

Top mounted shutter

**■ MX1200**®

**TECHNICAL CATALOGUE**





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## Features and benefits of the MX1200<sup>®</sup> box

- The MX1200 system shutter box is available in two sizes of 212 mm x 160 mm and 254 mm x 200 mm.
- Possibility to use **PA 39, PA 45** profiles.
- Installation on window frames of thickness from **60 to 180** mm.
- Simple, reliable and stable installation method for various window profiles.
- Additional fixing with side plates. The side plates can be recessed into the side walls of the box to connect the two boxes precisely.
- Possibility to use top anchoring of the box.
- The box is attached to the window frame with side screws.
- Easy service access to the drive components: tape, motor, crank.
- Possibility to make two (several) shutters in one box with independent or dependent drive.
- The divisions are designed for the use of two single guides with a total width of 120 mm or a double guide with a width of 60 mm.
- Bottom end cap of the guide inclined at an angle of 5° (adjusted for external window sills).
- Possibility to install brush seals at the curtain entry from the inside and outside.
- Long steel side handles along the entire height of the box which improves the stability of the shutter.
- Possibility to install an end cap of the box side covering the screws from the inside of the room.
- Stable connection of the box components on the locks.
- The inclined lower component of the box allowing the water to drain out of the curtain.
- The perfect flush with the window frame is enabled by the NRR-010 guide with a flange 40 mm wide, designed for MONOBLOCK window profiles.

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# MX1200<sup>®</sup>



## LEGEND:



The size of the box for which the component is intended.



The indicative weight of the component (in kilogrammes).



Maximum length of a long component (given in meters).



The material used to make a component (e.g. PVC, ASA, etc.).



It contains no harmful heavy metals such as lead.

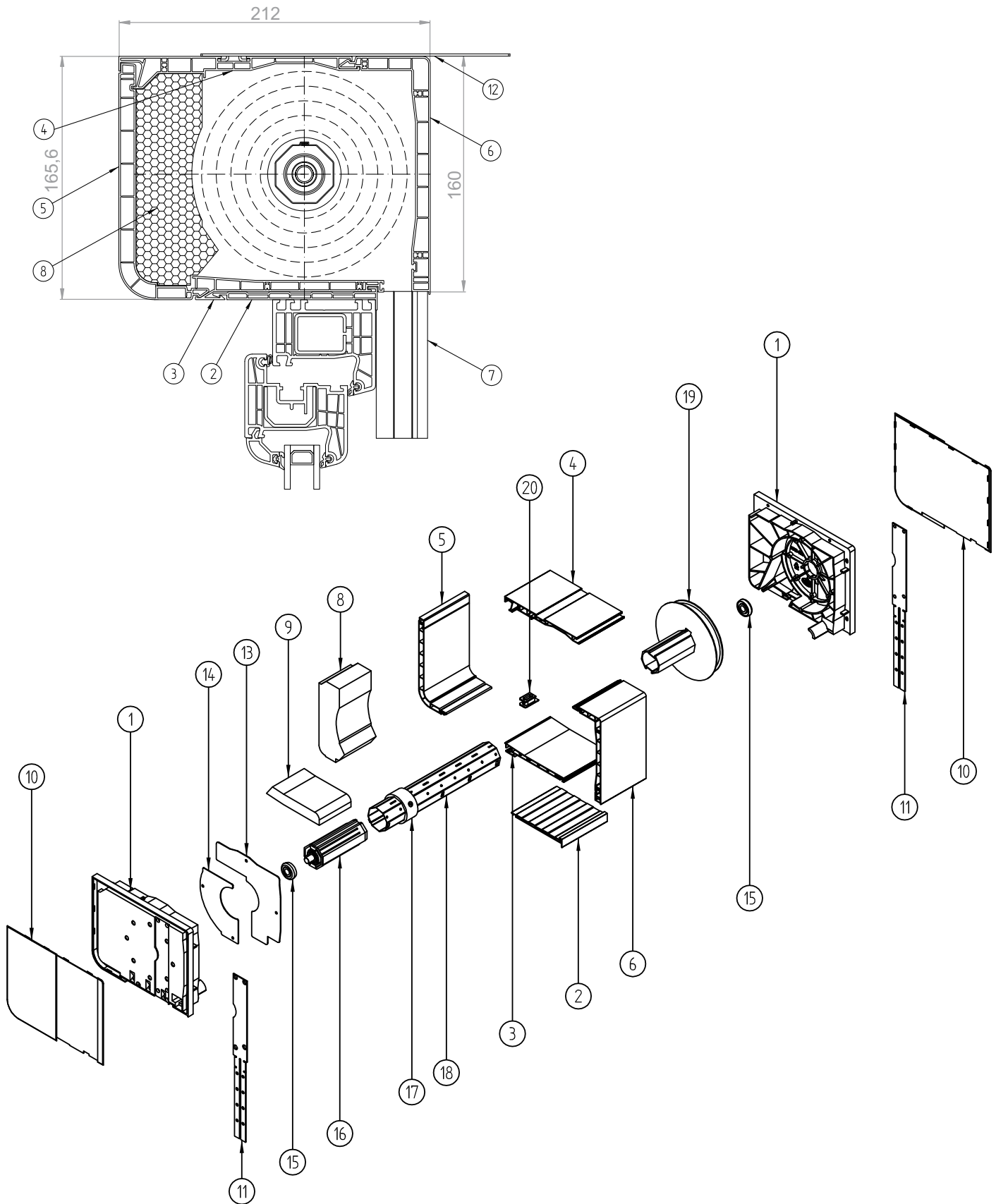


Type of the inspection cover.



The component with a veneering option.

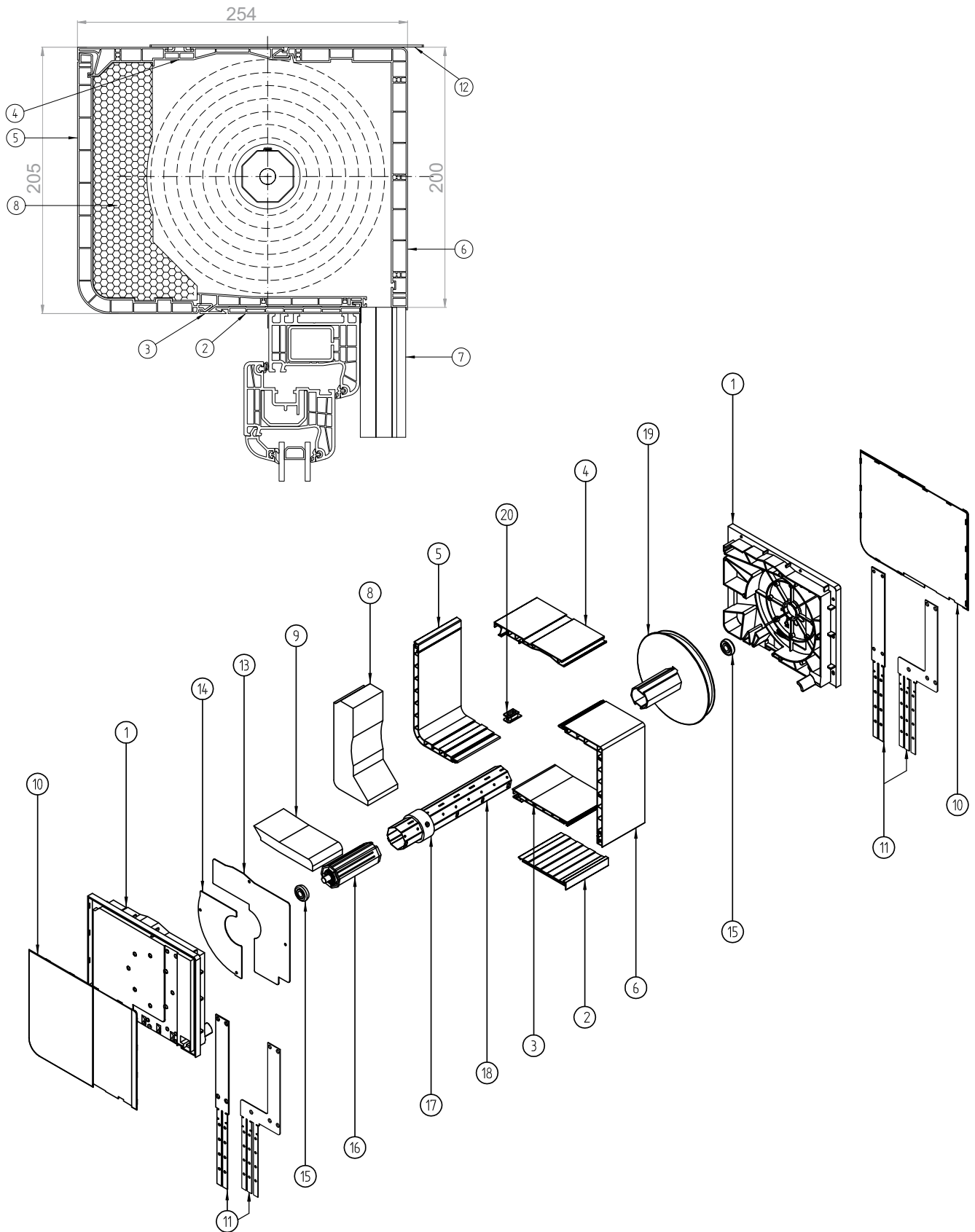
# Components of the MX1200® system Box 160 - cross-section and parts list



## MX1200<sup>®</sup> - cross-section and parts list

1	NRB-020	Side of the box 160
2	NRS-010	Adaptation profile 101 mm
3	NRS-020	Bottom profile of the box 160/200
4	NRS-030	Top profile of the box 160/200
5	NRS-050	Inspection cover of the box 160
6	NRS-070	Outer profile of the box 160
7	RK16	Guide
	NRR-010	Guide
	NRR-020	Guide
8	NRW-020	Styrofoam insert of the box 160
9	NRW-040	Bottom styrofoam insert of the box 160
10	NRD-020 (L/P)	Side end cap 160
11	NRT-020 (L/P)	Steel handles of the box 160
12	NPT-050	Steel mounting anchor
13	NRT-130	Inner cover of side 160 for fi 40 mounting top
	NRT-150	Inner cover of side 160 for fi 60 mounting top
14	NRT-140	Inner cover of side 160 for fi 40 mounting bottom
	NRT-160	Inner cover of side 160 for fi 60 mounting bottom
15	LO28/10 (12)	Bearing
16	OBS-40-PCV	40 mounting for PVC with pin
	OBS-60-PCV	60 mounting for PVC with pin
17	PZ40/50	Expansion ring
	PZ60/70	Expansion ring
18	SW 40	Octagonal pipe fi 40
	SW 60	Octagonal pipe fi 60
19	RKZ71	Winding wheel for box 160
20	E-R265	Belt guide

# Components of the MX1200® system Box 200 - cross-section and parts list



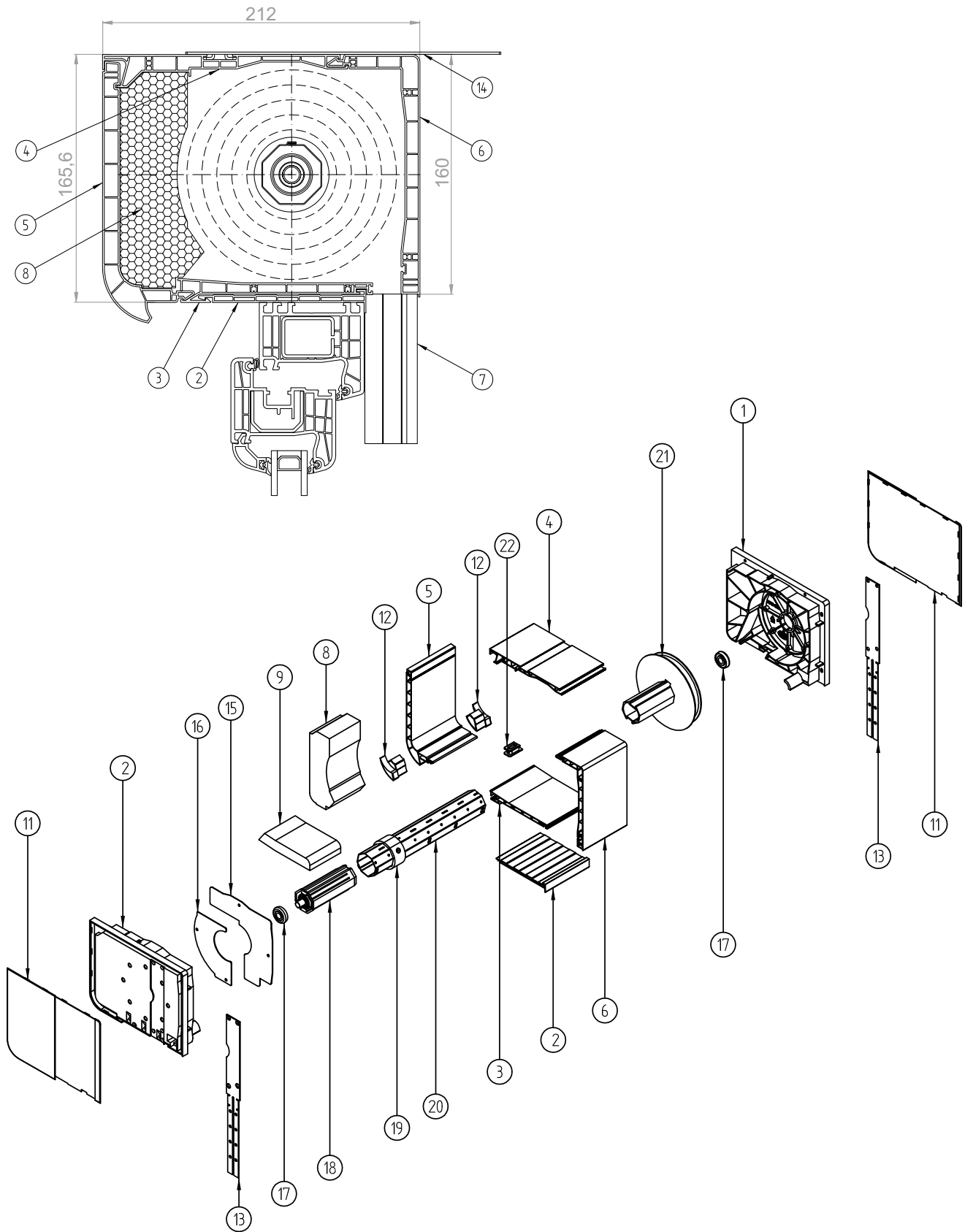


## MX1200<sup>®</sup> - cross-section and parts list

1	NRB-030	Side of the box 200
2	NRS-010	Adaptation profile 101 mm
3	NRS-020	Bottom profile of the box 160/200
4	NRS-030	Top profile of the box 160/200
5	NRS-060	Inspection cover of the box 200
6	NRS-080	Outer profile of the box 200
7	RK16	Guide
	NRR-010	Guide
	NRR-020	Guide
8	NRW-070	Styrofoam insert of the box 200 without handle
9	NRW-080	Bottom styrofoam insert of the box 200 without handle
10	NRD-030 (L/P)	End cap of the box 200 sides
11	NRT-030	Steel side handles of the box 200
	NRT-040 (L/P)	Steel side angular handles of the box 200
12	NPT-050	Steel mounting anchor
13	NRT-170	Inner cover of side 200 for fi 40 mounting top
	NRT-190	Inner cover of side 200 for fi 60 mounting top
14	NRT-180	Inner cover of side 200 for fi 40 mounting bottom
	NRT-200	Inner cover of side 200 for fi 60 mounting bottom
15	LO28/10 (12)	Bearing
16	OBS-40-PCV	40 mounting for PVC with pin
	OBS-60-PCV	60 mounting for PVC with pin
17	PZ40/50	Expansion ring
	PZ60/70	Expansion ring
18	SW 40	Octagonal pipe fi 40
	SW 60	Octagonal pipe fi 60
19	RKZ72	Winding wheel for box 200
20	E-R265	Belt guide

# Components of the MX1200® system

## Box 160 with handle - cross-section and parts list

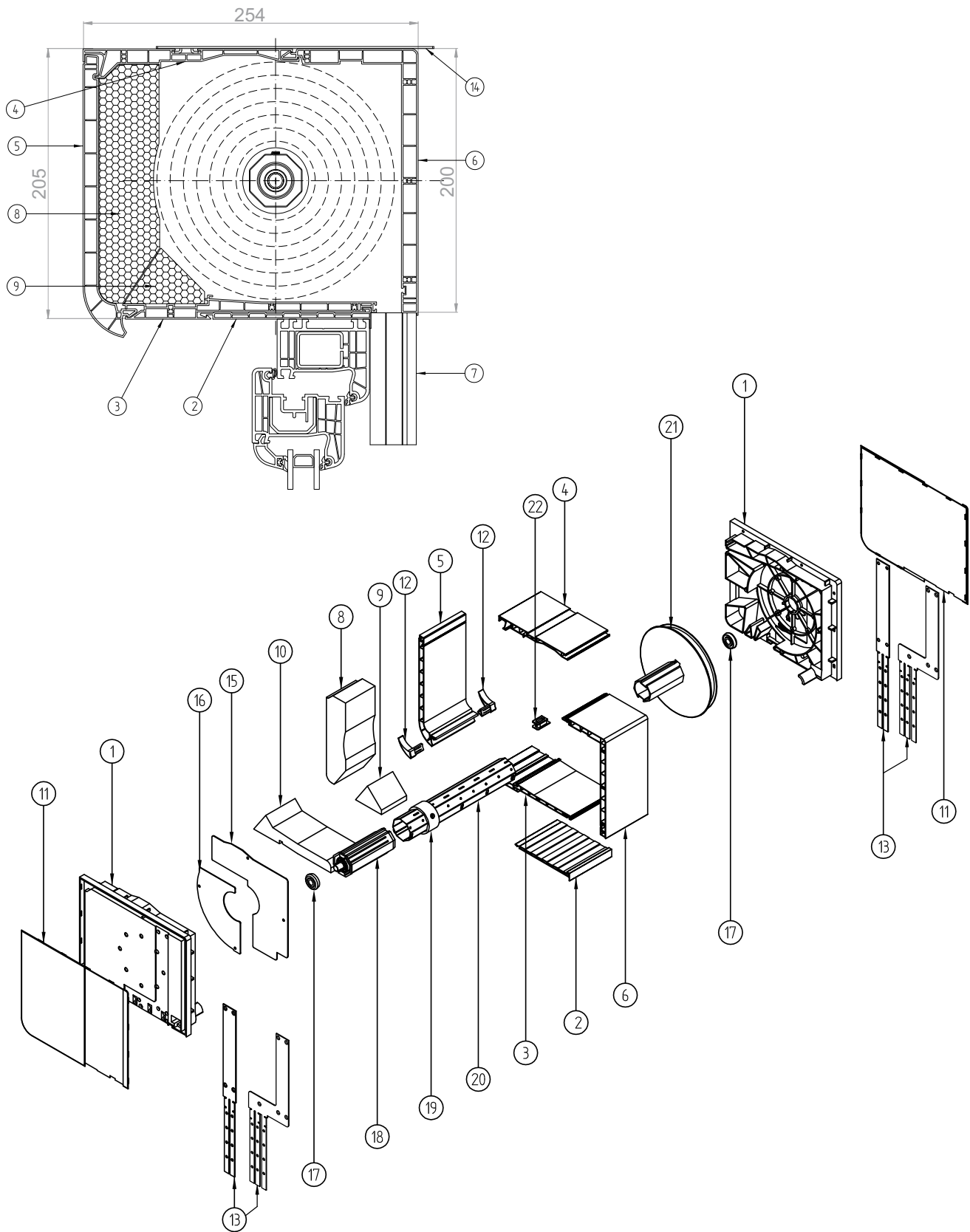


## MX1200<sup>®</sup> - cross-section and parts list

1	NRB-020	Side of the box 160
2	NRS-010	Adaptation profile 101 mm
3	NRS-020	Bottom profile of the box 160/200
4	NRS-030	Top profile of the box 160/200
5	NRS-130	Inspection cover of the box 160 with handle
6	NRS-070	Outer profile of the box 160
7	RK16	Guide
	NRR-010	Guide
	NRR-020	Guide
8	NRW-020	Styrofoam insert of the box 160
9	NRW-040	Bottom styrofoam insert of the box 160
11	NRD-020 (L/P)	Side end cap 160
12	NRD-060 (L/P)	End cap of box 160 inspection cover
13	NRT-020 (L/P)	Steel side handles of the box 160
14	NPT-050	Steel mounting anchor
15	NRT-130	Inner cover of side 160 for fi 40 mounting top
	NRT-150	Inner cover of side 160 for fi 60 mounting top
16	NRT-140	Inner cover of side 160 for fi 40 mounting bottom
	NRT-160	Inner cover of side 160 for fi 60 mounting bottom
17	LO28/10 (12)	Bearing
18	OBS-40-PCV	40 mounting for PVC with pin
	OBS-60-PCV	60 mounting for PVC with pin
19	PZ40/50	Expansion ring
	PZ60/70	Expansion ring
20	SW 40	Octagonal pipe fi 40
	SW 60	Octagonal pipe fi 60
21	RKZ71	Winding wheel for box 160
22	E-R265	Belt guide

# Components of the MX1200® system

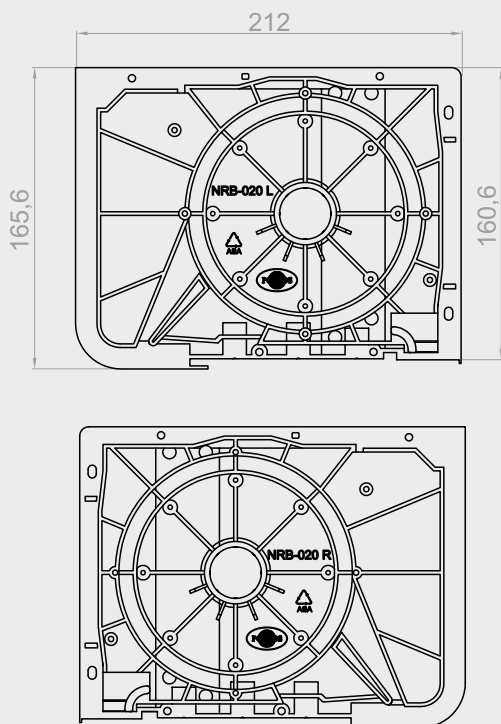
## Box 200 with handle - cross-section and parts list



