



OPTIMAL SOLUTION FOR CABLE SYSTEMS

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LINK BOXES

KZE type boxes

KZE type earthing boxes are designed for earthing of cable screens of the cable lines 10 to 220 kV.

Main components:

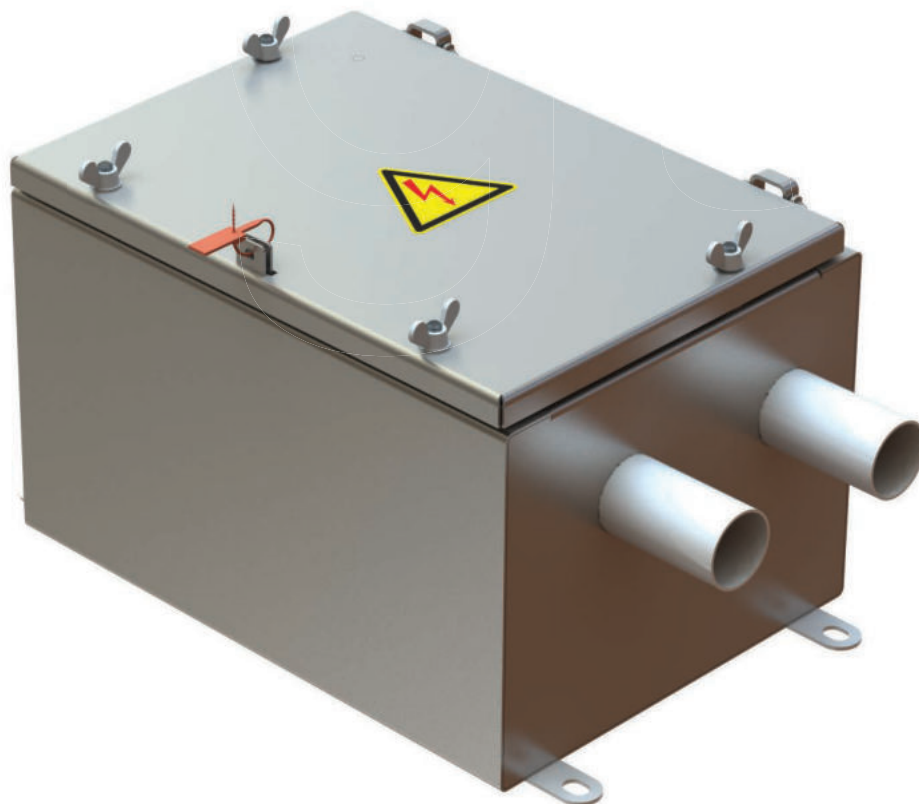
- stainless steel box with a cover;
- cable inputs sealed with heat-shrinkable tubes;
- box earthing;
- surge arresters (standard, network voltage class 6 kV);
- insulators (standard, voltage rating 10 kV);
- copper buses;
- sealed cable crimping lugs, Cu, 95-400 mm².

Technical specification:

- cable inputs are designed to prevent moisture penetration and to ensure that the earthing cables can be installed and pulled out from the earthing box without removing cable lugs;
- earthing cable up to 400 mm² can be used.

Additionally:

- type of surge arresters and insulators can be changed upon demand;
- protection grade – IP66 or IP68.



SINGLE-PHASE EARTHING LINK BOXES

KZE-1

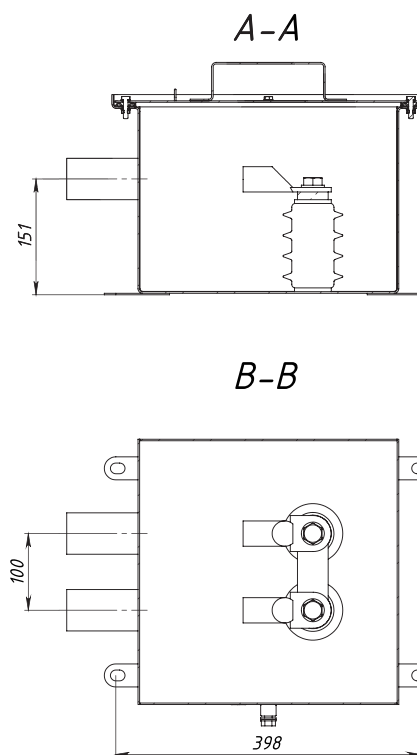
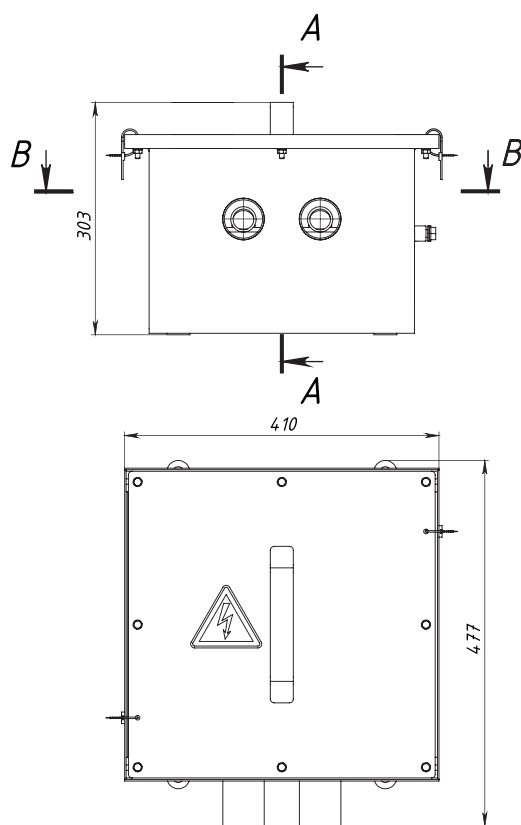
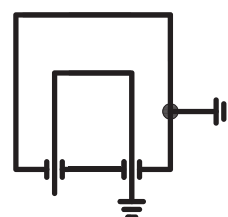


Direct earthing link box type KZE-1:

- For single core bonding cable*:
 - with copper stranded conductor, cross-section from 95 to 400 mm²;
 - insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors from 95 to 400 mm² are in the scope of supply.
- Conductor cross-section of bonding cable and the outer diameter must be specified in purchase order.
- Protection class: IP66.
- Ambient temperature during operation from -60 °C to +50 °C.
- Weight – 15 kg.

* not in the scope of supply.

ELECTRICAL DIAGRAM



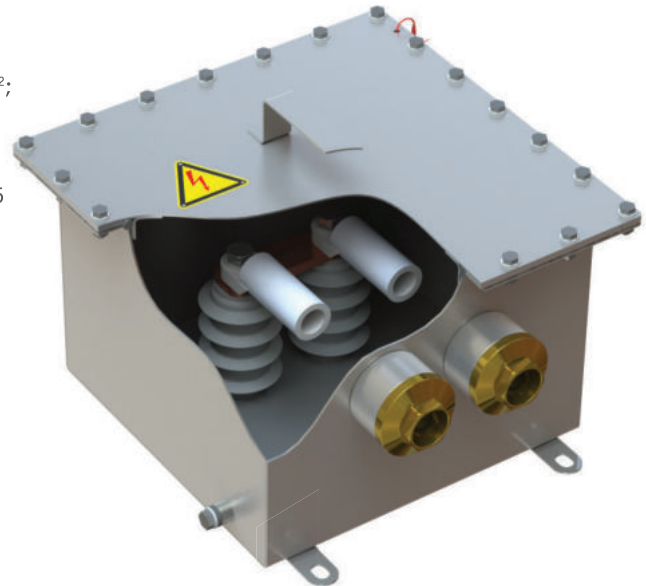
SINGLE-PHASE EARTHING LINK BOXES

KZE-H-1

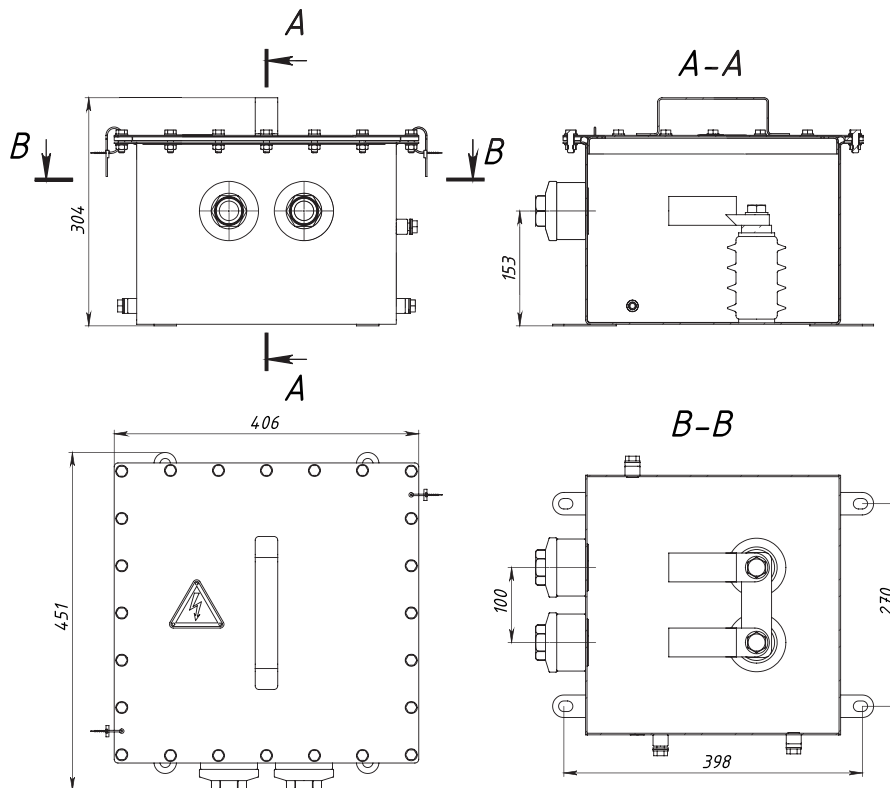
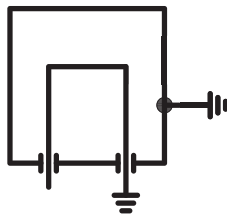
Direct earthing link box type KZE-H-1:

- For single core bonding cable*:
- with copper stranded conductor, cross-section from 95 to 400 mm²;
- insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors from 95 to 400 mm² are in the scope of supply.
- Conductor cross-section of bonding cable and the outer diameter must be specified in purchase order.
- Protection class: IP68.
- Ambient temperature during operation from -60 °C to +50 °C.
- Weight – 21 kg.

* not in the scope of supply.

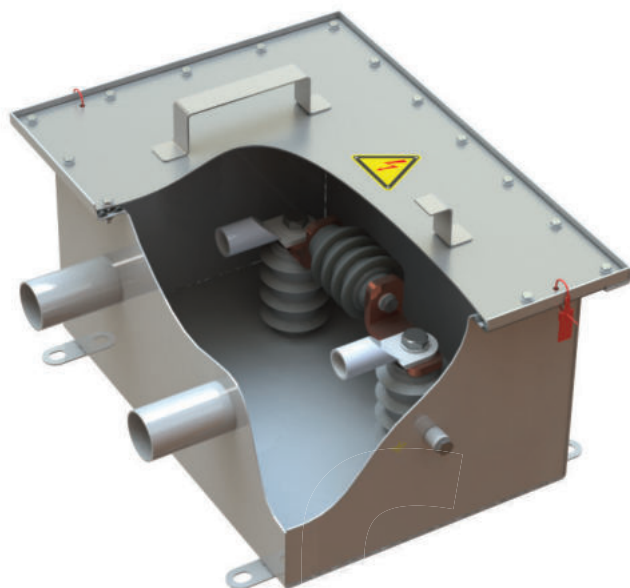


ELECTRICAL DIAGRAM



SINGLE-PHASE EARTHING LINK BOXES

KZE-0-1

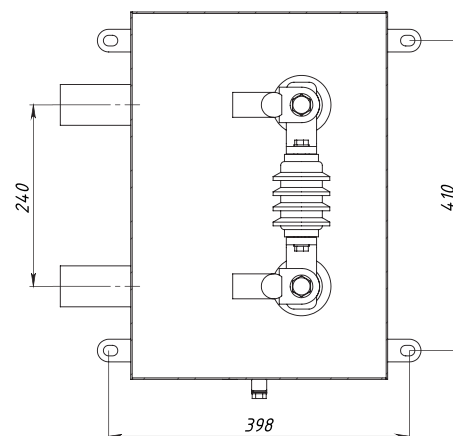
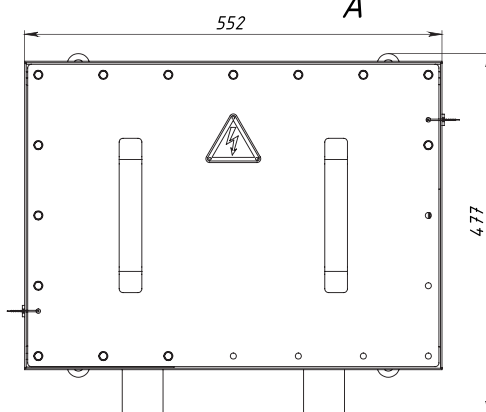
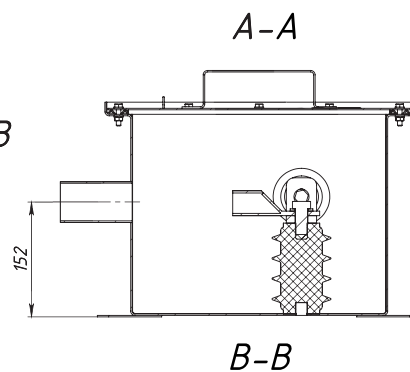
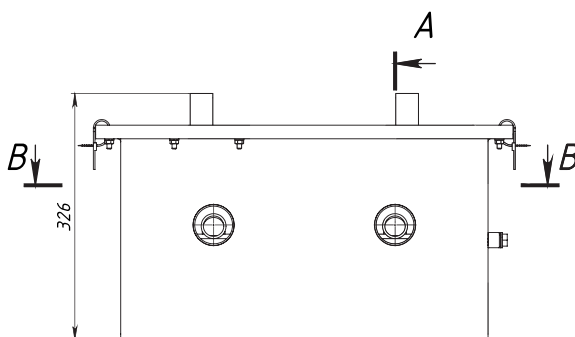
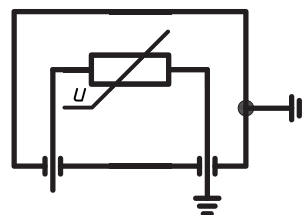


Earthing link box with SVL type KZE-0-1:

- For single core bonding cable*:
- with copper stranded conductor, cross-section from 95 to 400 mm²;
- insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors from 95 to 400 mm² are in the scope of supply.
- Conductor cross-section of bonding cable and the outer diameter must be specified in purchase order.
- Protection class: IP66.
- Ambient temperature during operation from -60 °C to +50 °C.
- Weight – 20 kg.

* not in the scope of supply.

ELECTRICAL DIAGRAM



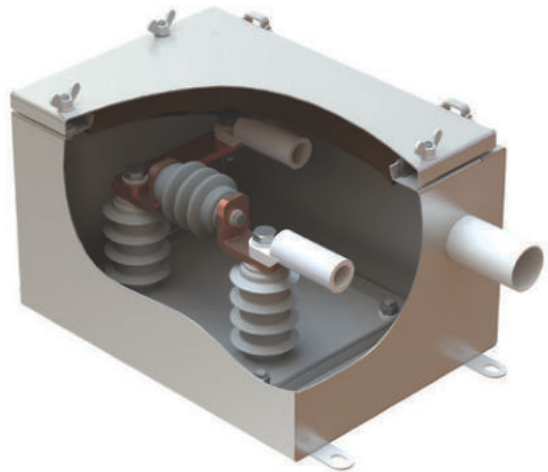
SINGLE-PHASE EARTHING LINK BOXES

KZEm-0-1

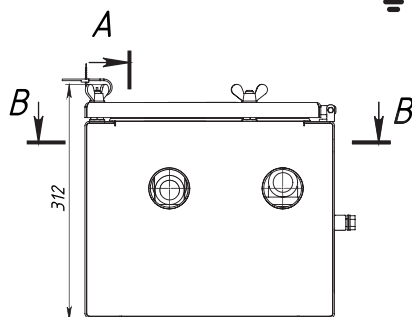
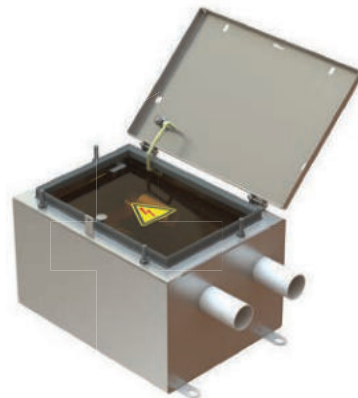
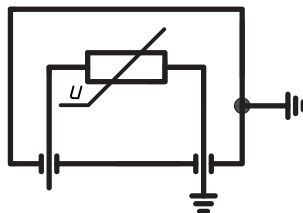
Earthing link box with SVL type KZEm-0-1:

- For single core bonding cable*:
- with copper stranded conductor, cross-section from 95 to 400 mm²;
- insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors from 95 to 400 mm² are in the scope of supply.
- Conductor cross-section of bonding cable and the outer diameter must be specified in purchase order.
- Protection class: IP66.
- Ambient temperature during operation from -60 °C to +50 °C.
- Weight – 23 kg.

