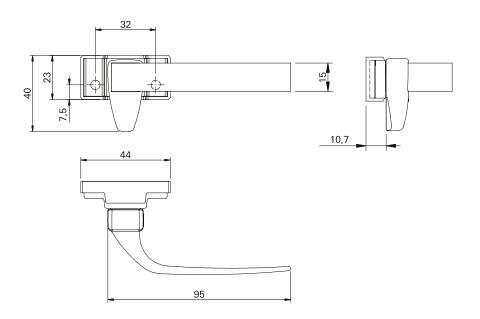
Outward Opening Handles Inside Fixing

#### FMA162









	<b></b>			N⁰
Mini OO Handle	95mm	-	Left/Right	FMA162

 Composition Base and handle: aluminium Trims and spur: nylon

- Fastening Stainless steel screws M4 x 10 Packaging
  - 1 handle (L or R) plus fastening screws



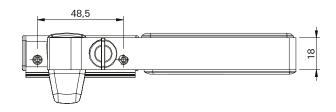


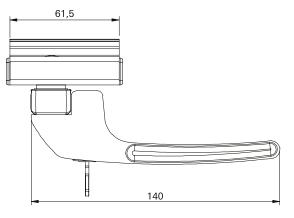
#### FMA166N

OO Handle - Front Fixing









				N⁰
Saturno OO Handle	140mm	$\checkmark$	Left/Right	FMA166N

#### Composition

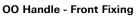
Base and handle: aluminium Trims and spur: nylon Cylinder zamak; chrome key

- Fastening Stainless steel screws M6 x 14
- Packaging
   1 handle (L or R) plus fastening screws



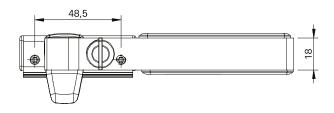


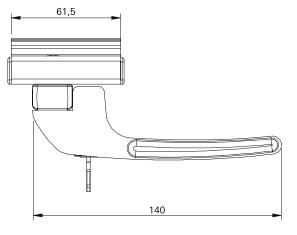
### FMA167N











				N⁰
Saturno OO Handle	140mm	$\checkmark$	Left/Right	FMA167N

#### Composition

Base and handle: aluminium Trims and spur: nylon Cylinder zamak; chrome key

- Fastening Stainless steel screws M6 x 14
- Packaging
   1 handle (L or R) plus fastening screws

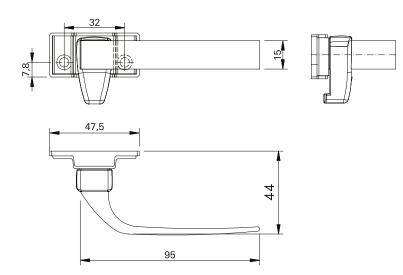


#### FMA187

**OO Handle - Front Fixing** 







	<b></b>			N⁰
Mini OO Handle	95mm	-	Left/Right	FMA187

 Composition Base and handle: aluminium Trims and spur: nylon

- Fastening Stainless steel screws M4 x 10 Packaging
  - 1 handle (L or R) plus fastening screws

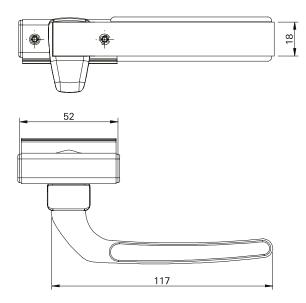


#### FMA190











Armoni design optional, page 88.

#### Composition

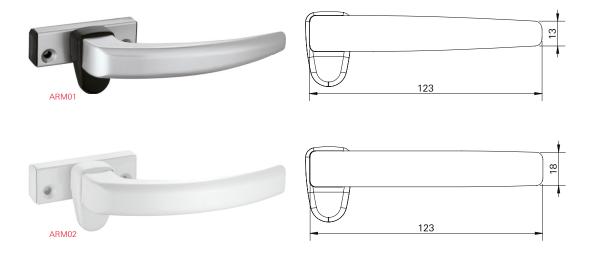
- Fastening Stainless steel screws M6 x 14 Packaging
  - 1 handle (L or R) plus fastening screws

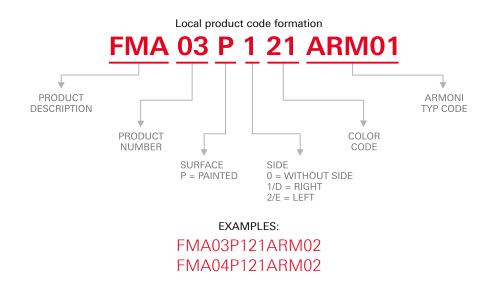


Outward Opening Special Cables Armoni

### Window Handles

Armoni





NOTE: Standard numeric Roto partnumbers available for some items. Creation upon request. Just only for handles wihout lock.







## ROL129N | ROL128N



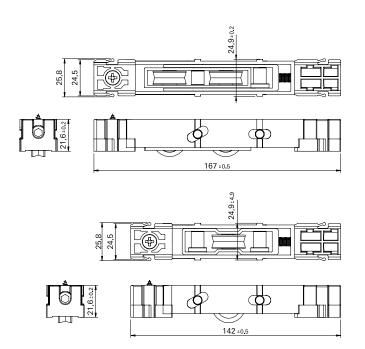




- ROL129N Strong Fit Single Roller - Max. 150kg sash weight
- ROL128N Strong Fit Tandem Roller - Max. 300kg sash weight

## **Product description** Adjustable height

- With bearing
- No profile drilling required



#### Composition

Structure: aluminum Guides: synthetic material (nylon) Bearing: steel Adjustment screws: stainless steel M6 x 25 Adjustment axis: stainless steel

Fastening

Fixing screws: stainless steel 4,8 x 16

#### Packaging





#### ROL136 | ROL137 Inline Rollers



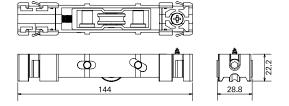


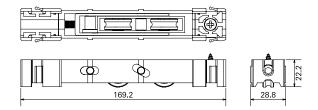
- ROL136 Strong Fit Single Roller - Max. 150kg sash weight
- ROL137 Strong Fit Tandem Roller - Max. 300kg sash weight

#### Product description

Adjustable height

- With bearing
- No profile drilling required





#### Composition

Structure: aluminum Guides: synthetic material (nylon) Bearing: steel Adjustment screws: stainless steel M6 x 25 Adjustment axis: stainless steel

#### Fastening

Fixing screws: stainless steel 4,8 x 16

#### Packaging



#### ROL138 | ROL139 Inline Rollers



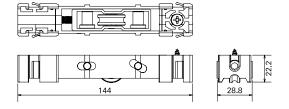


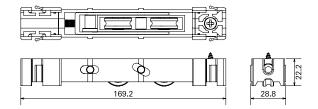
- ROL138 Strong Fit Single Roller - Max. 150kg sash weight
- ROL139 Strong Fit Tandem Roller - Max. 300kg sash weight

#### Product description

Adjustable height

- With bearing
- No profile drilling required





#### Composition

Structure: aluminum Guides: synthetic material (nylon) Bearing: steel Adjustment screws: stainless steel M6 x 25 Adjustment axis: stainless steel

#### Fastening

Fixing screws: stainless steel 4,8 x 16

#### Packaging





#### **ROL140 | ROL141 Inline Rollers**



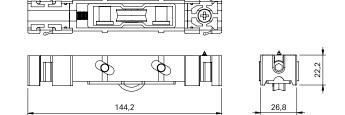


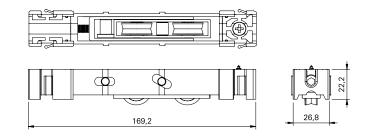
- ROL140 Strong Fit Single Roller - Max. 150kg sash weight
- ROL141 Strong Fit Tandem Roller - Max. 300kg sash weight

