

Top mounted shutters

TTP1000K[®]

TECHNICAL CATALOGUE



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Features and benefits of the TP 1000K[®] box

- The shutters are available with or without a mosquito net.
- Possibility to use profiles from PVC 37 to PA 39, PA 45 in the shutters with a mosquito net, and additionally PA 52 mm in the shutters without a mosquito net.
- Installation on window frames of thickness from 60 to 264 mm (with box enlargement + 62 mm, also HS door)
- Simple, reliable and stable assembly 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.
- Additionally, the possibility to install steel reinforcement.
- Installation of the reinforcement at the top of the shutter from the inside underneath the anchors to stiffen the whole structure. Edges of the top steel reinforcement covered.
- Possibility to select the inspection cover: at the bottom or at the front of the box.
- Possibility to make an entry of the tape at the bottom or at the front of the box.
- Possibility to use top box anchoring.
- Possibility of building up the box from the inside and from the outside. The inner and outer covers are smooth or grooved.
- Possibility of installation of concealed laths from the inside and the outside.
- Easy service access to the drive components: tape, motor, crank.
- Simple and easy way to close the mosquito net - click-clack system.
- Mosquito net placed in the cassette. Possibility of easy service disassembly of the mosquito net without the use of screws.
- The mosquito net is between the curtain and the window.
- Possibility to make two (several) shutters in one box with independent or dependent drive.
- Possibility of dividing the mosquito net into 2 parts without the need to divide the shutter curtain.
- Possibility to order PVC or aluminium guides for shutters.
- Bottom end cap inclined at an angle of 5° (is adjusted for external window sills).
- Possibility to install brush seals at the curtain entry from the inside and outside.
- Steel side handles along the entire height of the box, which improves the stability of the shutter.
- Possibility to install end caps of the box side covering the screws from the inside of the room.
- When connecting two boxes, the end caps cover the connection from the inside and from the bottom.
- Easy replacement of entry guides - without screws.
- When using mosquito net division without the curtain division, the shutter curtain does not rub against the guide dividing the mosquito net.
- The concealed lath has an additional bend to facilitate its correct installation in the grooved cover.
- Easy to open the bottom inspection cover with the shutter built up from the inside.
- Easy to change the opening of the inspection cover: at the front or at the bottom without the need to buy additional elements.
- In the outer cover there is a reinforcement for the concealed lath.
- 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.
- Possibility of ordering guide end caps to cover the unused mosquito net sockets (the element needed for the mosquito net with division but with the whole curtain).

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LEGEND:

BOX
180,220,250

BOX
220

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



Component to the box with mosquito net.

1rm
0,2kg

1pcs
0,3kg

The indicative weight of the component (in kilogrammes).

Max.
6rm

The maximum length of a long component (given in metres)

ABS

PVC

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

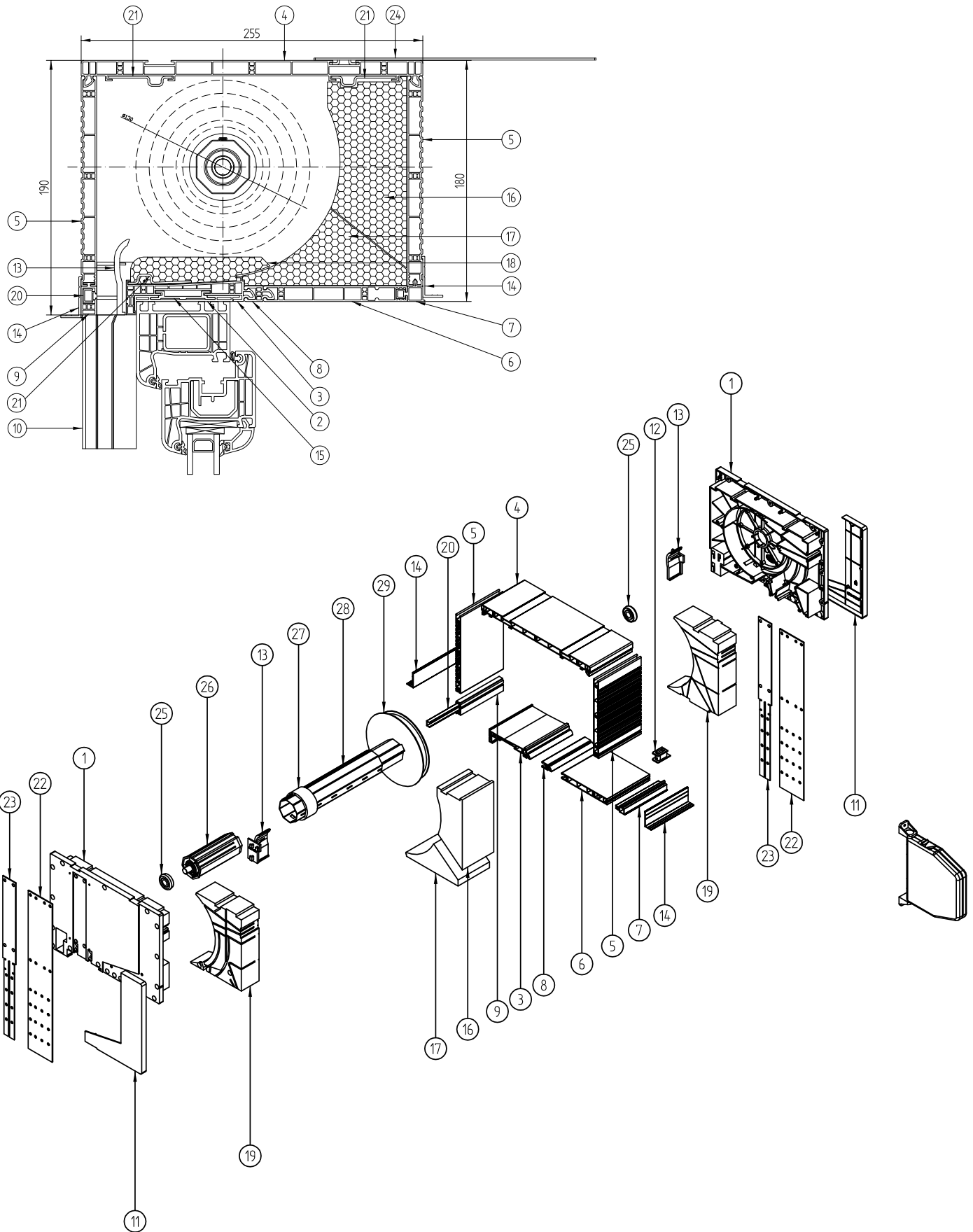
Pb

It contains no harmful heavy metals such as lead.



The component with a veneering option.

Components of the TP1000K[®] system Box 180 - cross section and parts list

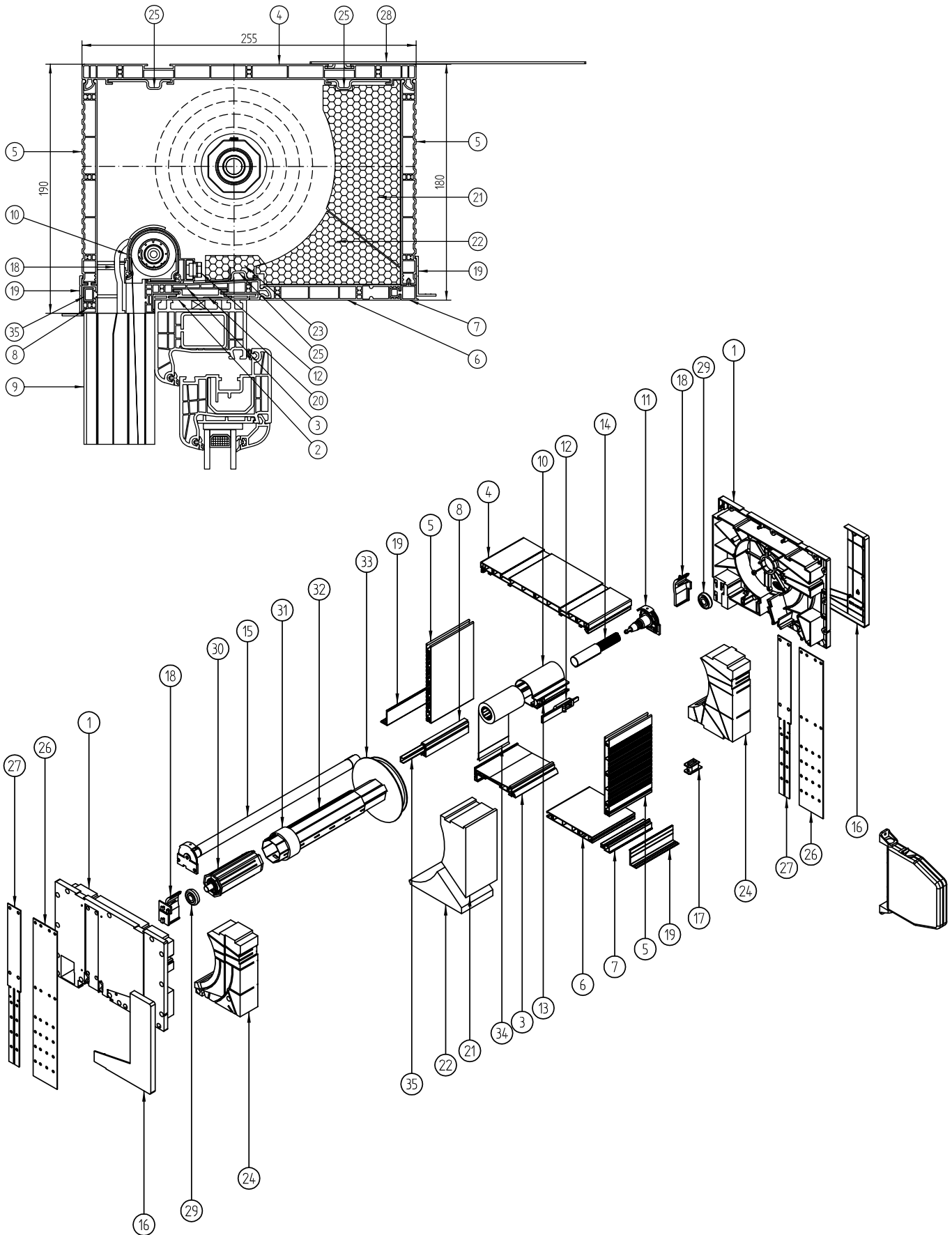


TP1000K[®] box 180- the cross-section and list of elements

1	NPB-010	End cap for shutter box 180
2	NPS-010	Box adapting profile
3	NPS-020	Bottom shutter box profile with seal
4	NPS-030	Top shutter box profile
5	NPS-040	Side profile for box 180
6	NPS-070	Bottom inspection hatch
7	NPS-080	Connecting profile for box
8	NPS-090	Complement bottom profile for box
9	NPS-100	Bottom side profile with seal
10	NPR-020	Single PCV-guide
11	NPD-010	Side blind of end cap
12	NPD-040	Cord guide
13	NPD-050	Entry guide for profile 37-45 left/right
14	NPL-010	Lath for plaster finishes
15	NPL-020	Aluminum inset for NPS-010 and RN-1 70
16	NPW-015	Side thermal insulation for box 220 graphite
17	NPW-045	Bottom thermal insulation for box 220 graphite
18	NPW-065	Additional thermal insulation
19	NPW-140	Thermal insulation for side cup
20	RA-2-00 7 MM	Thermal insulation for left/right end cap
21	NPT-020	Reinforcement of the shutter box
22	NPT-140	Steel side conector 56mm
23	NPT-120	Steel side conector 30mm
24	NPT-050	Steel munting anchor
25	LO 28/10	Bearing for pvc shutter boxes
26	OBS-40-PCV	Mounting cap fi-40 for pvc shutter box
27	PZ 40/50	40/50 expansion ring
28	SW 40	Octagonal pipe 40 0,6 mm
29	RKZ 71	Wheel of the roller tube

Components of the TP100K[®] system

Box 180 with mosquito net - cross section and parts list

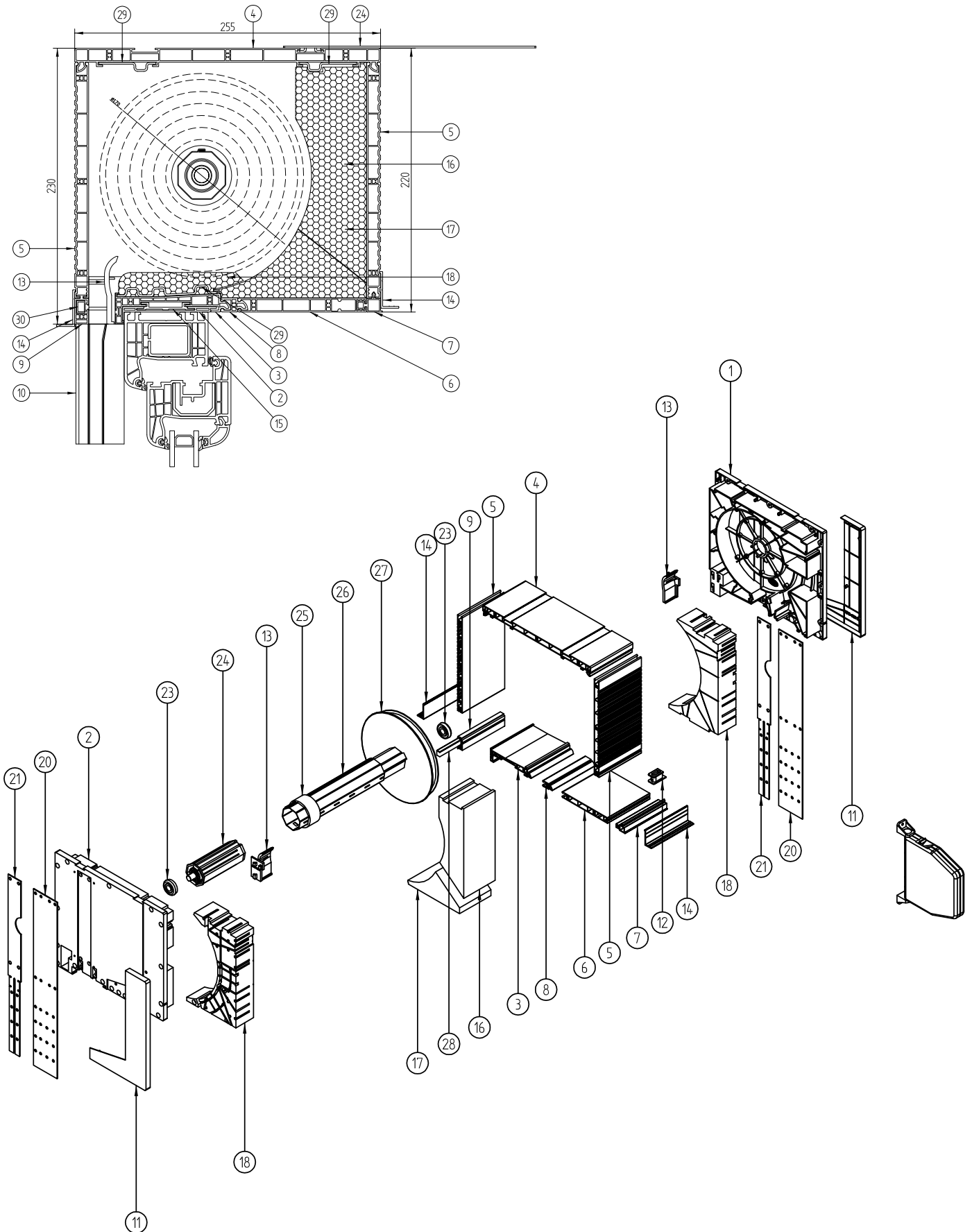


TP1000K® shutter box 180 with mosquito net - cross-section and list of components

1	NPB-110	End cap of the shutter box 180 with mosquito net
2	NPS-010	Box adapting profile
3	NPS-020	Bottom shutter box profile with seal
4	NPS-030	Top shutter box profile
5	NPS-040	Side profile of the shutter box 180
6	NPS-070	Bottom inspection hatch
7	NPS-080	Connecting profile for box
8	NPS-100	Bottom side profile with seal
9	NPR-010	Double guide for mosquito net
10	M-RN-090	Small cassette for mosquito net
11	MZW-030	The side of the cassette with mounting cap for spring pipe for small cassette
12	M-RN-050	Cassette's latch
13	M-RN-060	Spring for cassette's latch
14	ABS-CZ	Slowing system for mosquito-net
15	MZN-091	Spring 350 of the mosquito net for top mounted shutters (small cassette)
16	NPD-010	End cap of the shutter box 180
17	NPD-040	Cord guide
18	NPD-050	Entry guide for profile 37-45 left/right
19	NPL-010	Lath for plaster finishes
20	NPL-020	Aluminum inset for NPS-010 and RN-1 70
21	NPW-015	Additional thermal insulation for shutter box 180
22	NPW-055	Bottom thermal insulation for box with mosquito net
23	NPW-075	Additional thermal insulation for box with mosquito net
24	NPW-150	Thermal insulation for side cup
25	NPT-020	Reinforcement steel top - internal or external
26	NPT-140	Steel side connector 56mm
27	NPT-120	Steel side connector 30mm
28	NPT-050	Steel mounting anchor
29	LO 28/10	Bearing for PCV shutter boxes
30	OBS-40-PCV	Mounting cap fi-40 for PCV shutter box
31	PZ 40/50	40/50 expansion ring
32	SW 40	Octagonal pipe 40 0,6 mm
33	RKZ 70	Wheel of the roller tube
34	MOS-XX	Mosquito net
35	RA-2-00 7 MM	Small reinforcement of cover - raw 7mm

Components of the TP1000K[®] system

Box 220 - cross-section and parts list

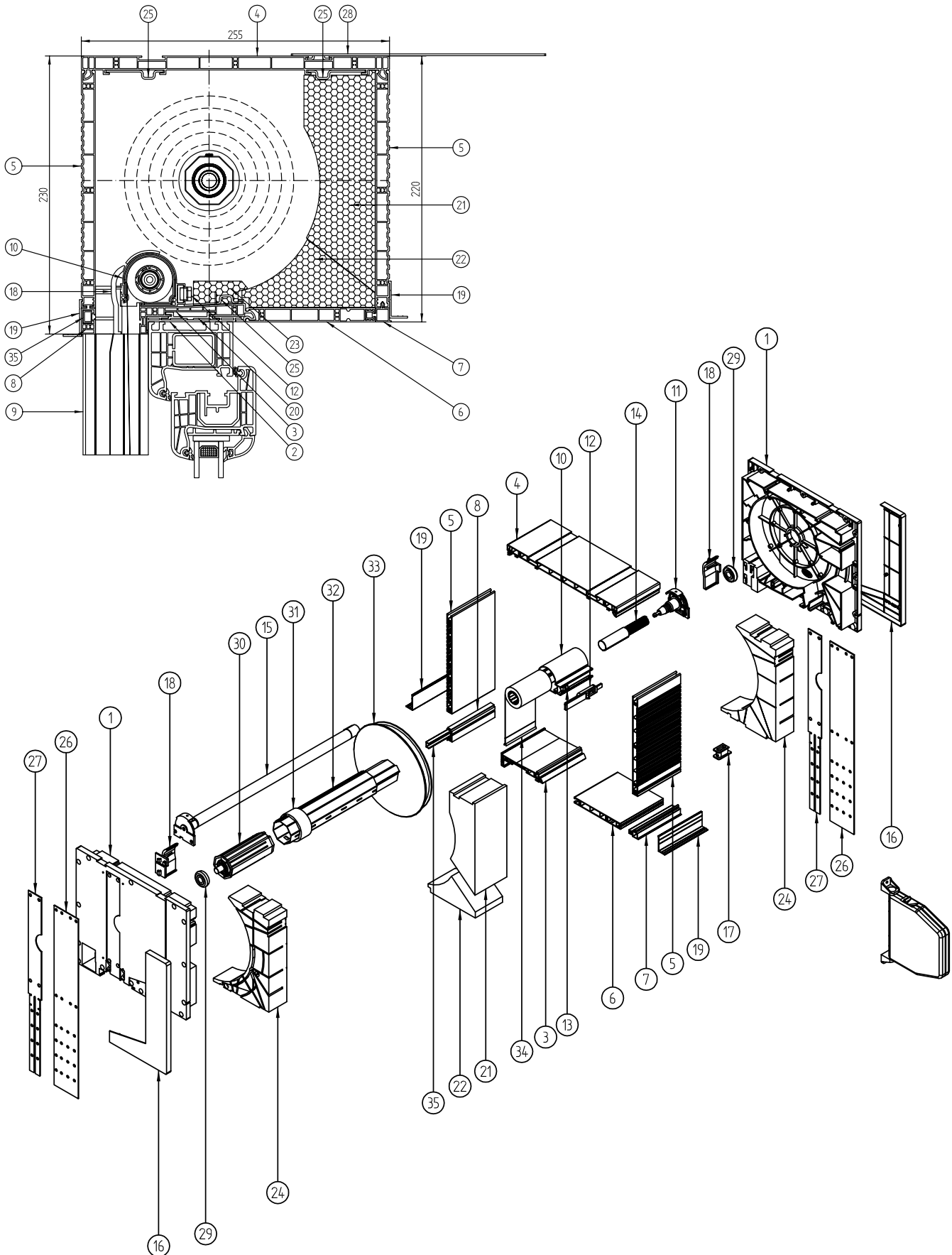


TP1000K[®] shutter box 220 - cross-section and list of components

1	NPB-020	End cap for shutter box 220
2	NPS-010	Box adapting profile
3	NPS-020	Bottom shutter box profile with seal
4	NPS-030	Top shutter box profile
5	NPS-051	Side profile for box 220
6	NPS-070	Bottom inspection hatch
7	NPS-080	Connecting profile for box
8	NPS-090	Complement bottom profile
9	NPS-100	Bottom side profile
10	NPR-020	Double guide
11	NPD-020	Side blind of end cap
12	NPD-040	Cord guide
13	NPD-050	Entry guide for profile 37-45 left/right
14	NPL-010	Lath for plaster finishes
15	NPL-020	Aluminum inset for NPS-010 and RN-1 70
16	NPW-025	Side thermal insulation for box 220 graphite
17	NPW-045	Bottom thermal insulation for box 220 graphite
18	NPW-090	Thermal insulation for side cup
19	NPT-020	Reinforcement steel top - internal or external
20	NPT-040	Steel side conector 56mm
21	NPT-030	Steel side conector 30mm
22	NPT-050	Steel mounting anchor
23	LO 28/10	Bearing for PVC shutter boxes
24	OBS-40-PCV	Mounting cap fi-40 for PVC shutter box
25	PZ 40/50	40/50 expansion ring
26	SW 40	Octagonal pipe 40 0,6 mm
27	RKZ 72	Wheel of the roller tube for box 200/220/250
28	RA-2-00 7 MM	Small reinforcement of cover - raw 7mm
29	NPT-010	Steel reinforcement of the shutter box

Components of the TP1000K[®] system

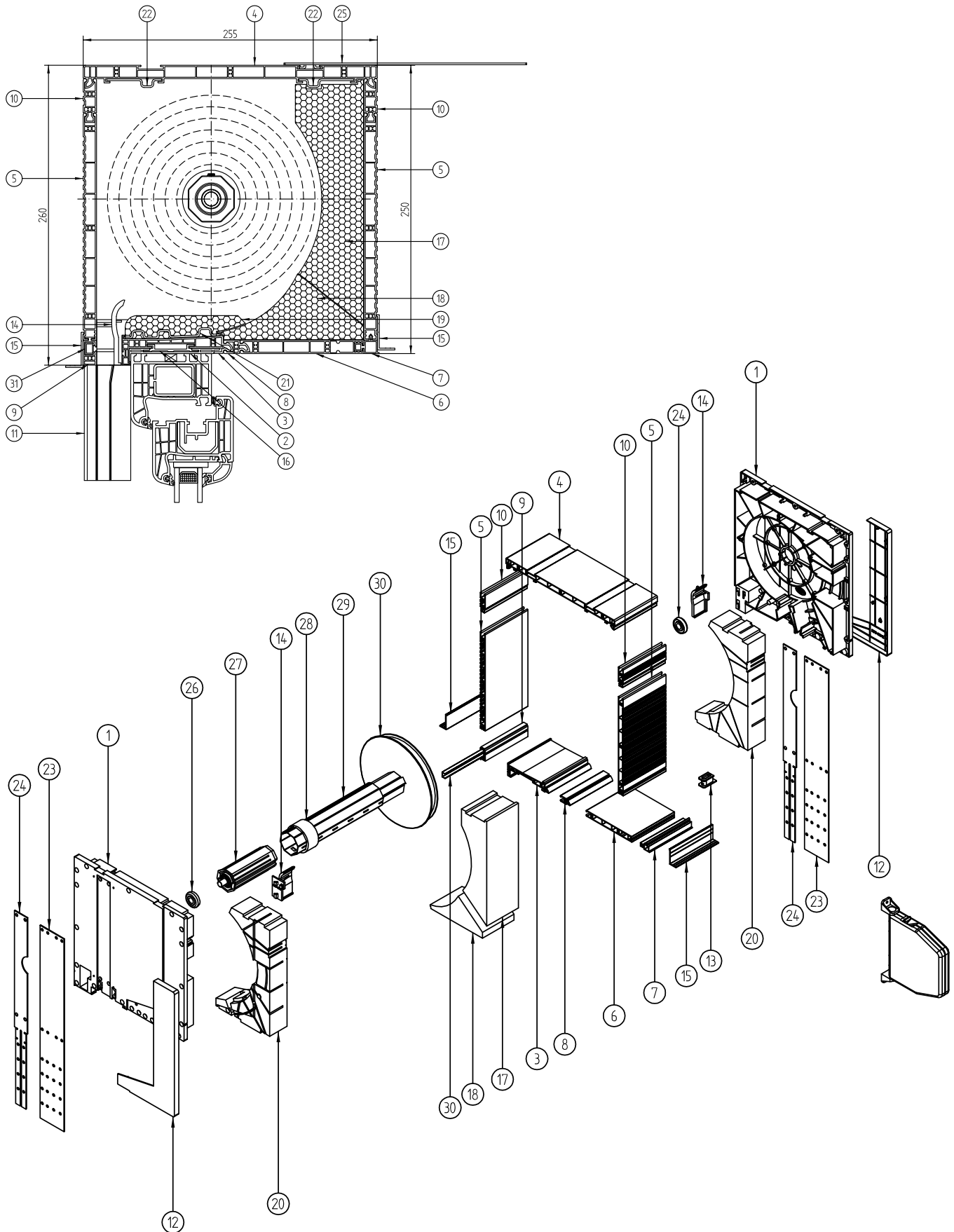
Box 220 with mosquito net - cross section and parts list



TP1000K® shutter box 220 with mosquito net - cross-section and list of components

1	NPB-120	End cap of the shutter box 220 with mosquito net
2	NPS-010	Box adapting profile
3	NPS-020	Bottom shutter box profile with seal
4	NPS-030	Top shutter box profile
5	NPS-051	Side profile for box 220
6	NPS-070	Bottom inspection hatch
7	NPS-080	Connecting profile for box
8	NPS-100	Bottom side profile
9	NPR-010	Double guide for mosquito-net
10	M-RN-010	Cassette for mosquito net
11	MZW-021	The side of the cassette with mounting cap for spring pipe
12	M-RN-050	Cassette's latch
13	M-RN-060	Spring for cassette's latch
14	ABS-CZ	Slowing system for mosquito-net
15	MZN-050	Spring of mosquito net 350mm for top mounted roller shutter
16	NPD-020	Side blind of end cap
17	NPD-040	Cord guide
18	NPD-050	Entry guide for profile 37-45 left/right
19	NPL-010	Lath for plaster finishes
20	NPL-020	Aluminum inset for NPS-010 and RN-1 70
21	NPW-025	Side thermal insulation for box 220 graphite
22	NPW-055	Side thermal insulation for mosquito-net box 220 graphite
23	NPW-075	Additional thermal insulation for mosquito-net box 220 graphite
24	NPW-100	Thermal insulation for side cup
25	NPT-020	Bottom steel reinforcement for mosquito-net box 220
26	NPT-040	Steel side conector 56mm
27	NPT-030	Steel side conector 30mm
28	NPT-050	Steel mounting anchor
29	LO 28/10	Bearing for PVC shutter boxes
30	OBS-40-PCV	Mounting cap fi-40 for PVC shutter box
31	PZ 40/50	40/50 expansion ring
32	SW 40	Octagonal pipe 40 0,6 mm
33	RKZ 72	Wheel of the roller tube for box 200/220/250
34	MOS-XX	Mosquito net
35	RA-2-00 7 MM	Small reinforcement of cover - raw 7mm

Components of the TP1000K[®] system Box 250 - cross-section and parts list

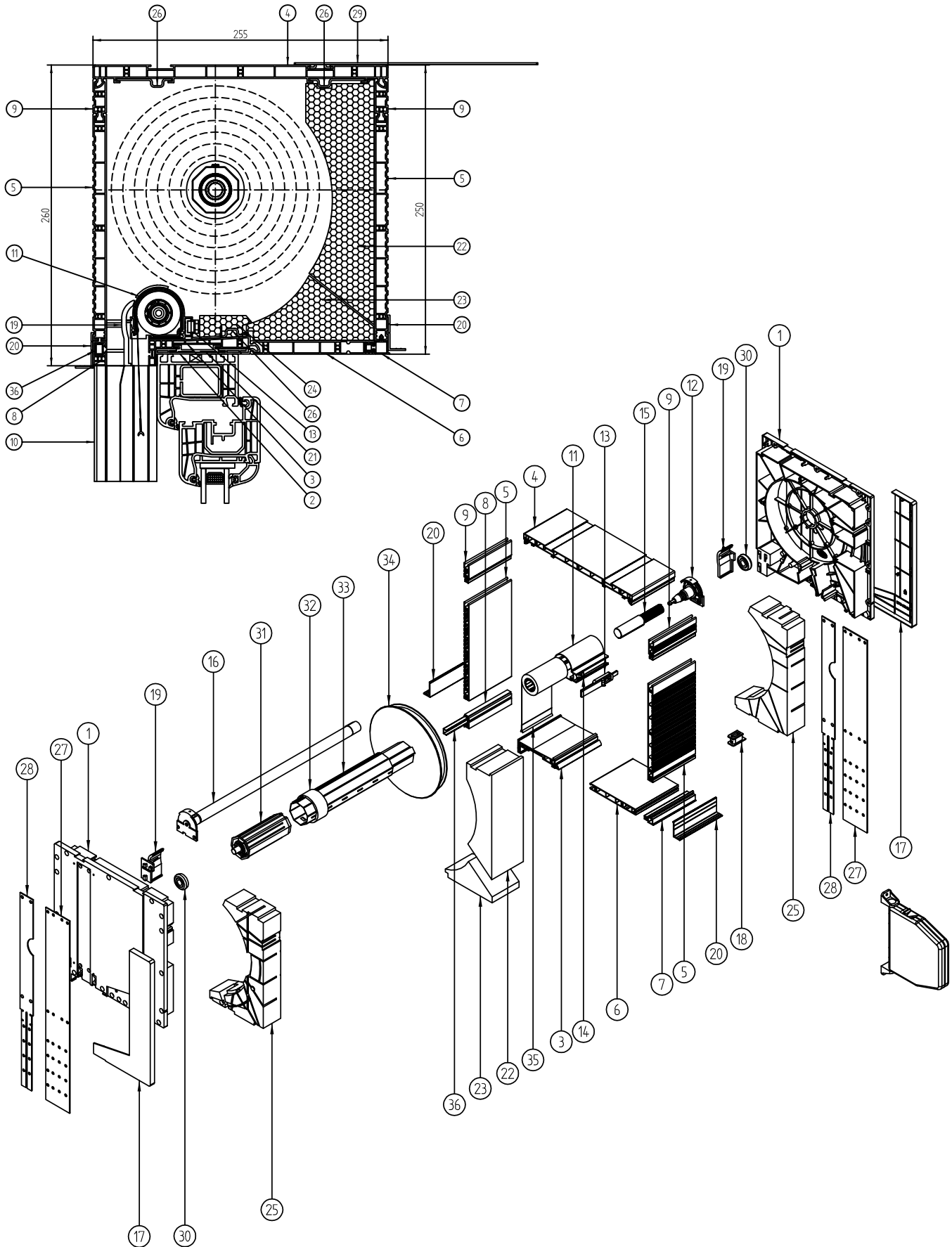


TP1000K® shutter box 250 - cross-section and list of components

1	NPB-030	End cap of the shutter box 250 with mosquito net
2	NPS-010	Box adapting profile
3	NPS-020	Bottom shutter box profile with seal
4	NPS-030	Top shutter box profile
5	NPS-051	Side profile for box 250
6	NPS-070	Bottom inspection hatch
7	NPS-080	Connecting profile for box
8	NPS-090	Complementary bottom shutter box profile
9	NPS-100	Bottom side profile
10	NPS-130	Complementary profile for vertical hatch
11	NPR-020	Double guide
12	NPD-030	Side blind of end cap
13	NPD-040	Cord guide
14	NPD-050	Entry guide for profile 37-45 left/right
15	NPL-010	Lath for plaster finishes
16	NPL-020	Aluminum inset for NPS-010 and RN-1 70
17	NPW-035	Side thermal insulation for box 220 graphite
18	NPW-045	Side thermal insulation for box 220 graphite
19	NPW-065	Additional thermal insulation
20	NPW-160	Thermal insulation for side cup
21	NPT-010	Bottom steel reinforcement
22	NPT-020	Reinforcement steel top - internal or external
23	NPT-150	Steel side conector 56mm
24	NPT-130	Steel side conector 30mm
25	NPT-050	Steel munting anchor
26	LO 28/10	Bearing for PVC shutter boxes
27	OBS-40-PCV	Mounting cap fi-40 for PVC shutter box
28	PZ 40/50	40/50 expansion ring
29	SW 40	Octagonal pipe 40 0,6 mm
30	RKZ 72	Wheel of the roller tube for box 200/220/250
31	RA-2-00 7 MM	Small reinforcement of cover - raw 7mm

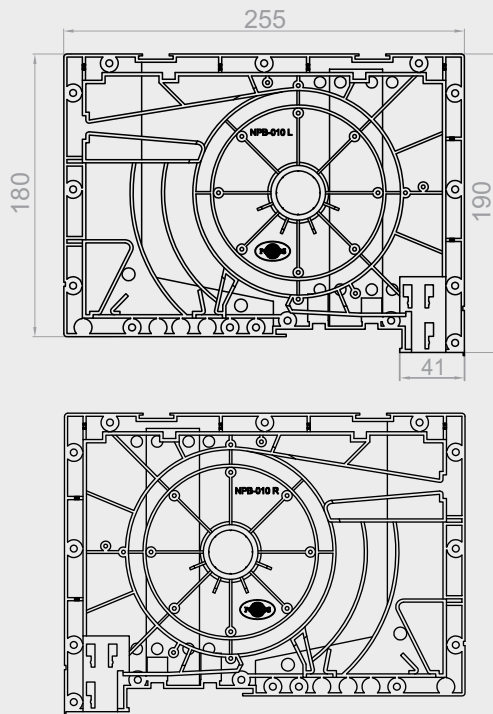
Components of the TP1000K[®] system

Box 250 with mosquito net - cross section and parts list



TP1000K[®] shutter box 250 with mosquito net - cross-section and list of components

1	NPB-130	End cap of the shutter box 250 with mosquito net
2	NPS-010	Box adapting profile
3	NPS-020	Bottom shutter box profile with seal
4	NPS-030	Top shutter box profile
5	NPS-051	Side profile for box 250
6	NPS-070	Bottom inspection hatch
7	NPS-080	Connecting profile for box
8	NPS-100	Bottom side profile
9	NPS-130	Complementary profile for vertical hatch
10	NPR-010	Double guide for mosquito-net
11	M-RN-010	Cassette for mosquito net
12	MZW-021	The side of the cassette with mounting cap for spring pipe
13	M-RN-050	Cassette's latch
14	M-RN-060	Spring for cassette's latch
15	ABS-CZ	Slowing system for mosquito-net
16	MZN-050	The spring of the mosquito net 350 mm for top mounted roller shutter
17	NPD-030	Side blind of end cap
18	NPD-040	Cord guide
19	NPD-050	Entry guide for profile 37-45 left/right
20	NPL-010	Lath for plaster finishes
21	NPL-020	Aluminum inset for NPS-010 and RN-1 70
22	NPW-035	Thermal insulation for box 250
23	NPW-055	Bottom thermal insulation for box with mosquito net
24	NPW-075	Additional thermal insulation for box with mosquito net
25	NPW-170	Thermal insulation of the side cap for box with mosquito net
26	NPT-020	Reinforcement steel top - internal or external
27	NPT-150	Steel side conector 56mm
28	NPT-130	Steel side conector 30mm
29	NPT-050	Steel munting anchor
30	LO 28/10	Bearing for pvc shutter boxes
31	OBS-40-PCV	Mounting cap fi-40 for pvc shutter box
32	PZ 40/50	40/50 expansion ring
33	SW 40	Octagonal pipe 40 0,6 mm
34	RKZ 72	Wheel of the roller tube
35	MOS-XX	Mosquito net
36	RA-2-00 7 MM	Small reinforcement of cover - raw 7mm