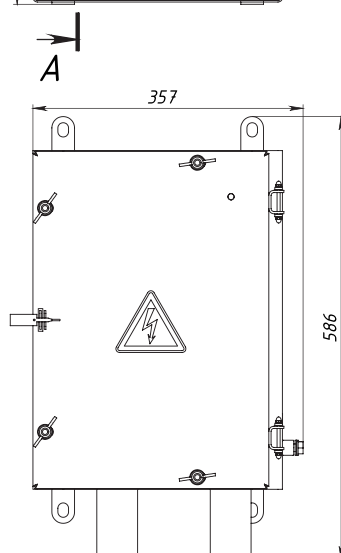
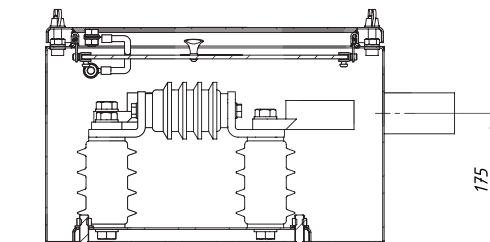
* not in the scope of supply.



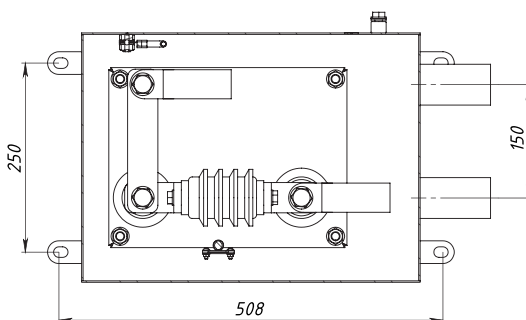
ELECTRICAL DIAGRAM



A-A

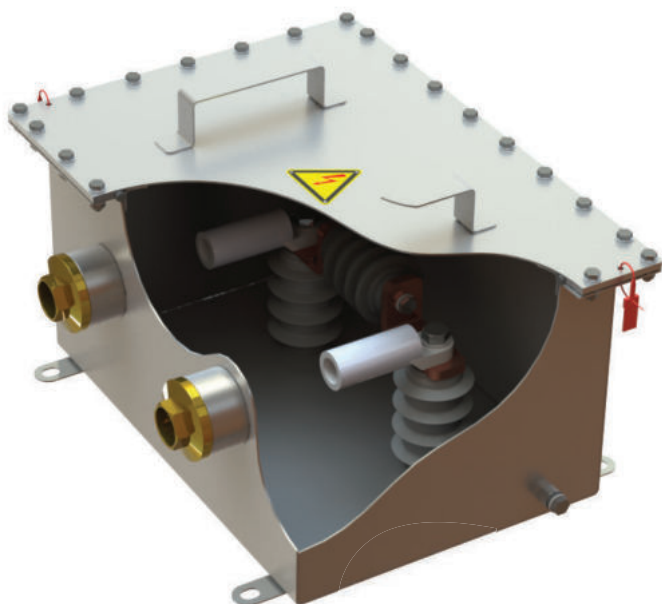


B-B



SINGLE-PHASE EARTHING LINK BOXES

KZE-L-0-1

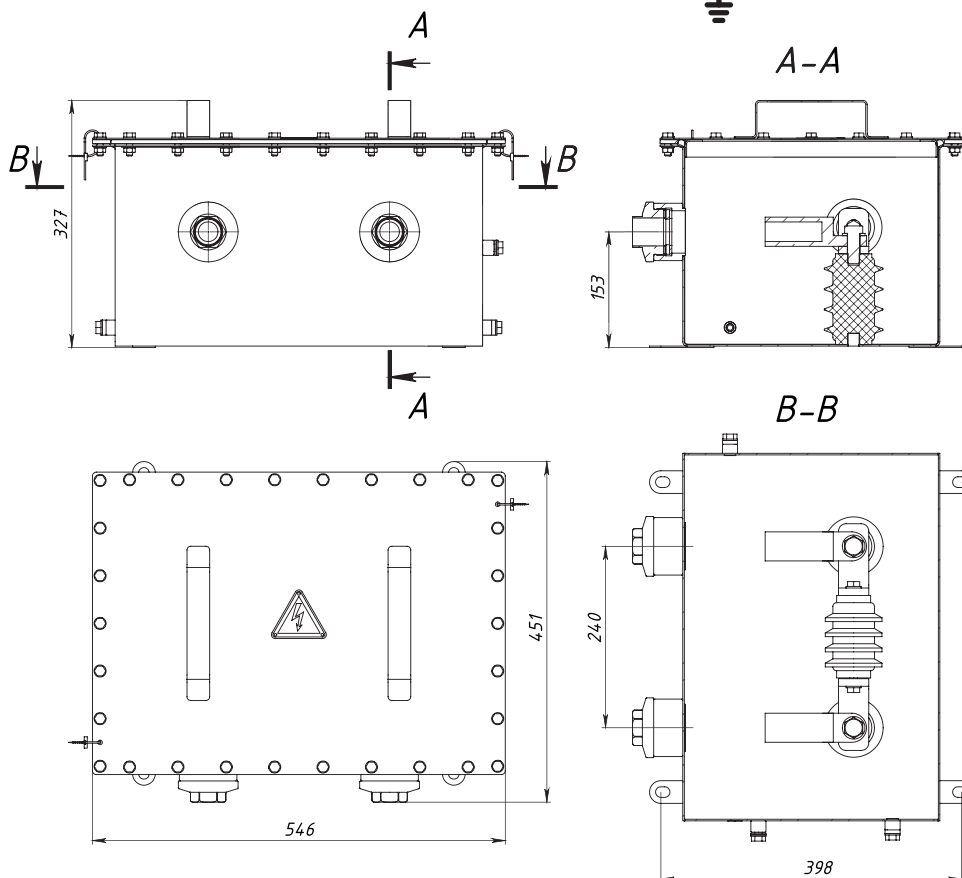
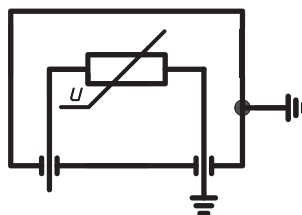


Earthing link box with SVL type KZE-L-0-1:

- For single core bonding cable*:
 - with copper stranded conductor, cross-section from 95 to 400 mm²;
 - insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors from 95 to 400 mm² are in the scope of supply.
- Conductor cross-section of bonding cable and the outer diameter must be specified in purchase order.
- Protection class: IP68.
- Ambient temperature during operation from -60 °C to +50 °C.
- Weight – 26 kg.

** not in the scope of supply.*

ELECTRICAL DIAGRAM



THREE-PHASE EARTHING LINK BOXES

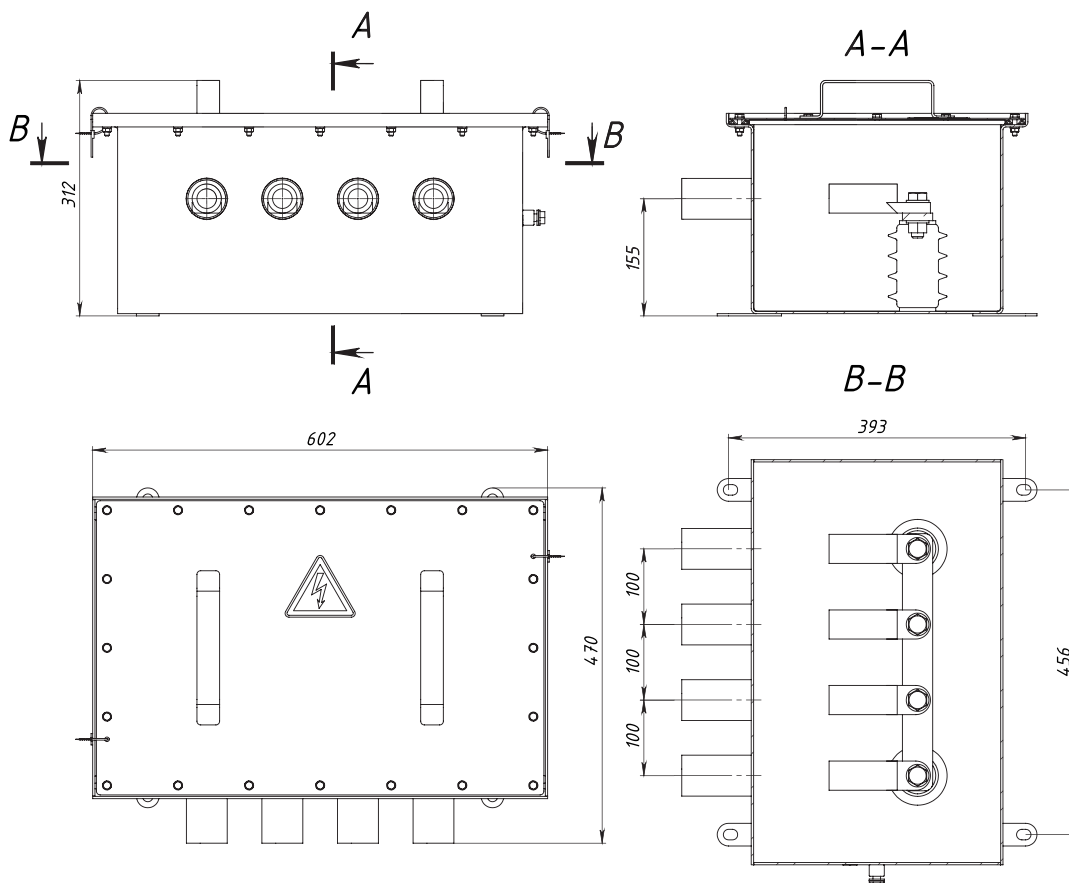
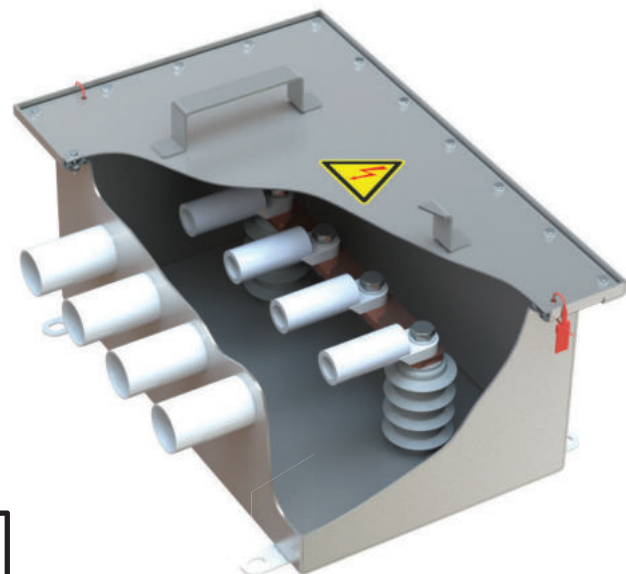
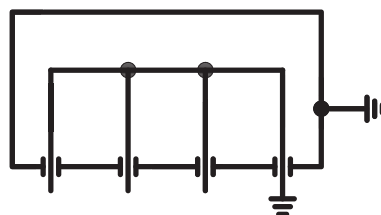
KZE-3

Direct earthing link box type KZE-3:

- For single core bonding cable*:
- with copper stranded conductor, cross-section from 95 to 400 mm²;
- insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors from 95 to 400 mm² are in the scope of supply.
- Conductor cross-section of bonding cable and the outer diameter must be specified in purchase order.
- Protection class: IP66.
- Ambient temperature during operation from -60 °C to +50 °C.
- Weight – 29 kg.

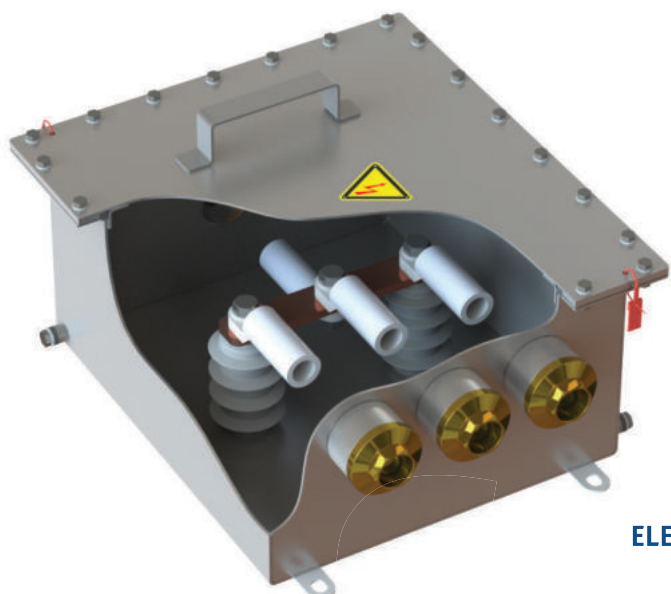
* not in the scope of supply.

ELECTRICAL DIAGRAM



THREE-PHASE EARTHING LINK BOXES

KZE-H-3

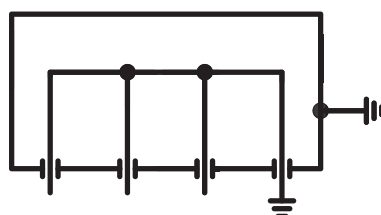


Direct earthing link box type KZE-H-3:

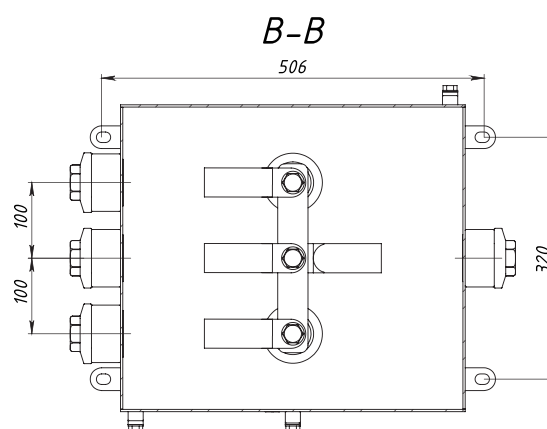
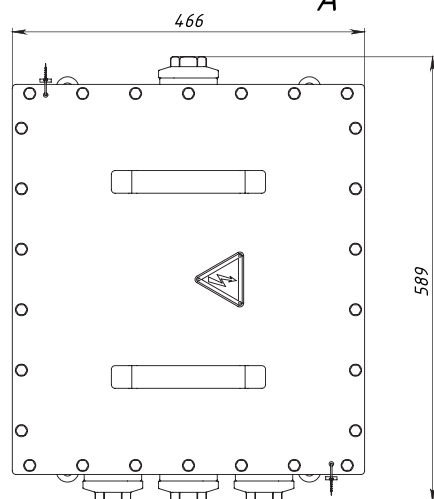
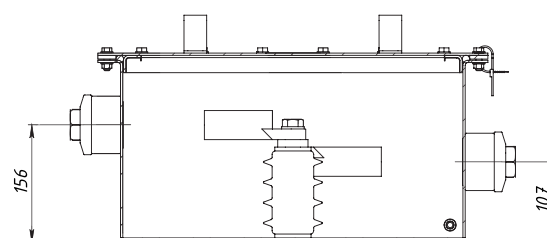
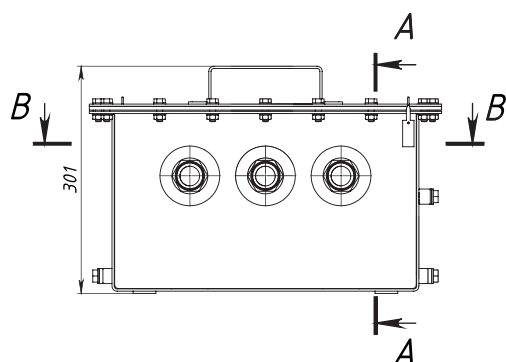
- For single core bonding cable*:
 - with copper stranded conductor, cross-section from 95 to 400 mm²;
 - insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors from 95 to 400 mm² are in the scope of supply.
- Conductor cross-section of bonding cable and the outer diameter must be specified in purchase order.
- Protection class: IP68.
- Ambient temperature during operation from -60 °C to +50 °C.
- Weight – 37 kg.

