

Top mounted shutter

■ MX1200®

TECHNICAL CATALOGUE



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Features and benefits of the MX1200[®] 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[®]



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).

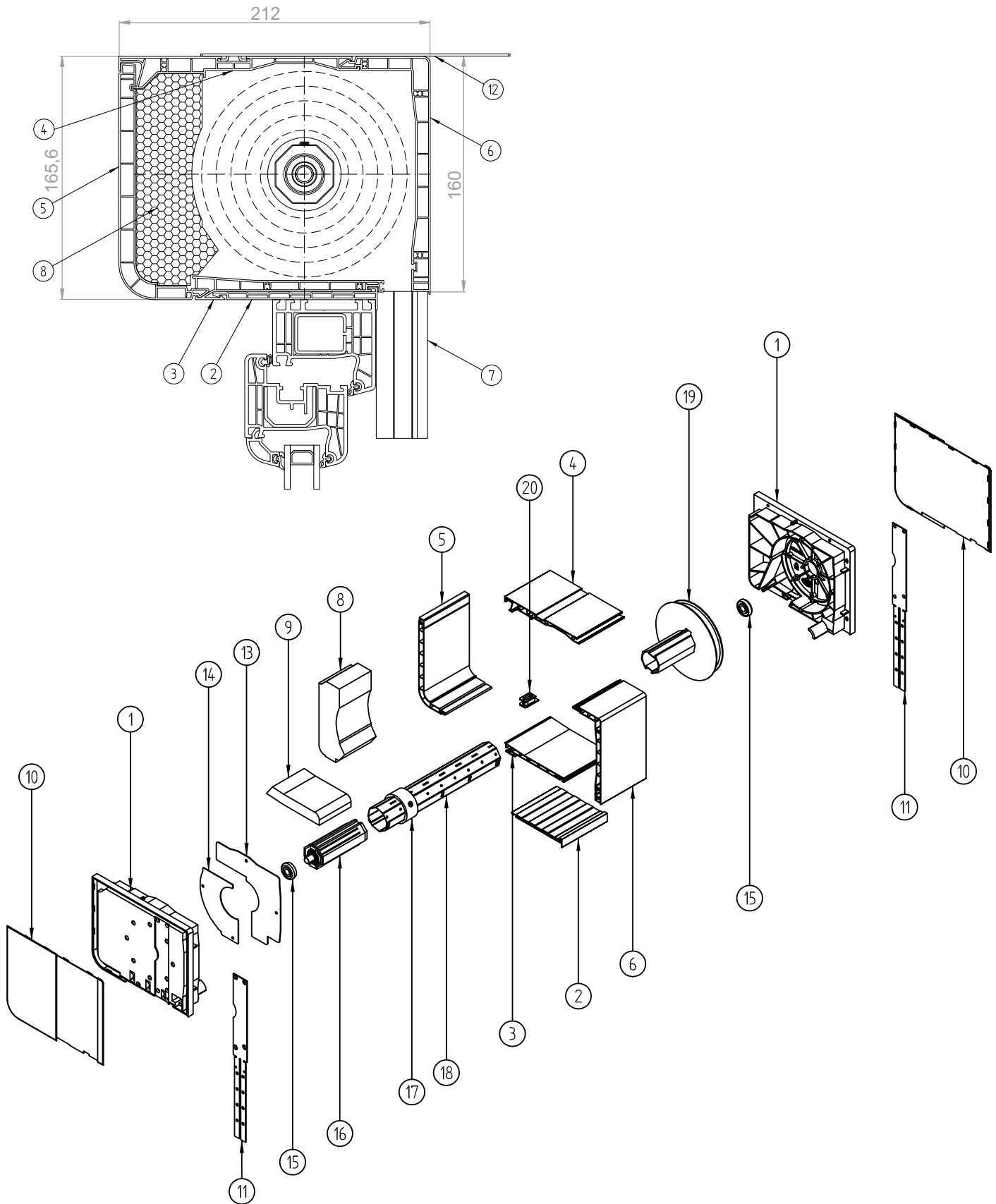
The material used to make a component (e.g. PVC, ASA, etc.).

It contains no harmful heavy metals such as lead.

Type of the inspection cover.

The component with a veneering option.

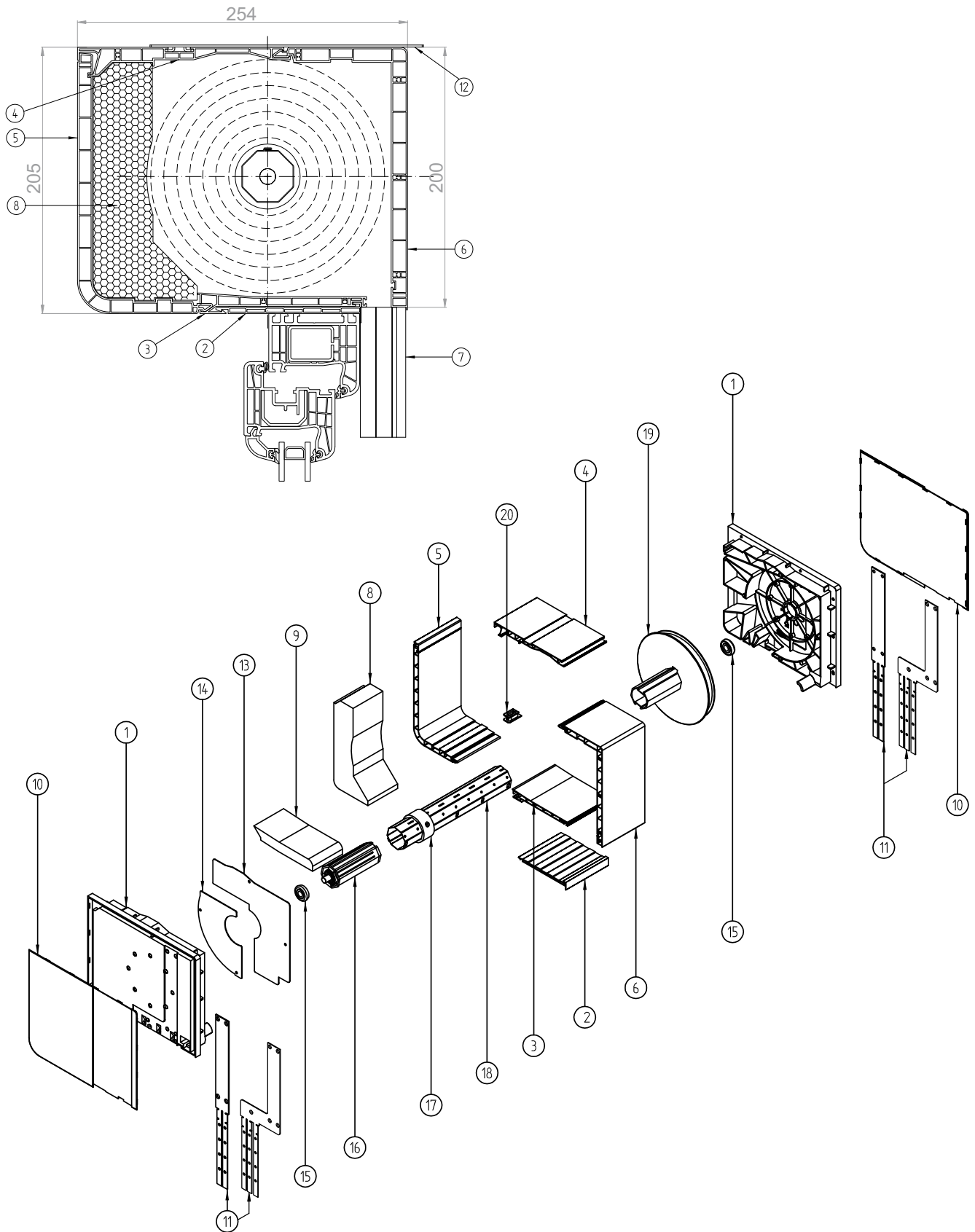
Components of the MX1200® system Box 160 - cross-section and parts list



MX1200[®] - 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

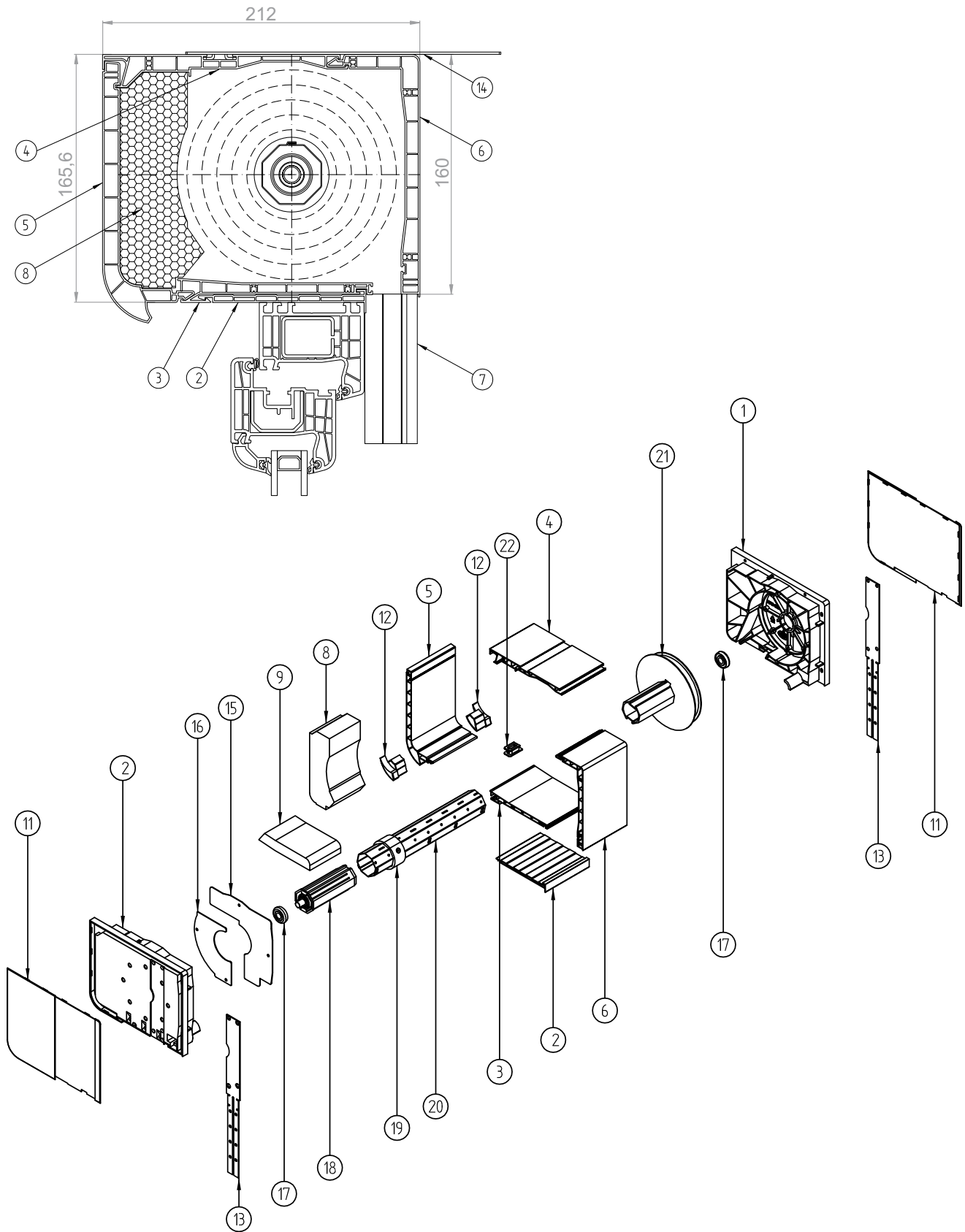


MX1200[®] - cross-section and parts list

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

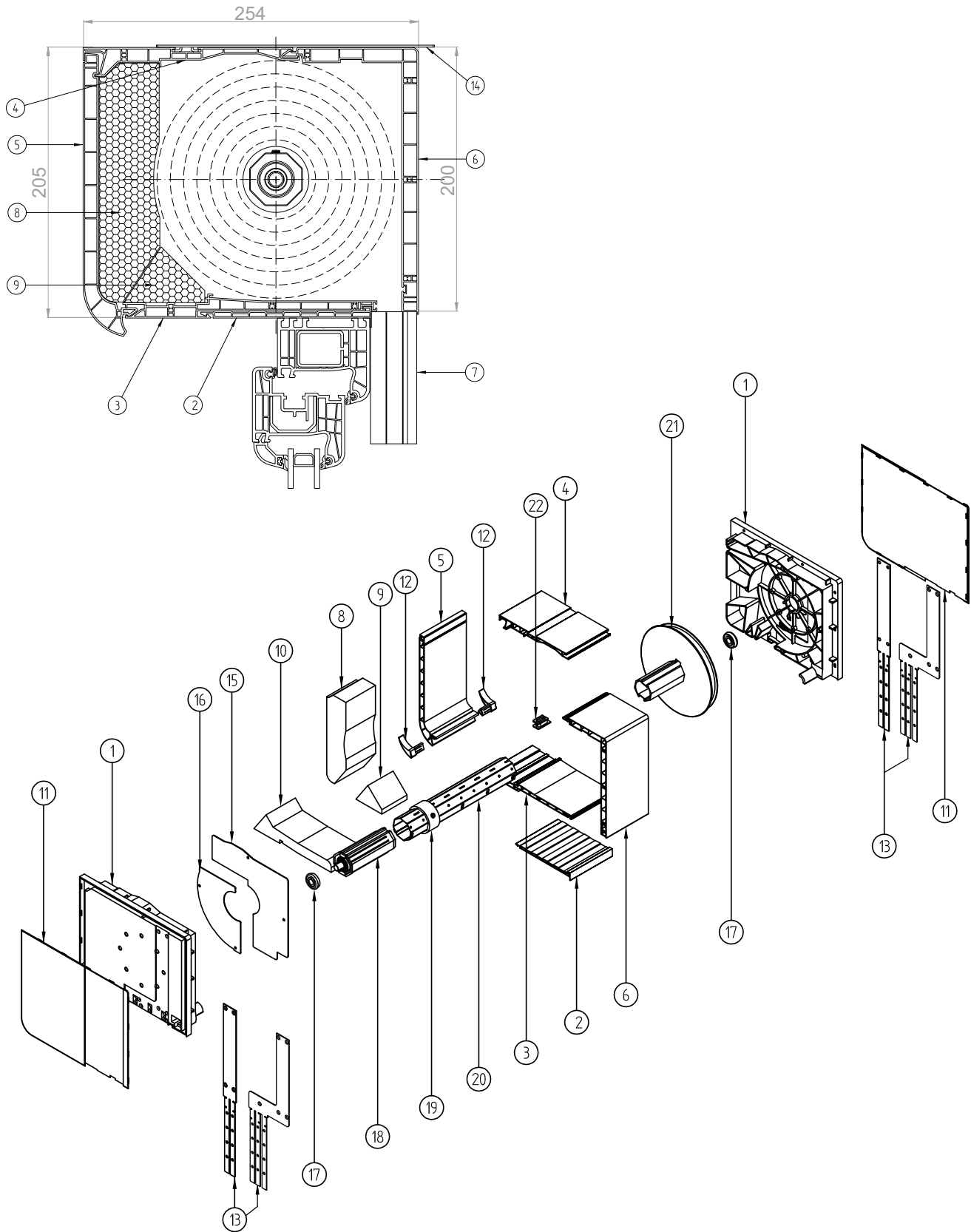
Box 160 with handle - cross-section and parts list



MX1200[®] - 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

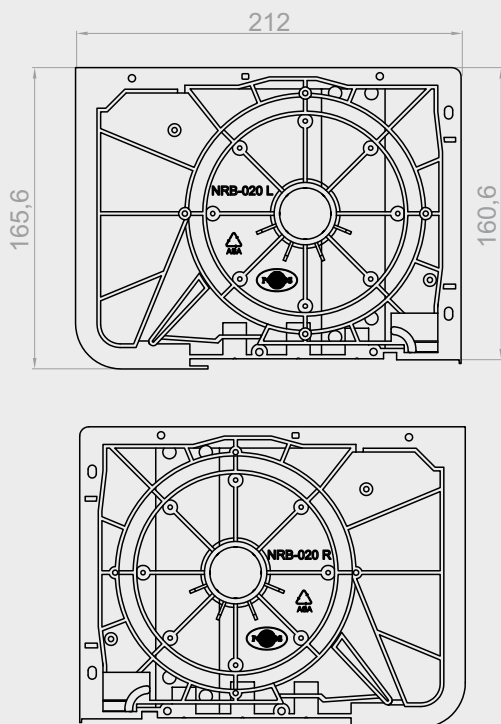
Components of the MX1200® system Box 200 with handle - cross-section and parts list



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

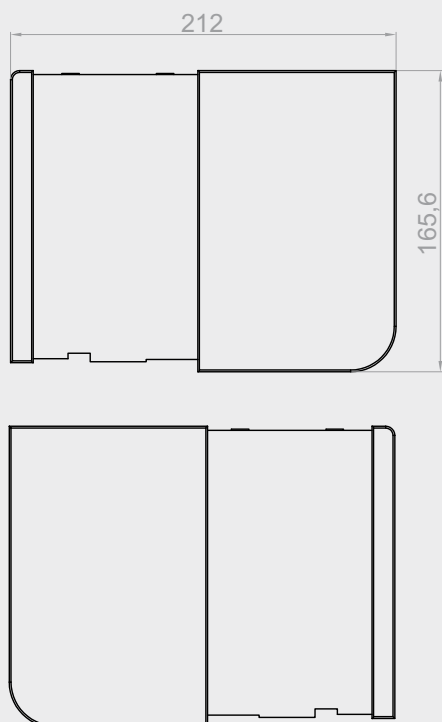
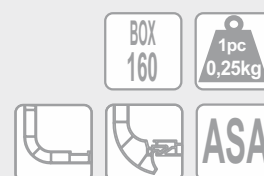


NRB-020 L

Side of the box 160 left

NRB-020 P

Side of the box 160 right

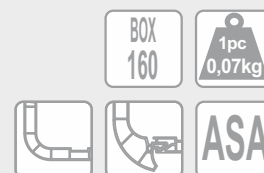


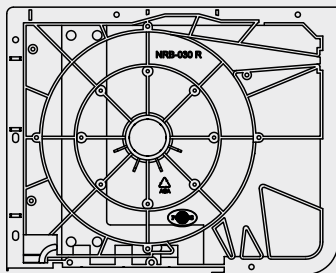
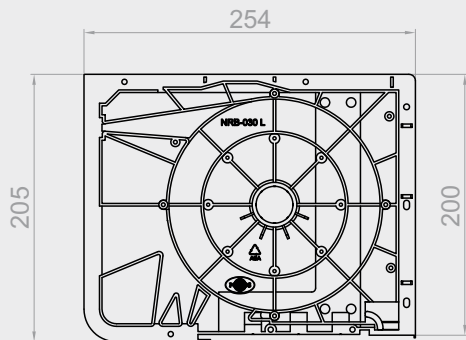
NRD-020 L

End cap of the box 160 sides left

NRD-020 P

End cap of the box 160 sides right



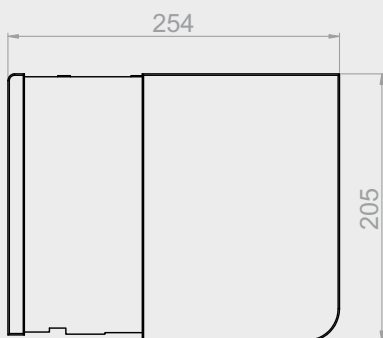
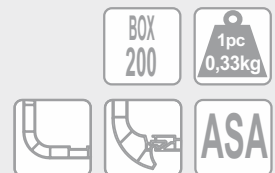