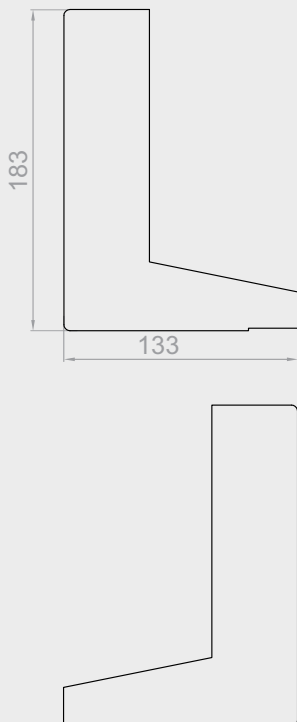


NPB-010 L

Left end cap for shutter box 180

NPB-010 P

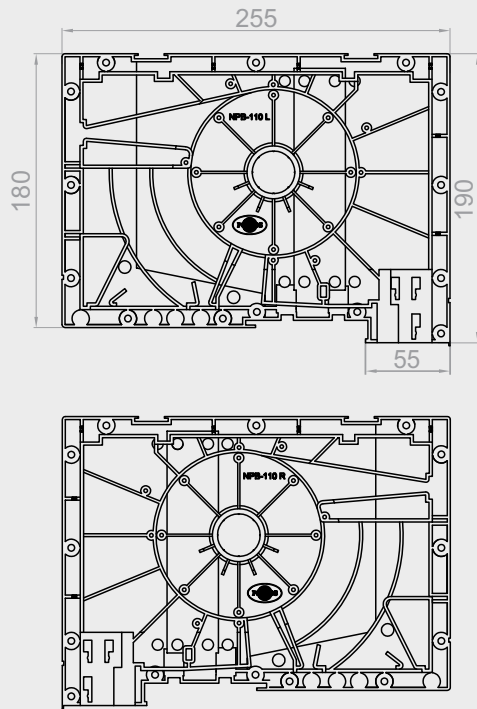
Right end cap for shutter box 180



NPD-010 L/P

Side blind of left and right end cap for box 180



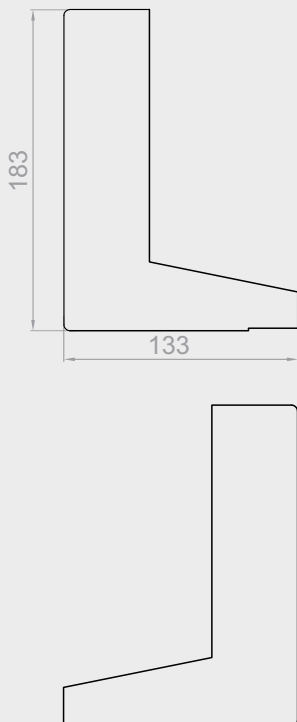
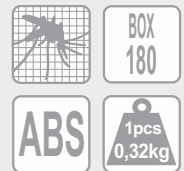


NPB-110 L

Left end cap for shutter box 180 with mosquito net

NPB-110 P

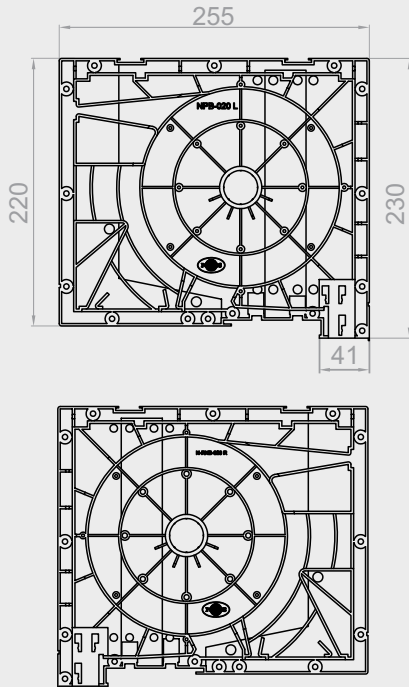
Right end cap for shutter box 180 with mosquito net



NPD-010 L/P

Side blind of left and right end cap for box 180 with mosquito net



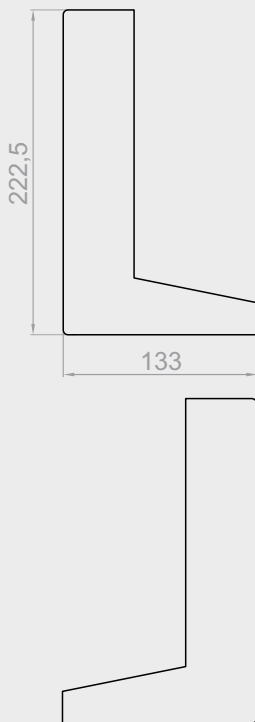
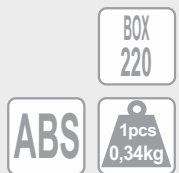


NPB-020 L

Left end cap for shutter box 220

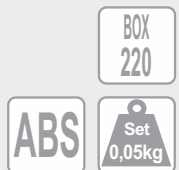
NPB-020 P

Right end cap for shutter box 220

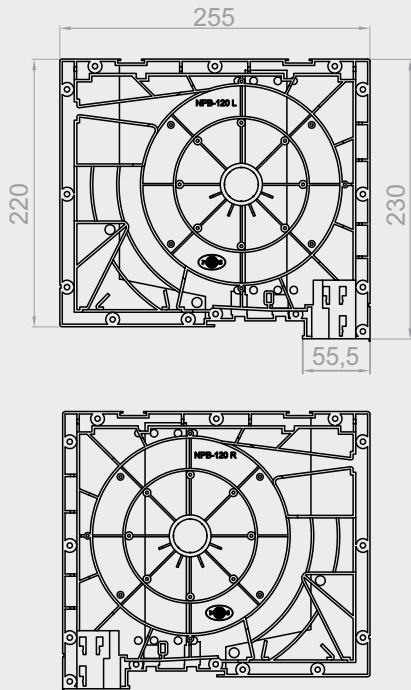


NPD-020 L/P

Side blind of left and right end cap for box 220



Available only in boxes without enlargement

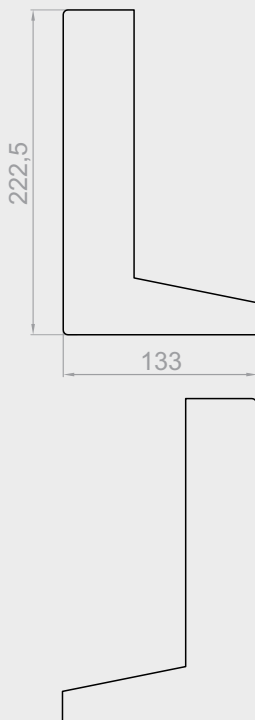
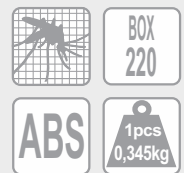


NPB-120 L

Left end cap for shutter box 220 with mosquito net

NPB-120 P

Right end cap for shutter box 220 with mosquito net

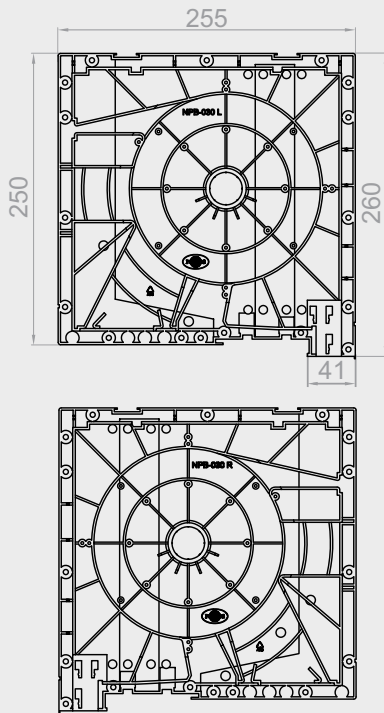


NPD-020 L/P

Side blind of left and right end cap for box 220 with mosquito net



Available only in boxes without enlargement

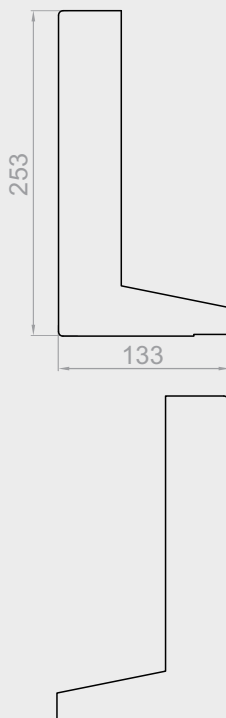
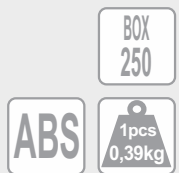


NPB-030 L

Left end cap for shutter box 250

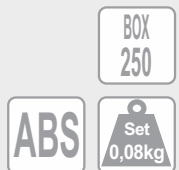
NPB-030 P

Right end cap for shutter box 250

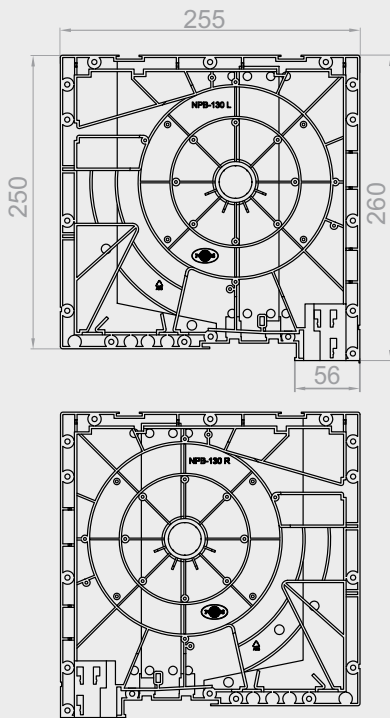


NPD-030 L/P

Side blind of left and right end cap for box 250



Available only in boxes without enlargement

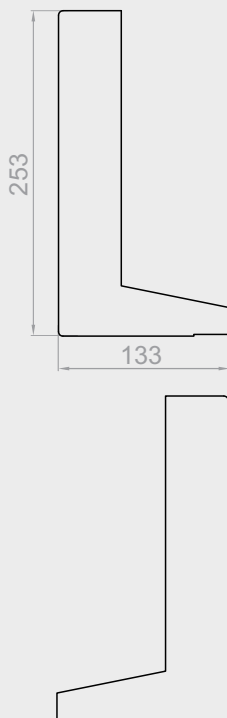
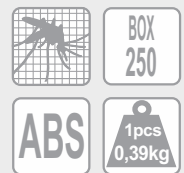


NPB-130 L

Left end cap for shutter box 250 with mosquito net

NPB-130 P

Right end cap for shutter box 250 with mosquito net

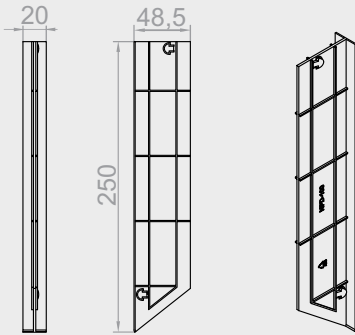


NPD-030 L/P

Side blind of left and right end cap for box 250 with mosquito net

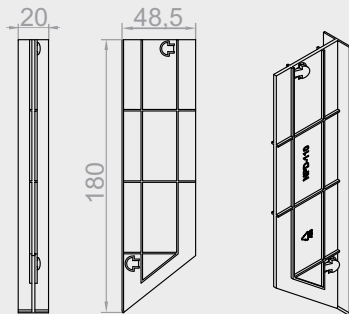
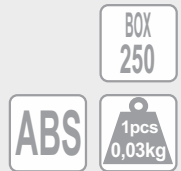


Available only in boxes without enlargement



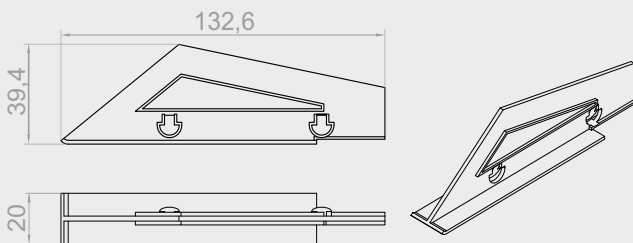
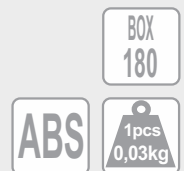
NPD-100

Double side blind for box 250 part 1



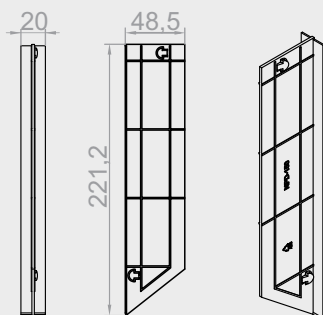
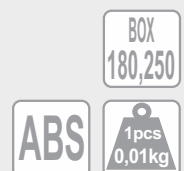
NPD-110

Double side blind for box 180 part 1



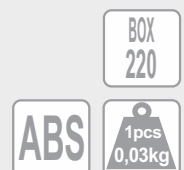
NPD-120

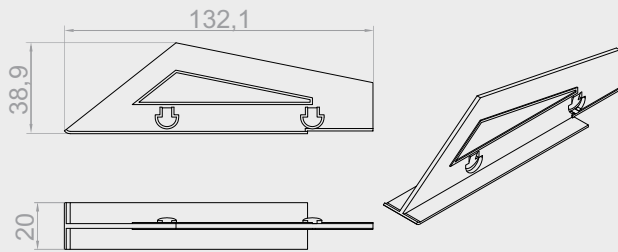
Double side blind for box 180, 250 part 2



NPD-150

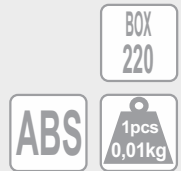
Double side blind for box 220 part 1





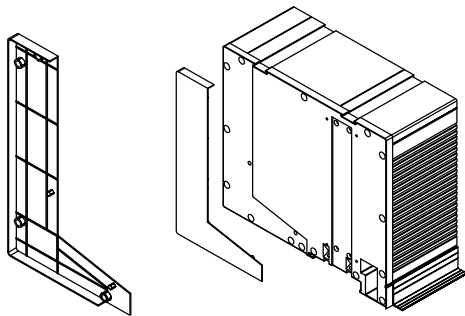
NPD-160

Double side blind for box 220 part 2



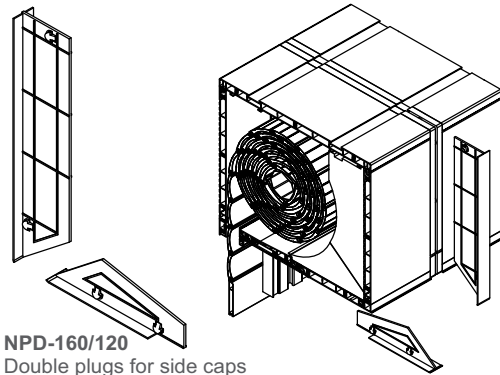
NPD-010/020/030 L/P.

Plug of the side cap for box 180/220/250 (right/left)



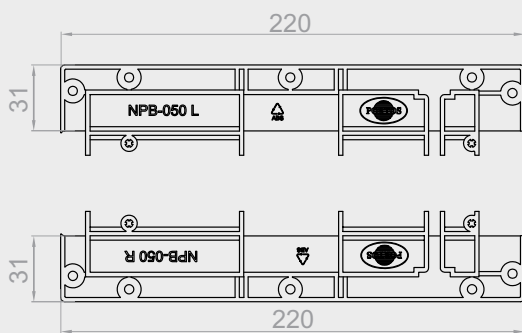
NPD-110/150/100

Double plugs for side caps of the box 180/220/250



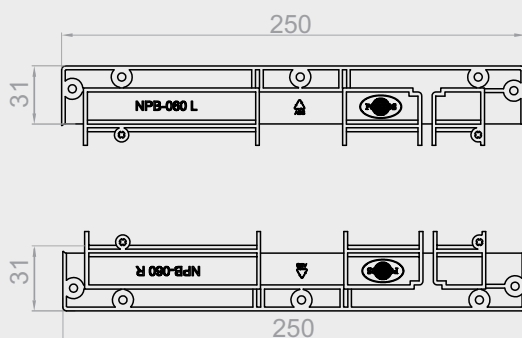
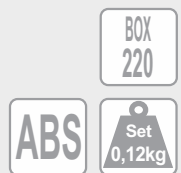
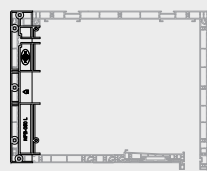
NPD-160/120

Double plugs for side caps of the box 220/180,250



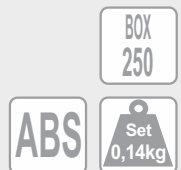
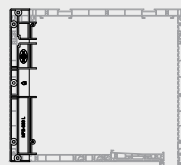
NPB-050 L/P

Extension of the side cap in box 220 - left and right



NPB-060 L/P

Extension of the side cap in box 250 - left and right

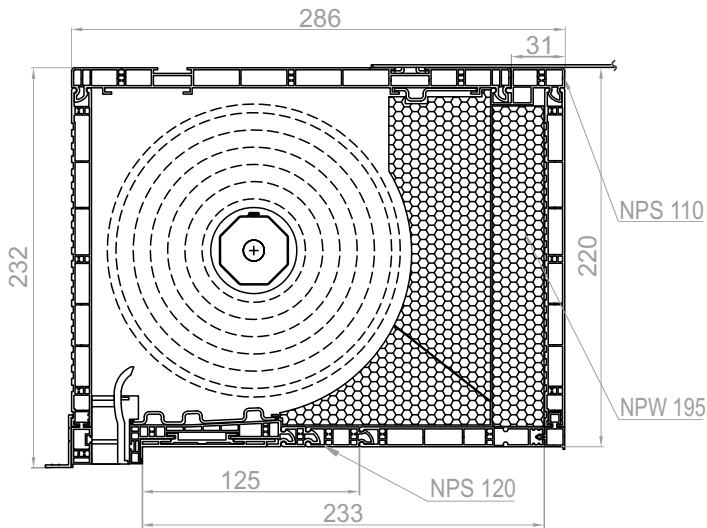


Components of the TP1000K® system

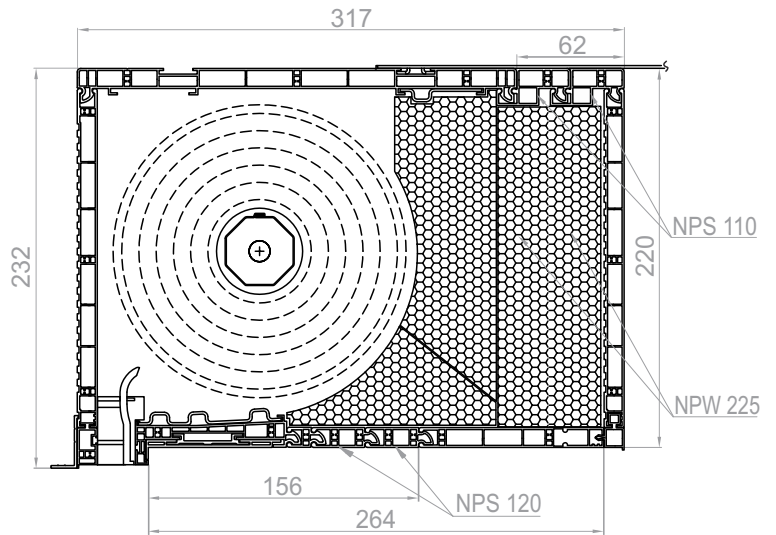
Box 220, 250 - box enlargement

View of TP1000K boxes - box 220 with enlargement

Box with enlargement of 31 mm (1xNBB-050)

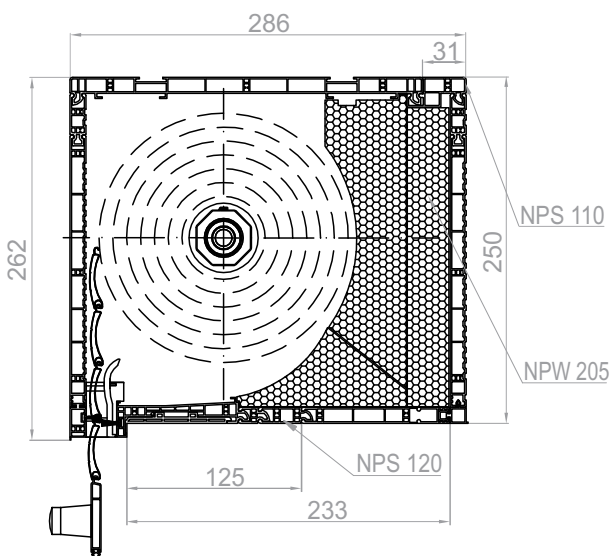


Box with enlargement of 62 mm (2xNPB-050)

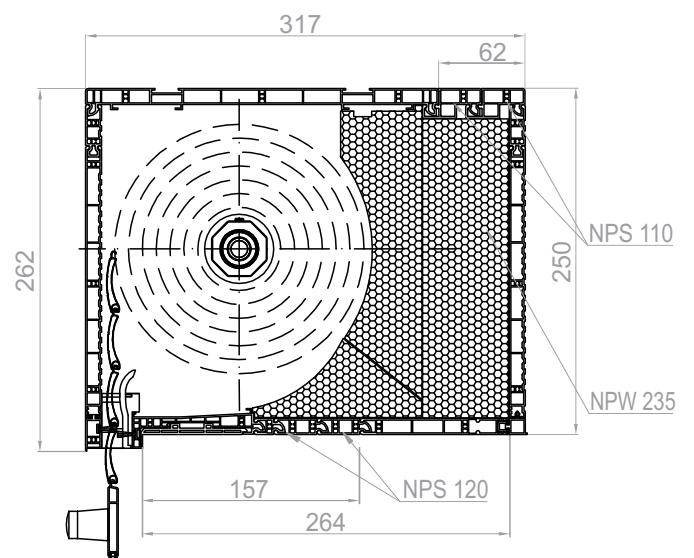


View of TP1000K boxes - box 250 with enlargement

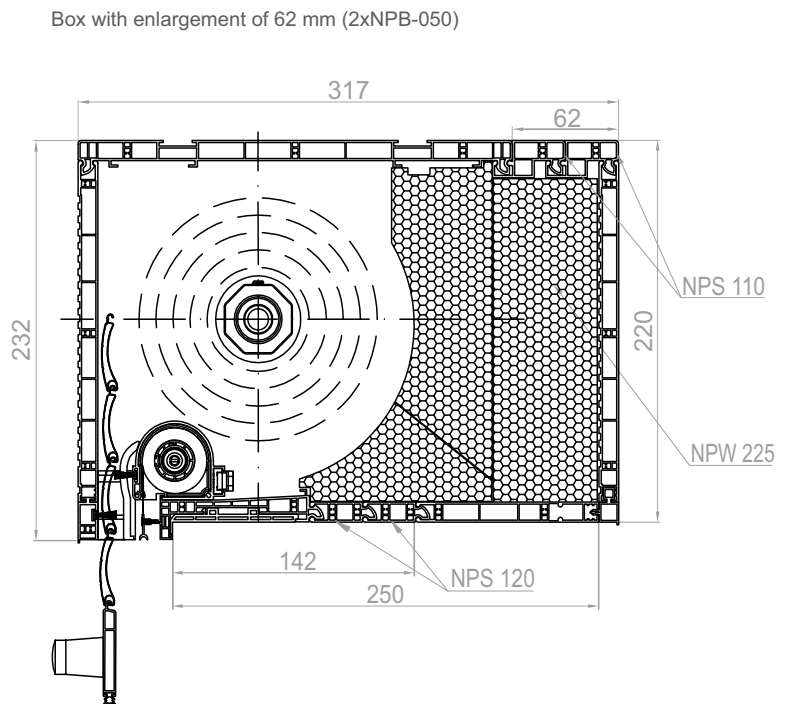
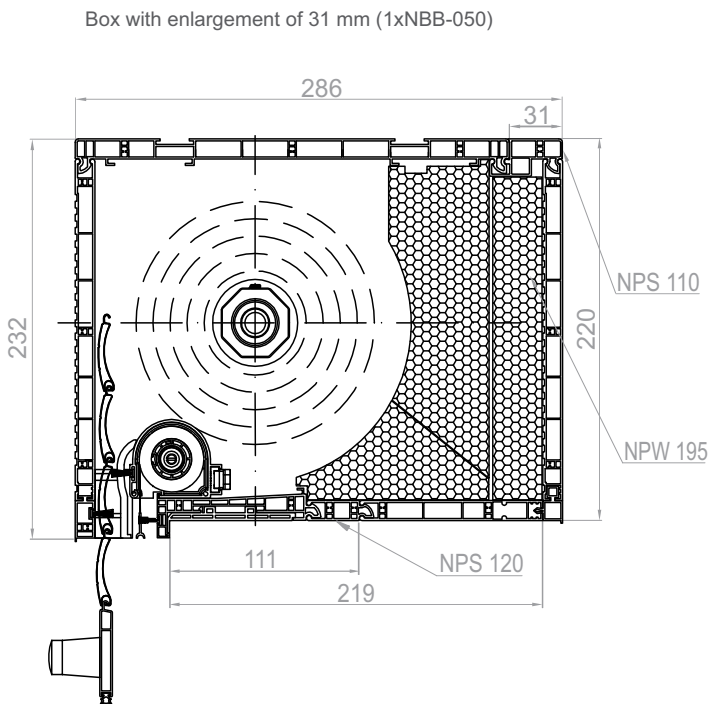
Box with enlargement of 31 mm (1xNBB-060)



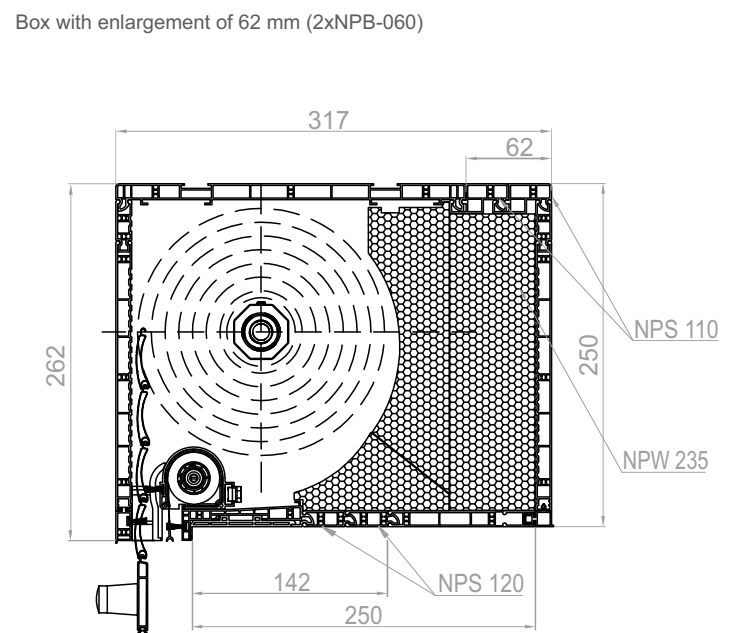
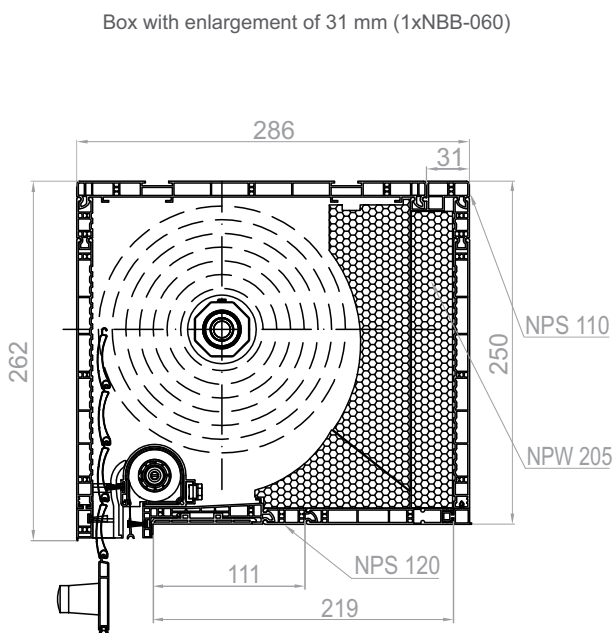
Box with enlargement of 62 mm (2xNPB-060)



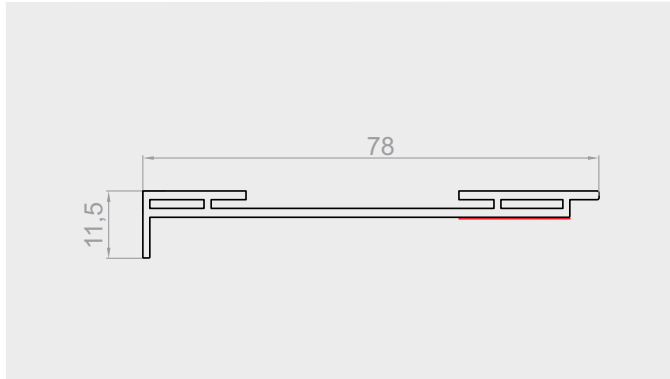
View of TP1000K boxes with mosquito net - box 220 with enlargement



View of TP1000K boxes with mosquito net - box 250 with enlargement

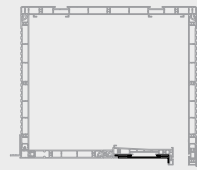


Components of the TP1000K® system
 Box 180, 220, 250 - adaptation profiles

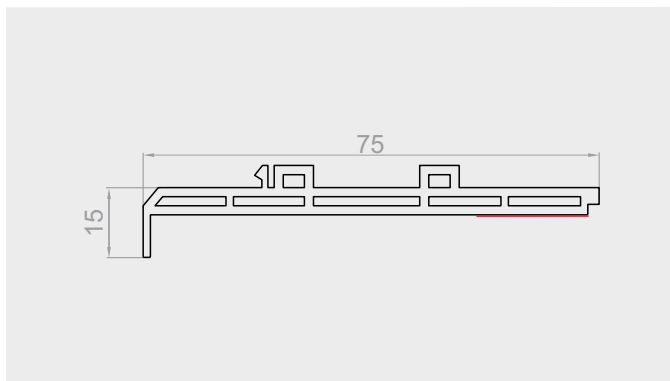


NPS-010

Box adapting profile click

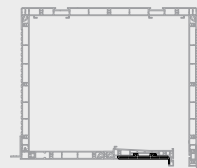


PVC	BOX 180,220,250	Max. 6mm
	1mm 0,30kg	Pb

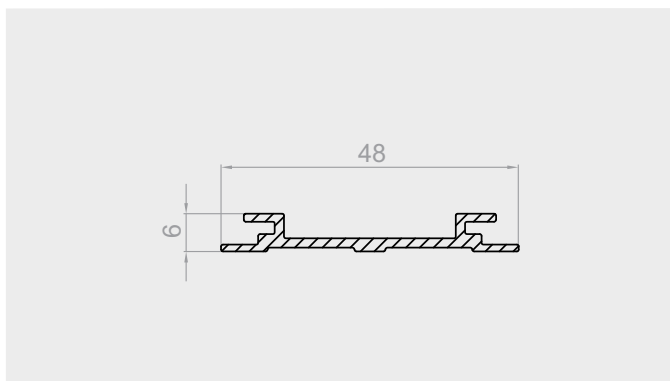


NPS-011

Box adapting profile

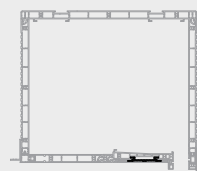


PVC	BOX 180,220,250	Max. 6mm
	1mm 0,40kg	Pb



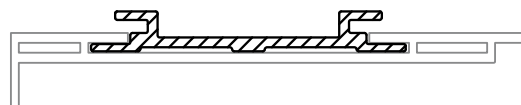
NPL-020

Aluminum inset for NPS-010.



BOX 180,220,250	Max. 6mm
	1mm 0,26kg

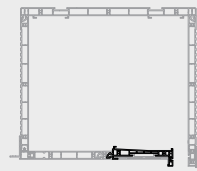
View of NPS-010 adaption profile with NPL-020 aluminium insert.