#### **Product description**

Adjustable height 

- With bearingNo profile drilling required





#### Composition

Structure: aluminum Guides: synthetic material (nylon) Bearing: steel Adjustment screws: stainless steel M6 x 25 Adjustment axis: stainless steel

#### Fastening

Fixing screws: stainless steel 4,8 x 16

#### Packaging



## ROL142 | ROL143 Inline Rollers







ROL142 Strong Fit Single Roller - Max. 150kg sash weight

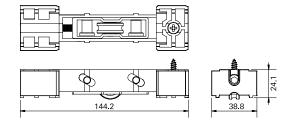
ROL143 Strong Fit Tandem Roller - Max. 300kg sash weight

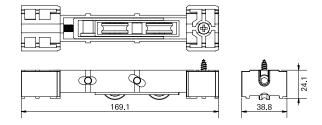
#### **Product description**

Adjustable height

With bearing 

No profile drilling required





#### Composition

Structure: aluminum Guides: synthetic material (nylon) Bearing: steel Adjustment screws: stainless steel M6 x 25 Adjustment axis: stainless steel

#### Fastening

Fixing screws: stainless steel 4,8 x 16

#### Packaging





#### ROL144 | ROL145 Inline Rollers



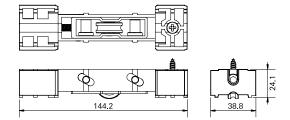


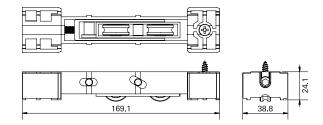
- ROL144 Strong Fit Single Roller - Max. 150kg sash weight
- ROL145 Strong Fit Tandem Roller - Max. 300kg sash weight

#### **Product description**

Adjustable height

- With bearing
- No profile drilling required





#### Composition

Structure: aluminum Guides: synthetic material (nylon) Bearing: steel Adjustment screws: stainless steel M6 x 25 Adjustment axis: stainless steel

#### Fastening

Fixing screws: stainless steel 4,8 x 16

#### Packaging



## ROL146 | ROL147







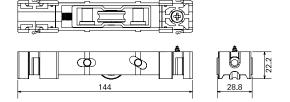
 ROL146 Strong Fit Single Roller - Max. 150kg sash weight

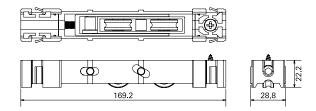
 ROL147 Strong Fit Tandem Roller - Max. 300kg sash weight

#### Product description

Adjustable height

- With bearing
- No profile drilling required





#### Composition

Structure: aluminum Guides: synthetic material (nylon) Bearing: steel Adjustment screws: stainless steel M6 x 25 Adjustment axis: stainless steel

#### Fastening

Fixing screws: stainless steel 4,8 x 16

#### Packaging





#### ROL148 | ROL149 Inline Rollers

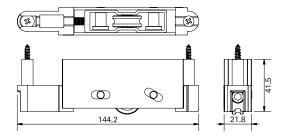


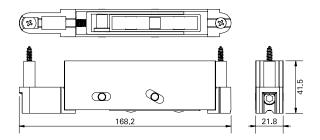


- ROL148 Strong Fit Single Roller - Max. 150kg sash weight
- ROL149
   Strong Fit Tandem Roller Max. 300kg sash weight

#### Product description

- Adjustable height
- With bearing
- No profile drilling required





#### Composition

Structure: aluminum Guides: synthetic material (nylon) Bearing: steel Adjustment screws: stainless steel M6 x 25 Adjustment axis: stainless steel

#### Fastening

Fixing screws: stainless steel 4,8 x 16

#### Packaging



# ROL80N | ROL81N Inline Rollers



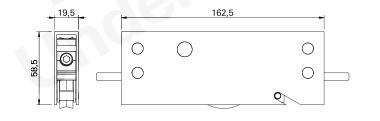


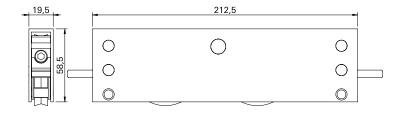
## ROL80N

- Strong Single Roller Max. 130kg sash weight
- ROL81N Strong Tandem Roller - Max. 260kg sash weight

### **Product description**

- Adjustable height With bearing
- Profile drilling required





#### Composition

Trestle, wheel support, aluminum base and axles Wheel w/ nylon- and fiber-coated shielded bearing

#### Fastening

Stainless screws

#### Packaging



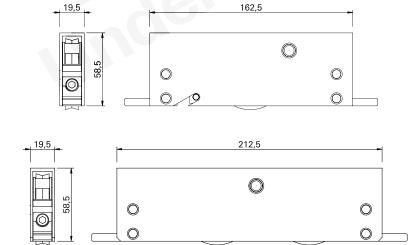


# ROL82N | ROL83N Inline Rollers





- Strong Single Roller Max. 130kg sash weight
- Strong Tandem Roller Max. 260kg sash weight



#### Composition

Trestle, wheel support, aluminum base and axles Wheel w/ nylon- and fiber-coated shielded bearing

#### Fastening

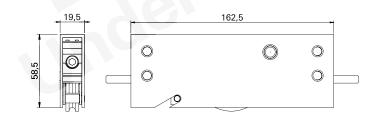
Stainless screws

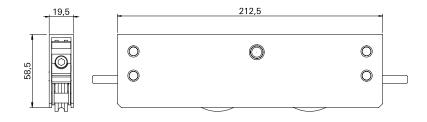
#### Packaging



### ROL84N | ROL85N Inline Rollers







#### Composition

Trestle, wheel support, aluminum base and axles Wheel w/ nylon- and fiber-coated shielded bearing

#### Fastening

Stainless screws

#### Packaging

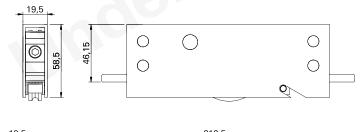


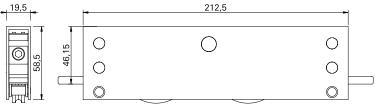


### ROL124N | ROL125N Inline Rollers









#### Composition

Trestle, wheel support, aluminum base and axles Wheel w/ nylon- and fiber-coated shielded bearing

#### Fastening

Stainless screws

#### Packaging





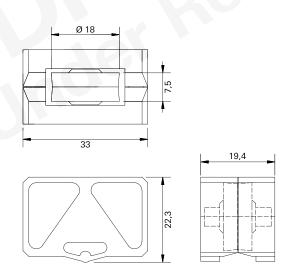
#### ROL05 | ROL06 Inline Rollers







- ROL05 Single Roller without bearing - Max. 15kg sash weight
- ROL06 Single Roller with bearing Max. 40kg sash weight
  - Product description Fixed height



#### ROL05

- Composition Nylon wheel, trestle
- Aluminum wheel axle Packaging
  - 100 rollers

Composition Nylon wheel, trestle Steel/nylon bearing Packaging



#### ROL10 Inline Rollers

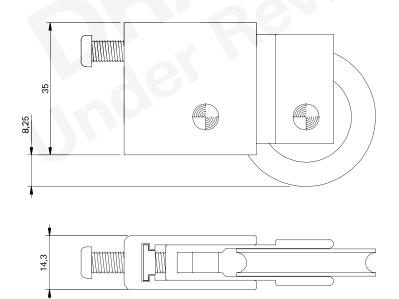




ROL10 Single Roller - Max. 15kg sash weight

#### **Product description**

- Fixed height
- Without bearing



#### Composition

Aluminum trestle/wheel support/wheel axle Polyacetal wheel Nylon bolt brake

• Fastening Carbon M6 x 20 bolt

### Packaging

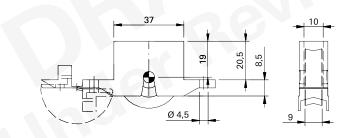


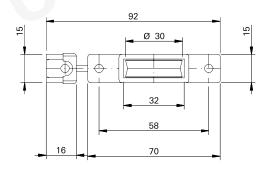
ROL13 Inline Rollers





- ROL13 Single Roller - Max. 40kg sash weight
- Product description
- Fixed heightWith bearing