NRB-030 L

Side of the box 200 left

NRB-030 P

Side of the box 200 right

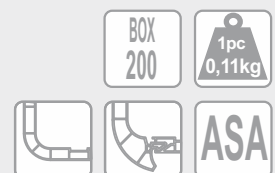


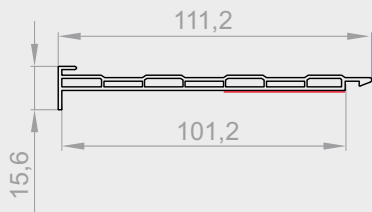
NRD-030 L

End cap of the box sides 200 left

NRD-030 P

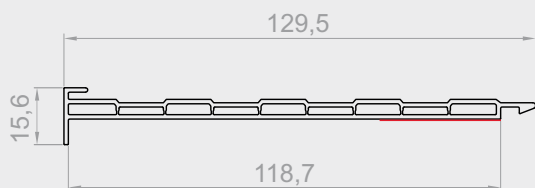
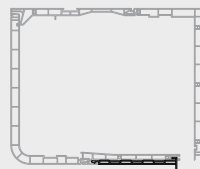
End cap of the box 200 sides right





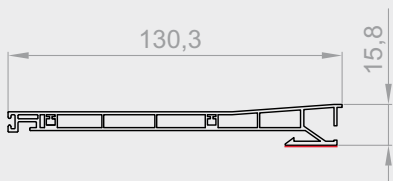
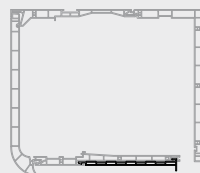
NRS-010

Universal adaptation profile



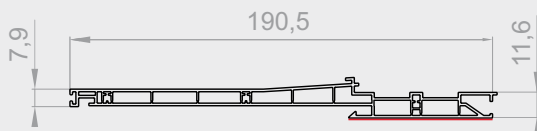
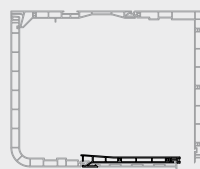
NRS-110

Universal adaptation profile 118mm



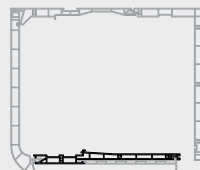
NRS-020

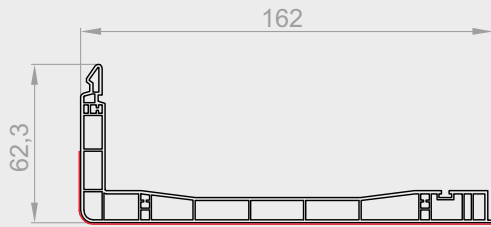
Bottom profile of the box 160, 200



NRS-120

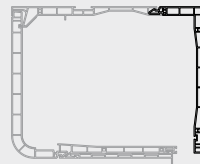
Bottom profile of the box 200 with handle





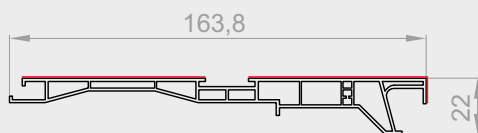
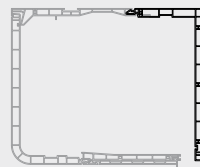
NRS-070

Outer profile of the box 160



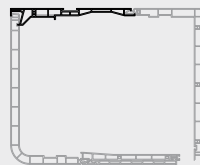
NRS-080

Outer profile of the box 200



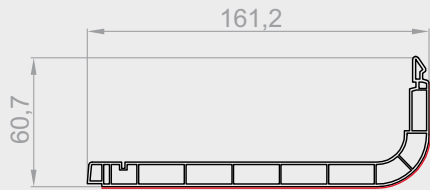
NRS-030

Top profile of the box 160, 200



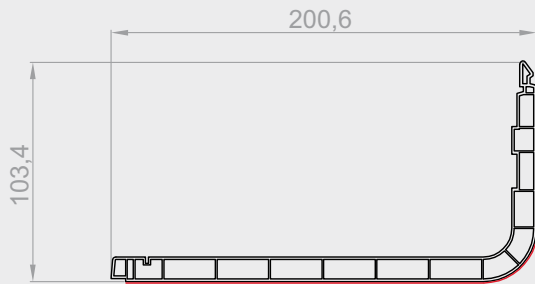
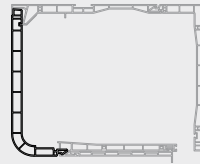
Components of the MX1200® system

Box 160/200 - inspection covers, end caps



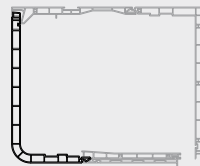
NRS-050

Inspection cover of the box 160



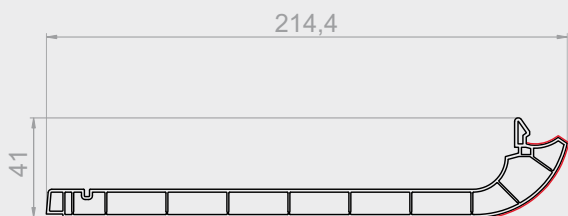
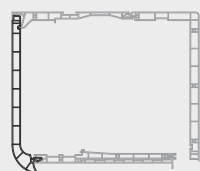
NRS-060

Inspection cover of the box 200



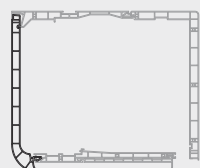
NRS-130

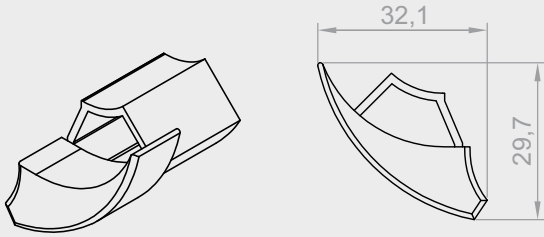
Inspection cover of the box 160 with handle



NRS-140

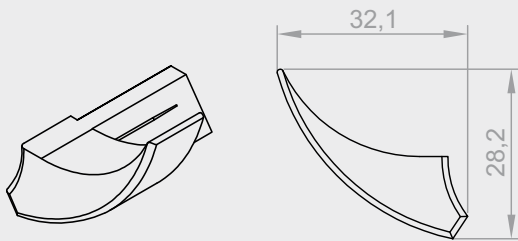
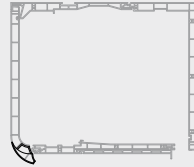
Inspection cover of the box 200 with handle





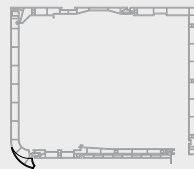
NRD-060 L/P

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



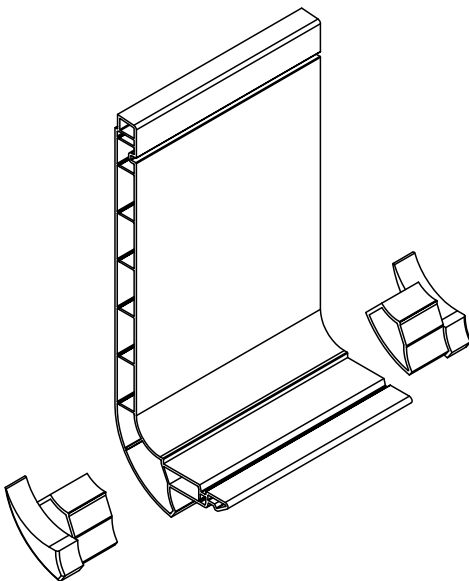
NRD-050 L/P

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

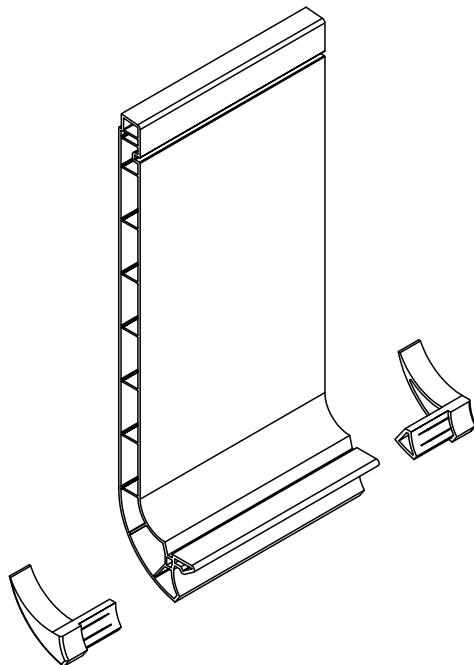


View of box inspection covers with appropriate plugs.

Box 160



Box 200

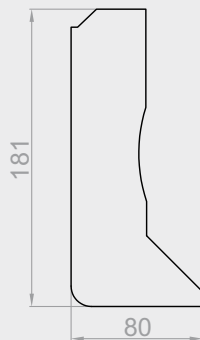
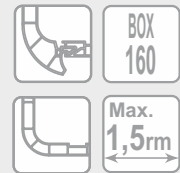
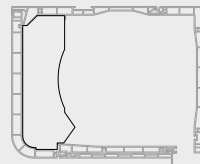


NOTE - Inspection cover plugs can only be used if the inspection cover of the box protrudes from the inside beyond the face of the wall.



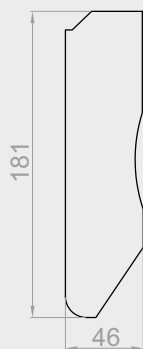
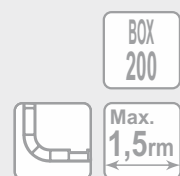
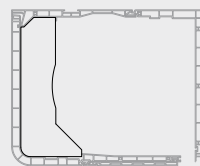
NRW-020

Styrofoam insert of the box 160



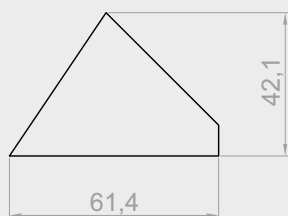
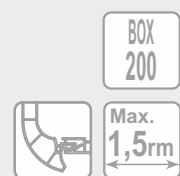
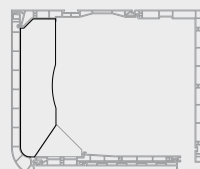
NRW-070

Styrofoam insert of the box 200



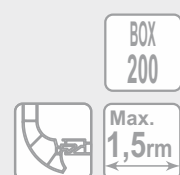
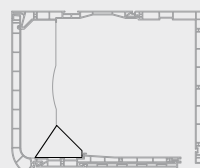
NRW-030

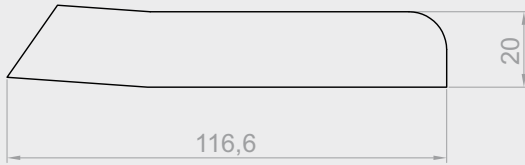
Styrofoam insert of the box 200 with handle part 1



NRW-060

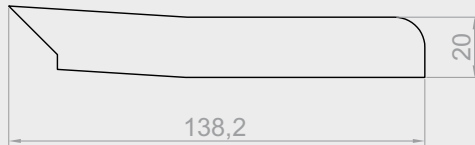
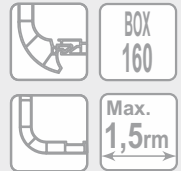
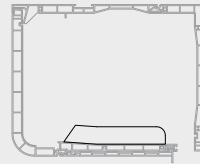
Styrofoam insert of the box 200 with handle part 2





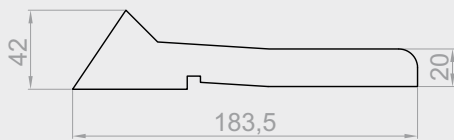
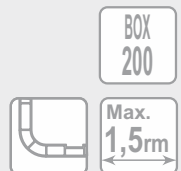
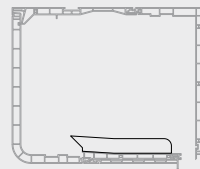
NRW-040

Bottom styrofoam insert of the box 160



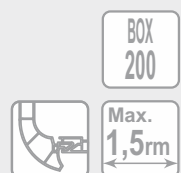
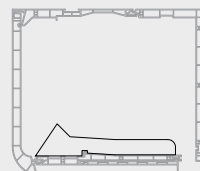
NRW-080

Bottom styrofoam insert of the box 200

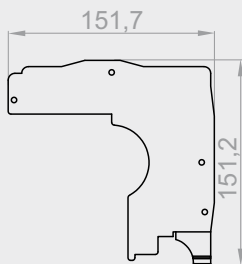


NRW-050

Bottom styrofoam insert of the box 200
with handle



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



NRT-130

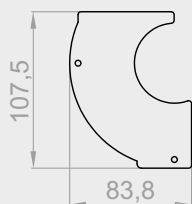
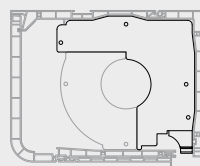
Inner cover of side 160 for ø40 pipe - top

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

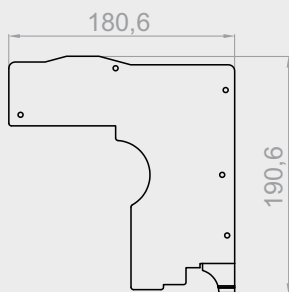
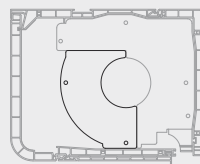
Inner cover of side 160 for ø40 pipe - bottom

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

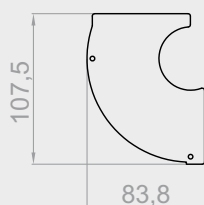
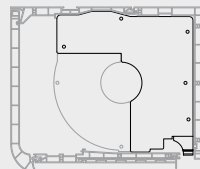
Inner cover of side 200 for ø40 pipe - top

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

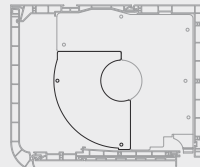
Inner cover of side 200 for ø40 pipe - bottom

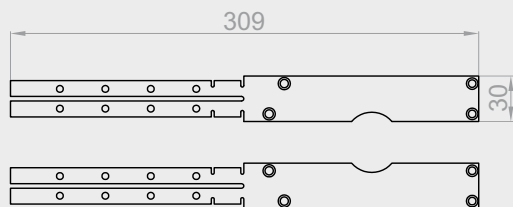
NRT-200

Inner cover of side 200 for ø60 pipe - bottom

NRT-240

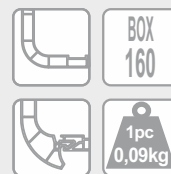
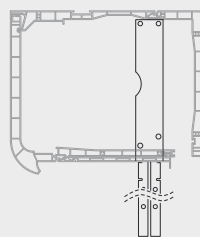
Inner cover of side 200 for ø60 pipe for NHK motor - bottom





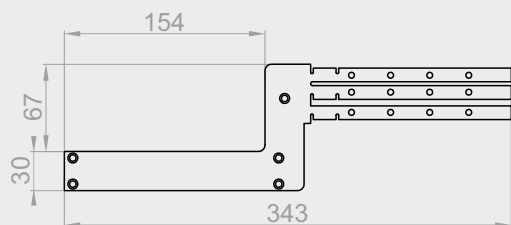
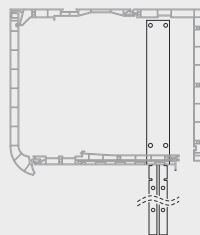
NRT-020 L/P

Steel side handle for box 160 left / right



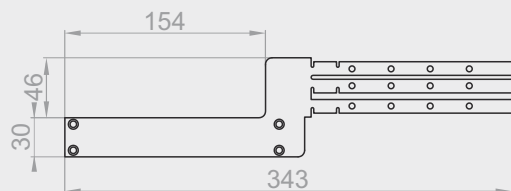
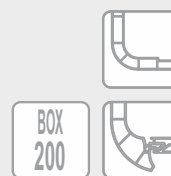
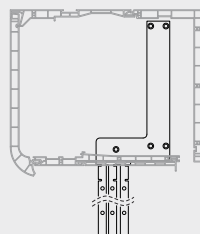
NRT-030

Steel side handle for box 200



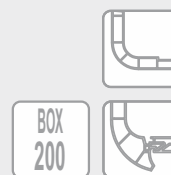
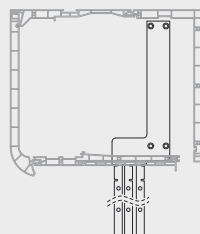
NRT-040 L/P

Steel side angular handle for box 200 left / right

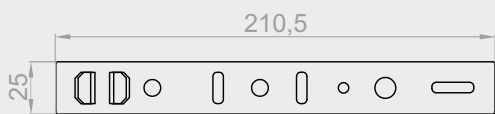


NRT-250 L/P

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

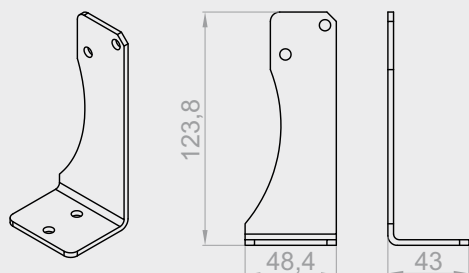
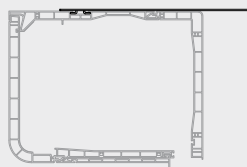


Components of the MX1200® system Box 160/200 - steel components



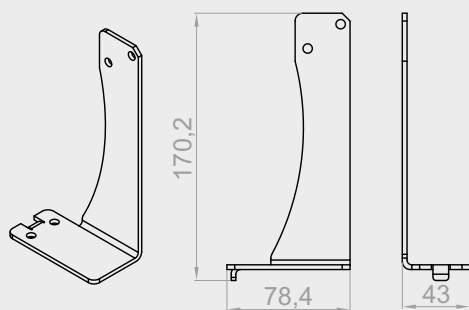
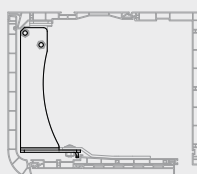
NPT-050

Steel mounting anchor



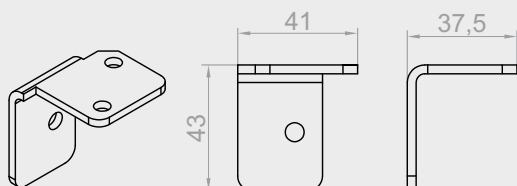
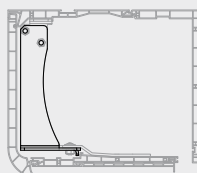
NRT-060

Stabilizing console for box 160



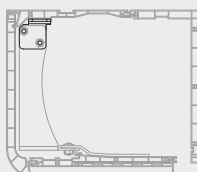
NRT-070

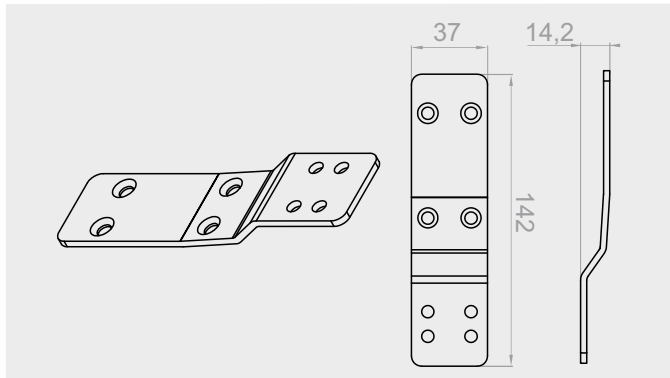
Stabilizing console for box 200



NRT-090

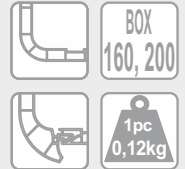
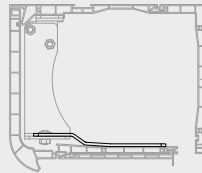
Upper connector of the stabilizing console





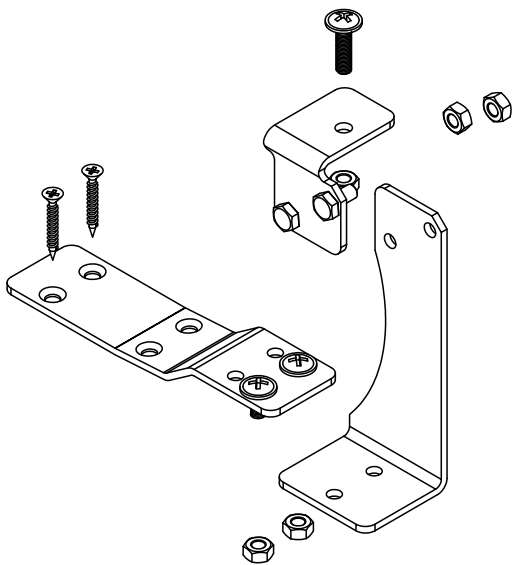
NRT-120

Lower connector of the stabilizing console for box 160, 200

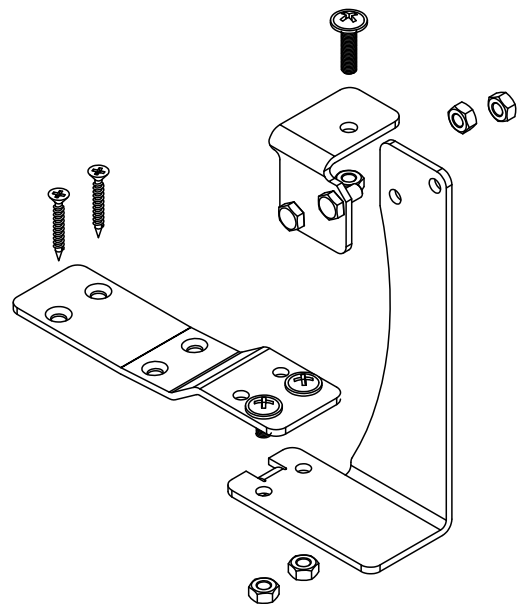


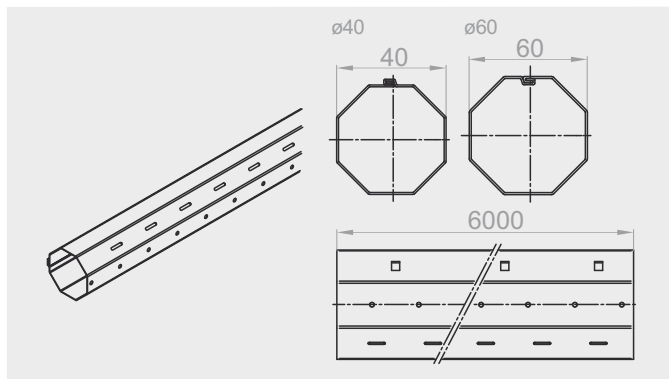
View of stabilizing consoles with connectors.