## MX1200® - cross-section and parts list

1	NRB-030	Side of the box 200
2	NRS-110	Adaptation profile 118 mm
3	NRS-120	Bottom profile of the box 200
4	NRS-030	Top profile of the box 160/200
5	NRS-140	Inspection cover of the box 200 with handle
6	NRS-080	Outer profile of the box 200
7	RK16	Guide
	NRR-010	Guide
	NRR-020	Guide
8	NRW-030	Styrofoam insert of the box 200
9	NRW-060	Styrofoam insert of the box 200 part 2
10	NRW-050	Bottom styrofoam insert of the box 200
11	NRD-030 (L/P)	Side end cap 200
12	NRD-050 (L/P)	End cap of box 200 inspection cover
13	NRT-030	Steel side handles of the box 200
	NRT-040 (L/P)	Steel side angular handles of the box 200
14	NPT-050	Steel mounting anchor
15	NRT-170	Inner cover of side 200 for fi 40 mounting top
	NRT-190	Inner cover of side 200 for fi 60 mounting top
16	NRT-180	Inner cover of side 200 for fi 40 mounting bottom
	NRT-200	Inner cover of side 200 for fi 60 mounting bottom
17	LO28/10 (12)	Bearing
18	OBS-40-PCV	40 mounting for PVC with pin
	OBS-60-PCV	60 mounting for PVC with pin
19	PZ40/50	Expansion ring
	PZ60/70	Expansion ring
20	SW 40	Octagonal pipe fi 40
	SW 60	Octagonal pipe fi 60
21	RKZ72	Winding wheel for box 200
	RKZ82	Winding wheel for box 200 for monoblock system
22	E-R265	Belt guide

## Components of the MX1200® system Box 160 - sides and end caps

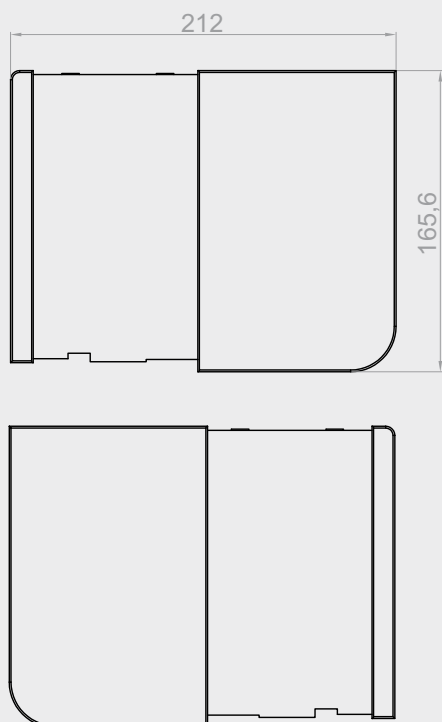
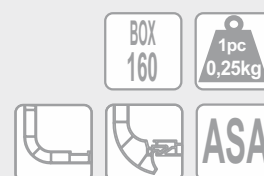


### **NRB-020 L**

Side of the box 160 left

### **NRB-020 P**

Side of the box 160 right

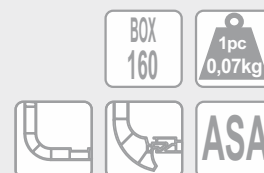


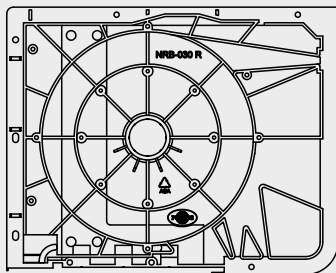
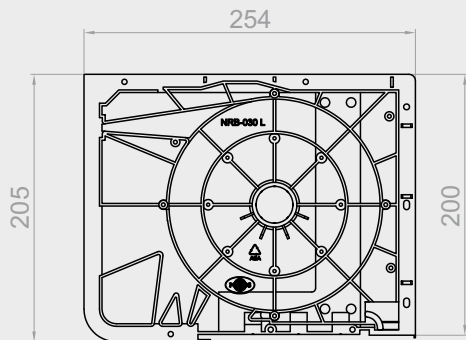
### **NRD-020 L**

End cap of the box 160 sides left

### **NRD-020 P**

End cap of the box 160 sides right



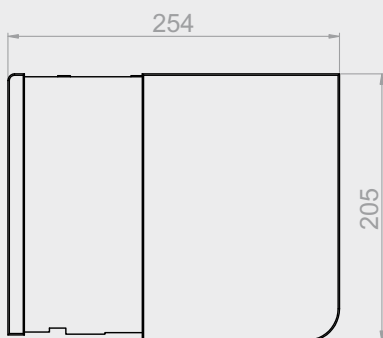
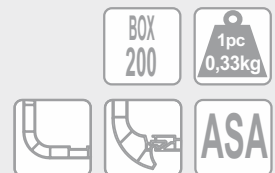


**NRB-030 L**

Side of the box 200 left

**NRB-030 P**

Side of the box 200 right

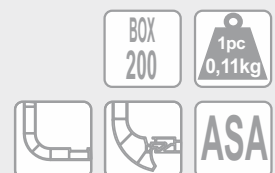


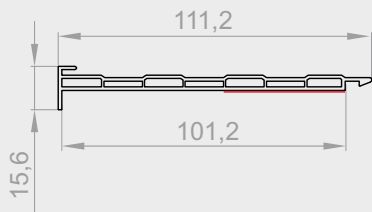
**NRD-030 L**

End cap of the box sides 200 left

**NRD-030 P**

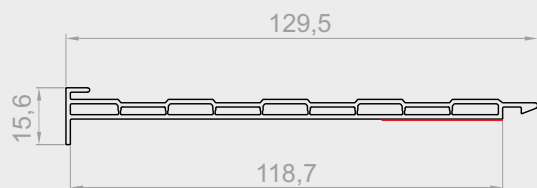
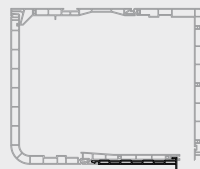
End cap of the box 200 sides right





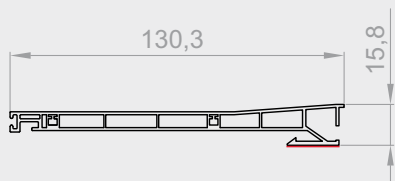
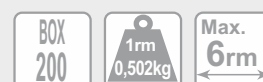
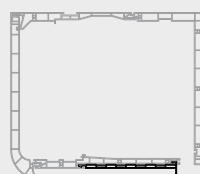
### NRS-010

Universal adaptation profile



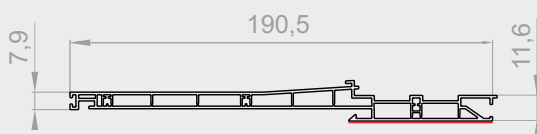
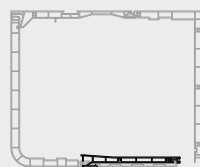
### NRS-110

Universal adaptation profile 118mm



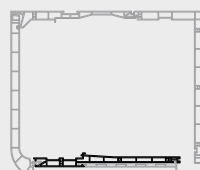
### NRS-020

Bottom profile of the box 160, 200

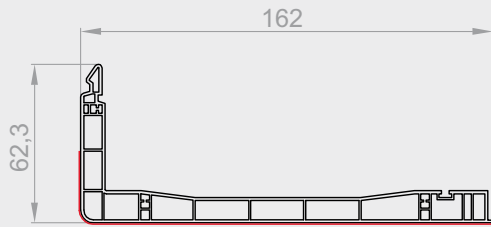


### NRS-120

Bottom profile of the box 200 with handle

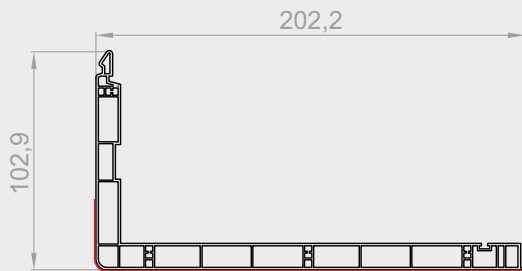
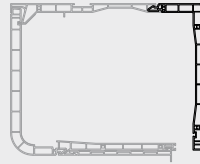






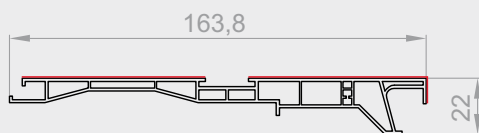
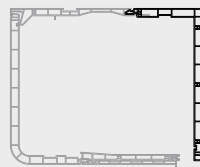
### **NRS-070**

Outer profile of the box 160



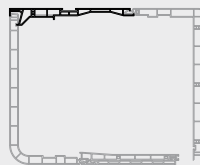
### **NRS-080**

Outer profile of the box 200



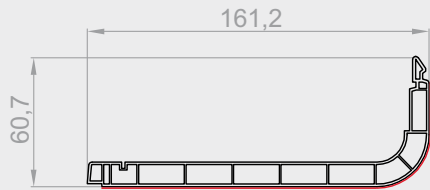
### **NRS-030**

Top profile of the box 160, 200



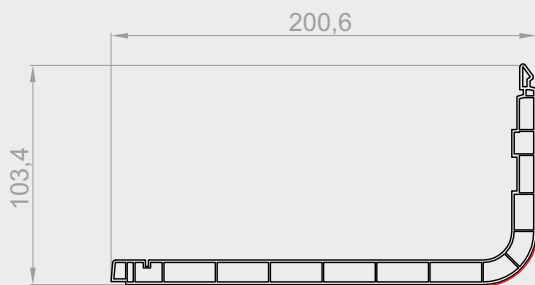
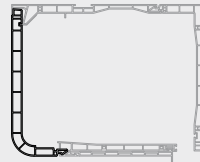
# Components of the MX1200® system

## Box 160/200 - inspection covers, end caps



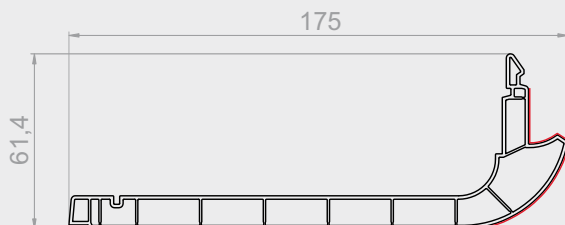
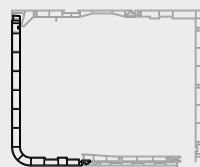
### **NRS-050**

Inspection cover of the box 160



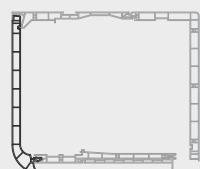
### **NRS-060**

Inspection cover of the box 200



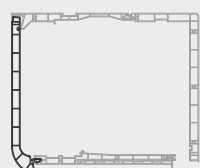
### **NRS-130**

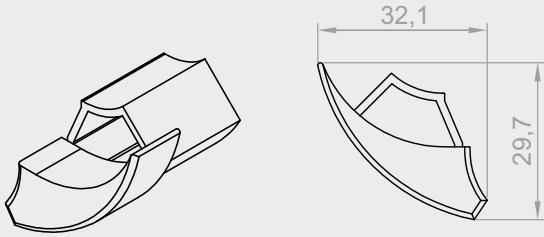
Inspection cover of the box 160 with handle



### **NRS-140**

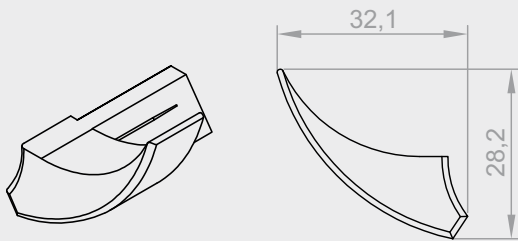
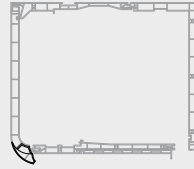
Inspection cover of the box 200 with handle





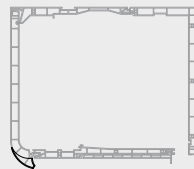
**NRD-060 L/P**

End cap of box 160 inspection cover with handle left / right



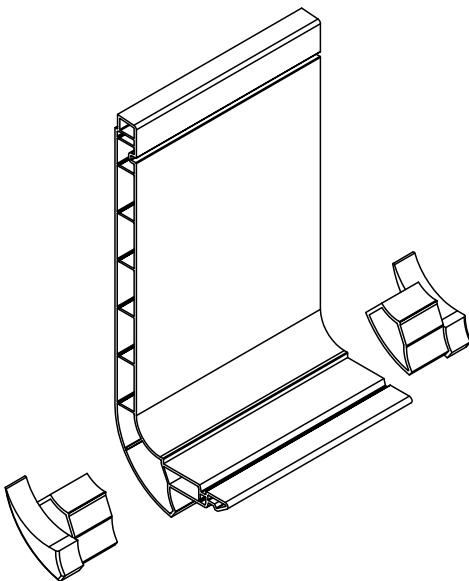
**NRD-050 L/P**

End cap of box 200 inspection cover with handle left / right

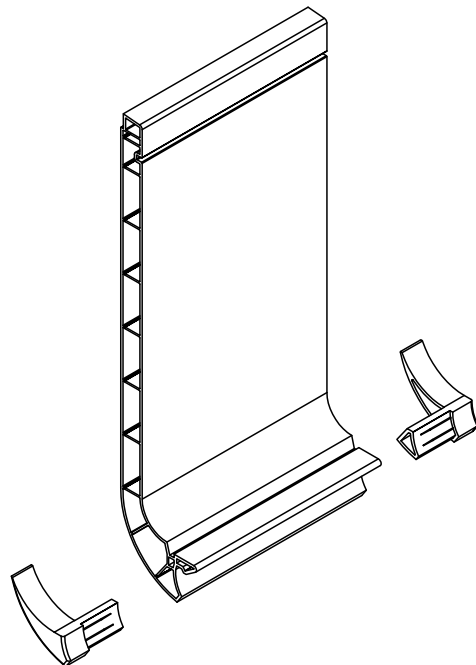


View of box inspection covers with appropriate plugs.

Box 160



Box 200

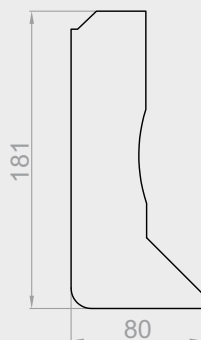
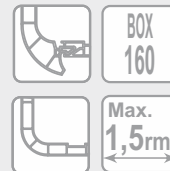
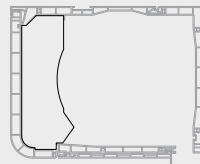


**NOTE** - Inspection cover plugs can only be used if the inspection cover of the box protrudes from the inside beyond the face of the wall.



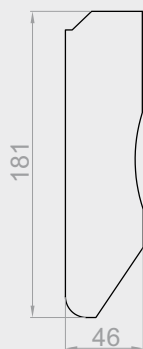
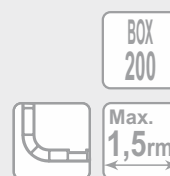
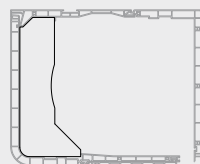
**NRW-020**

Styrofoam insert of the box 160



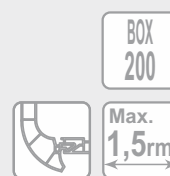
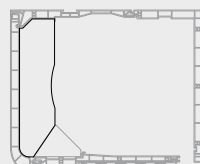
**NRW-070**

Styrofoam insert of the box 200



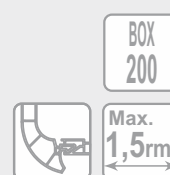
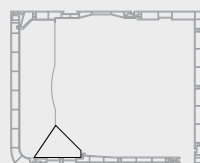
**NRW-030**

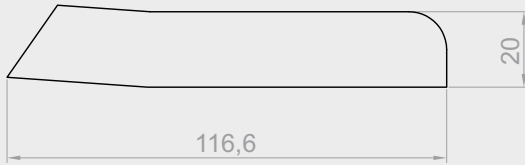
Styrofoam insert of the box 200 with handle part 1



**NRW-060**

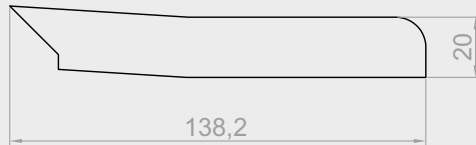
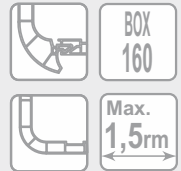
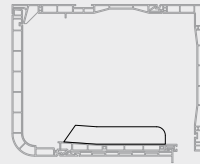
Styrofoam insert of the box 200 with handle part 2





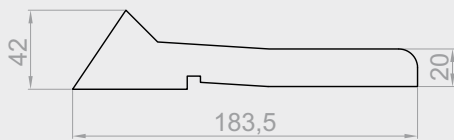
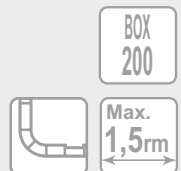
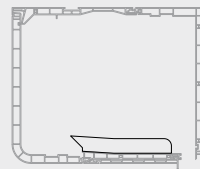
**NRW-040**

Bottom styrofoam insert of the box 160



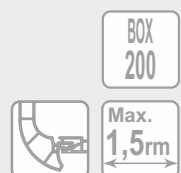
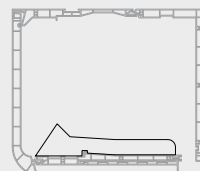
**NRW-080**

Bottom styrofoam insert of the box 200

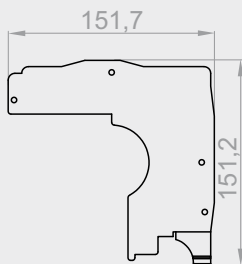


**NRW-050**

Bottom styrofoam insert of the box 200 with handle



## Components of the MX1200® system Box 160/200 - steel components



### **NRT-130**

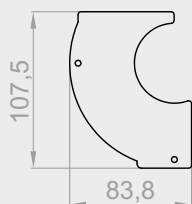
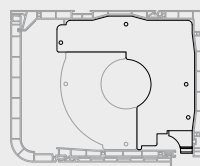
Inner cover of side 160 for ø40 pipe - top

### **NRT-150**

Inner cover of side 160 for ø60 pipe - top

### **NRT-210**

Inner cover of side 160 for ø60 pipe for NHK motor - top



### **NRT-140**

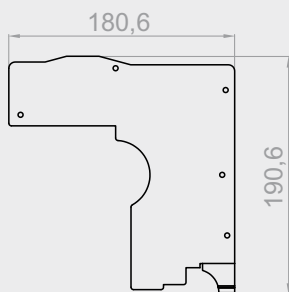
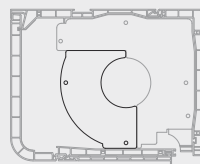
Inner cover of side 160 for ø40 pipe - bottom

### **NRT-160**

Inner cover of side 160 for ø60 pipe - bottom

### **NRT-220**

Inner cover of side 160 for ø60 pipe for NHK motor - bottom



### **NRT-170**

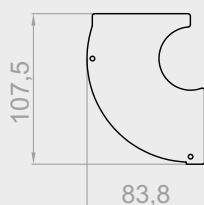
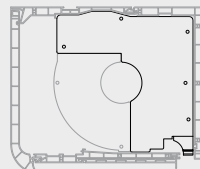
Inner cover of side 200 for ø40 pipe - top

### **NRT-190**

Inner cover of side 200 for ø60 pipe - top

### **NRT-230**

Inner cover of side 200 for ø60 pipe for NHK motor - top



### **NRT-180**

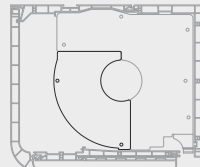
Inner cover of side 200 for ø40 pipe - bottom

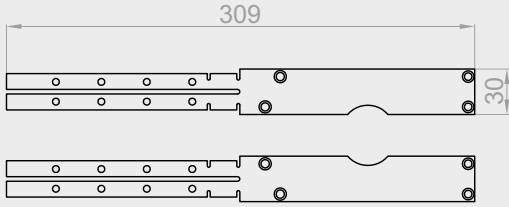
### **NRT-200**

Inner cover of side 200 for ø60 pipe - bottom

### **NRT-240**

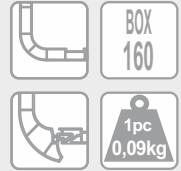
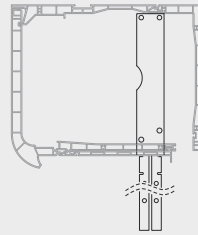
Inner cover of side 200 for ø60 pipe for NHK motor - bottom





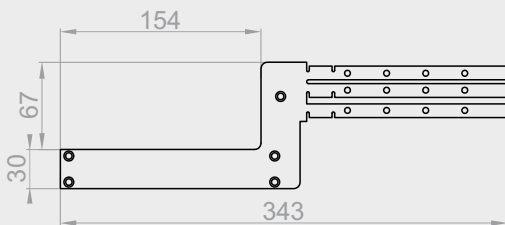
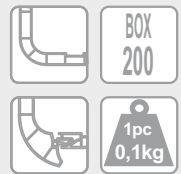
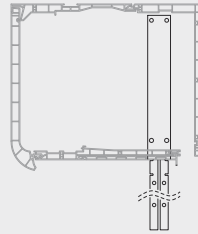
**NRT-020 L/P**

Steel side handle for box 160 left / right



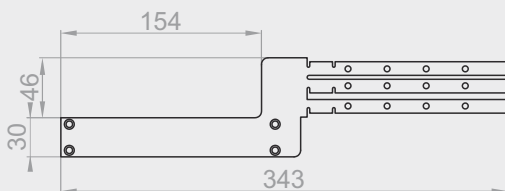
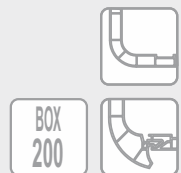
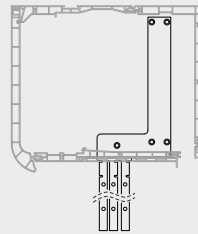
**NRT-030**

Steel side handle for box 200



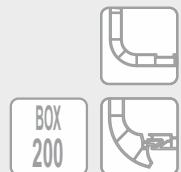
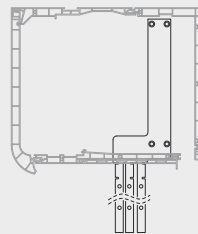
**NRT-040 L/P**

Steel side angular handle for box 200 left / right



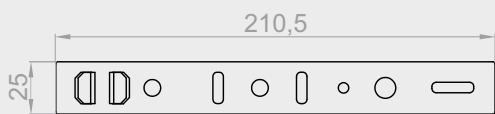
**NRT-250 L/P**

Steel side angular handle 76 mm for box 200 left / right



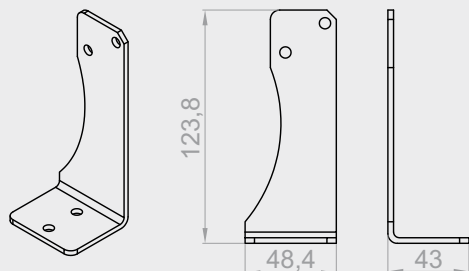
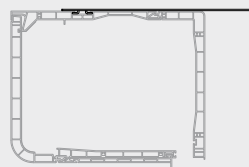
# Components of the MX1200® system

## Box 160/200 - steel components



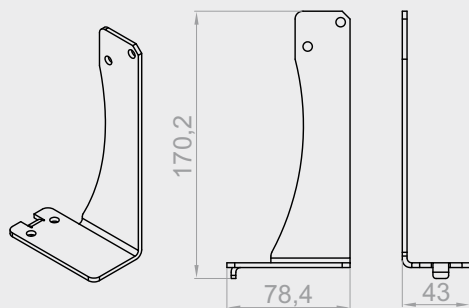
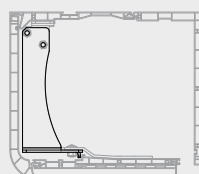
### **NPT-050**