Composition
 Nylon trestle
 Steel/nylon bearing

 Packaging



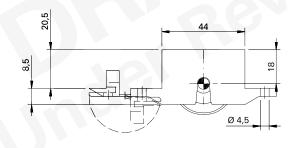


ROL17 Inline Rollers

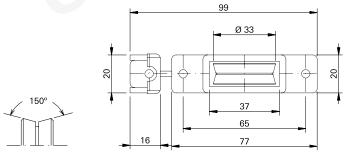




- ROL17 Single Roller - Max. 70kg sash weight
- Product description
- Fixed heightWith bearing







Composition
 Nylon trestle
 Steel/nylon bearing

 Packaging



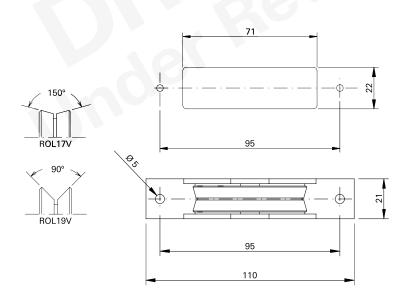


# ROL17V | ROL19V Inline Rollers





- ROL17V | ROL19V Single Roller Max. 70kg sash weight
  - Product description
- Fixed heightWith bearing



Composition Aluminum trestle and axle Nylon wheel Steel bearing Packaging



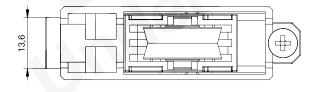


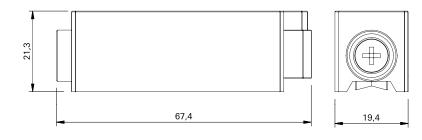
### ROL37N | ROL38N Inline Rollers





- ROL37N Single Roller with bearing - Max. 40kg sash weight
- ROL38N Single Roller without bearing - Max. 15kg sash weight
  - **Product description**
- Adjustable height





#### Composition

Nylon and fiber trestle/ wheel support Wheels w/ nylon/bichromated steel bearing

#### Fastening

Stainless  $3.9 \times 13$  screws Stainless M5 x 20 bolts

#### Packaging



ROL53 **Inline Rollers** 

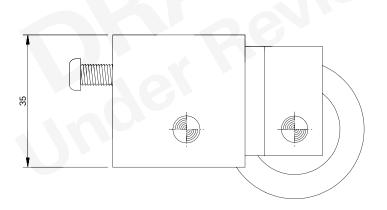


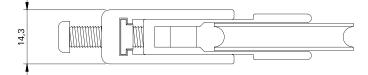


ROL53 Single Roller - Max. 100kg sash weight

## Product description Adjustable height

- With bearing





#### Composition

Aluminum trestle/ wheel support/wheel axle Polyacetal wheel Nylon bolt brake Shielded bearing

• Fastening Carbon M6 x 20 bolt

### Packaging



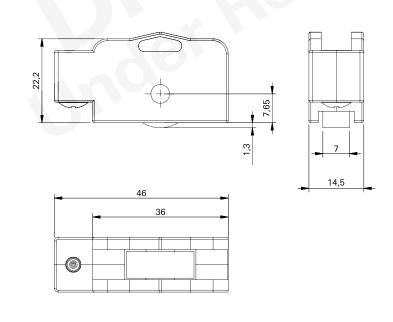


#### ROL55 | ROL56 Inline Rollers





- ROL55 Single Roller without bearing - Max. 15kg sash weight
- ROL56
   Single Roller with bearing Max. 30kg sash weight
  - **Product description**
- Fixed height



#### ROL55

- Composition Nylon trestle/ wheel
- Fastening Stainless Bolt
- Packaging
   100 rollers plus fastening/adjustment screws

#### ROL56

- Composition Nylon trestle/ wheel Steel bearing
- Fastening Stainless 3.9 x 9.5 bolt
- Packaging
   100 rollers plus fastening/adjustment screws





#### ROL57N | ROL58N Inline Rollers



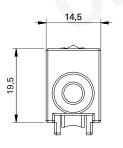


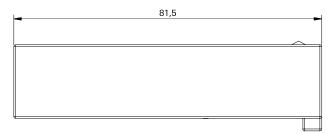
#### ROL57N

Single Roller without bearing - Max. 15kg sash weight

 ROL58N Single Roller with bearing - Max. 30kg sash weight

Product descriptionAdjustable height





#### Composition

Nylon trestle, wheel support, wheel Aluminum wheel axle

#### Fastening

Stainless 3.9 x 13 screws Stainless M5 x 20 bolts

#### Packaging





ROL59 Inline Rollers



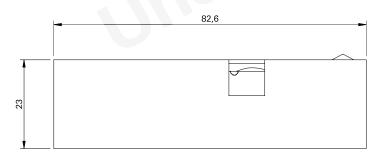


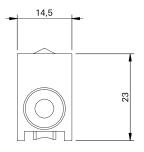
#### ROL59

Single Roller - Max. 40kg sash weight

## Product description Adjustable height

- 2
- With bearing







Stainless 3.9 x 9.5 cm screws Stainless M5 x 20 bolts

Packaging

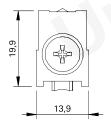


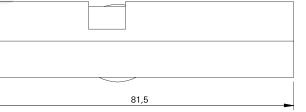
#### ROL61 | ROL62 Inline Rollers





- ROL61 Single Roller without bearing - Max. 15kg sash weight
- ROL62 Single Roller with bearing - Max. 30kg sash weight
  - Product description
- Adjustable height





#### ROL61

- Composition
   Nylon trestle/wheel
   Zamak wheel support
   Aluminium axle
- Fastening Stainless 3.9 x 9.5 cm screws Stainless M5 x 20 bolts
- Packaging
   10 rollers plus fastening/adjustment screws