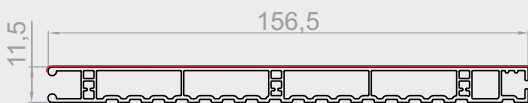
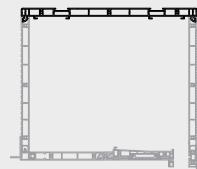
NPS-020

Bottom shutter box profile with seal



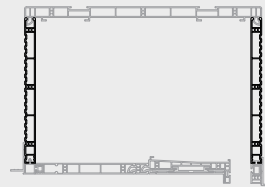
NPS-030

Top shutter box profile



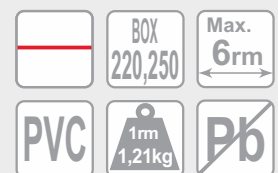
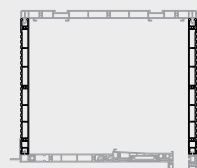
NPS-040

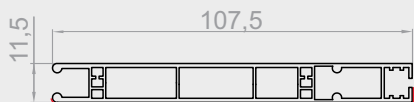
Side profile for box 180



NPS-051

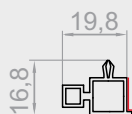
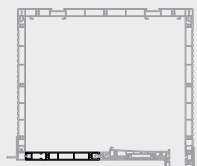
Side profile for box 220, 250





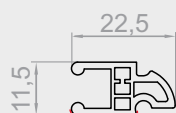
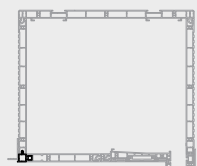
NPS-070

Bottom inspection hatch



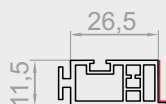
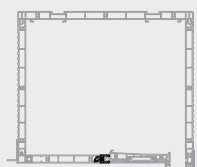
NPS-080

Connecting profile for box



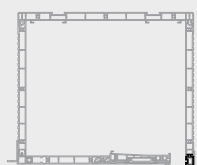
NPS-090

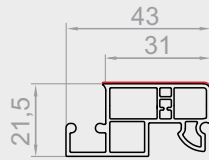
Complement bottom profile



NPS-100

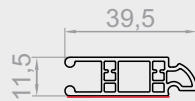
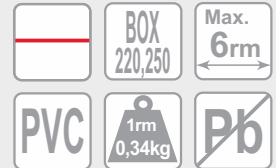
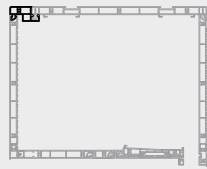
Bottom side profile with seal





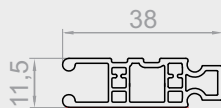
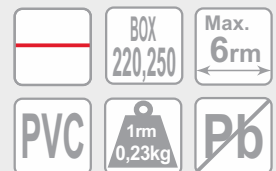
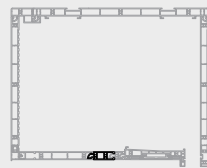
NPS-110

Broadenning upper profile of the box



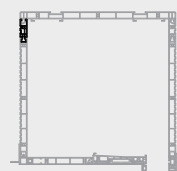
NPS-120

Broadenning bottom profile of the box



NPS-130

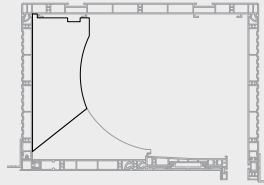
Additional profile for the vertical hatch



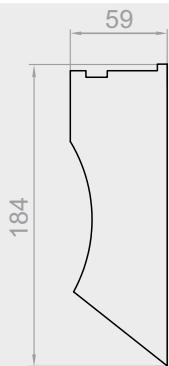


NPW-015

Thermal insulation for box 180

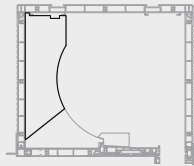


BOX
180

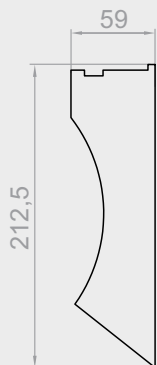


NPW-025

Thermal insulation for box 220

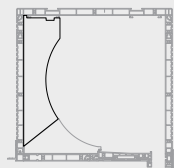


BOX
220

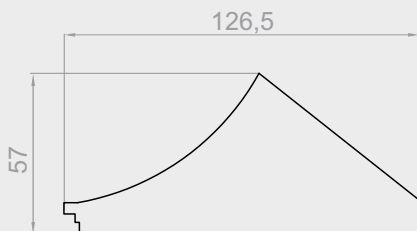


NPW-035

Thermal insulation for box 250

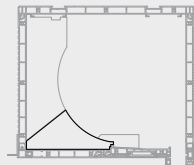


BOX
250

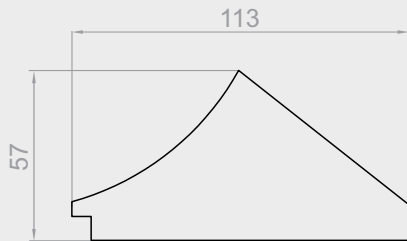


NPW-045

Bottom thermal insulation

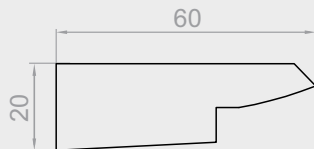
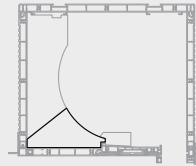


BOX
180,220,250



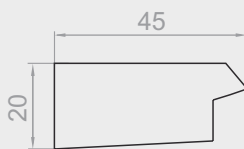
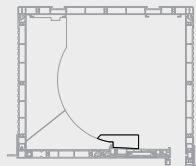
NPW-055

Bottom thermal insulation for the box with mosquito net



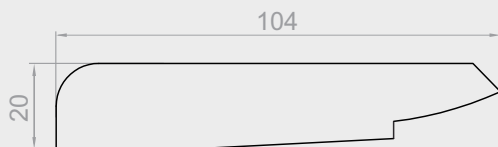
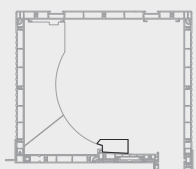
NPW-065

Additional thermal insulation for box 180, 220, 250



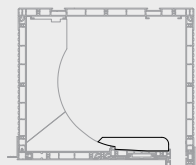
NPW-075

Additional thermal insulation for the box 180, 220,250 with mosquito net



NPW-255

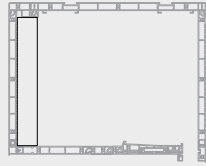
Additional long thermal insulation for box 180, 220,250



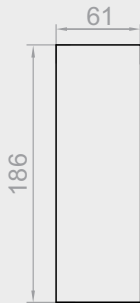


NPW-195

Broadening thermal insulation graphite 3cm
for end cap 220

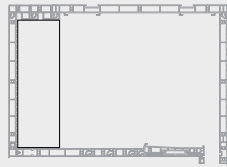


BOX
220



NPW-225

Broadening thermal insulation graphite 6cm
for end cap 220

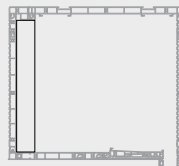


BOX
220



NPW-205

Broadening thermal insulation graphite 3cm
for end cap 250

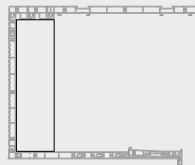


BOX
250

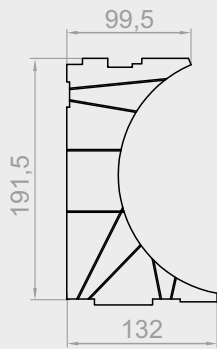


NPW-235

Broadening thermal insulation graphite 6cm
for end cap 250

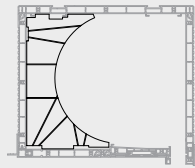


BOX
250

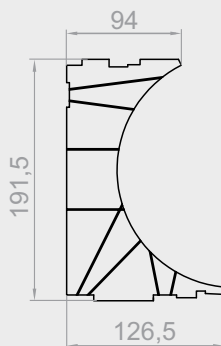


NPW-090 L/P

Thermal insulation for end cap 220

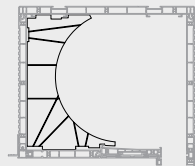


BOX
220

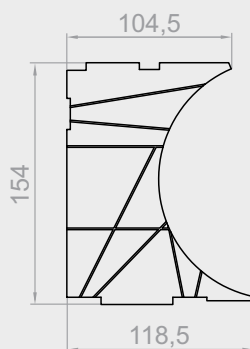


NPW-100 L/P

Thermal insulation for end cap 220 with mosquito net

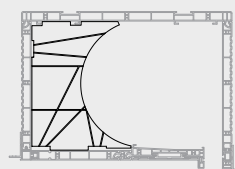


BOX
220

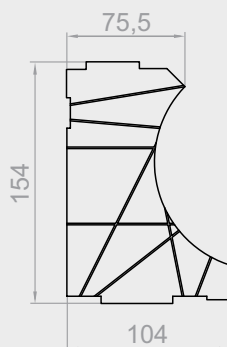


NPW-140 L/P

Thermal insulation for end cap 180

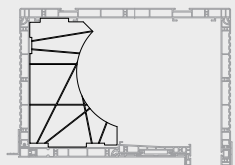


BOX
180



NPW-150 L/P

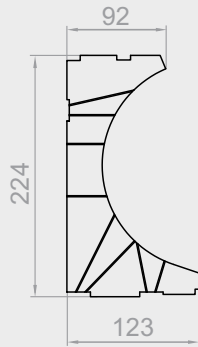
Thermal insulation for end cap 180 with mosquito net



BOX
180

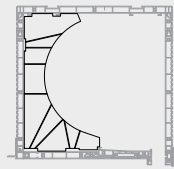
Components of the TP1000K® system

Box 180, 220, 250 - styrofoam inserts

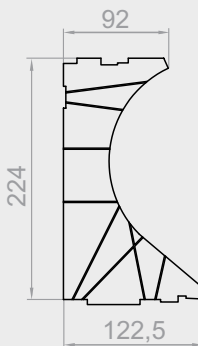


NPW-160 L/P

Thermal insulation for end cap 250

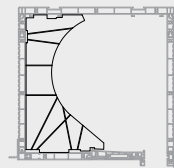


BOX
250

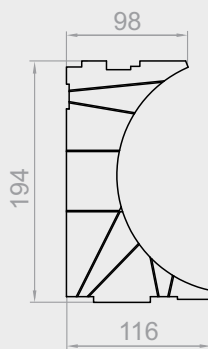


NPW-170 L/P

Thermal insulation for end cap 250 with mosquito net

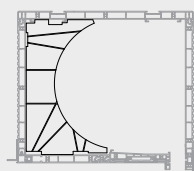


BOX
250



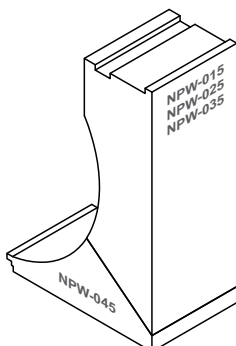
NPW-240 L/P

Thermal insulation for division NPJ-020 of the box 220

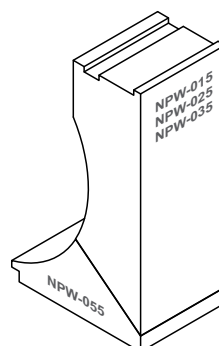


BOX
220

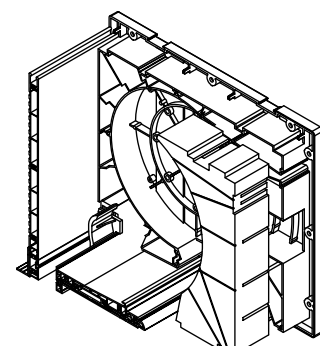
View of
NPW-045 bottom styrofoam inserts with
NPW-015/025/035 rear inserts - the box
without mosquito net

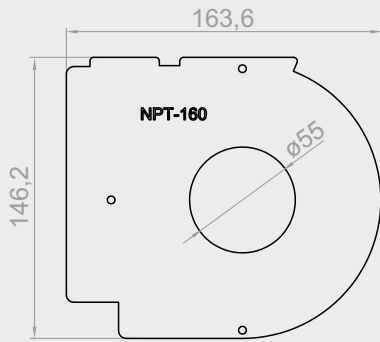


View of
NPW-055 bottom styrofoam inserts with
NPW-015/025/035 rear inserts - the box
with mosquito net



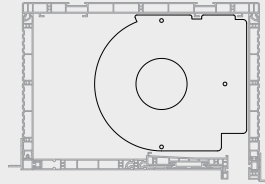
View of styrofoam insert of the side
NPW-090/100/140/150/160/170
with the side



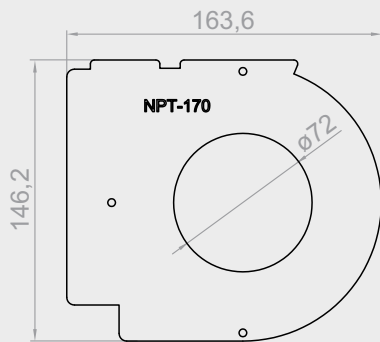


NPT-160

Internal cover of side cap 180 for mounting cap fi-40

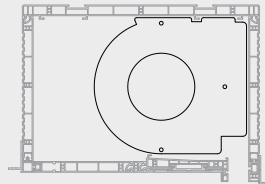


BOX
180

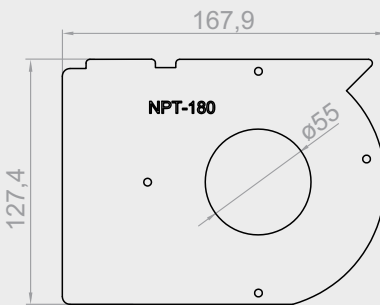


NPT-170

Internal cover of side cap 180 for mounting cap fi-60

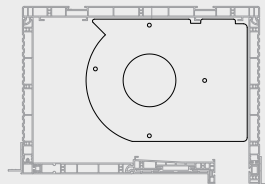


BOX
180

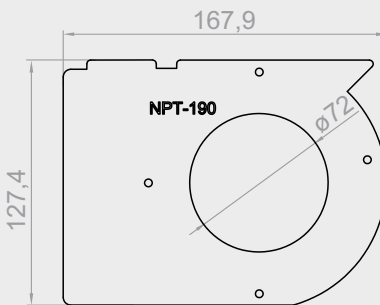


NPT-180

Internal cover of side cap 180 with mosquito net for mounting cap fi-40

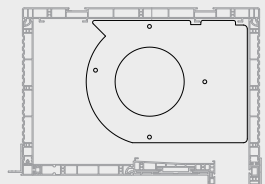


BOX
180

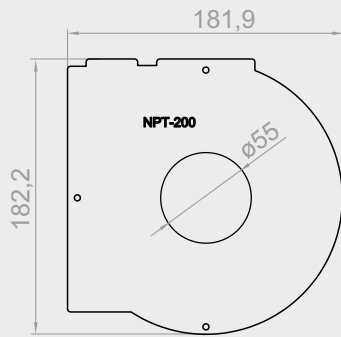


NPT-190

Internal cover of side cap 180 with mosquito net for mounting cap fi-60

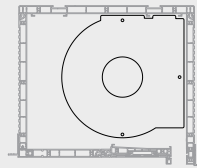


BOX
180

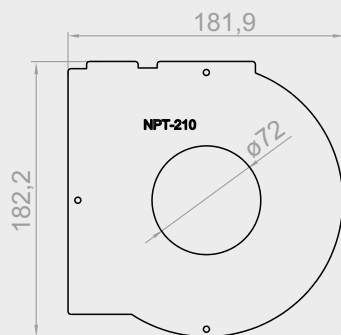


NPT-200

Internal cover of side cap 220 for mounting cap fi-40

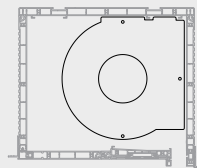


BOX
220

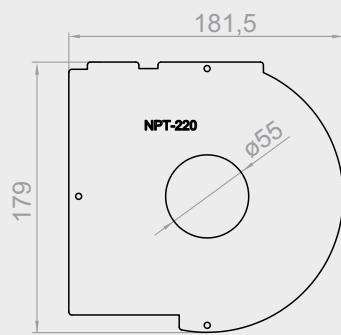


NPT-210

Internal cover of side cap 220 for mounting cap fi-60

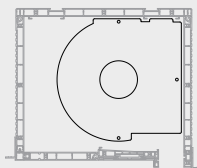


BOX
220

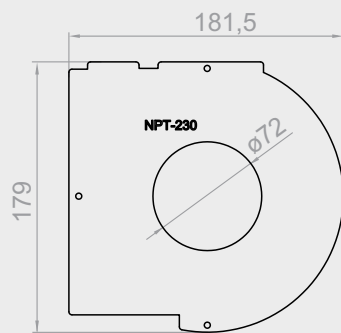


NPT-220

Internal cover of side cap 220 with mosquito net for mounting cap fi-40

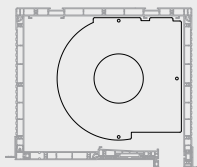


BOX
220

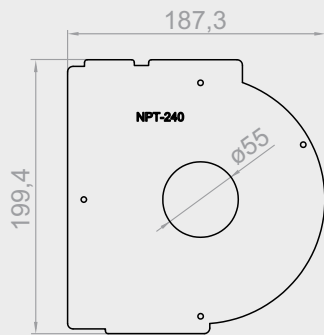


NPT-230

Internal cover of side cap 220 with mosquito net for mounting cap fi-60

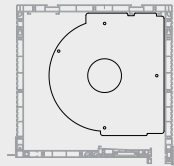


BOX
220

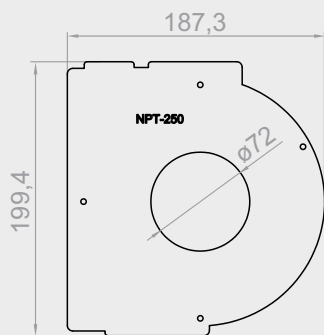


NPT-240

Internal cover of side cap 250 for mounting cap fi-40

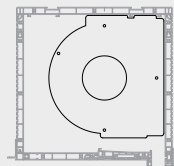


BOX
250

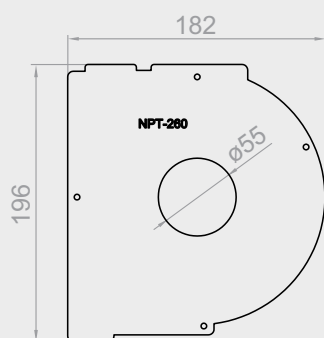


NPT-250

Internal cover of side cap 250 for mounting cap fi-60

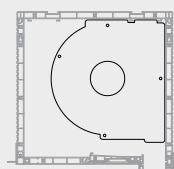


BOX
250

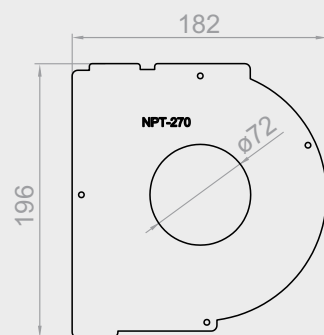


NPT-260

Internal cover of side cap 250 with mosquito net for mounting cap fi-40

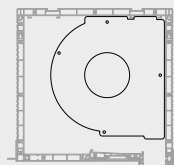


BOX
250



NPT-270

Internal cover of side cap 250 with mosquito net for mounting cap fi-60

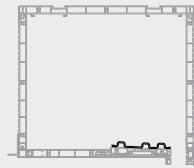


BOX
250



NPT-010

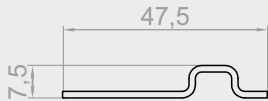
Bottom steel reinforcement for box without mosquito net



Max. **6m**

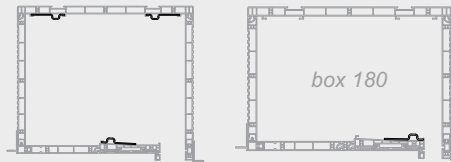
BOX 180,220,250

1m **1,10kg**



NPT-020

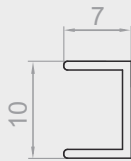
External and internal upper and bottom steel reinforcement for box with mosquito net. Bottom steel reinforcement for box 180.



Max. **6m**

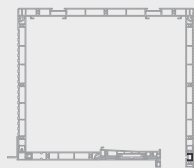
BOX 180,220,250

1m **0,61kg**



RA 2

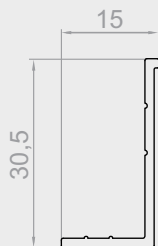
Front steel reinforcement



Max. **6m**

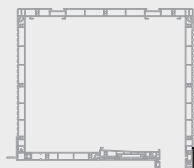
BOX 180,220,250

1m **0,06kg**



NPL-010

Lath for plaster finishes

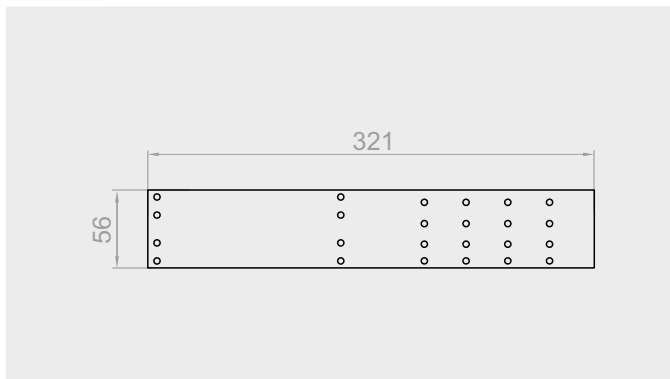
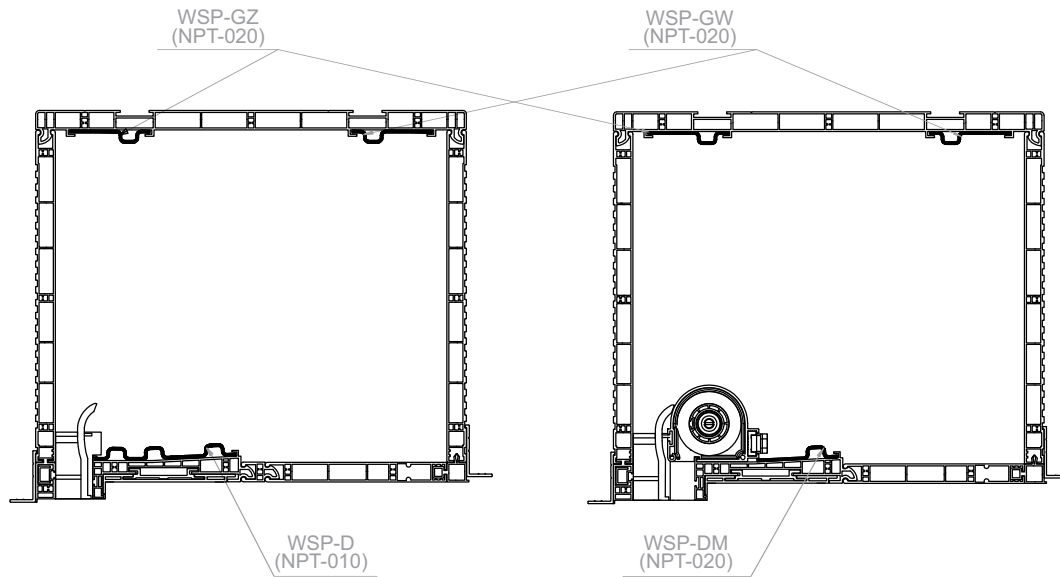


Max. **6m**

BOX 180,220,250

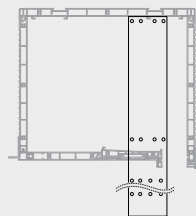
1m **0,18kg**

Arrangement of **NPT-010** and **NPT-020** reinforcements in TP1000K shutter boxes without and with mosquito net



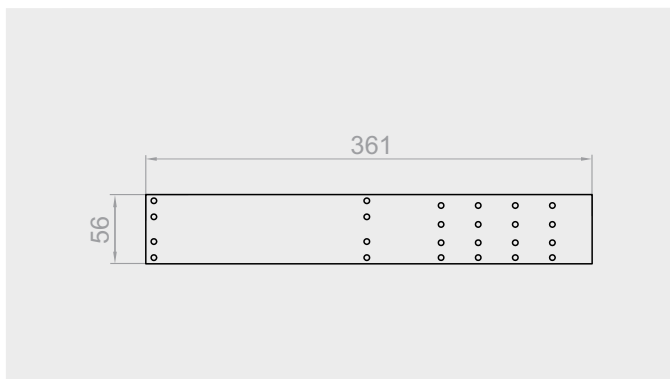
NPT-140

Steel side connector 56mm for box 180



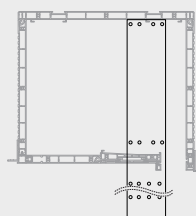
BOX
180

1 pcs
0,14kg



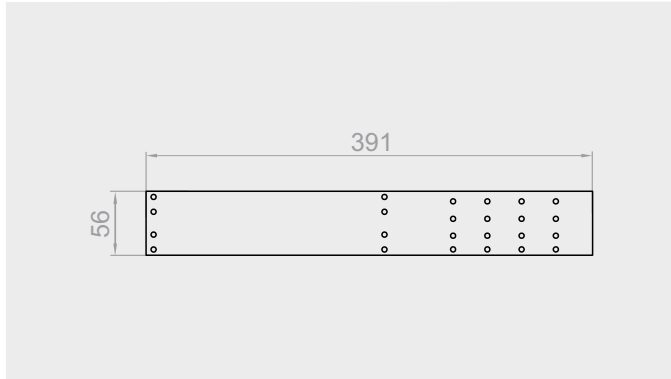
NPT-040

Steel side connector 56mm for box 220



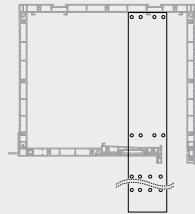
BOX
220

1 pcs
0,23kg



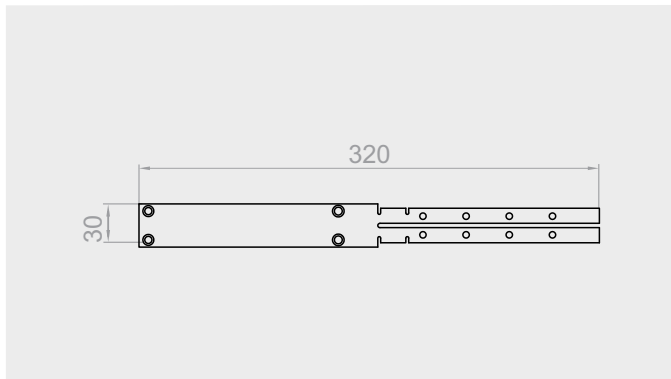
NPT-150

Steel side connector 56mm for box 250



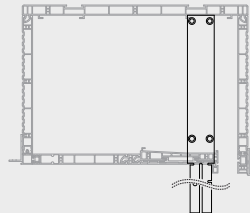
BOX
250

1pcs
0,17kg



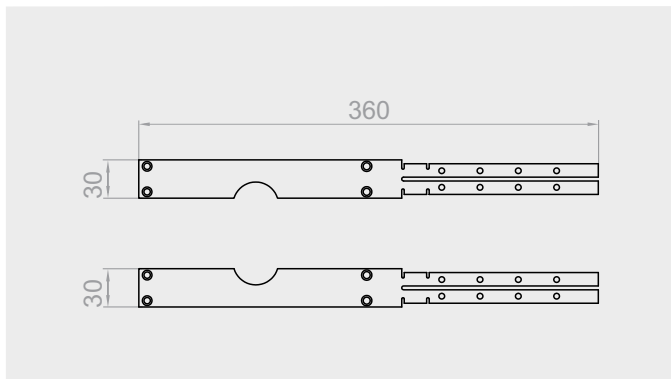
NPT-120

Steel side connector 30mm for box 180



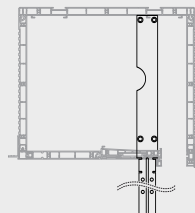
BOX
180

1pcs
0,06kg



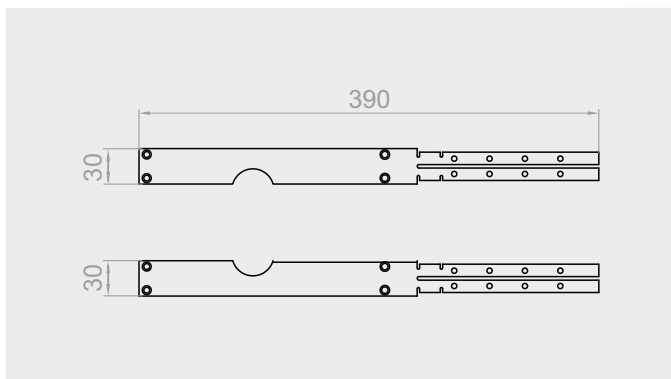
NPT-030 L/P

Steel side connector 30mm for box 220



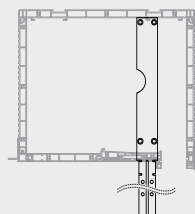
BOX
220

1pcs
0,11kg



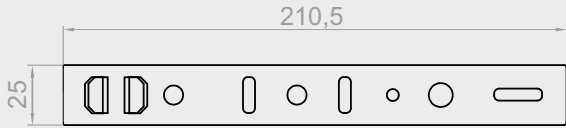
NPT-130 L/P

Steel side connector 30mm for box 250

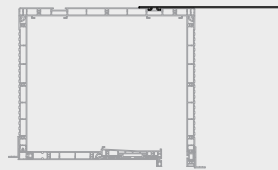


BOX
250

1pcs
0,07kg



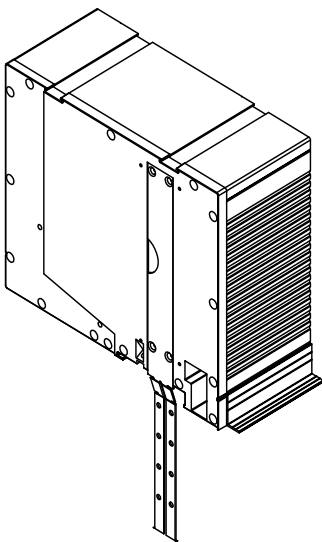
NPT-050
Steel mounting anchor



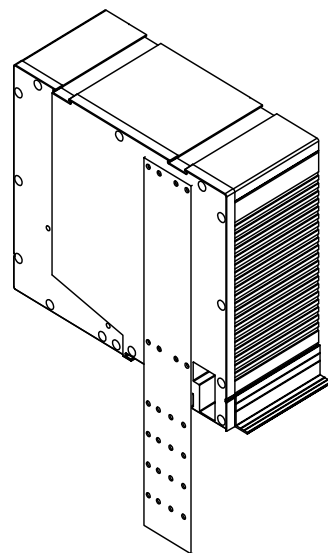
BOX
180,220,250

1 pcs
0,06kg

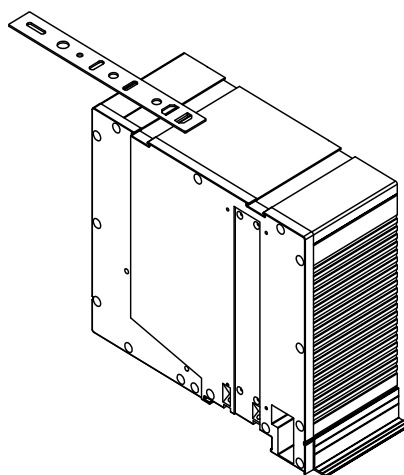
NPT-030 - Steel side handle 30 mm

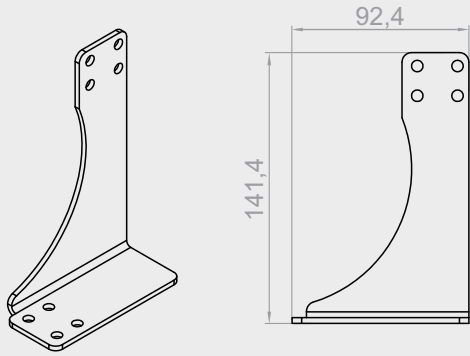


NPT-040 - Steel side handle 56 mm



NPT-050 - Steel mounting anchor



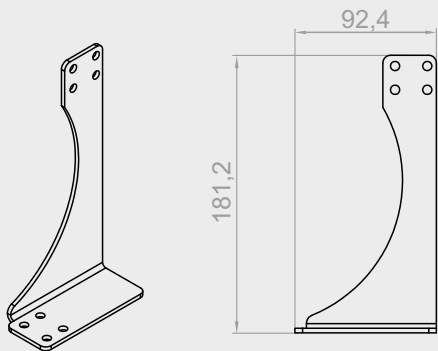


NPT-060

Stabilizing console for box 180

BOX
180

1 pcs
0,22kg

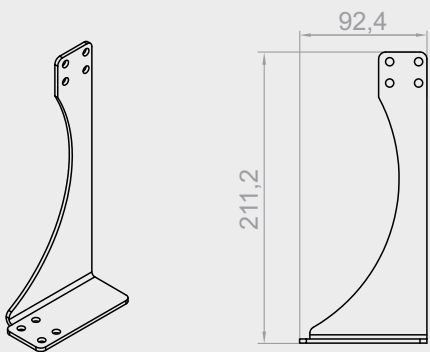


NPT-070

Stabilizing console for box 220

BOX
220

1 pcs
0,24kg

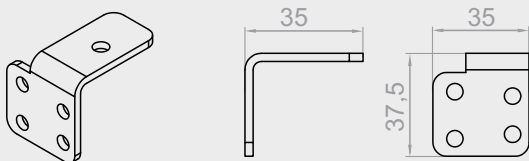


NPT-080

Stabilizing console for box 250

BOX
250

1 pcs
0,26kg

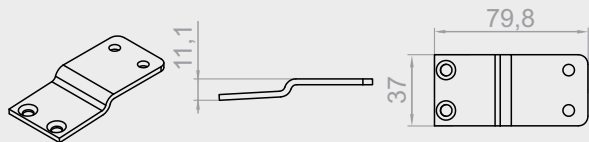


NPT-090

Top conector of stabilizing console

BOX
180,220,250

1 pcs
0,05kg



NPT-100

Bottom conector of stabilizing console without reinforcement

BOX
180,220,250

1pcs
0,07kg



NPT-110

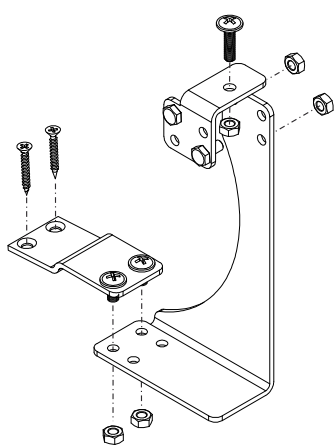
Bottom conector of stabilizing console with reinforcement

BOX
180,220,250

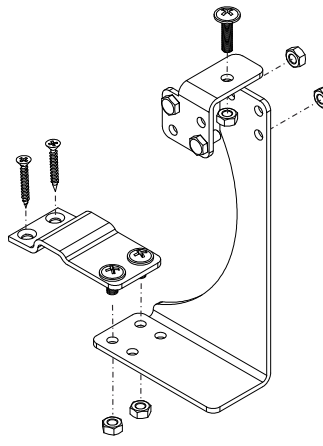
1pcs
0,07kg

View of stabilizing consoles with connectors.

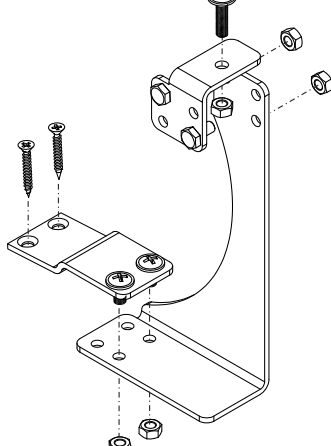
TP1000K Shutter stabilizing console
NPTK-030 - 180 box
NPTK-010 - 220 box
NPTK-050 - 250 box



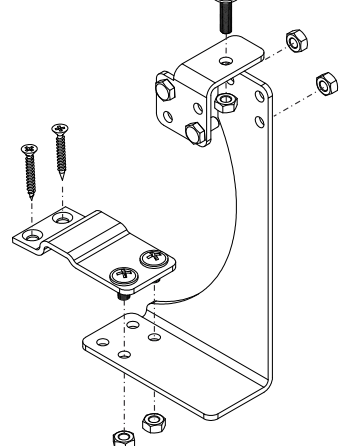
TP1000K Shutter stabilizing console
with bottom reinforcement
NPTK-040 - 180 box
NPTK-020 - 220 box
NPTK-060 - 250 box

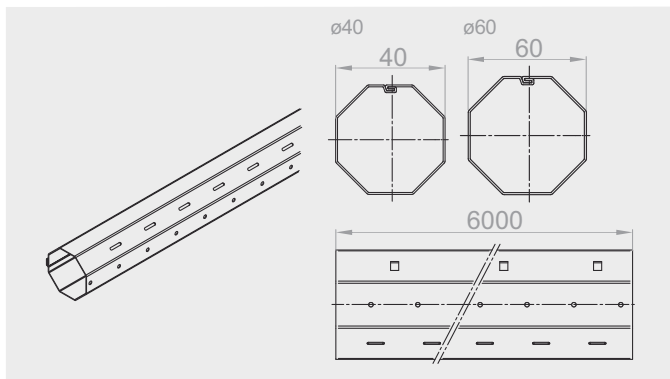


TP1000K Shutter stabilizing console
with mosquito net
NPTK-030 - box 180 with mosquito net
NPTK-010 - box 220 with mosquito net
NPTK-050 - box 250 with mosquito net



TP1000K Shutter stabilizing console
with bottom reinforcement
with mosquito net
NPTK-040 - box 180 with mosquito net
NPTK-020 - box 220 with mosquito net
NPTK-060 - box 250 with mosquito net



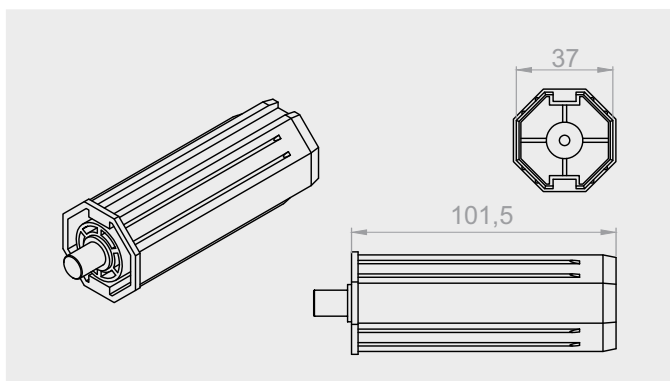
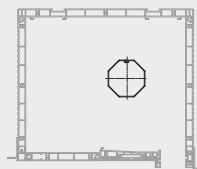