** not in the scope of supply.*

ELECTRICAL DIAGRAM



A-A



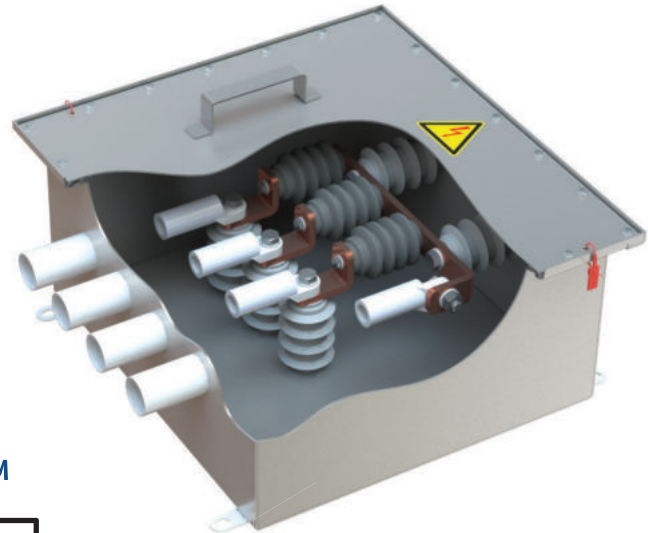
THREE-PHASE EARTHING LINK BOXES

KZE-0-3

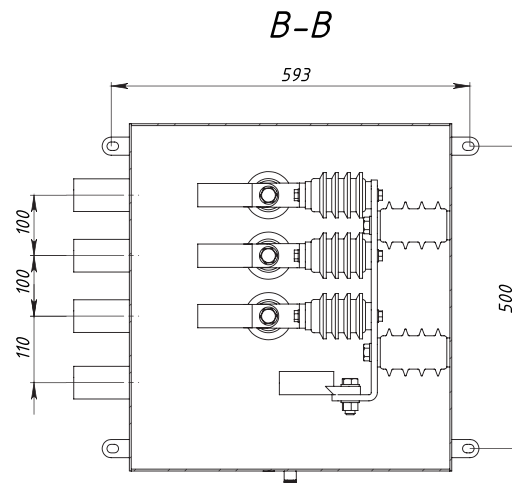
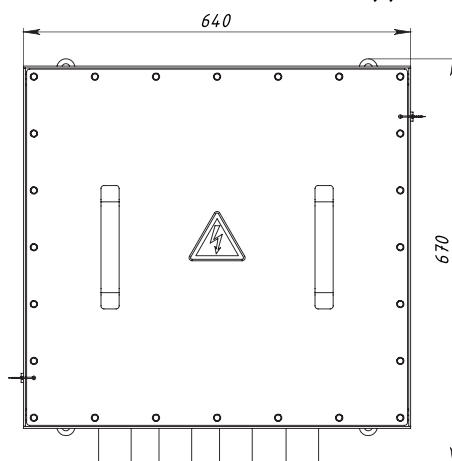
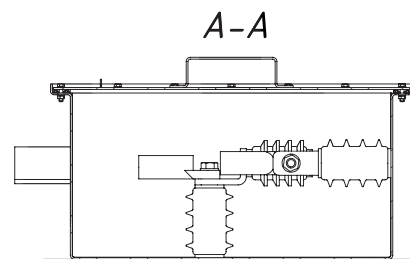
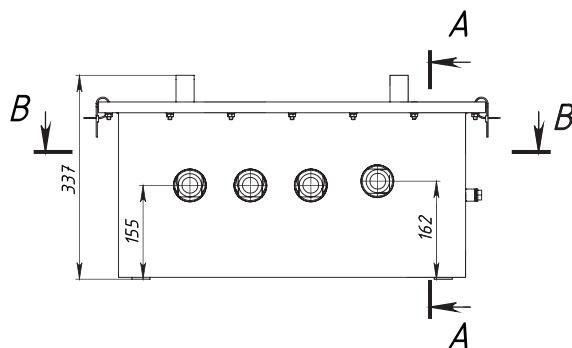
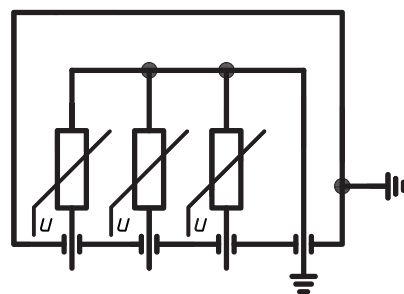
Earthing link box with SVLs type KZE-0-3:

- For single core bonding cable*:
- with copper stranded conductor, cross-section from 95 to 400 mm²;
- insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors from 95 to 400 mm² are in the scope of supply.
- Conductor cross-section of bonding cable and the outer diameter must be specified in purchase order.
- Protection class: IP66.
- Ambient temperature during operation from -60 °C to +50 °C.
- Weight – 49 kg.

* not in the scope of supply.

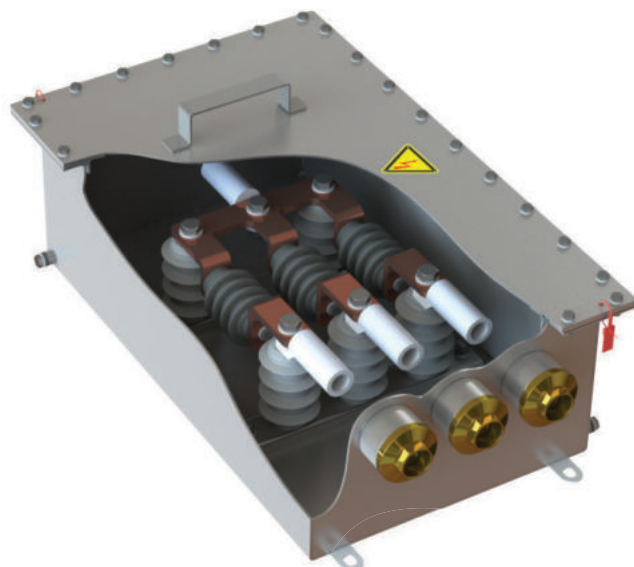


ELECTRICAL DIAGRAM



THREE-PHASE EARTHING LINK BOXES

KZE-L-0-3

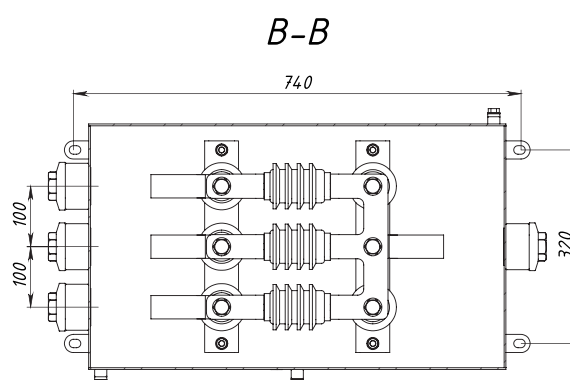
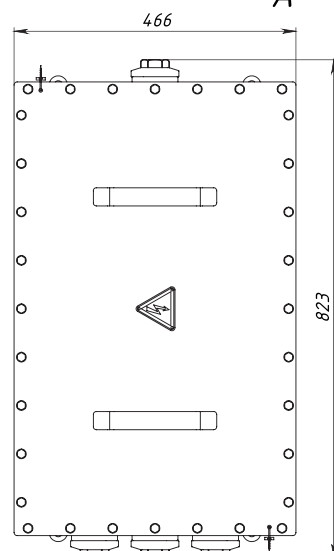
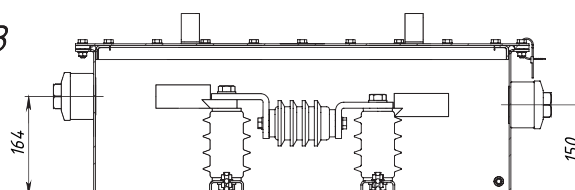
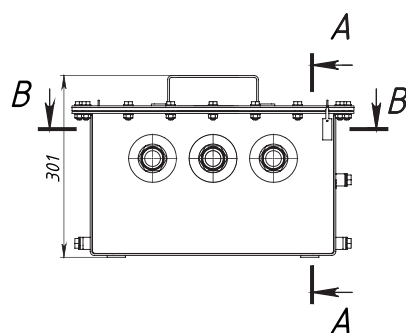
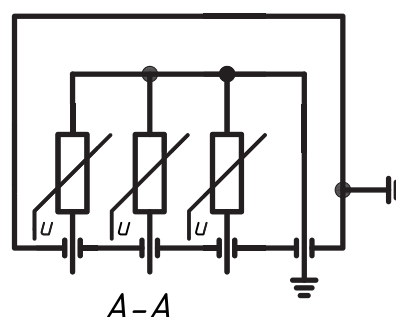


Earthing link box with SVLs type KZE-L-0-3:

- For single core bonding cable*:
- with copper stranded conductor, cross-section from 95 to 400 mm²;
- insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors from 95 to 400 mm² are in the scope of supply.
- Conductor cross-section of bonding cable and the outer diameter must be specified in purchase order.
- Protection class: IP68.
- Ambient temperature during operation from -60 °C to +50 °C.
- Weight – 56 kg.

* not in the scope of supply.

ELECTRICAL DIAGRAM



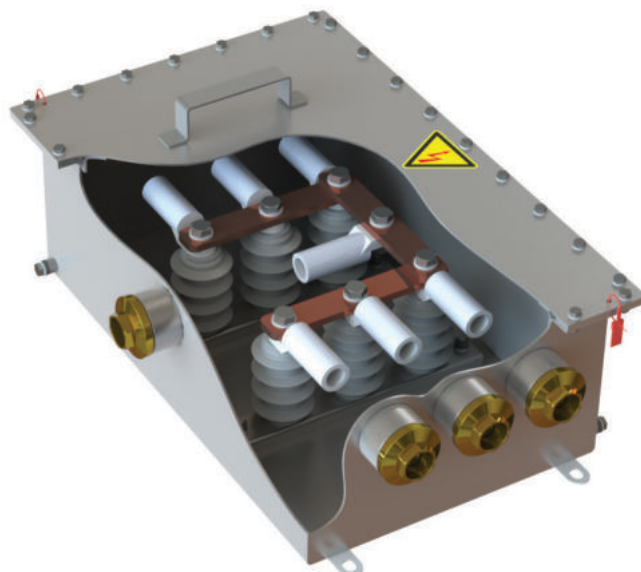
THREE-PHASE EARTHING LINK BOXES

KZE-6

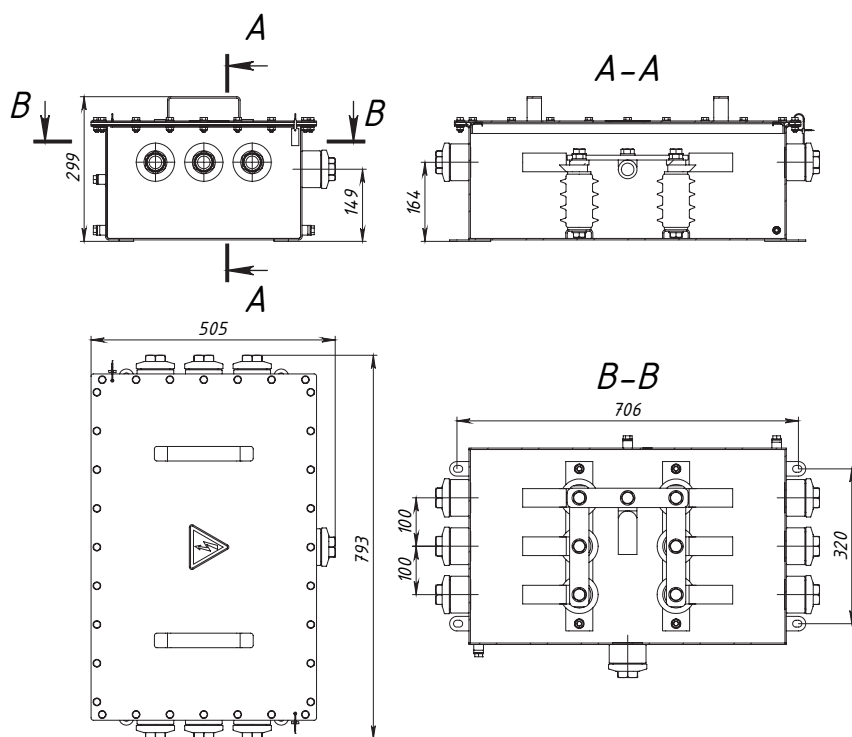
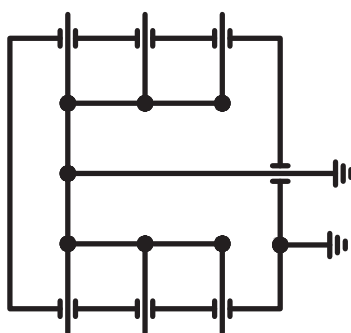
Direct earthing link box type KZE-6:

- For single core bonding cable :
- with copper stranded conductor, cross-section from 95 to 400 mm²;
- insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors from 95 to 400 mm² are in the scope of supply.
- Conductor cross-section of bonding cable and earthing cables and the outer diameter must be specified in purchase order.
- Protection class: IP68.
- Ambient temperature during operation from -60°C to +50°C.
- Weight - 59 kg.

** not in the scope of supply.*

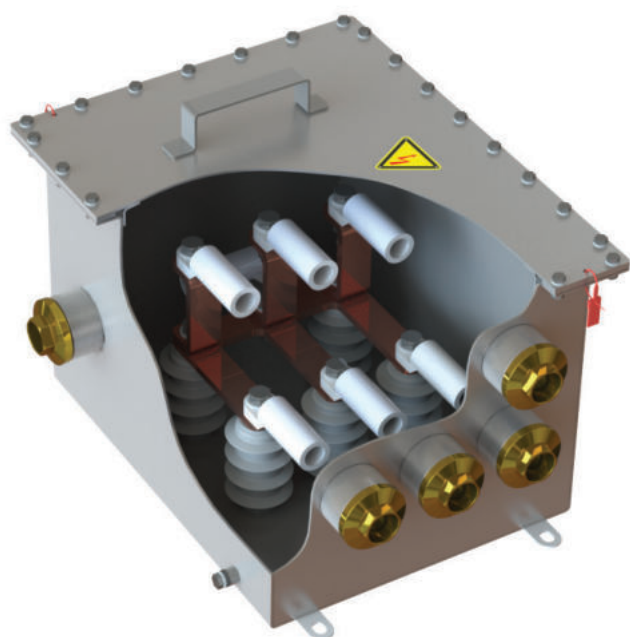


ELECTRICAL DIAGRAM



THREE-PHASE EARTHING LINK BOXES

KZE-6/2

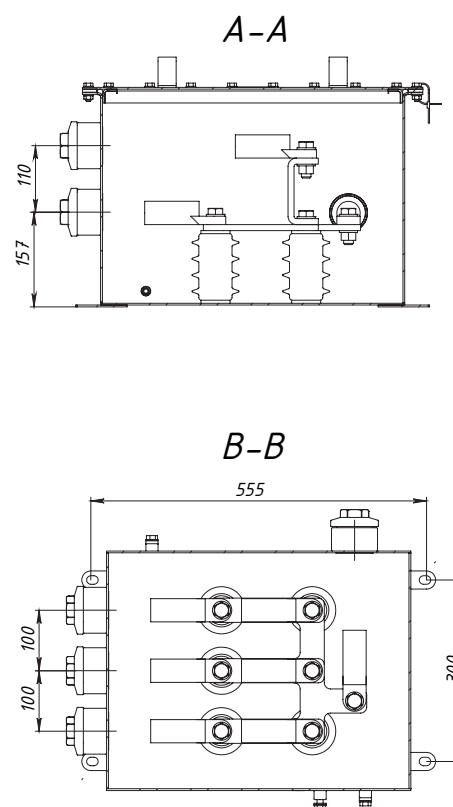
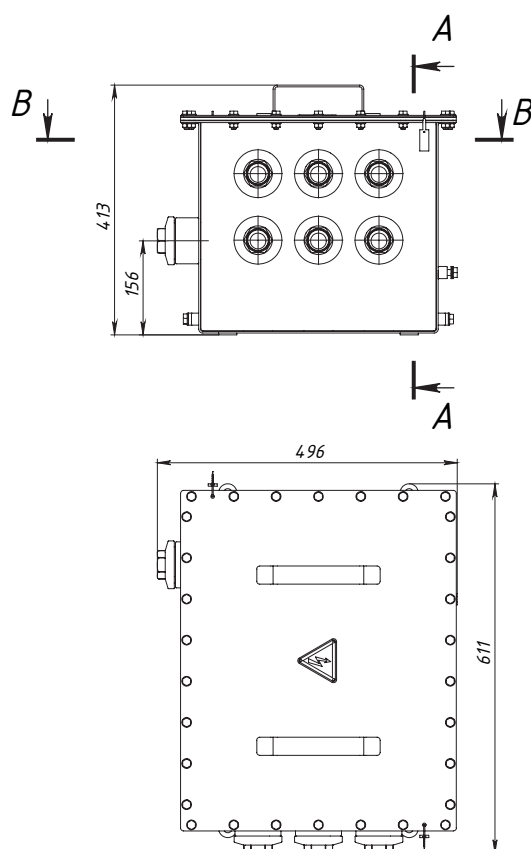
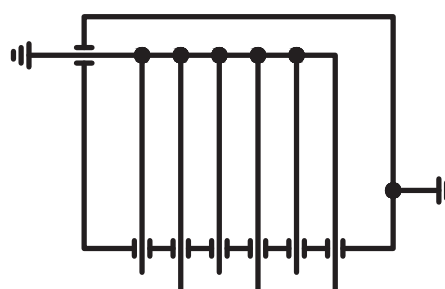


Direct earthing link box type KZE-6/2:

- For single core bonding cable :
- with copper stranded conductor, cross-section from 95 to 400 mm²;
- insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors from 95 to 400 mm² are in the scope of supply.
- Conductor cross-section of bonding cable and earthing cables and the outer diameter must be specified in purchase order.
- Protection class: IP68.
- Ambient temperature during operation from -60°C to +50°C.
- Weight - 57 kg.

* not in the scope of supply.