#### ROL62

- Composition
- Nylon trestle/wheel Zamak wheel support Steel bearing

### Fastening Staiplage 2.0 v (

Stainless 3.9 x 9.5 cm screws Stainless M5 x 20 bolts

Packaging
 10 rollers plus fastening/adjustment screws





#### **ROL70 Inline Rollers**

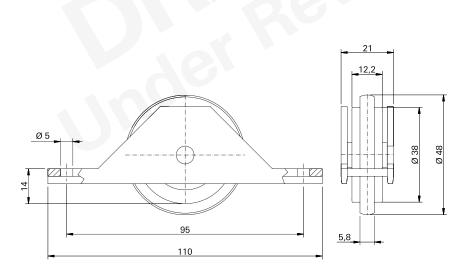




ROL70 Single Roller - Max. 100kg sash weight

#### Product description

- Fixed height With bearing



#### Composition Aluminum trestle and axle Wheel with shielded bearing

Packaging 2 rollers



ROL71N **Inline Rollers** 

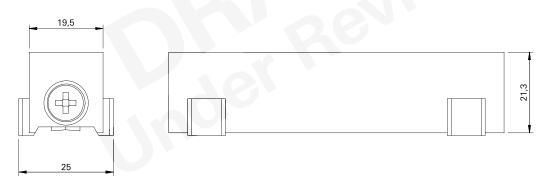


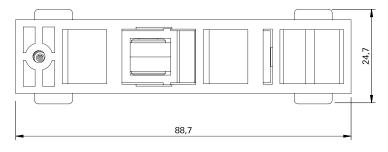


ROL71N Single Roller - Max. 40kg sash weight

## Product description Adjustable height

- With bearing





#### Composition

Nylon and fiber trestle/ wheel support Steel/ nylon bearing

#### Fastening

Stainless 3.9 x 13 screws Stainless M5 x 20 bolts

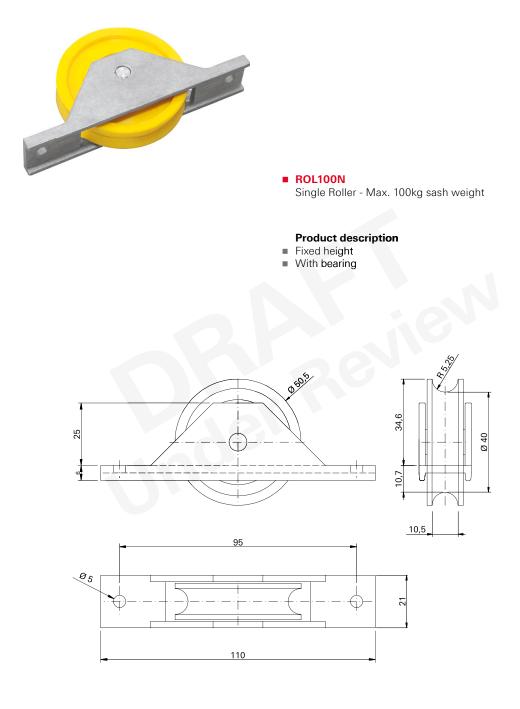
#### Packaging





#### ROL100N Inline Rollers





#### Composition

Aluminum trestle and axle Wheel w/ shielded bearing Finish: polished

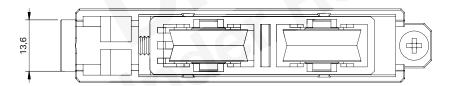
Packaging 2 rollers

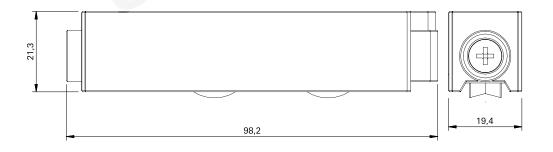


ROL39N Inline Rollers









#### Composition

Nylon and fiber trestle/ wheel support Wheels w/ nylon/bichromated steel bearing

#### Fastening

Stainless M5 x 20 screws Stainless 3.9 x 13 bolts

#### Packaging





#### ROL40N Inline Rollers

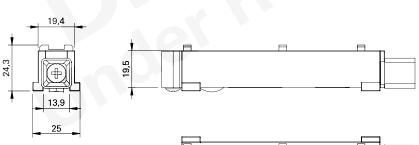




 ROL40N Tandem Roller - Max. 80kg sash weight

#### Product description

- Adjustable height
- With bearing





#### Composition

Nylon trestle/ wheel support Steel/ nylon bearing

#### Fastening

Stainless M5 x 20 screws Stainless 3.9 x 13 bolts

#### Packaging



ROL78 Inline Rollers

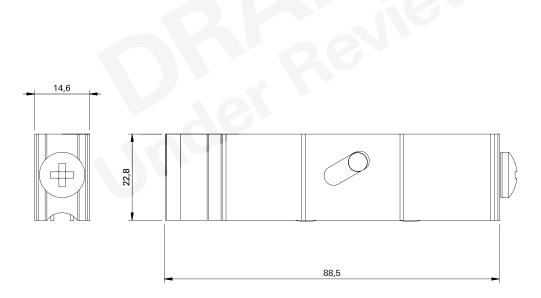




 ROL78 Tandem Roller - Max. 60kg sash weight

#### Product description

- Adjustable height
- With bearing



#### Composition

Aluminum trestle, wheel support Nylon wheel Steel bearing

#### Fastening

Galvanized Steel M6 x 20 screws Stainless 3.9 x 13 bolts

#### Packaging





#### ROL99 Inline Rollers

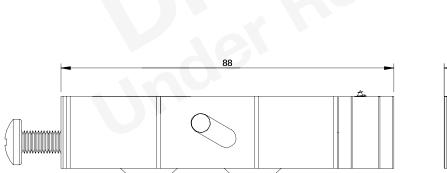


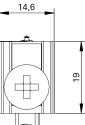


 ROL99 Tandem Roller - Max. 60kg sash weight

#### Product description

- Adjustable height
- With bearing





#### Composition

Aluminum trestle and wheel support Nylon/steel wheel Nylon sliding block, brake

#### Fastening

Galvanized Steel M6 x 20 screws Stainless 3.9 x 13 bolts

#### Packaging



**ROL102 Inline Rollers** 

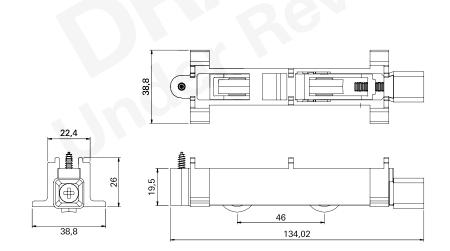




**ROL102** Tandem Roller - Max. 60kg sash weight

### Product description Adjustable height

- With bearing



#### Composition

Nylon trestle, bolt guide Aluminum wheel support Nylon/steel wheel

#### Fastening

Stainless M5 x 25 screws Stainless 3.9 x 19 bolts

#### Packaging





### FEC121N | FEC122N



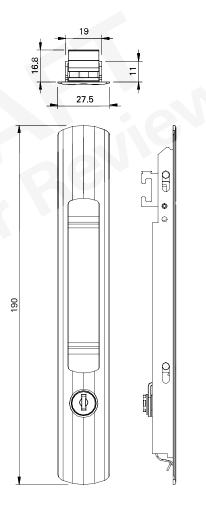




- FEC121N DUO Standard single-point pull handle
- FEC122N DUO Lockable single-point pull handle

#### **Product description**

- Lenght: 192mm Automatic function
- Standard locking system hooks
- Invisible screws fixing



#### FEC121N

#### Composition

Aluminum base and bracket Latch, stainless steel spring Polyacetal stop pin

- Fastening Stainless M5 x 6 bolts
- Packaging 1 handle set plus fastening screws

#### FEC122N

#### Composition

Aluminum base and bracket Latch, stainless steel spring Steel lock cylinder and spring Lock support, polyacetal stop pin

Fastening Stainless M5 x 6 bolts

#### Packaging

1 handle set plus fastening screws



### CON11N

Inline Handles



Aluminum base and bracket Stainless steel latch

Packaging 1 handle







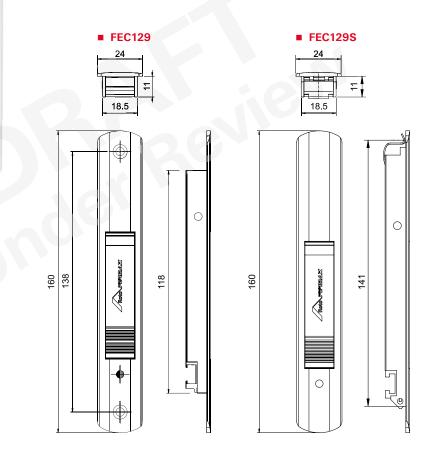


 FEC129 Easy Touch - Standard single-point pull handle

 FEC129S Easy Touch - Standard single-point pull handle

#### **Product description**

- One-touch function
- Lenght: 160mm
- Horizontal locking
- Exterior visible/invisible screw-fixing
- Standard locking system hooks



#### **FEC129**

- Composition
   Aluminium base
   Steel spring
   Polyacetal stop pin
- Fastening Stainless 4.2 x 8 screws Stainless M6 x 6 bolts
- Packaging
   1 handle set plus fastening screws

#### FEC129S

- Composition Aluminium base Steel spring
- Polyacetal stop pin
- Fastening Stainless M6 x 6 bolts
- Packaging
  - 1 handle set plus fastening screws



#### FEC131 | FEC132 | FEC133 Inline Handles

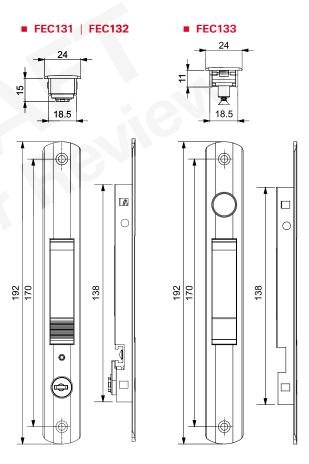




- FEC131
   Easy Touch Standard single-point pull handle
- FEC132 Easy Touch - Lockable single-point pull handle
- FEC133
   Easy Touch Push button single-point pull handle