SW 40

Octagonal pipe 40

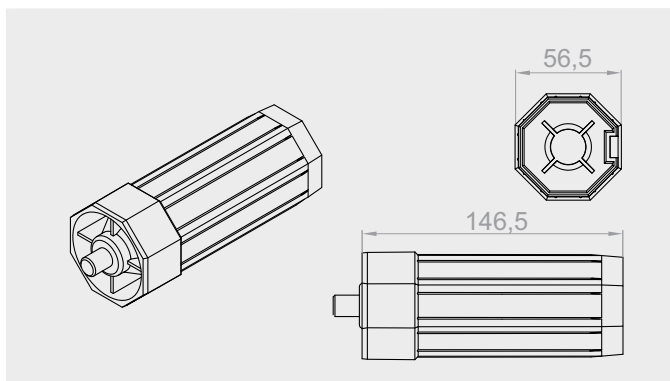
SW 60

Octagonal pipe 60



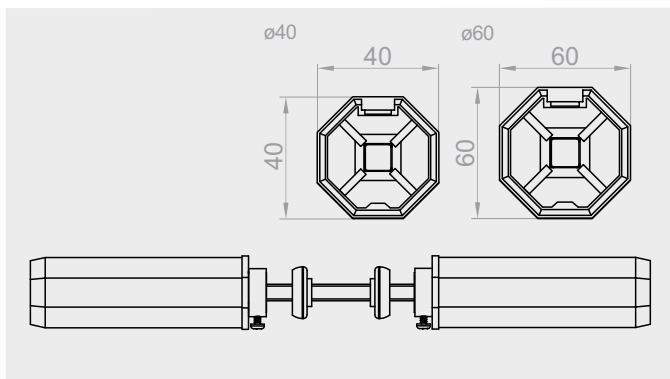
OBS-40-PVC

PVC mounting with pin for pipe ø 40



OBS-60-PVC

PVC mounting with pin for pipe ø 60



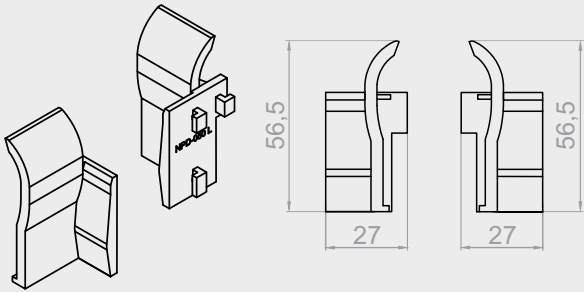
RKZ 34

Round bolt for octagonal pipe 40mm

RKZ 35

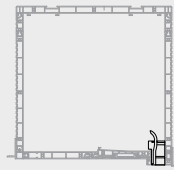
Round bolt for octagonal pipe 60mm





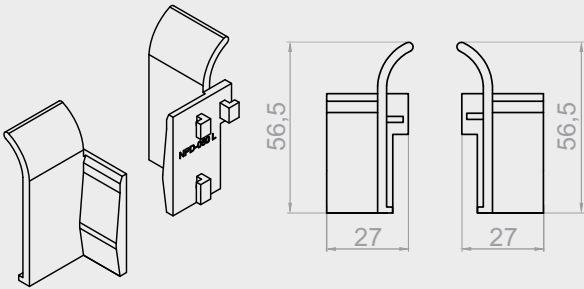
NPD-050

Entry guide for profile 37-45 left/right



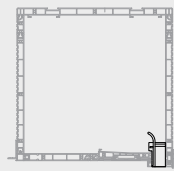
BOX
160,220,250

1pcs
0,009kg



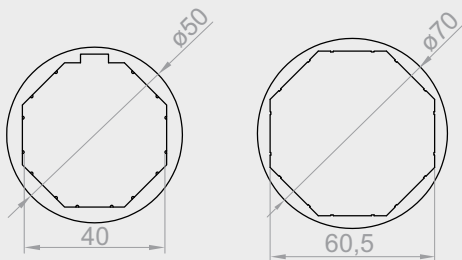
NPD-060

Entry guide for profile 52 left/right



BOX
160,220,250

1pcs
0,009kg

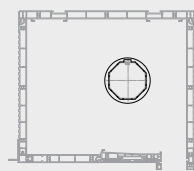


PZ 40/50

40/50 expansion ring

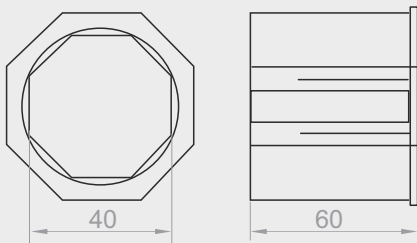
PZ 60/70

60/70 expansion ring



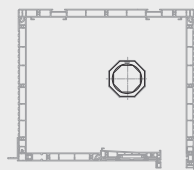
Ø40
1pcs
0,01kg

Ø60
1pcs
0,03kg

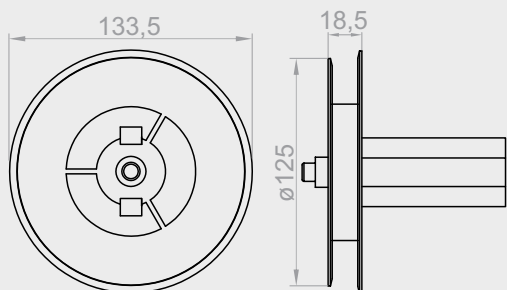


RED-40-60

Reduction 40/60



1pcs
0,05kg

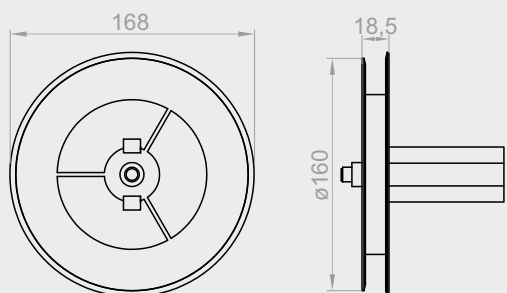


RKZ 71

Pulley for the box 180

BOX
180

1 pcs
0,09kg

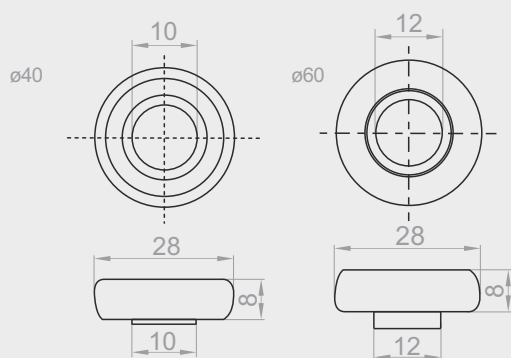


RKZ 72

Pulley of shutter box 220,250

BOX
220,250

1 pcs
0,13kg



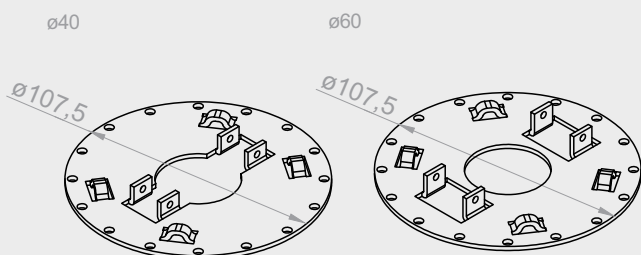
LO-28/10

28/10 bearing for PVC shutter boxes fi 40

LO-28/12

28/12 bearing for PVC shutter boxes fi 60

1 pcs
0,02kg

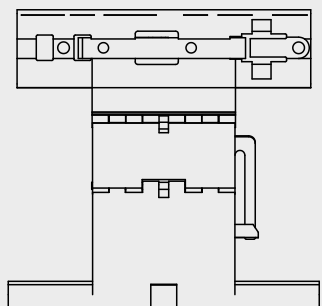


RKZ P4

Plate for mounting tubular motor in PVC shutter box fi 40

RKZ P6

Plate for mounting tubular motor in PVC shutter box fi 60



WBZ1-40

Lokking hanger 1-part for pipe 40

WBZ2-40

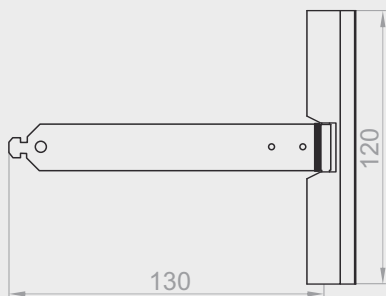
Lokking hanger 2-part for pipe 40

WBZ1-60

Lokking hanger 1-part for pipe 60

WBZ2-60

Lokking hanger 2-part for pipe 60



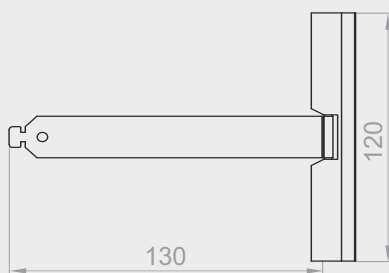
WS-37/40-130

Steel hanger 130



WS-37/40-170

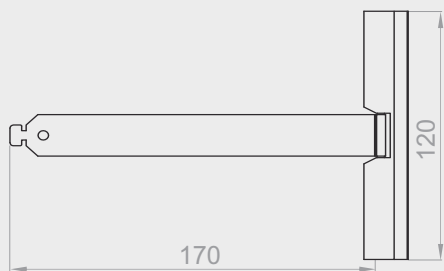
Steel hanger 170



WS-37/40-130 S

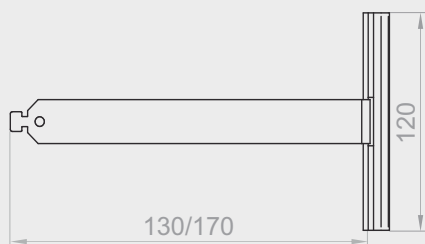
Steel hanger 130 alu for motors





WS-37/40-170 S

Steel hanger 170 alu for motors

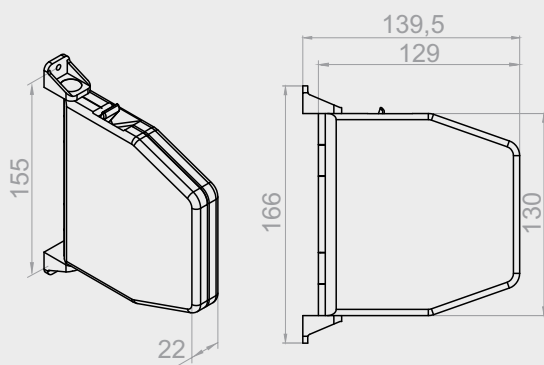


WS-37/40-130 ALU

Steel hanger 130 alu

WS-37/40-170 ALU

Steel hanger 170 alu

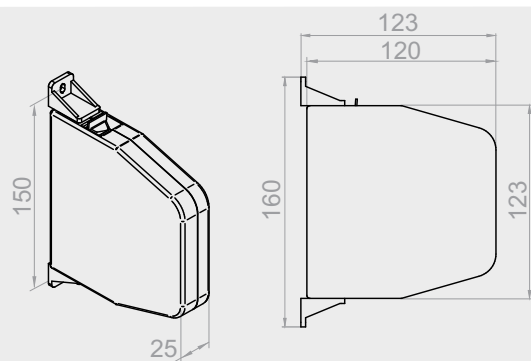


ZT-5M02

Tape (strip) coiler up to 5m - white

ZT-5M08

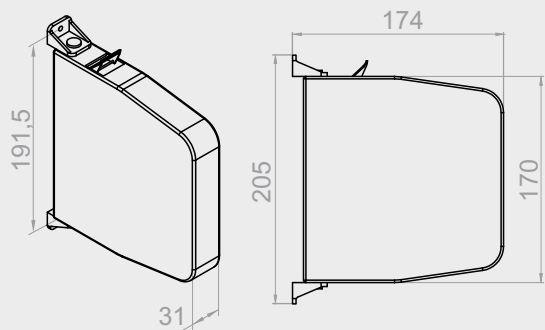
Tape (strip) coiler up to 5m - brown



ZT/L-5M-23

Tape/cord coiler 5 m anthracite



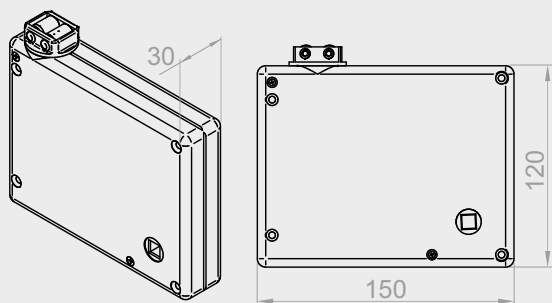


ZT-11M02

Tape (strip) coiler up to 11m - white

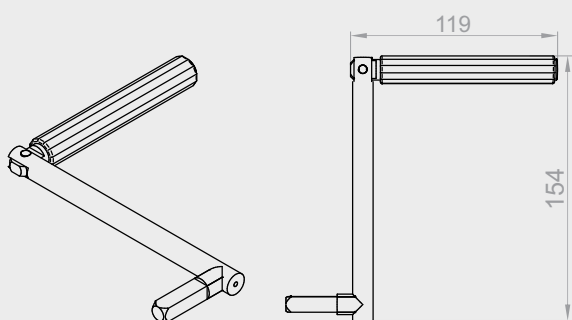
ZT-11M08

Tape (strip) coiler up to 11m - brown



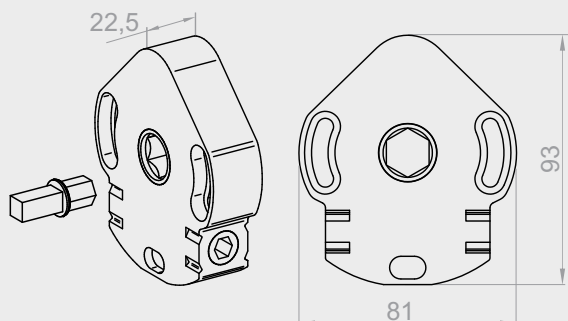
KPT KM

Cassette (box) with tape (strip) transmission



KRM-140

Mignon crank 140 mm



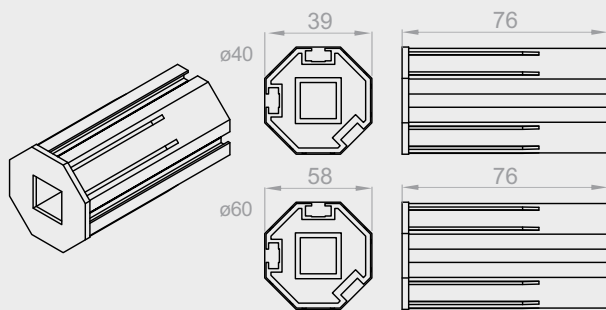
ACE-1-8

ACE 1:8 crank mechanism

ACE-1-11

ACE 1:11 crank mechanism



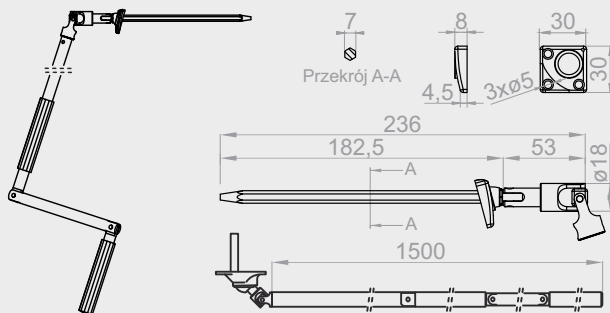


OBS-40-ACE

Mounting cap fi-40 for ace mechanism

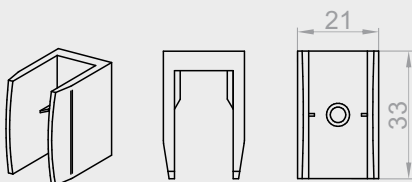
OBS-60-ACE

Mounting cap fi-60 for ace mechanism



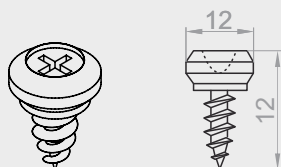
KRH-ZF

Kardan 90 with 1500mm crank



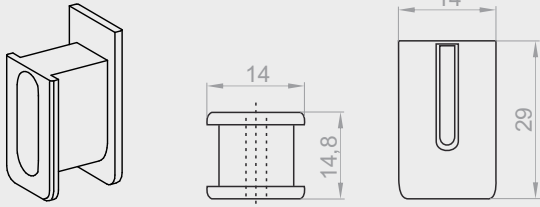
U-KRD

Wall handle for kardan crank



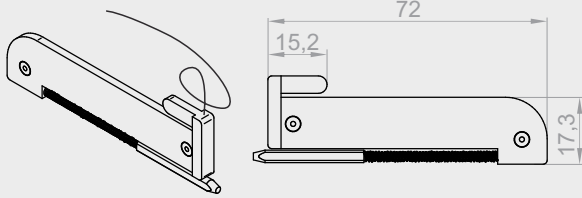
NYP

Guide nipple



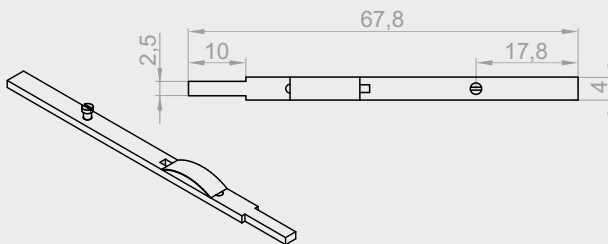
NPD-040

Belt guide



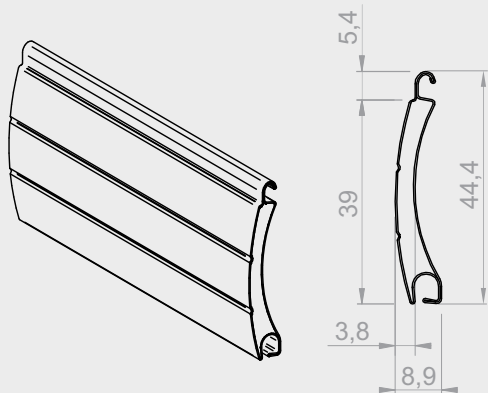
RA

Automatic bolt



ZR

Latch (manual bolt)



PA 39/0k

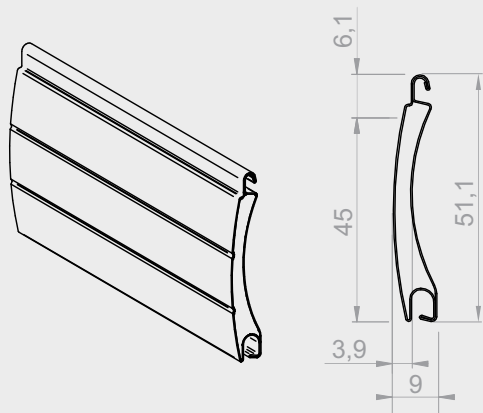
Aluminium profile pa 39 - perforated

PA 39/1k

Aluminium profile pa 39 - unperforated

Profile height	39 mm
Profile thickness	8,9 mm
Profile weight 1 m ²	2,8 kg
Maximum profile length	6 m
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	24 - steel anthracite DB703	26 - steel olive	27 - basalt grey	30 - walnut	34 - bog oak	48 - golden oak	54 - winchester



PA 45/0k

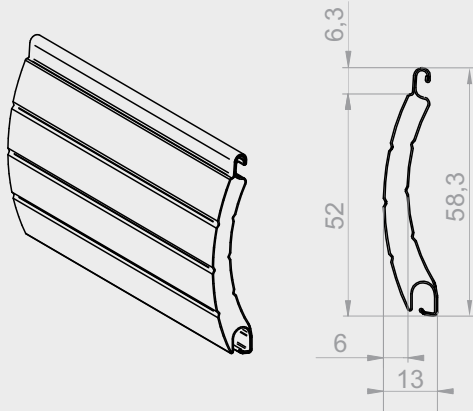
Aluminium profile pa 45 - perforated

PA 45/1k

Aluminium profile pa 45 - unperforated

Profile height	45 mm
Profile thickness	9 mm
Profile weight 1 m ²	2,9 kg
Maximum profile length	6 m
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	22 - mahogany	23 - anthracite	26 - steel olive	30 - walnut	48 - golden oak	54 - winchester



PA 52/0k

Aluminium profile pa 52 - perforated

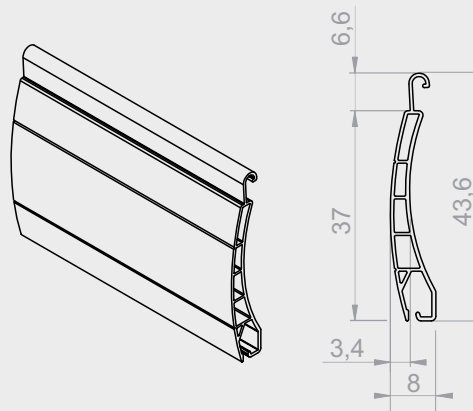
PA 52/1k

Aluminium profile pa 52 - unperforated

Profile height	52 mm
Profile thickness	13 mm
Profile weight 1 m ²	3,0 kg
Maximum profile length	6 m
Number of laths 1m high	19 pcs
Maximum area	8,0 m ²
Maximum shutter width	3700 mm

Profile colors (k)

01 - silver	02 - white	03 - grey	05 - beige	07 - light grey	08 - dark brown	09 - brown	15 - cream white	16 - ivory	23 - anthracite	26 - steel olive	30 - walnut	48 - golden oak



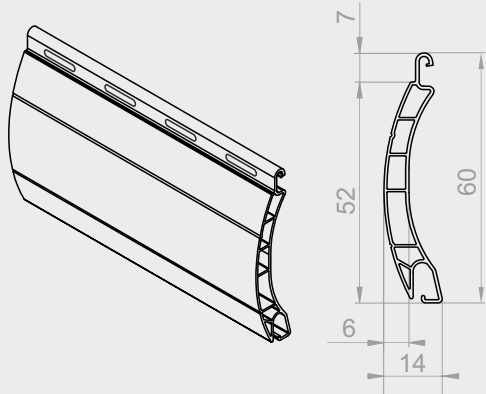
PVC 37/0k

PVC profile 37- perforated

Profile height	37 mm
Profile thickness	8 mm
Profile weight 1 m ²	3,5 kg
Maximum profile length	6 m
Number of laths 1m high	27 pcs
Maximum area	3,0 m ²
Maximum shutter width	1600 mm

Profile colors (k)



02 - white	03 - grey	05 - beige

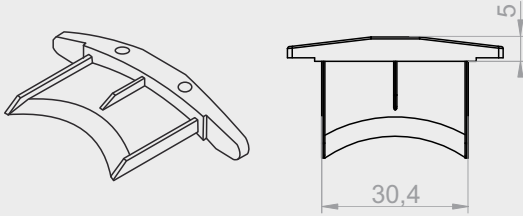


PVC 52/0k

PVC profile 52- perforated

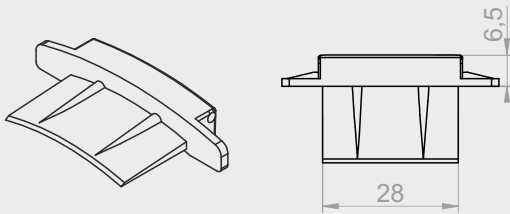
Profile height	52 mm
Profile thickness	14 mm
Profile weight 1 m ²	4,0 kg
Maximum profile length	6 m
Number of laths 1m high	19 pcs
Maximum area	4,3 m ²
Maximum shutter width	1600 mm

Profile colors (k)		
02 - white	03 - grey	05 - beige
		



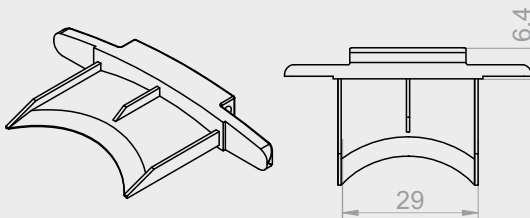
APA 39 M

Lateral cap for PA-39 ALU slat



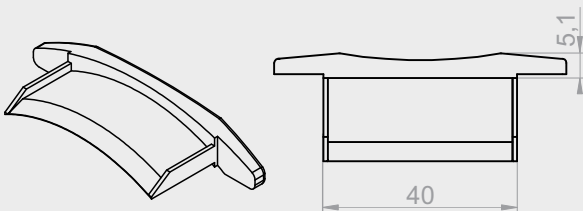
APA 37-R

Lateral cap for PA-37 PVC slat, bolts



APA 45-R

Lateral cap for PA-45 ALU slat, bolts



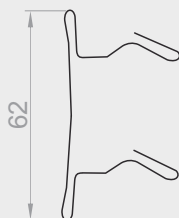
APA 52

Lateral cap for PA-52 ALU slat



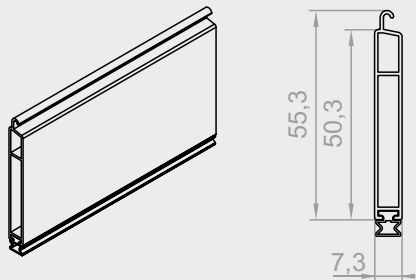
APA 37-PCV

Lateral cap for PA-37 PVC slat



APA 52-PCV

Lateral cap for PA-52 PVC slat

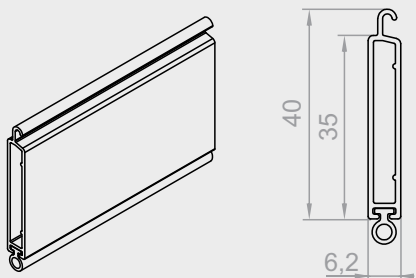


LD-37

Bottom lath for profile PA 39, PA 45, PA 52,
PCV 37, PCV 52

KA-44

Seal for LD-37

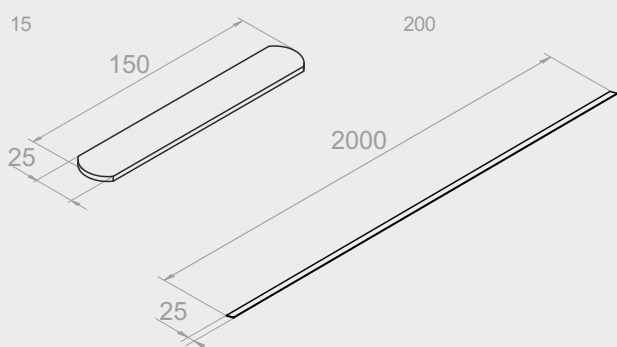


LD-35 MINI

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

KA-44B

Seal for LD-35 MINI

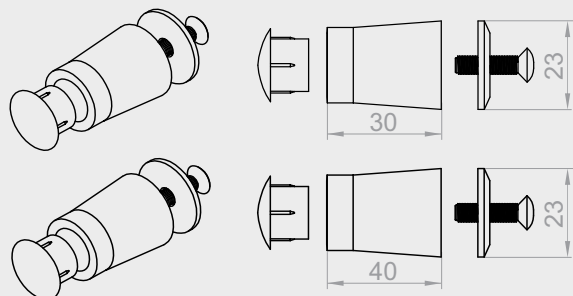


LD-OBCIAŻNIK 15

Weight of bottom lath 15cm

LD-OBCIAŻNIK 200

Weight of bottom lath 200cm



BF (without plug)

BF-ZAT

Bottom lath bumper

} SET

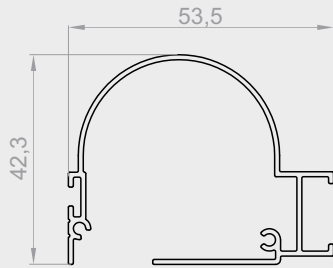
BF-40MM (without plug)

BF-ZAT

Bottom lath bumper

} SET

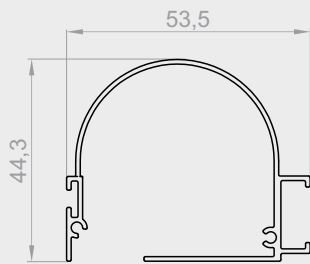




M-RN-090

Mosquito's net cassette for box 180

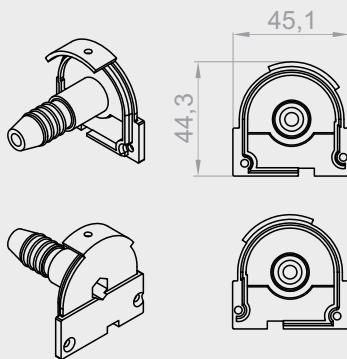
BOX
180



M-RN-011

Mosquito's net cassette for box 220,250

BOX
220,250



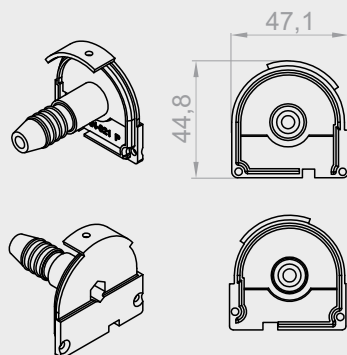
M-RN-080 L/P

Side caps of mosquito's net cassette in box 180

BOX
180

ABS

1pcs
0,01kg



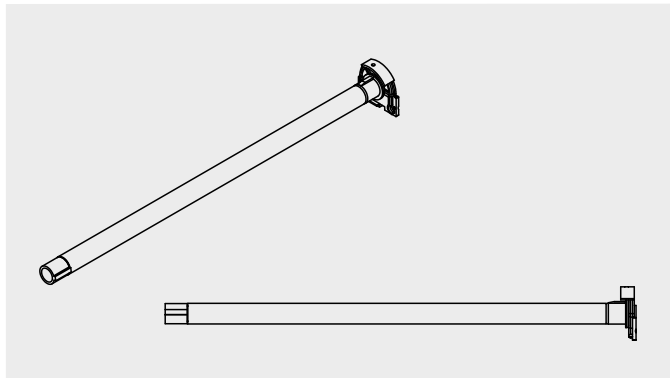
M-RN-021 L/P

Side caps of mosquito's net cassette in box 220, 250

BOX
220,250

ABS

1pcs
0,01kg



MZN-060

Side cap of the mosquito's net cassette with spring 240 in box 180

MZN-070

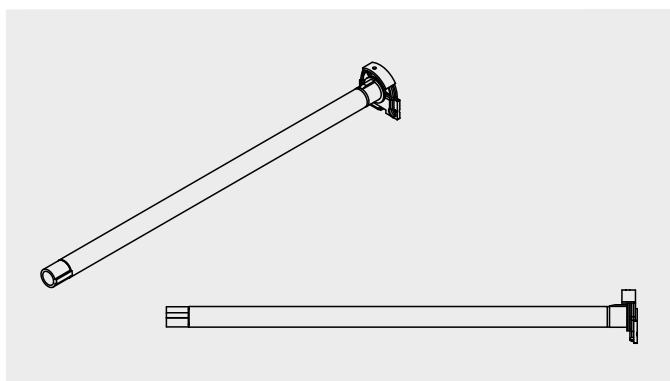
Side cap of the mosquito's net cassette with spring 260 in box 180

MZN-080

Side cap of the mosquito's net cassette with spring 310 in box 180

MZN-090

Side cap of the mosquito's net cassette with spring 350 in box 180



MZN-021

Side cap of the mosquito's net cassette with spring 240 in box 220, 250

MZN-031

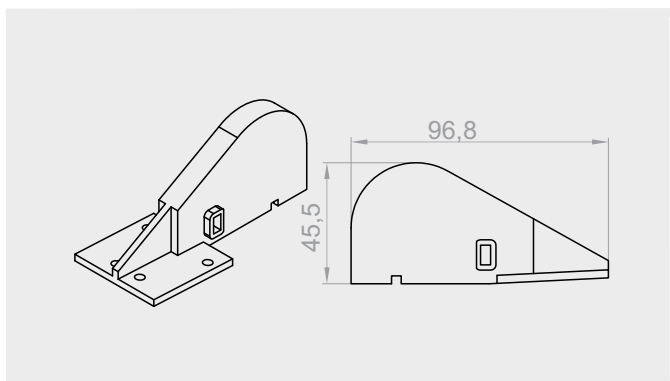
Side cap of the mosquito's net cassette with spring 260 in box 220, 250

MZN-041

Side cap of the mosquito's net cassette with spring 310 in box 220, 250

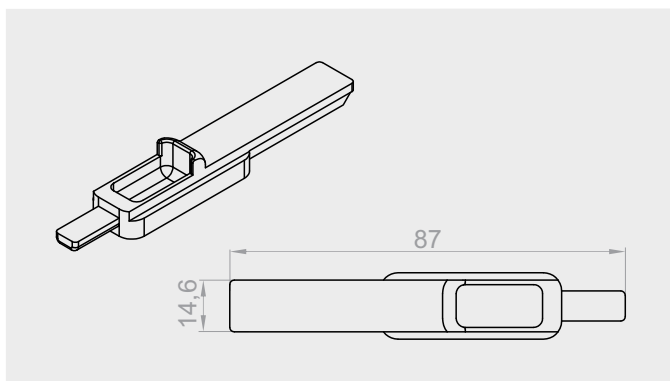
MZN-051

Side cap of the mosquito's net cassette with spring 350 in box 220, 250



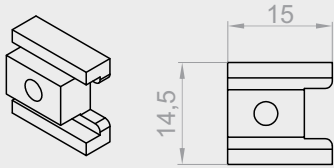
NPD-070

Division of the mosquito's net

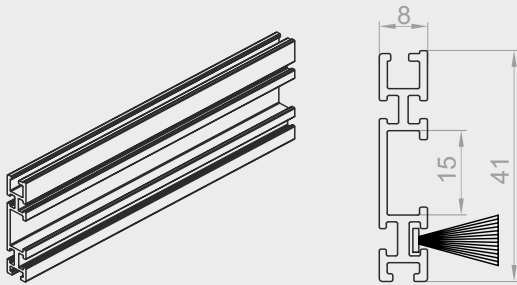


M-RN-050

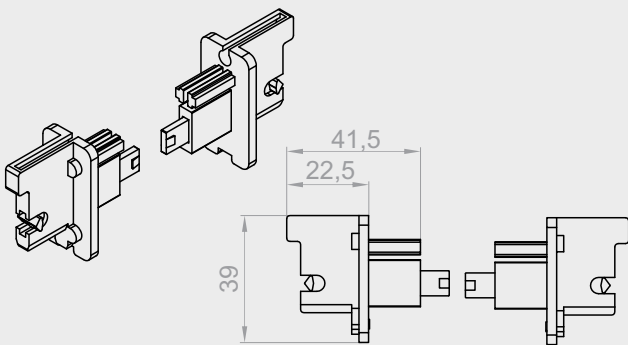
Latch of the mosquito's net cassette



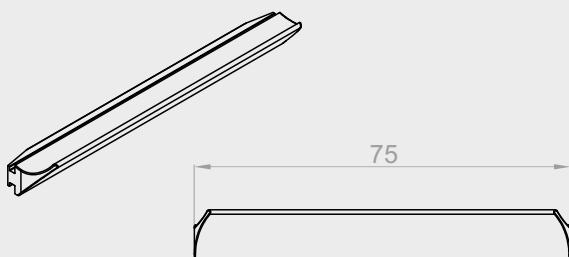
M-RN-060
Latch blockade



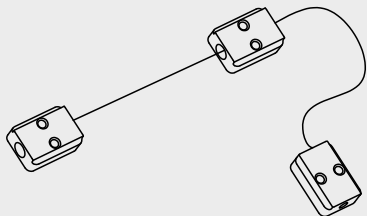
LDM 41x8
Bottom lath of the mosquito's net with
seal SP-5,5X25 G W1, mounted from the front



MZW-040 L/P
End caps of the bottom lath with klik-klak blockade
in mosquito's net

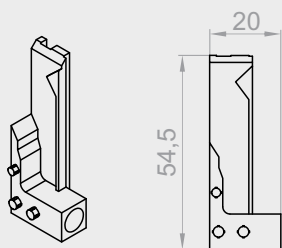


M-RW-080
Handle of the bottom lath of the mosquito's net



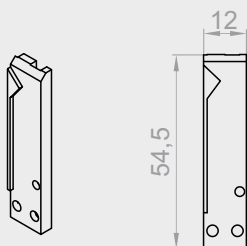
M-RW-070

Cord handle of the mosquito'net



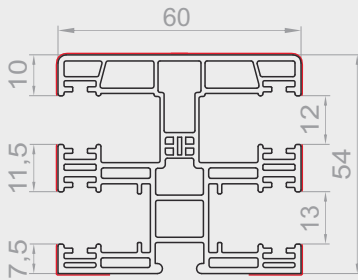
M-RN-040

Latch blockade klik-klak of the PVC guide (right)



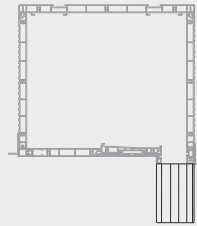
M-RN-030

Latch blockade klik-klak of the pcv guide (left)



NPR-010

Double PVC guide for mosquito's net

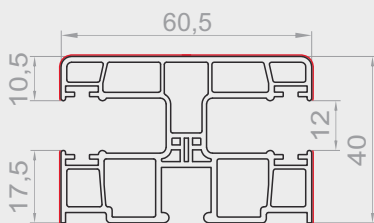


Max.
6m



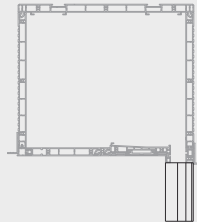
PVC

1m
0,99kg



NPR-020

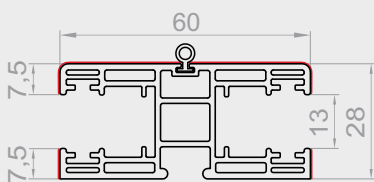
Double PVC guide



Max.
6m

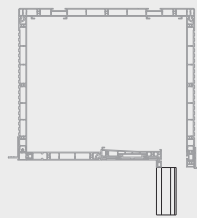
PVC

1m
0,65kg



NPR-030

Division PVC guide for mosquito's net with seal KA-44 B

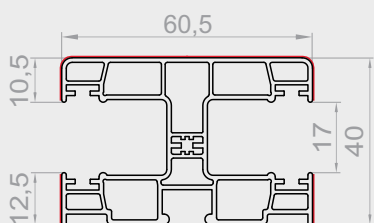


Max.
6m



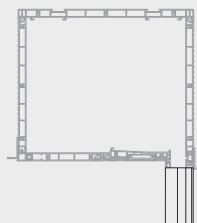
PVC

1m
0,58kg



RK-18 M

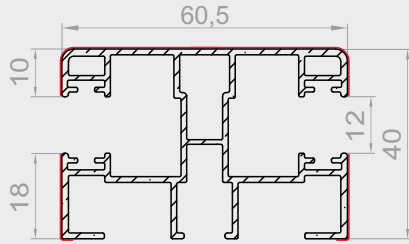
PVC guide for profile PA 52/ PVC 52



Max.
6m

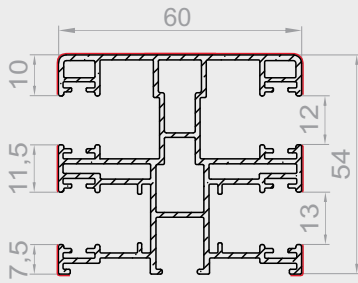
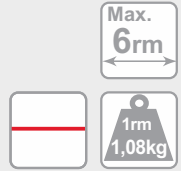
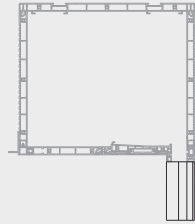
PVC

1m
0,67kg



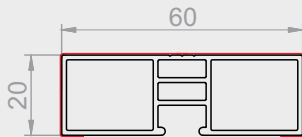
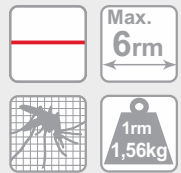
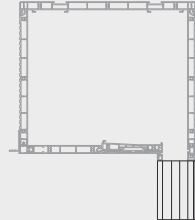
NPR-040

ALU double guide



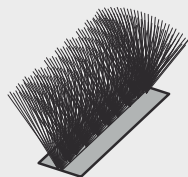
NPR-050

ALU double guide for mosquito's net



DP-PCV-20

60x20 guide spacer.