NRTK-010 - Stabilizing console for box 160



NRTK-030 - Stabilizing console for box 200



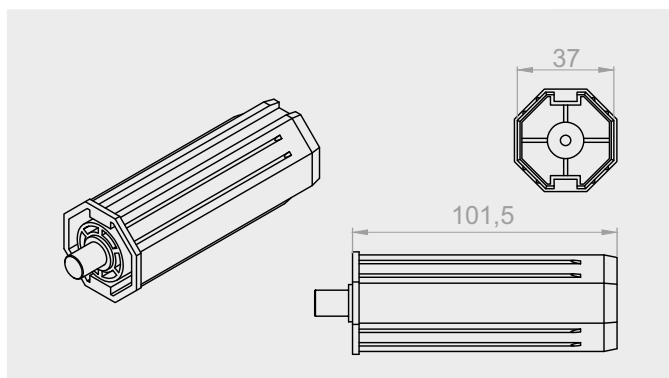
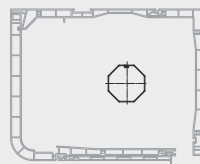


SW 40

Octagonal pipe $\varnothing 40$

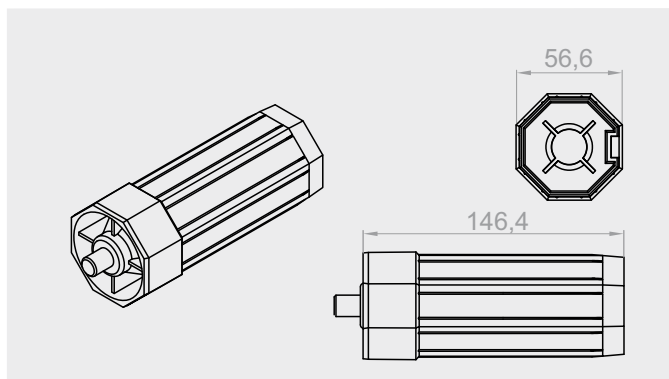
SW 60

Octagonal pipe $\varnothing 60$



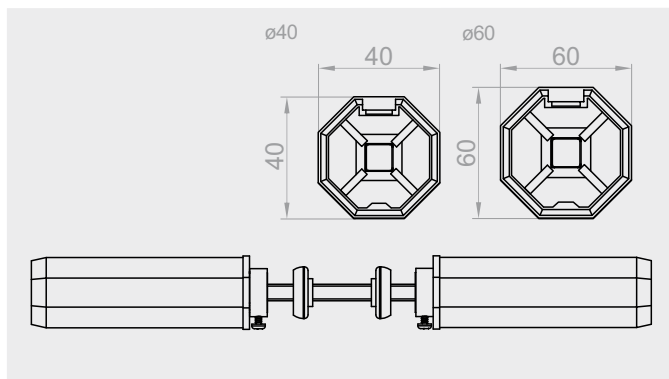
OBS-40-PVC

PVC mounting with pin for $\varnothing 40$ pipe



OBS-60-PVC

PVC mounting with pin for $\varnothing 60$ pipe



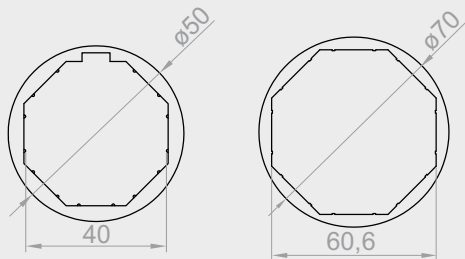
RKZ 34

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

RKZ 35

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



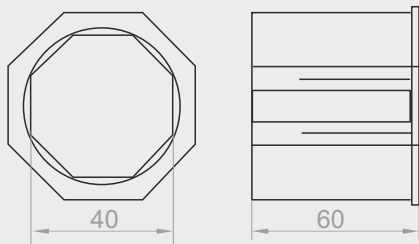


PZ 40/50

Expansion ring 40/50

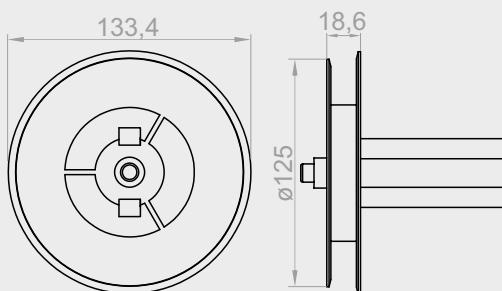
PZ 60/70

Expansion ring 60/70



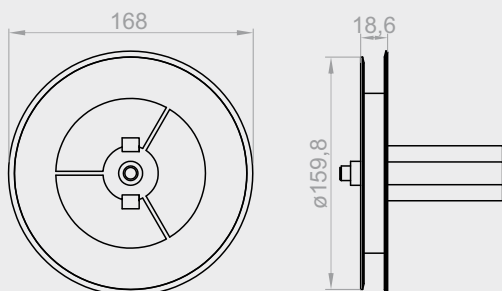
RED-40-60

Reduction 40/60



RKZ71

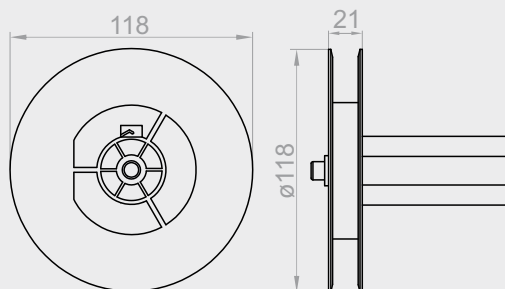
Winding wheel for box 160



RKZ72

Winding wheel for box 200



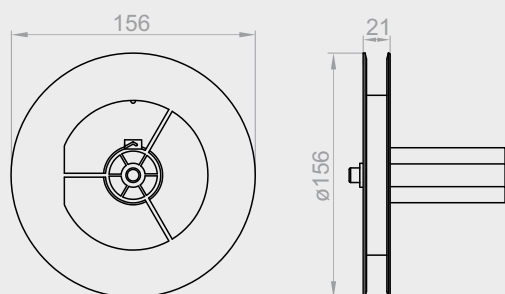


RKZ81

Winding wheel for box 160 for monoblock system

BOX
160

1 pc
0,10kg

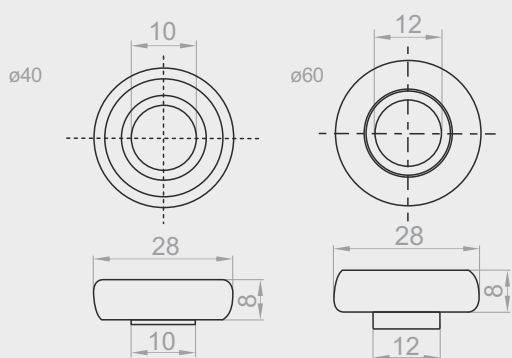


RKZ82

Winding wheel for box 200 for monoblock system

BOX
200

1 pc
0,13kg



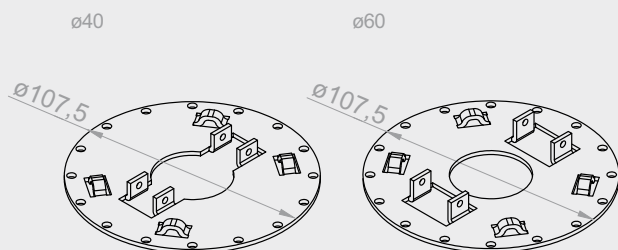
LO-28/10

Bearing for PVC boxes for $\varnothing 40$

LO-28/12

Bearing for PVC boxes for $\varnothing 60$

1 pc
0,02kg

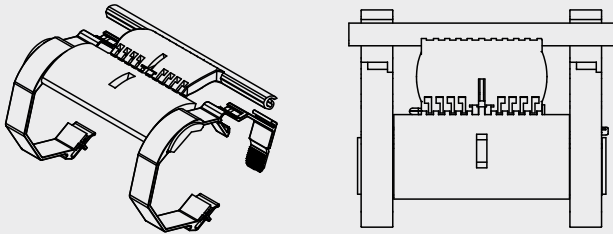


RKZ P4

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

RKZ P6

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

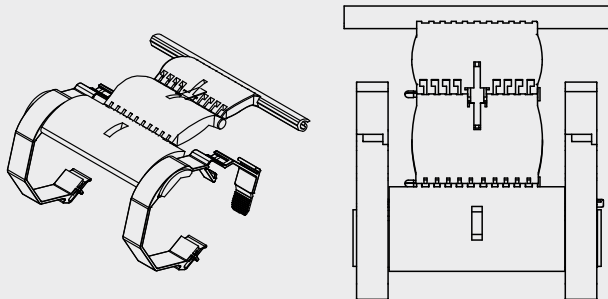


WB1-40 W

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

WB1-60 W

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

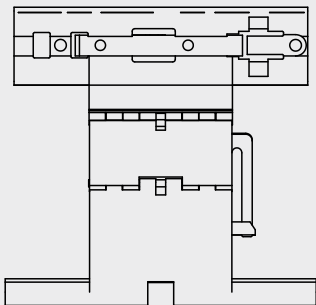


WB3-40 W

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





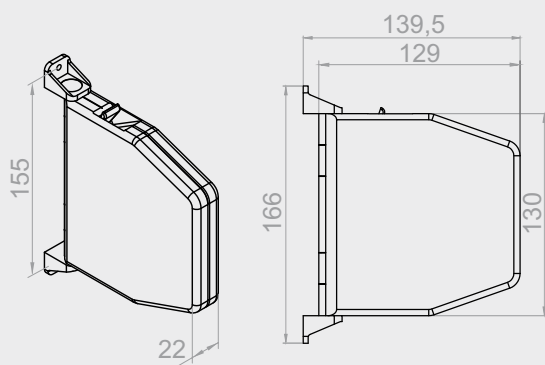
WS-37/40-170 S

Steel hanger 170 (electrically powered shutters)



WS-37/40-170 ALU

Aluminium hanger

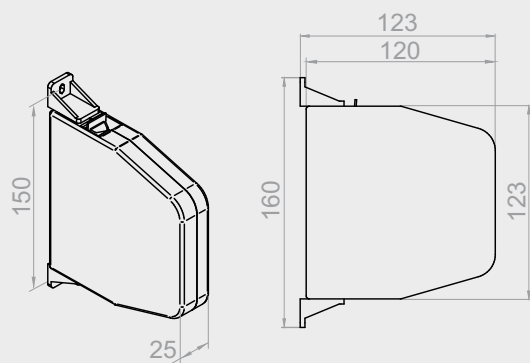


ZT-5M02

Tape coiler 5m white

ZT-5M08

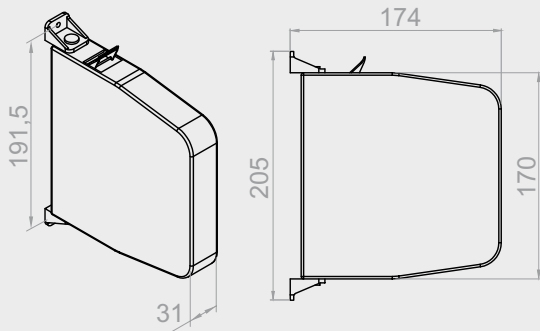
Tape coiler 5m brown



ZT/L-5M-23

Universal tape / cord coiler up to 5m anthracite



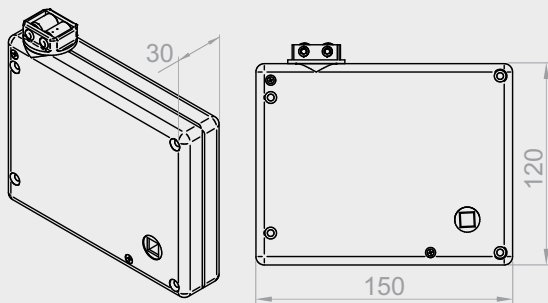


ZT-11M-02

Tape coiler 11m white

ZT-11M-08

Tape coiler 11m brown

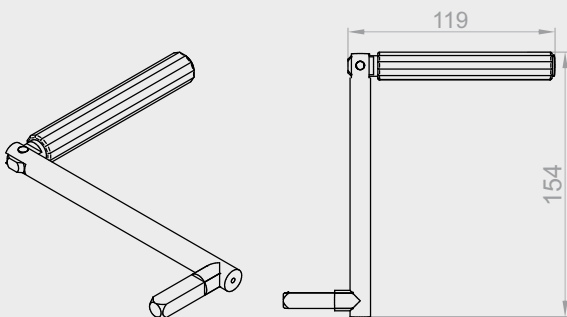


KPTKM-02

Cassette with tape transmission - white

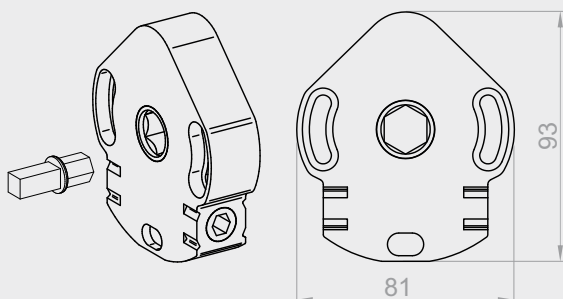
KPTKM-08

Cassette with tape transmission - brown



KRM-140

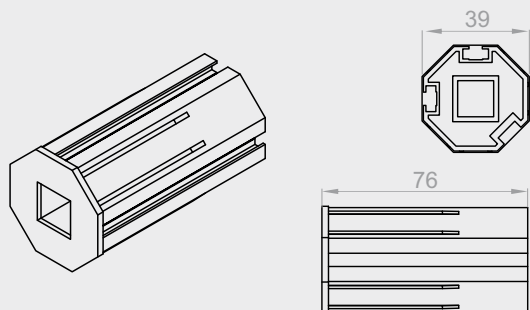
Mignon crank 140mm



ACE-1-8 MAŁY

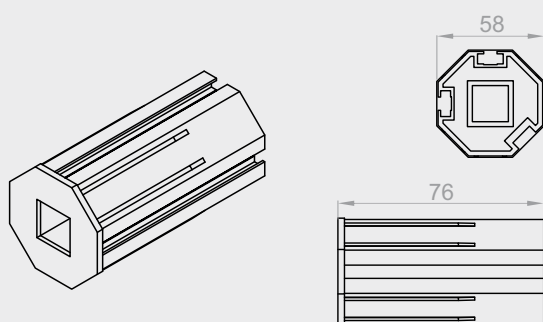
Crank mechanism - 22 kg





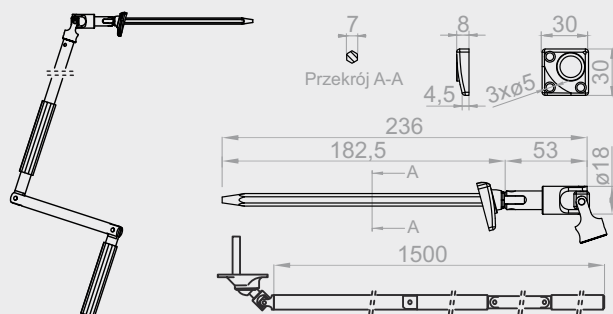
OBS-40-ACE

Ø40 mounting for the ACE mechanism



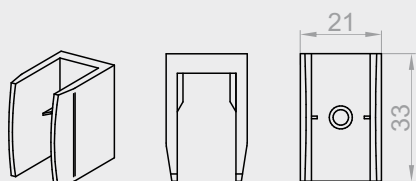
OBS-60-ACE

Ø60 mounting for the ACE mechanism



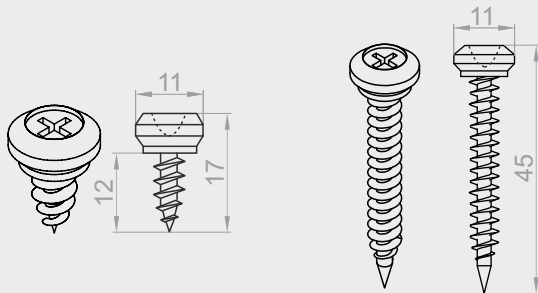
KRH-ZF

Cardan 165 with 1430 mm crank



U-KRD

Handle for mounting the crank

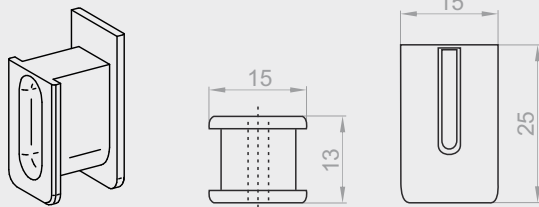


NYP

Guide nipple

NYP45

45 mm Guide nipple



E-R265-6

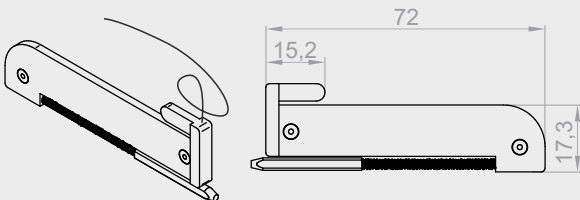
Belt guide - 02 (white)

E-R265-7

Belt guide - 08 (brown)

E-R265-23

Belt guide - 23 (anthracite)

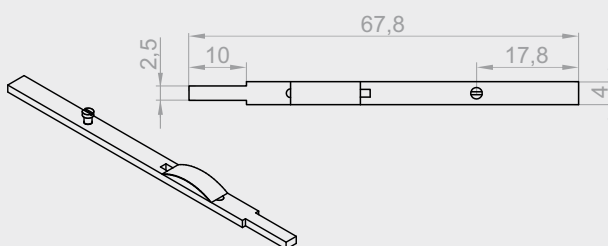


RA

Automatic bolt.

Minimum shutter width - 45 cm.

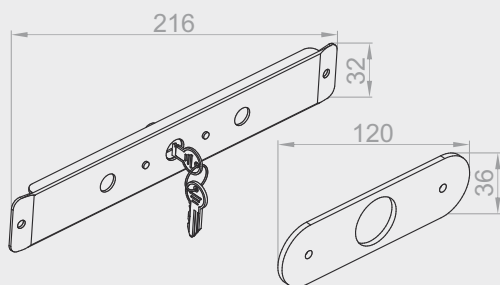
Minimum shutter height - 90 cm.