#### **Product description**

- One-touch function
- Lenght: 192mm
- Horizontal locking
- Exterior visible screw-fixing
- Standard locking system hooks



#### FEC131

- Composition
   Aluminium base
   Steel spring
   Zamak lock cylinder
   Support, nylon lock latch
- Fastening Stainless 4.2 x 8 screws
- Packaging
   1 handle set plus fastening screws

#### FEC132

- Composition
   Aluminium base
   Steel spring
   Nickel-plated zamak clamp
   Aluminium latch
- Fastening Stainless Bolts
- Packaging
   1 handle set plus fastening screws

#### FEC133

#### Composition Aluminium base

- Steel spring Nylon activator button and support Polyacetal stop pin
- Fastening Stainless 4.2 x 8 screws
  - Stainless 3.9 x 16 bolts
- Packaging
  - 1 handle set plus fastening screws





## BAC01 | BAC02 | BAC03 Inline Handles



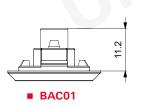


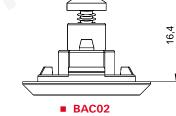


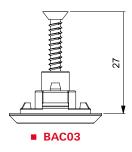
BAC01 | BAC02 | BAC03 Easy Touch - Outside push button

#### Product description

- Outside sash installation
  Color: black | white
  Standard locking system hooks







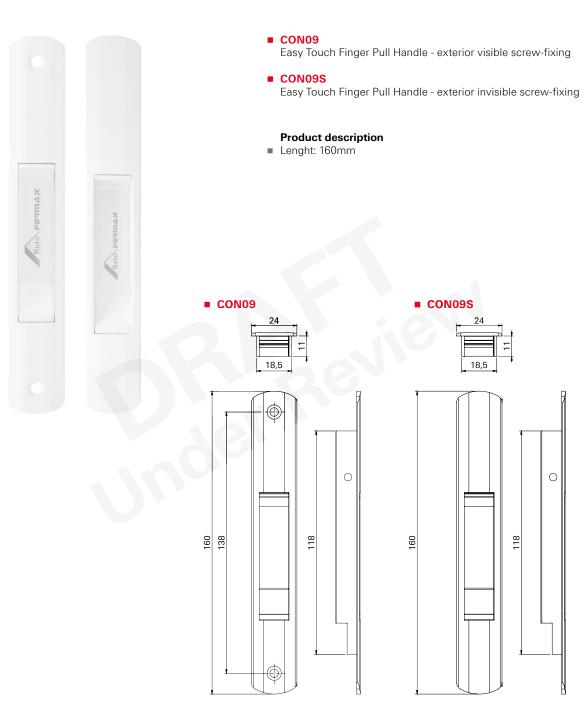




## CON09 | CON09S Inline Handles







#### CON09

- Composition Aluminum base and bracket
- Fastening
- Stainless 4.2 x 8 screws
- Packaging
  - 1 handle set plus fastening screws

#### CON09S

- Composition
  - Aluminum base and bracket Nylon latch
- Packaging
  - 1 handle





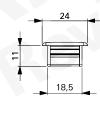
#### CON13

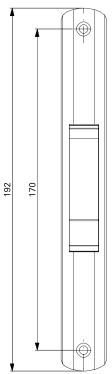
**Inline Handles** 





- Product descriptionLenght: 192mmExterior visible screw-fixing





#### Composition

Aluminum base and bracket

#### Fastening Stainless 4.2 x 8 screws

Packaging

1 handle set plus fastening screws



### FEC93 | FEC94



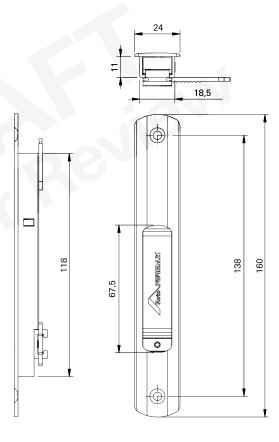




- FEC93 Standard single-point pull handle
- **FEC94**
- Lockable single-point pull handle

# Product descriptionLenght: 160mmManual function

- Exterior visible screw-fixing
- Standard locking system hooks



#### **FEC93**

- Composition Aluminum base and bracket
- Fastening Stainless 4.2 x 8 screws Stainless M5 x 6 bolts
- Packaging 1 handle set plus fastening screws

#### **FEC94**

- Composition Aluminum base and bracket Brass key
- Fastening Stainless steel lock panel Stainless 4.2 x 8 screws Stainless M5 x 6 bolt

Packaging 1 handle set plus fastening screws



#### FEC16S | FEC19S Inline Handles





#### FEC16S

Standard single-point pull handle

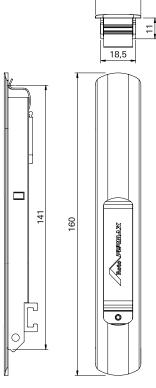
#### **FEC19S**

Lockable single-point pull handle

## Product descriptionLenght: 160mm

- Manual function
- Exterior invisible screw-fixing
- Standard locking system hooks

24



- Structure and handle: aluminium Trims: polyamide 6.6
- Fastening Stainless steel screws M6 x 6 + 4,2 x 8
- Packaging 1 handle set plus fastening screws





#### FEC125 | FEC126 Inline Handles





#### FEC125

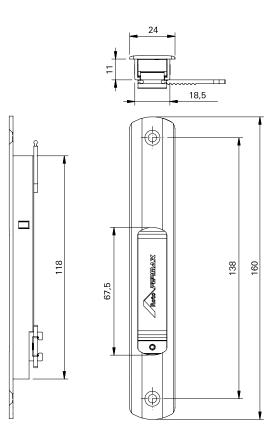
Standard single-point pull handle

#### **FEC126**

Lockable single-point pull handle

## Product descriptionLenght: 160mm

- Automatic function
- Exterior visible screw-fixing
- Standard locking system hooks



- Structure and handle: aluminium Trims: polyamide 6.6
- Fastening Stainless steel screws M6 x 6 + 4,2 x 8
- Packaging 1 handle set plus fastening screws



## FEC37S | FEC38S Inline Handles





### FEC37S

Standard single-point pull handle

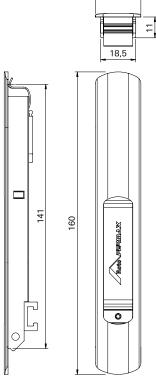
#### FEC38S

Lockable single-point pull handle

## Product descriptionLenght: 160mm

- Automatic function
- Exterior invisible screw-fixing
- Standard locking system hooks

24



- Structure and handle: aluminium Trims: polyamide 6.6
- Fastening Stainless steel screws M6 x 6 + 4,2 x 8
- Packaging 1 handle set plus fastening screws



## FEC95 | FEC96 Inline Handles







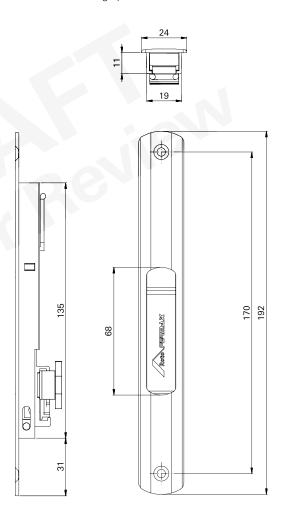
#### **FEC95**

Composition Aluminum base and bracket

- Fastening Stainless 4.2 x 8 screws Stainless M5 x 10 bolt
- Packaging 1 handle set plus fastening screws

- FEC95 Standard single-point pull handle
- **FEC96** Lockable single-point pull handle

- **Product description** Lenght: 192mm Manual function
- Exterior visible screw-fixing
- Standard locking system hooks