ELECTRICAL DIAGRAM



CROSSBONDING LINK BOXES

KTK-3

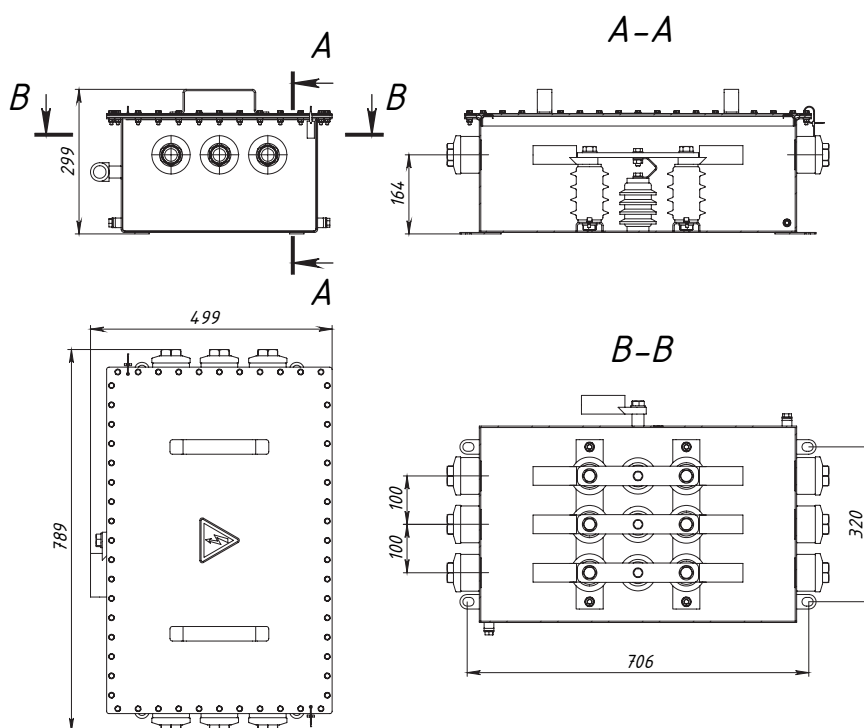
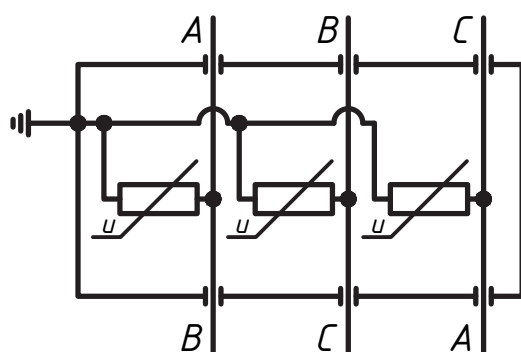
Crossbonding Link box KTK-3:

- For single core bonding cable :
- with copper stranded conductor, cross-section from 95 to 400 mm²;
- insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors from 95 to 400 mm² are in the scope of supply.
- Conductor cross-section of bonding cable and earthing cables and the outer diameter must be specified in purchase order.
- Protection class: IP68.
- Ambient temperature during operation from -60°C to +50°C.
- Weight - 60 kg.

** not in the scope of supply.*

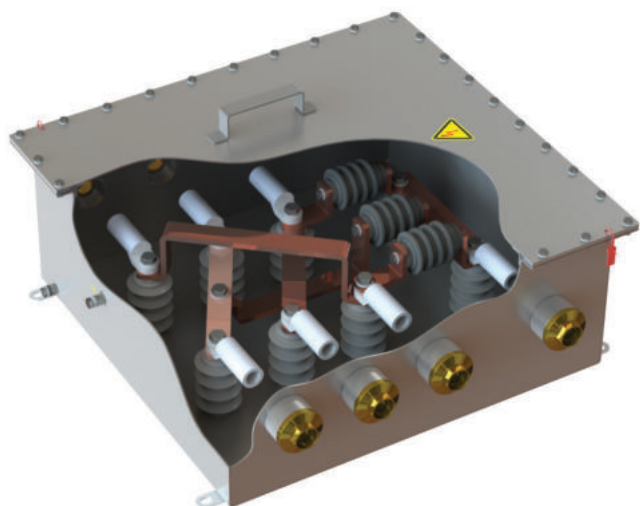


ELECTRICAL DIAGRAM



CROSSBONDING LINK BOXES

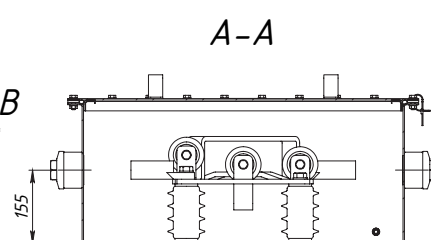
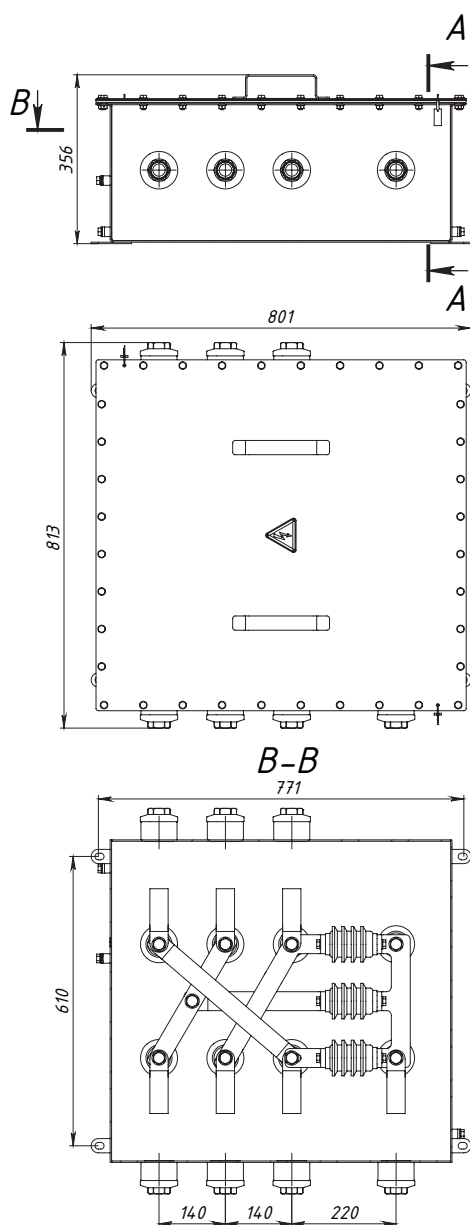
KTK-P-3



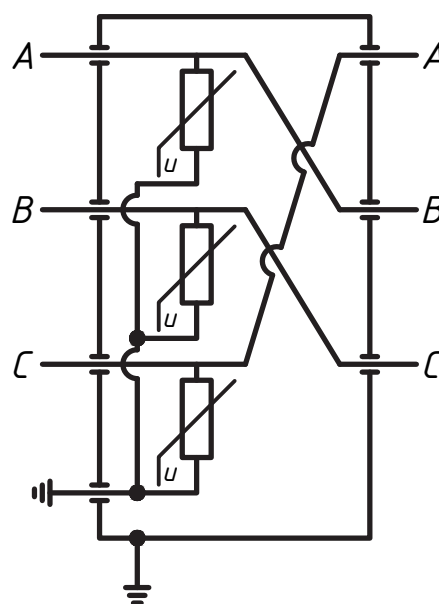
Crossbonding Link box KTK-P-3:

- For single core bonding cable :
 - with copper stranded conductor, cross-section from 95 to 400 mm²;
 - insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors from 95 to 400 mm² are in the scope of supply.
- Conductor cross-sections of bonding and earthing cables and the outer diameter must be specified in purchase order.
- Protection class: IP68.
- Ambient temperature during operation from -60°C to +50°C.
- Weight - 88 kg.

* not in the scope of supply.



ELECTRICAL DIAGRAM



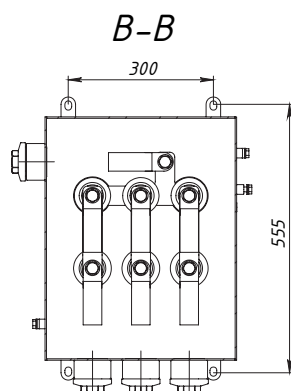
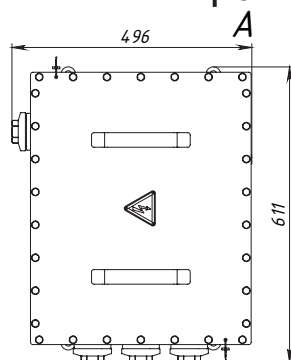
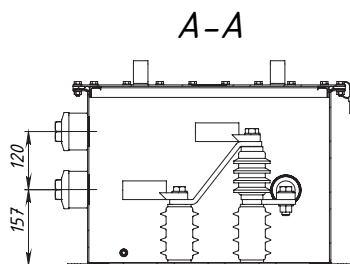
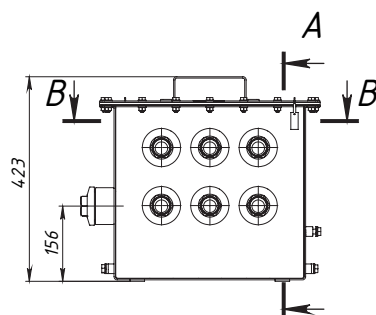
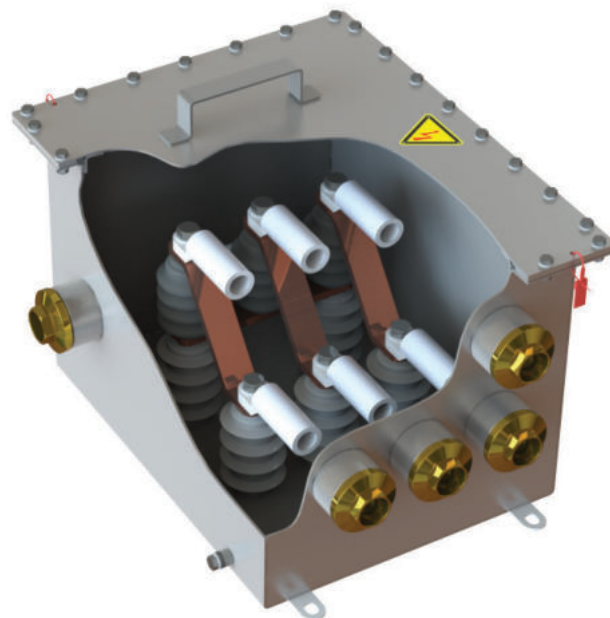
CROSSBONDING LINK BOXES

KTK-6

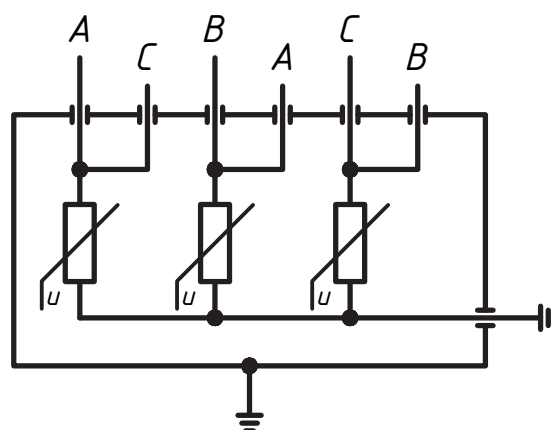
Crossbonding link box KTK-6:

- For single core bonding cable :
 - with copper stranded conductor, cross-section from 95 to 400 mm²;
 - insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors from 95 to 400 mm² are in the scope of supply.
- Conductor cross-section of bonding cable and earthing cables and the outer diameter must be specified in purchase order.
- Protection class: IP68.
- Ambient temperature during operation from -60°C to +50°C.
- Weight - 59 kg.

* not in the scope of supply.



ELECTRICAL DIAGRAM

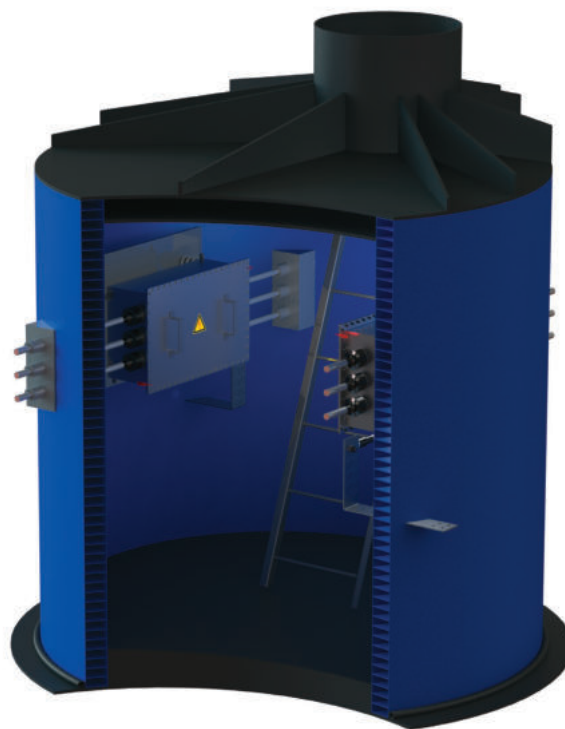


DEVICES FOR TRANSPOSITION OF CABLES

KPVK pit

The polymer waterproof round KPVK pit is designed for reliable - arrangement of the transposition of power cable screens. Inside the pit, there are places for mounting transposition and grounding boxes. Pits are available in various versions:

Name	Articl number	Dimensions, mm		Number of boxes, pcs.
		Diametr	Height	
Pit KPVK-1/1500	10501	1500	2600	1
Pit KPVK-2/1500	10502	1500	2600	2
Pit KPVK-3/1500	10503	1500	2600	3
Pit KPVK-4/1500	10504	1500	2600	4
Pit KPVK-1/2000	10601	2000	2600	1
Pit KPVK-2/2000	10602	2000	2600	2
Pit KPVK-3/2000	10603	2000	2600	3
Pit KPVK-4/2000	10604	2000	2600	4



- Easy and fast installation of the pit without the use of heavy machinery.
- High resistance to aggressive environmental factors (temperature changes, oil and gas resistance, fire resistance).
- The inputs of the transposition and ground wires are sealed with heat-shrinkable CFM Raychman black tubes with glue included in the delivery package.
- The metal parts inside the pit must be grounded according to the Electrical Installations Code (EIC). The pit is provided with a ground strip with outputs to the outside.
- Transposition and grounding boxes are not included in the delivery package.
- Transposition and grounding wires are not included in the delivery package.
- The cross-section of the core and the outer diameter of the transposition and grounding wire must be specified when ordering the pit.

It is possible to manufacture other modifications. To select and order a pit, you must fill out a questionnaire. More detailed information can be obtained by contacting the specialists of technical service of RKS-Plast LLC

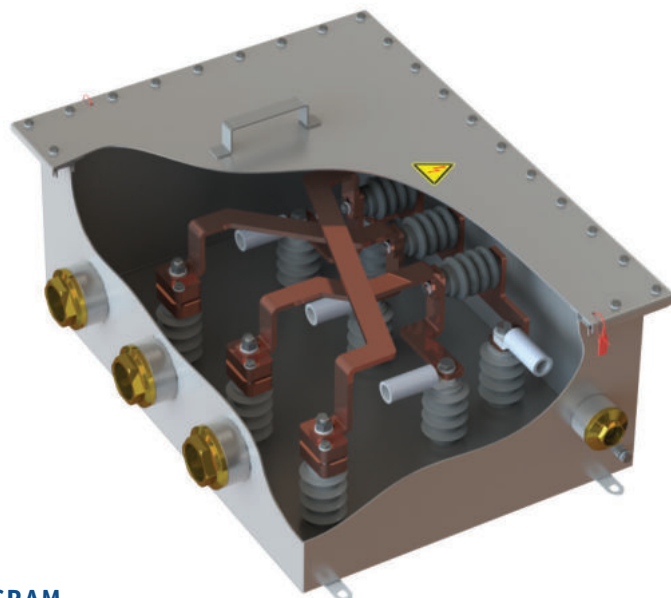
STRAIGHT LINK BOX FOR COAXIAL CABLES

KTK-Km-3

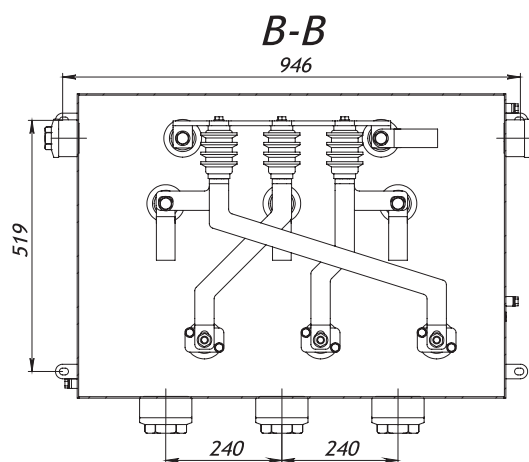
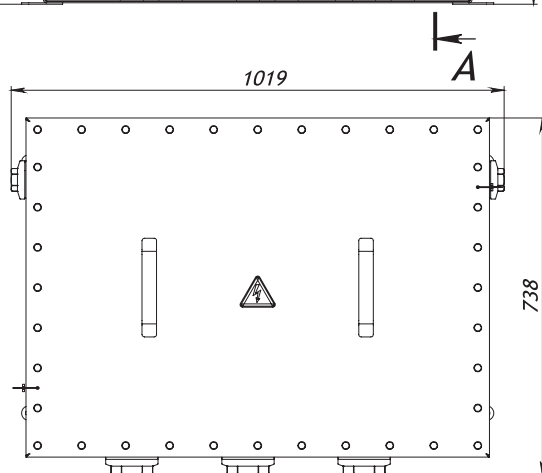
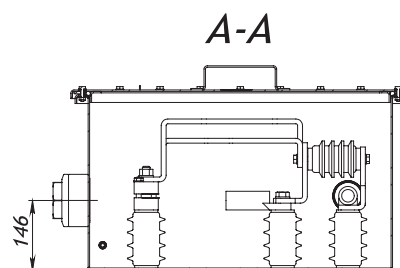
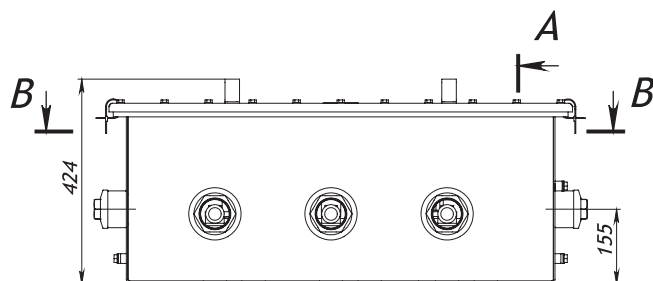
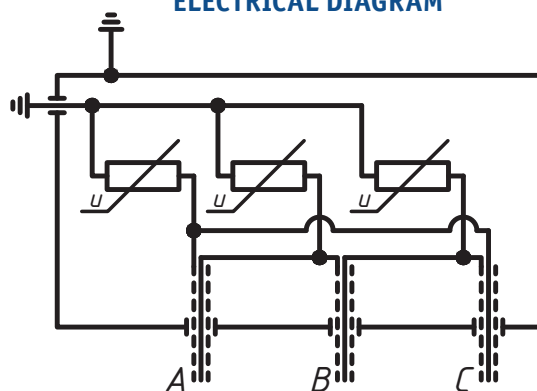
Crossbonding link box type KTK-Km-3:

- For coaxial bonding cable*:
- with copper stranded conductor and copper wire screen, cross-section from 95 to 400 mm²;
- insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors and screens from 95 to 400 mm² are in the scope of supply.
- Conductor cross-sections of bonding and earthing cables and the outer diameter must be specified in purchase order.
- Protection class: IP68.
- Ambient temperature during operation from -60°C to +50°C.
- Weight - 108 kg.