ZR

Latch (manual bolt)

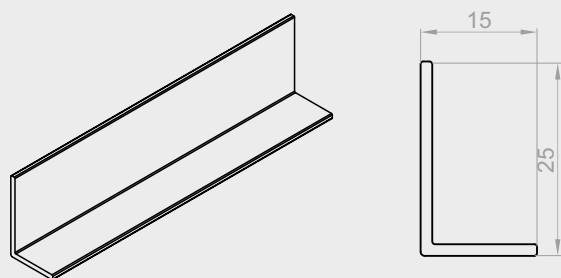
Minimum shutter width - 45 cm.



ZB

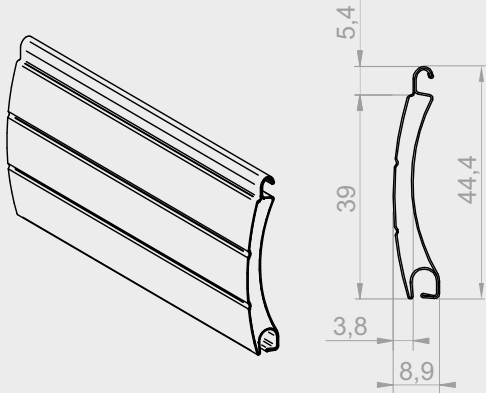
Cylinder lock, set of keys (3 pieces) and covering plate. The covering plate is mounted as standard from the outside.

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

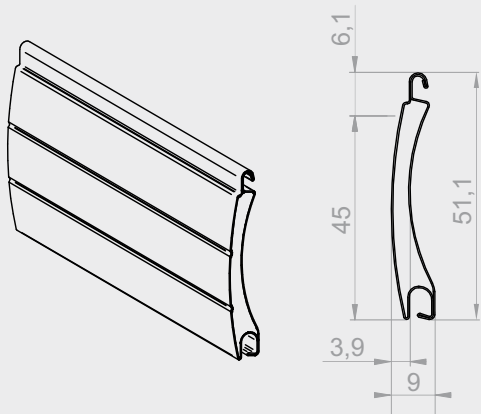
PA 39 Aluminium profile - perforated

PA 39/1k

PA 39 Aluminium profile - non-perforated

Profile height	39 mm
Profile thickness	8,9 mm
Profile weight 1 m ²	2,8 kg
Maximum profile length	6 rm
Number of laths 1m high	26 pcs
Maximum area	6,5 m ²
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

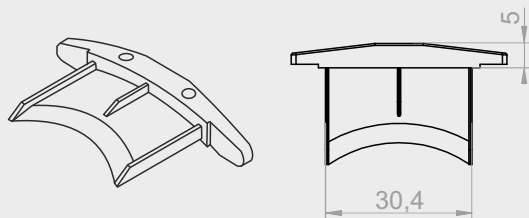
PA 45 Aluminium profile - perforated

PA 45/1k

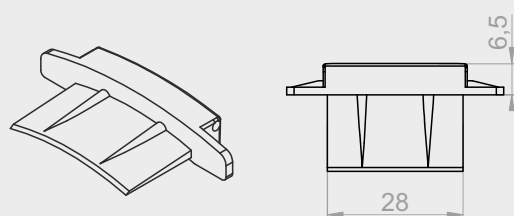
PA 45 Aluminium profile - non-perforated

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

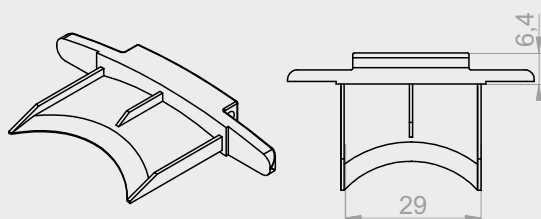
Profile colors (k)																		
01 - silver	02 - white	03 - grey	04 - dark beige	05 - beige	07 - light grey	08 - dark brown	09 - brown	13 - green	15 - cream white	16 - ivory	19 - maroon	20 - black	22 - mahogany	23 - anthracite	26 - steel olive	30 - walnut	48 - golden oak	54 - winchester



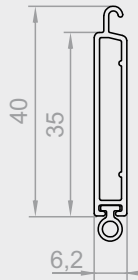
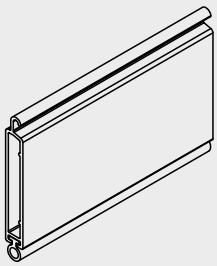
APA 39 M
PA 39 Profile plug



APA 37-R
PA 39 Profile plug bolt



APA 45-R
PA 45 Profile plug bolt

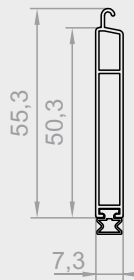
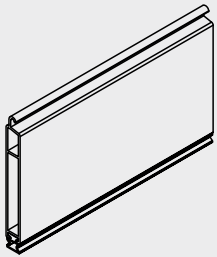


LD-35 MINI

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

KA-44B

Seal for LD-35 MINI

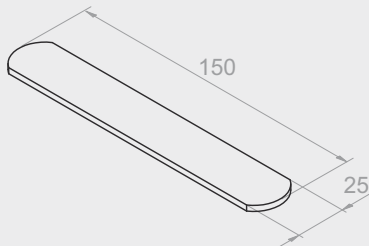


LD-37

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

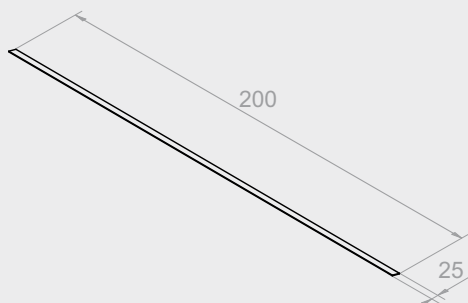
KA-44

Seal for LD-37



LD-OBCIĄŻNIK 15

Bottom lath weight 15 cm



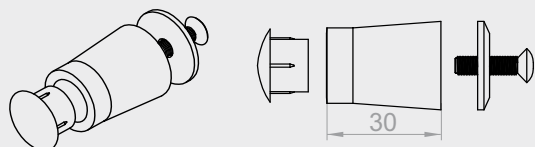
LD-OBCIĄŻNIK 200

Bottom lath weight 200 cm - for cylinder lock



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

BF



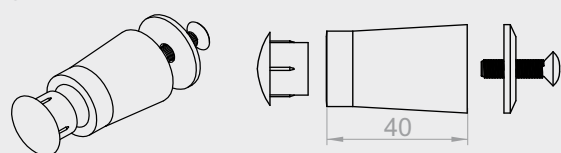
BF (without the plug)

BF-ZAT

Bottom lath buffer

} SET

BF-40 MM



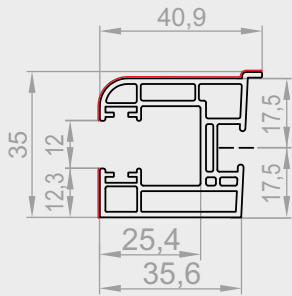
BF-40 MM (without the plug)

BF-ZAT

Bottom lath buffer

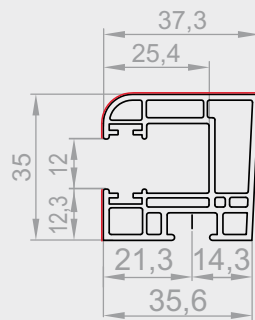
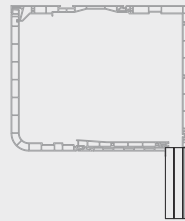
} SET





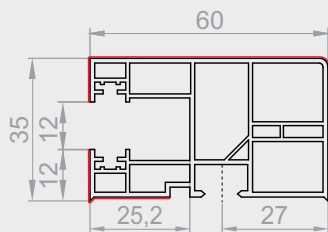
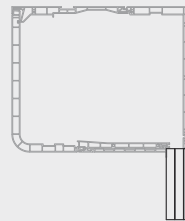
NRR-010

Narrow guide with flange



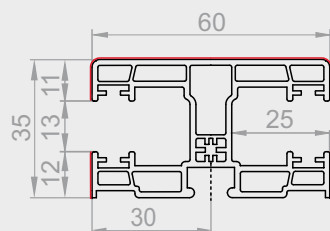
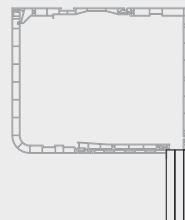
NRR-020

Narrow guide



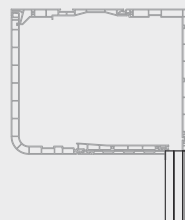
RK16

Single guide



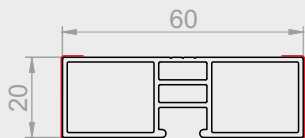
RK18

Double guide



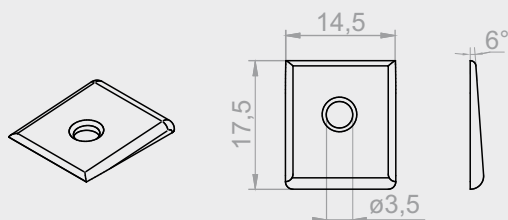
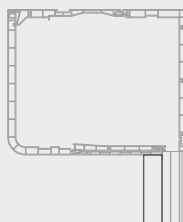
Components of the MX1200® system

Box 160/200 - PVC guide end caps



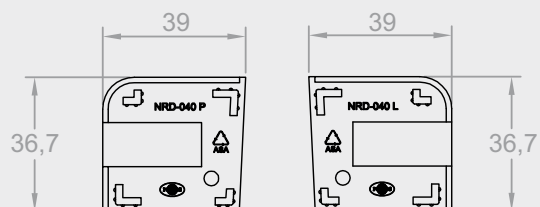
DP-PCV-20

60x20 guide distance



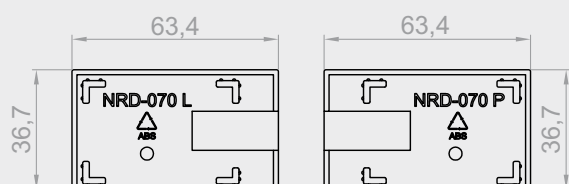
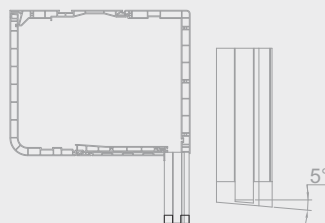
NRD-110

Wedge for monoblock guides



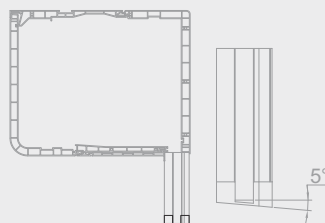
NRD-040 L/P

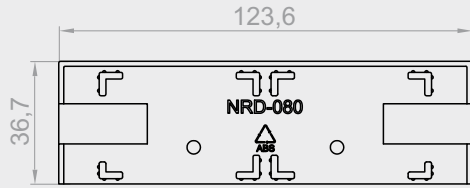
Bottom end cap of the NRR-010, NRR-020 guides



NRD-070 L/P

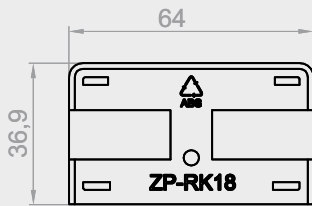
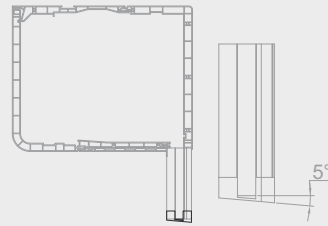
Bottom end cap of the RK16 guides





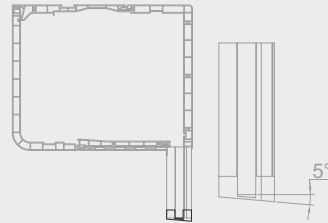
NRD-080

Bottom end cap of two RK16 guides

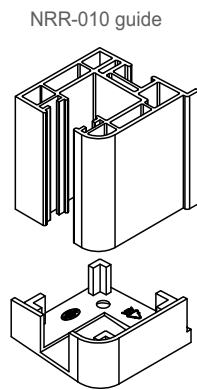


ZP-RK 18

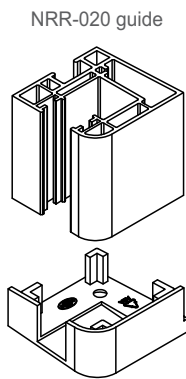
Bottom end cap of the RK18 double guide



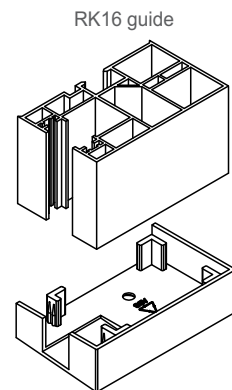
View of guides with the appropriate end caps for guides.



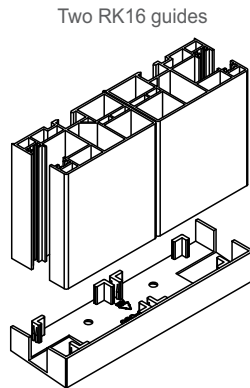
NRD-040 L / P end cap



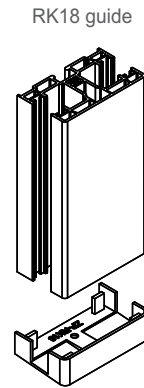
NRD-040 L / P end cap



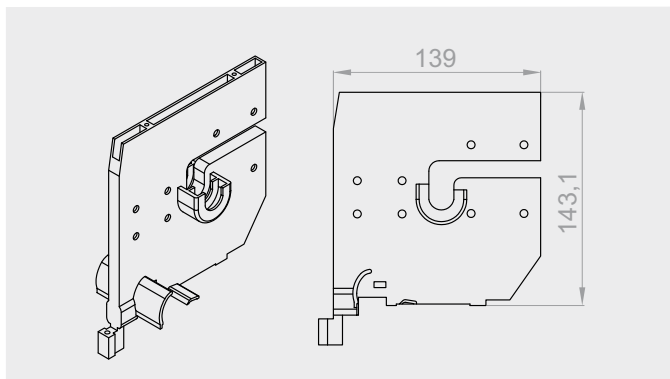
NRD-070 L / P end cap



NRD-080 end cap

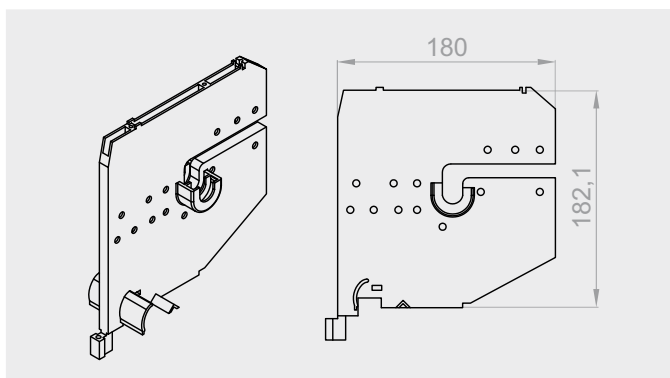
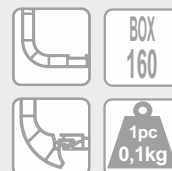
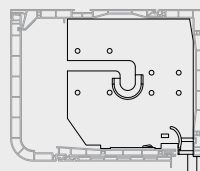


ZP-RK 18 end cap



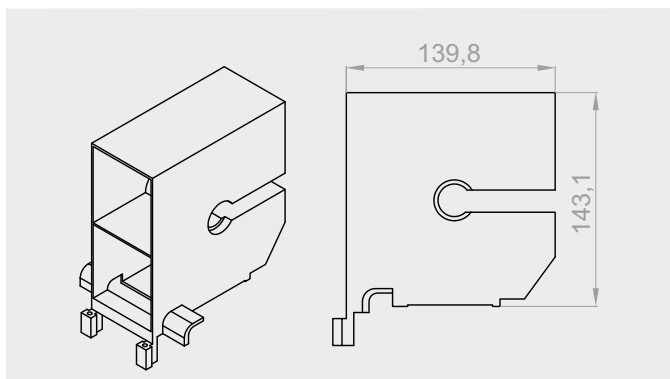
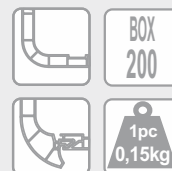
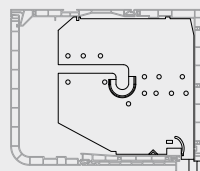
RKM201

160 box division for a double guide



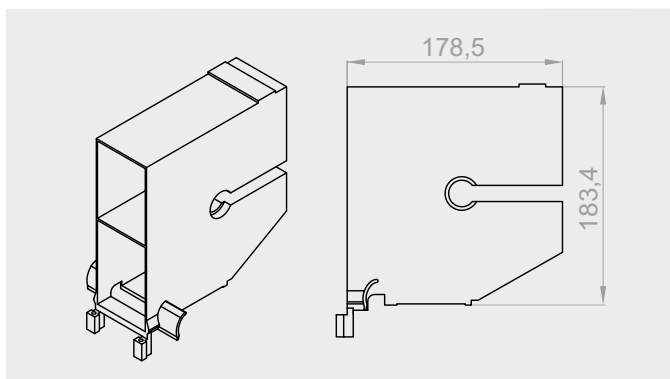
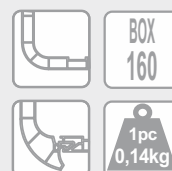
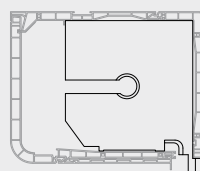
RKM301

200 box division for a double guide



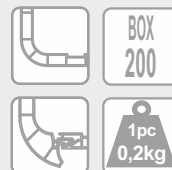
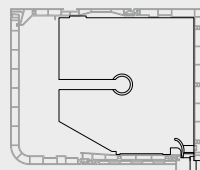
RKB2