#### **FEC96**

Composition Aluminum base and bracket Brass key

#### Fastening

Stainless steel lock panel Stainless 4.2 x 8 screws Stainless M5 x 10 bolt

Packaging 1 handle set plus fastening screws



## FEC42S | FEC44S Inline Handles



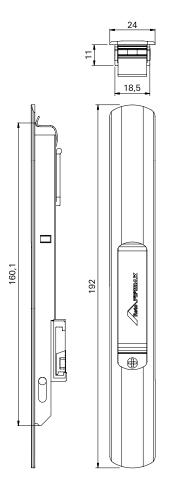


### FEC42S Standard single-point pull handle

FEC44S Lockable single-point pull handle

# Product descriptionLenght: 192mmManual function

- Exterior invisible screw-fixing
- Standard locking system hooks



- Structure and handle: aluminium Trims: polyamide 6.6
- Fastening Stainless steel screws M6 x 6 + 4,2 x 8 Packaging
  - 1 handle set plus fastening screws





## FEC127 | FEC128 Inline Handles





#### **FEC127** Standard single-point pull handle

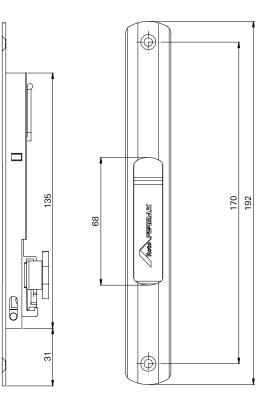
#### **FEC128**

Lockable single-point pull handle

### Product descriptionLenght: 192mm

- Automatic function
- Exterior visible screw-fixing
- Standard locking system hooks





- Structure and handle: aluminium Trims: polyamide 6.6
- Fastening Stainless steel screws M6 x 6 + 4,2 x 8 Packaging
  - 1 handle set plus fastening screws



## FEC43S | FEC45S Inline Handles



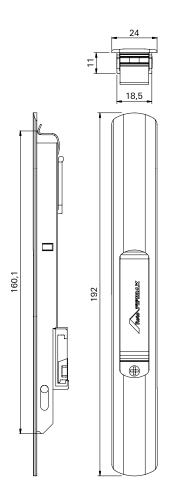


#### FEC43S Standard single-point pull handle

**FEC45S** Lockable single-point pull handle

### Product descriptionLenght: 192mm

- Automatic function
- Exterior invisible screw-fixing
- Standard locking system hooks



- Structure and handle: aluminium Trims: polyamide 6.6
- Fastening Stainless steel screws M6 x 6 + 4,2 x 8 Packaging
  - 1 handle set plus fastening screws





#### CON04 | CON04S Inline Handles





#### **CON04**

- Composition Aluminum base and bracket
- Fastening Stainless 4.2 x 8 screws
- Packaging
   1 handle set plus fastening screws

#### CON04S

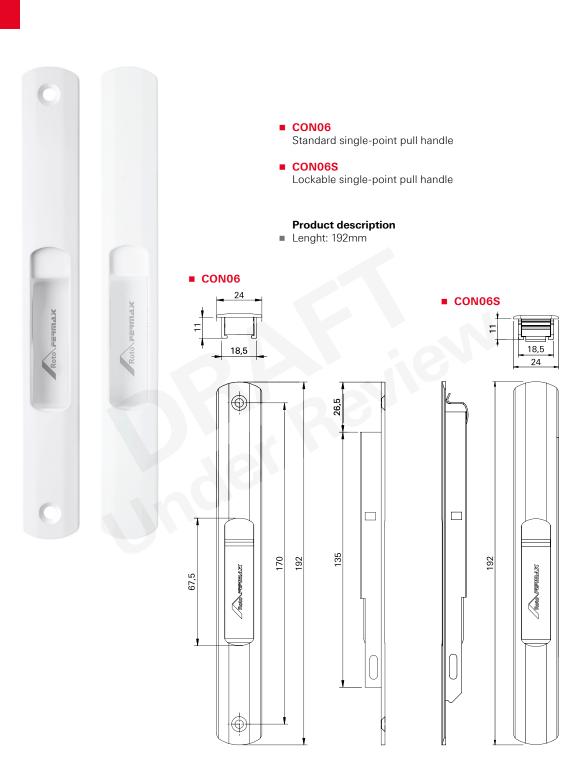
- Composition
  - Aluminum base and bracket
- Fastening
- Nylon latch
  - 1 handle set plus fastening screws





## CON06 | CON06S Inline Handles





#### **CON06**

- Composition Aluminium base
- Fastening Stainless Bolts
- Packaging
  - 1 handle set plus fastening screws

#### CON06S

- Composition
  - Aluminum base and bracket
- Fastening
- Stainless 4.2 x 8 screws
- Packaging
  - 1 handle set plus fastening screws

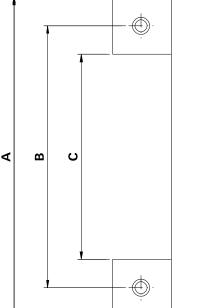


## PUX11N | PUX12N | PUX14N Inline Handles





30,5



с

108

138

108

в

#### Composition

Aluminum cable, support, rivet Stainless steel pin Nylon finish caps

#### Fastening Stainless 3/16" x 1 1/2" bolts

Packaging 1 handle set plus fastening screws





## HOOKS For Standard Single-point lockings

Material N°	Image	Technical Drawing	Composition
LIN01		83 93 93	aluminium
LIN02	1	86- 	stainless steel
LIN03		32	zamac
LIN04		6.4	zamac
LIN05		900 900	stainless steel
LIN06			stainless steel
LIN07		e and the second s	stainless steel
LIN21		86.7 900 000 000 000 000 000	stainless steel

## HOOKS For Easy Touch Single-point lockings

Material N°	Image	Technical Drawing	Composition
LIN18			aluminium
LIN19			aluminium
LIN20			aluminium
LIN24		2 <sup>1</sup> 2 <sup>1</sup> 2 <sup>1</sup> 2 <sup>1</sup> 2 <sup>1</sup>	aluminium

#### HOOKS

#### For DUO Single-point lockings

Material N°	Image	Technical Drawing	Composition
LIN27		43 92 92 94 95 95 96 96 97 96 96 97 96 96 97 96 96 97 96 97 97 97 97 97 97 97 97 97 97 97 97 97	zamac







## DOB03 | DOB04 Door Hinge



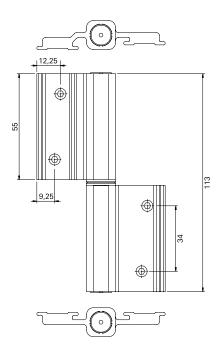


#### **DOB03** Centered Butt hinge for doors - 2 parts

#### **DOB04**

Off Center Butt hinge for doors - 2 parts

- Product descriptionMaximum door dimension: 900 x 2100mm
- Weight up for hinge: 10 kg
  Can be used on the right and left side



#### Composition

Structure and Axle: aluminium Add-ons: polyamide 6.6

#### Fastening

Stainless steel screws M6 x 8 Packaging

1 hinge plus fastening screws



Door Hinges **Butt Hinges** 

#### **DOB05** Door Hinge



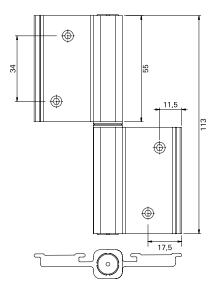


#### DOB05

Butt hinge for doors - 2 parts

#### **Product description**

- Maximum door dimension: 900 x 2100mm
  Weight up for hinge: 10 kg
  Can be used on the right and left side