SP-7X6 4P

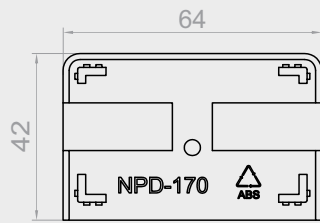
Brush seal for guides

SP-7x9-3P1M-VR

Brush seal for mosquito's net ALU guide

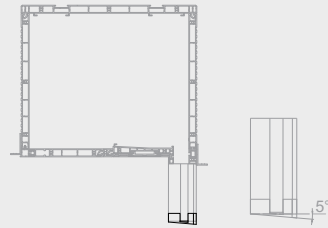
SP-7,5x9-3P1M-VR

Brush seal for mosquito's net PVC guide



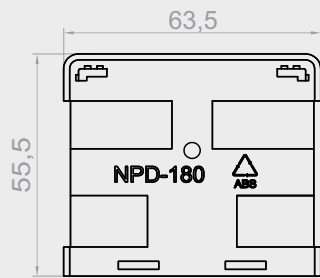
NPD-170

Bottom plug for double guide



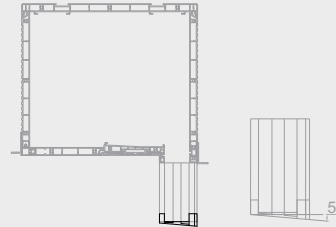
ABS

1 pcs
0,01kg



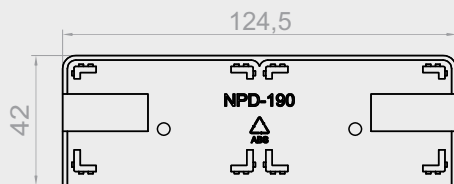
NPD-180

Bottom plug for guide with mosquito net



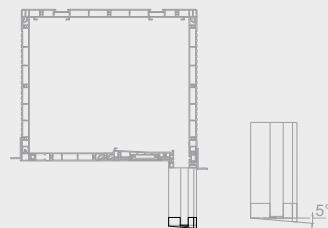
ABS

1 pcs
0,012kg



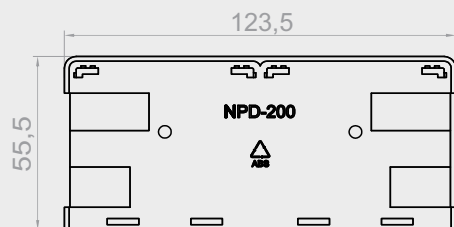
NPD-190

Bottom plug for 2 x double guide



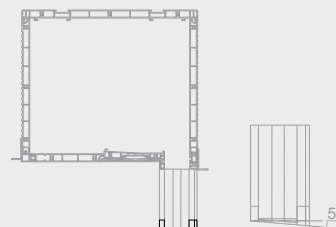
ABS

1 pcs
0,017kg



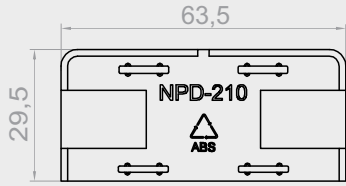
NPD-200

Bottom plug for guide 2 x mosquito net



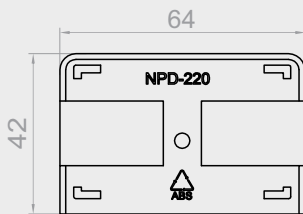
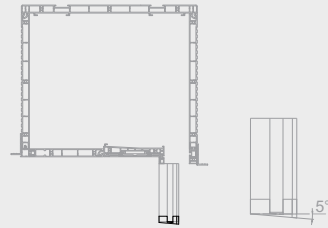
ABS

1 pcs
0,022kg



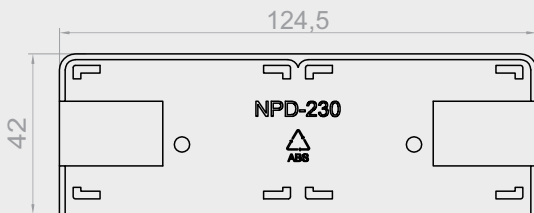
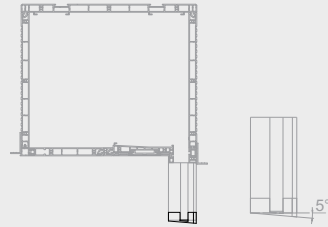
NPD-210

Bottom plug for mosquito net division guide



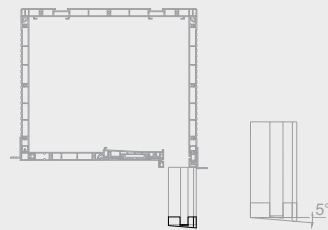
NPD-220

Bottom plug for RK- 18 M guide



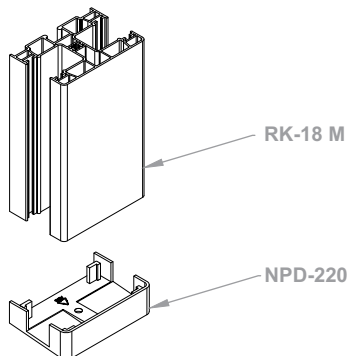
NPD-230

Bottom plug for RK-18 M

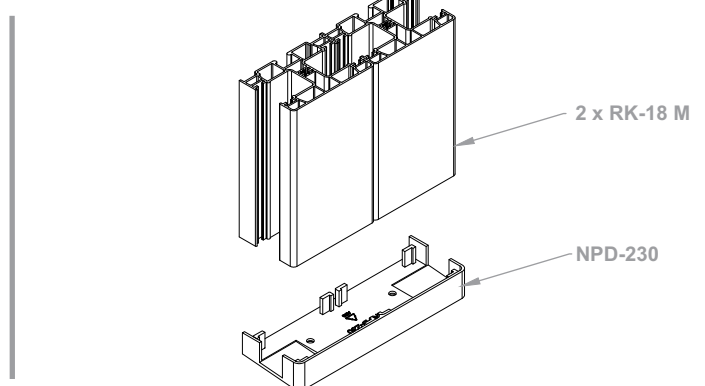


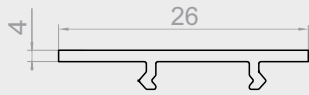
View of the bottom end caps with guides:

RK-18 M + NPD-220



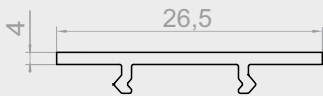
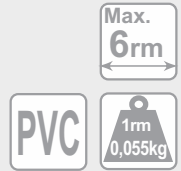
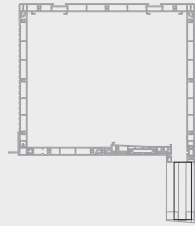
2xRK-18 M + NPD-230





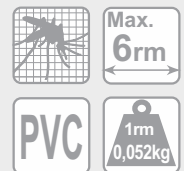
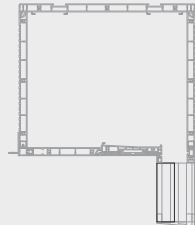
NPD-090

Plug for profile's channel in guide

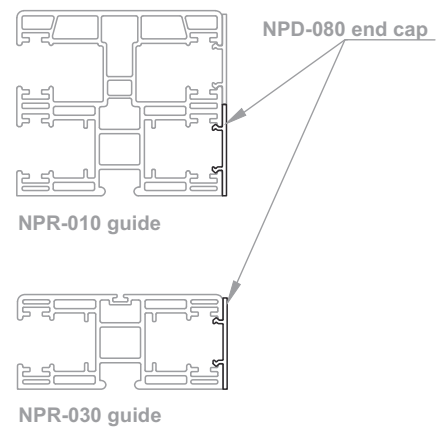
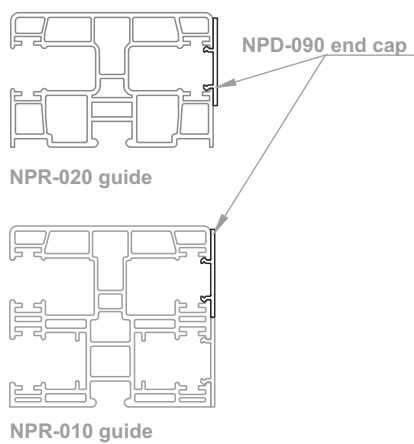


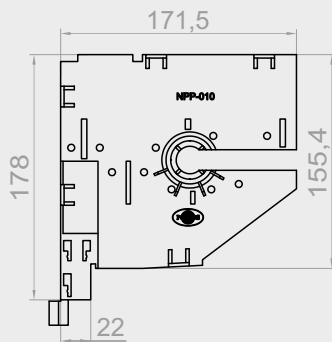
NPD-080

Plug for mosquito net channel in guide



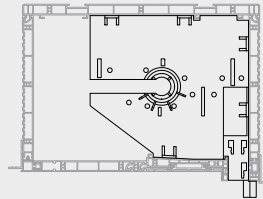
View of guides with the appropriate end caps for guide channels.





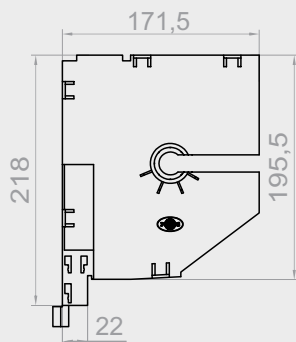
NPP-010

Division of the box 180 for double guide



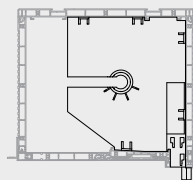
BOX
180

1pcs
0,12kg



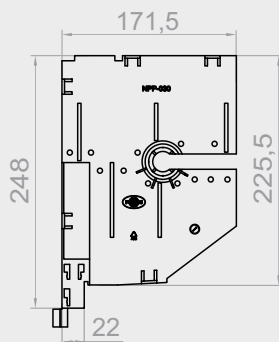
NPP-020

Division of the box 220 for double guide



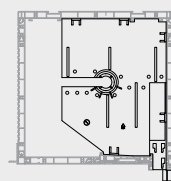
BOX
220

1pcs
0,15kg



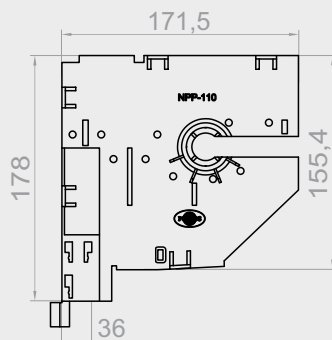
NPP-030

Division of the box 250 for double guide



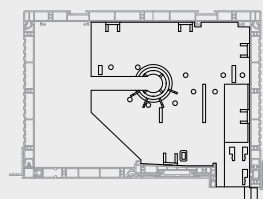
BOX
250

1pcs
0,17kg



NPP-110

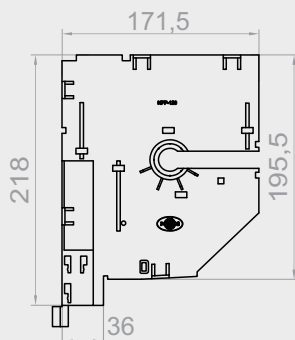
Division of the box 180 with mosquito net
for double guide



BOX
180

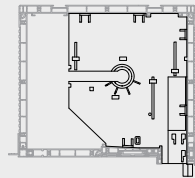


1pcs
0,13kg



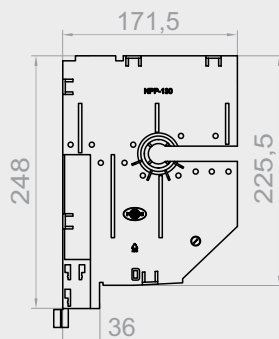
NPP-120

Division of the box 220 with mosquito net for double guide



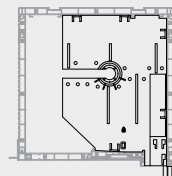
BOX
220

1pcs
0,15kg



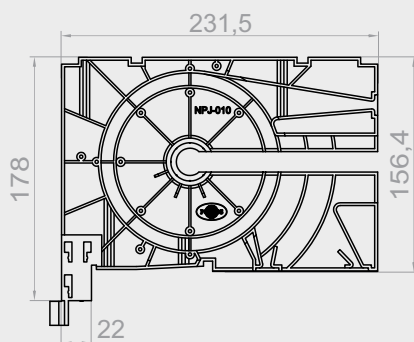
NPP-130

Division of the box 250 with mosquito net for double guide



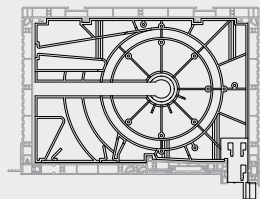
BOX
250

1pcs
0,16kg



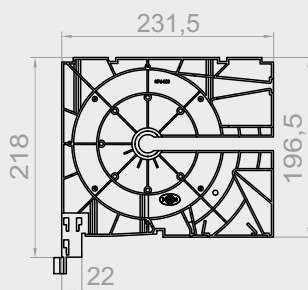
NPJ-010

Division of the box 180 for two single guides



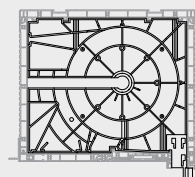
BOX
180

1pcs
0,38kg



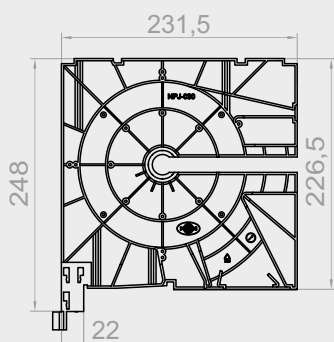
NPJ-020

Division of the box 220 for two single guides



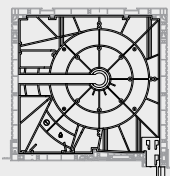
BOX
220

1pcs
0,41kg



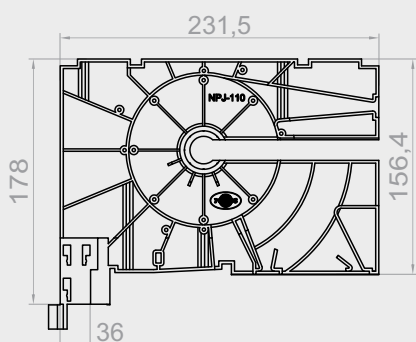
NPJ-030

Division of the box 250 for two single guides



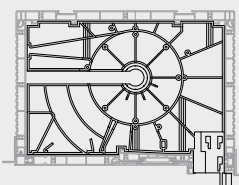
BOX
250

1pcs
0,49kg



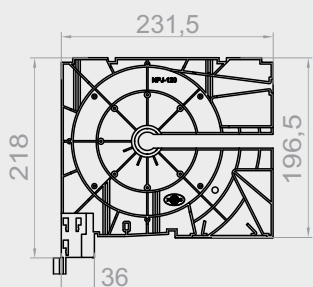
NPJ-110

Division of the box 180 with mosquito net for two single guides



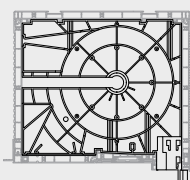
BOX
180

1pcs
0,36kg



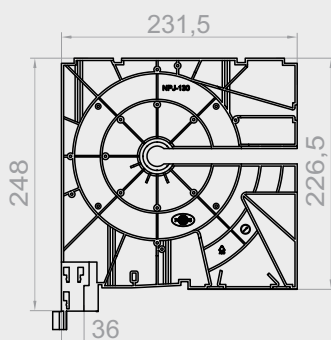
NPJ-120

Division of the box 220 with mosquito net for two single guides



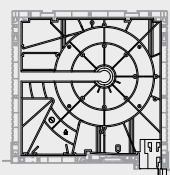
BOX
220

1pcs
0,41kg



NPJ-130

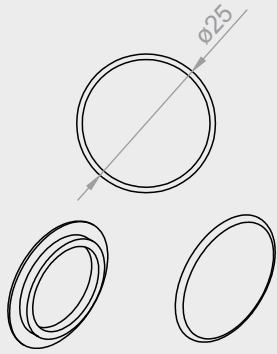
Division of the box 250 with mosquito net for two single guides



BOX
250

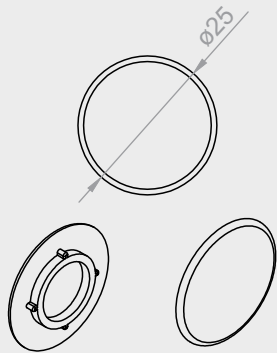
1pcs
0,5kg





NPD-240 L

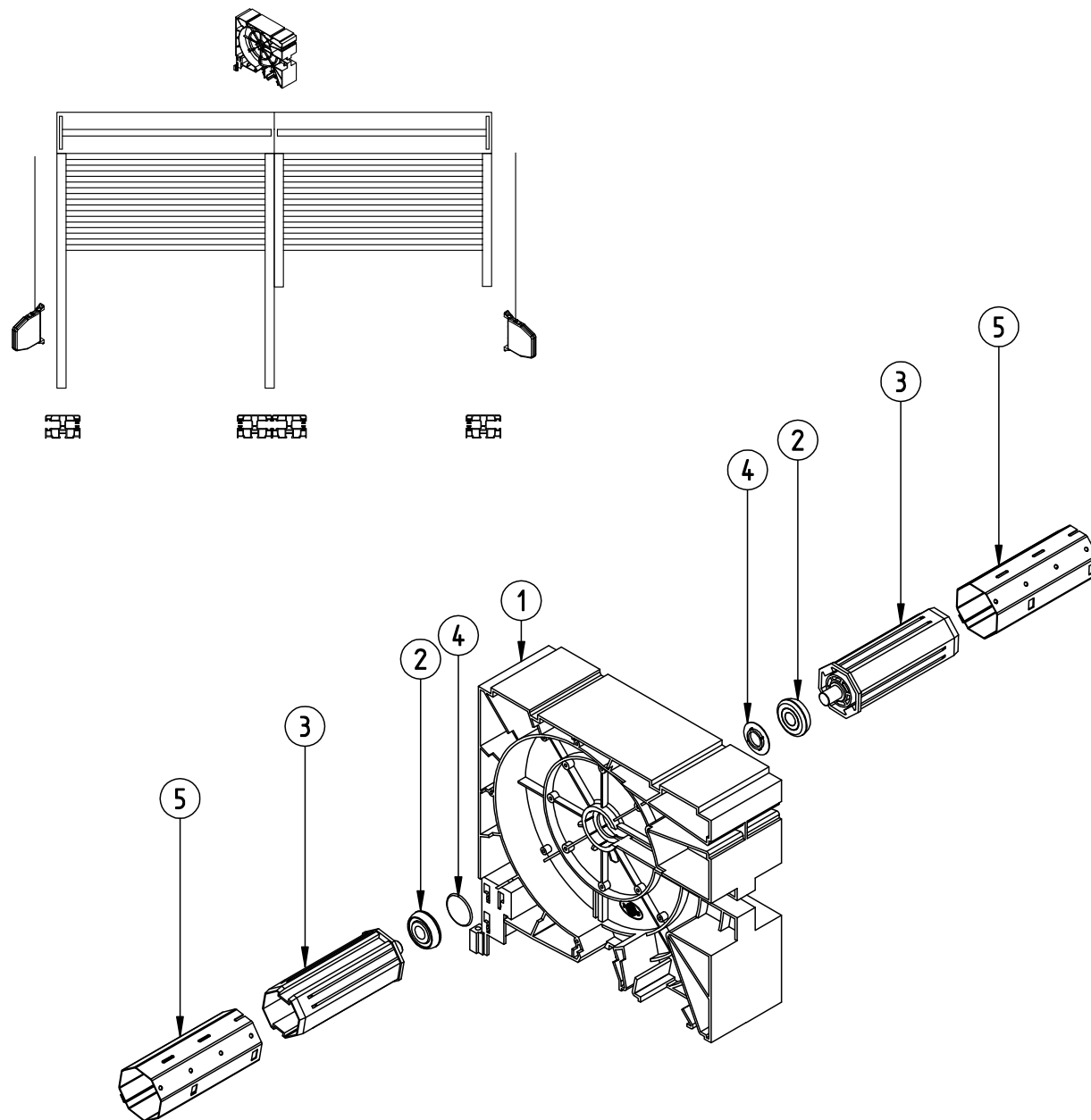
Socket plug for npj division- part left



NPD-240 P

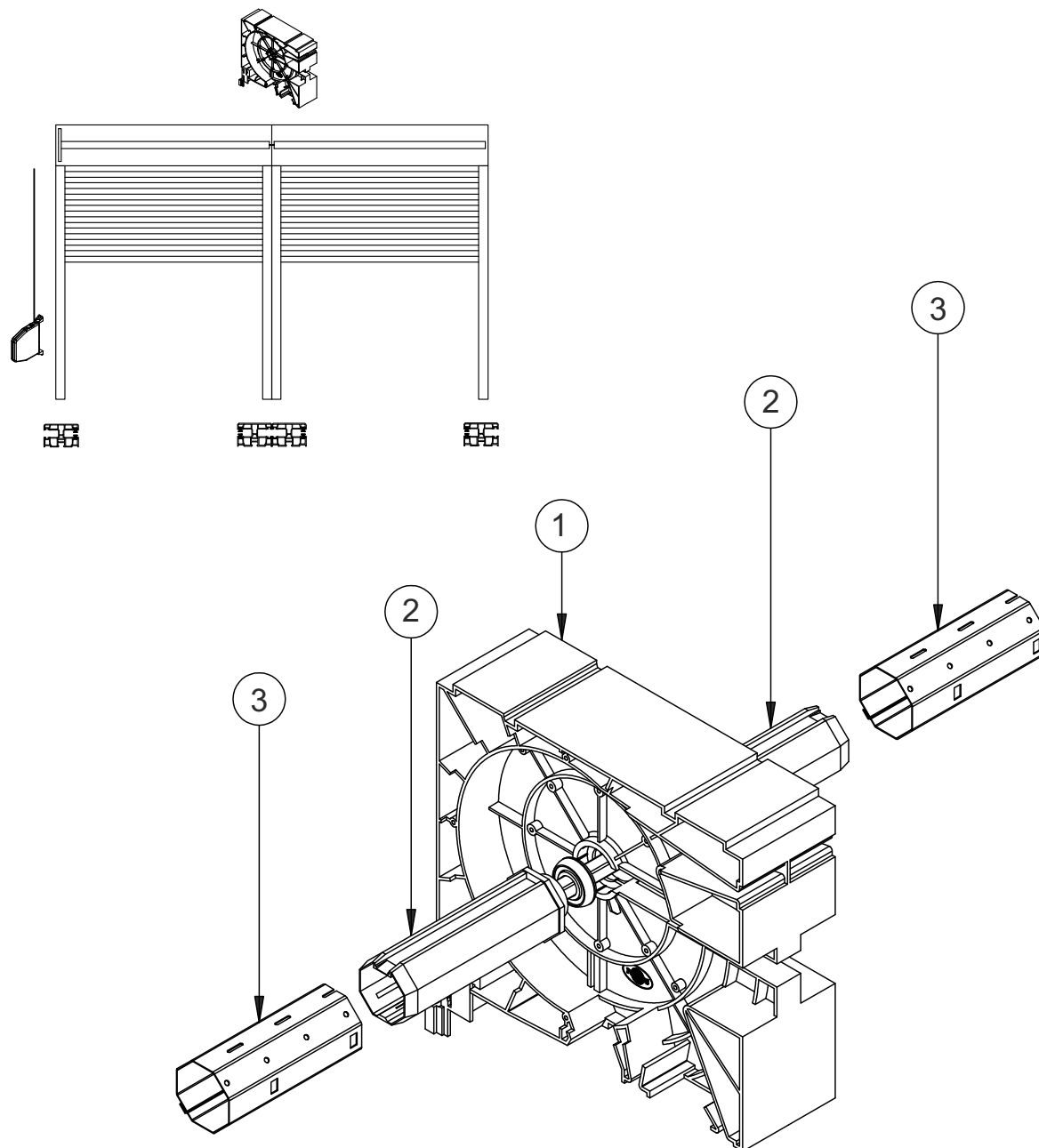
Socket plug for npj division- part right

Division for two single guides in shutter box with independent motor.



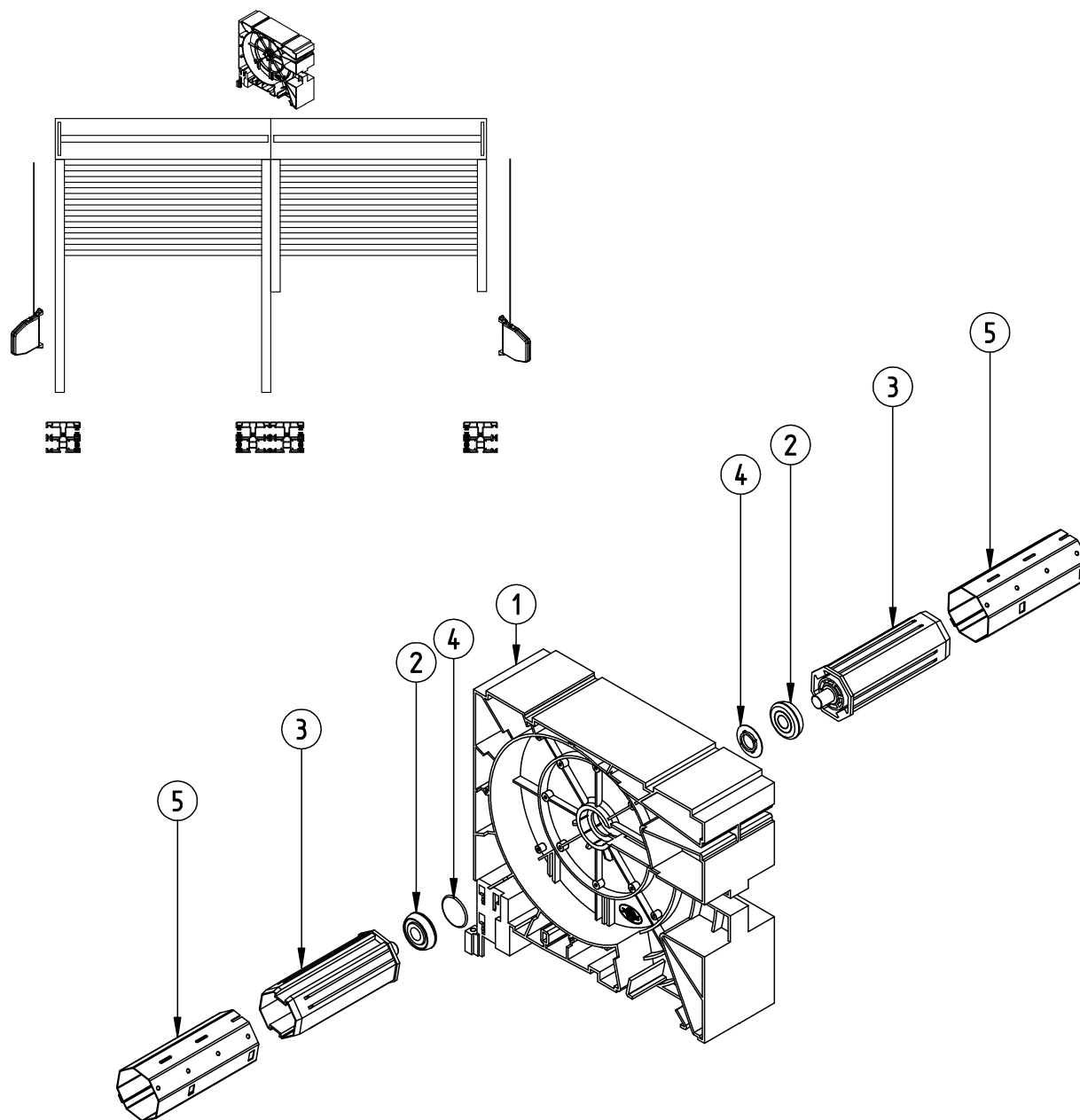
- | | |
|--------------------|---|
| 1. NPJ-010/020/030 | Division of the box 180/220/250 for two single guides |
| 2. LO 28/10 | 28/10 bearing for PVC shutter boxes for pipe 40 |
| LO 28/12 PCV | 28/10 bearing for PVC shutter boxes for pipe 60 |
| 3. OBS-40-PVC | Mounting cap fi-40 for PVC shutter box |
| OBS-60-PVC | Mounting cap fi-60 for PVC shutter box |
| 4. NPD-240 L/P. | Socket plug for NPJ division for tube 60 |
| 5. SW 40 | Octagonal pipe 40 |
| SW 60 | Octagonal pipe 60 |

Division for two single guides in shutter box with dependent motor.



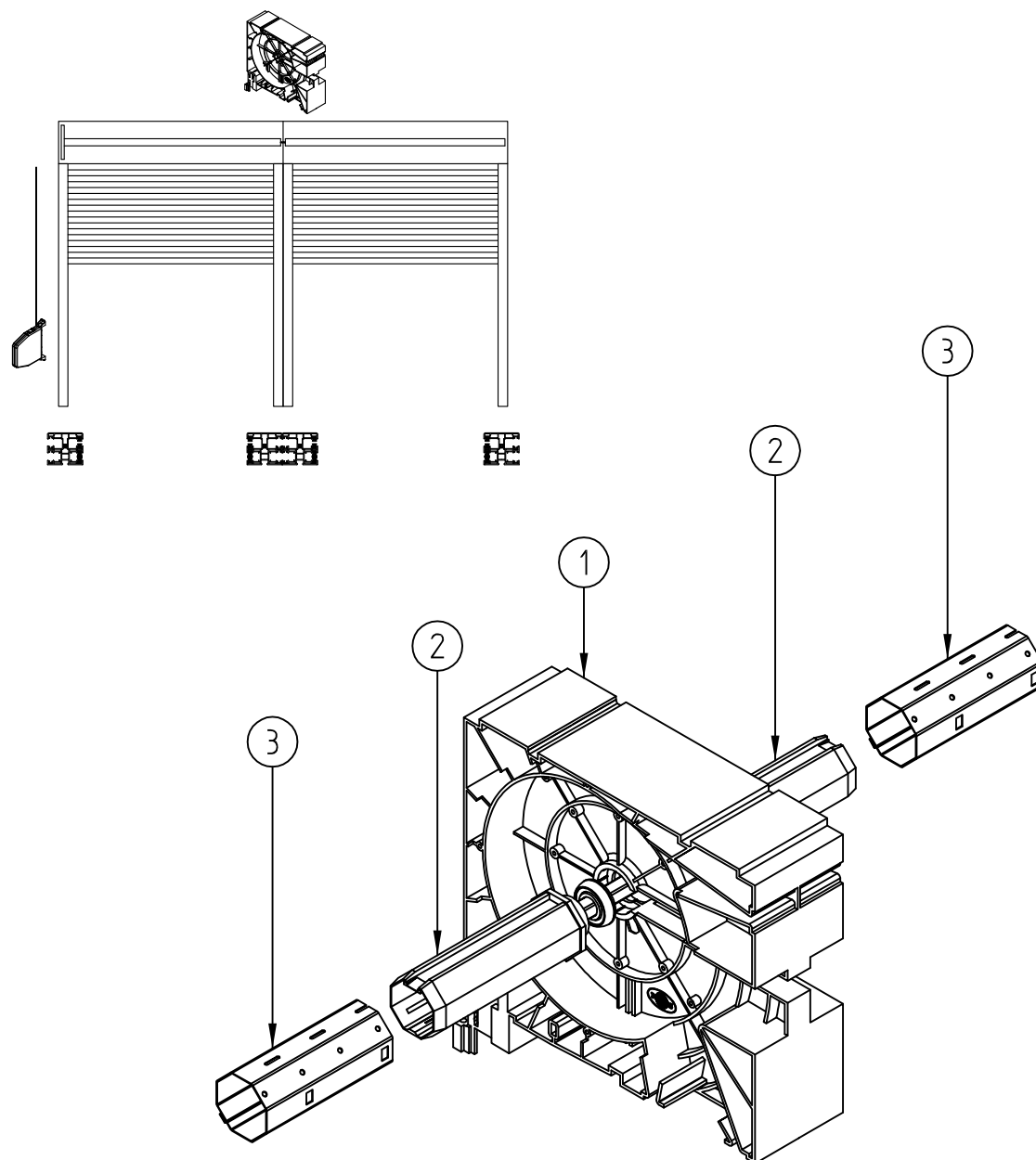
- | | |
|--------------------|---|
| 1. NPJ-010/020/030 | Division of the shutter box 180/220/250 for two single guides |
| 2. RKZ 34 | Round pin for pipes fi-40 |
| RKZ 35 | Round pin for pipes fi-60 |
| 3. SW 40 | Octagonal pipe 40 |
| SW 60 | Octagonal pipe 60 |

Division for two single guides in shutter box with mosquito net and independent motor



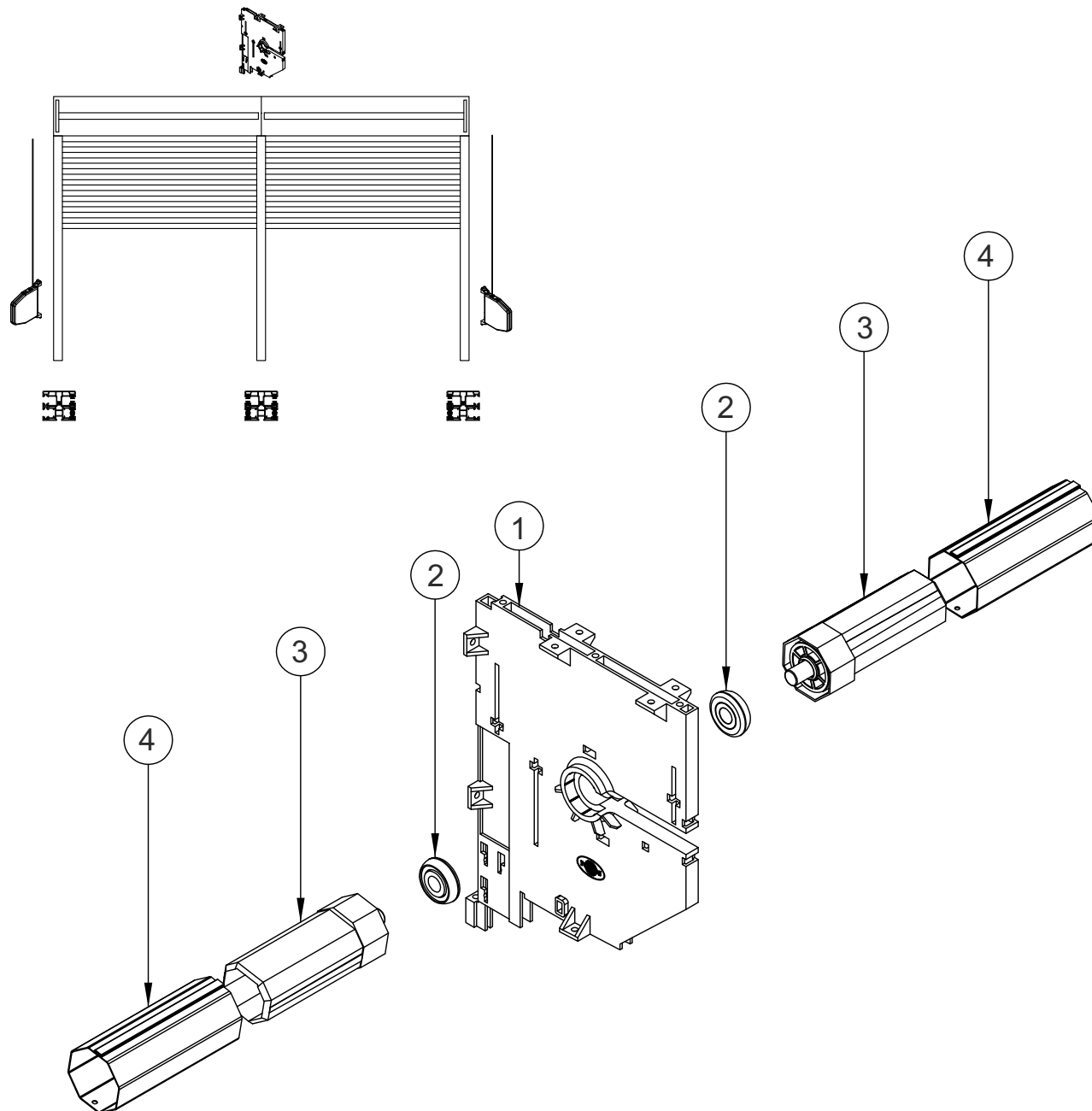
- | | |
|--------------------|---|
| 1. NPJ-110/120/130 | Division of the shutter box 180/220/250 with mosquito-net for two single guides |
| 2. LO 28/10 | Bearing lo 28/10 for PVC shutter boxes |
| LO 28/12 PCV | Bearing lo 28/12 for PVC shutter boxes |
| 3. OBS-40-PVC | Mounting cap fi-40 for PVC shutter box |
| OBS-60-PVC | Mounting cap fi-60 for PVC shutter box |
| 4. NPD-240 L/P. | Socket plug for npj division for tube 60 |
| 5. SW 40 | Octagonal pipe 40 |
| SW 60 | Octagonal pipe 60 |