Steel mounting anchor



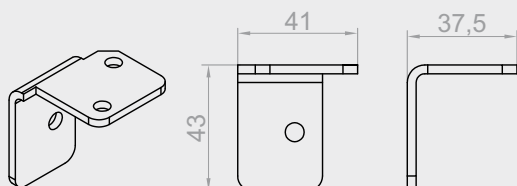
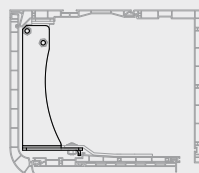
### **NRT-060**

Stabilizing console for box 160



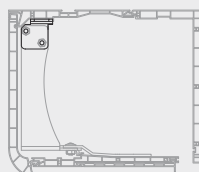
### **NRT-070**

Stabilizing console for box 200

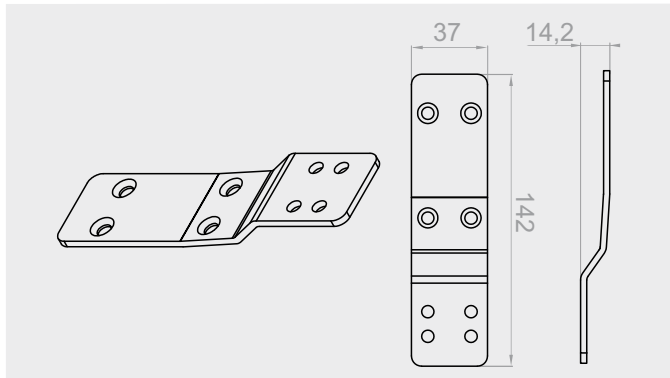


### **NRT-090**

Upper connector of the stabilizing console

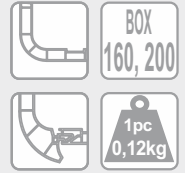
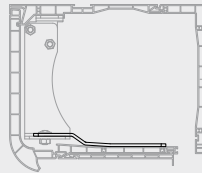






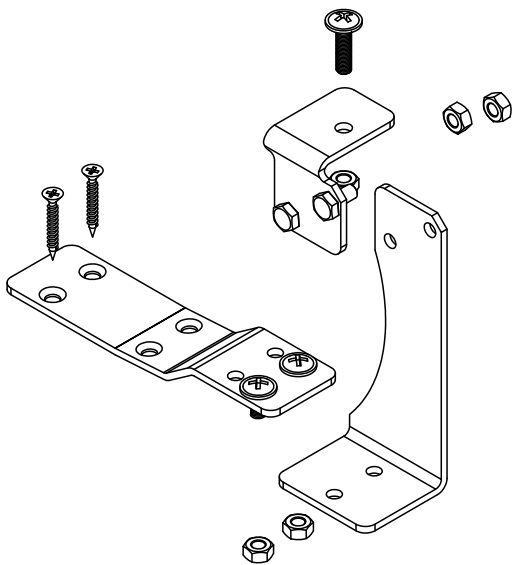
### NRT-120

Lower connector of the stabilizing console for box 160, 200

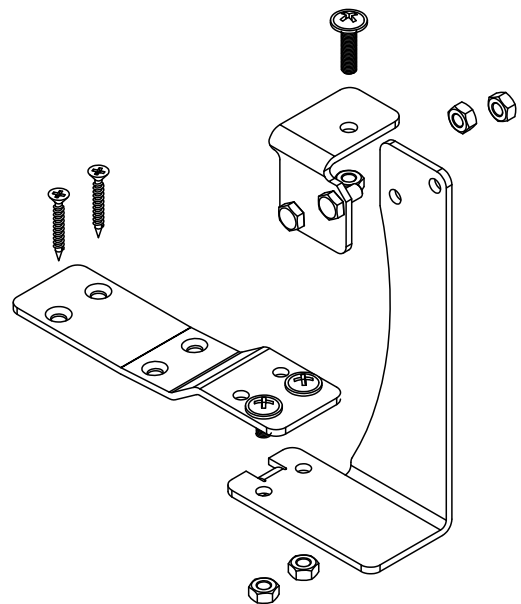


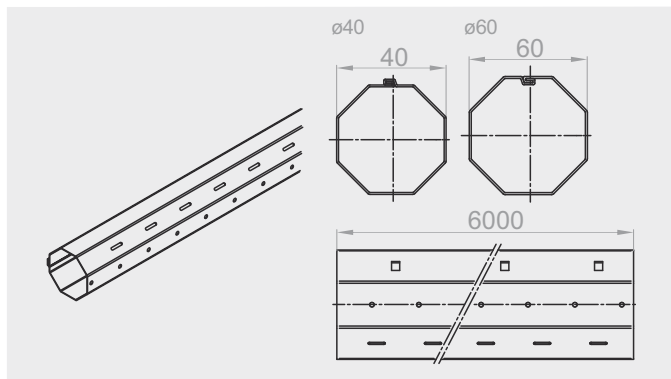
View of stabilizing consoles with connectors.

NRTK-010 - Stabilizing console for box 160



NRTK-030 - Stabilizing console for box 200



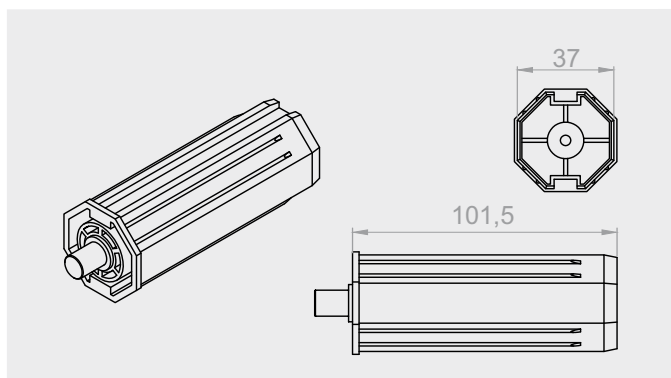
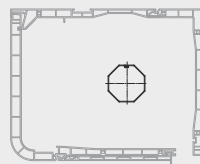


### **SW 40**

Octagonal pipe  $\varnothing 40$

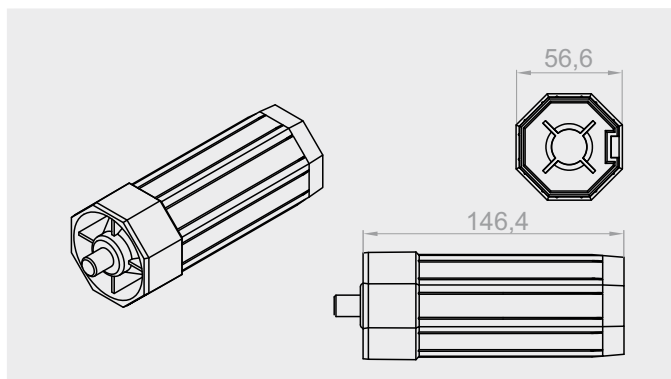
### **SW 60**

Octagonal pipe  $\varnothing 60$



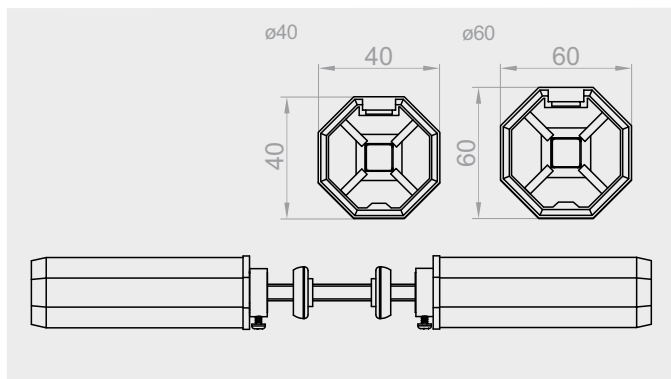
### **OBS-40-PVC**

PVC mounting with pin for  $\varnothing 40$  pipe



### **OBS-60-PVC**

PVC mounting with pin for  $\varnothing 60$  pipe



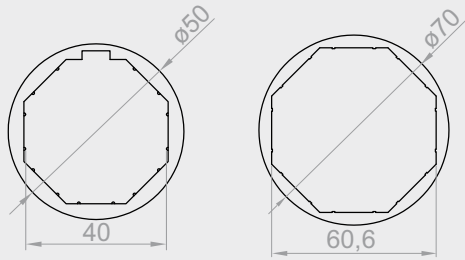
### **RKZ 34**

Roller bolt for  $\varnothing 40$  pipe  
(to transfer power)

### **RKZ 35**

Roller bolt for  $\varnothing 60$  pipe  
(to transfer power)



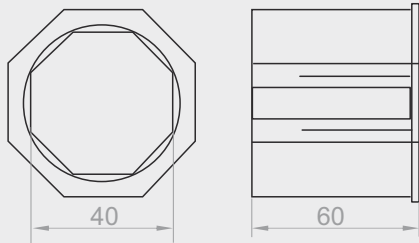


**PZ 40/50**

Expansion ring 40/50

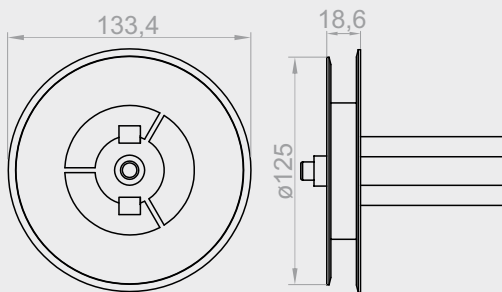
**PZ 60/70**

Expansion ring 60/70



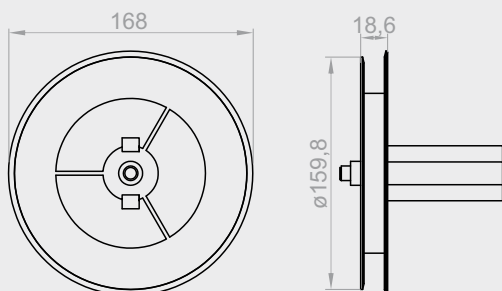
**RED-40-60**

Reduction 40/60



**RKZ71**

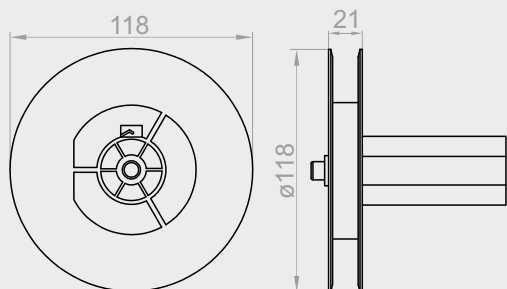
Winding wheel for box 160



**RKZ72**

Winding wheel for box 200



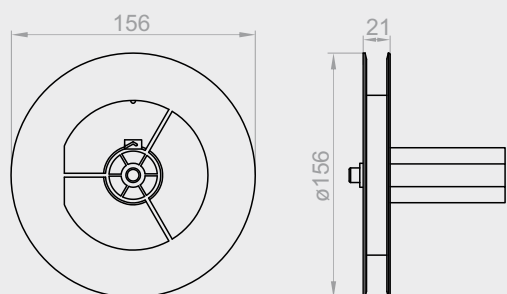


### **RKZ81**

Winding wheel for box 160 for monoblock system

BOX  
160

1 pc  
0,10kg

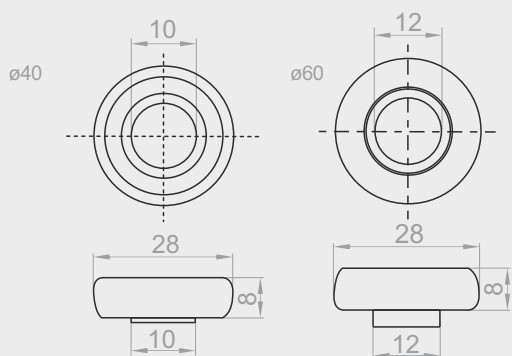


### **RKZ82**

Winding wheel for box 200 for monoblock system

BOX  
200

1 pc  
0,13kg



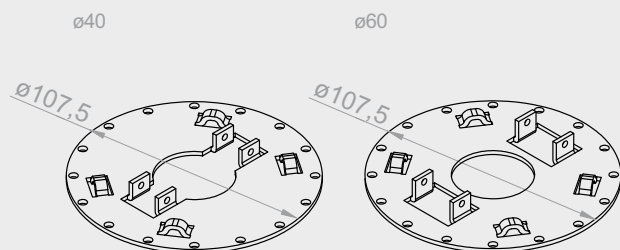
### **LO-28/10**

Bearing for PVC boxes for  $\varnothing 40$

### **LO-28/12**

Bearing for PVC boxes for  $\varnothing 60$

1 pc  
0,02kg

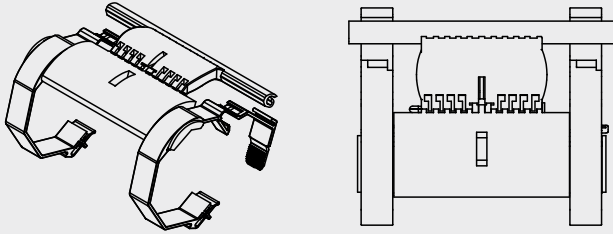


### **RKZ P4**

Plate for installation of motors for  $\varnothing 40$  pipe

### **RKZ P6**

Plate for installation of motors for  $\varnothing 60$  pipe

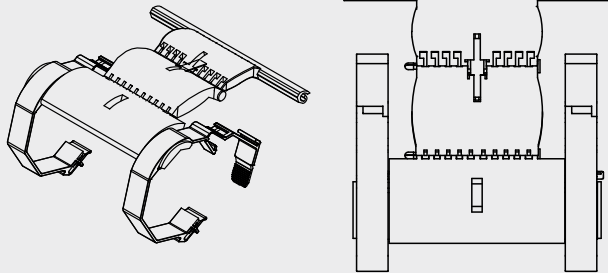


**WB1-40 W**

2-piece blocking hitch bracket for  $\varnothing$  40 pipe.

**WB1-60 W**

2-piece blocking hitch bracket for  $\varnothing$  60 pipe.

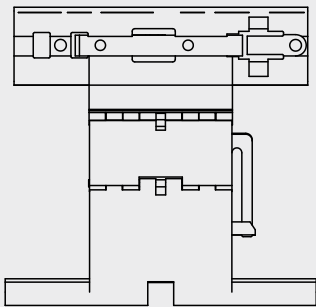


**WB3-40 W**

3-piece blocking hitch bracket for  $\varnothing$  40 pipe.

**WB3-60 W**

3-piece blocking hitch bracket for  $\varnothing$  60 pipe.



**WBZ1-40**

1-piece blocking hitch bracket for  $\varnothing$ 40 pipe

**WBZ2-40**

2-piece blocking hitch bracket for  $\varnothing$ 40 pipe

**WBZ1-60**

1-piece blocking hitch bracket for  $\varnothing$ 60 pipe

**WBZ2-60**

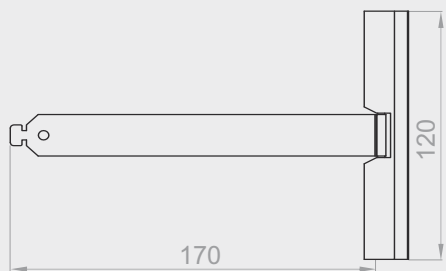
2-piece blocking hitch bracket for  $\varnothing$ 60 pipe



**WS-37/40-170**

Steel hanger 170





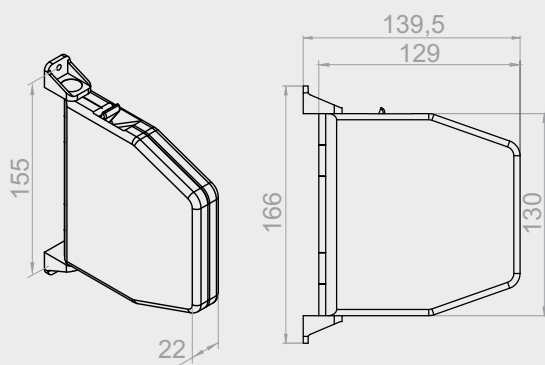
**WS-37/40-170 S**

Steel hanger 170 (electrically powered shutters)



**WS-37/40-170 ALU**

Aluminium hanger

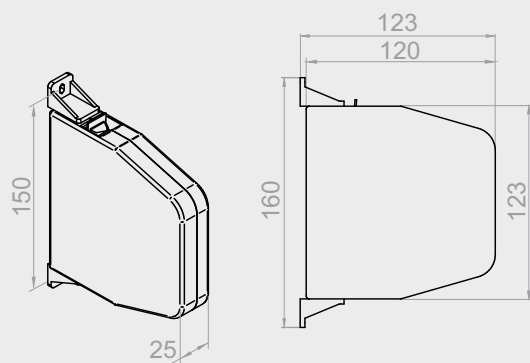


**ZT-5M02**

Tape coiler 5m white

**ZT-5M08**

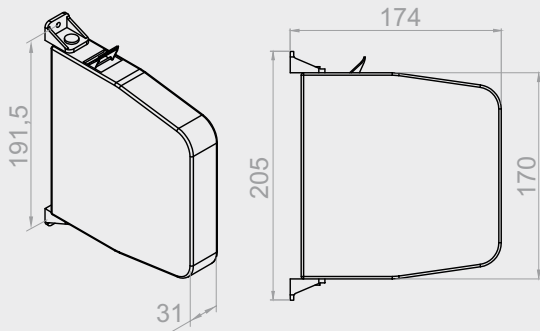
Tape coiler 5m brown



**ZT/L-5M-23**

Universal tape / cord coiler up to 5m anthracite



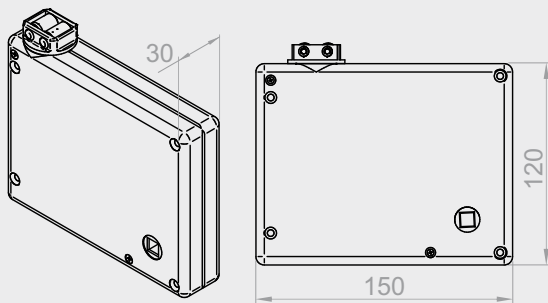


**ZT-11M-02**

Tape coiler 11m white

**ZT-11M-08**

Tape coiler 11m brown

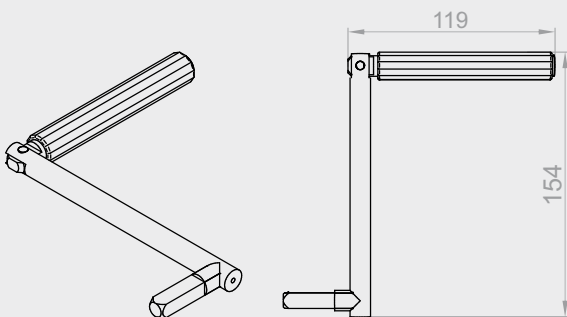


**KPTKM-02**

Cassette with tape transmission - white

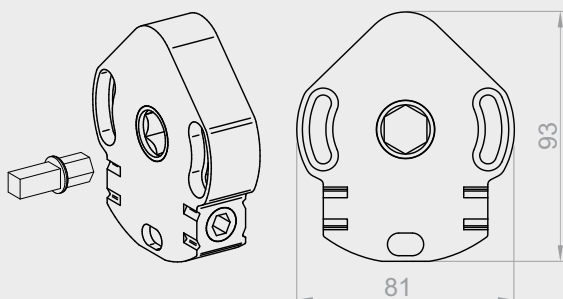
**KPTKM-08**

Cassette with tape transmission - brown



**KRM-140**

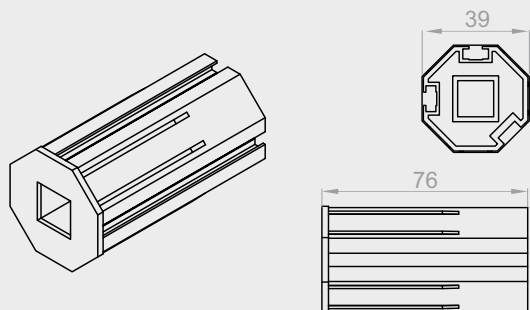
Mignon crank 140mm



**ACE-1-8 MAŁY**

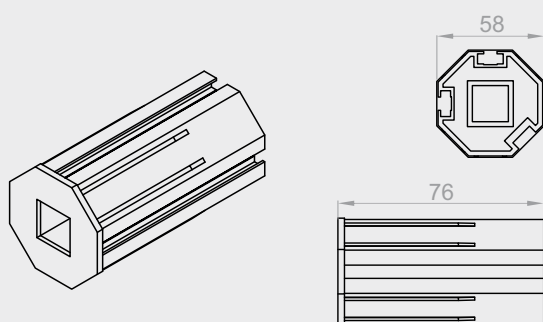
Crank mechanism - 22 kg





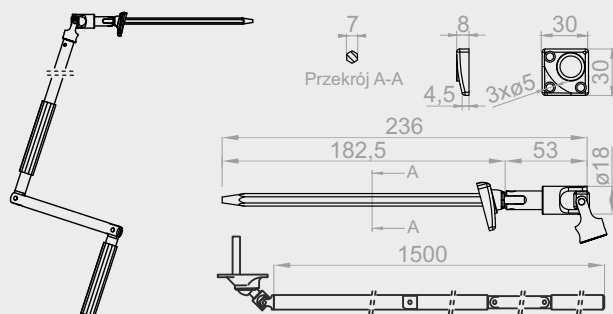
### **OBS-40-ACE**

Ø40 mounting for the ACE mechanism



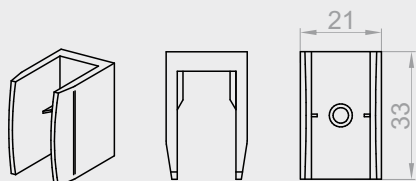
### **OBS-60-ACE**

Ø60 mounting for the ACE mechanism



### **KRH-ZF**

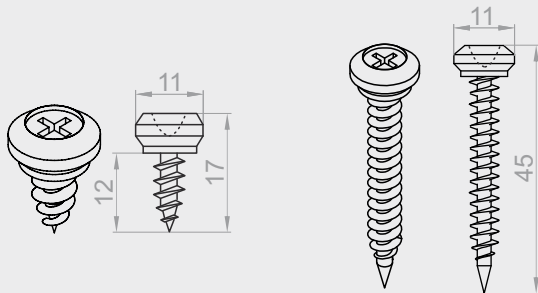
Cardan 165 with 1430 mm crank



### **U-KRD**

Handle for mounting the crank



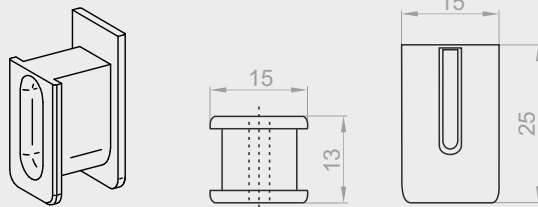


**NYP**

Guide nipple

**NYP45**

45 mm Guide nipple



**E-R265-6**

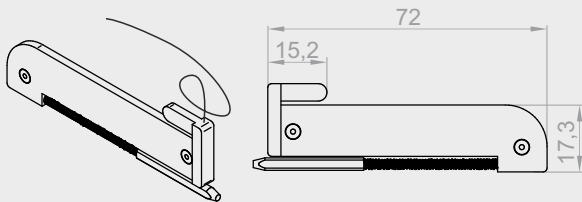
Belt guide - 02 (white)

**E-R265-7**

Belt guide - 08 (brown)

**E-R265-23**

Belt guide - 23 (anthracite)

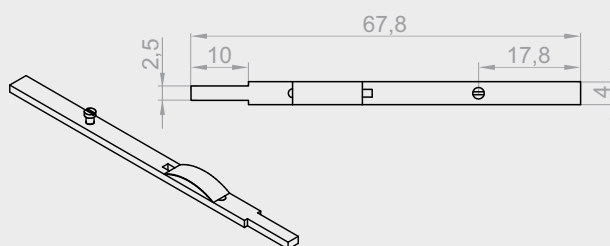


**RA**

Automatic bolt.