160 box division for two single guides



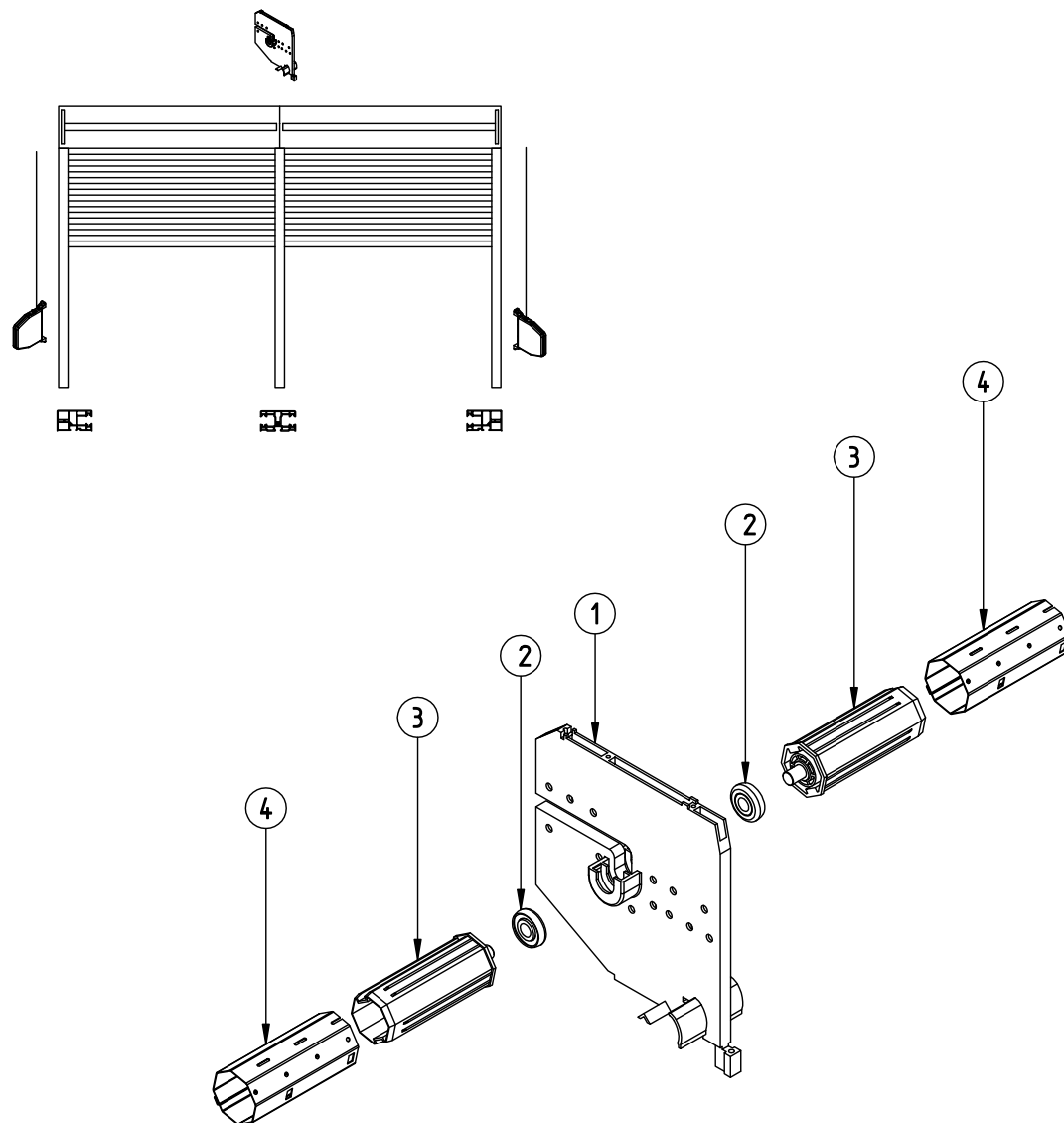
RKB3

200 box division for two single guides



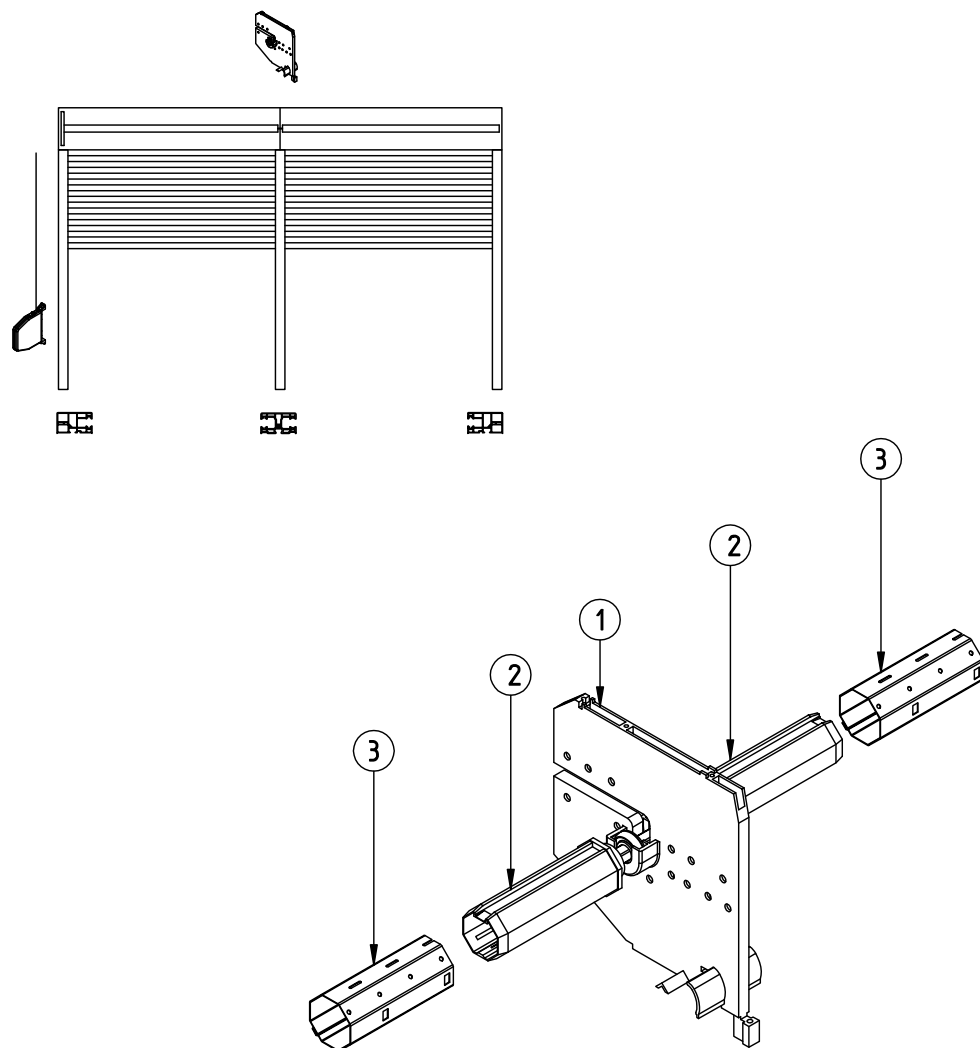
ASSEMBLY DRAWINGS

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



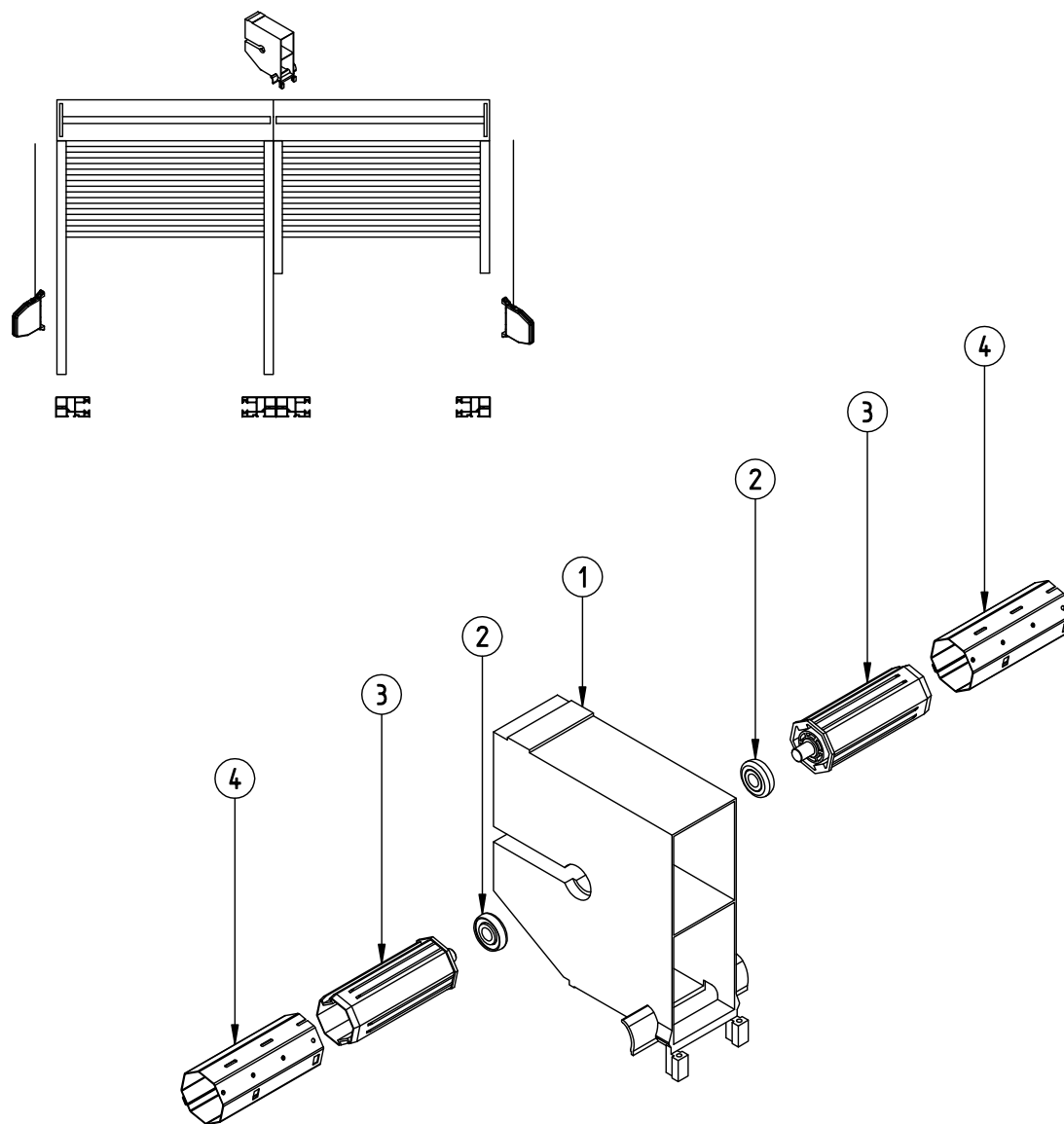
1	RKM201	Centre bearing for box 160
	RKM301	Centre bearing for box 200
2	LO 28/10	Bearing 28/10 for PVC
3	OBS-40-PCV	40 mounting for fi 40 pipe with pin
4	SW 40	Octagonal pipe fi 40

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



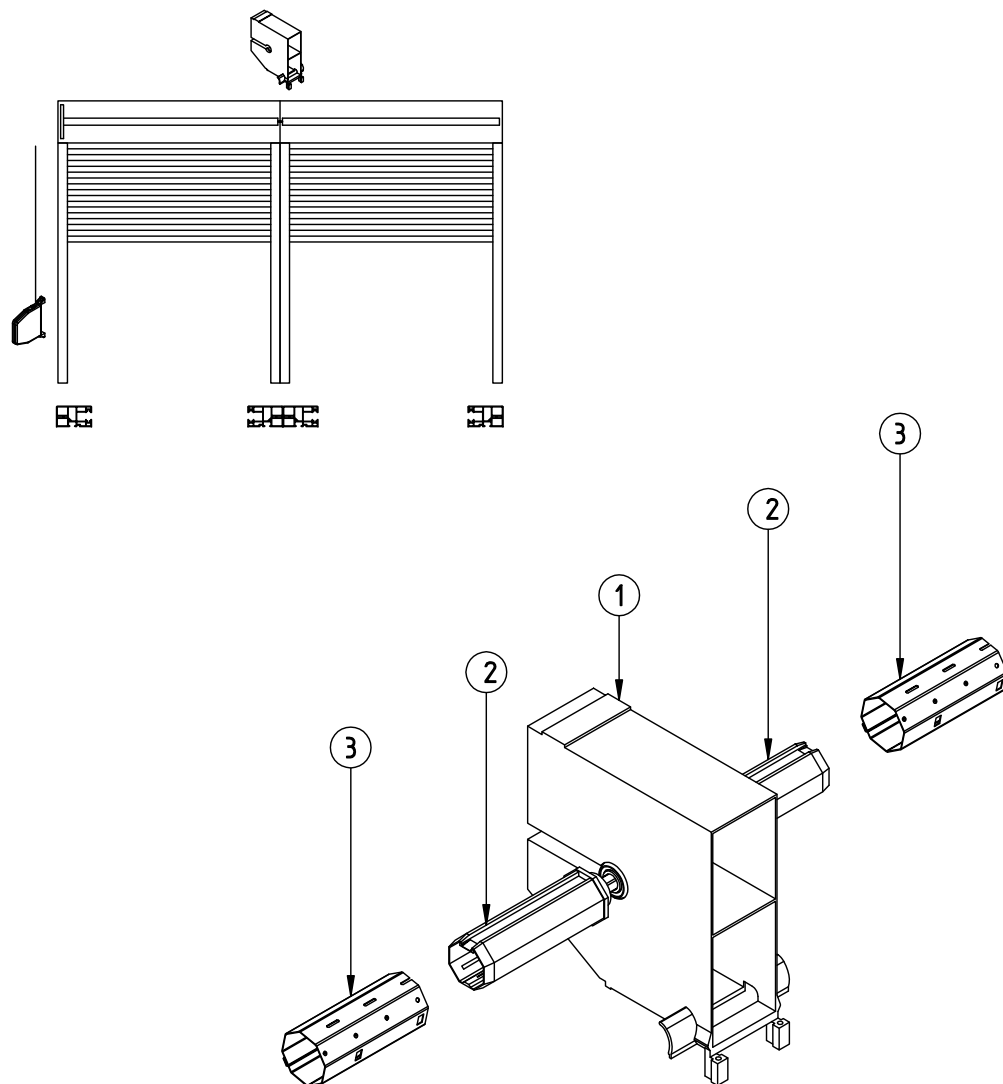
- | | | |
|---|--------|----------------------------|
| 1 | RKM201 | Centre bearing for box 160 |
| | RKM301 | Centre bearing for box 200 |
| 2 | RKZ34 | Roller bolt for fi 40 pipe |
| 3 | SW 40 | Octagonal pipe fi 40 |

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



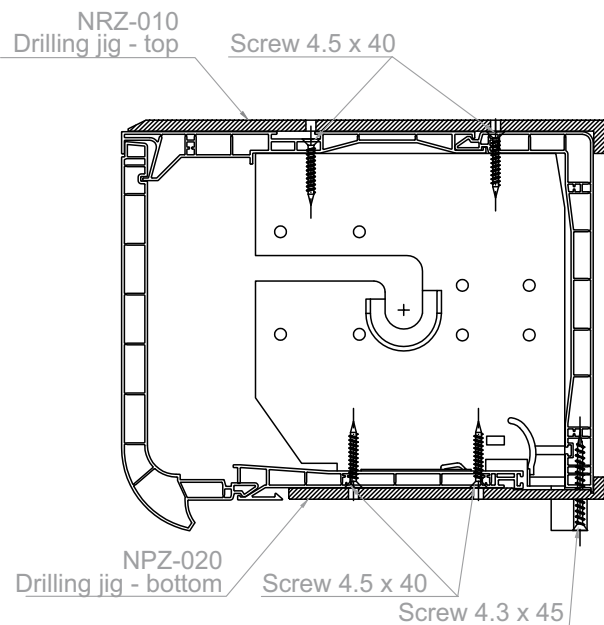
1	RKB2	Bearing for both guides for box 160
	RKB3	Bearing for both guides for box 200
2	LO 28/10	Bearing 28/10 for PVC
3	OBS-40-PCV	40 mounting for fi 40 pipe with pin
4	SW 40	Octagonal pipe fi 40

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

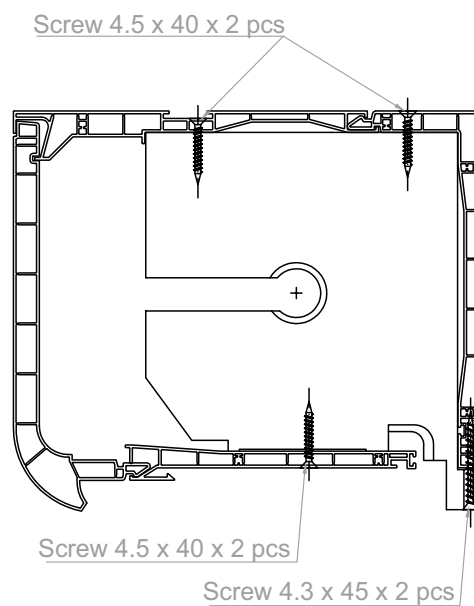


- | | | |
|---|--------------|--|
| 1 | RKB2
RKB3 | Bearing for both guides for box 160
Bearing for both guides for box 200 |
| 2 | RKZ34 | Roller bolt for ø40 pipe |
| 3 | SW 40 | Octagonal pipe fi 40 |

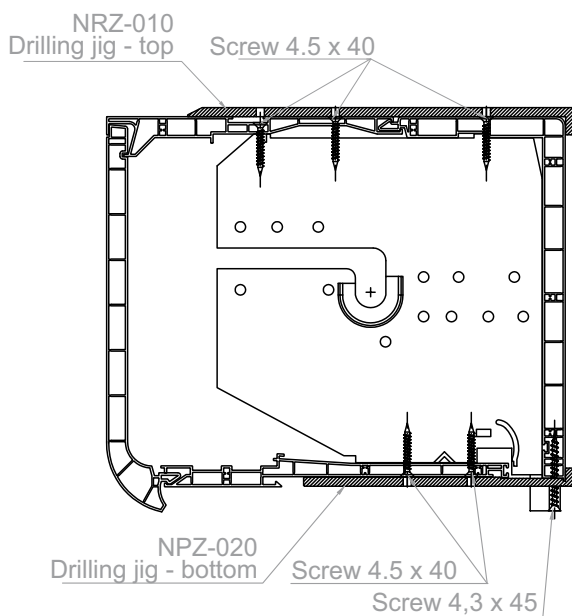
Box 160
 Installation of the RKM2 division



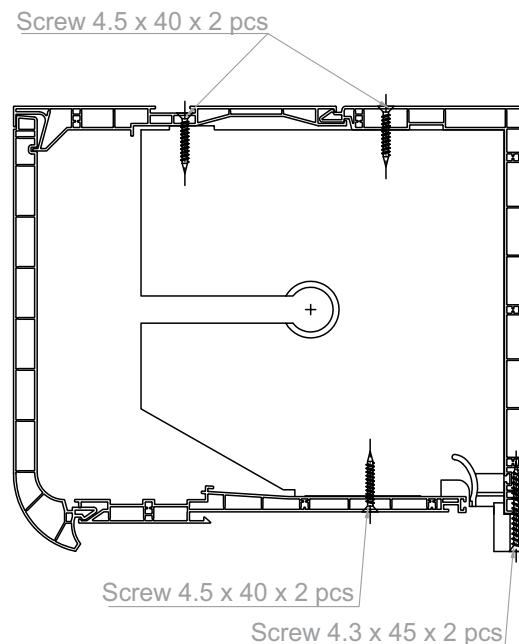
Box 160
 Installation of the RKB2 division



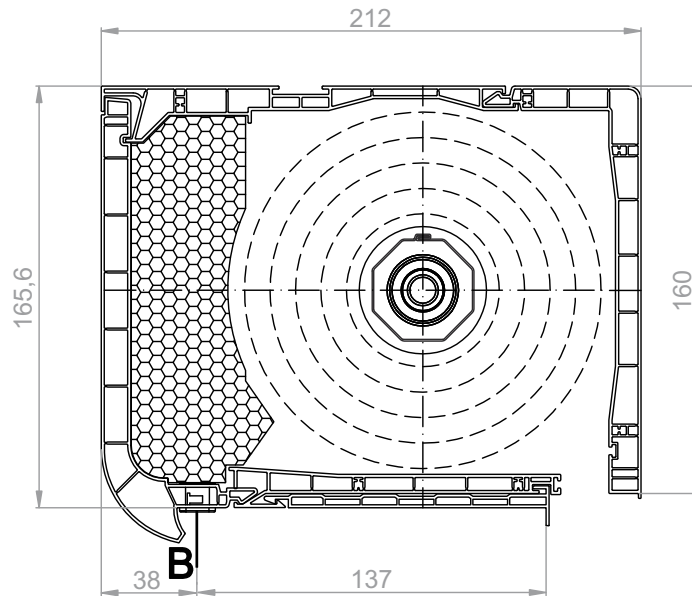
Box 200
 Installation of the RKM3 division



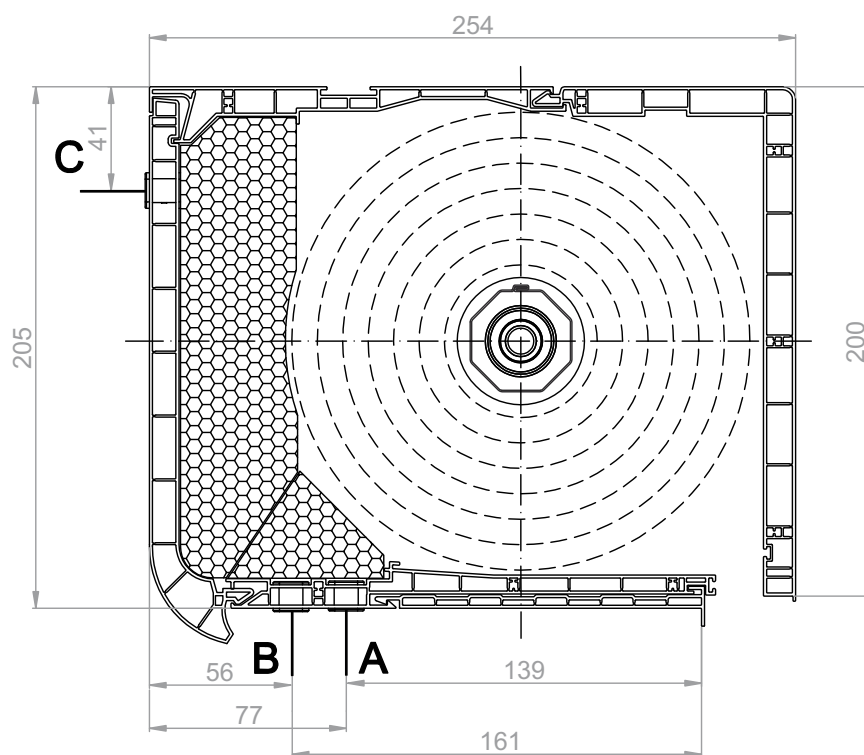
Box 200
 Installation of the RKB3 division