#### Composition

Structure and Axle: aluminium Add-ons: polyamide 6.6

### Fastening

Stainless steel screws M6 x 8 Packaging

1 hinge plus fastening screws



#### **DOB15** Door Hinge

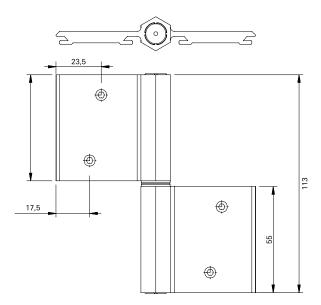




#### DOB15 Butt hinge for doors - 2 parts

#### **Product description**

- Maximum door dimension: 900 x 2100mm
  Weight up for hinge: 10 kg
  Can be used on the right and left side



#### Composition

Structure and Axle: aluminium Add-ons: polyamide 6.6

Fastening

Stainless steel screws M6 x 8 Packaging

1 hinge plus fastening screws



Door Hinges **Butt Hinges** 

### **DOB16** Door Hinge



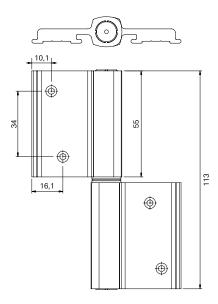


## DOB16

Butt hinge for doors - 2 parts

### **Product description**

- Mmaximum door dimension: 900 x 2100mm
  Weight up for hinge: 10 kg
  Can be used on the right and left side



### Composition

Structure and Axle: aluminium Add-ons: polyamide 6.6

# Fastening

Stainless steel screws M6 x 8 Packaging



### **DOB17** Door Hinge

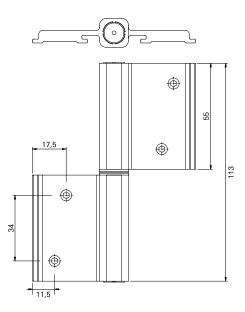




### DOB17 Butt hinge for doors - 2 parts

### **Product description**

- Maximum door dimension: 900 x 2100mm
  Weight up for hinge: 10 kg
  Can be used on the right and left side



### Composition

- Structure and Axle: aluminium Add-ons: polyamide 6.6
- Fastening Stainless steel screws M6 x 8
- Packaging



# DOB19 | DOB20 Door Hinge



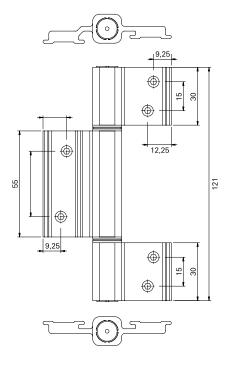


### DOB19 Centered Butt hinge for doors - 3 parts

### DOB20

Off Center Butt hinge for doors - 3 parts

- Product description
  Maximum door dimension: 900 x 2100mm
  Weight up for hinge: 20 kg
  Can be used on the right and left side



### Composition

Structure and Axle: aluminium Add-ons: polyamide 6.6

### Fastening Stainless steel screws M6 x 8

Packaging



### **DOB21** Door Hinge

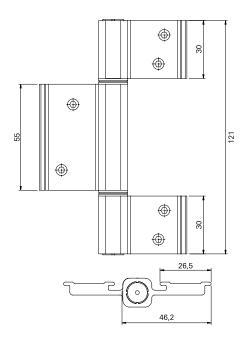




DOB21 Butt hinge for doors - 3 parts

### Product description

- Maximum door dimension: 900 x 2100mm
  Weight up for hinge: 20 kg
- Can be used on the right and left side



### Composition

- Structure and Axle: aluminium Add-ons: polyamide 6.6
- Fastening
- Stainless steel screws M6 x 8 Packaging
  - 1 hinge plus fastening screws



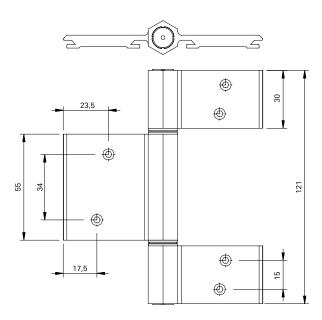
### **DOB22** Door Hinge





DOB22 Butt hinge for doors - 3 parts

- Product description
  Maximum door dimension: 900 x 2100mm
  Weight up for hinge: 20 kg
- Can be used on the right and left side



### Composition

Structure and Axle: aluminium Add-ons: polyamide 6.6

- Fastening Stainless steel screws M6 x 8
- Packaging 1 hinge plus fastening screws



### **DOB23** Door Hinge

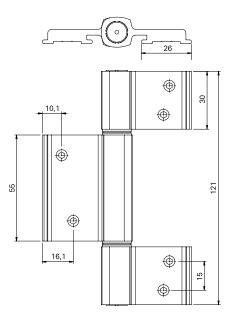




### DOB33 Butt hinge for doors - 3 parts

### Product description

- Maximum door dimension: 900 x 2100mm
  Weight up for hinge: 20 kg
- Can be used on the right and left side



### Composition

Structure and Axle: aluminium Add-ons: polyamide 6.6

Fastening

Stainless steel screws M6 x 8 Packaging



Door Hinges **Butt Hinges** 

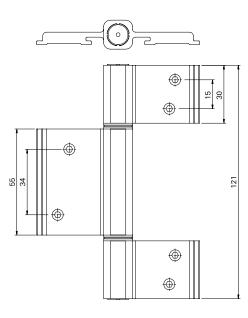
### **DOB24** Door Hinge





### **DOB24** Butt hinge for doors - 3 parts

- Product description
  Maximum door dimension: 900 x 2100mm
  Weight up for hinge: 20 kg
- Can be used on the right and left side



### Composition

Structure and Axle: aluminium Add-ons: polyamide 6.6

Fastening Stainless steel screws M6 x 8

Packaging 1 hinge plus fastening screws





# DOB08 | DOB12 Door Hinge

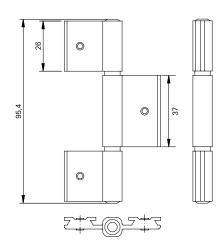


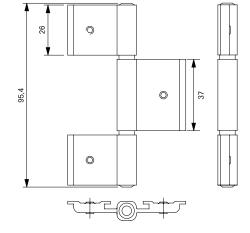


### DOB08 | DOB12 Butt hinge for Fold doors - 3 parts

## Product description

- Maximum door dimension: 900 x 2100mm
  Weight up for hinge: 20 kg
  Can be used on the right and left side





### Composition

- Structure and Axle: aluminium Add-ons: polyamide 6.6
- Fastening

Stainless steel screws M6 x 6 Packaging



# DOB09 | DOB13 Door Hinge

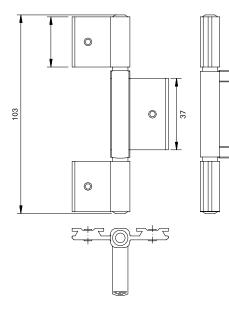




**DOB09** | DOB13 Butt hinge with handle for Fold doors - 3 parts

## Product description

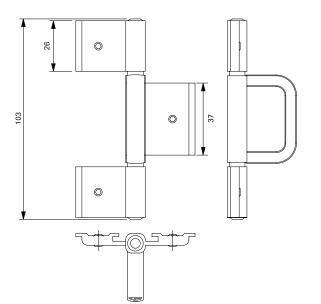
- Maximum door dimension: 900 x 2100mm
- Weight up for hinge: 20 kg
  Can be used on the right and left side