Minimum shutter width - 45 cm.

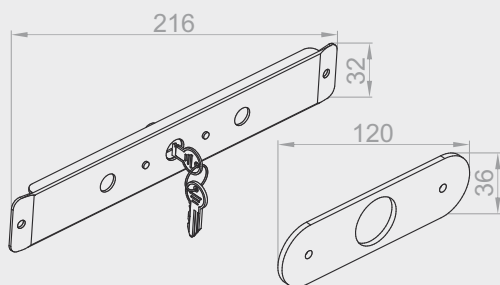
Minimum shutter height - 90 cm.



**ZR**

Latch (manual bolt)

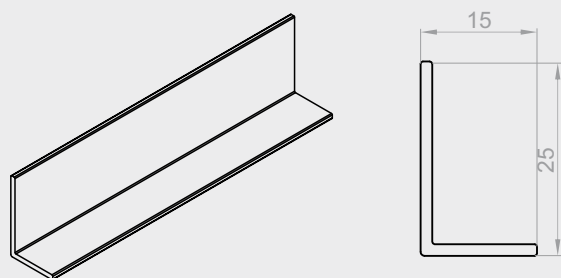
Minimum shutter width - 45 cm.



### **ZB**

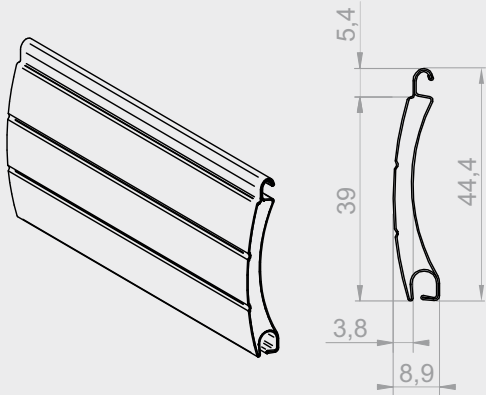
Cylinder lock, set of keys (3 pieces) and covering plate. The covering plate is mounted as standard from the outside.

Minimum shutter width - 45 cm.



### **LT**

External concealed lath  
(white LT-02, light brown LT-09,  
dark brown LT-08, anthracite LT-23)



**PA 39/0k**

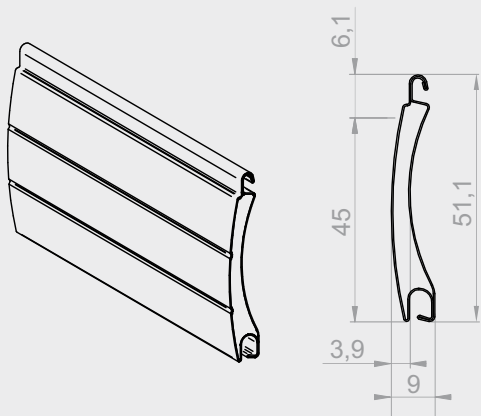
PA 39 Aluminium profile - perforated

**PA 39/1k**

PA 39 Aluminium profile - non-perforated

Profile height	39 mm
Profile thickness	8,9 mm
Profile weight 1 m <sup>2</sup>	2,8 kg
Maximum profile length	6 rm
Number of laths 1m high	26 pcs
Maximum area	6,5 m <sup>2</sup>
Maximum shutter width	2500 mm

Profile colors (k)																				
01 - silver	02 - white	03 - grey	04 - dark beige	05 - beige	07 - light grey	08 - dark brown	09 - brown	13 - green	15 - cream white	16 - ivory	19 - maroon	20 - black	22 - mahogany	23 - anthracite	26 - steel olive	27 - basalt grey	30 - walnut	34 - bog oak	48 - golden oak	54 - winchester



**PA 45/0k**

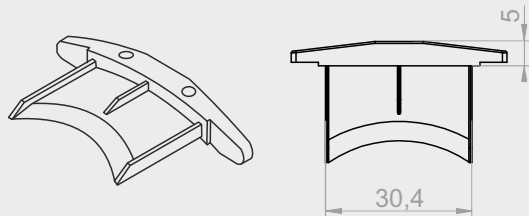
PA 45 Aluminium profile - perforated

**PA 45/1k**

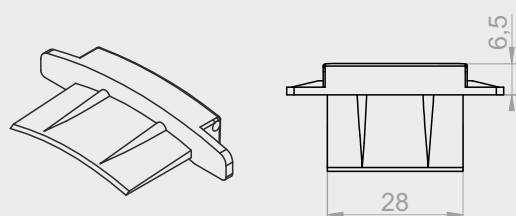
PA 45 Aluminium profile - non-perforated

Profile height	45 mm
Profile thickness	9 mm
Profile weight 1 m <sup>2</sup>	2,9 kg
Maximum profile length	5,4 rm
Number of laths 1m high	23 pcs
Maximum area	6,5 m <sup>2</sup>
Maximum shutter width	3000 mm

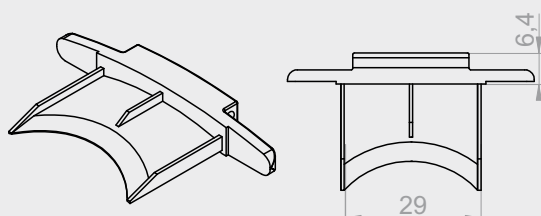
Profile colors (k)																		
01 - silver	02 - white	03 - grey	04 - dark beige	05 - beige	07 - light grey	08 - dark brown	09 - brown	13 - green	15 - cream white	16 - ivory	19 - maroon	20 - black	22 - mahogany	23 - anthracite	26 - steel olive	30 - walnut	48 - golden oak	54 - winchester



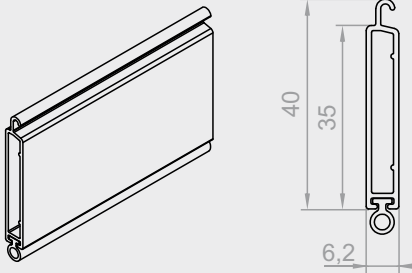
**APA 39 M**  
PA 39 Profile plug



**APA 37-R**  
PA 39 Profile plug bolt



**APA 45-R**  
PA 45 Profile plug bolt

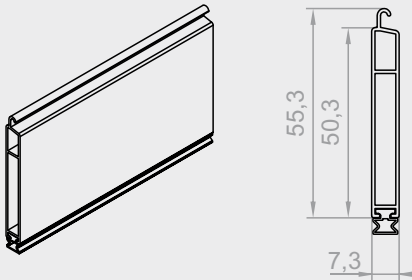


**LD-35 MINI**

Bottom lath for profiles PA 39, PA 45,  
PVC 37

**KA-44B**

Seal for LD-35 MINI

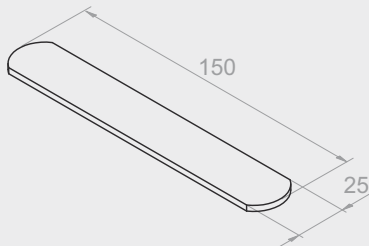


**LD-37**

Bottom lath for profiles PA 39, PA 45,  
PVC 37

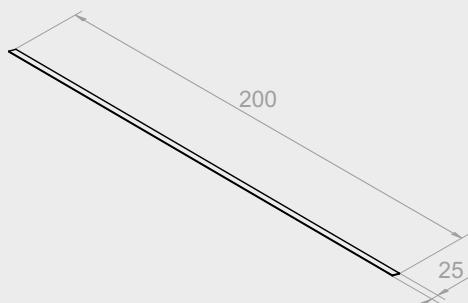
**KA-44**

Seal for LD-37



**LD-OBCIĄŻNIK 15**

Bottom lath weight 15 cm



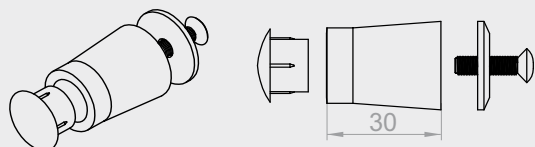
**LD-OBCIĄŻNIK 200**

Bottom lath weight 200 cm - for cylinder lock



Components of the MX1200® system  
Box 160/200 - bottom laths, additional components

BF



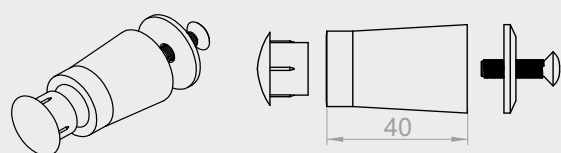
**BF** (without the plug)

**BF-ZAT**

Bottom lath buffer

} SET

BF-40 MM



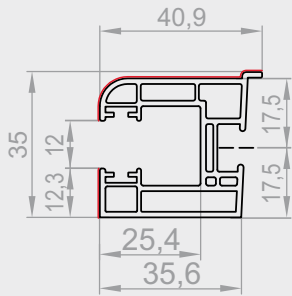
**BF-40 MM** (without the plug)

**BF-ZAT**

Bottom lath buffer

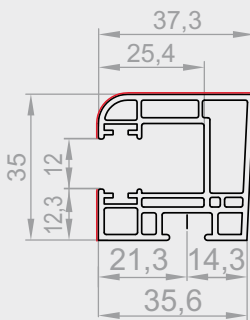
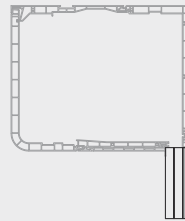
} SET





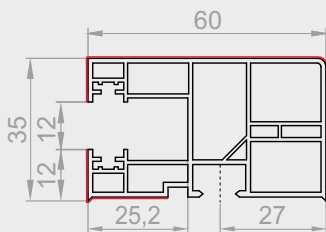
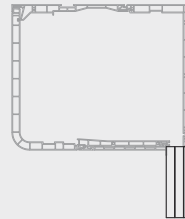
**NRR-010**

Narrow guide with flange



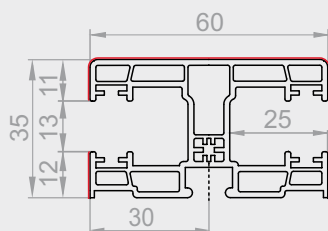
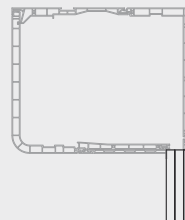
**NRR-020**

Narrow guide



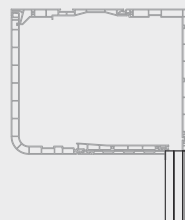
**RK16**

Single guide



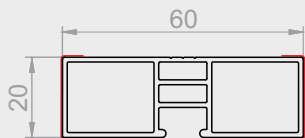
**RK18**

Double guide



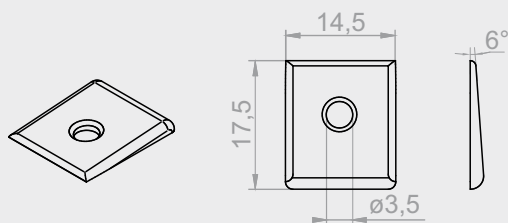
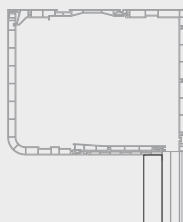
# Components of the MX1200® system

## Box 160/200 - PVC guide end caps



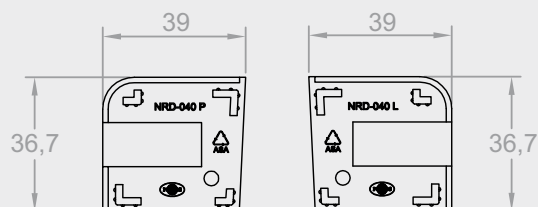
### DP-PCV-20

60x20 guide distance



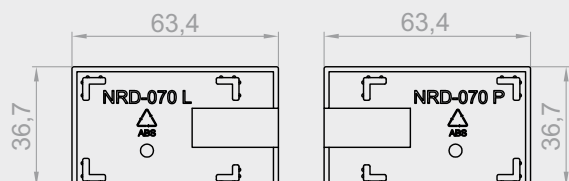
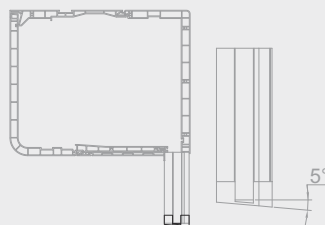
### NRD-110

Wedge for monoblock guides



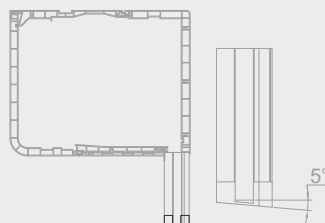
### NRD-040 L/P

Bottom end cap of the NRR-010, NRR-020 guides

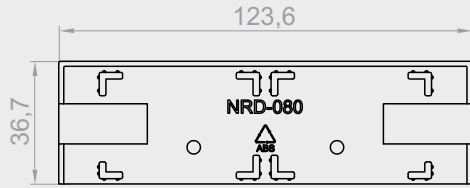


### NRD-070 L/P

Bottom end cap of the RK16 guides

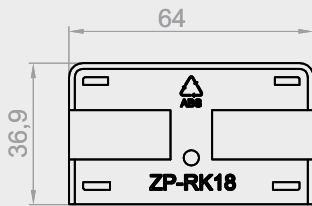
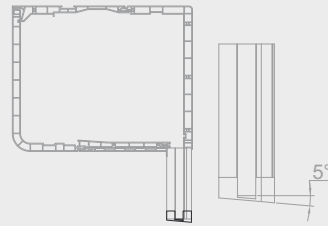






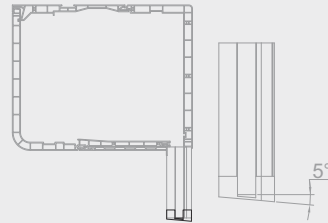
**NRD-080**

Bottom end cap of two RK16 guides

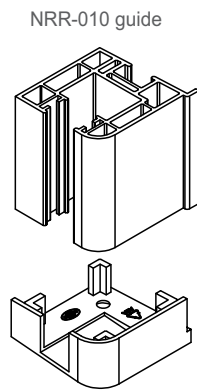


**ZP-RK 18**

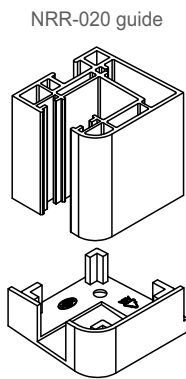
Bottom end cap of the RK18 double guide



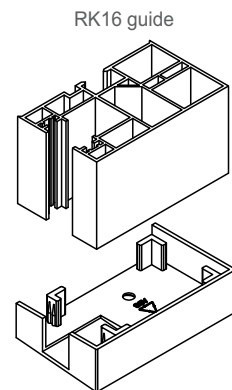
View of guides with the appropriate end caps for guides.



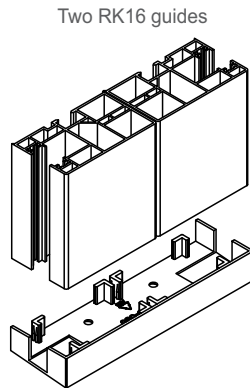
NRD-040 L / P end cap



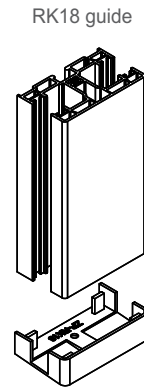
NRD-040 L / P end cap



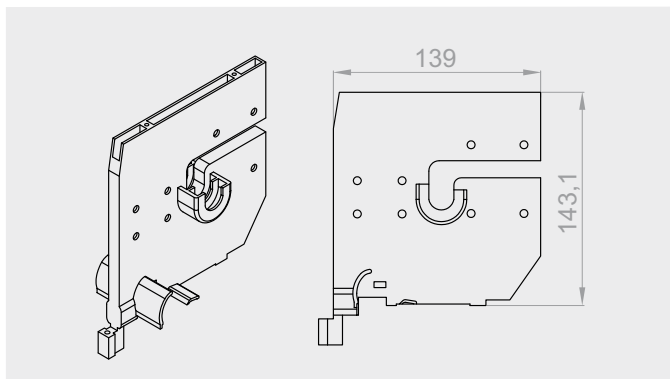
NRD-070 L / P end cap



NRD-080 end cap

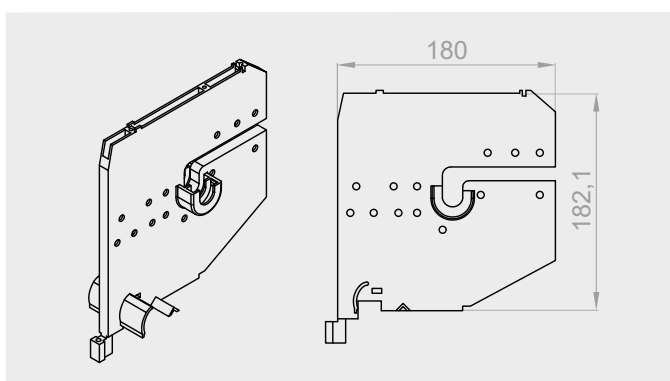
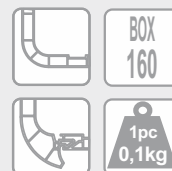
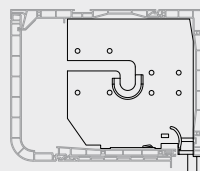


ZP-RK 18 end cap



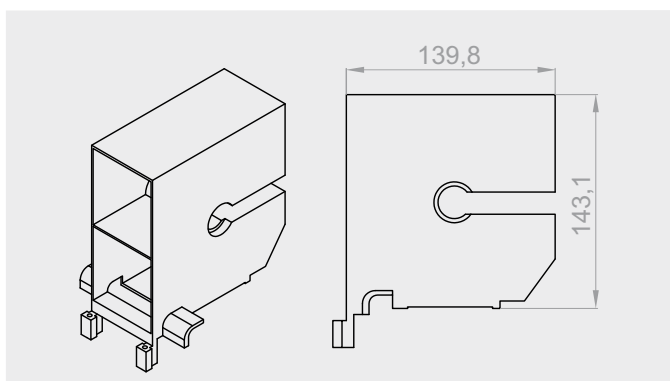
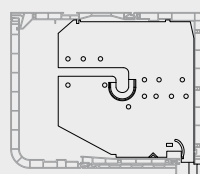
### RKM201

160 box division for a double guide



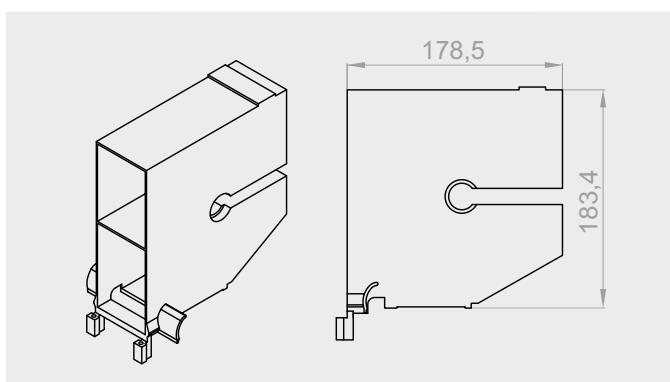
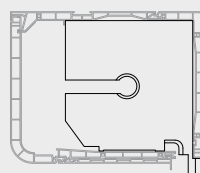
### RKM301

200 box division for a double guide



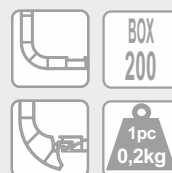
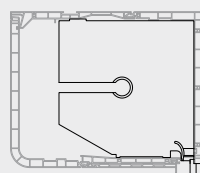
### RKB2