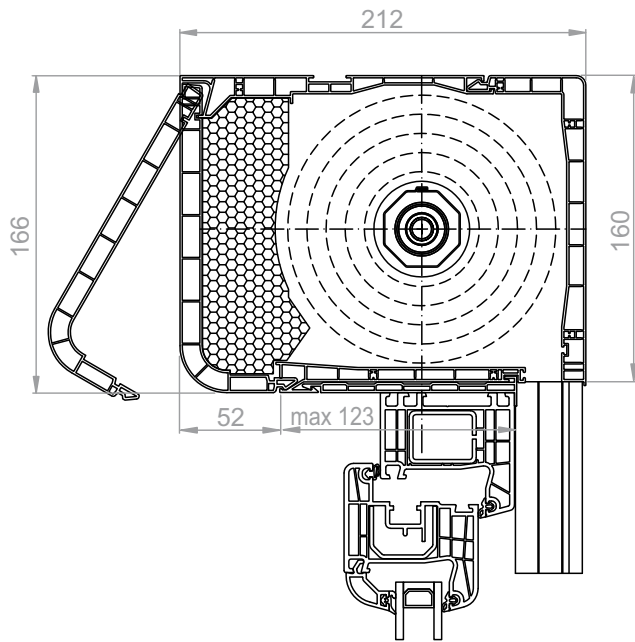
Entry of the tape - 160 box



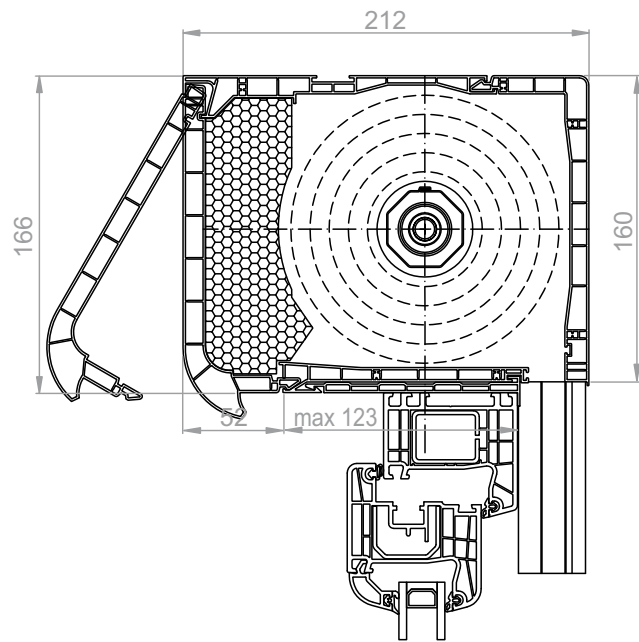
Entry of the tape - 200 box



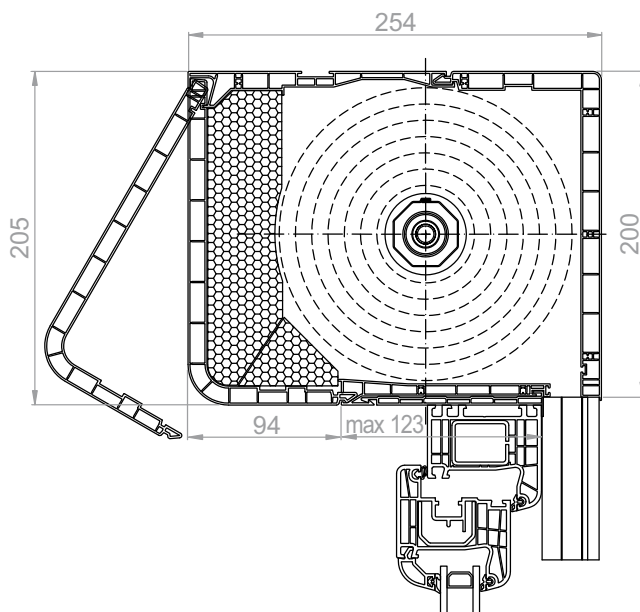
Box 160 - inspection cover without handle



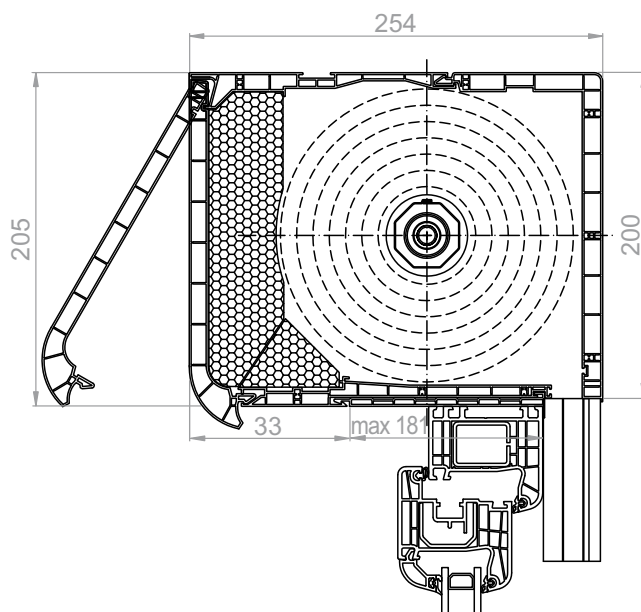
Box 160 - inspection cover with handle

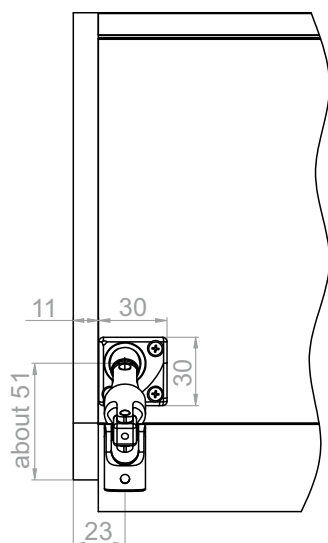
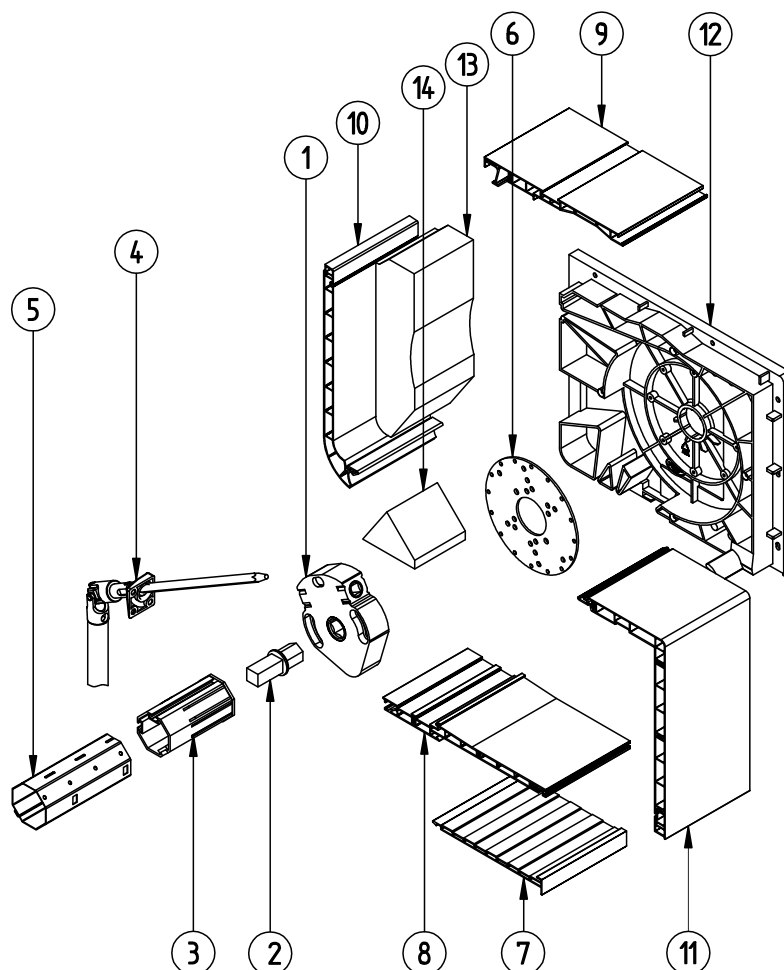


Box 200 - inspection cover without handle



Box 200 - inspection cover with handle

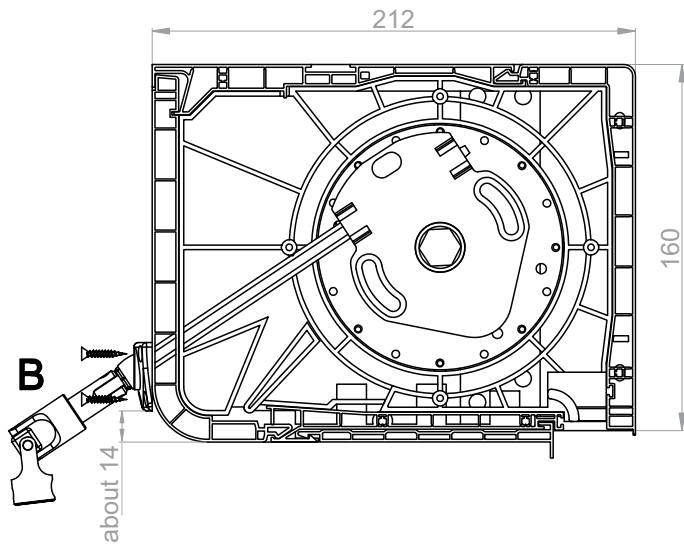




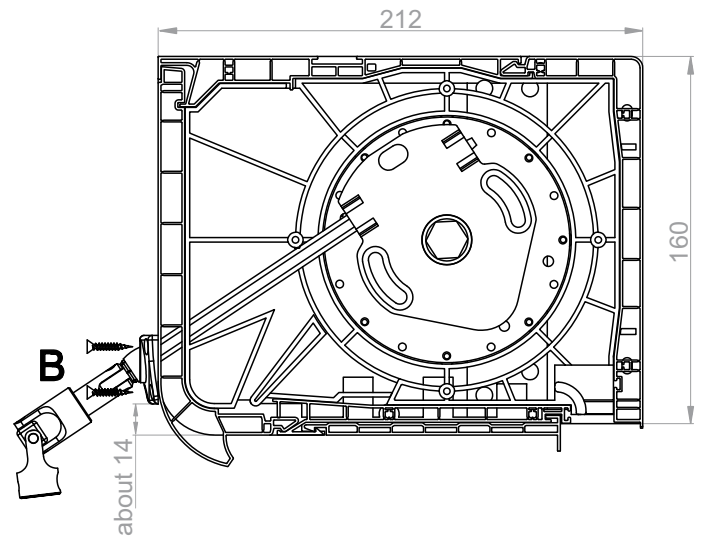
Dimensioning of the cardan mechanism output
 out of the shutter box

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

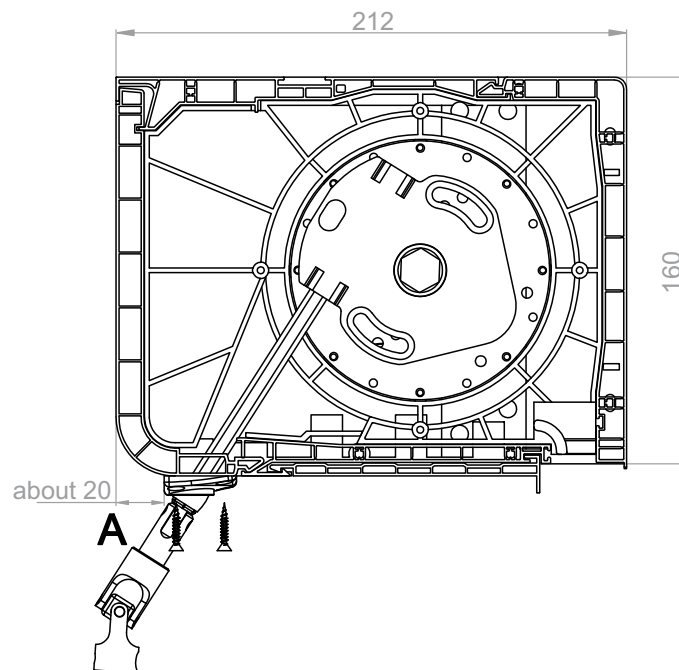
Box 160
Crank lifting mechanism with cardan joint
Output at the front at the cover without a handle.



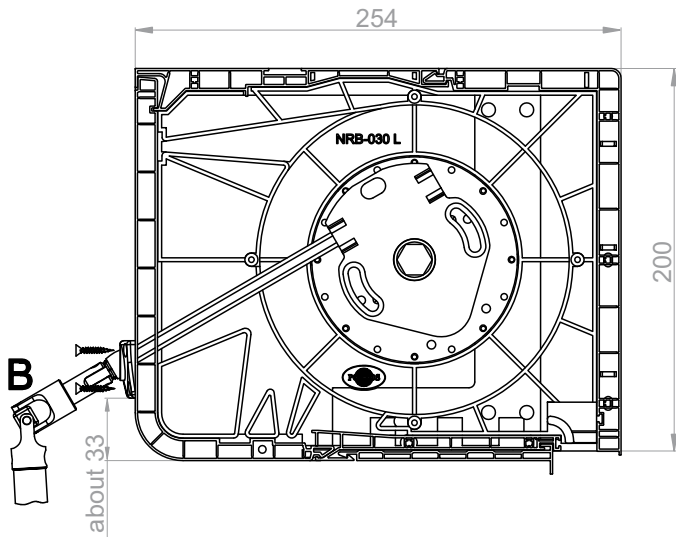
Box 160
Crank lifting mechanism with cardan joint
Output at the front at the cover with a handle.



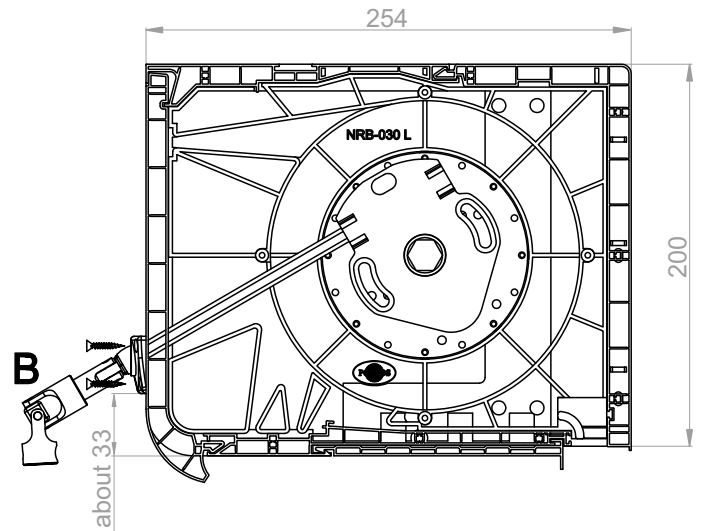
Box 160
Crank lifting mechanism with cardan joint
Output at the bottom at the cover without a handle.



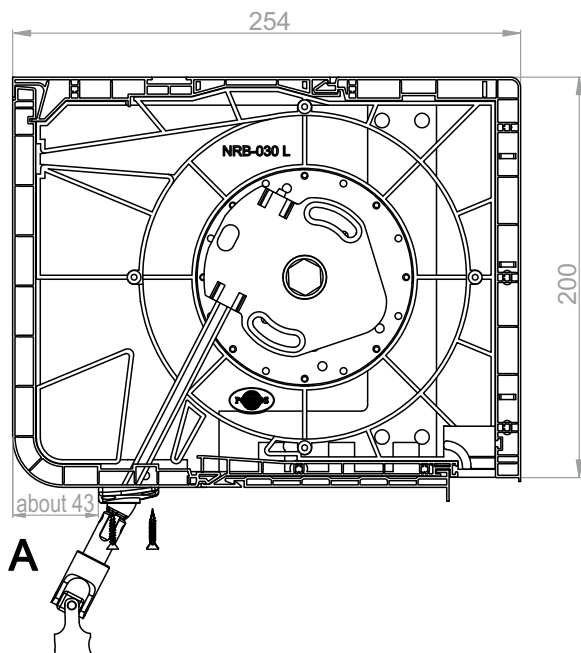
Box 200
 Crank lifting mechanism with cardan joint
 Output at the front at the cover without a handle.



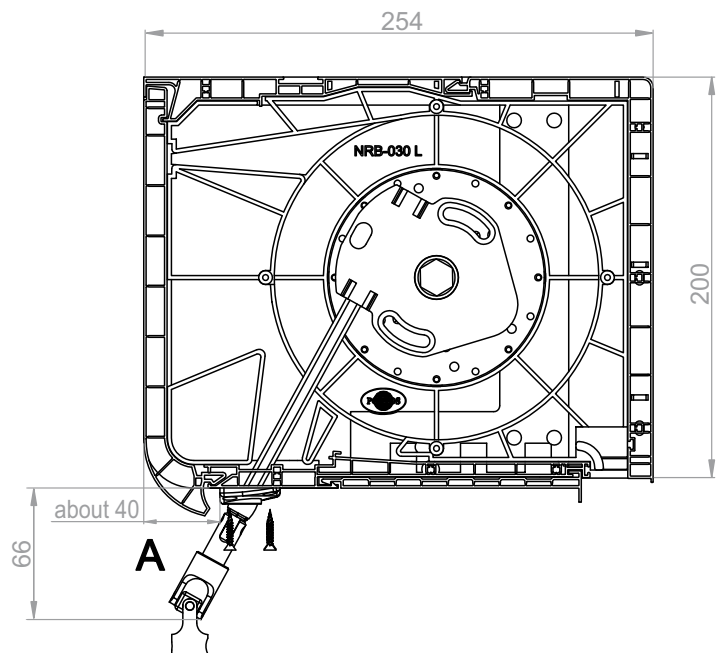
Box 200
 Crank lifting mechanism with cardan joint
 Output at the front at the cover with a handle.

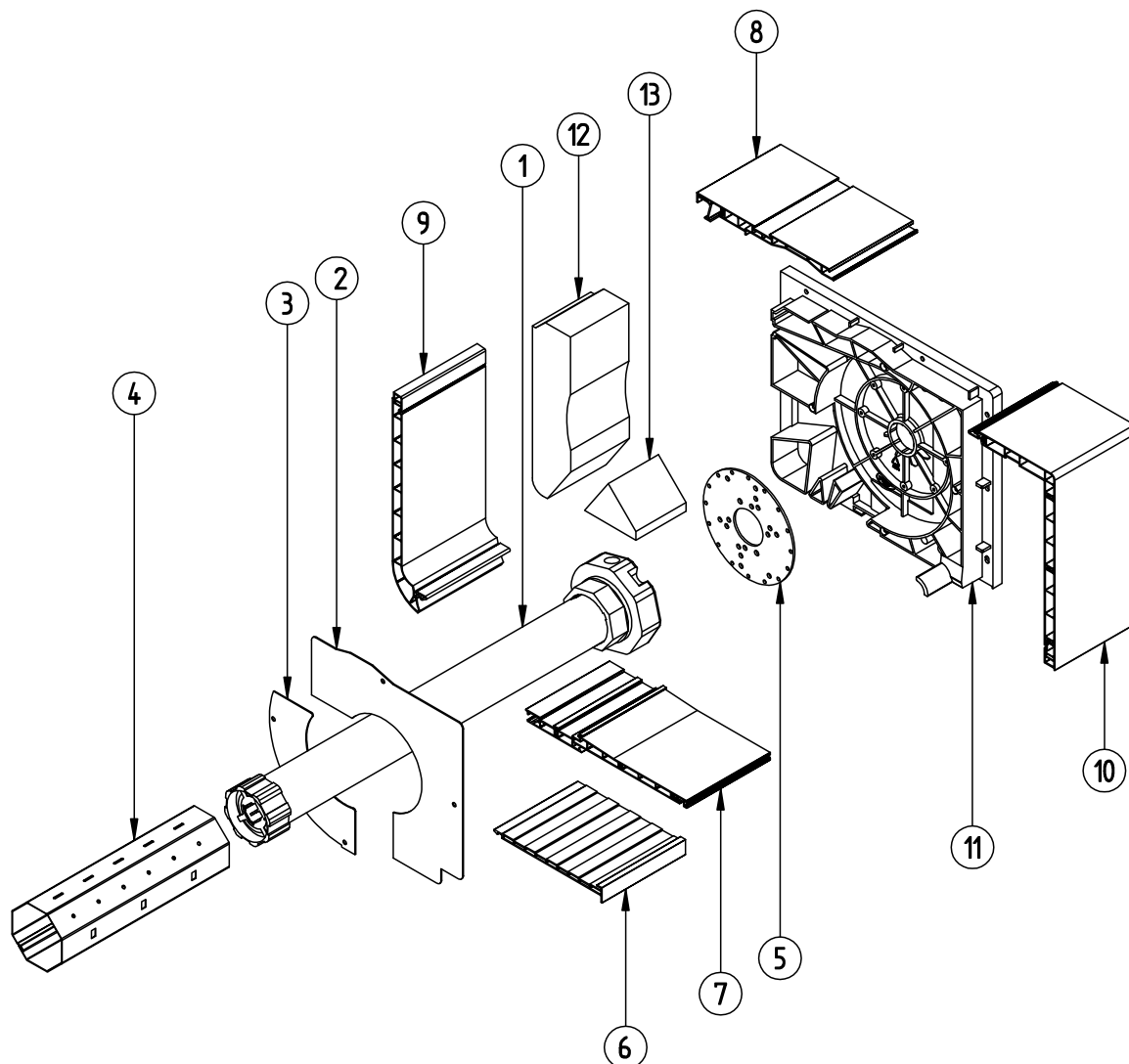


Box 200
 Crank lifting mechanism with cardan joint
 Output at the bottom at the cover without a handle.