* not in the scope of supply.

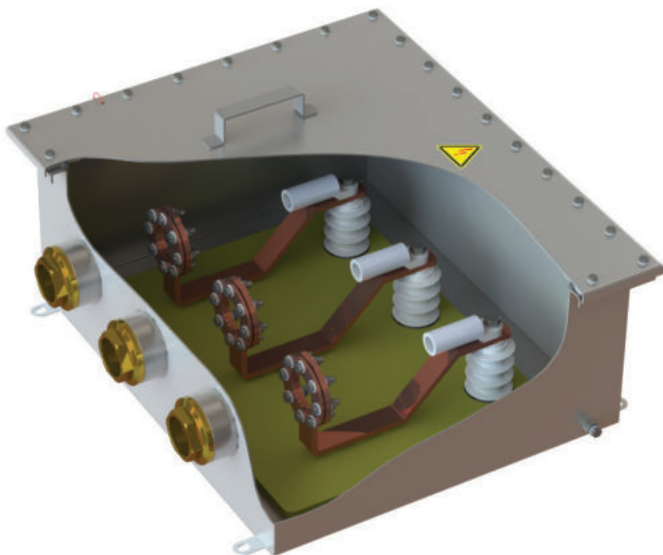


ELECTRICAL DIAGRAM



CROSBONDING LINK BOX FOR COAXIAL CABLES

KPK-K-3

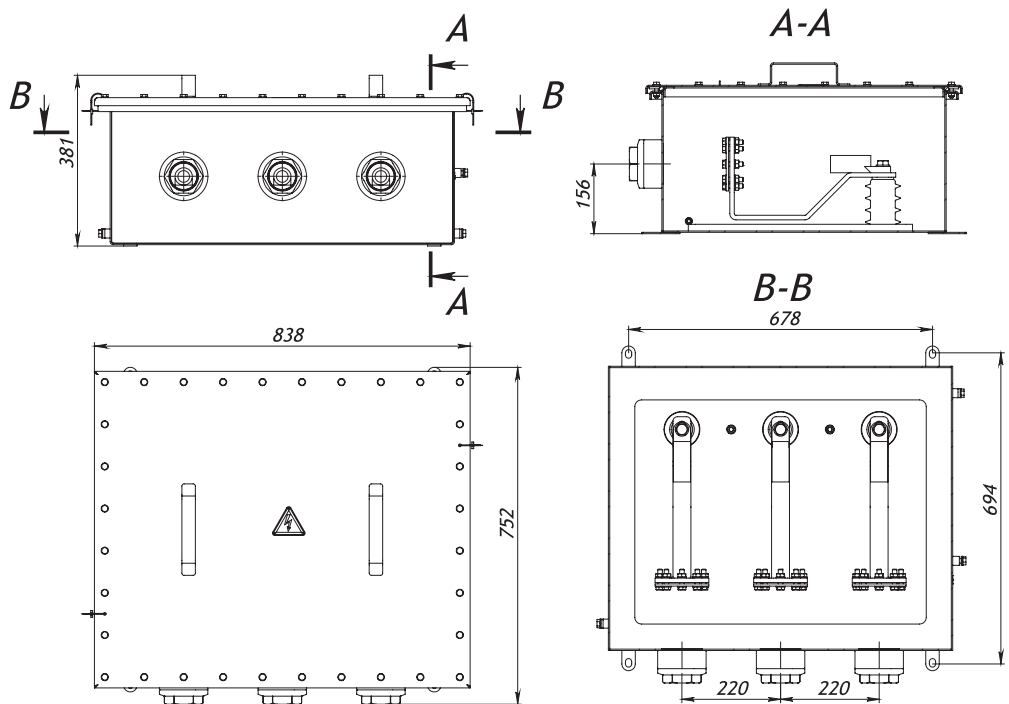
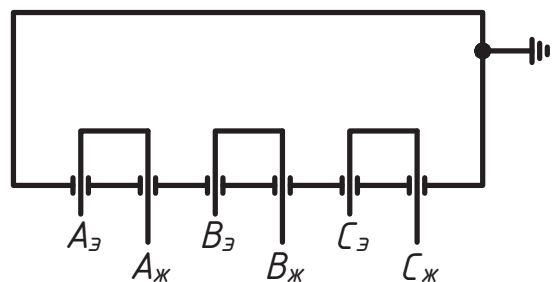


Straight link box for coaxial cables type KPK-K-3:

- For coaxial bonding cable*:
 - with copper stranded conductor and copper wire screen, cross-section from 95 to 400 mm²;
 - insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors and screens from 95 to 400 mm² are in the scope of supply.
- Conductor cross-sections of bonding and the outer diameter must be specified in purchase order.
- Protection class: IP68.
- Ambient temperature during operation from -60°C to +50°C.
- Weight - 86 kg.

* not in the scope of supply.

ELECTRICAL DIAGRAM



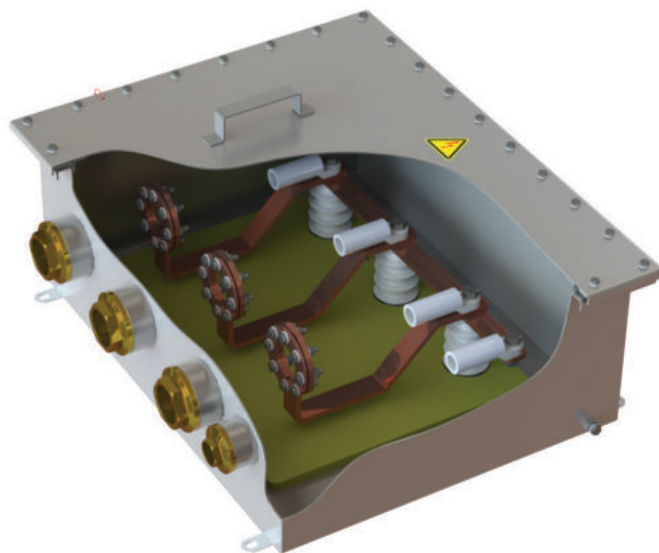
DIRECT EARTHING LINK BOX FOR COAXIAL CABLES

KZE-K-3

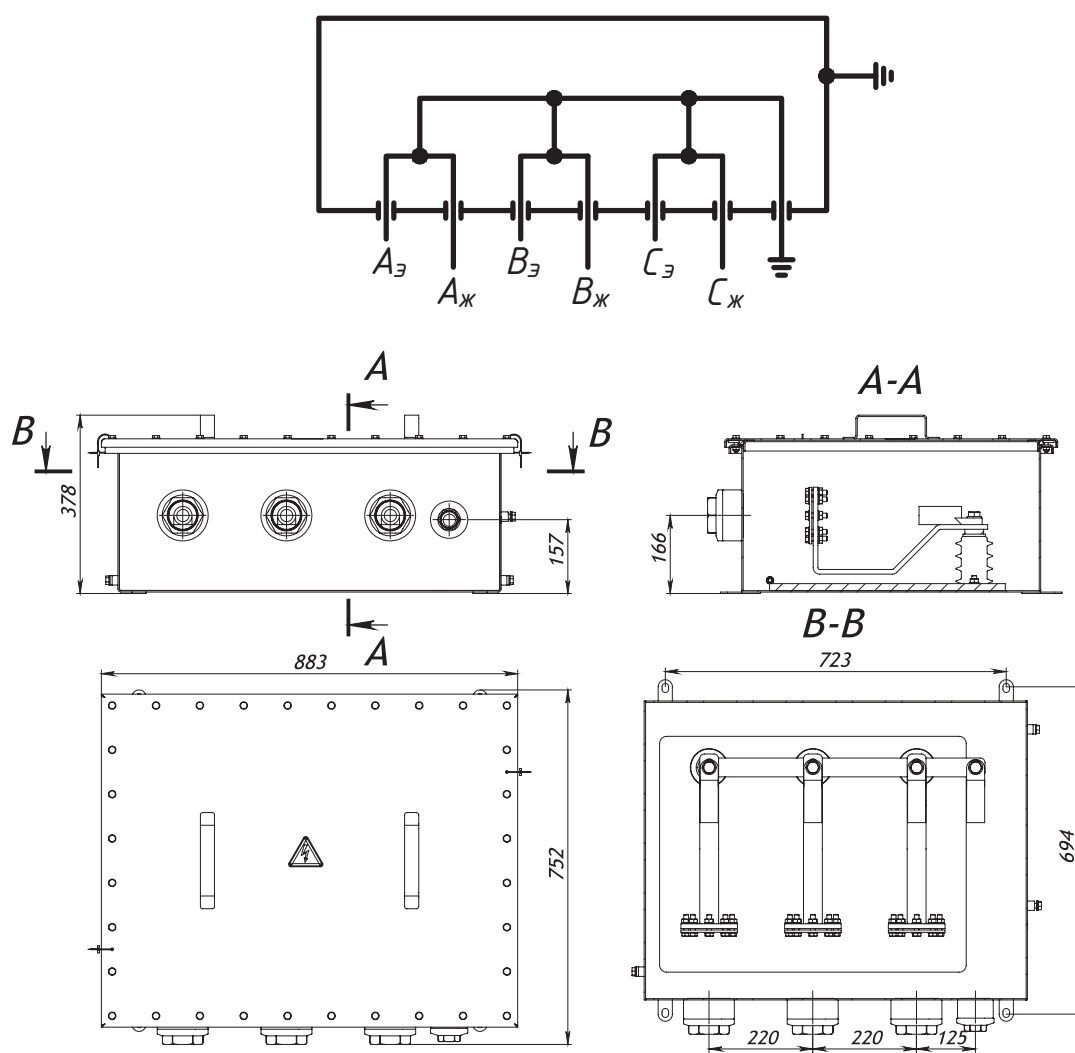
Direct earthing link box type KZE-K-3:

- For coaxial bonding cable*:
- with copper stranded conductor and copper wire screen, cross-section from 95 to 400 mm²;
- insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors and screens from 95 to 400 mm² are in the scope of supply.
- Conductor cross-sections of bonding and the outer diameter must be specified in purchase order.
- Protection class: IP68.
- Ambient temperature during operation from -60°C to +50°C.
- Weight - 92 kg.

* not in the scope of supply.

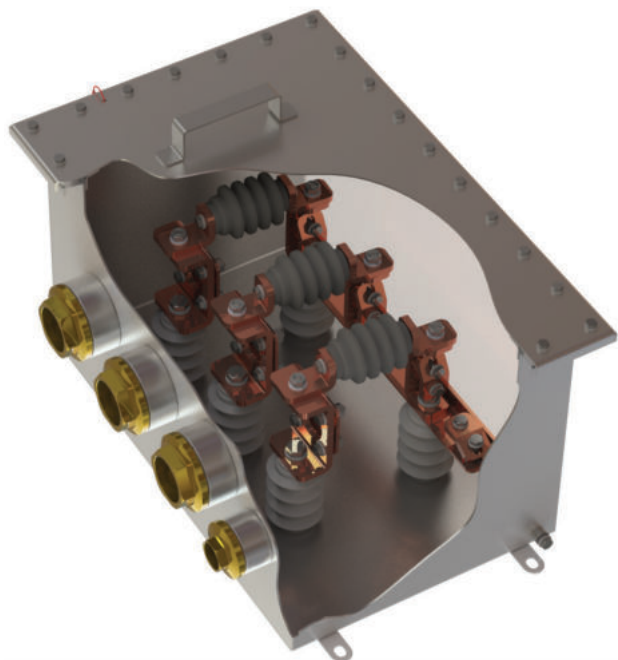


ELECTRICAL DIAGRAM



DEVICES FOR COAXIAL CABLES

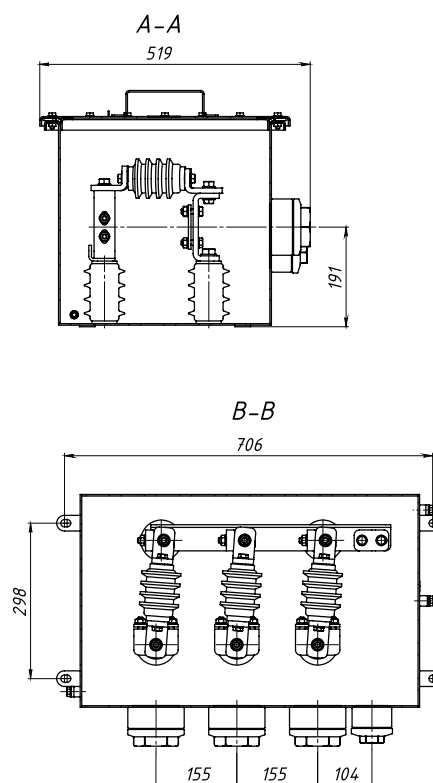
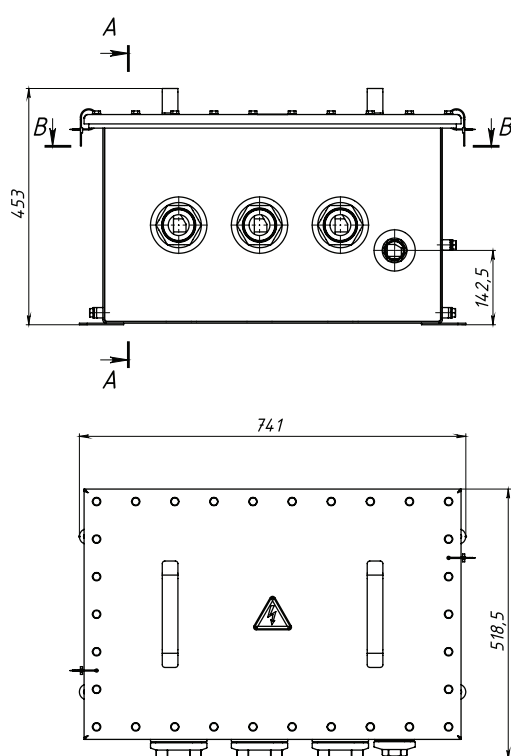
KZE-K-0-3



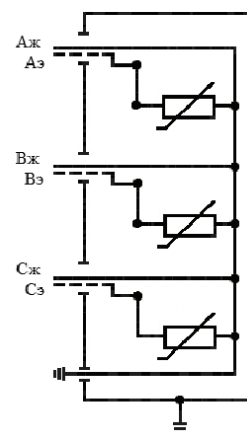
Earthing link box with SVLs type KZE-K-0-3:

- For coaxial bonding cable*:
- with copper stranded conductor and copper wire screen, cross- section from 95 to 400 mm²;
- insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors and screens from 95 to 400 mm² are in the scope of supply.
- Conductor cross-sections of bonding and the outer diameter must be specified in purchase order.
- Protection class: IP68.
- Ambient temperature during operation from -60°C to +50°C.
- Weight - 71 kg.

* not in the scope of supply.