### Composition

Structure and Axle: aluminium Add-ons: polyamide 6.6

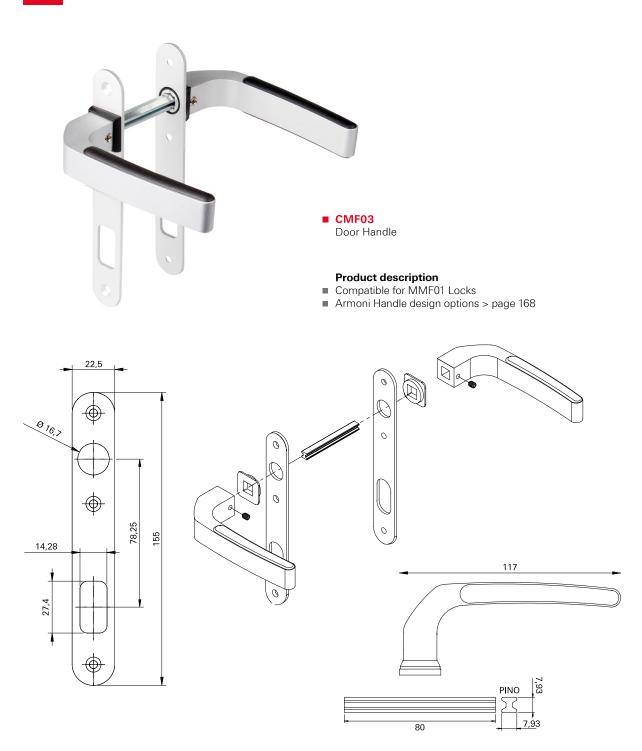
- Fastening Stainless steel screws M6 x 6
- Packaging 1 hinge plus fastening screws





### CMF03 Door Handle





Composition

Aluminum mirror and cable Nylon brackets Steel pin

• Fastening Stainless 4.2 x 8 screws

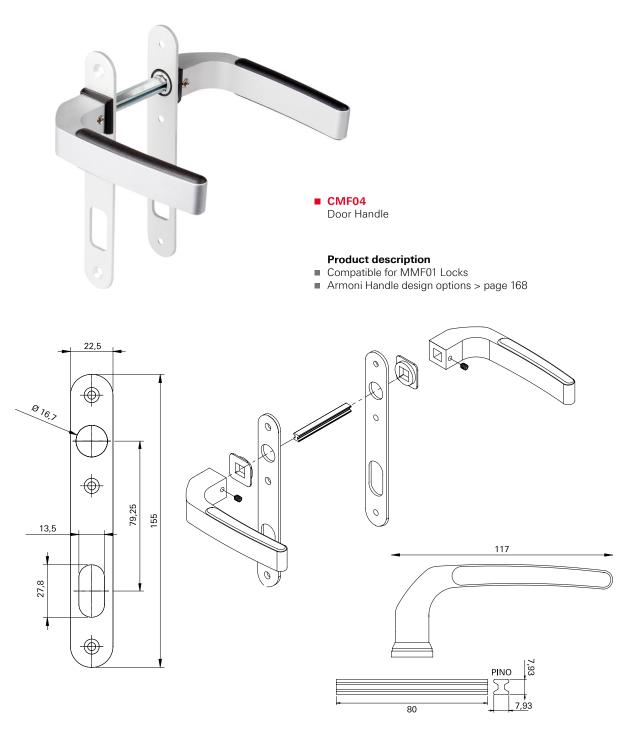
Packaging 1 handle set plus fastening screws



# CMF04







## Composition

Aluminum mirror and cable Nylon brackets Steel pin

- Fastening Stainless 4.2 x 8 screws
- Packaging

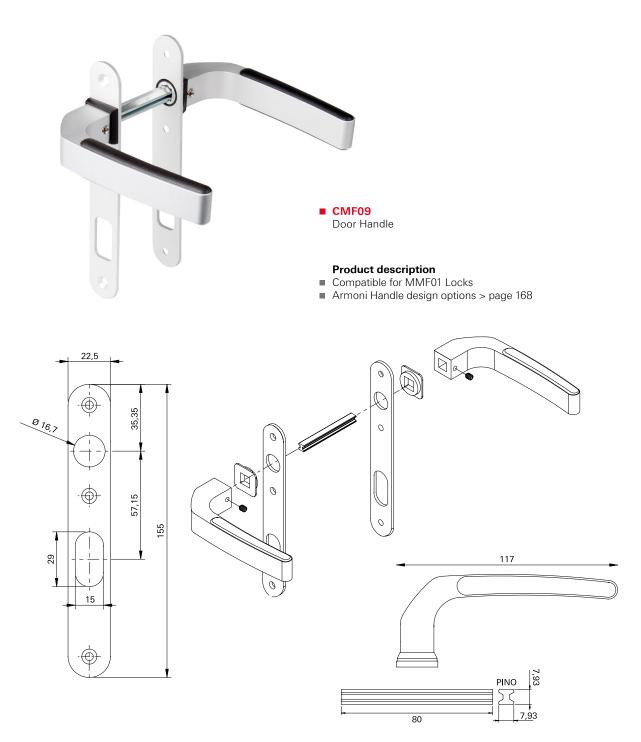
1 handle set plus fastening screws



# CMF09

Door Handle





### Composition

Aluminum mirror and cable Nylon brackets Steel pin

Fastening

Stainless 4.2 x 8 screws

## Packaging

1 handle set plus fastening screws



Door Special Handles Armoni Design

### Door Handles Armoni Design

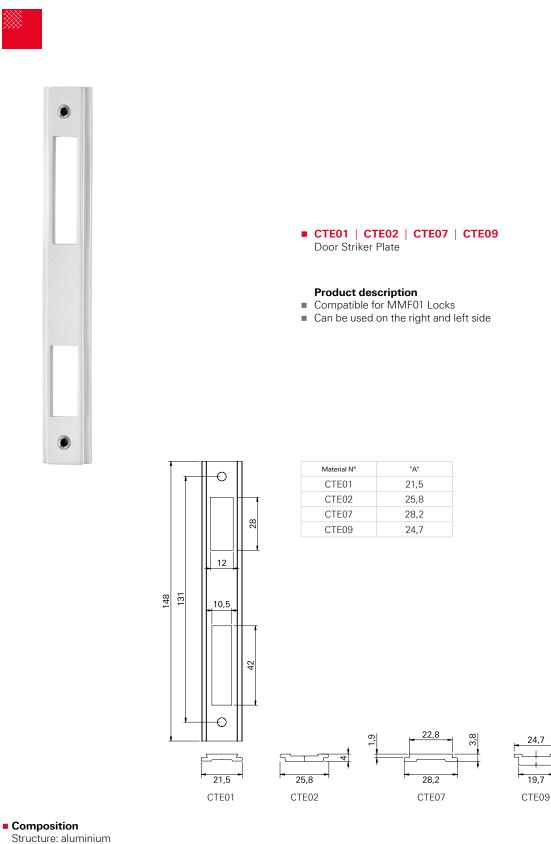




Note The technical characteristics of CMF03 | CMF04 | CMF09 are not changed, only the handles design. Standard numeric Roto partnumbers available for some items. Creation upon request.



CTE01 | CTE02 | CTE07 | CTE07 Door Striker Plate



### Fastening

Stainless steel screws M6 x 6

Packaging

1 Stricke Plate plus fastening screws



CTE15

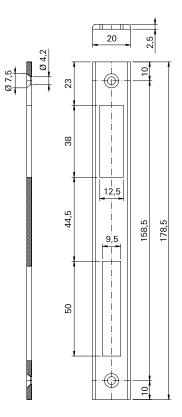
**Door Striker Plate** 





CTE15 Door Striker Plate

- Product descriptionCompatible for Tubular Frame LocksCan be used on the right and left side



### Composition

Structure: aluminium

## Fastening

Stainless steel screws M6 x 6

Packaging 1 Stricke Plate plus fastening screws



Door Handles For French Doors

### FEC14 Door Flush Bolt



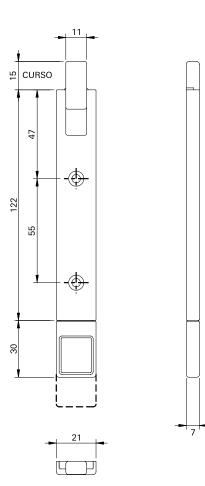


# FEC14 Door Fluch

Door Flush Bolt

### Product description

Application: used most often on French doors



### Composition

Structure and handle: aluminium Guides: polyamide 6.6

### • Fastening Stainless steel screws 4,2 x 16 x 6

Packaging
 1 handle plus fastening screws







www.rotofermax.com.br