Division for the two single guides with mosquito net with motor



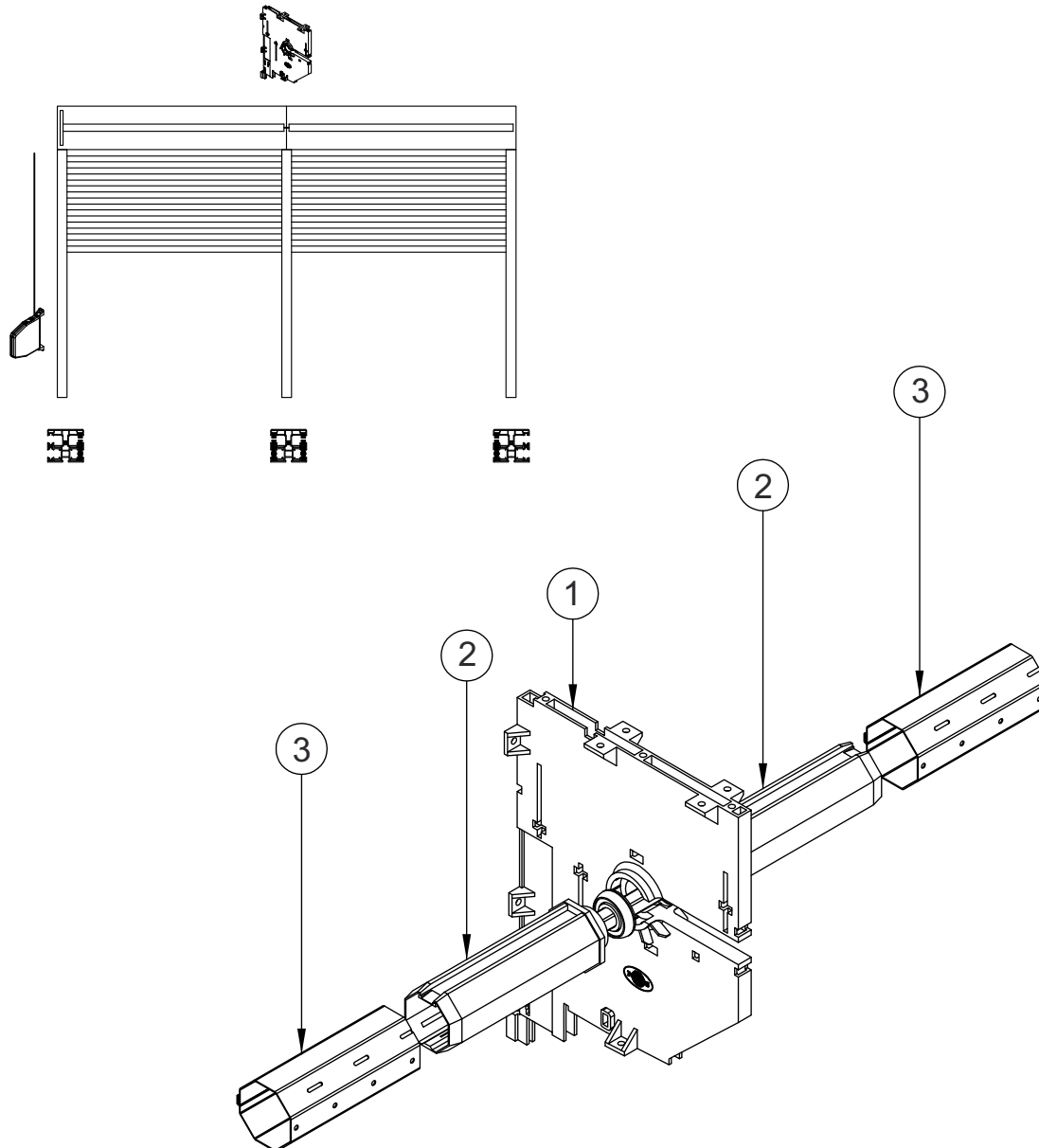
- | | |
|--------------------|---|
| 1. NPJ-010/020/030 | Division for mosquito-net shutter box 180/220/250 for two single guides |
| 2. RKZ 34 | Round pin for pipes fi-40 |
| RKZ 35 | Round pin for pipes fi-60 |
| 3. SW 40 | Octagonal pipe 40 |
| SW 60 | Octagonal pipe 60 |

Division for the double guide with mosquito net with independent motor



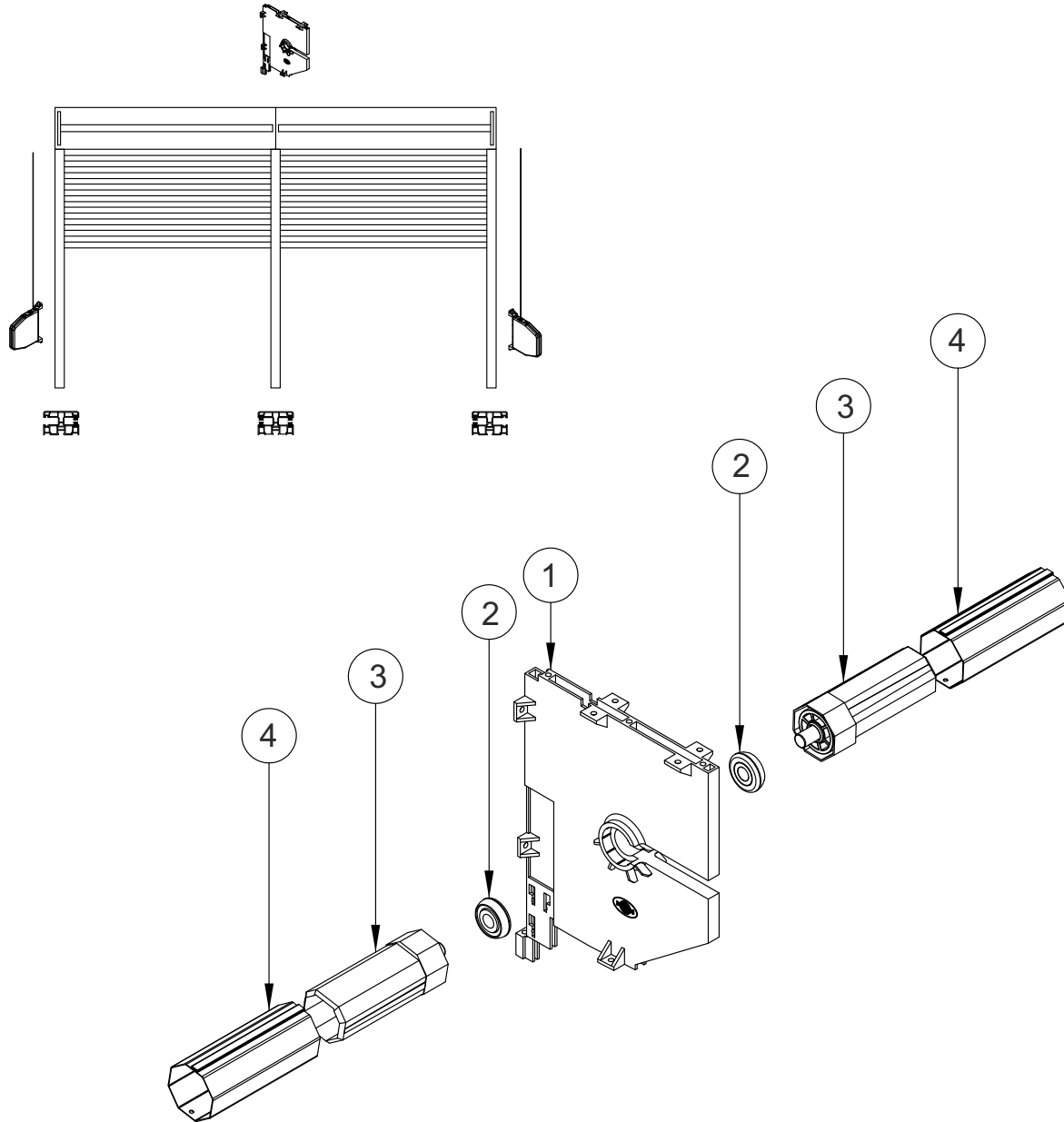
- | | |
|--------------------|--|
| 1. NPP-110/120/130 | Division for single guides with mosquito net |
| 2. LO 28/10 | Bearing lo 28/10 for PVC shutter boxes |
| LO 28/12 PCV | Bearing lo 28/12 for PVC shutter boxes |
| 3. OBS-40-PVC | Mounting cap fi-40 for PVC shutter box |
| OBS-60-PVC | Mounting cap fi-60 for PVC shutter box |
| 4. SW 40 | Octagonal pipe 40 |
| SW 60 | Octagonal pipe 60 |

Division for the double guide with mosquito net with dependent motor



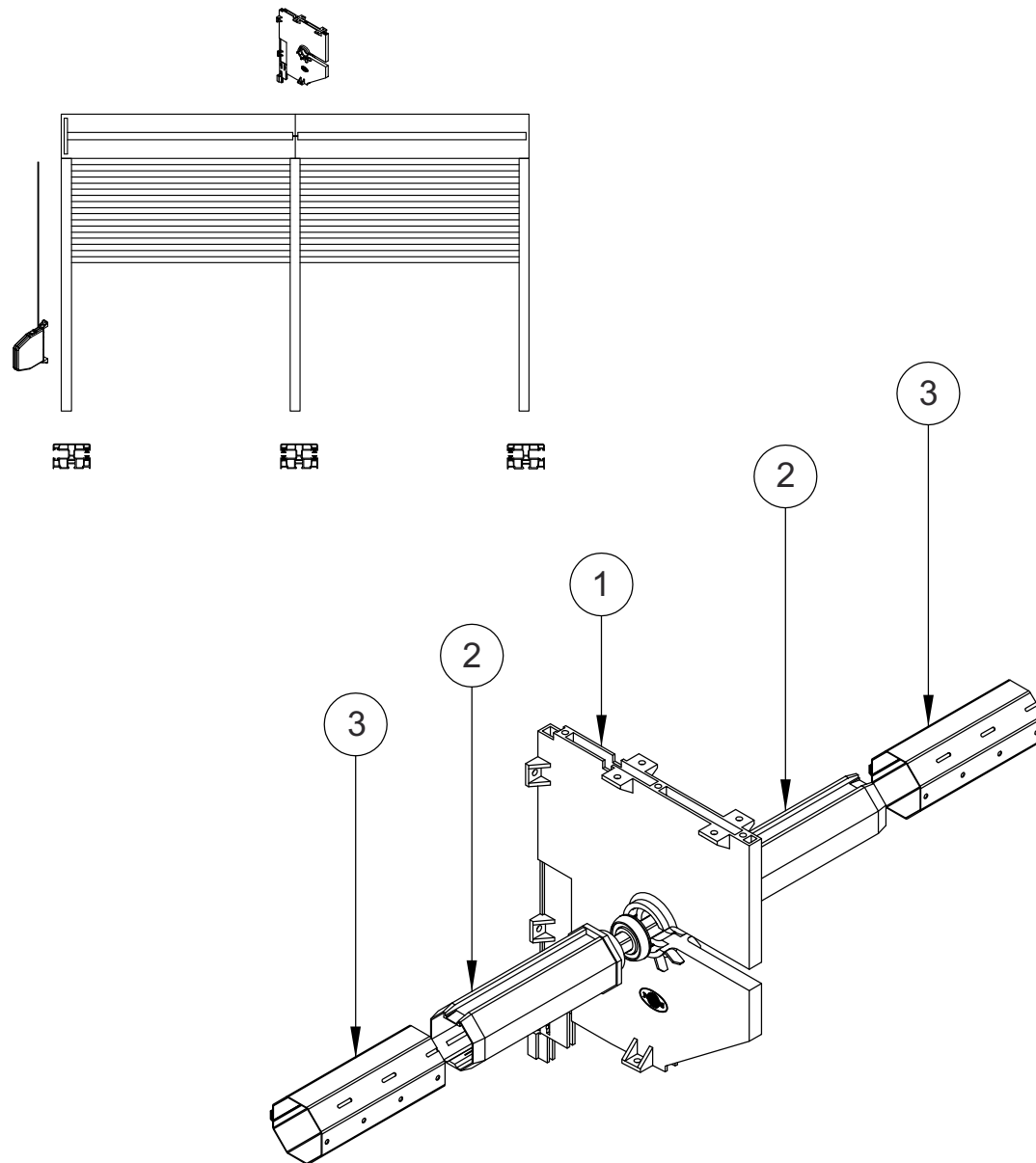
- | | |
|--------------------|---|
| 1. NPP-110/120/130 | Division of the box 220 for double guide
with mosquito net |
| 2. RKZ 34 | Round pin for pipes fi-40 |
| RKZ 35 | Round pin for pipes fi-60 |
| 3. SW 40 | Octagonal pipe 40 |
| SW 60 | Octagonal pipe 60 |

Division for double guide in roller shutter with independent motor



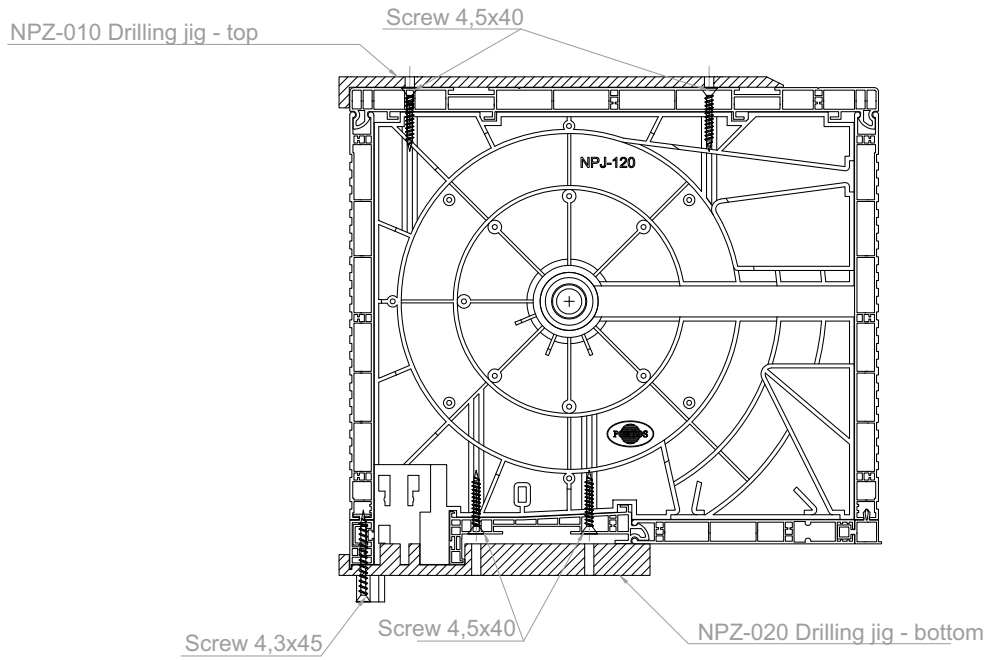
- | | |
|--------------------|--|
| 1. NPP-010/020/030 | Division of the shutter box 220 for double guide |
| 2. LO 28/10 | Bearing lo 28/10 for PVC shutter boxes |
| LO 28/12 PCV | Bearing lo 28/12 for PVC shutter boxes |
| 3. OBS-40-PVC | Mounting cap fi-40 for PVC shutter box |
| OBS-60-PVC | Mounting cap fi-60 for PVC shutter box |
| 4. SW 40 | Octagonal pipe 40 |
| SW 60 | Octagonal pipe 60 |

Division for the double guide in roller shutter with dependent motor

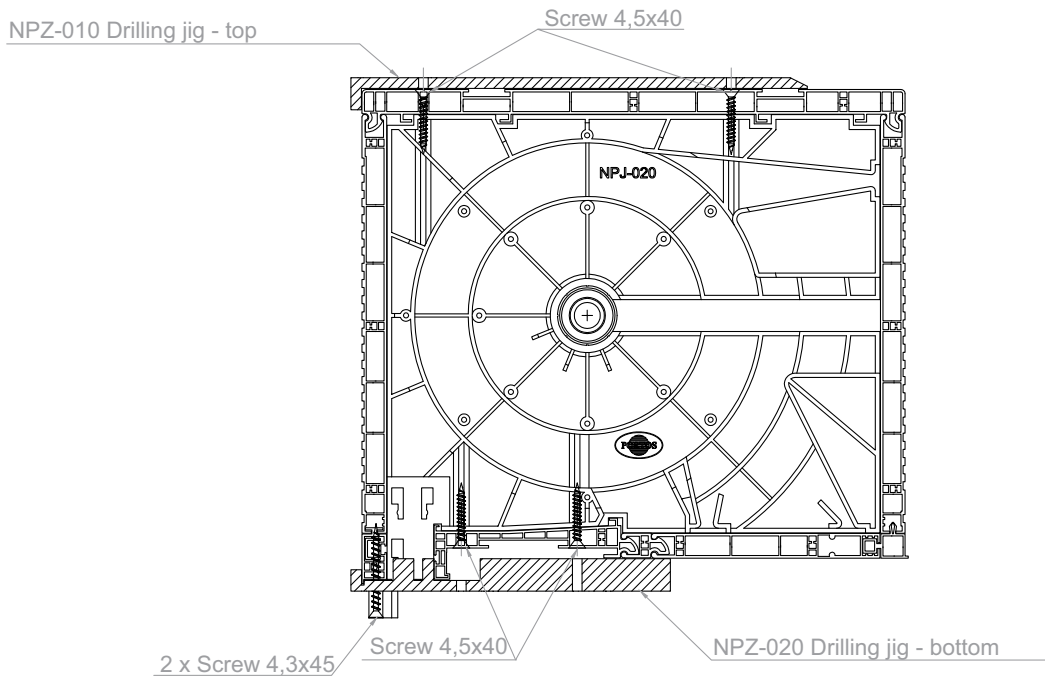


- | | |
|--------------------|--|
| 1. NPP-010/020/030 | The division of the shutter box 220 for double guide |
| 2. RKZ 34 | Round pin for pipes fi-40 |
| RKZ 35 | Round pin for pipes fi-60 |
| 3. SW 40 | Octagonal pipe 40 |
| SW 60 | Octagonal pipe 60 |

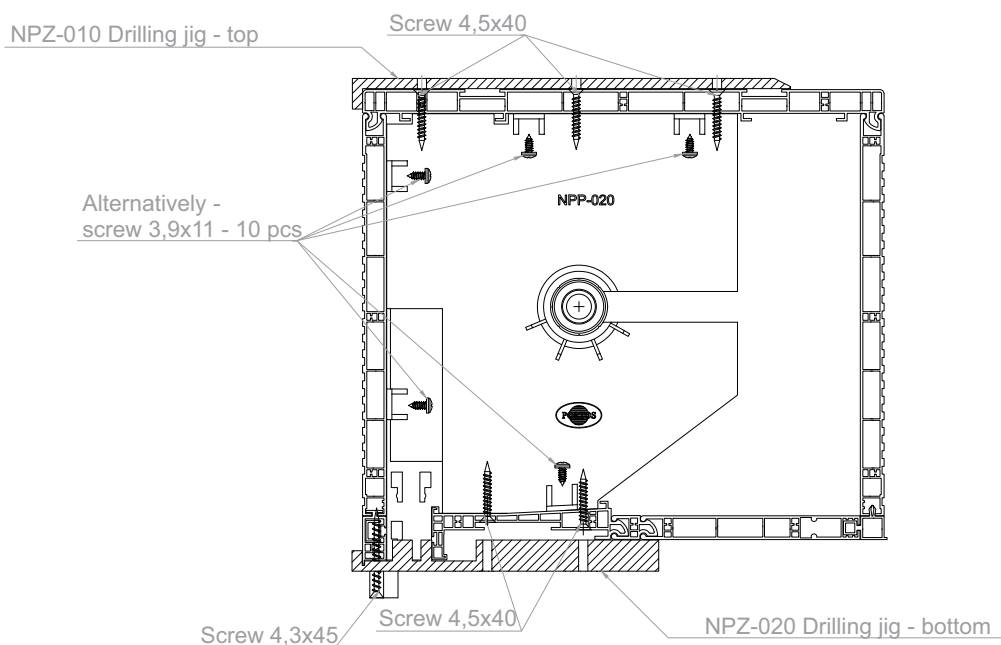
Assembly of the division NPJ-020



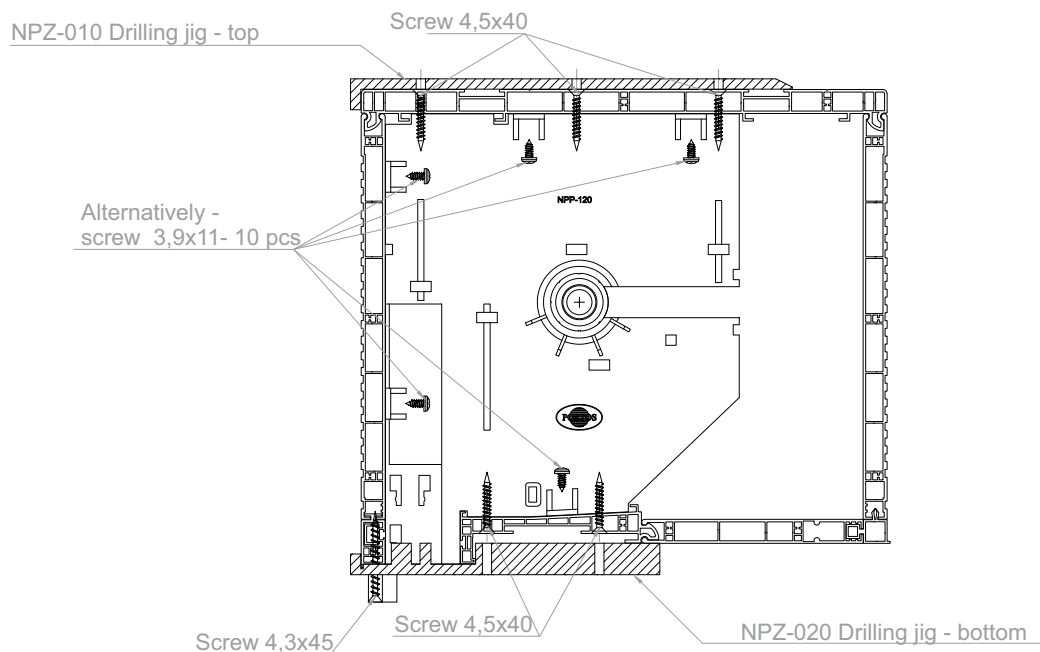
Assembly of the division NPJ-120



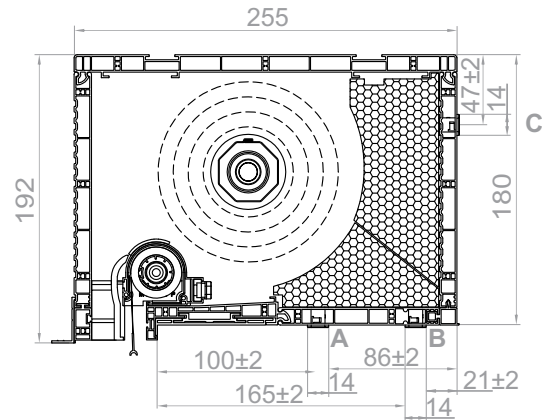
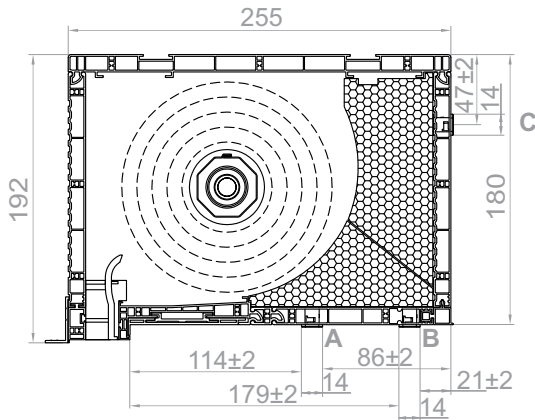
Assmebly of the division NPP-020



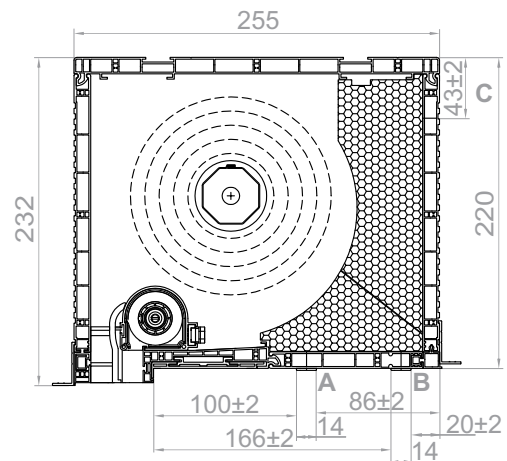
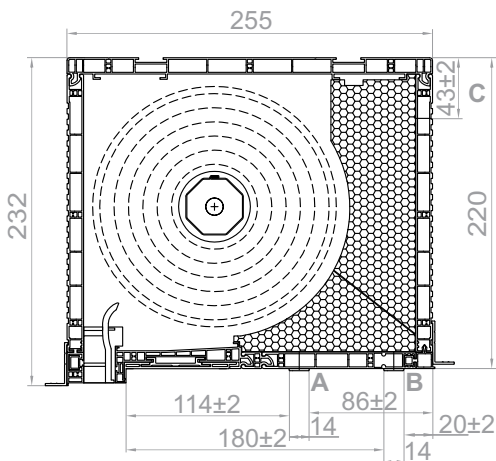
Assembly of the division NPP-120



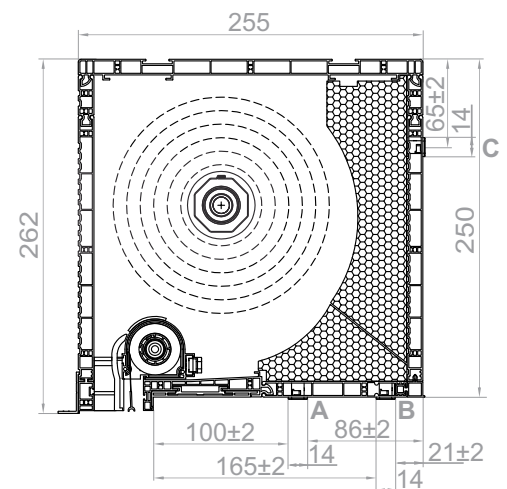
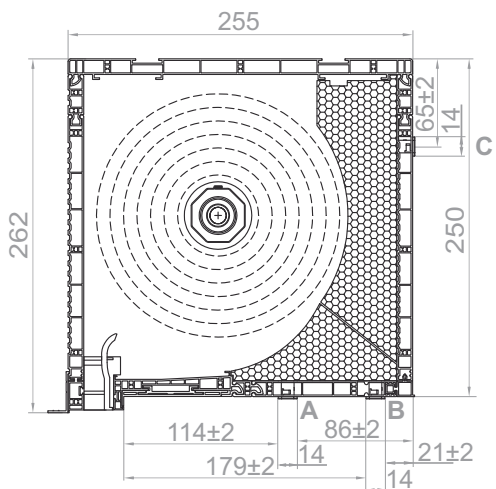
Entry of the tape- box 180



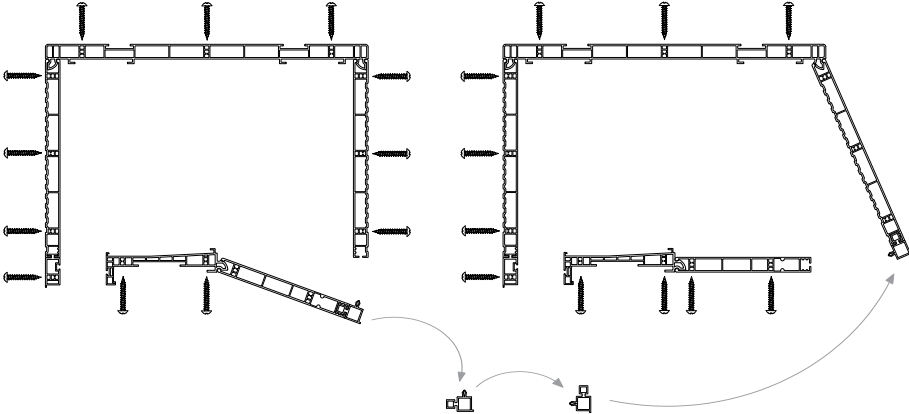
Entry of the tape- box 220



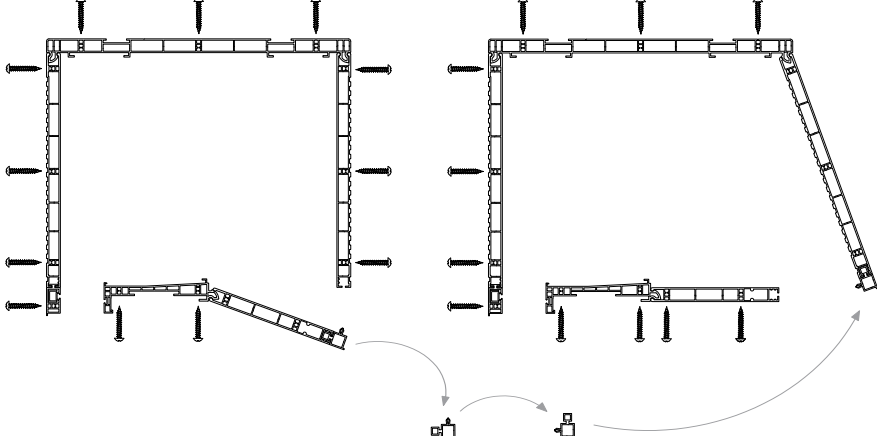
Entry of the tape- box 250



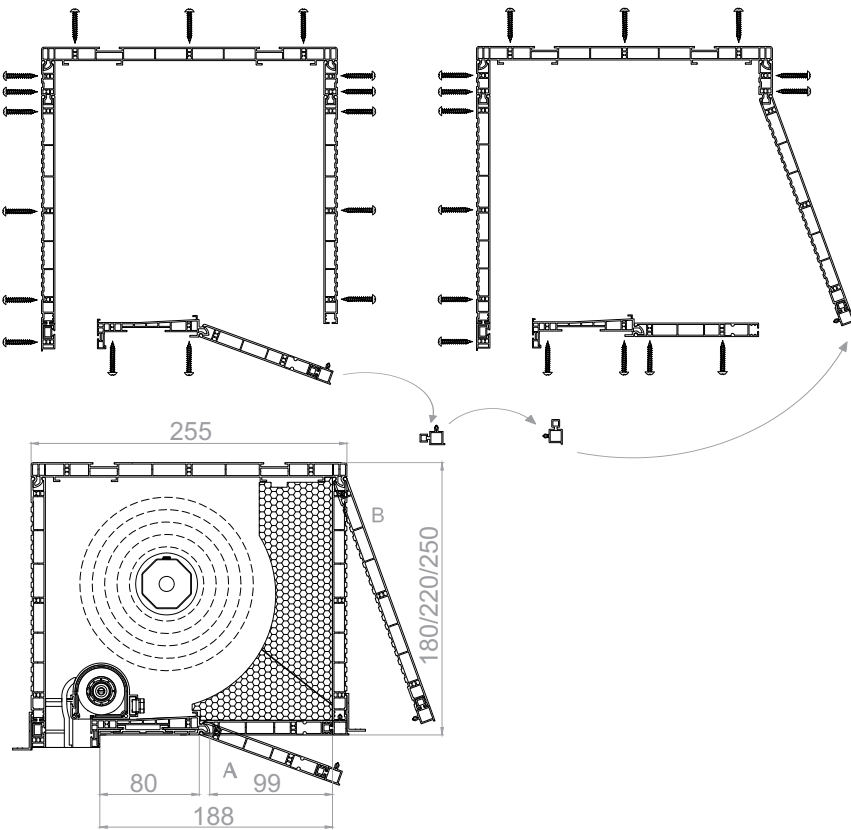
Revision hatches in box 180 with mosquito net



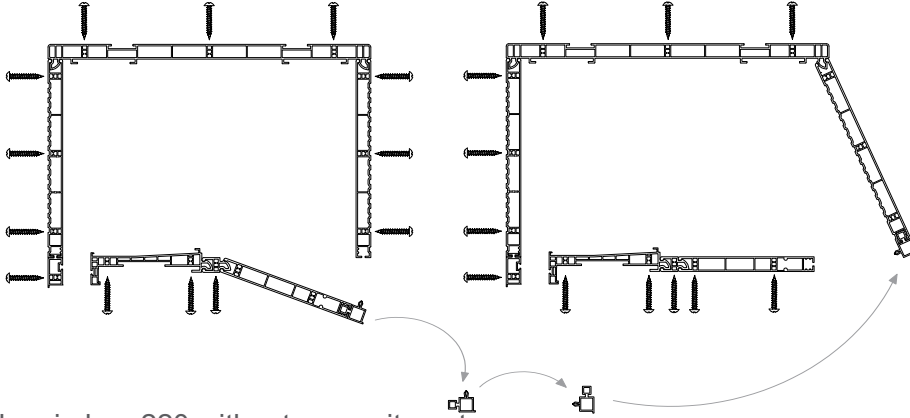
Revision hatches in box 220 with mosquito net



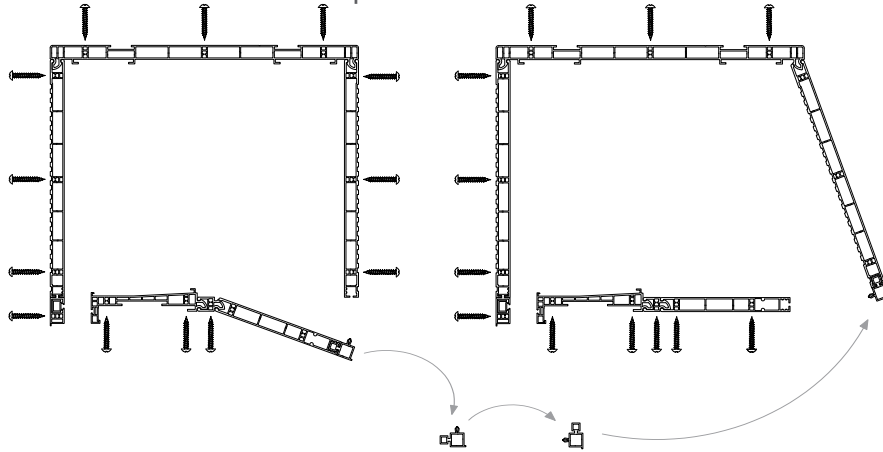
Revision hatches in box 250 with mosquito net



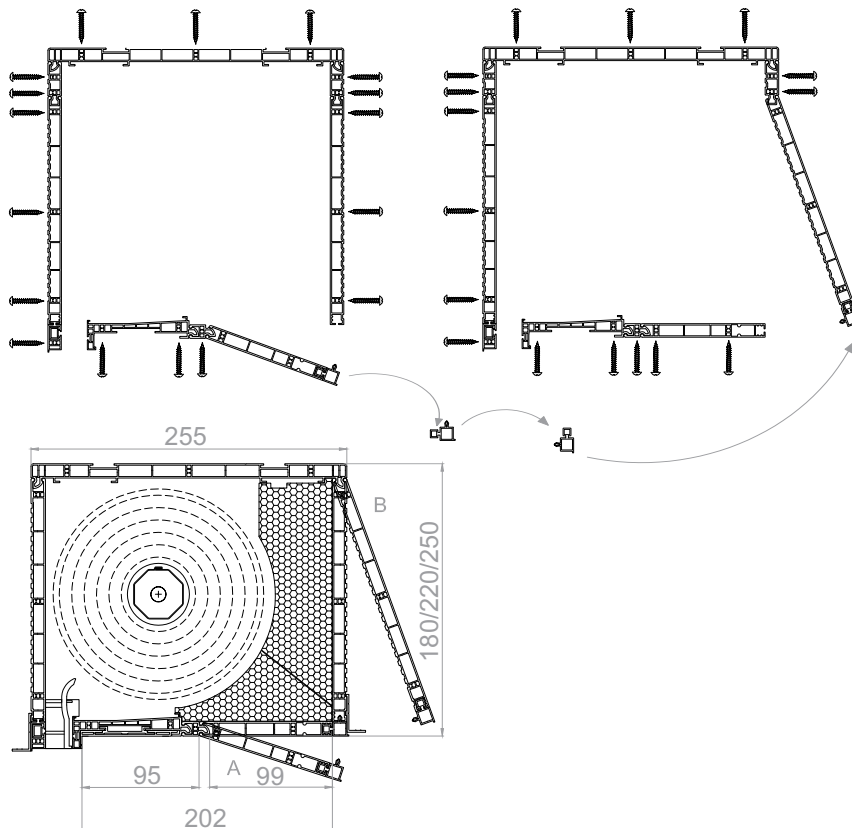
Revision hatches in box 180 without mosquito net