ELECTRICAL DIAGRAM



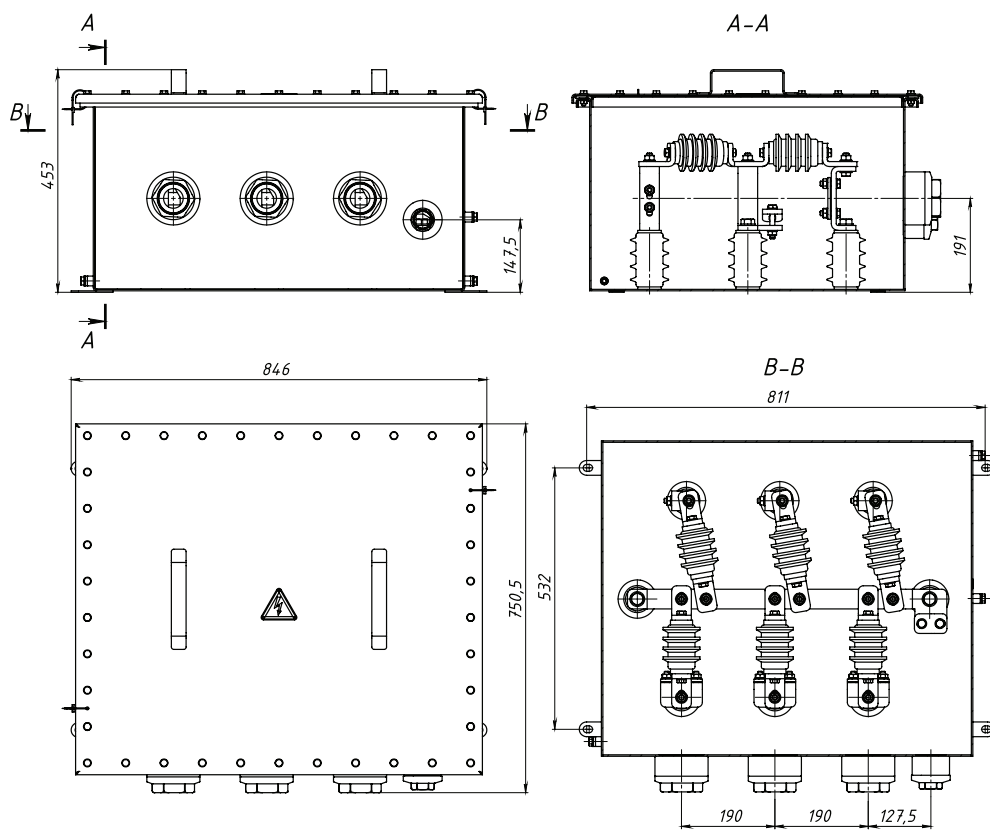
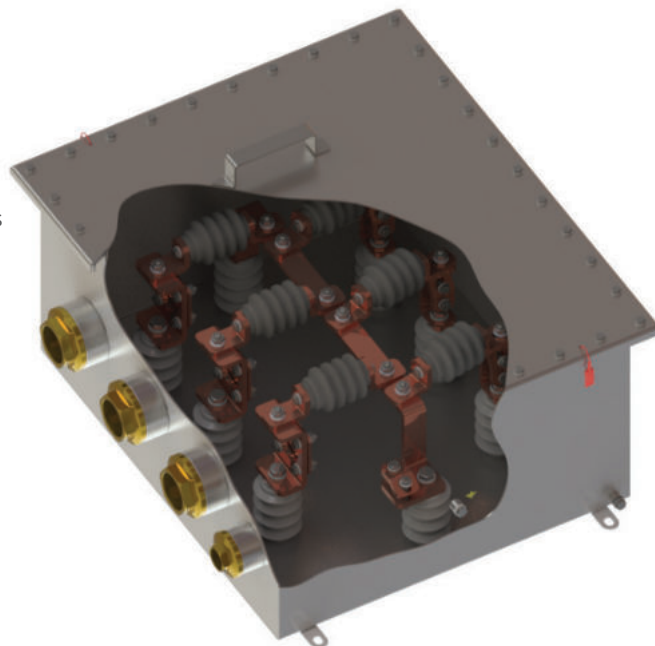
DEVICES FOR COAXIAL CABLES

KZE-K-0-6

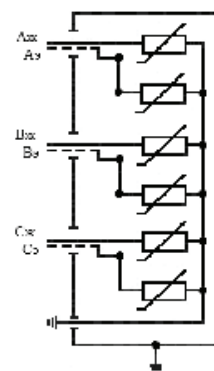
Earthing link box with SVLs type KZE-K-0-6:

- For coaxial bonding cable*:
- with copper stranded conductor and copper wire screen, cross-section from 95 to 400 mm²;
- insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors and screens from 95 to 400 mm² are in the scope of supply.
- Conductor cross-sections of bonding and the outer diameter must be specified in purchase order.
- Protection class: IP68.
- Ambient temperature during operation from -60°C to +50°C.
- Weight - 101 kg.

* not in the scope of supply.



ELECTRICAL DIAGRAM



DEVICES WITH THE COMPOUND

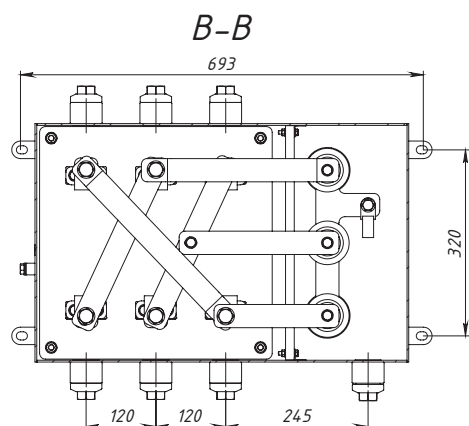
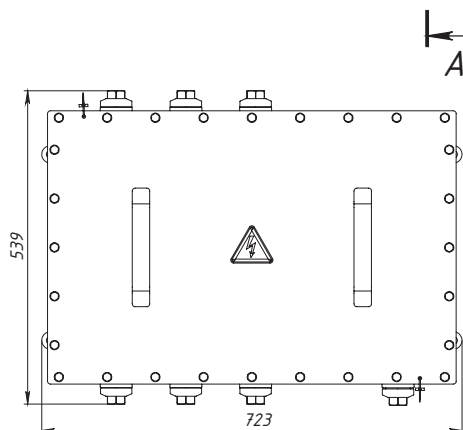
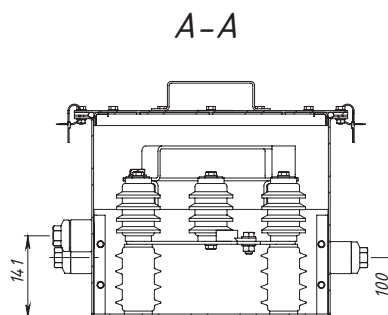
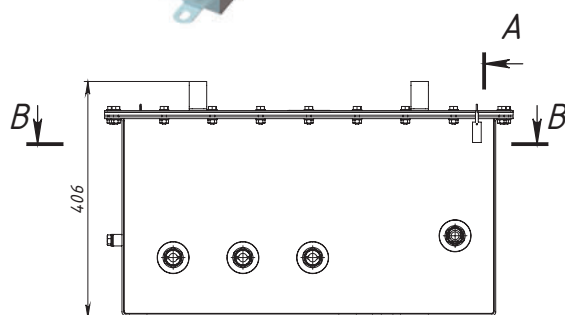
KTK-Pc-3



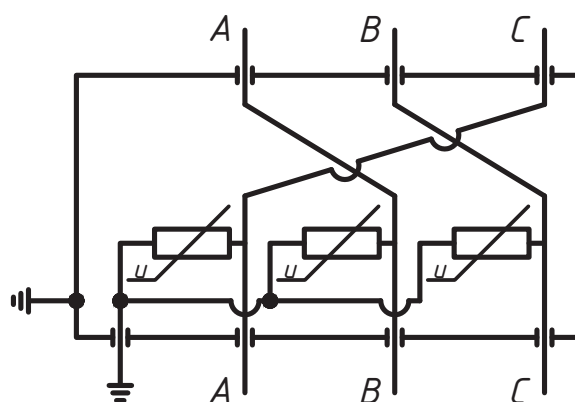
Crossbonding link box with compound type KTK-Pc-3:

- For single core bonding cable :
 - with copper stranded conductor, cross-section from 95 to 400 mm²;
 - insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors from 95 to 400 mm² are in the scope of supply.
- Conductor cross-section of bonding cable and earthing cables and the outer diameter must be specified in purchase order.
- Protection class: IP68.
- Ambient temperature during operation from -60°C to +50°C.
- Weight - 68 kg.

* not in the scope of supply.



ELECTRICAL DIAGRAM



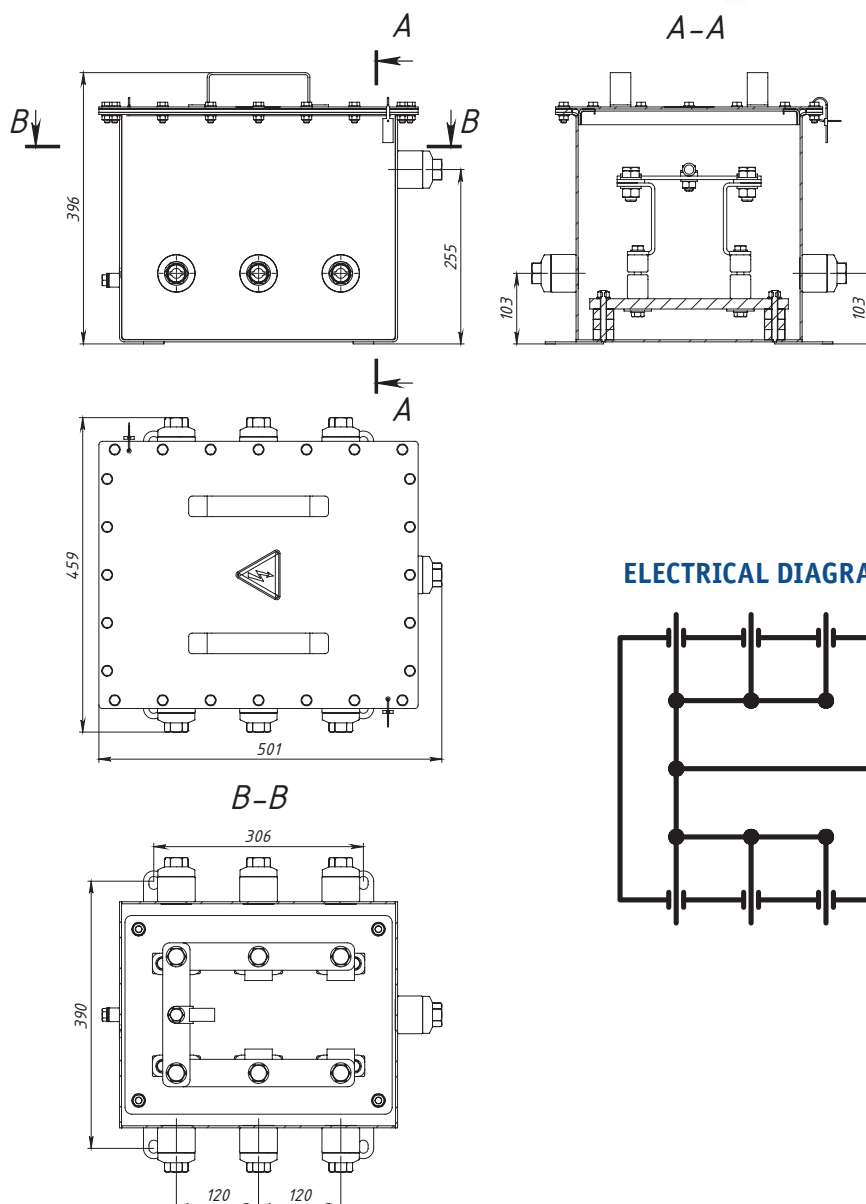
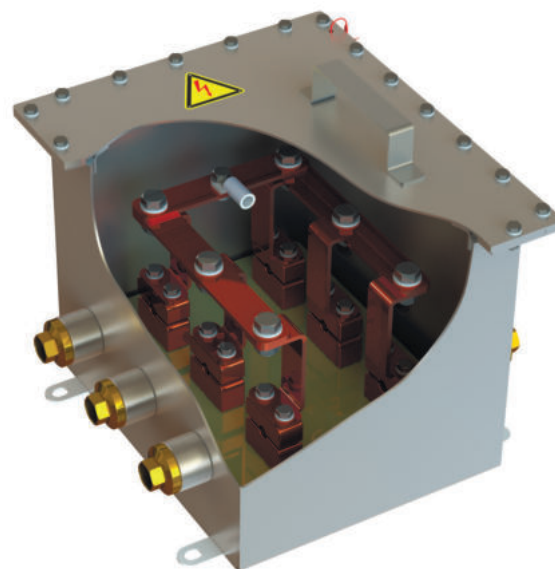
DEVICES WITH THE COMPOUND

KZEc-6

Direct earthing link box with compound type KZEc-6:

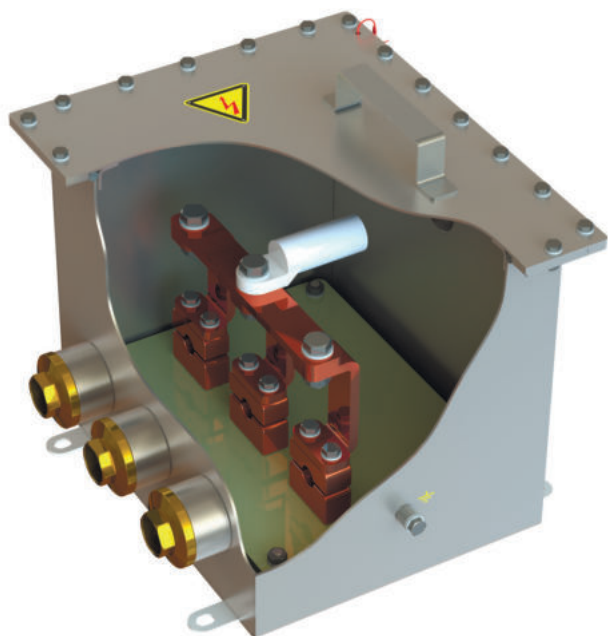
- For single core bonding cable :
- with copper stranded conductor, cross-section from 95 to 400 mm²;
- insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors from 95 to 400 mm² are in the scope of supply.
- Conductor cross-section of bonding cable and earthing cables and the outer diameter must be specified in purchase order.
- Protection class: IP68.
- Ambient temperature during operation from -60°C to +50°C.
- Weight - 44 kg.

* not in the scope of supply.



DEVICES WITH THE COMPOUND

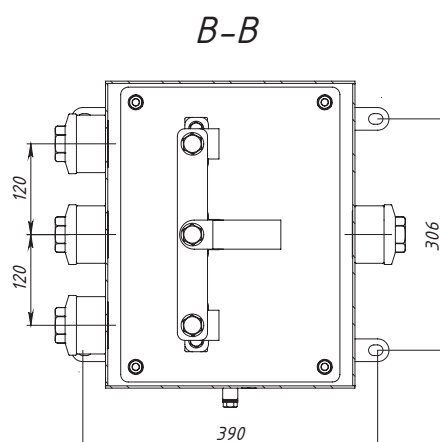
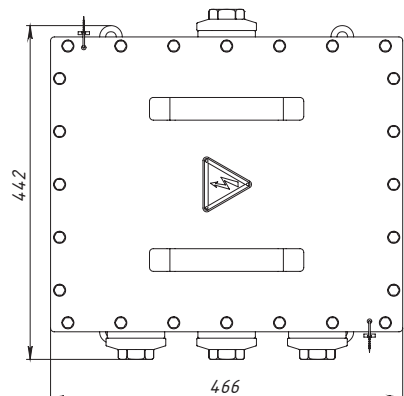
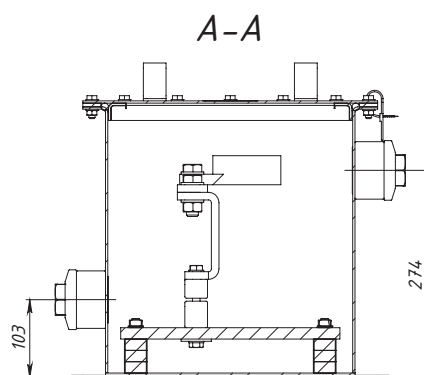
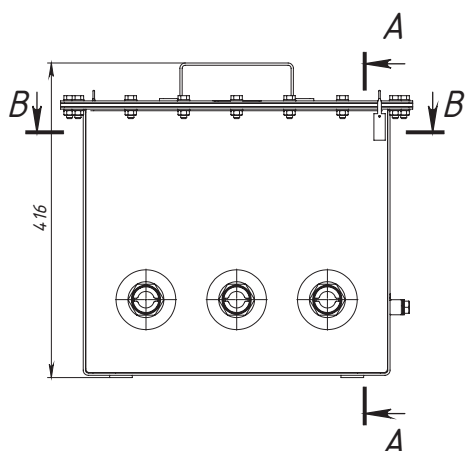
KZE-Hc-3



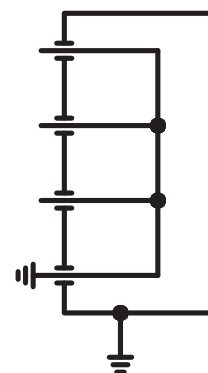
Direct earthing link box with compound type KZE-Hc-3:

- For single core bonding cable :
 - with copper stranded conductor, cross-section from 95 to 400 mm²;
 - insulation withstand voltage 10 kV DC.
- BIL in accordance with IEC 60840 and IEC 62067.
- Cable lugs (hexagonal compressing) for copper conductors from 95 to 400 mm² are in the scope of supply.
- Conductor cross-section of bonding cable and earthing cables and the outer diameter must be specified in purchase order.
- Protection class: IP68.
- Ambient temperature during operation from -60°C to +50°C.
- Weight - 42 kg.