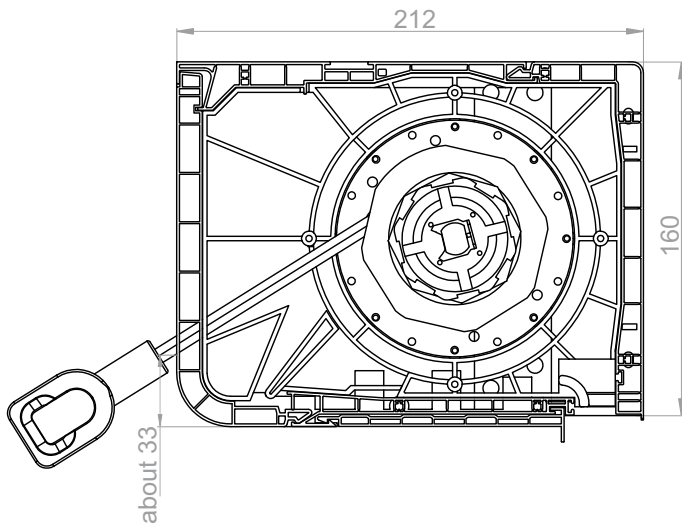
Box 200
 Crank lifting mechanism with cardan joint
 Output at the bottom at the cover with a handle.



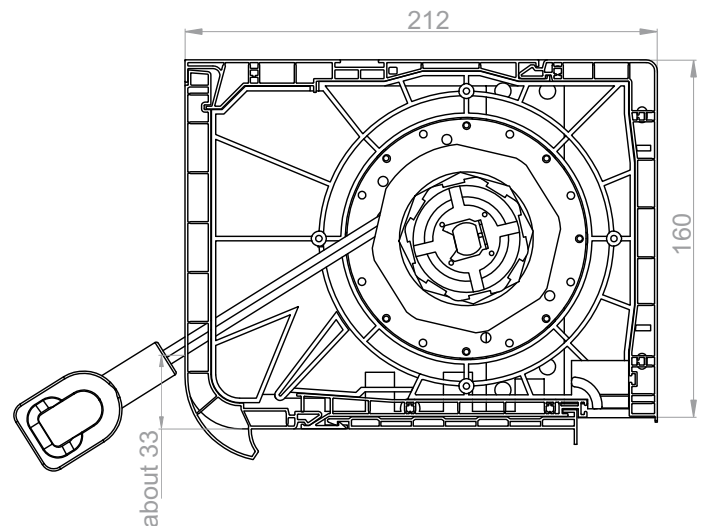


1	S-60/XX NHK	Motor 60 / XX NHK for fi 60 pipe
2	NRT-230	Inner cover of side 200 for motor NHK fi 60 top
3	NRT-240	Inner cover of side 200 for motor NHK fi 60 bottom
4	SW 60	Octagonal pipe fi 60
5	RKZ55	Plate for installation of the motor
6	NRS-010	Adaptation profile
7	NRS-020	Bottom profile of the box 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

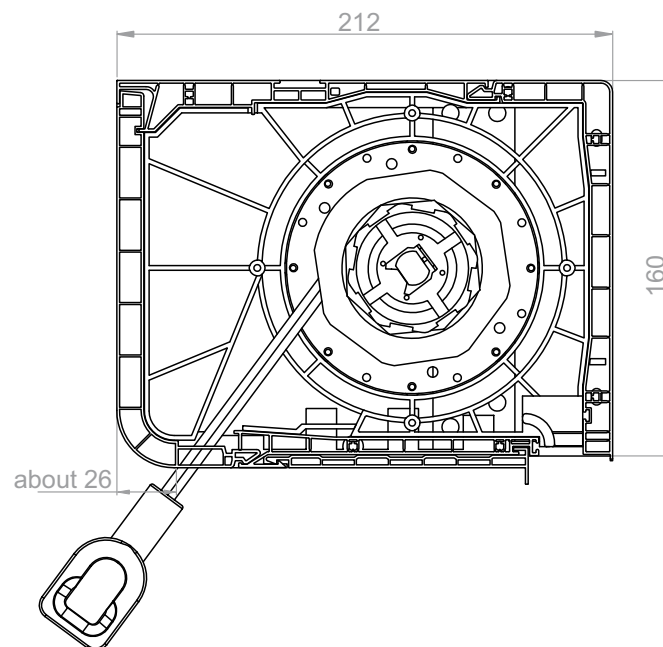
Box 160
Motor with emergency manual operation (NHK)
Output at the front at the cover without a handle.



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

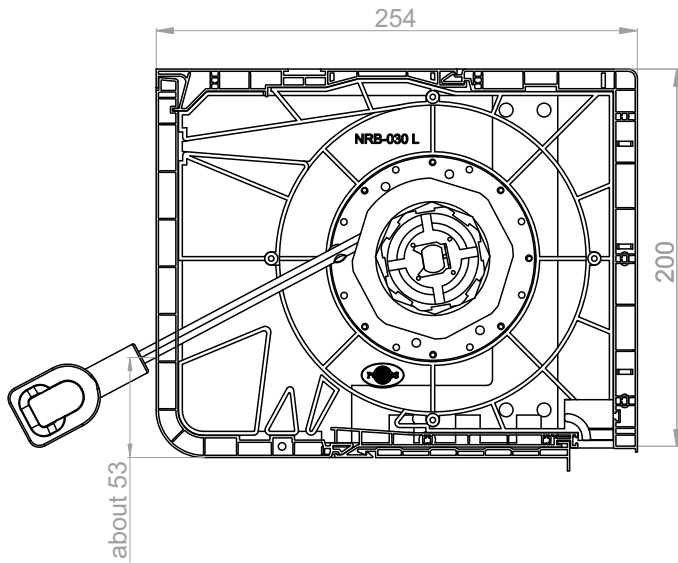


Box 160
Motor with emergency manual operation (NHK)
Output at the bottom at the cover without a handle.

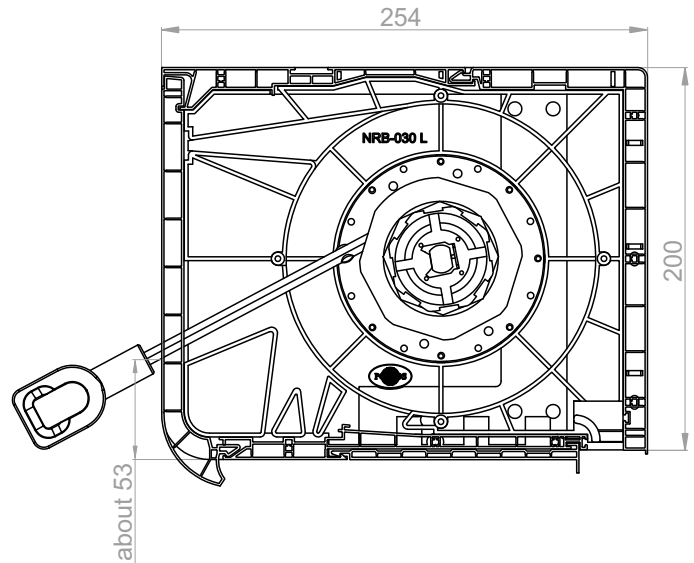


MX1200[®] System Assembly drawings - installation of the NHK motor

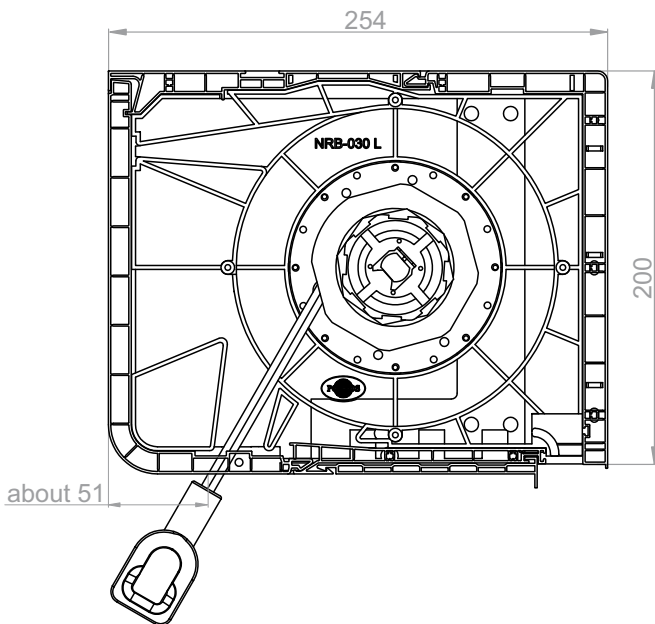
Box 200
Motor with emergency manual operation (NHK)
Output at the front at the cover without a handle.



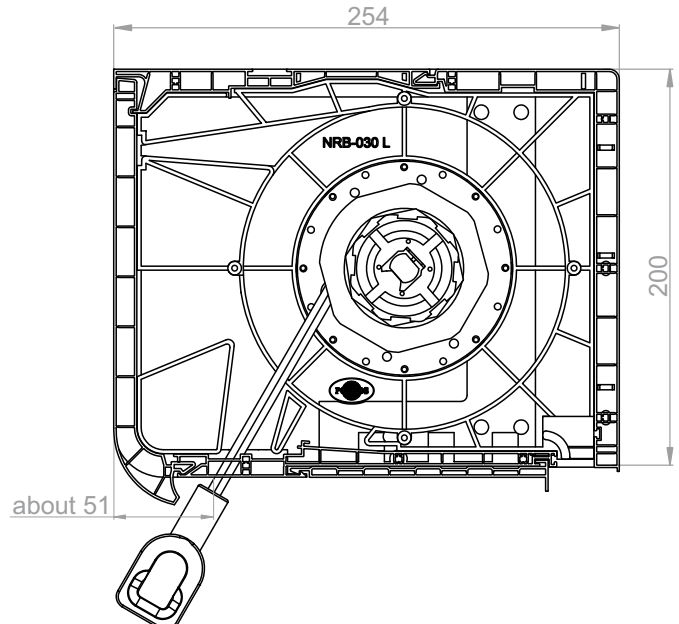
Box 200
Motor with emergency manual operation (NHK)
Output at the front at the cover with a handle.



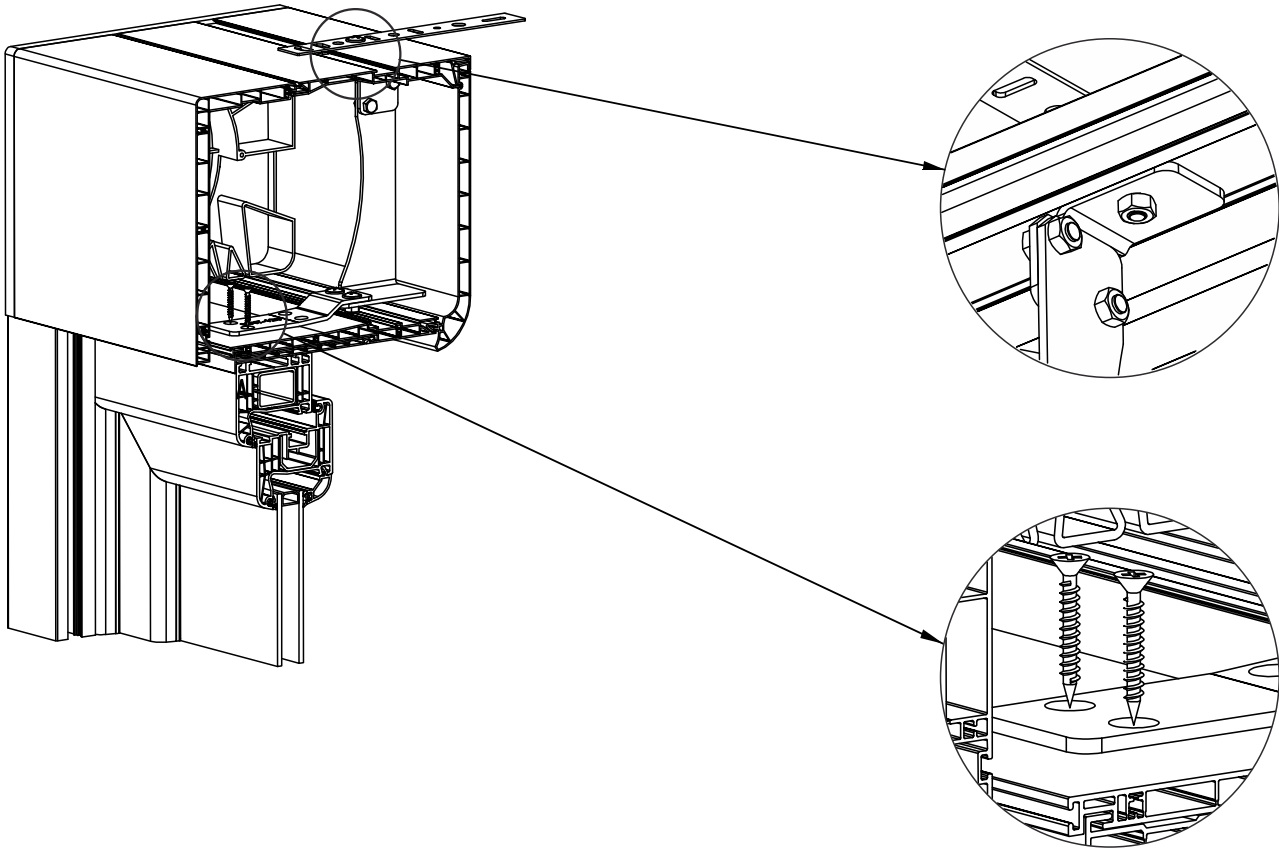
Box 200
Motor with emergency manual operation (NHK)
Output at the bottom at the cover without a handle.



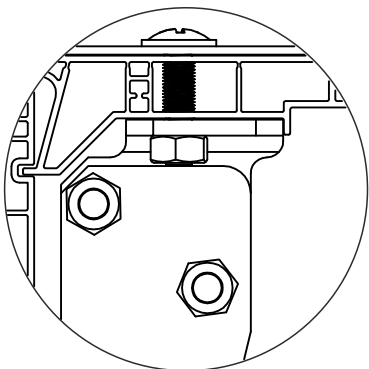
Box 200
Motor with emergency manual operation (NHK)
Output at the bottom at the cover with a handle.



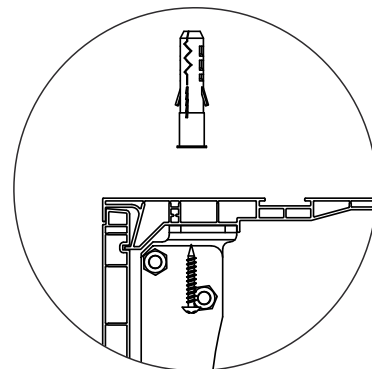
The stabilizing console is mounted as standard every 1m from the outer edge of the box side (with the use of the supplied bolts and screws).



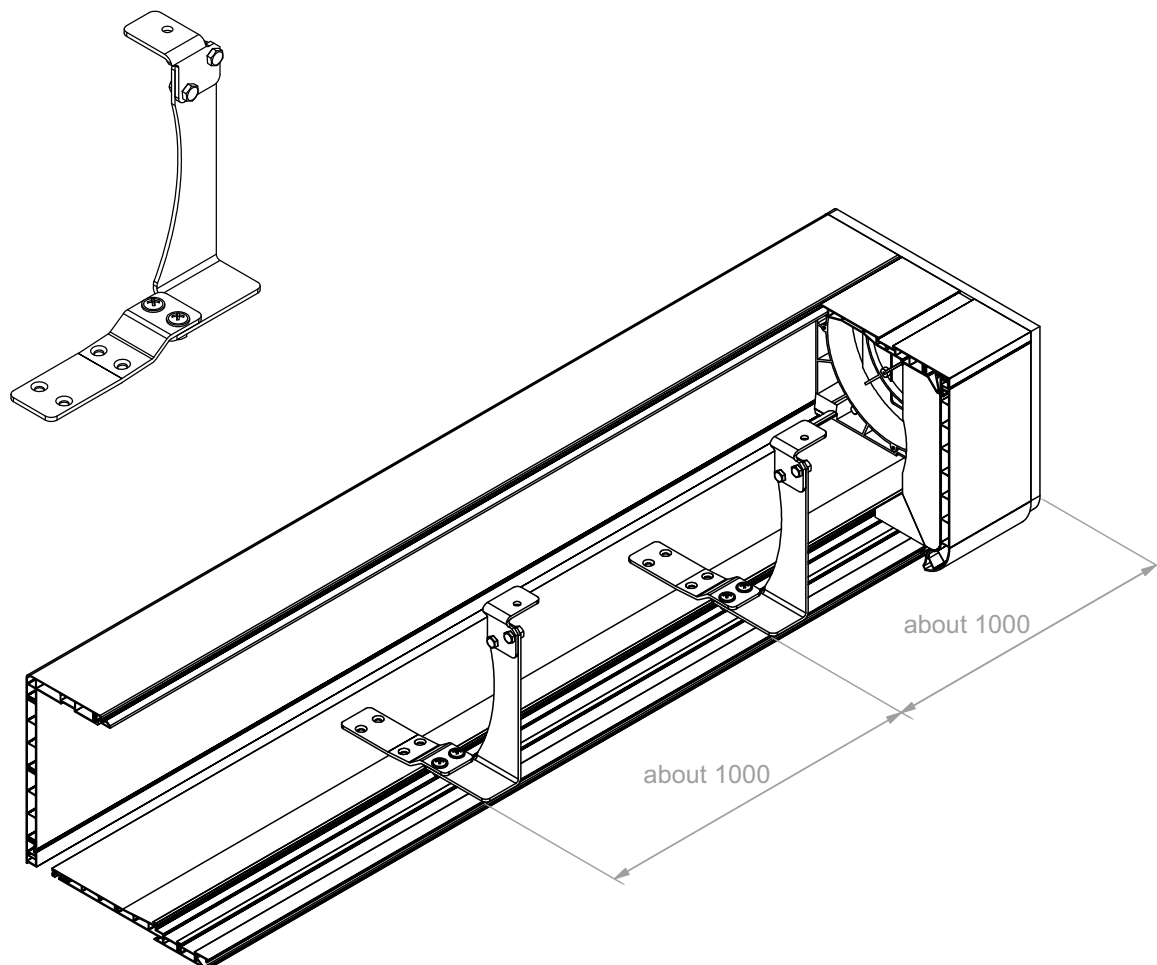
Mounting the stabilizing console in the top part with a mounting anchor.