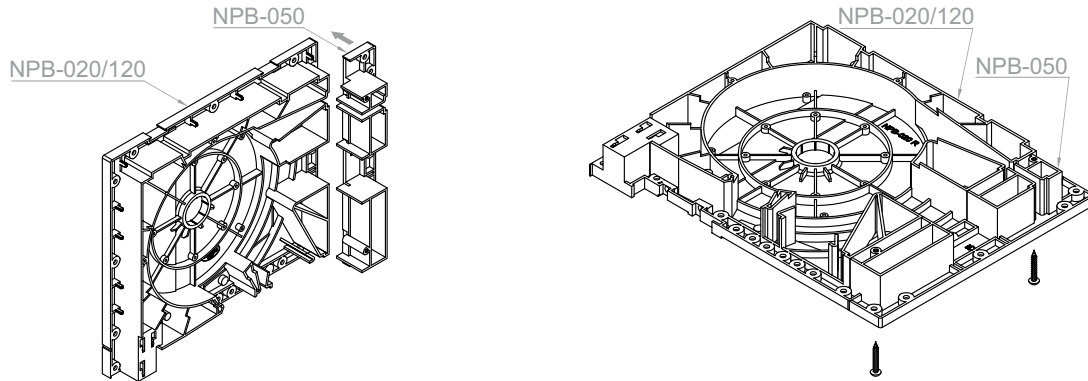
Revision hatches in box 220 without mosquito net



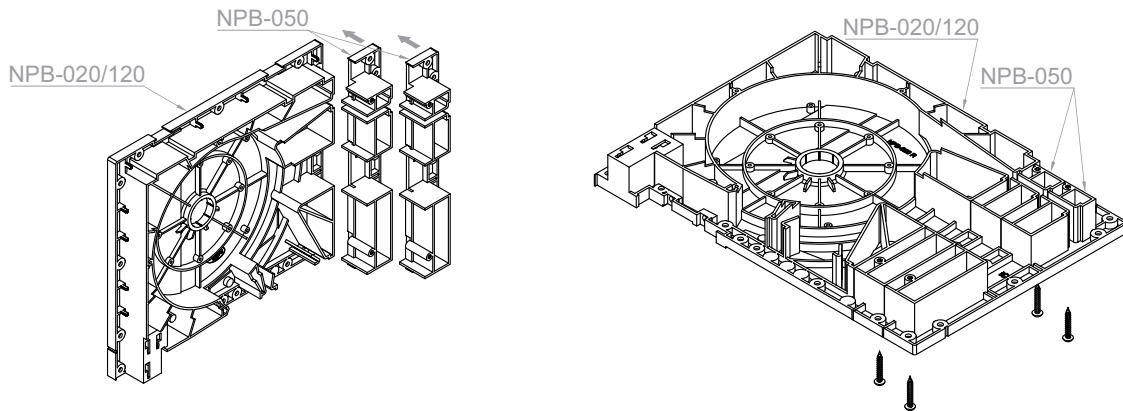
Revision hatches in box 250 without mosquito net



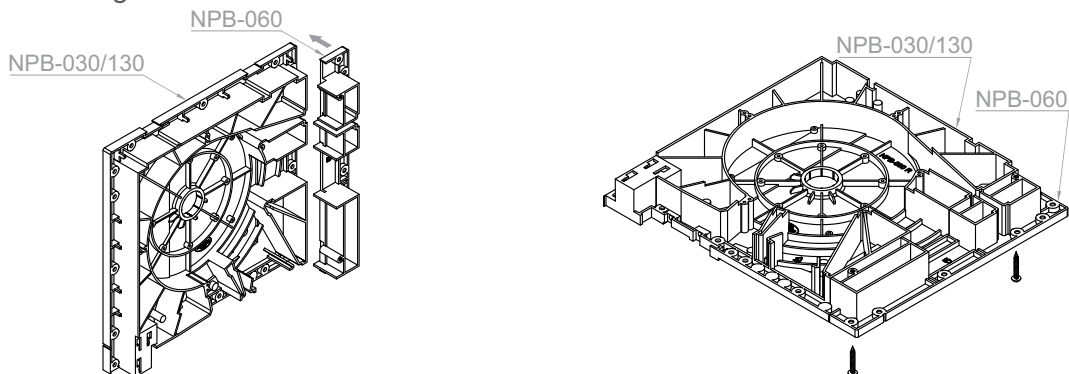
Installation of enlargement + 31 mm NPB-050 for BPB 020/120 side



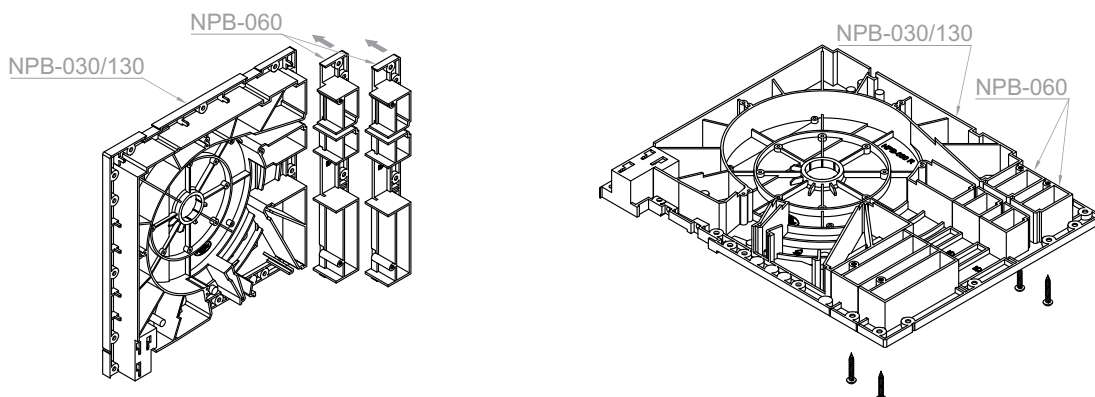
Installation of enlargement + 62 mm 2xNPB-050 for BPB 020/120 side



Installation of enlargement + 31 mm NPB-060 for BPB 030/130 side



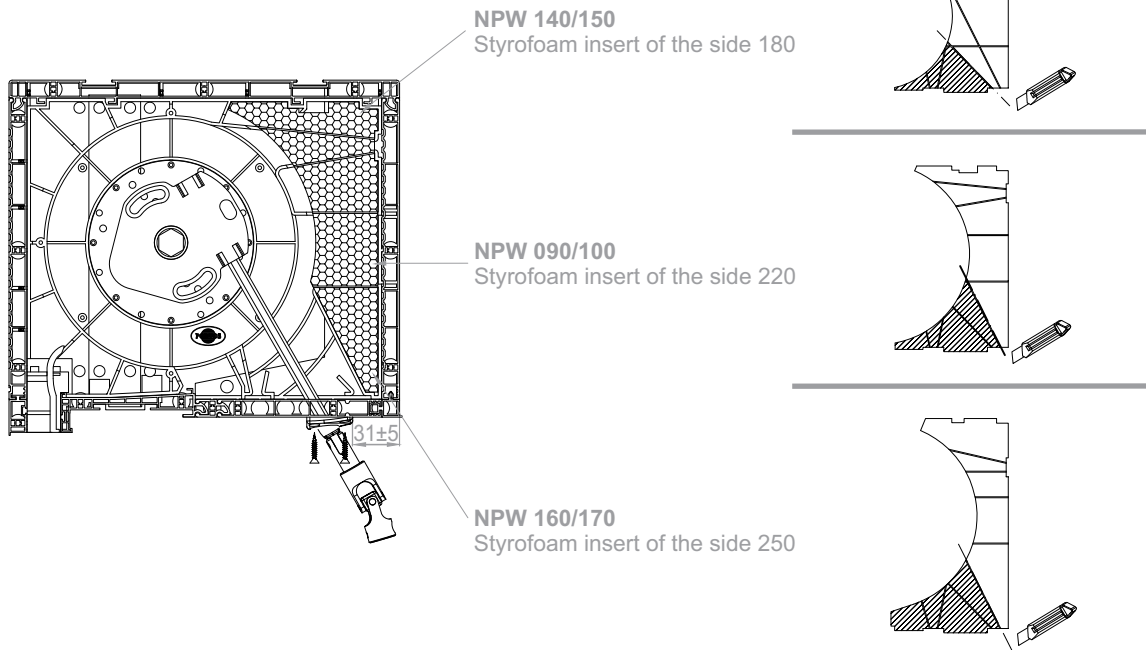
Installation of enlargement +62 mm 2xNPB-060 for BPB 030/130 side



Components of the TP1000K[®] system

Assembly drawings - crank lifting mechanism

Installation of the kardan crank - **A** output, 180, 220, 250 box

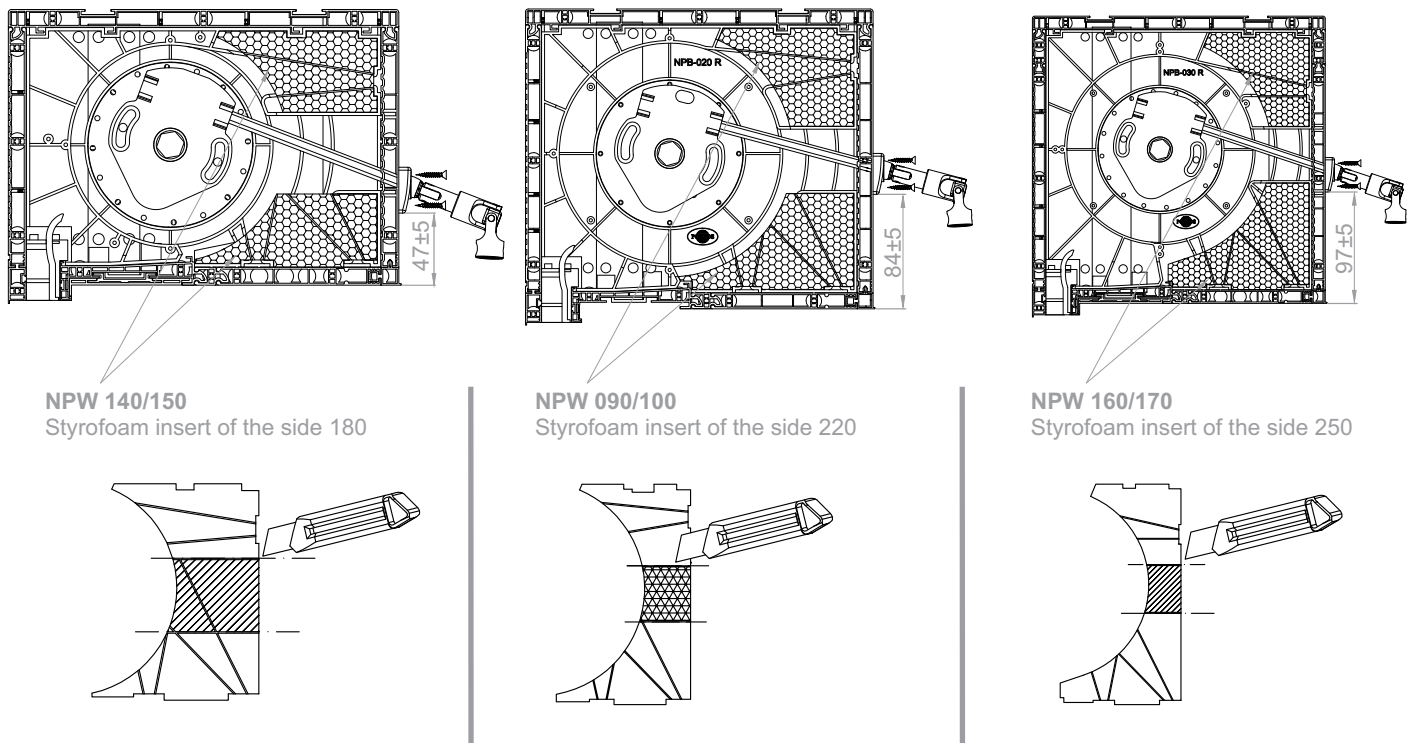


Installation of the kardan crank - **B** output

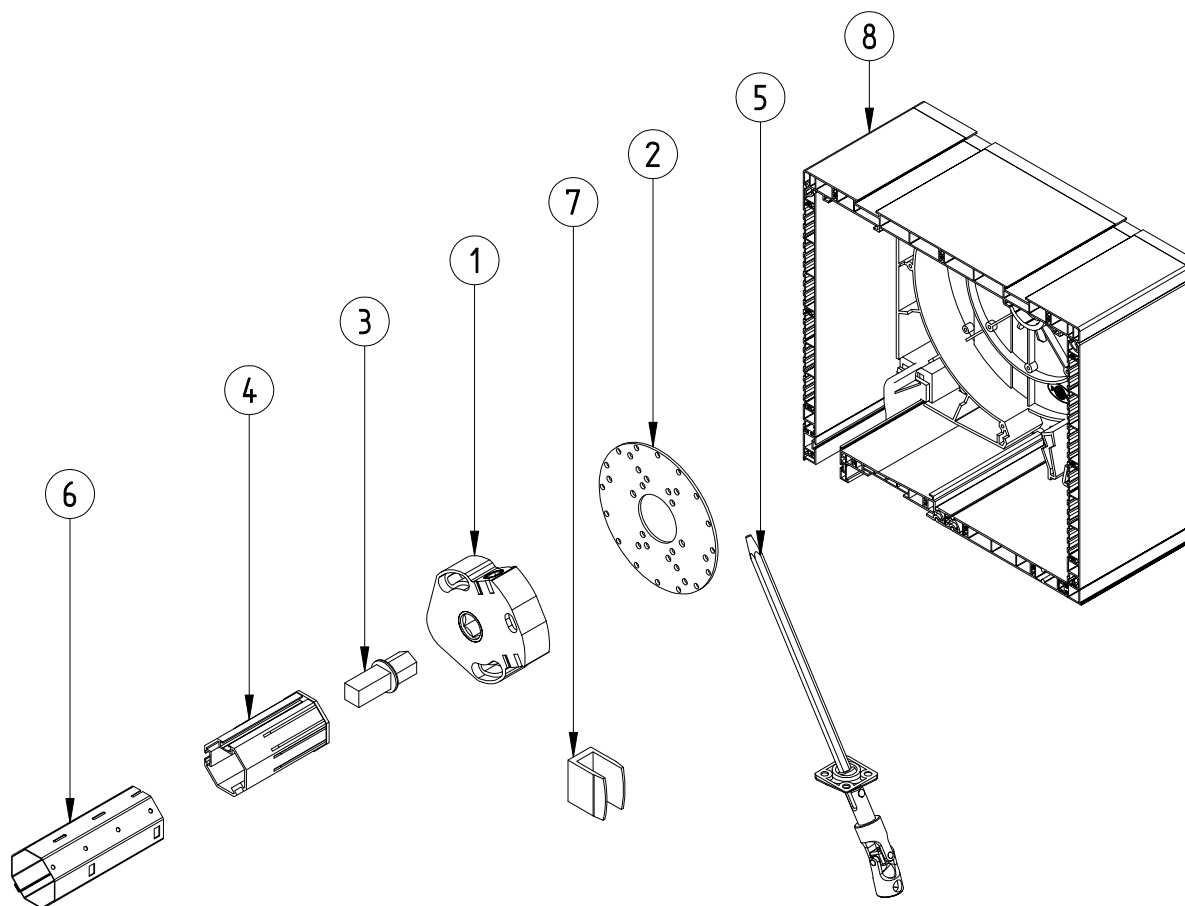
Box 180

Box 220

Box 250

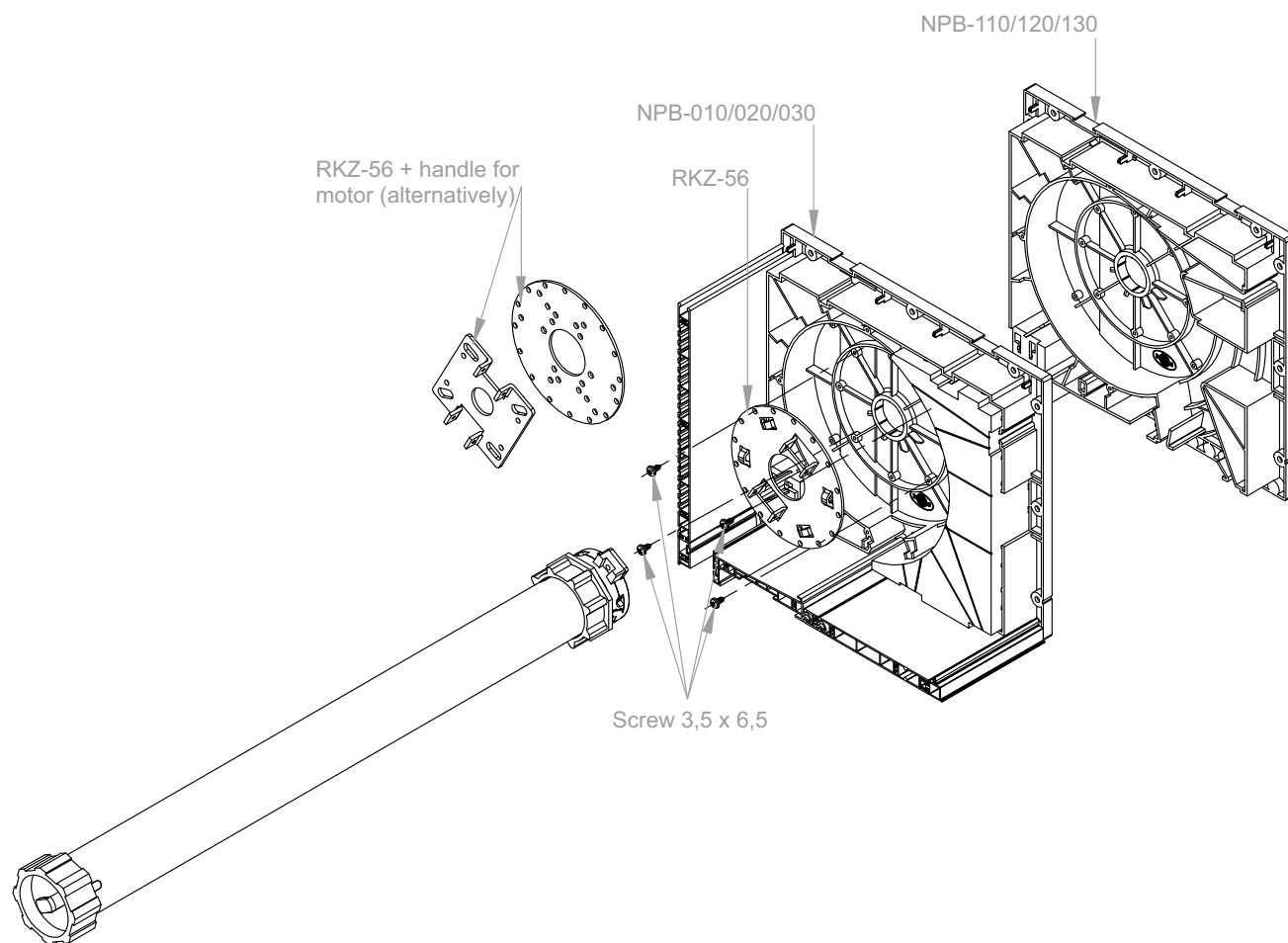


Assembly of crank mechanism

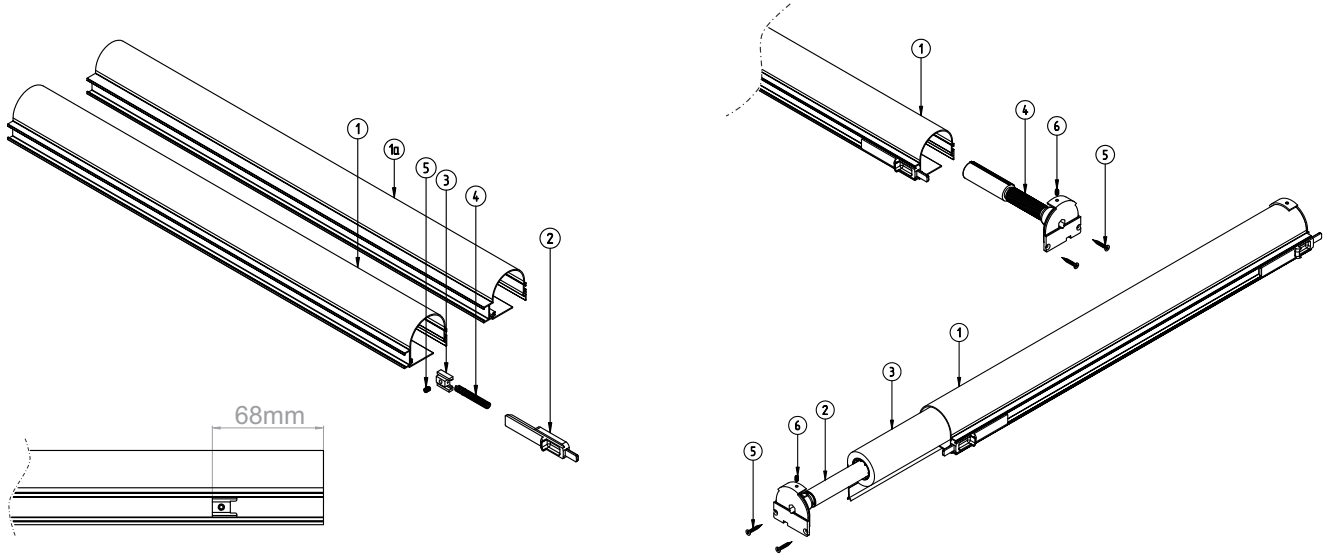


- | | |
|-----------------|--|
| 1. ACE 1-8 MAŁY | ACE 1: 8 small crank mechanism |
| 2. RKZ56 | Plate for PCV box motor |
| 3. | ACE Mounting pin - included with the ACE mechanism |
| 4. OBS-40-ACE | 40 mounting for ACE mechanism |
| OBS-60-ACE | 60 mounting for ACE mechanism |
| 5. KRH-ZF | Kardan 165 with 1430 mm crank |
| 6. SW 40 | Octagonal pipe Ø40 |
| SW 60 | Octagonal pipe Ø60 |
| 7. | Wall handle for crank - included in the crank set |
| 8. | TP1000K 180, 220, 250 Box |

Assembly of the motor



Installation of the mosquito net cassette in the box



- 1. M-RN-011 Mosquito net cassette for 260 net
- 1a.M-RN-091 Mosquito net cassette for 160 net
- 2. M-RN-050 Latch of the cassette
- 3. M-RN-060 Latch blockade
- 4. M-RN-070 Spring for cassette latch
- 5. WKR 4 x 6 Grub screw for the latch lock

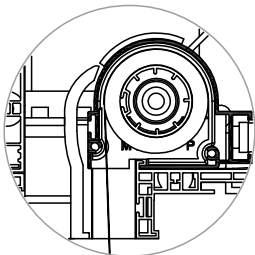
Box 220, 250

- 1. M-RN-011 Mosquito net cassette for 260 net
- 2. MZN-020 Spring 240 for mosquito net for a large cassette
- MZN-030 Spring 260 for mosquito net for a large cassette
- MZN-040 Spring 310 for mosquito net for a large cassette
- MZN-050 Spring 350 for mosquito net for a large cassette
- 3. MOS-260 Mosquito net
- 4. MZN-012 Slowing system for mosquito net
- 5. 2,8 x 20 Screw
- 6. 4 x 6 Grub screw

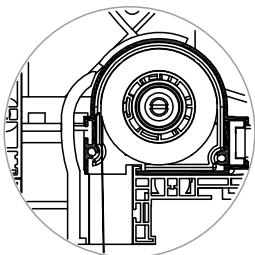
Box 180

- 1. M-RN-091 Mosquito net cassette for 160 net
- 2. MZN-060 Spring 240 for mosquito net for a small cassette
- MZN-070 Spring 260 for mosquito net for a small cassette
- MZN-080 Spring 310 for mosquito net for a small cassette
- MZN-090 Spring 350 for mosquito net for a small cassette
- 3. MOS-160 Mosquito net
- 4. MZN-100 Slowing system for mosquito net for a small cassette
- 5. 2,8 x 20 Screw
- 6. 4 x 6 Grub screw

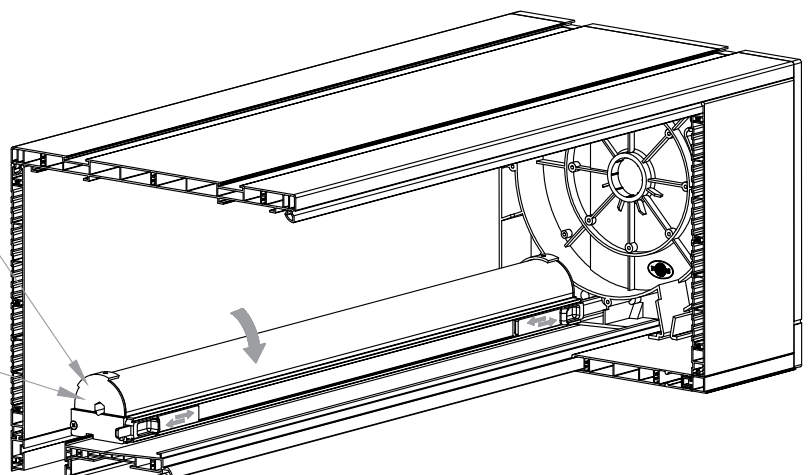
Correct arrangement of mosquito net cassette



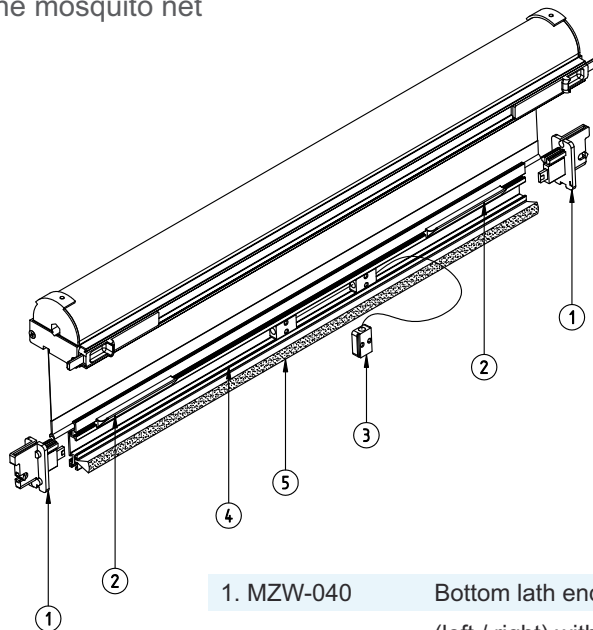
Cassette M-RN-090
 in the box 180, 220, 250 mm



Cassette M-RN-011
 in the box 220, 250 mm

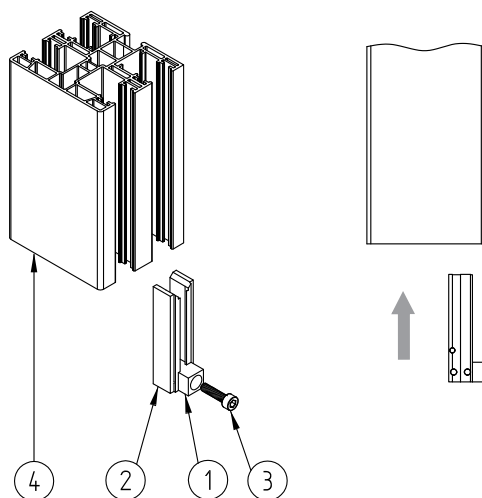


Installation of bottom lath of the mosquito net



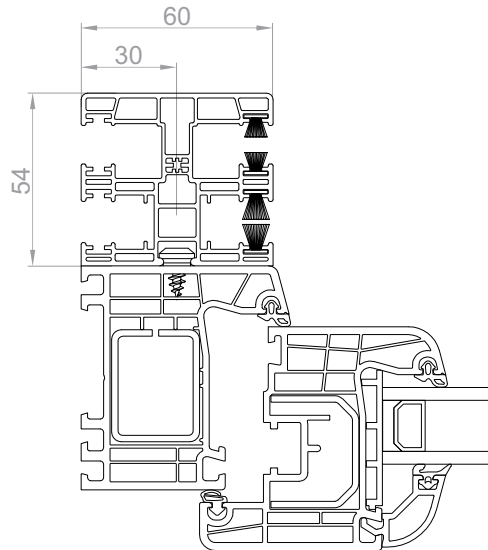
- | | |
|--------------|---|
| 1. MZW-040 | Bottom lath end of the CLICK-CLACK blockade (left / right) with latch |
| 2. M-RW-080 | Handle of mosquito net bottom lath |
| 3. MZW-050 | Mosquito net cord handle |
| 4. LDM 42x8 | Mosquito net bottom lath |
| 5. SP 5,5x14 | Brush seal in the mosquito net bottom lath |

Installation of CLICK-CLACK blockade lock in PVC and ALU guide

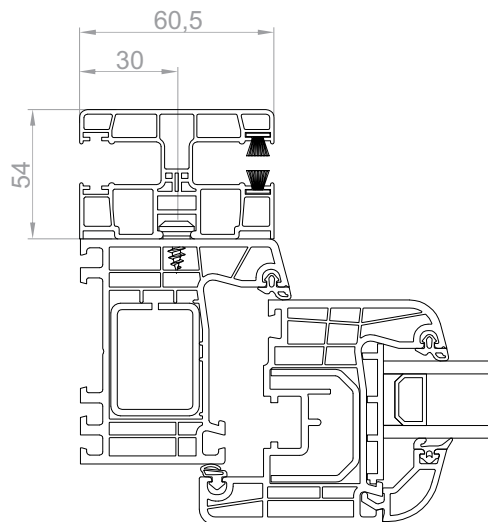


- | | |
|-------------|---|
| 1. M-RN-030 | CLICK-CLACK blockade lock for PVC guide L |
| 2. M-RN-040 | CLICK-CLACK blockade lock for PVC guide R |
| 3. M4x16 | Allen screw with nut |
| 4. NPR-010 | Shutter guide with mosquito net |

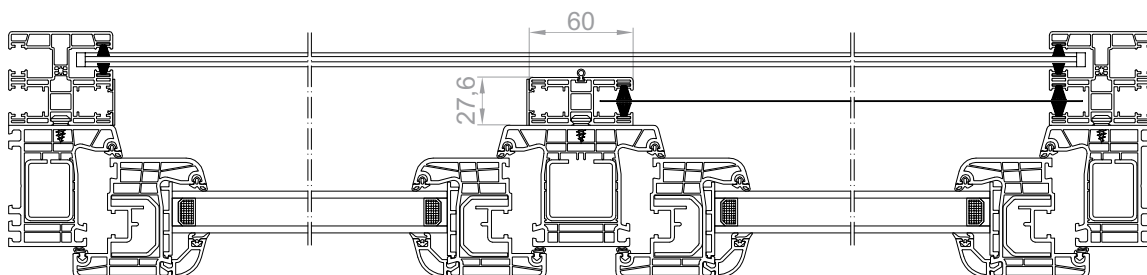
Installation of **NPR-010** guide



Installation of **NPR-020** guide



Installation of division guide for **NPR-030** mosquito net



Recommended box size for TP1000K® shutter with mosquito net

PA-39 and PA-45 curtain (including lateral caps)

width 0,55-1,8 m, max area of 4.5 m²

Type of the box	Maximum height of the shutter with box (cm)			Maximum height of the shutter with box (cm)			Maximum height of the shutter with box (cm)		
		with automatic bolt (cm)	with blocking bracket (cm)		with automatic bolt (cm)	with blocking bracket (cm)		with automatic bolt (cm)	with 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
180 mm	168	168	168	150	158	161	120	120	124
220 mm	230	212	212	212	204	204	173	173	137
250 mm	265	265	265	265	265	265	265	265	265
180 mm+stabilizing console	168	168	168	150	158	161	120	120	124
220 mm+stabilizing console	230	212	212	212	204	204	173	173	137
250 mm+stabilizing console	265	265	265	265	265	265	265	265	265
180 mm+additional styrofoam insert	168	168	168	150	158	161	120	120	124
220 mm+additional styrofoam insert	230	212	212	212	204	204	173	173	137
250 mm+additional styrofoam insert	265	265	265	265	265	265	265	265	265

Pancerz PVC-37 (including lateral caps)

width from 0,55 to 1,6 m; max. area of 3 m²

Type of the box	Maximum height of the shutter with box (cm)			Maximum height of the shutter with box (cm)		
		with automatic bolt (cm)	with blocking bracket (cm)		with automatic bolt (cm)	with blocking bracket (cm)
PVC	PVC-37 ø 40+PZ50	PVC-37 ø 40-rygiel	PVC-37 ø 40-WB.	PVC-37 ø 60+PZ70	PVC-37 ø 60-rygiel	PVC-37 ø 60-WB
180 mm	168	x	168	168	x	154
220 mm	230	x	206	199	x	195
250 mm	265	x	265	265	x	265
180 mm+stabilizing console	168	x	168	168	x	154
220 mm+stabilizing console	230	x	206	199	x	195
250 mm+stabilizing console	265	x	265	265	x	265
180 mm+additional styrofoam insert	168	x	168	168	x	154
220 mm+additional styrofoam insert	230	x	206	199	x	195
250 mm+additional styrofoam insert	265	x	265	265	x	265

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

In addition, the box reinforcement - WSP should be taken into account.

The minimum width of the shutter with slowing system for mosquito net is 67 cm.

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

Recommended box size for TP1000K® shutter without mosquito net

PA-39, PA-45, PA-52 curtain (including lateral caps)

width 0,35-2 m, max. area 6,5 m² width 0,35-2,5 m, max. area 6,5 m² width 0,35-3 m, max. area 6,5 m² width 0,35-3,7 m., max. area 8.0 m²

Type of the box	Maximum height of the shutter with box (cm)			Maximum height of the shutter with box (cm)			Maximum height of the shutter with box (cm)			Maximum height of the shutter with box (cm)		
		with automatic bolt (cm)	with blocking bracket (cm)		with automatic bolt (cm)	with blocking bracket (cm)		with automatic bolt (cm)	with blocking bracket (cm)		with automatic bolt (cm)	with 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	PA-52 ø 60+PZ70	PA-52 ø 60-rygiel	PA-52 ø 60-WB
180 mm	236	232	230	212	200	216	169	169	169	132	x	153
220 mm	349	340	349	328	298	298	255	255	255	212	x	212
250 mm	418	418	418	402	402	402	334	334	334	239	x	265
180 mm+stabilizing console	169	165	177	158	154	142	129	129	120	101	x	111
220 mm+stabilizing console	302	302	302	290	290	290	255	255	245	212	x	212
250 mm+stabilizing console	418	418	418	402	402	402	334	334	334	239	x	265
180 mm+additional styrofoam insert	138	134	134	95	91	95	93	93	93	64	x	76
220 mm+additional styrofoam insert	250	250	250	212	204	204	173	173	173	170	x	180
250 mm+additional styrofoam insert	418	418	418	402	402	402	334	334	334	239	x	265

PVC-37 and PVC-52 curtain (including lateral caps)

width from 0,35 m to 1,6 m; max. area 3 m²

width up to 1,6 m; max. area 4.3m²

Type of the box	Maximum height of the shutter with box (cm)			Maximum height of the shutter with box (cm)			Maximum height of the shutter with box (cm)		
		with automatic bolt (cm)	with blocking bracket (cm)		with automatic bolt (cm)	with blocking bracket (cm)		with automatic bolt (cm)	with blocking bracket (cm)
PVC	PVC-37 ø 40+PZ50	PVC-37 ø 40-rygiel	PVC-37 ø 40-WB.	PVC-37 ø 60+PZ70	PVC-37 ø 60-rygiel	PVC-37 ø 60-WB	PVC-52 ø 60+PZ70	PVC-52 ø 60-rygiel	PVC-52 ø 60-WB
180 mm	236	x	236	217	x	210	157	x	161
220 mm	360	x	340	317	x	325	212	x	212
250 mm	431	x	443	420	x	417	272	x	261
180 mm+stabilizing console	165	x	165	151	x	151	119	x	119
220 mm+stabilizing console	314	x	329	270	x	270	212	x	212
250 mm+stabilizing console	431	x	443	420	x	417	272	x	261
180 mm+additional styrofoam insert	132	x	136	121	x	114	67	x	67
220 mm+additional styrofoam insert	240	x	206	199	x	195	170	x	180
250 mm+additional styrofoam insert	431	x	443	420	x	417	272	x	261

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

In addition, the box reinforcement - WSP should be taken into account.

The minimum width of the shutter with slowing system for mosquito net is 67 cm.