** not in the scope of supply.*



ELECTRICAL DIAGRAM



HIGH-VOLTAGE FLAT CLAMPS

High-voltage flat clamp for top bolt of ASHV type

High-voltage top bolt flat clamps, type ASHV, are designed for connection of electrical aluminum and copper wires or buses of switchgear with electrical apparatus termination made in the form of a top bolt.

Technical features:

- voltage U_{max} is up to 252 kV;
- nominal alternating current – up to 3000 A;
- mains frequency – 50 or 60 Hz;
- current thermal resistance (1 s.) – 63 kA;
- climatic version and placement category – UHL1 GOST 15150;
- material - copper alloy;
- protective coating - tin;
- service life - not less than 30 years;
- admissible continuous heating temperature – 105°C.

Clamps structural design and external appearance is available in the following modifications:

- clamp for connection to smooth aluminum or copper bolt 50 and 60 mm in diameter;
- clamp equipped with a contact portion with/without holes.

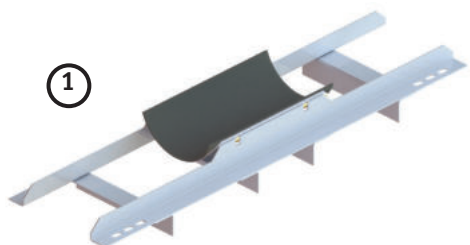


Name	Art.	Top bolt diameter, mm	Contact plate hole diameter, mm	Weight, kg/pc.
High-voltage flat clamp for top bolt, ASHV-50	10001	50	-	6,9
High-voltage flat clamp for top bolt, ASHV-60	10002	60	-	6,2
High-voltage flat clamp for top bolt, ASHV-50-4	10003	50	13	6,8
High-voltage flat clamp for top bolt, ASHV-60-4	10004	60	13	6,2

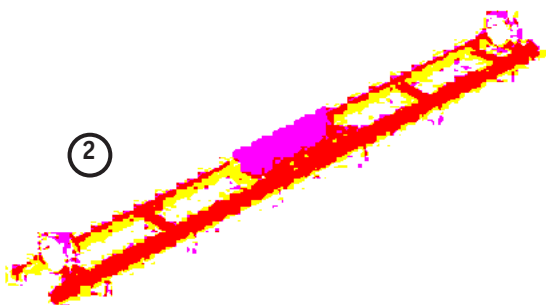
LOCATING BLOCKS

Locating block

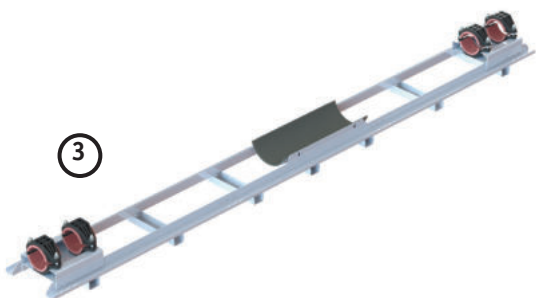
①



②



③



Locating block is a support assembly designed for installation of joints.

Support assembly consists of steel angles with supporting stand for a joint. A set of fasteners is required for fastening to mounting structures.

Locating blocks are made in various versions:

- standard (1);
- with one pair of mounts (2);
- with two pairs of mounts (3);
- with symmetrical (2) and asymmetrical (3) arrangement of the bed under the joint, depending on the joint design.

Locating blocks with cable clamps are designed for joints installation while ensuring cables and joints coaxial alignment at a distance of 0.5 - 1 m.

Clamping devices of VKK series of various dimension types are used as fasteners (subject to cable outer diameter) with a kit of clamps.

To select and order locating block, you must fill out a questionnaire.

For more information, please contact our technicians.

Mounting example:



CABLE CLAMPS

Cable clamps

Application

Cable clamps are designed for fixing all cable types of medium, high and extra-high voltage.

Material

Fiberglass reinforced polyamide.

Operating conditions

Climatic version according to U, UKHL 1, placement categories 1 and 2 according to GOST 15150-69. Applications include surrounding air temperature from 60°C to 120°C. The product is notable for resistance to weather elements, mineral oil and others petrochemicals, solar and UV radiation, to ozone effects.

CABLE CLAMPS FOR FIXING SINGLE-CORE CABLES “SINGLE- PHASED” AND MULTI-CORE CABLES

Type	Cable Outer Diameter
RKK-25/40	25 to 40 mm
RKK-40/60	40 to 65 mm

RKK series. Mechanical durability to dynamic load – 10 000 N.

Type	Cable Outer Diameter
VKK-65/90	65 to 90 mm
VKK-85/105	85 to 105 mm
VKK-100/125	100 to 125 mm
VKK-125/150	125 to 150 mm
VKK-145/170	145 to 170 mm

VKK series. Mechanical durability to dynamic load – 40 000 N.

CABLE CLAMPS FOR CLAMPING CABLES WHEN LAYING IN A DELTA

Type	Cable Outer Diameter
UKK-50	25 to 35 mm
UKK-60*, UKK2-60*	33 to 40 mm

UKK Series. Mechanical durability to dynamic load – 10 000 N.

Type	Cable Outer Diameter
UKK3-35/50	35 to 50 mm
UKK3-35/55	35 to 55 mm
UKK3-40/70	40 to 70 mm

UKK3 series. Mechanical durability to dynamic load - 40 000 N.

Type	Cable Outer Diameter
VKK3-65/90	65 to 90 mm
VKK3-85/110	85 to 110 mm
VKK3-110/135	110 to 135 mm

VKK3 series. Mechanical durability to dynamic load – 40 000 N.

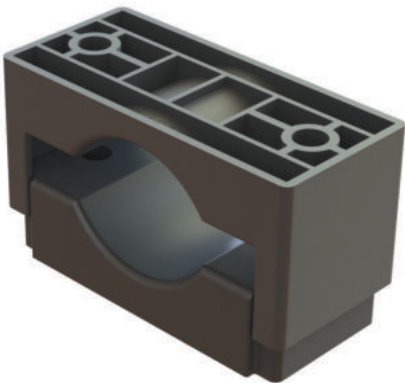
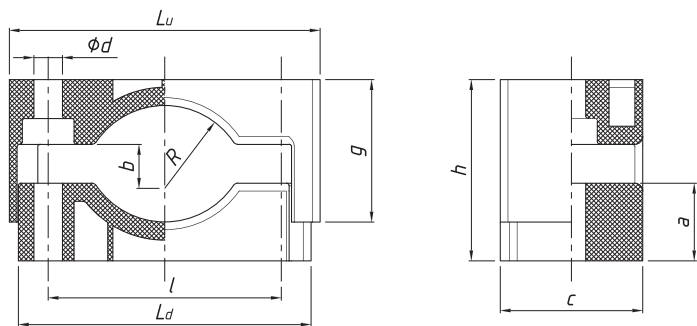
**UKK-60 Series clamps can be used also when laying single-core cable with diameter 55 to 70 mm.*

“RKS-Plast» reserves the right for introducing alterations and modifications into the clamping production range. Catalog data is for information purpose only. For further detailed information please refer to web-site www.rks-plast.ru

CABLE CLAMPS

In-line cable fasteners (RKK series)

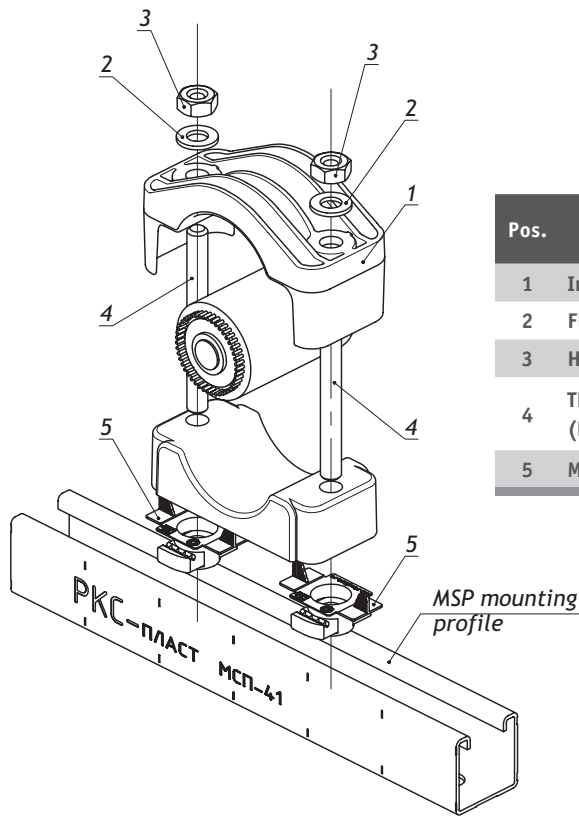
The clamp consists of two profiles gripping the cable. The profiles are fitted with ribs providing mechanical strength and durability to shock loads at short-circuit. The profiles have holes at both sides for fastening the device to bearing metalworks*.



Technical features

Type	Article number	Lu, mm	Ld, mm	l, mm	d, mm	c, mm	a, mm	b, mm	g, mm	R, mm	h, mm		Weight, g
RKK-25/40	30101	90	83	60	11	55	23	17	40	25	50	70	150
RKK-40/60	30102	120	113	90	11	55	30	17	55	32	65	95	225

Assembly for RKK clamp fastening to MSP mounting profile



Specification for 1 assembly*:

Pos.	Name	Article number	Meas. unit	Q-ty	Unit weight, kg
1	In-line cable clamps (RKK series)		pc.	1	
2	Flat washer, A10, 5 zinc plated	20251	pc.	2	0,003
3	Hexagon nut, M10, zinc plated	20261	pc.	2	0,010
4	Threaded rod, M10, zinc plated (L=100mm)	20236	pc.	2	0,050
5	Mounting nut MSG-M10	20224	pc.	2	0,037

* Metalware for fastening the device to bearing metalwork are not included into the delivery package and are ordered individually.

CABLE CLAMPS

High-voltage cable clamps (VKK series)

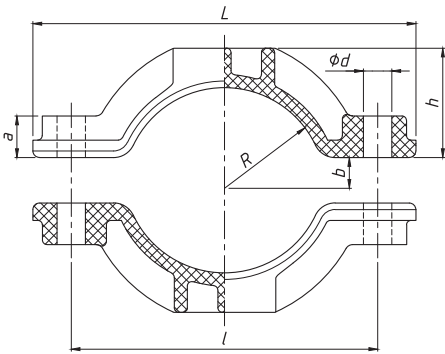
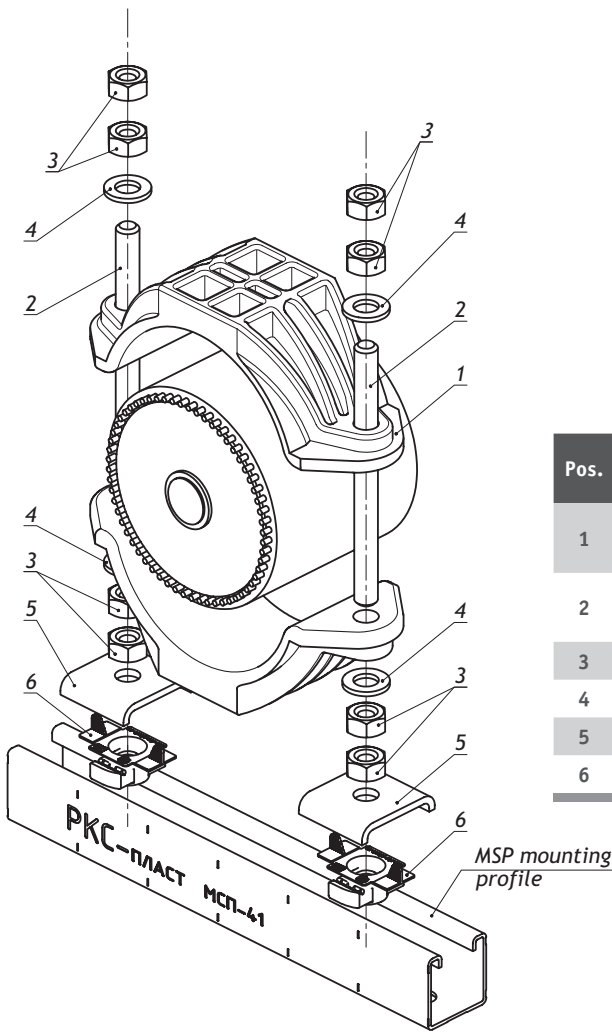
The clamp consists of two interchangeable brackets fitted with ribs providing mechanical strength and durability to shock loads at short-circuit. The bracket lugs have holes at both sides for fastening the device to bearing metalworks*.

Technical features

Type	Article number	L, mm	l, mm	h, mm	a, mm	b, mm	R, mm	d, mm	Weight, g
VKK-65/90	30107	175	140	50	19	14	46	13	370
VKK-85/105	30108	185	150	64	20	11	53	13	474
VKK-100/125	30109	204	170	67	19	14	63	13	446
VKK-125/150	30110	234	200	81	20	14	75	13	590
VKK-145/170	30111	250	214	91	19	14	85	18	630



Assembly for VKK clamp fastening to MSP mounting profile



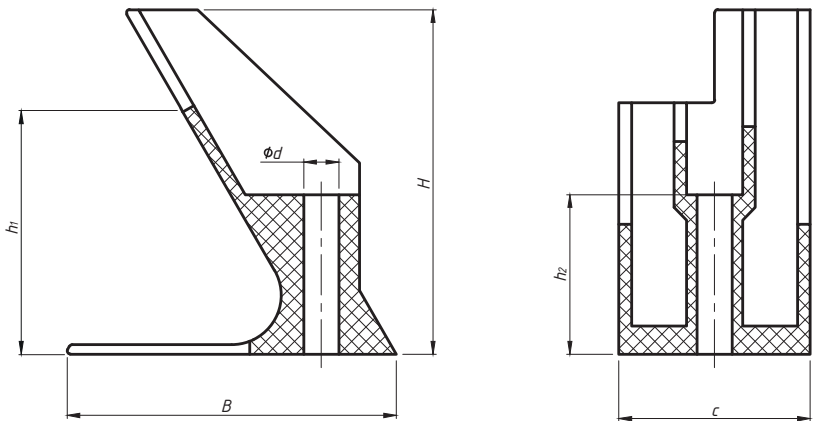
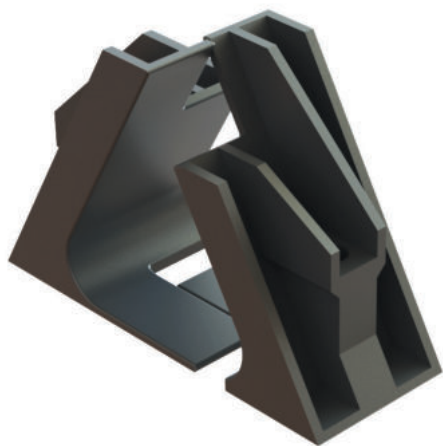
Specification for 1 assembly*:

Pos.	Name	Article number	Meas. unit	Q-ty	Unit weight, kg
1	VKK high-voltage cable clamp		pc.	1	
2	Threaded rod, M12, zinc plated (L=200mm)	20237	pc.	2	0,015
3	Hexagon nut, M12, zinc plated	20262	pc.	8	0,016
4	Flat washer, A13, zinc plated	20252	pc.	4	0,006
5	Mounting washer, MSSH-13	20205	pc.	2	0,084
6	Mounting nut, MSG-M12	20226	pc.	2	0,035

* Metalware for fastening the device to bearing metalwork are not included into the delivery package and are ordered individually.

Versatile cable clamps (UKK series)

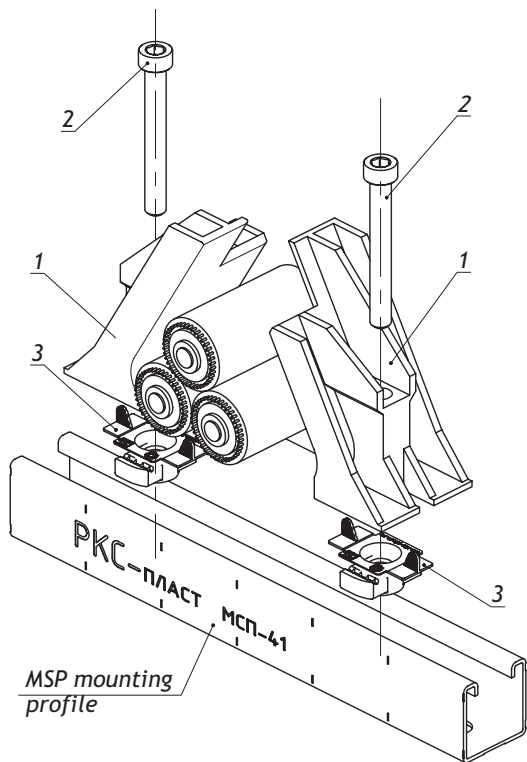
The clamp consists of two interchangeable brackets fitted with ribs providing mechanical strength and durability to shock loads at short-circuit. The bracket lugs have holes for fastening the device to bearing metalworks*.