160 box division for two single guides



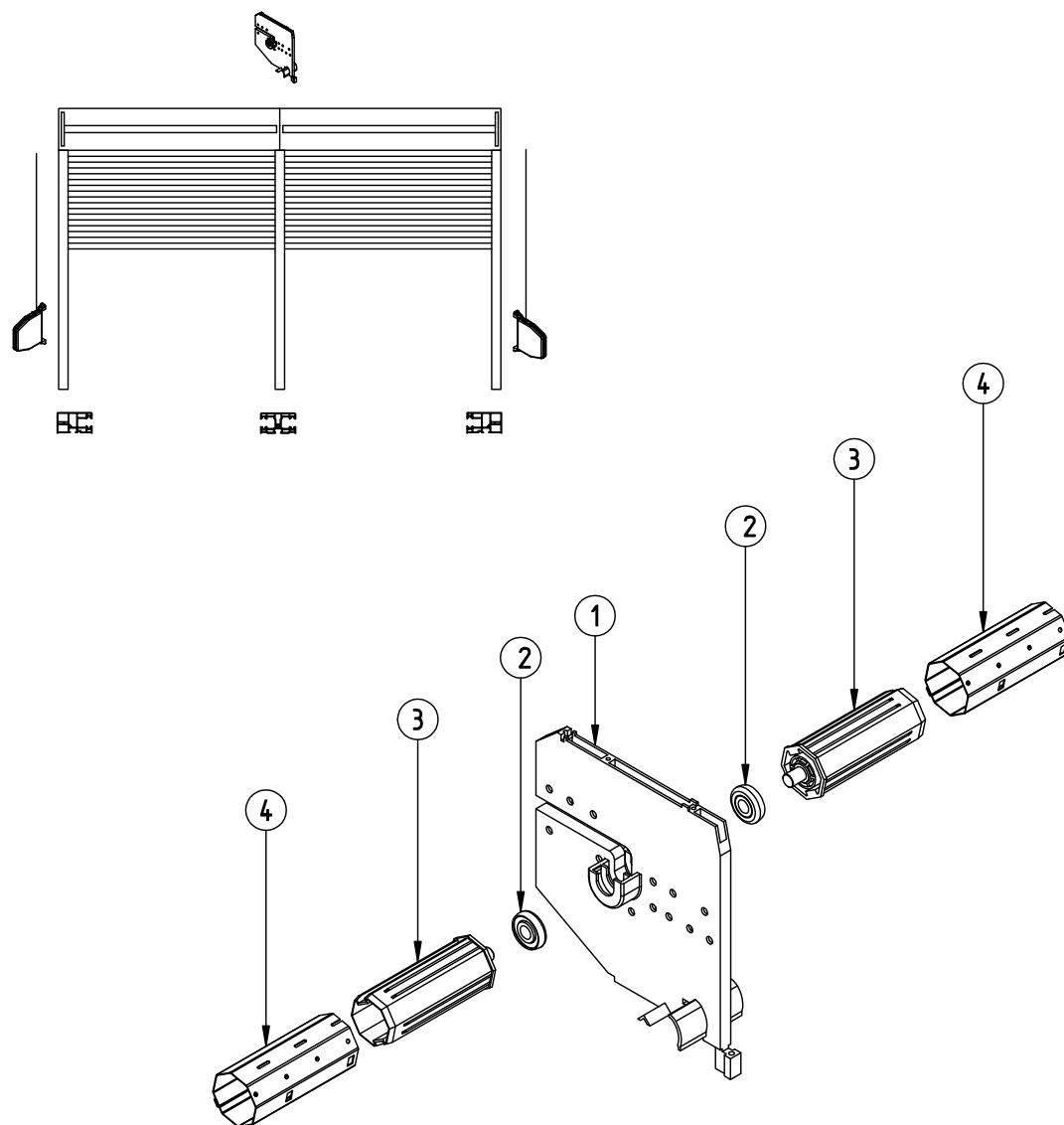
### RKB3

200 box division for two single guides



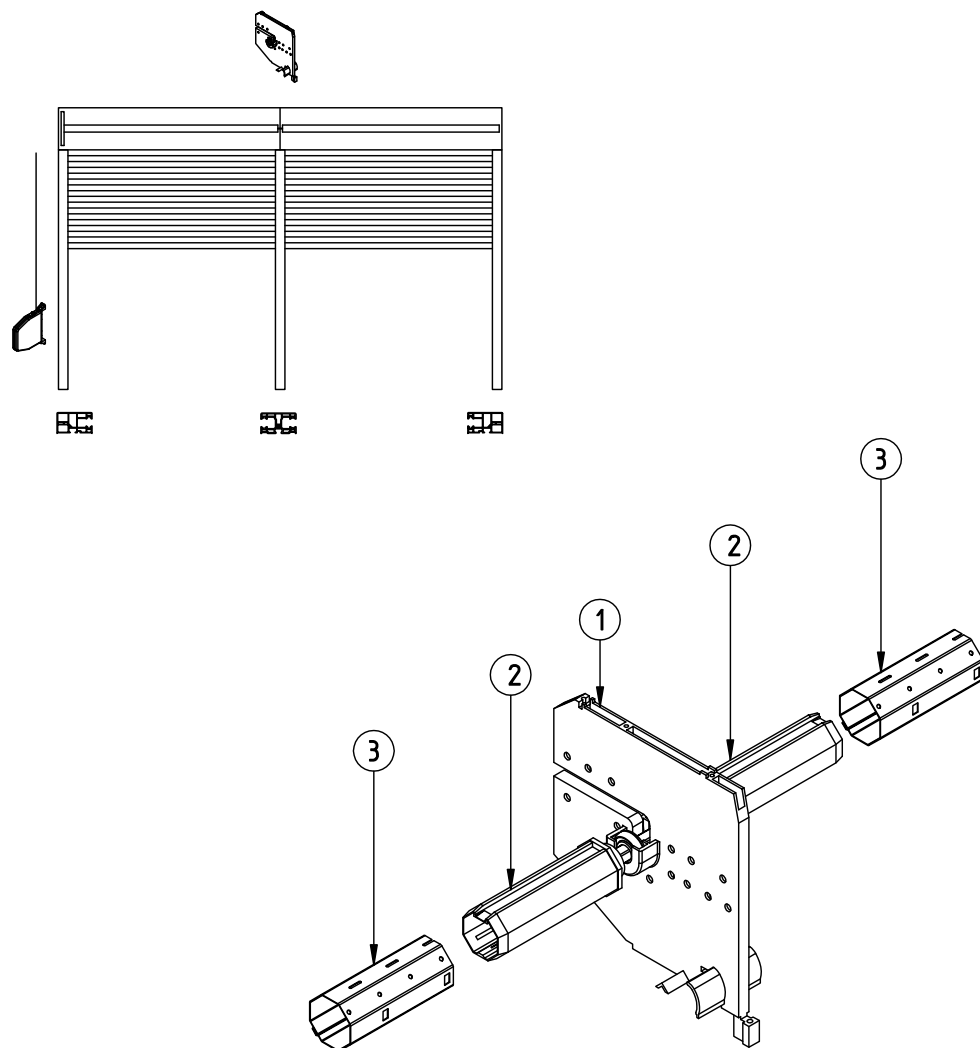
# **ASSEMBLY DRAWINGS**

Division for a double guide in a shutter with independent drive.



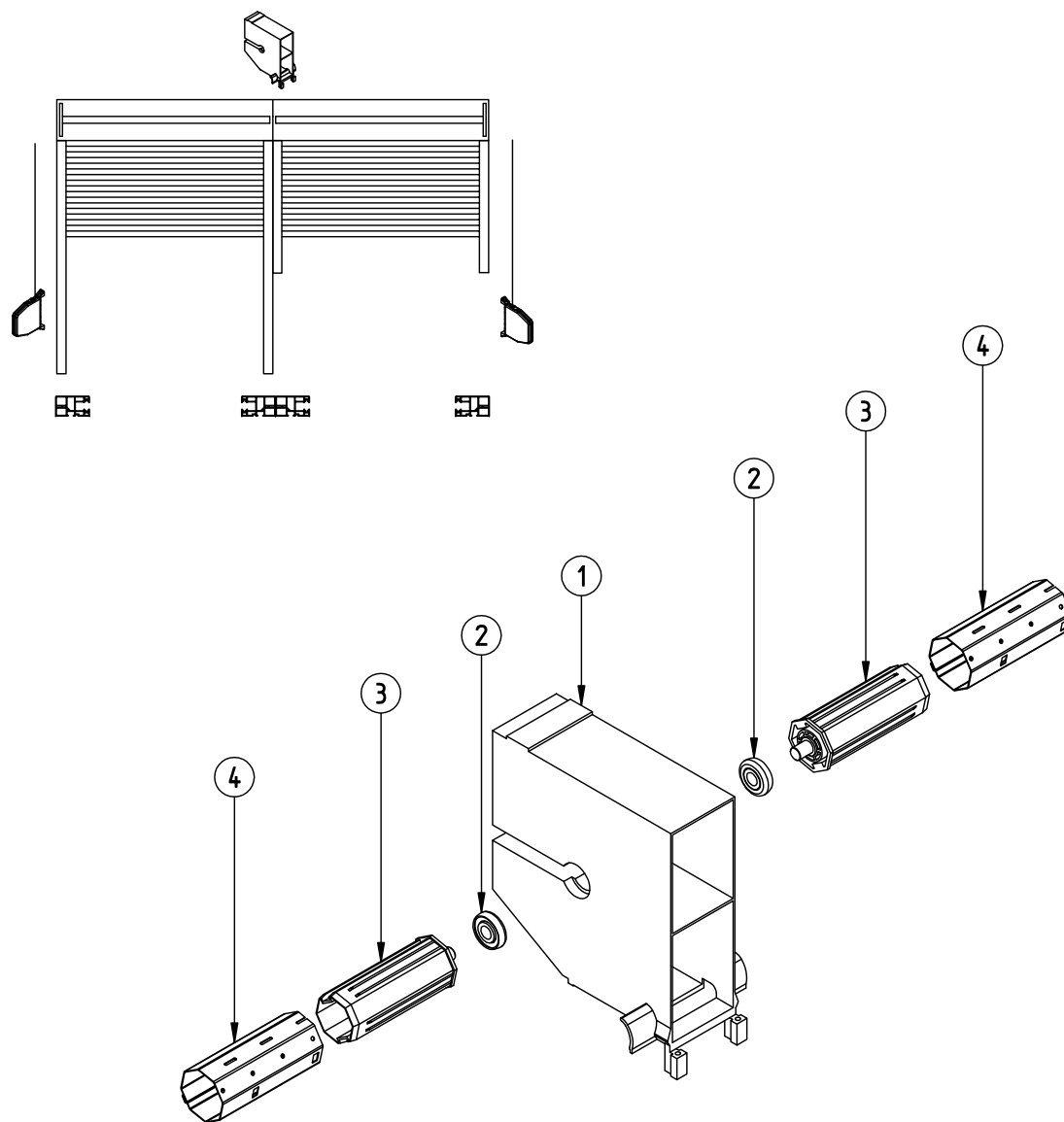
1	RKM201	Centre bearing for box 160
	RKM301	Centre bearing for box 200
2	LO 28/10	Bearing 28/10 for PVC
3	OBS-40-PCV	40 mounting for fi 40 pipe with pin
4	SW 40	Octagonal pipe fi 40

Division for a double guide in a shutter with dependent drive.



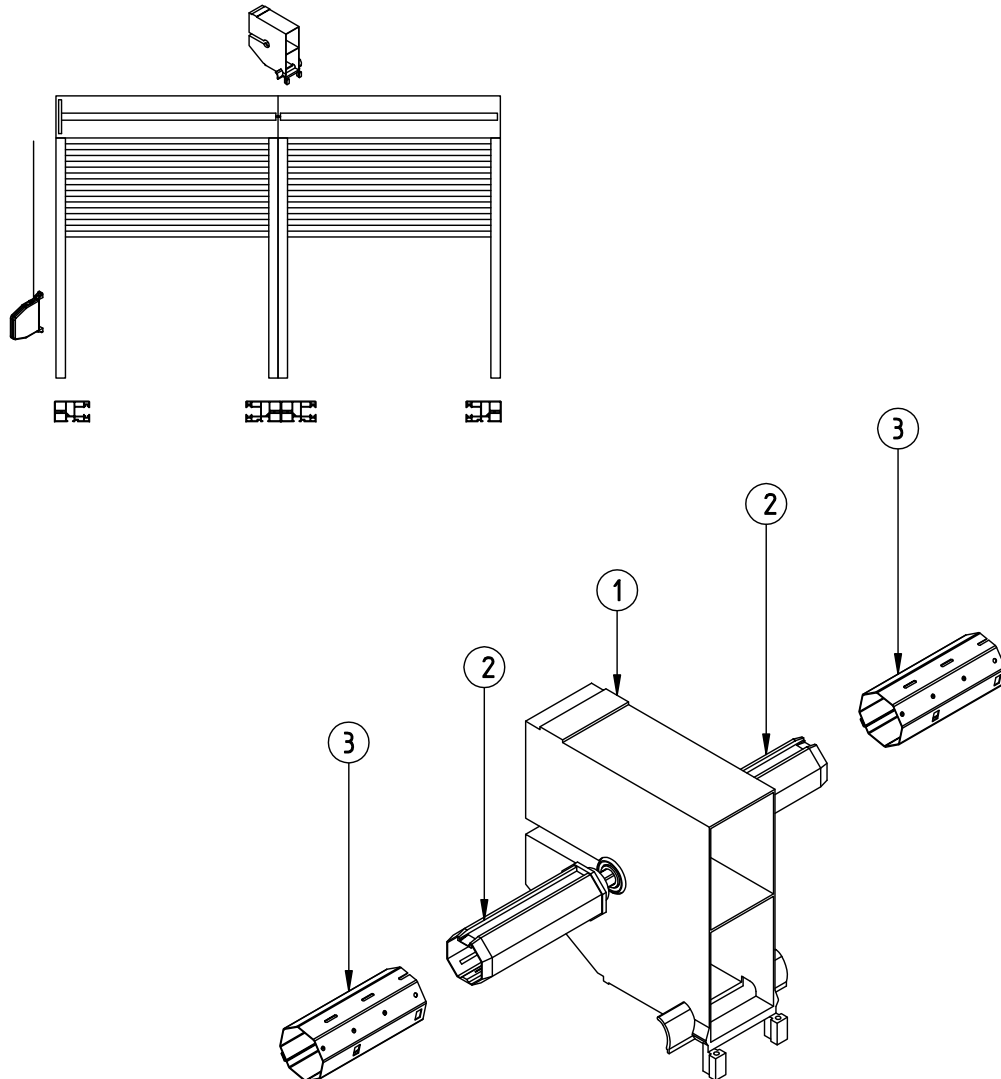
- |   |        |                            |
|---|--------|----------------------------|
| 1 | RKM201 | Centre bearing for box 160 |
|   | RKM301 | Centre bearing for box 200 |
| 2 | RKZ34  | Roller bolt for fi 40 pipe |
| 3 | SW 40  | Octagonal pipe fi 40       |

Division for two single guides in a shutter with independent drive.



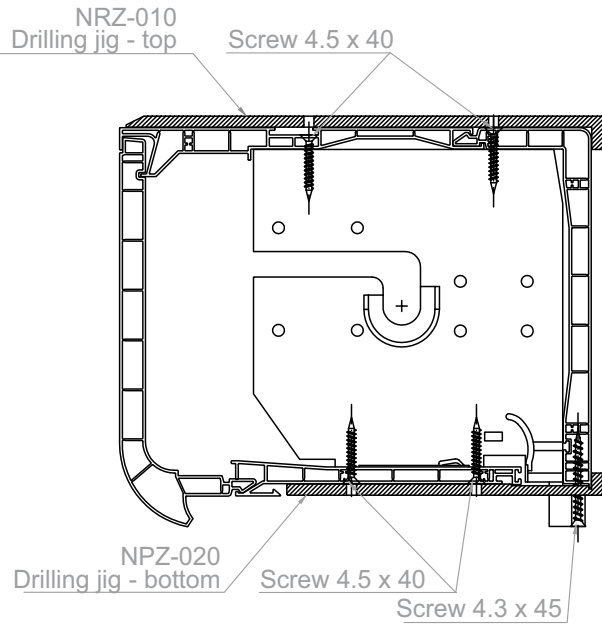
1	RKB2	Bearing for both guides for box 160
	RKB3	Bearing for both guides for box 200
2	LO 28/10	Bearing 28/10 for PVC
3	OBS-40-PCV	40 mounting for fi 40 pipe with pin
4	SW 40	Octagonal pipe fi 40

Division for two single guides in a shutter with dependent drive.

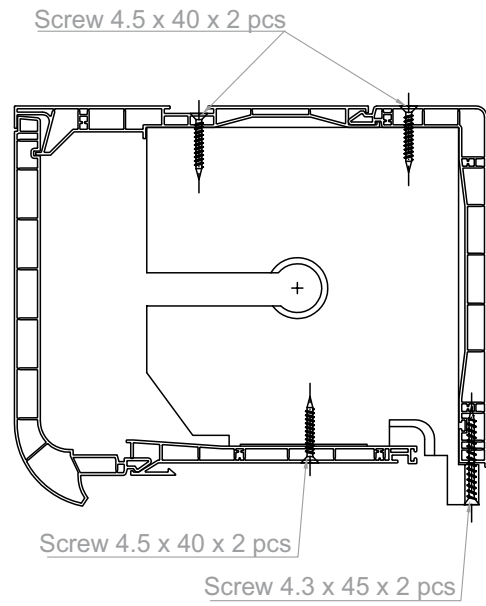


- |   |              |  |
|---|--------------|--|
| 1 | RKB2<br>RKB3 | Bearing for both guides for box 160<br>Bearing for both guides for box 200 |
| 2 | RKZ34        | Roller bolt for ø40 pipe   |
| 3 | SW 40        | Octagonal pipe fi 40   |

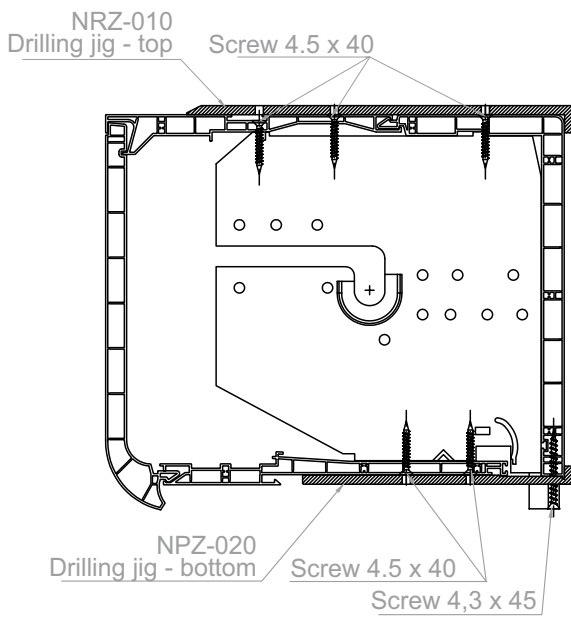
Box 160  
 Installation of the RKM2 division



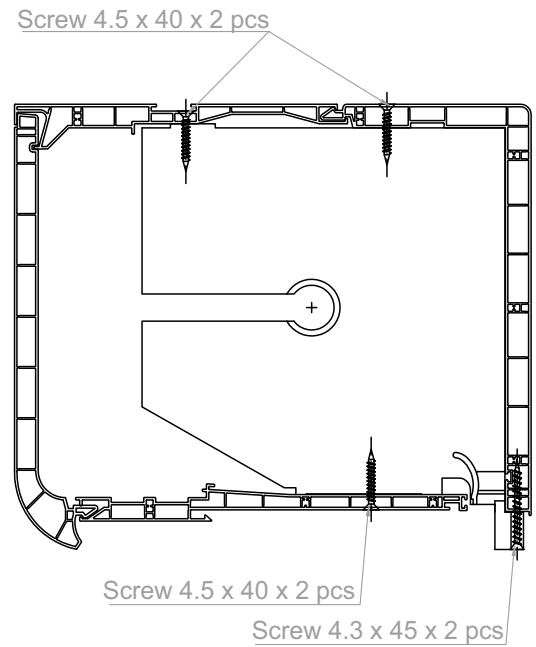
Box 160  
 Installation of the RKB2 division



Box 200  
 Installation of the RKM3 division

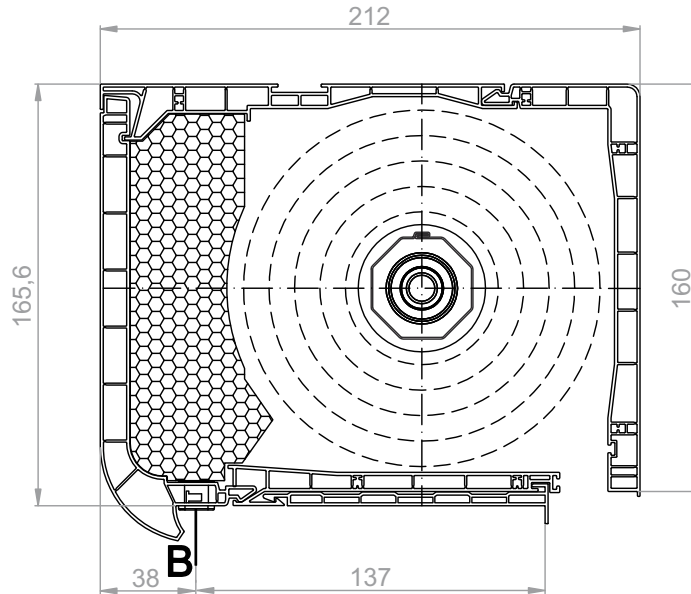


Box 200  
 Installation of the RKB3 division

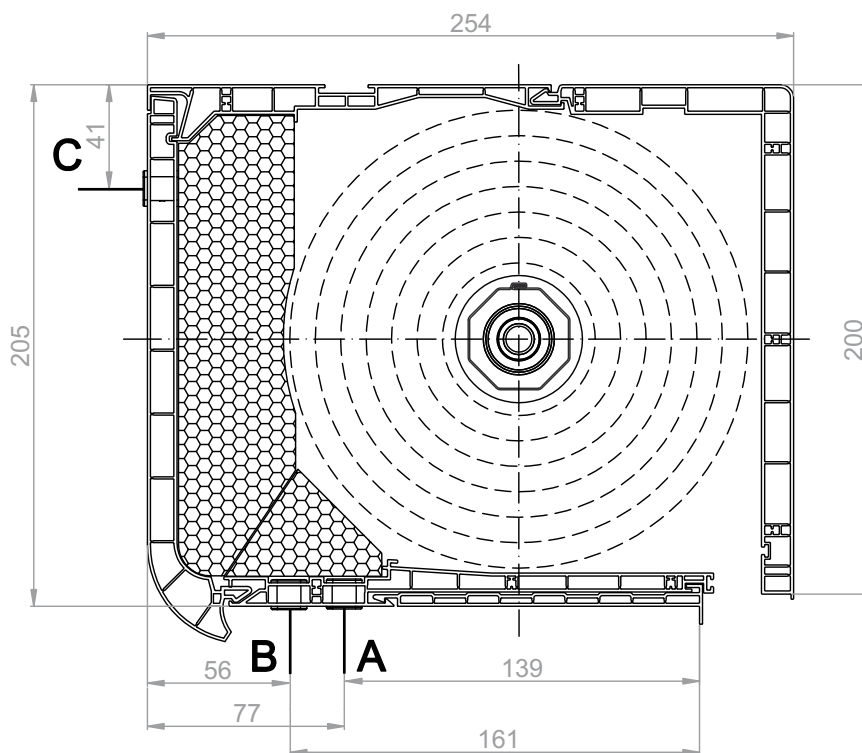




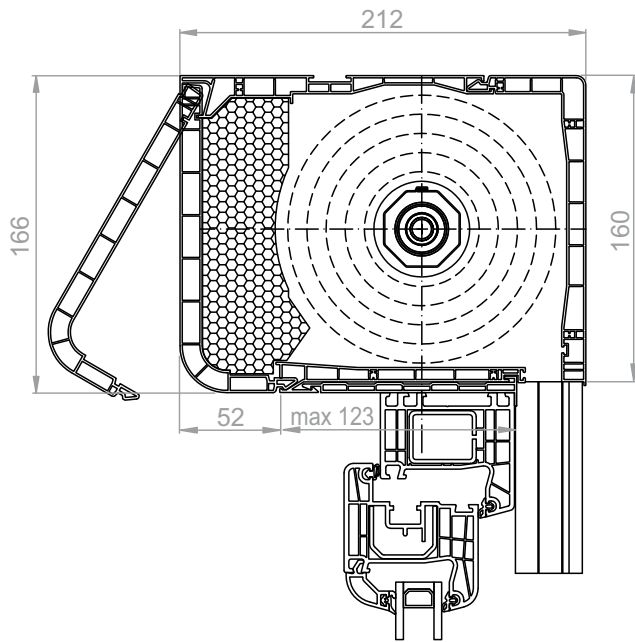
Entry of the tape - 160 box



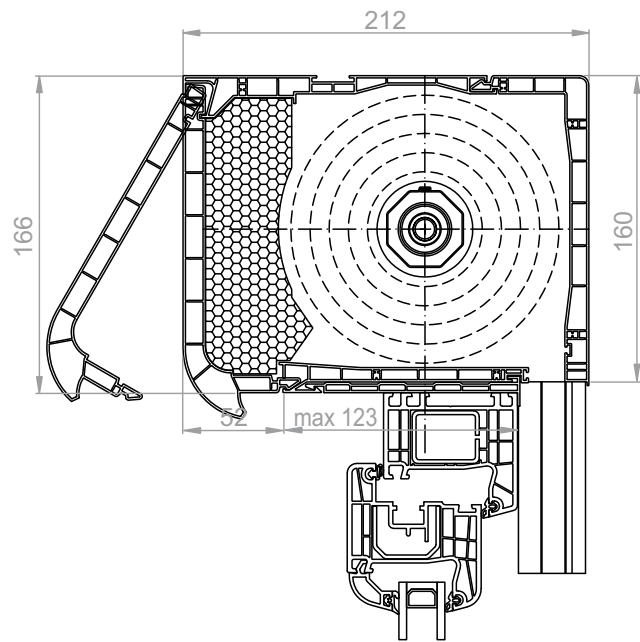
Entry of the tape - 200 box



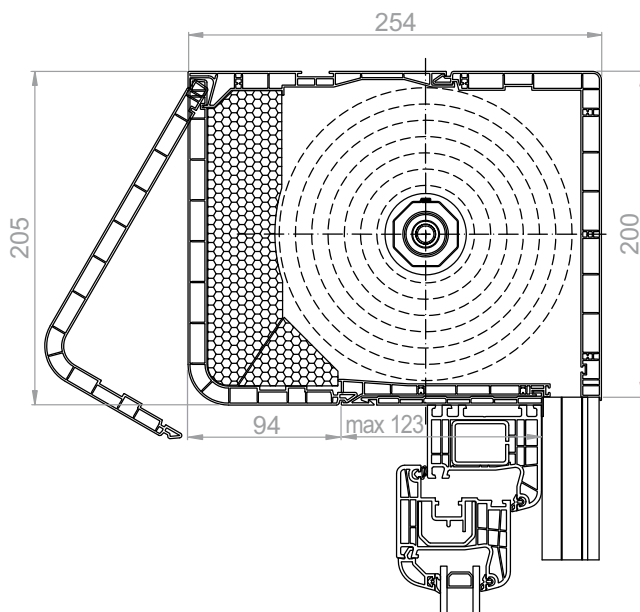
Box 160 - inspection cover without handle