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

INSTRUCTION OF THE INSTALLATION OF TOP MOUNTED SHUTTER TP1000K®

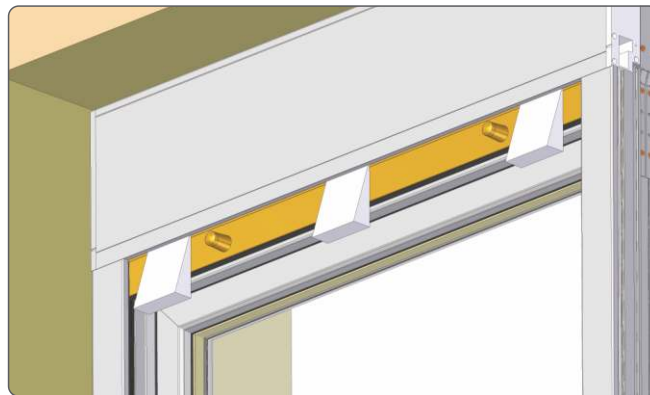
Before starting installation, please read the following instructions.

During transportation and storage, the shutter should lie horizontally in a place protected from damage to the box. The shutter should not be placed on the side wall. Any modifications or changes to the design of the shutter can only be made after consultation with the manufacturer or his authorized representative.

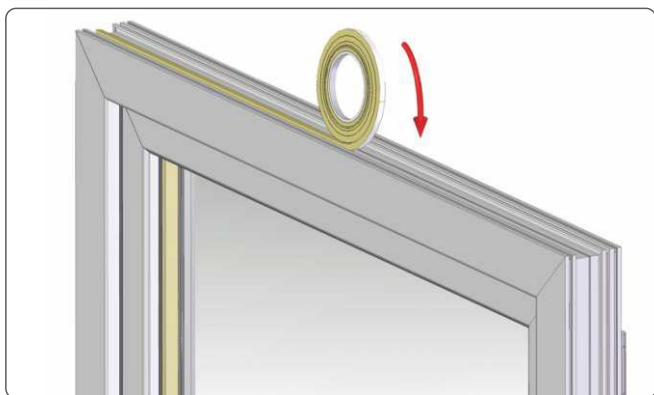
Directly before assembly, unpack the shutter and check if there are all elements necessary for its assembly.



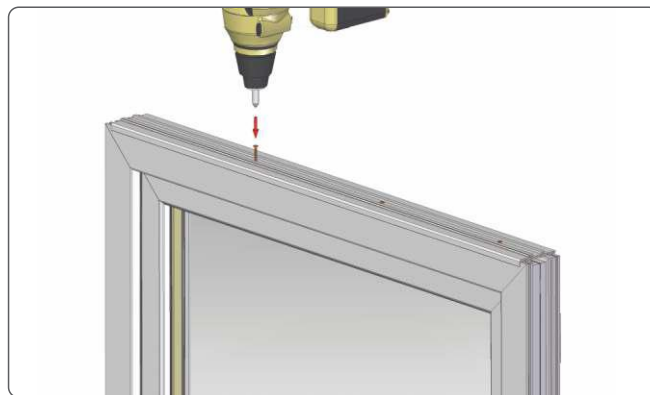
Tools needed to install the shutter.



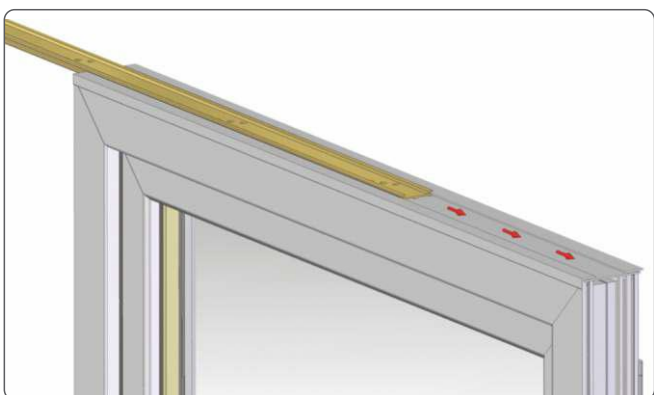
Assembly wedges for external machining.



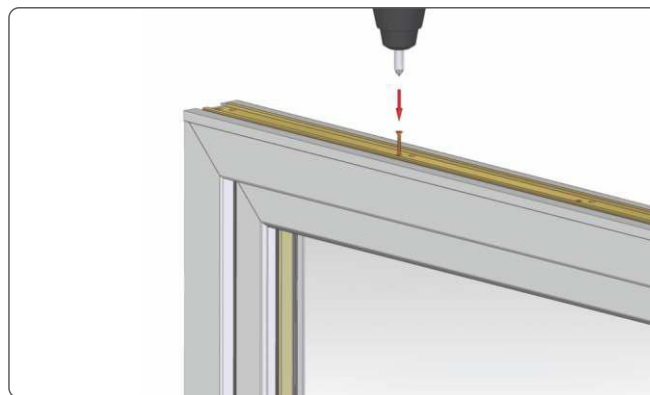
1. Before installing the adapter, it is recommended to attach the PURS Standard expanding tape to the window frame.



2. Apply the snap-in adapter to the window frame and screw it 10 cm from the frame edge, others every 30 cm.

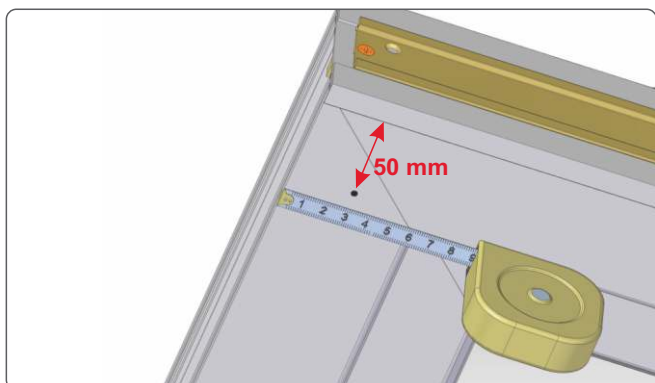


3. When using an adapter slid on the frame, apply the PVC adapter and then insert the aluminium part of the adapter with a 1 cm gap on the sides.

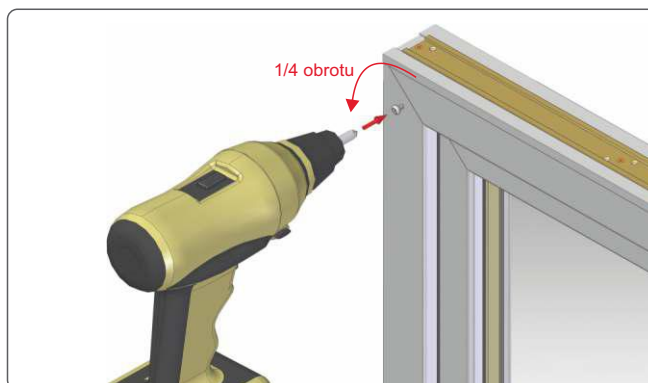


4. Screw the mounted part of the adapter in a distance of 10 cm from the edge. If necessary, drill the hole with a 3 mm drill bit, and then mill with a drill bit of 8 mm.

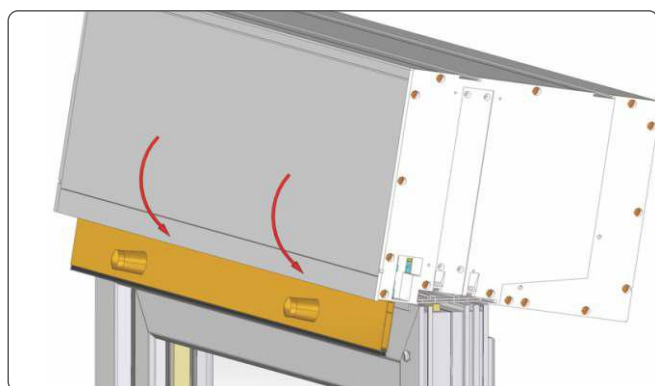
Instruction of the installation of top mounted shutter TP1000K®



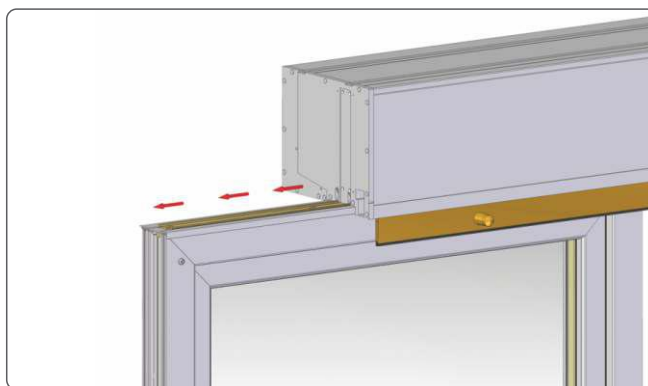
5. Measure the above indicated distances from the edges of the frame.



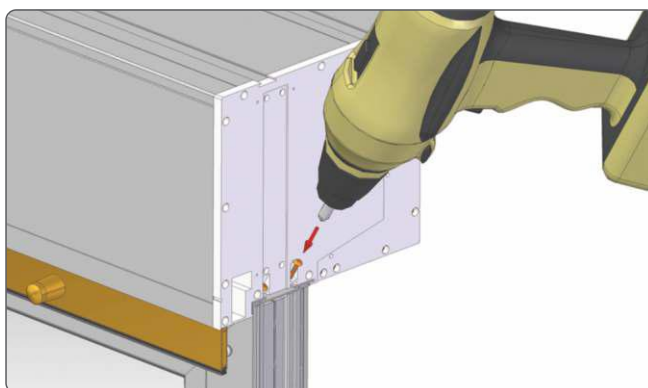
5. Fasten the screws mounting the guides (nipples) in the marked place. The nipples are installed on average every 50 cm but not less than 3 per side. After tightening, loosen the screw by 1/4 rotation, which will facilitate insertion of the guide.



6. Apply the prepared shutter box onto the snap-in adapter as described above.



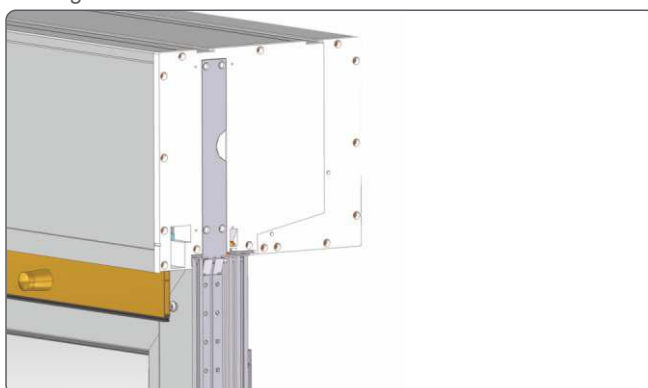
7. In case of using the slide-on adapter, attach and slide in the box to the end of the window frame. Do not hit with a hammer.

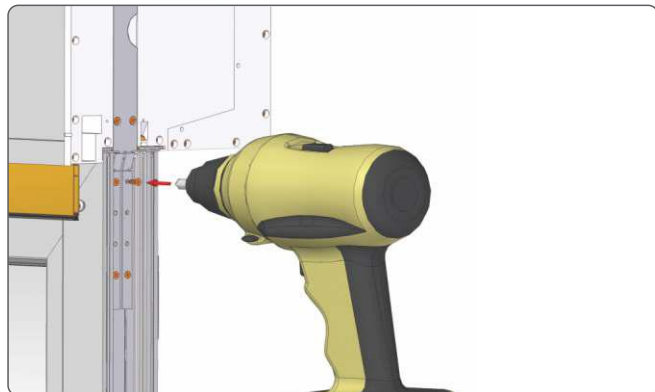
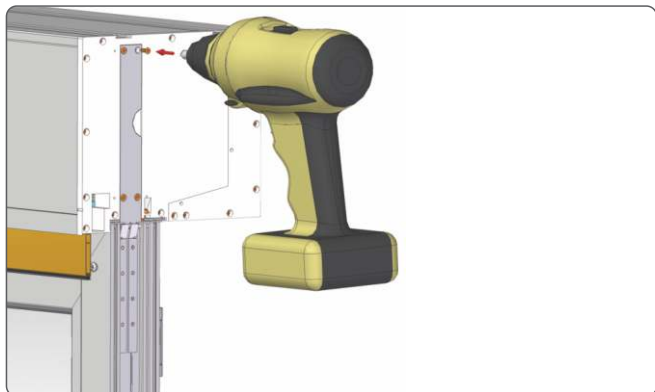


8. After sliding in or closing the shutter, fasten the side screws starting from the outside of the shutter.

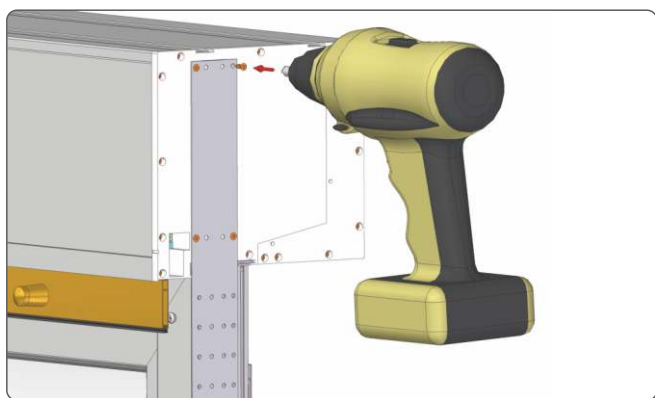


9. Prepare the steel side connectors properly for screwing (in the case of connecting the shutter with a shutter adjust the steel side connectors to the window frame - as shown in the picture).

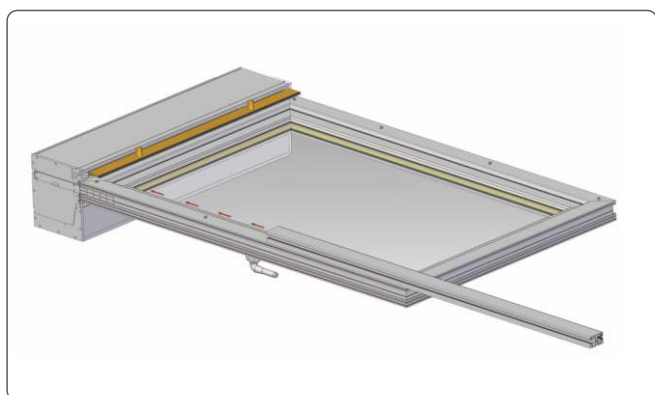




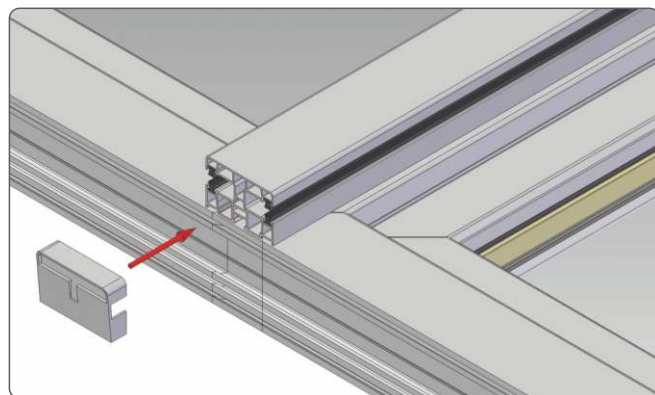
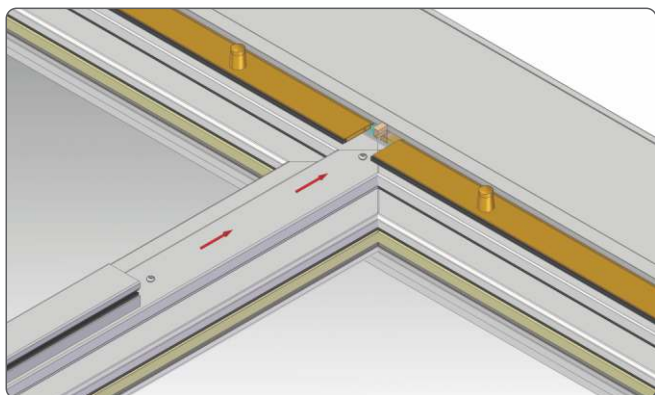
10. Screw the previously prepared steel side connectors to the marked holes with the screws provided.



11. Screw the steel side connectors into prepared holes.

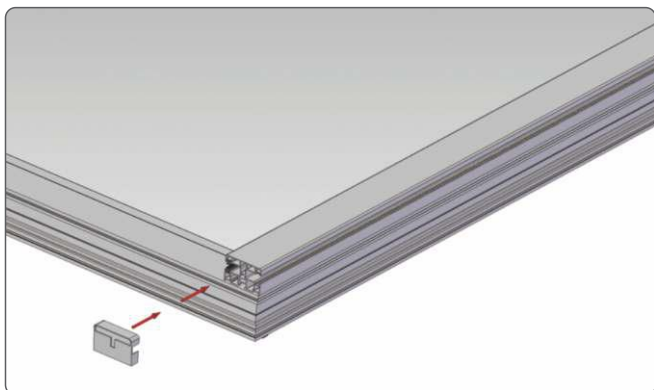


12. Slide the guides into the nipples prepared earlier.

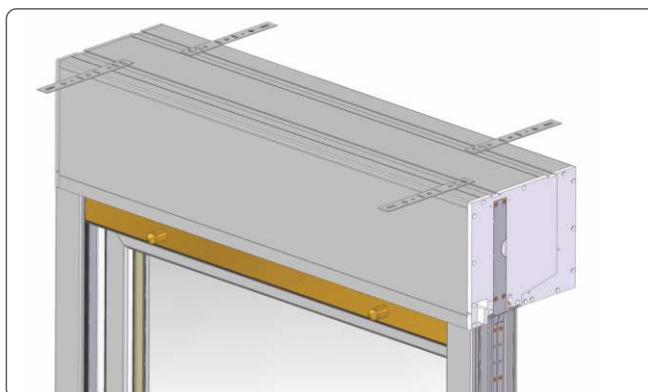
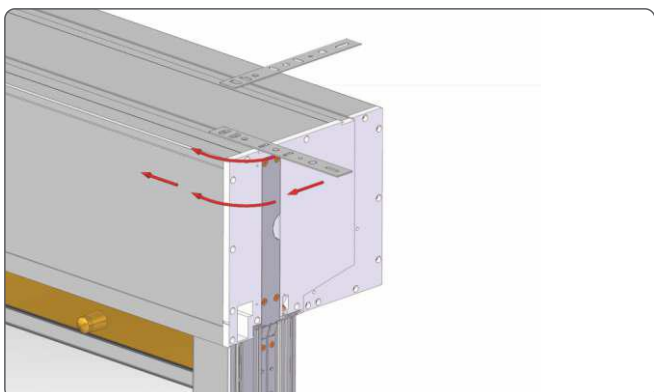


13. If necessary, mount the bottom end caps.

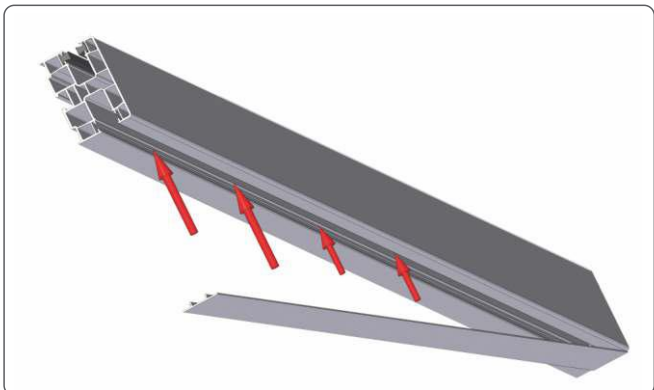
Instruction of the installation of top mounted shutter TP1000K®



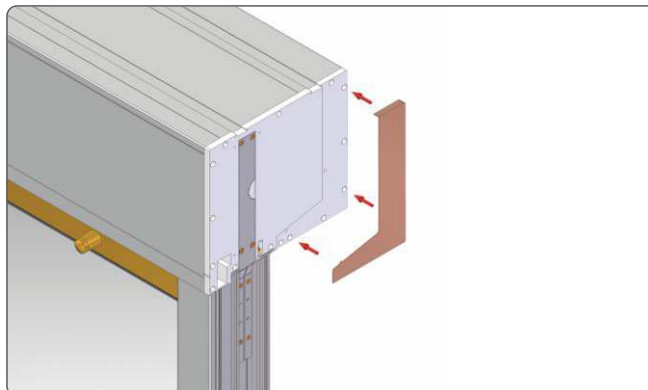
14. Such a mounted shutter with the window frame should be prepared for assembly.



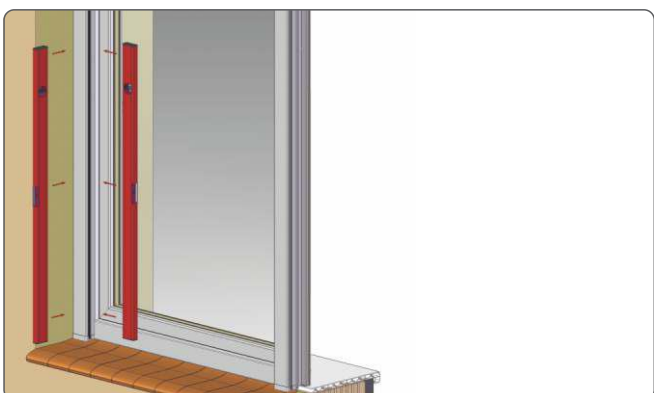
15. Mount the top anchoring in the distance of 40 cm from the side edge of the shutter.



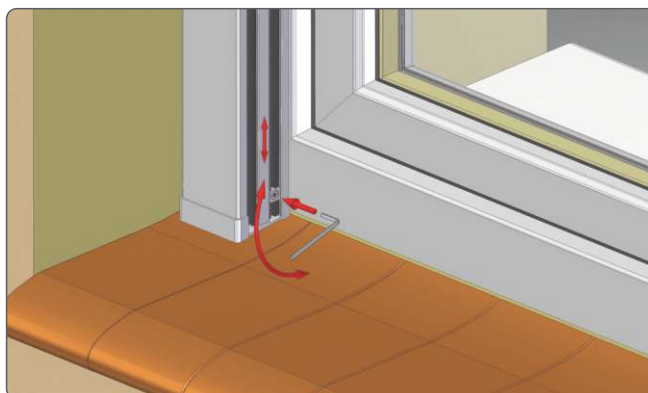
16. Snap the guide end cap into the unused chambers.



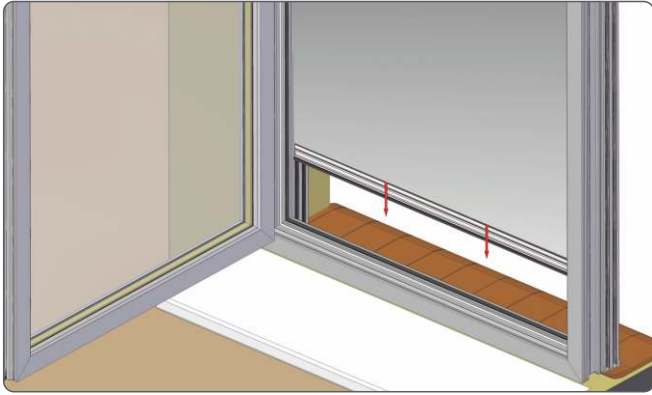
17. Install an end cap of the box side for mounting in narrow mounting holes.



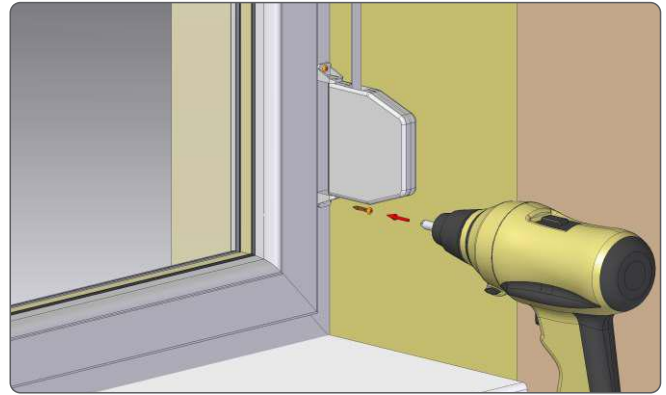
18. Before the final anchoring the shutters, its horizontal and vertical should be checked.



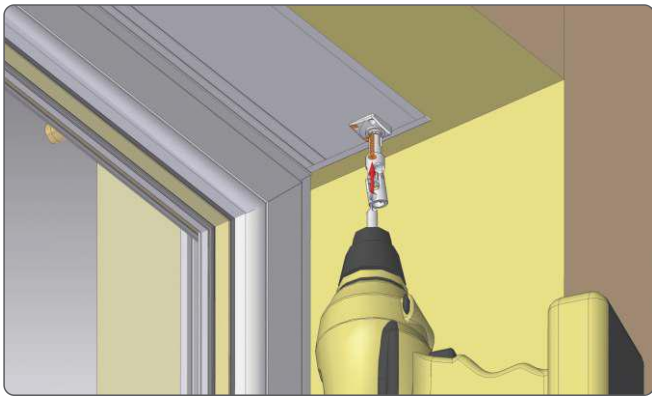
19. Guides to the mosquito net system should be mounted properly with the click-clack clip set downwards. If necessary adjust its height with a 4mm Allen key.



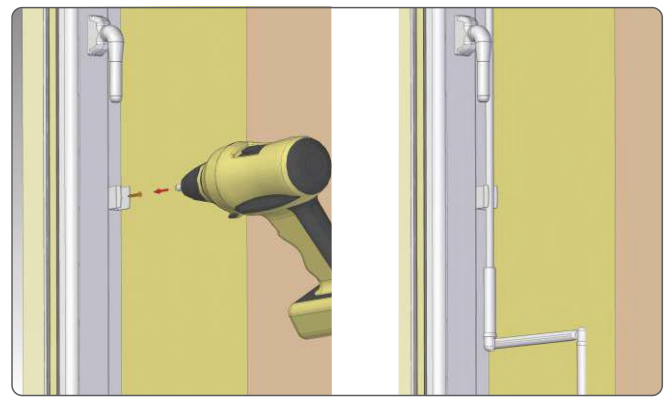
20. Check the operation of the mosquito net.



21. In the shutter with the manual drive, screw the coiler to the frame...



22. ...or the cardan mechanism to the inspection cover.



TP1000K® System Examples of building-up the shutters

Examples of building-up TP1000K® shutters



TP1000K® shutter non-built-up



TP1000K® shutter built up from the inside



TP1000K® shutter built-up from the outside



TP1000K® shutter built-up on both sides

ITI
Instytut Techniki Budowlanej
Jednostka notyfikowana nr 1488 | Czołonek EOTA | Certyfikaty akredytacji PCA nr: AB 023, AC 020, AC 072, AP 113
00-611 Warszawa | ul. Filtrowa 1 | tel. 22 8250471 | Fax: 22 8252886 | Dyrektor: tel. 22 8251303 | 22 8252885 | fax 22 8257730
02-656 Warszawa | ul. Kałwowski 21 | tel. 22 8431471 | fax: 22 8432931 | www.itb.pl | KRS: 0000158785

**Zakład Fizyki Ciepłej,
Akustyki i Środowiska**
ul. Kałwowski 21, 02-656 Warszawa
tel.: 22 5664 133; fizyka@itb.pl
Pracownia Fizyki Ciepłej
tel.: 22 5664 269; fizyka@itb.pl
Pracownia Energii i Środowiska
tel.: 22 5664 272; fizyka-srodowisko@itb.pl
Pracownia Akustyki
tel.: 22 5664 311; akustyka@itb.pl
Filia w Katowicach
al. W. Korfantego 191, 40-153 Katowice
tel.: 32 7302 925; akustyka@itb.pl

Warszawa, 15.07.2016 r.

PORTOS Renata i Tomasz Szukalscy Spółka Jawna
ul. Ziłota 71
62-800 KALISZ

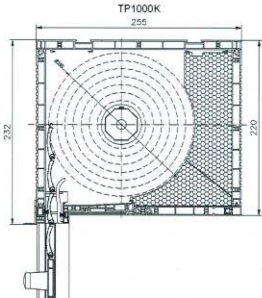
Wasz znak: W konsolidacji prosimy podawać poniższy znak:
NZF-03309R:24/JA/16

DOTYCZY: LZF00-01619/16/Z00NZF

OBIEKT BADAŃ: Skrzynka załuzi z PCV (TP1000K)

WYNIK BADAŃ: Współczynnik przenikania ciepła skrzynki załuzi z PCV (TP1000K), pokazanej na rysunku, obliczony wg PN-EN ISO 10077-2:2012, o wymiarach (H x T) 220 x 255 mm jest równy:
 $U_{0,0} = 0,75 \text{ W/(m}^2\cdot\text{K)}$

DOKUMENT ŹRÓDŁOWY: LZF00-01619/16/Z00NZF



Z-ca KIEROWNIKA
Zakładu Fizyki Ciepłej, Akustyki i Środowiska
dr Barbara Pietruszka

Nr sprawy wg RWIA: NZF-413-186/2016
Regon: 000083650 BPH S.A. Warszawa, Al. Jerozolimskie 27 nr 87 1060 0076 0000 3210 0016 6236 NIP: 525-000-93-58

ITI
Instytut Techniki Budowlanej
Jednostka notyfikowana nr 1488 | Czołonek EOTA | Certyfikaty akredytacji PCA nr: AB 023, AC 020, AC 072, AP 113
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02-656 Warszawa | ul. Kałwowski 21 | tel. 22 8431471 | fax: 22 8432931 | www.itb.pl | KRS: 0000158785

**Zakład Fizyki Ciepłej,
Akustyki i Środowiska**
ul. Kałwowski 21, 02-656 Warszawa
tel.: 22 5664 133; fizyka@itb.pl
Pracownia Fizyki Ciepłej
tel.: 22 5664 269; fizyka@itb.pl
Pracownia Energii i Środowiska
tel.: 22 5664 272; fizyka-srodowisko@itb.pl
Pracownia Akustyki
tel.: 22 5664 311; akustyka@itb.pl
Filia w Katowicach
al. W. Korfantego 191, 40-153 Katowice
tel.: 32 7302 925; akustyka@itb.pl

Warszawa, 15.07.2016 r.

PORTOS Renata i Tomasz Szukalscy Spółka Jawna
ul. Ziłota 71
62-800 KALISZ

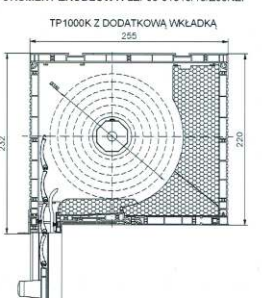
Wasz znak: W konsolidacji prosimy podawać poniższy znak:
NZF-03309R:25/JA/16

DOTYCZY: LZF00-01619/16/Z00NZF

OBIEKT BADAŃ: Skrzynka załuzi z PCV (TP1000K z dodatkową wkładką)

WYNIK BADAŃ: Współczynnik przenikania ciepła skrzynki załuzi z PCV (TP1000K z dodatkową wkładką), pokazanej na rysunku, obliczony wg PN-EN ISO 10077-2:2012, o wymiarach (H x T) 220 x 255 mm jest równy:
 $U_{0,0} = 0,72 \text{ W/(m}^2\cdot\text{K)}$

DOKUMENT ŹRÓDŁOWY: LZF00-01619/16/Z00NZF



Z-ca KIEROWNIKA
Zakładu Fizyki Ciepłej, Akustyki i Środowiska
dr Barbara Pietruszka

Nr sprawy wg RWIA: NZF-413-186/2016
Regon: 000083650 BPH S.A. Warszawa, Al. Jerozolimskie 27 nr 87 1060 0076 0000 3210 0016 6236 NIP: 525-000-93-58

ITI
Instytut Techniki Budowlanej
Jednostka notyfikowana nr 1488 | Czołonek EOTA | Certyfikaty akredytacji PCA nr: AB 023, AC 020, AC 072, AP 113
00-611 Warszawa | ul. Filtrowa 1 | tel. 22 8250471 | Fax: 22 8252886 | Dyrektor: tel. 22 8251303 | 22 8252885 | fax 22 8257730
02-656 Warszawa | ul. Kałwowski 21 | tel. 22 8431471 | fax: 22 8432931 | www.itb.pl | KRS: 0000158785

**Zakład Fizyki Ciepłej,
Akustyki i Środowiska**
ul. Kałwowski 21, 02-656 Warszawa
tel.: 22 5664 133; fizyka@itb.pl
Pracownia Fizyki Ciepłej
tel.: 22 5664 269; fizyka@itb.pl
Pracownia Energii i Środowiska
tel.: 22 5664 272; fizyka-srodowisko@itb.pl
Pracownia Akustyki
tel.: 22 5664 311; akustyka@itb.pl
Filia w Katowicach
al. W. Korfantego 191, 40-153 Katowice
tel.: 32 7302 925; akustyka@itb.pl

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PORTOS Renata i Tomasz Szukalscy Spółka Jawna
ul. Ziłota 71
62-800 KALISZ

Wasz znak: W konsolidacji prosimy podawać poniższy znak:
NZF-03309R:27/JA/16

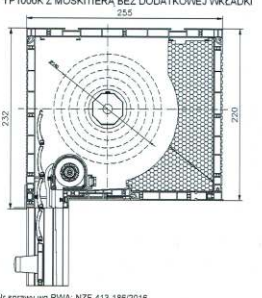
DOTYCZY: LZF00-01619/16/Z00NZF

OBIEKT BADAŃ: Skrzynka załuzi z PCV (TP1000K z moskitierą bez dodatkowej wkładki)

WYNIK BADAŃ: Współczynnik przenikania ciepła skrzynki załuzi z PCV (TP1000K z moskitierą bez dodatkowej wkładki), pokazanej na rysunku, obliczony wg PN-EN ISO 10077-2:2012, o wymiarach (H x T) 220 x 255 mm jest równy:
 $U_{0,0} = 0,78 \text{ W/(m}^2\cdot\text{K)}$

DOKUMENT ŹRÓDŁOWY: LZF00-01619/16/Z00NZF

TP1000K Z MOSKITIERĄ BEZ DODATKOWEJ WKŁADKI



Z-ca KIEROWNIKA
Zakładu Fizyki Ciepłej, Akustyki i Środowiska
dr Barbara Pietruszka

Nr sprawy wg RWIA: NZF-413-186/2016
Regon: 000083650 BPH S.A. Warszawa, Al. Jerozolimskie 27 nr 87 1060 0076 0000 3210 0016 6236 NIP: 525-000-93-58

ITI
Instytut Techniki Budowlanej
Jednostka notyfikowana nr 1488 | Czołonek EOTA | Certyfikaty akredytacji PCA nr: AB 023, AC 020, AC 072, AP 113
00-611 Warszawa | ul. Filtrowa 1 | tel. 22 8250471 | Fax: 22 8252886 | Dyrektor: tel. 22 8251303 | 22 8252885 | fax 22 8257730
02-656 Warszawa | ul. Kałwowski 21 | tel. 22 8431471 | fax: 22 8432931 | www.itb.pl | KRS: 0000158785

**Zakład Fizyki Ciepłej,
Akustyki i Środowiska**
ul. Kałwowski 21, 02-656 Warszawa
tel.: 22 5664 133; fizyka@itb.pl
Pracownia Fizyki Ciepłej
tel.: 22 5664 269; fizyka@itb.pl
Pracownia Energii i Środowiska
tel.: 22 5664 272; fizyka-srodowisko@itb.pl
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tel.: 22 5664 311; akustyka@itb.pl
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al. W. Korfantego 191, 40-153 Katowice
tel.: 32 7302 925; akustyka@itb.pl

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PORTOS Renata i Tomasz Szukalscy Spółka Jawna
ul. Ziłota 71
62-800 KALISZ

Wasz znak: W konsolidacji prosimy podawać poniższy znak:
NZF-03309R:26/JA/16

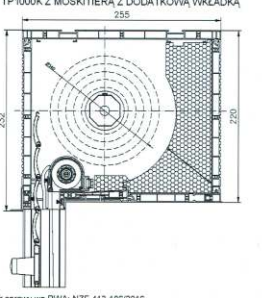
DOTYCZY: LZF00-01619/16/Z00NZF

OBIEKT BADAŃ: Skrzynka załuzi z PCV (TP1000K z moskitierą z dodatkową wkładką)

WYNIK BADAŃ: Współczynnik przenikania ciepła skrzynki załuzi z PCV (TP1000K z moskitierą z dodatkową wkładką), pokazanej na rysunku, obliczony wg PN-EN ISO 10077-2:2012, o wymiarach (H x T) 220 x 255 mm jest równy:
 $U_{0,0} = 0,74 \text{ W/(m}^2\cdot\text{K)}$

DOKUMENT ŹRÓDŁOWY: LZF00-01619/16/Z00NZF

TP1000K Z MOSKITIERĄ Z DODATKOWĄ WKŁADKĄ



Z-ca KIEROWNIKA
Zakładu Fizyki Ciepłej, Akustyki i Środowiska
dr Barbara Pietruszka

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Regon: 000083650 BPH S.A. Warszawa, Al. Jerozolimskie 27 nr 87 1060 0076 0000 3210 0016 6236 NIP: 525-000-93-58