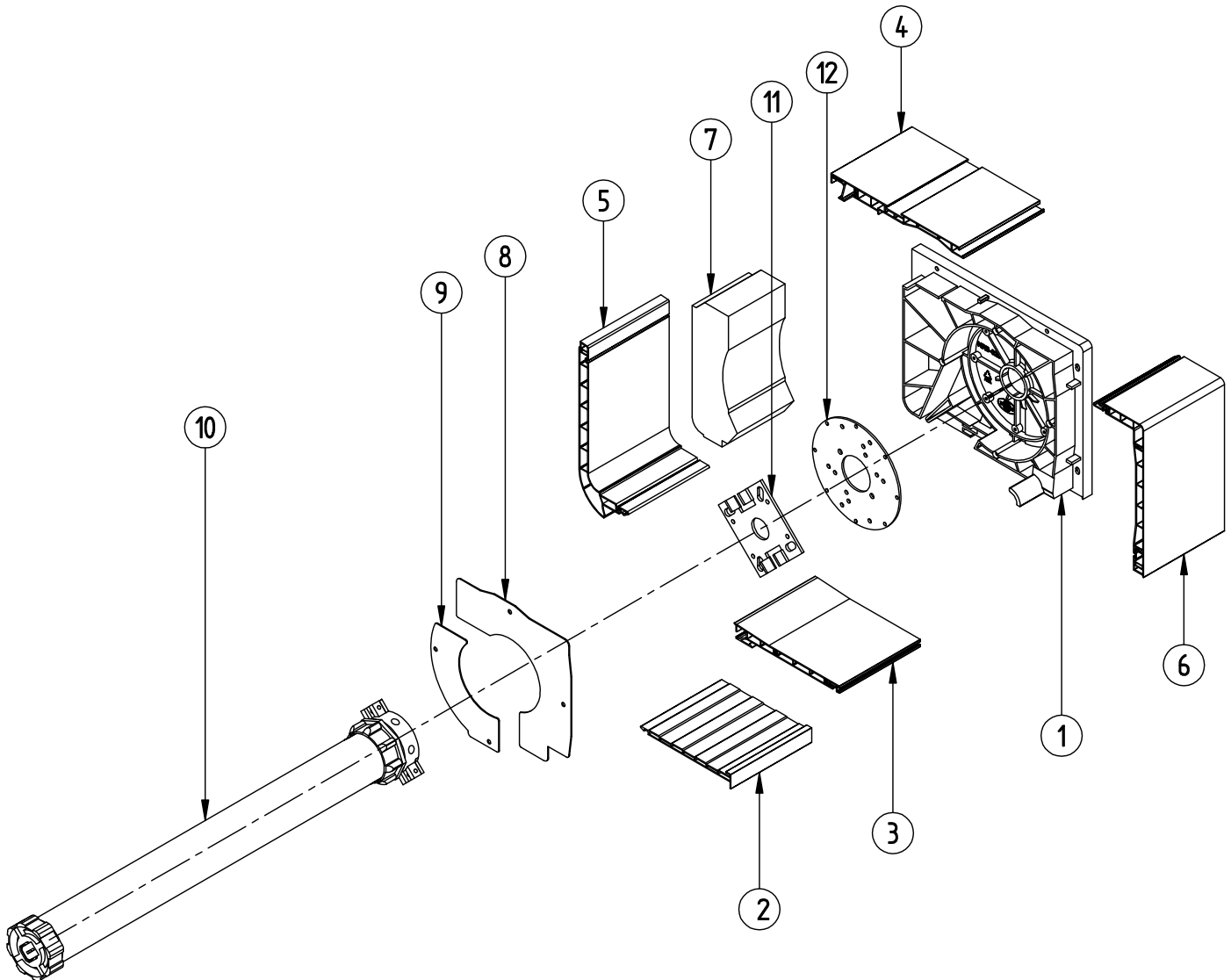


Mounting the stabilizing console in the top part without a mounting anchor.

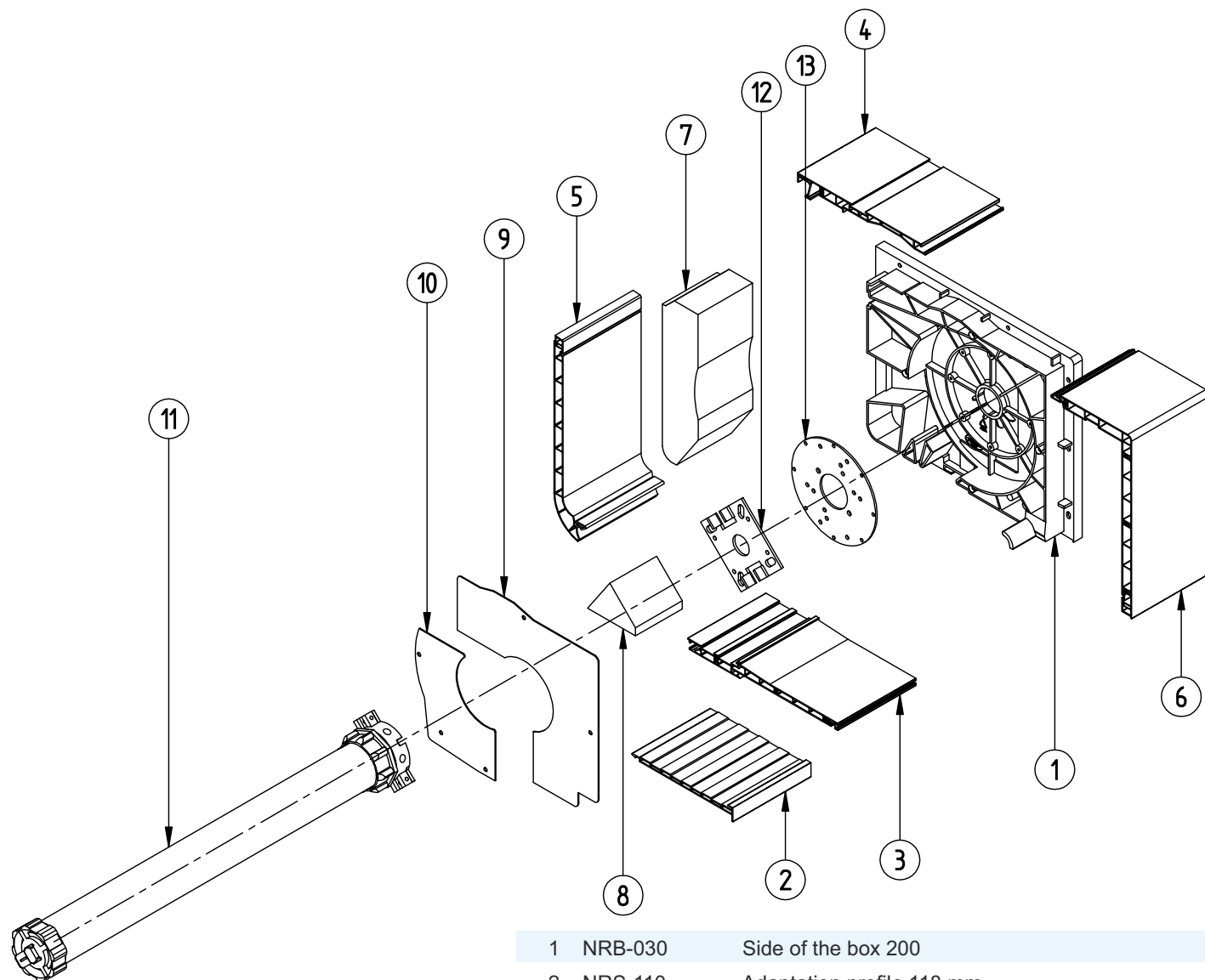


Illustrative arrangement of the stabilizing console in the MX1200 shutter box.



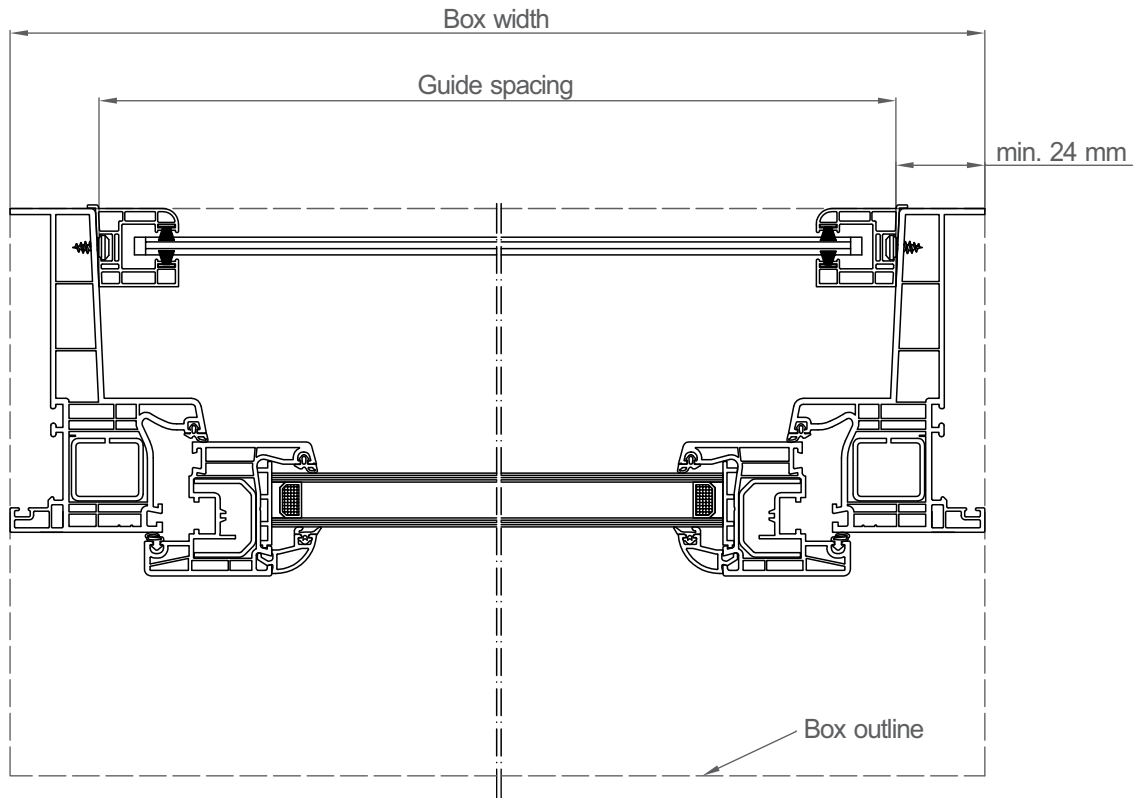


1	NRB-020	Side of the box 160
2	NRS-010	Adaptation profile 101 mm
3	NRS-020	Bottom profile of the box 160/200
4	NRS-030	Top profile of the box 160/200
5	NRS-130	Inspection cover of the box 160 with handle
6	NRS-070	Outer profile of the box 160
7	NRW-020	Styrofoam insert of the box 160
8	NRT-130	Inner 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

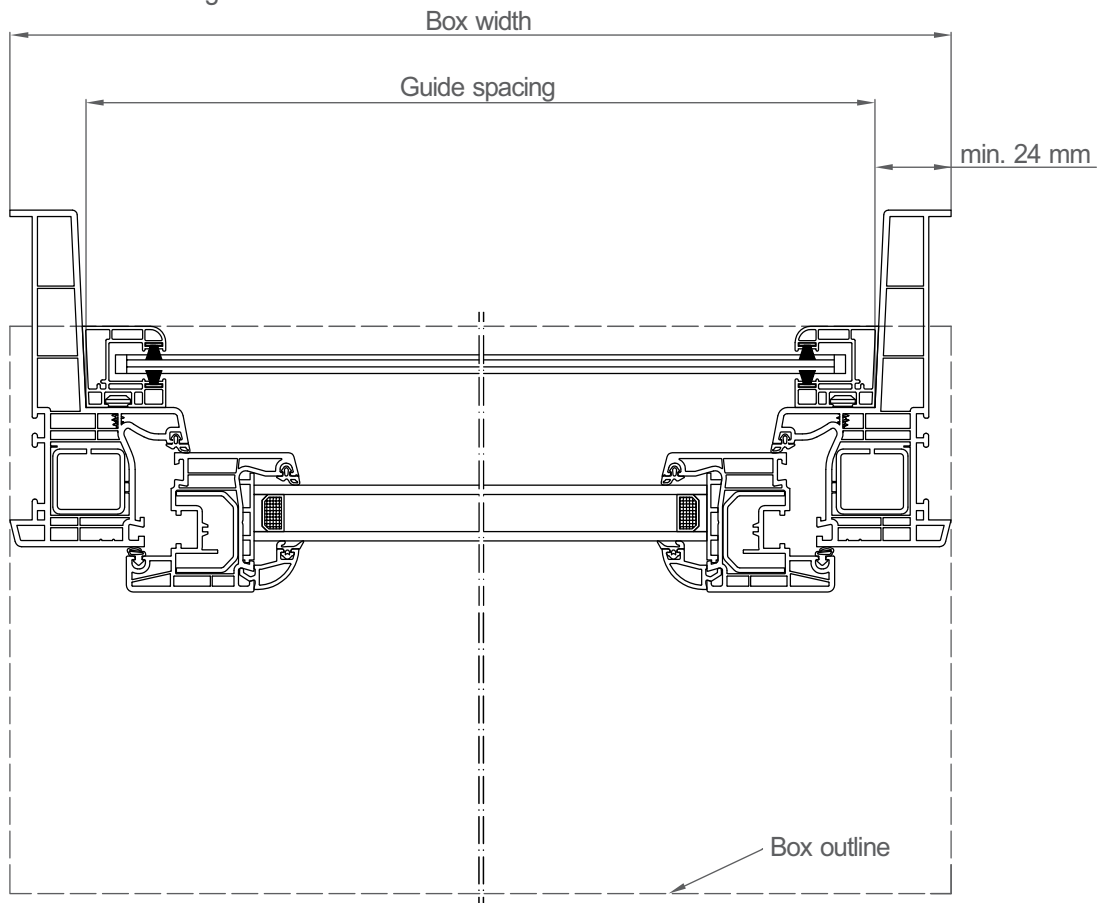


1	NRB-030	Side of the box 200
2	NRS-110	Adaptation profile 118 mm
3	NRS-120	Bottom profile of the box 200
4	NRS-030	Top profile of the box 160/200
5	NRS-140	Inspection cover of the box 200 with handle
6	NRS-080	Outer profile of the box 200
7	NRW-030	Styrofoam insert of the box 200
8	NRW-060	Styrofoam 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

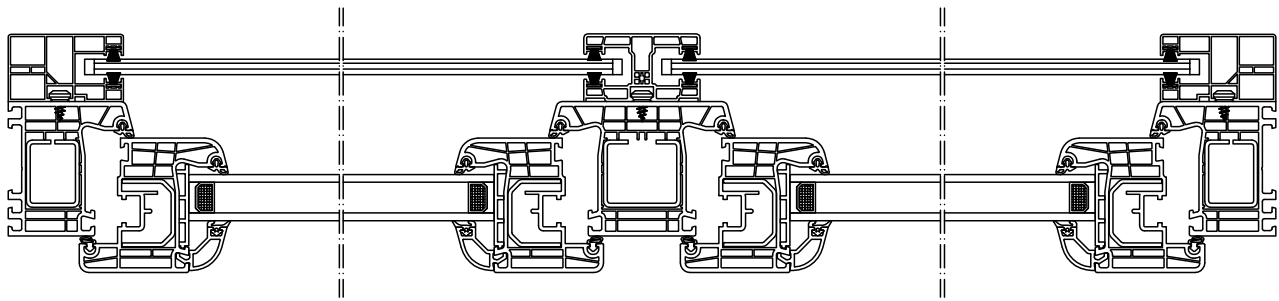
Installation of the NRR-010 narrow guide with flange.



Installation of the NRR-020 narrow guide

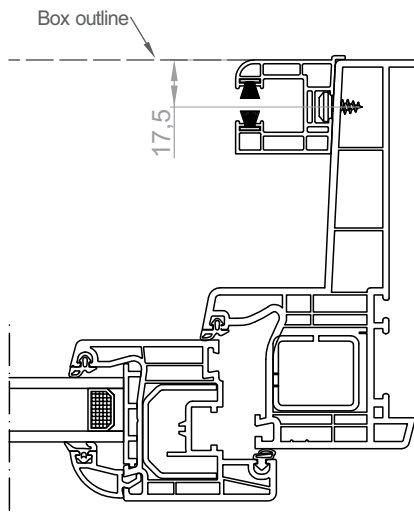


Installation of RK16 single guide with RK18 double guide

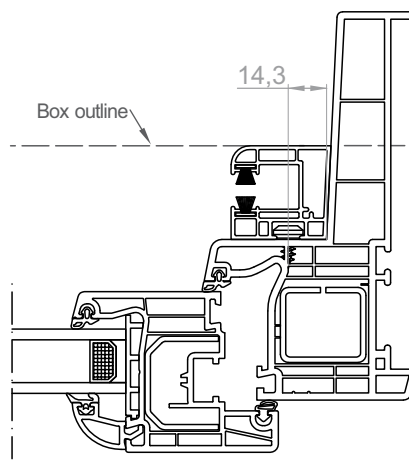


View of guides with a window frame

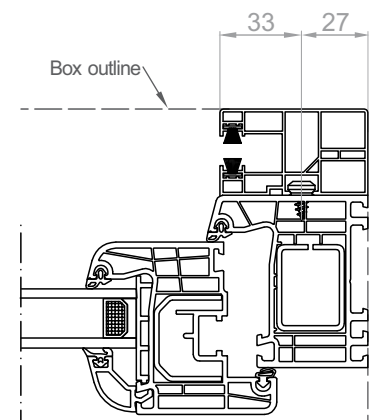
NRR-010 guide



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 ²			width 0.35-2.5 m, max. area 6.5 m ²			width 0.35-3 m, max. area 6.5 m ²		
	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)
PVC	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
160 mm	202	198	202	194	190	187	163	163	158
160 mm with the stabilizing console	198	198	195	187	175	187	136	136	140
160 mm with additional Styrofoam insert	101	101	101	85	85	81	59	59	59
200 mm	343	335	347	344	344	339	279	279	270
200 mm with the stabilizing console	300	300	339	331	331	316	226	226	226
200 mm with additional Styrofoam insert	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 Normschalldämmwertdifferenz 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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Prüfung und Kalibrierung - EN ISO/IEC 17025
Inspektion - EN ISO/IEC 17020
Zertifizierung Produkte - EN ISO/IEC 17065
Zertifizierung Managementsysteme - EN ISO/IEC 17021

ISO 9001:2015
ISO 14001:2015
DIN EN ISO 9001:2015
DIN EN ISO 14001:2015

DAkkS
DIN EN ISO 9001:2015
DIN EN ISO 14001:2015

Nachweis Luftschalldämmung von Bauteilen

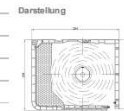
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Nr. 14-004002-PR01
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Auftraggeber
PORTOS
ul. Ziota 71
62-800 Kalisz
Polen

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 Normschalldämmwertdifferenz 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
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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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DIN EN ISO 9001:2015
DIN EN ISO 14001:2015

DAkkS
DIN EN ISO 9001:2015
DIN EN ISO 14001:2015

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-0200111083 2011-09

Product
Designation System **Roller shutter box**
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 ($e_1 + e_2 \leq 2$ mm); Replacement panel; Material adiabatic; Thickness in mm 70; Length L in mm 105

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 pages and annex (1 page).

Results
Calculation of thermal transmittance referring to
EN ISO 10077-2:2012-02

$U_{sb} = 0,75$ W/(m²K)

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).

ift Rosenheim
11.08.2015

Manuel Demel
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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-0200111083 2011-09

Product
Designation System **Roller shutter box**
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 ($e_1 + e_2 \leq 2$ mm); Replacement panel; Material adiabatic; Thickness in mm 70; Length L in mm 147

Instructions for use
The results obtained can be used as evidence in accordance with the above basis.
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Calculation of thermal transmittance referring to
EN ISO 10077-2:2012-02

$U_{sb} = 0,77$ W/(m²K)

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).

ift Rosenheim
11.08.2015

Manuel Demel
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