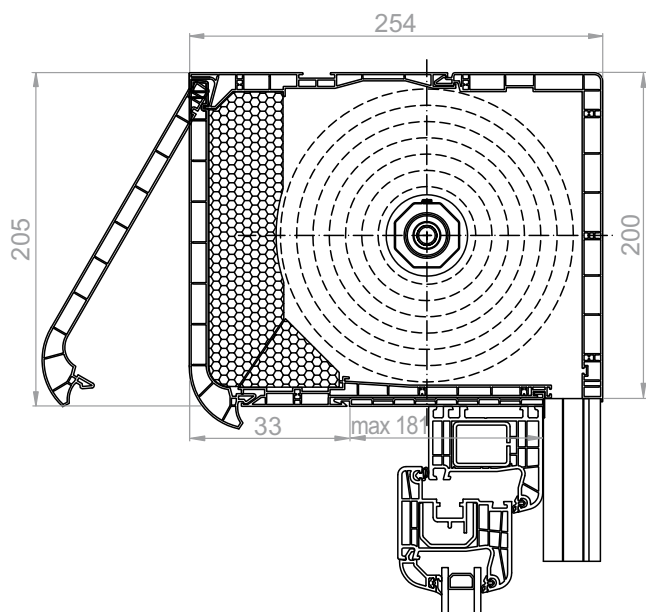
Box 160 - inspection cover with handle

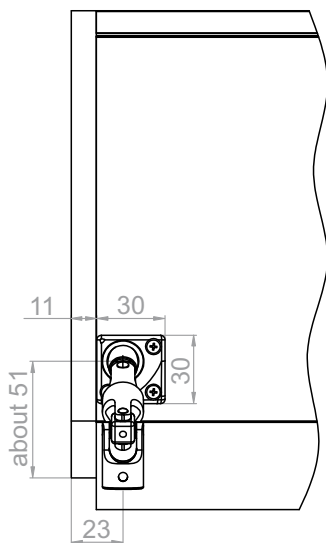
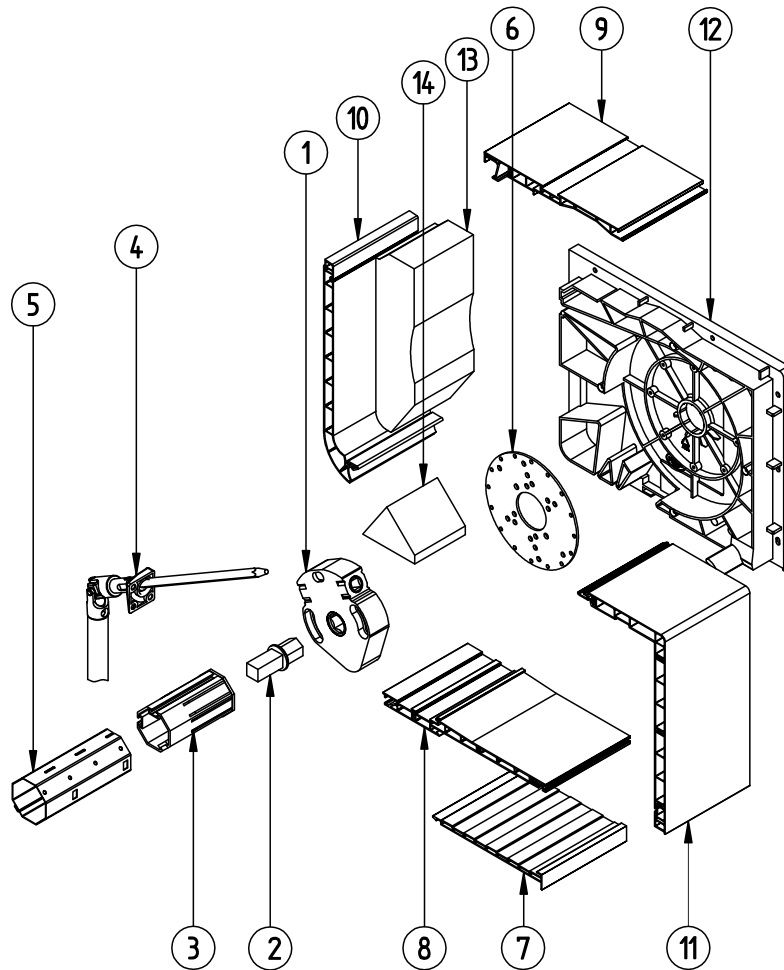


Box 200 - inspection cover without handle



Box 200 - inspection cover with handle

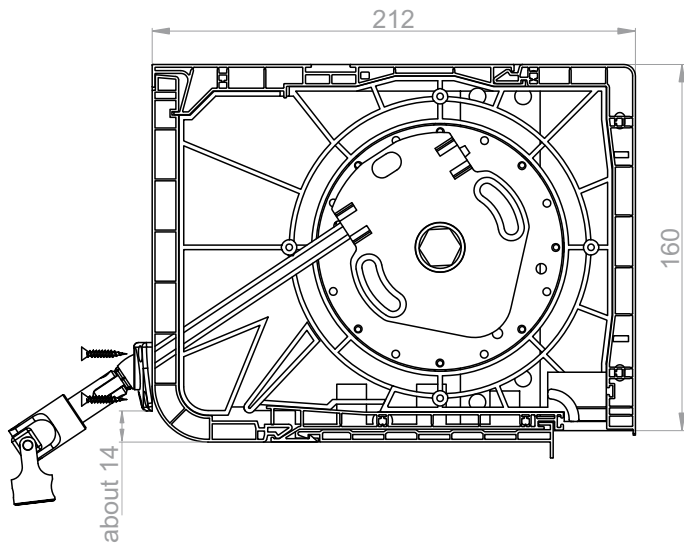




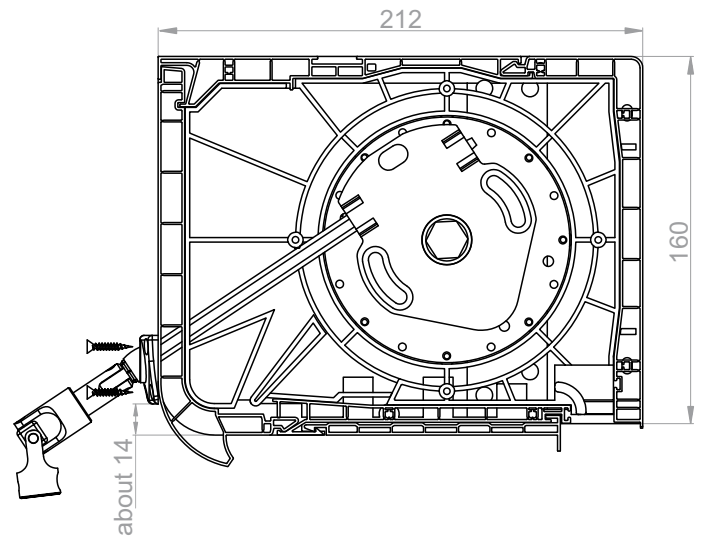
Dimensioning of the cardan mechanism output  
 out of the shutter box

1	ACE-1-8 MAŁY	ACE crank mechanism 1:8 up to 22 kg
2		ACE mechanism pin
3	OBS-40-ACE	40 mounting for the ACE mechanism
	OBS-60-ACE	60 mounting for the ACE mechanism
4	KRH-ZF	Cardan 165 with crank
5	SW 40	Octagonal pipe fi 40
	SW 60	Octagonal pipe fi 60
6	RKZ55	Plate for installation of the motor
7	NRS-010	Adaptation profile
8	NRS-020	Bottom profile of the box 160/200
9	NRS-030	Top profile of the box 160/200
10	NRS-130/140	Inspection cover of the box 160/200 with handle
11	NRS-050/060	Outer profile of the box 160/200
12	NRB-020/030	Side of the box 160/200
13	NRW-020/030	Styrofoam insert of the box 160/200
14	NRW-060	Styrofoam insert of the box 200 part 2

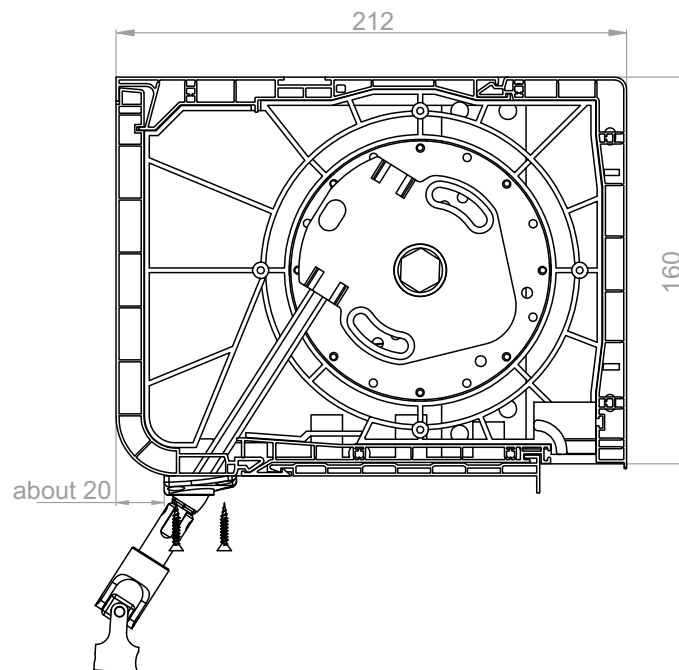
Box 160  
Crank lifting mechanism with cardan joint  
Output at the front at the cover without a handle.



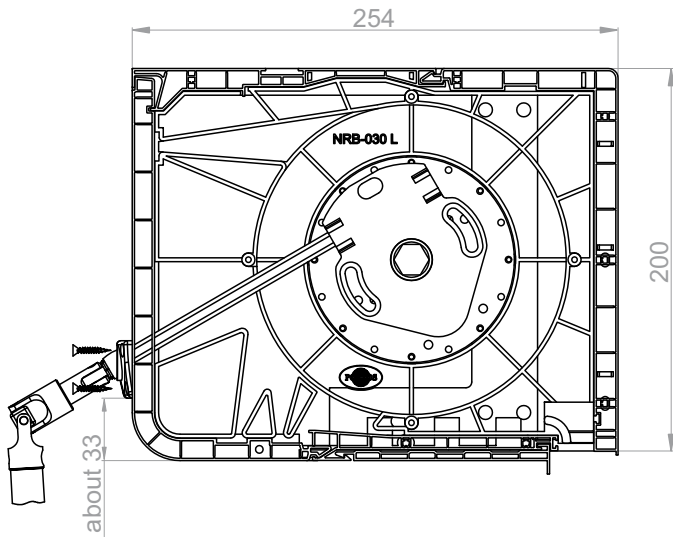
Box 160  
Crank lifting mechanism with cardan joint  
Output at the front at the cover with a handle.



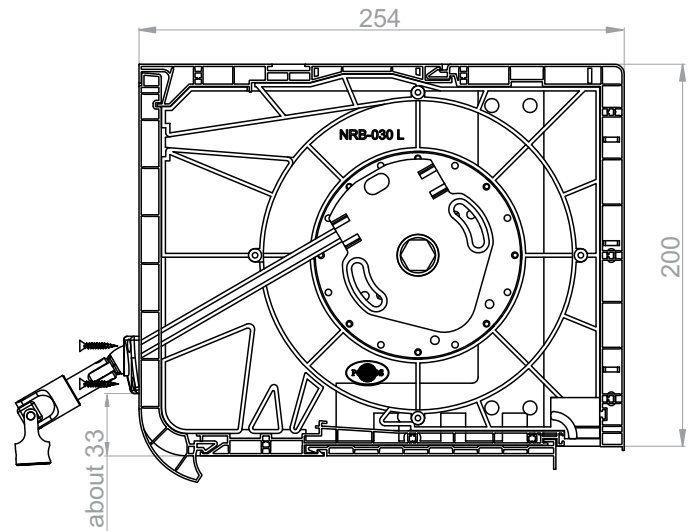
Box 160  
Crank lifting mechanism with cardan joint  
Output at the bottom at the cover without a handle.



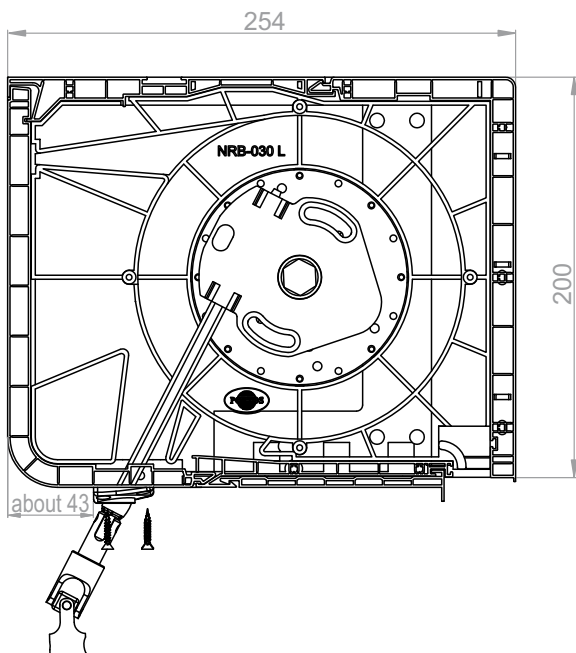
Box 200  
 Crank lifting mechanism with cardan joint  
 Output at the front at the cover without a handle.



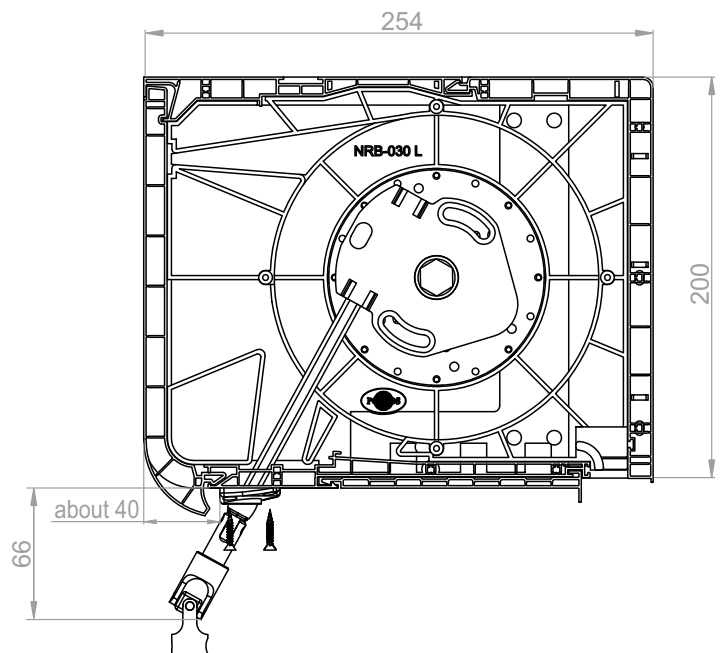
Box 200  
 Crank lifting mechanism with cardan joint  
 Output at the front at the cover with a handle.

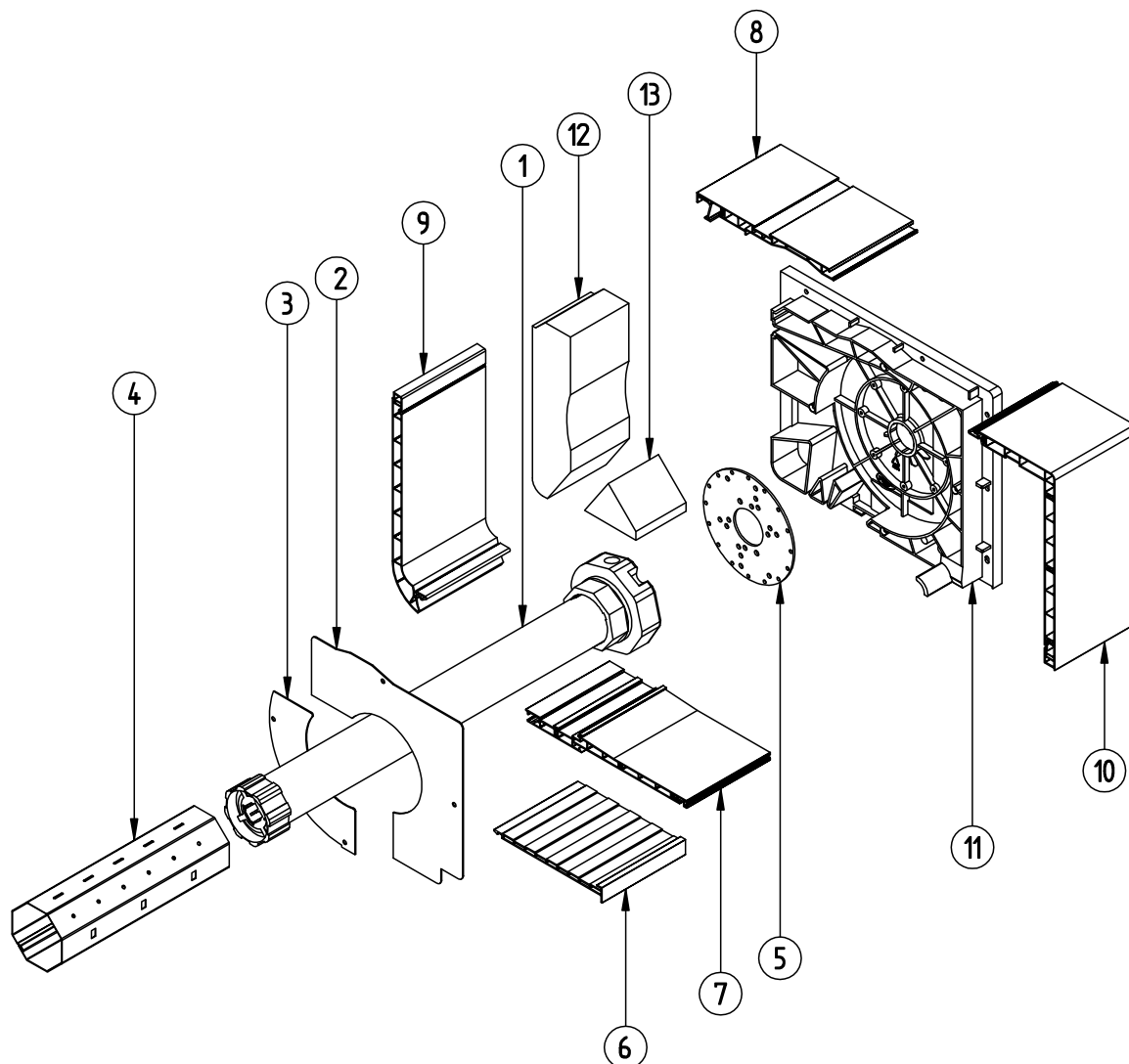


Box 200  
 Crank lifting mechanism with cardan joint  
 Output at the bottom at the cover without a handle.



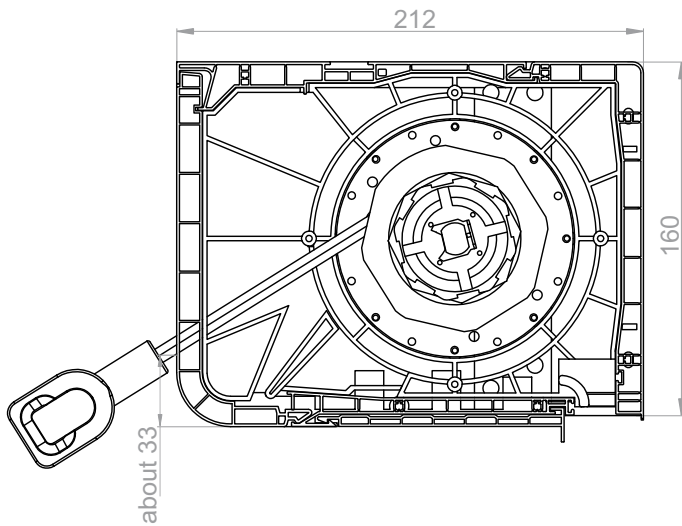
Box 200  
 Crank lifting mechanism with cardan joint  
 Output at the bottom at the cover with a handle.



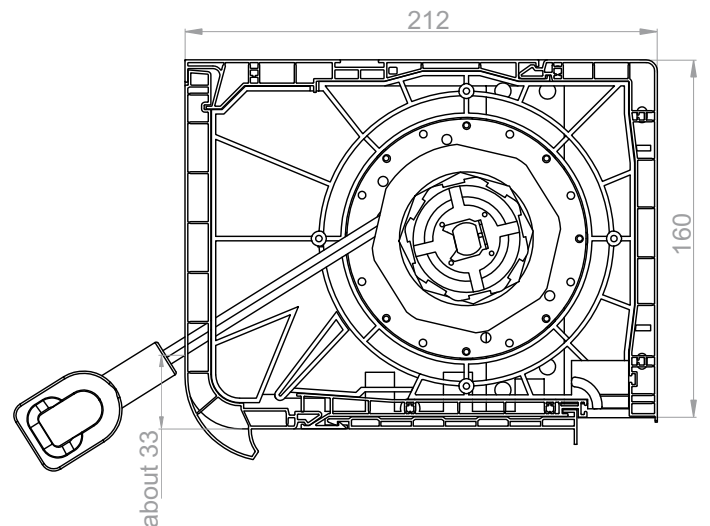


1	S-60/XX NHK	Motor 60 / XX NHK for fi 60 pipe
2	NRT-230	Inner cover of side 200 for motor NHK fi 60 top
3	NRT-240	Inner cover of side 200 for motor NHK fi 60 bottom
4	SW 60	Octagonal pipe fi 60
5	RKZ55	Plate for installation of the motor
6	NRS-010	Adaptation profile
7	NRS-020	Bottom profile of the box 160/200
8	NRS-030	Top profile of the box 160/200
9	NRS-130/140	Inspection cover of the box 160/200 with handle
10	NRS-050/060	Outer profile of the box 160/200
11	NRB-020/030	Side of the box 160/200
12	NRW-020/030	Styrofoam insert of the box 160/200
13	NRW-060	Styrofoam insert of the box 200 part 2

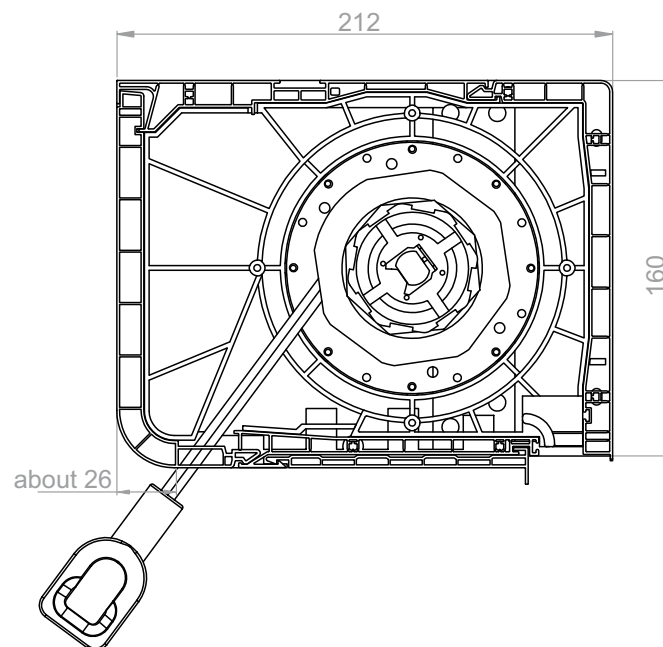
Box 160  
Motor with emergency manual operation (NHK)  
Output at the front at the cover without a handle.



Box 160  
Motor with emergency manual operation (NHK)  
Output at the front at the cover with a handle.

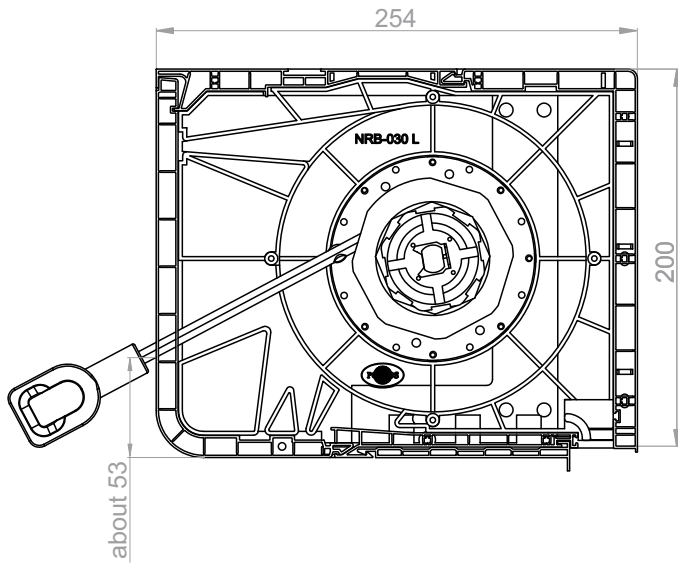


Box 160  
Motor with emergency manual operation (NHK)  
Output at the bottom at the cover without a handle.

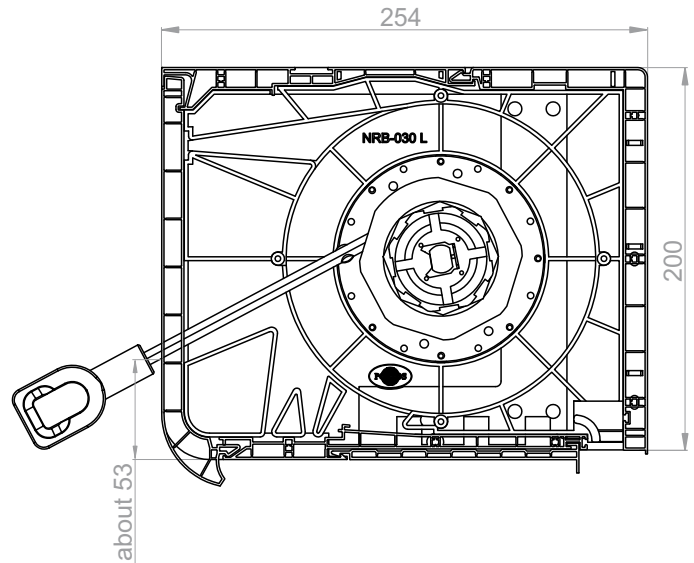


# MX1200<sup>®</sup> System Assembly drawings - installation of the NHK motor

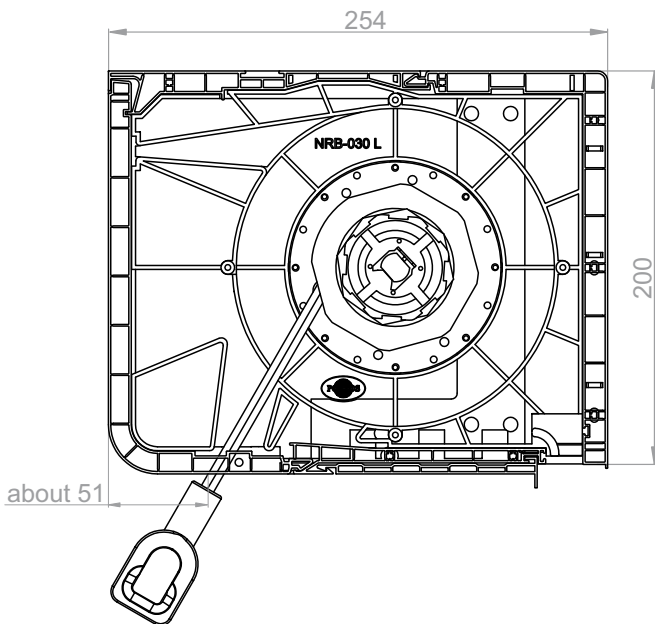
Box 200  
Motor with emergency manual operation (NHK)  
Output at the front at the cover without a handle.



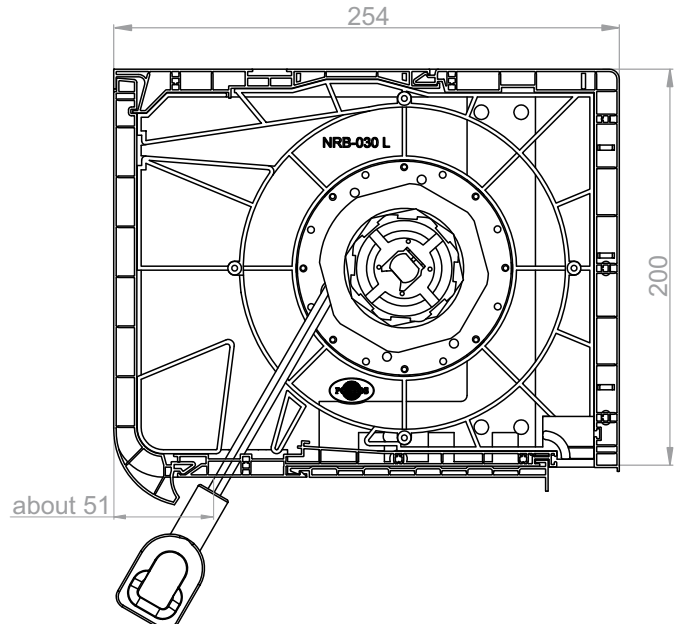
Box 200  
Motor with emergency manual operation (NHK)  
Output at the front at the cover with a handle.



Box 200  
Motor with emergency manual operation (NHK)  
Output at the bottom at the cover without a handle.

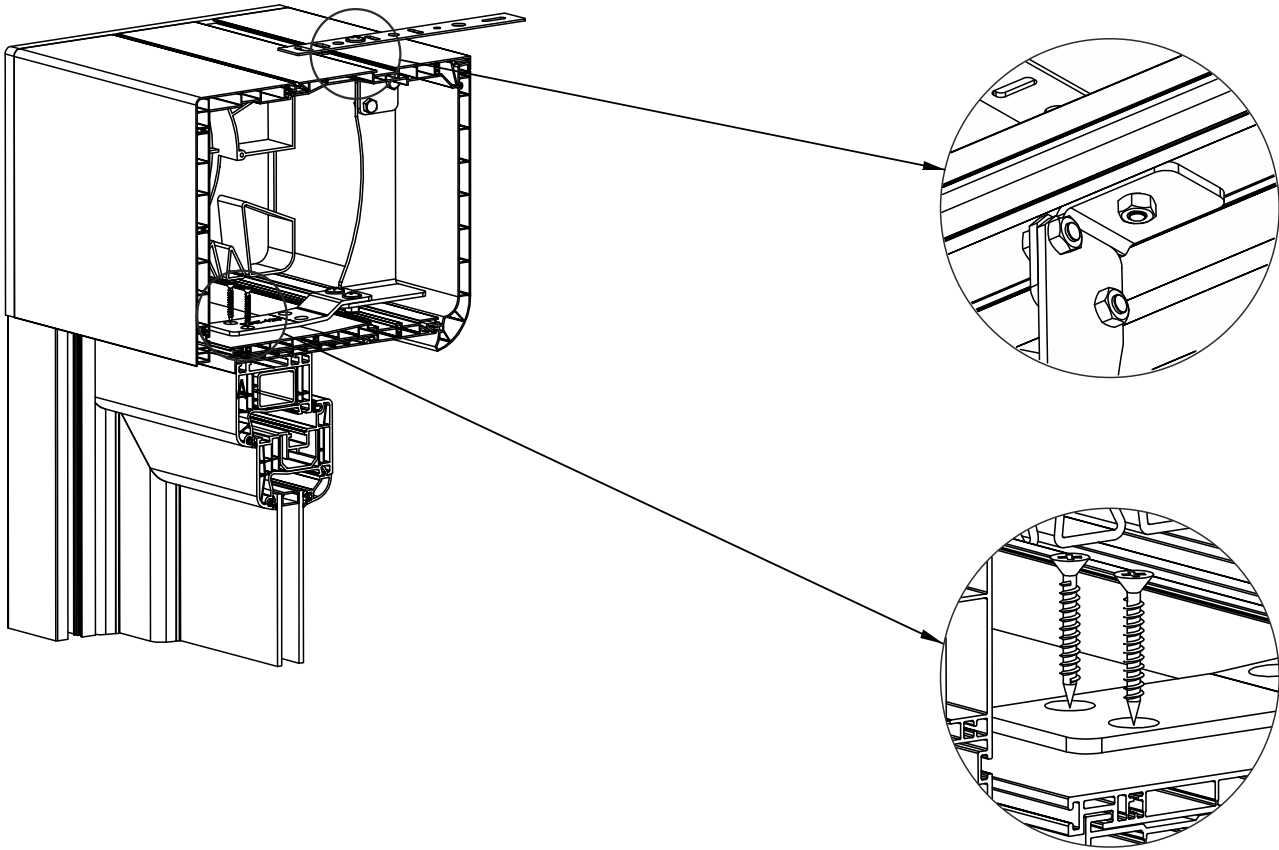


Box 200  
Motor with emergency manual operation (NHK)  
Output at the bottom at the cover with a handle.

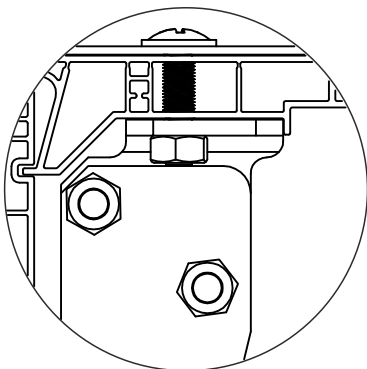




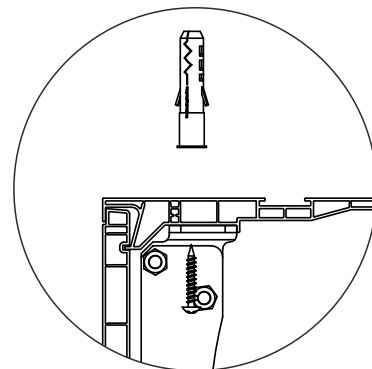
The stabilizing console is mounted as standard every 1m from the outer edge of the box side (with the use of the supplied bolts and screws).



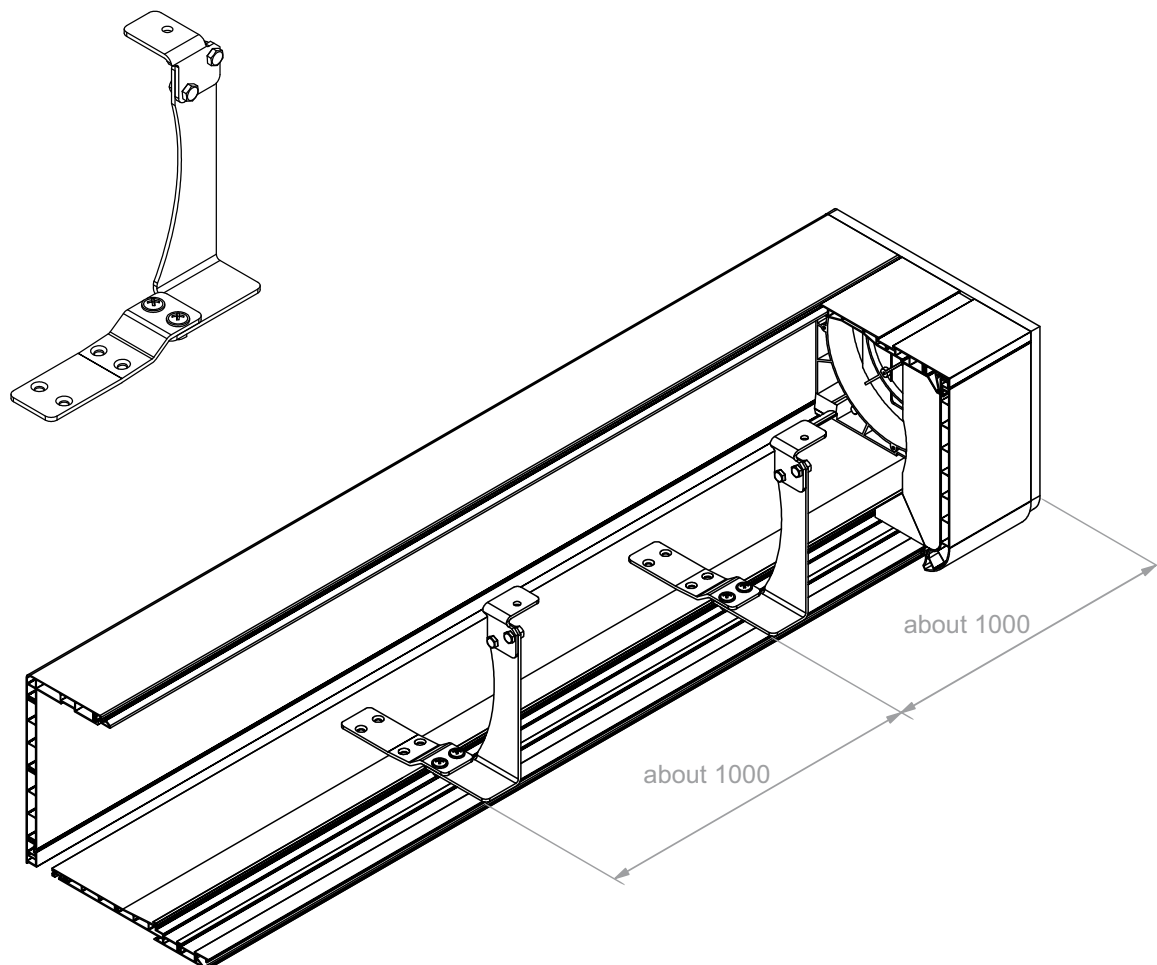
Mounting the stabilizing console in the top part with a mounting anchor.

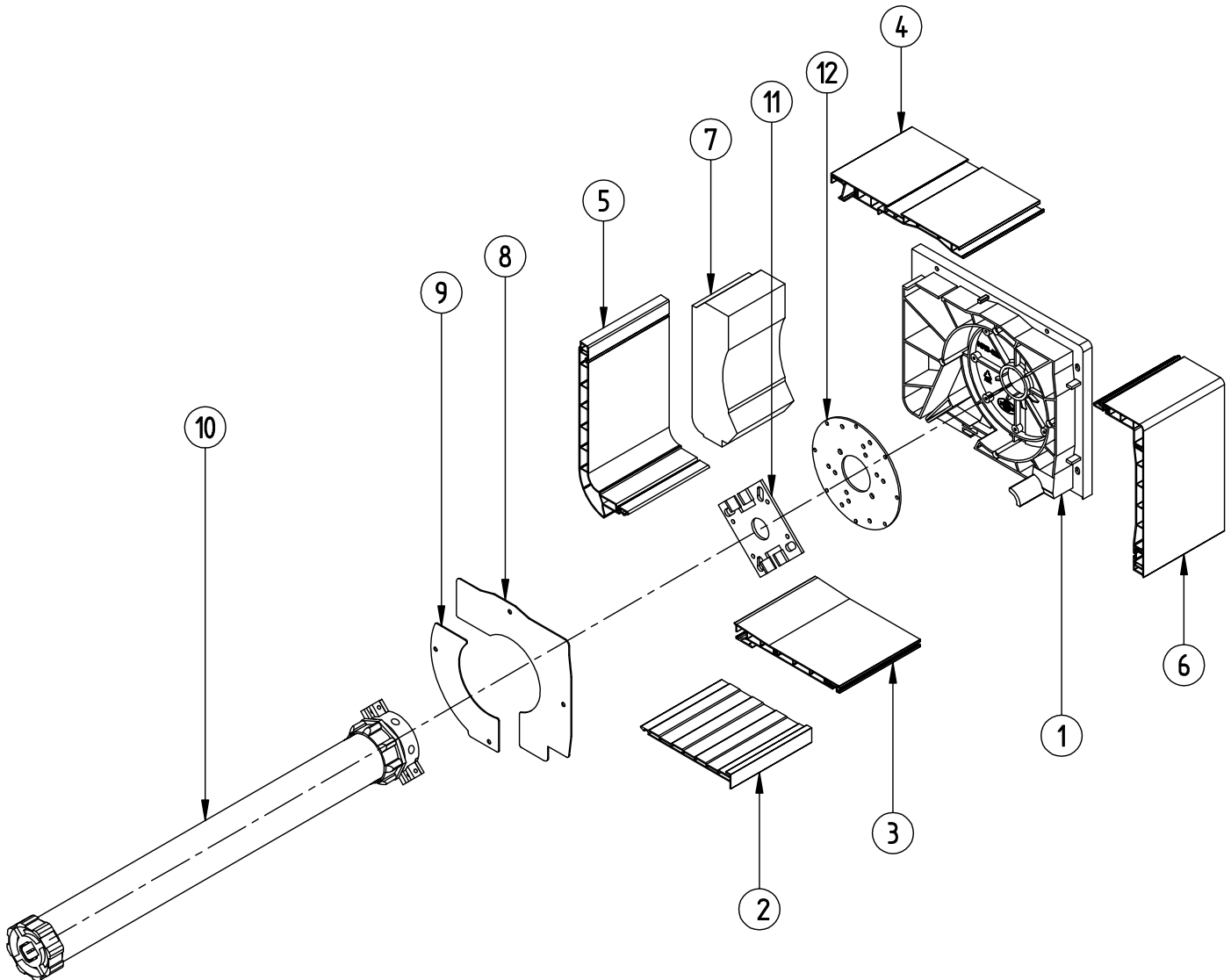


Mounting the stabilizing console in the top part without a mounting anchor.

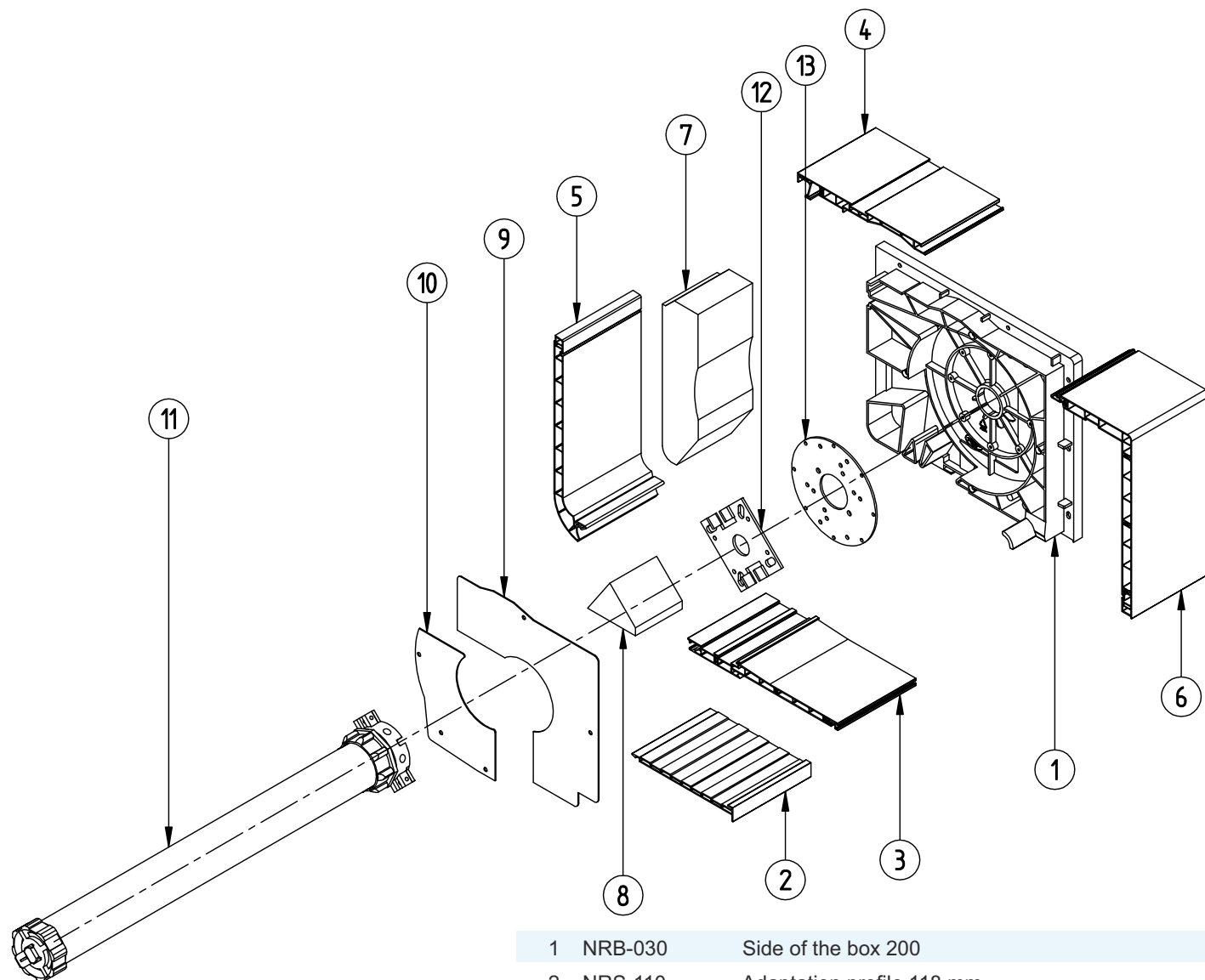


Illustrative arrangement of the stabilizing console in the MX1200 shutter box.



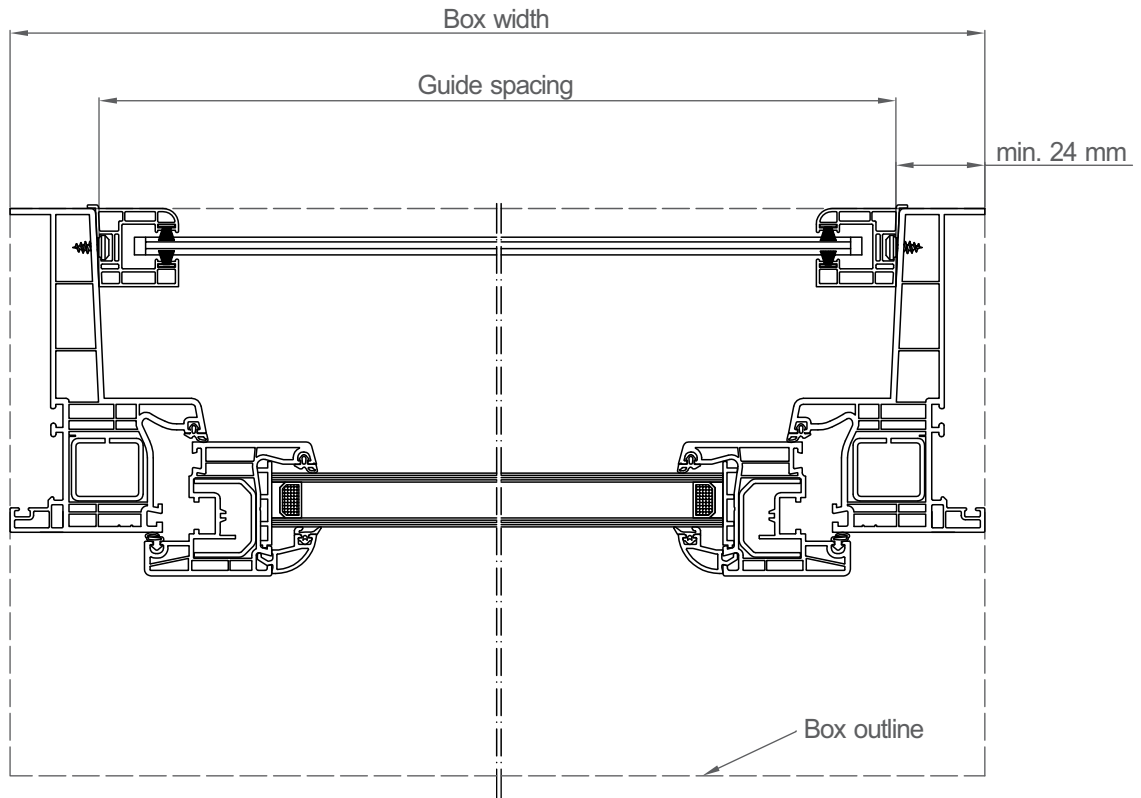


1	NRB-020	Side of the box 160
2	NRS-010	Adaptation profile 101 mm
3	NRS-020	Bottom profile of the box 160/200
4	NRS-030	Top profile of the box 160/200
5	NRS-130	Inspection cover of the box 160 with handle
6	NRS-070	Outer profile of the box 160
7	NRW-020	Styrofoam insert of the box 160
8	NRT-130	Inner cover of side 160 for fi 40 mounting top
	NRT-150	Inner cover of side 160 for fi 60 mounting top
9	NRT-140	Inner cover of side 160 for fi 40 mounting bottom
	NRT-160	Inner cover of side 160 for fi 60 mounting bottom
10	S-40/xx (60/xx)	Motor for fi 40 (60) pipe
11		Motor handle (included in the motor set)
12	RKZ55	Plate for installation of the motor

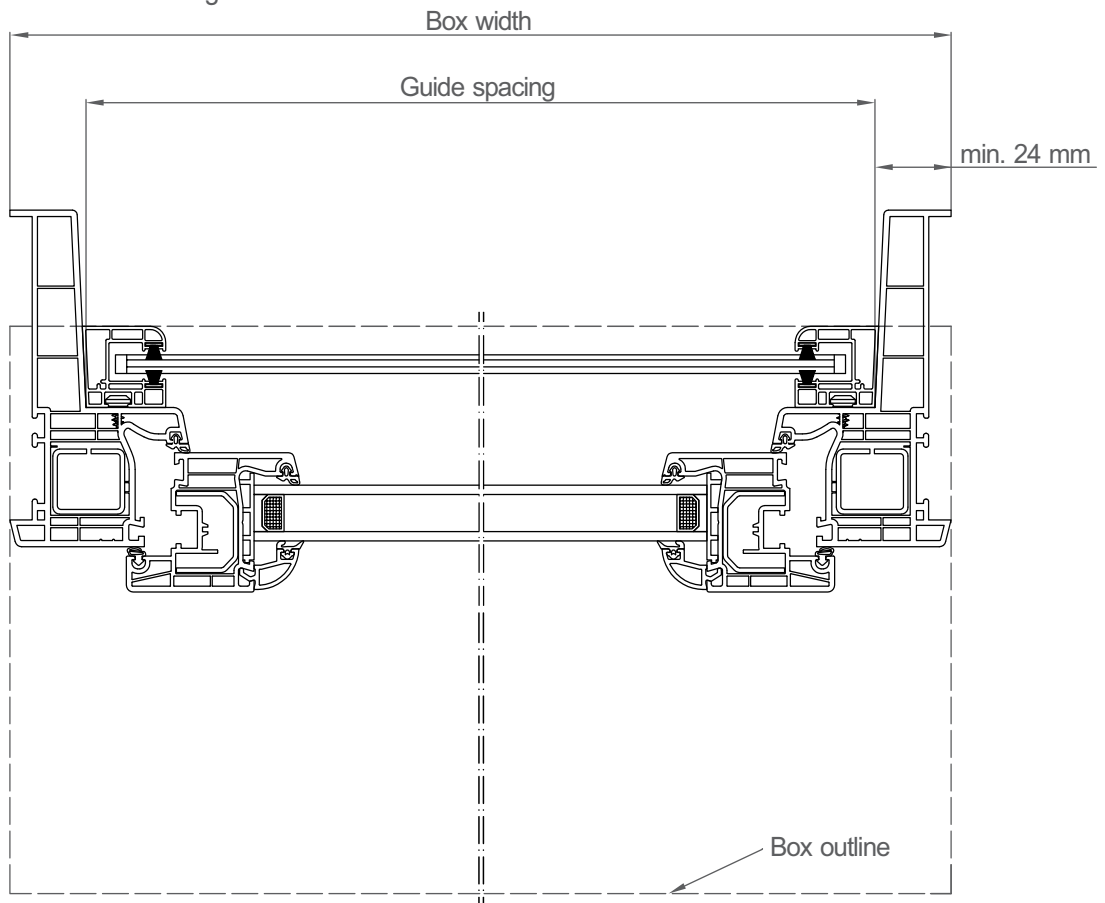


1	NRB-030	Side of the box 200
2	NRS-110	Adaptation profile 118 mm
3	NRS-120	Bottom profile of the box 200
4	NRS-030	Top profile of the box 160/200
5	NRS-140	Inspection cover of the box 200 with handle
6	NRS-080	Outer profile of the box 200
7	NRW-030	Styrofoam insert of the box 200
8	NRW-060	Styrofoam insert of the box 200 part 2
9	NRT-170	Inner cover of side 200 for fi 40 mounting top
	NRT-190	Inner cover of side 200 for fi 60 mounting top
10	NRT-180	Inner cover of side 200 for fi 40 mounting bottom
	NRT-200	Inner cover of side 200 for fi 60 mounting bottom
11	S-40/xx (60/xx)	Motor for fi 40 (60) pipe
12		Motor handle (included in the motor set)
13	RKZ55	Plate for installation of the motor

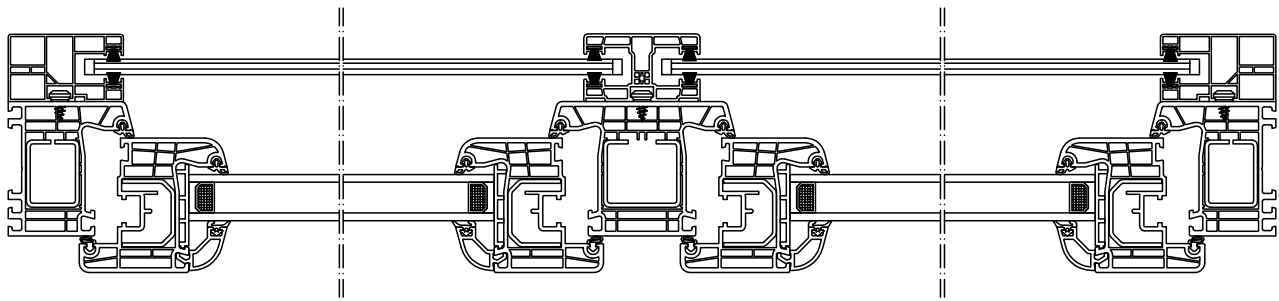
Installation of the NRR-010 narrow guide with flange.



Installation of the NRR-020 narrow guide

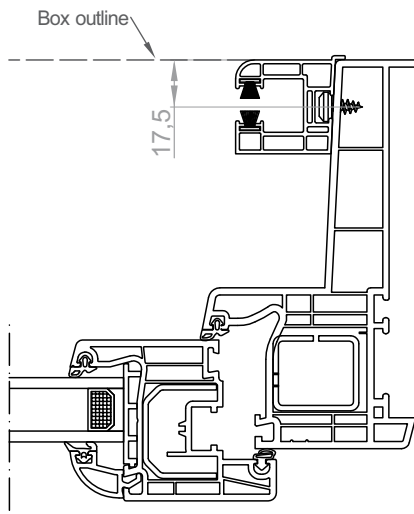


Installation of RK16 single guide with RK18 double guide

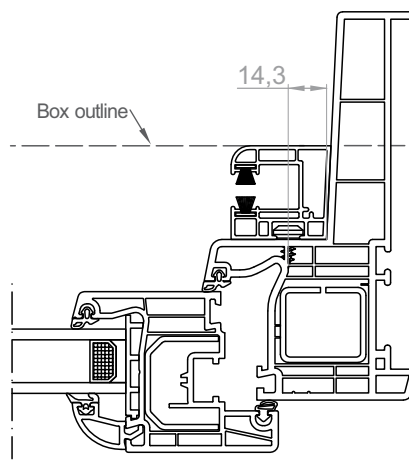


View of guides with a window frame

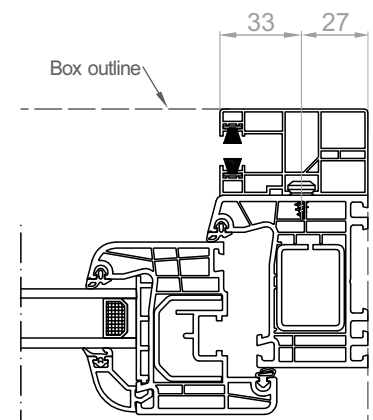
NRR-010 guide



NRR-020 guide



RK16 guide



## PA 39 and PA 45 curtain (including profile plugs)

Type of the box	width 0.35-2 m, max. area 6.5 m <sup>2</sup>			width 0.35-2.5 m, max. area 6.5 m <sup>2</sup>			width 0.35-3 m, max. area 6.5 m <sup>2</sup>		
	Max. height of the shutter with box			Max. height of the shutter with box			Max. height of the shutter with box		
		with the use of automatic bolt (cm)	with the use of the blocking bracket (cm)		with the use of automatic bolt (cm)	with the use of the blocking bracket (cm)		with the use of automatic bolt (cm)	with the use of the blocking bracket (cm)
<b>PVC</b>	PA 39 ø 40+PZ50	PA 39 ø 40-rygiel	PA 39 ø 40-WB.	PA 39 ø 60+PZ70	PA 39 ø 60-rygiel	PA 39 ø 60-WB	PA 45 ø 60+PZ70	PA 45 ø 60-rygiel	PA 45 ø 60-WB
<b>160 mm</b>	202	198	202	194	190	187	163	163	158
<b>160 mm with the stabilizing console</b>	198	198	195	187	175	187	136	136	140
<b>160 mm with additional Styrofoam insert</b>	101	101	101	85	85	81	59	59	59
<b>200 mm</b>	343	335	347	344	344	339	279	279	270
<b>200 mm with the stabilizing console</b>	300	300	339	331	331	316	226	226	226
<b>200 mm with additional Styrofoam insert</b>	206	206	206	195	195	195	162	162	153

**NOTE!** With the shutter width of more than 2 m (for divisions in one box) use ø 60.

For shutters with a width of more than 1.8 m it is advisable to include a stabilizing console.

For each shutter it is recommended to include mounting anchors counting 40 cm from the sides of the box, each subsequent anchor is mounted every 50 cm.

PZ - expansion ring from ø 40 to ø 50 or from ø 60 to ø 70.

## Nachweis Luftschalldämmung von Bauteilen

Prüfbericht  
Nr. 14-004002-PR01  
(PB Z02-E01-04-de-01)



Auftraggeber  
**PORTOS**  
ul. Ziota 71  
62-800 Kalisz  
Polen

Grundlagen  
EN ISO 10140-1:2010  
+A1:2012 + A2:2014  
EN ISO 10140-2:2010  
EN ISO 717-1:2013

Produkt  
**Rollladen-Aufsatzkasten**  
Bezeichnung **MX1200/160**



Außenmaß (b x h) **1230 mm x 165 mm**  
Querschnitt **212 mm x 165 mm**

Material **Kunststoff-Hohlprofile**

Antrieb **Motorantrieb**

Besonderheiten **J**

Verwendungshinweise  
Dieser Prüfbericht dient als Nachweis der Luftschalldämmung eines Bauteils.  
Für Deutschland gilt  
-  $R_{n,w}$  nach DIN 4109 ( $R_{n,w} = R_n - 2$  dB)  
-  $R_{n,w}$  für Bauregelleiste

**Bewertetes Schalldämm-Maß  $R_w$**   
**Bewertete Normschallpegeldifferenz kleiner Bauteile  $D_{n,w}$**   
**Spektrum-Anpassungswerte C und  $C_w$**

Rollpanzer oben:  
 $R_w$  (C;  $C_w$ ) = 34 (-1; -3) dB  
 $D_{n,w}$  (C;  $C_w$ ) = 50 (-1; -3) dB

Rollpanzer unten:  
 $R_w$  (C;  $C_w$ ) = 37 (-1; -4) dB  
 $D_{n,w}$  (C;  $C_w$ ) = 53 (-1; -3) dB

ift Rosenheim  
09.03.2015

*J. Kemiger*  
Dr. Joachim Hessinger, Dipl.-Phys.  
Prüfstellenleiter  
Bauakustik

*H. Mörchow*  
Herrning Mörchow, Dipl.-Ing. (FH)  
Prüfingenieur  
Bauakustik

Gültigkeit  
Die genannten Daten und Ergebnisse beziehen sich ausschließlich auf den geprüften und beschriebenen Probekörper.  
Die Prüfung einer Leistungseigenschaft berechtigt keine Aussage über weitere leistung- und qualitätsbestimmenden Eigenschaften der vorliegenden Konstruktion.

Veröffentlichungshinweise  
Es gilt das ift-Merkblatt „Bedingungen und Hinweise zur Verwendung von ift-Prüfprotokollen“ und „Bestimmung der Gesamtschalldämmung eines Fensters mit Rolladenkasten“. Das Deckblatt kann als Kurzfassung verwendet werden.

Inhalt  
Der Nachweis umfasst insgesamt 10 Seiten:  
1. Gegenstand  
2. Durchführung  
3. Einzelergebnisse  
4. Verwendungshinweise  
Messblatt (2 Seiten)

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Inmetro - EN ISO/IEC 17025  
Zertifizierung Produkte - EN ISO/IEC 17067  
Zertifizierung Managementsysteme - EN ISO/IEC 17021



## Nachweis Luftschalldämmung von Bauteilen

Prüfbericht  
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(PB Z01-E01-04-de-01)



Auftraggeber  
**PORTOS**  
ul. Ziota 71  
62-800 Kalisz  
Polen

Grundlagen  
EN ISO 10140-1:2010  
+A1:2012 + A2:2014  
EN ISO 10140-2:2010  
EN ISO 717-1:2013

Produkt  
**Rollladen-Aufsatzkasten**  
Bezeichnung **MX1200/200**



Außenmaß (b x h) **1230 mm x 205 mm**  
Querschnitt **254 mm x 205 mm**

Material **Kunststoff-Hohlprofile**

Antrieb **Motorantrieb**

Besonderheiten **J**

Verwendungshinweise  
Dieser Prüfbericht dient als Nachweis der Luftschalldämmung eines Bauteils.  
Für Deutschland gilt  
-  $R_{n,w}$  nach DIN 4109 ( $R_{n,w} = R_n - 2$  dB)  
-  $R_{n,w}$  für Bauregelleiste

**Bewertetes Schalldämm-Maß  $R_w$**   
**Bewertete Normschallpegeldifferenz kleiner Bauteile  $D_{n,w}$**   
**Spektrum-Anpassungswerte C und  $C_w$**

Rollpanzer oben:  
 $R_w$  (C;  $C_w$ ) = 33 (-1; -3) dB  
 $D_{n,w}$  (C;  $C_w$ ) = 49 (-1; -4) dB

Rollpanzer unten:  
 $R_w$  (C;  $C_w$ ) = 33 (-1; -5) dB  
 $D_{n,w}$  (C;  $C_w$ ) = 49 (-2; -5) dB

ift Rosenheim  
09.03.2015

*J. Kemiger*  
Dr. Joachim Hessinger, Dipl.-Phys.  
Stv. Prüfstellenleiter  
Bauphysik

*H. Mörchow*  
Herrning Mörchow, Dipl.-Ing. (FH)  
Prüfingenieur  
Bauakustik

Gültigkeit  
Die genannten Daten und Ergebnisse beziehen sich ausschließlich auf den geprüften und beschriebenen Probekörper.  
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Veröffentlichungshinweise  
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Zertifizierung Produkte - EN ISO/IEC 17067  
Zertifizierung Managementsysteme - EN ISO/IEC 17021



## Evidence of Performance Calculation of thermal transmittance

Test Report  
No. 15-001690-PR01  
(PB-E01-06-en-01)



Client  
**PORTOS**  
ul. Ziota 71  
62-800 Kalisz  
Poland

Basis  
EN ISO 10077-2:2012-02  
SG 05-verpflichtend  
NB-CPS-02/0111083 2011-09

Product  
**Roller shutter box**  
Designation System **MX1200® - 160**

Representation

Performance-relevant product details  
Material: polyvinylchloride (PVC-U), rigid; View width in mm 166; Overall depth in mm 212; Inlay foam; Material expanded polystyrene "PRO-LAMBDA"; Thermal conductivity in W/(m·K) 0,032; Roller shutter; Thickness  $e_s$  in mm 8,5; Outlet slot of the shutter; Width  $a_{out}$  in mm 19; Sealing: pile weather stripping; in cavity in the shutter box unventilated ( $e_s + e_s \leq 2$  mm); Replacement panel; Material adiabatic; Thickness in mm 70; Length L in mm 105



Special features  
Results  
Calculation of thermal transmittance referring to EN ISO 10077-2:2012-02  
 $U_{sb} = 0,75$  W/(m<sup>2</sup>K)

Specified by the customer the thermal transmittance  $U_{sb}$  was, deviating to the EN ISO 10077-2, calculated with 70 mm adiabatic panel (instead of 60 mm).

Instructions for use  
The results obtained can be used as evidence in accordance with the above basis.

Validity  
The data and results given relate solely to the tested and described specimen. This test does not allow any statement to be made on further characteristics of the present structure regarding performance and quality.

Notes on publication  
The ift-Guidance Sheet "Conditions and Guidance for the Use of ift Test Documents" applies. The cover sheet can be used as abstract.

Contents  
The report contains a total of 4 page/s and annex (1 page).

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11.08.2015

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## Evidence of Performance Calculation of thermal transmittance

Test Report  
No. 15-001690-PR02  
(PB-E01-06-en-01)



Client  
**PORTOS**  
ul. Ziota 71  
62-800 Kalisz  
Poland

Basis  
EN ISO 10077-2:2012-02  
SG 05-verpflichtend  
NB-CPS-02/0111083 2011-09

Product  
**Roller shutter box**  
Designation System **MX1200® - 200**

Representation

Performance-relevant product details  
Material: polyvinylchloride (PVC-U), rigid; View width in mm 205; Overall depth in mm 254; Inlay foam; Material expanded polystyrene "PRO-LAMBDA"; Thermal conductivity in W/(m·K) 0,032; Roller shutter; Thickness  $e_s$  in mm 8,5; Outlet slot of the shutter; Width  $a_{out}$  in mm 19; Sealing: pile weather stripping; in cavity in the shutter box unventilated ( $e_s + e_s \leq 2$  mm); Replacement panel; Material adiabatic; Thickness in mm 70; Length L in mm 147



Special features  
Results  
Calculation of thermal transmittance referring to EN ISO 10077-2:2012-02  
 $U_{sb} = 0,77$  W/(m<sup>2</sup>K)

Specified by the customer the thermal transmittance  $U_{sb}$  was, deviating to the EN ISO 10077-2, calculated with 70 mm adiabatic panel (instead of 60 mm).

Instructions for use  
The results obtained can be used as evidence in accordance with the above basis.

Validity  
The data and results given relate solely to the tested and described specimen. This test does not allow any statement to be made on further characteristics of the present structure regarding performance and quality.

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