Technical features

Type	Articl number	B, mm	H, mm	c, mm	h ₁ , mm	h ₂ , mm	d, mm	Weight, g
UKK-50	30118	86	108	60	62	50	11	200
UKK-60	30103	104	108	60	81	50	11	210

Assembly for UKK clamp fastening to MSP mounting profile



Specification for 1 assembly*:

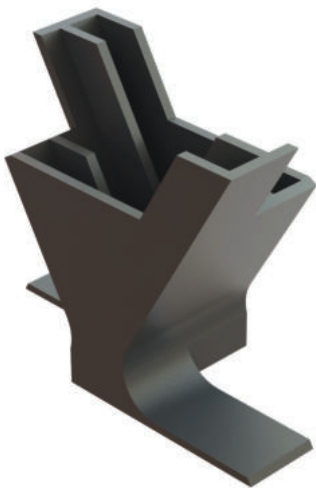
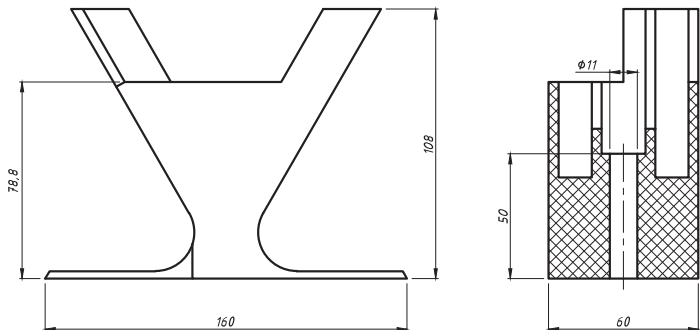
Pos.	Name	Articl number	Meas. unit	Q-ty	Unit weight, kg
1	UKK versatile cable clamp		set.	1	
2	Bolt with internal hexagon, M10x70, zinc plated	20247	pc.	2	0,050
3	Mounting nut MSG-M10	20224	pc.	2	0,037

* Metalware for fastening the device to bearing metalwork are not included into the delivery package and are ordered individually.

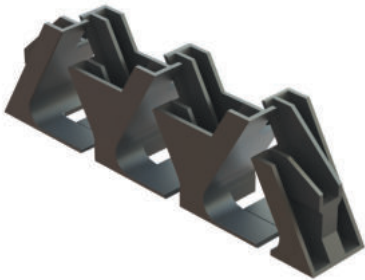
CABLE CLAMPS

Versatile cable clamps (UKK2-60 type) art. 30104

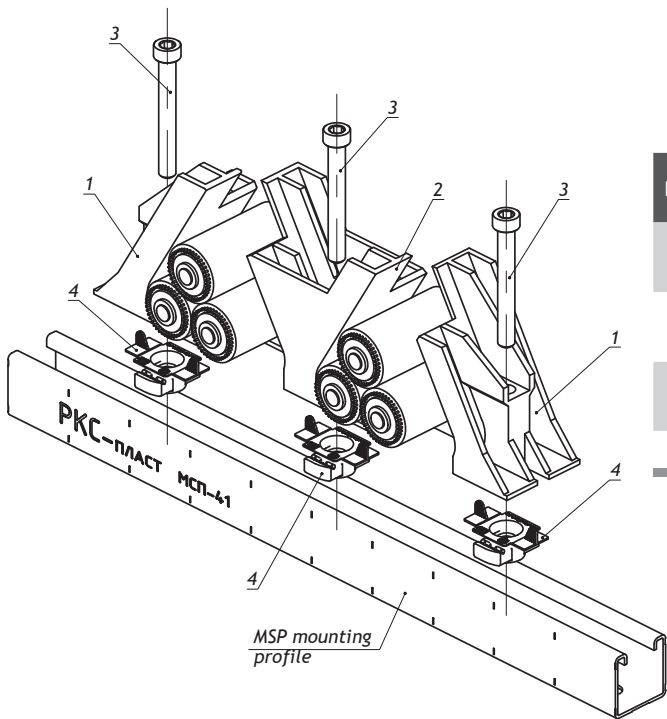
Cable clamps of UKK2-60 brand are specially designed as components to UKK-60 clamps for fastening several cables on the shelf*.



With using UKK2-60 in assembly with UKK-60, the shelf occupied space is reduced, the stability of the whole structure is heightened, the number of fasteners is reduced.



Assembly for UKK2-60 and UKK-60 clamp fastening to MSP mounting profile



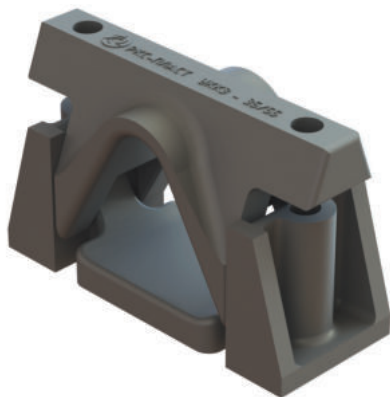
Specification for 1 assembly*:

Pos.	Name	Articl number	Meas. unit	Q-ty	Unit weight, kg
1	UKK-60 versatile cable clamp	30103	set.	1	0,210
2	UKK2-60 versatile cable clamp	30104	pc.	1	0,190
3	Bolt with internal hexagon, M10x70, zinc plated	20247	pc.	3	0,050
4	Mounting nut MSG-M10	20224	pc.	3	0,037

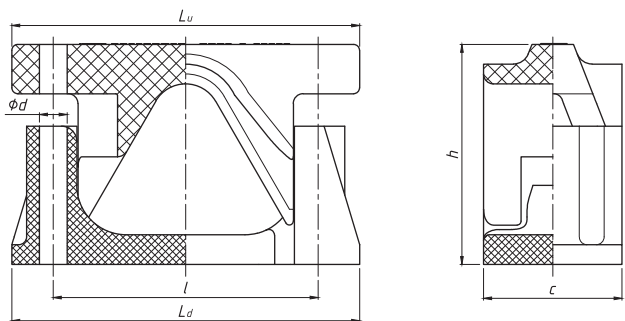
* Metalware for fastening the device to bearing metalwork are not included into the delivery package and are ordered individually..

CABLE CLAMPS

Versatile cable clamps (UKK3 series)



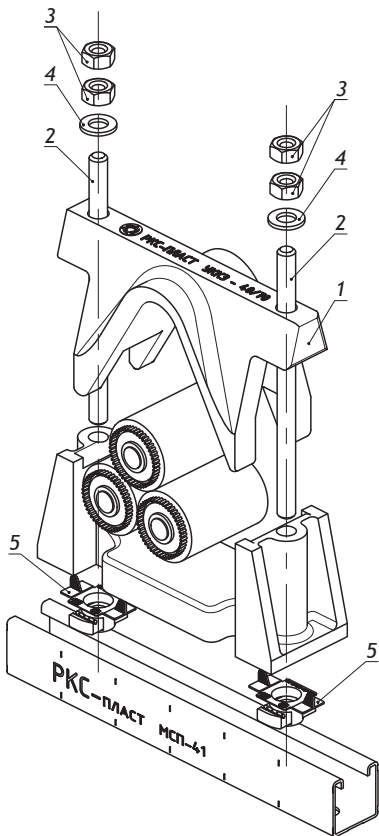
The device is designed in such a way that with the cable maximum diameters for this clamp type the both upper and lower parts are engaged constantly. That lowers bending forces on fastening element and thus increases the overall stability of the whole structure to mechanical stresses at arising short-circuit currents*.



Technical features

Type	Articl number	Lu, mm	Ld, mm	l, mm	d, mm	c, mm	h, mm	Weight, g
UKK3-35/55	30105	176	176	134	13	70	100	755
UKK3-40/70	30106	213	213	173	13	70	120	1196

Assembly for UKK3 clamp fastening to MSP mounting profile



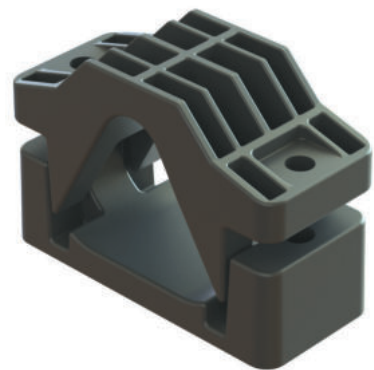
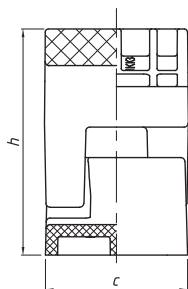
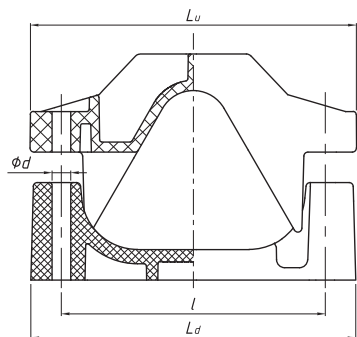
Specification for 1 assembly*:

Pos.	Name	Articl number	Meas. unit	Q-ty	Unit weight, kg
1	UKK3 versatile cable clamp		pc.	1	
2	Threaded rod, M12, zinc plated (L=250mm)	20237	pc.	2	0,183
3	Hexagon nut, M12, zinc plated	20262	pc.	4	0,016
4	Flat washer, A13, zinc plated	20252	pc.	2	0,006
5	Mounting nut, MSG-M12	20224	pc.	2	0,035

* Metalware for fastening the device to bearing metalwork are not included into the delivery package and are ordered individually..

CABLE CLAMPS

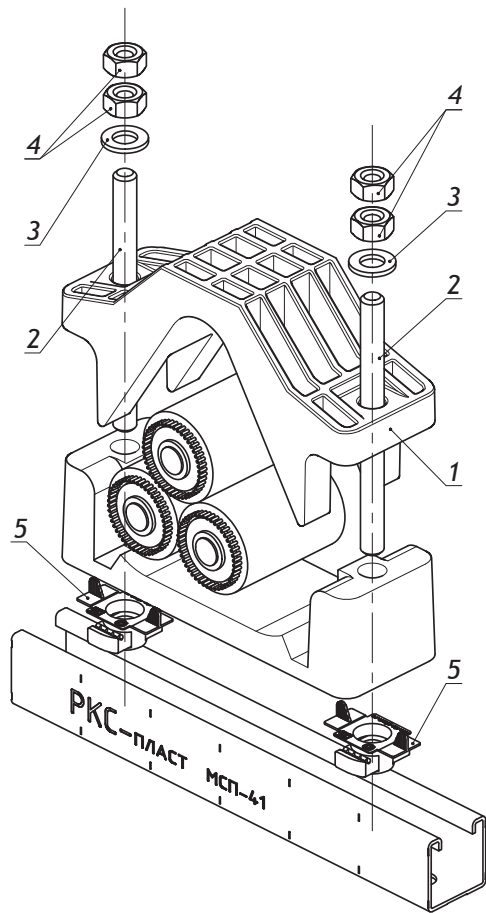
Versatile cable clamps (UKK3 series)



Technical features

Type	Articl number	L _u , mm	L _d , mm	l, mm	d, mm	c, mm	mim	h, mm max	Weight, g
UKK3-35/50	30116	161	160	130	13	70	99	134	560

Assembly for UKK3 clamp fastening to MSP mounting profile

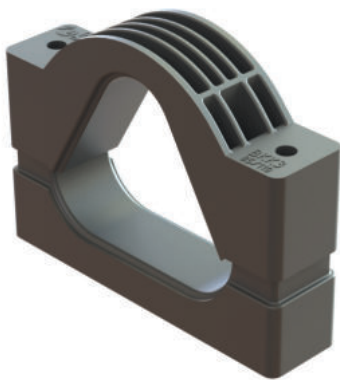


Specification for 1 assembly*:

Pos.	Name	Articl number	Meas. unit	Q-ty	Unit weight, kg
1	UKK3 versatile cable clamp		pc.	1	
2	Threaded rod, M12, zinc plated (L=250mm)	20237	pc.	2	0,183
3	Flat washer, A13, zinc plated	20252	pc.	2	0,006
4	Hexagon nut, M12, zinc plated	20262	pc.	4	0,016
5	Mounting nut, MSG-M12	20224	pc.	2	0,035

* Metalware for fastening the device to bearing metalwork are not included into the delivery package and are ordered individually.

High-voltage cable clamps (VKK3 series)

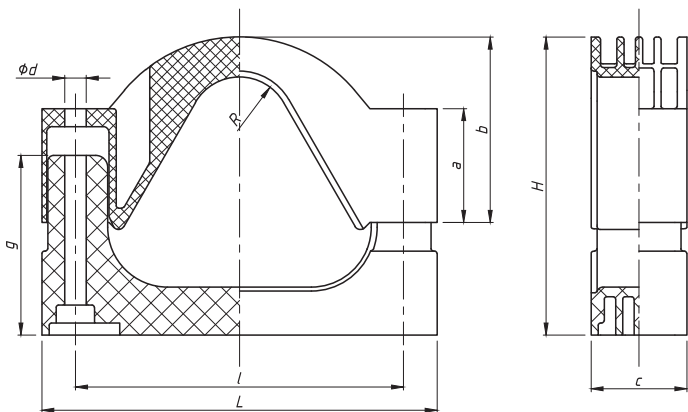
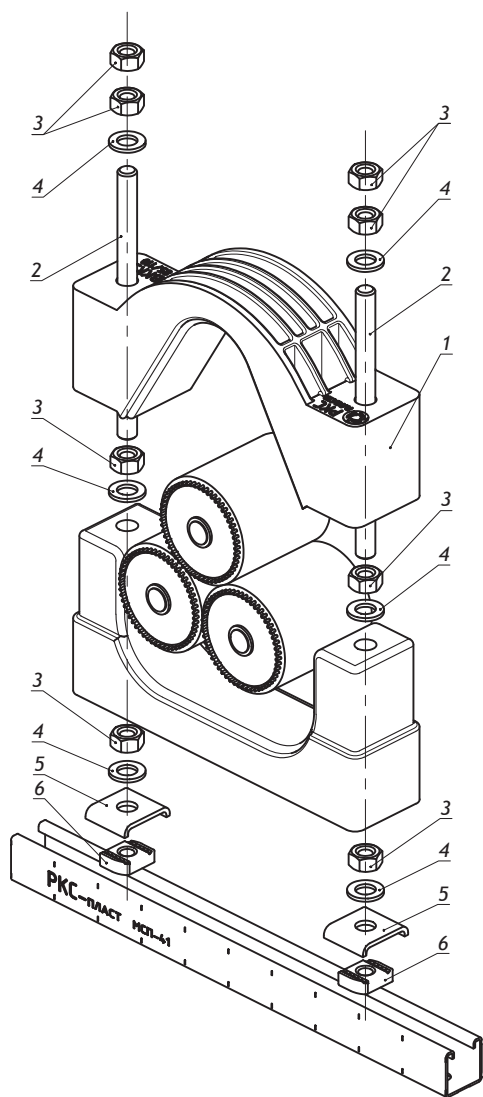


The device is designed in such a way that with the cable maximum diameters for this clamp type the both upper and lower parts are engaged constantly. That lowers bending forces on fastening element and thus increases the overall stability of the whole structure to mechanical stresses at arising short-circuit currents*.

Technical features

Type	Articl number	L, mm	l, mm	d, mm	c, mm	a, mm	b, mm	g, mm	R, mm	H, mm min max	Weight, g
VKK3-65/90	30112	290	234	18	80	95	130	135	32,5	198 260	2415
VKK3-85/110	30113	330	274	18	80	95	155	150	42,5	226 296	3080
VKK3-110/135	30114	380	324	20	80	100	190	155	55	265 335	3470

Assembly for VKK3 clamp fastening to MSP mounting profile



Specification for 1 assembly*:

Pos.	Name	Articl number	Meas. unit	Q-ty	Unit weight, kg
1	VKK3 high-voltage cable clamp		pc.	1	
2	Threaded rod, M16, zinc plated (L=300mm)	20238	pc.	2	0,400
3	Hexagon nut, M16, zinc plated	20263	pc.	8	0,038
4	Flat washer, A17, zinc plated	20253	pc.	6	0,011
5	Mounting washer, MSSH-17	20206	pc.	2	0,080
6	Mounting nut, MSG-M16	20228	pc.	2	0,041

* Metalware for fastening the device to bearing metalwork are not included into the delivery package and are ordered individually.

CABLE CLAMPS

Silicone sealant, PST-80, art. 30115

Application

PST-80 gasket is used by mounting a cable vertically to increase friction and prevent the cable from slipping down.

Material

Gaskets are made of organic-silicon rubber (silicone).

Operating conditions

Climatic version according to U, UKHL 1, placement categories 1 and 2 according to GOST 15150-69. Applications include surrounding air temperature from minus 60°C to plus 60°C. The product is notable for resistance to weather elements, mineral oil and other petrochemicals, solar and UV radiation, to ozone effects.

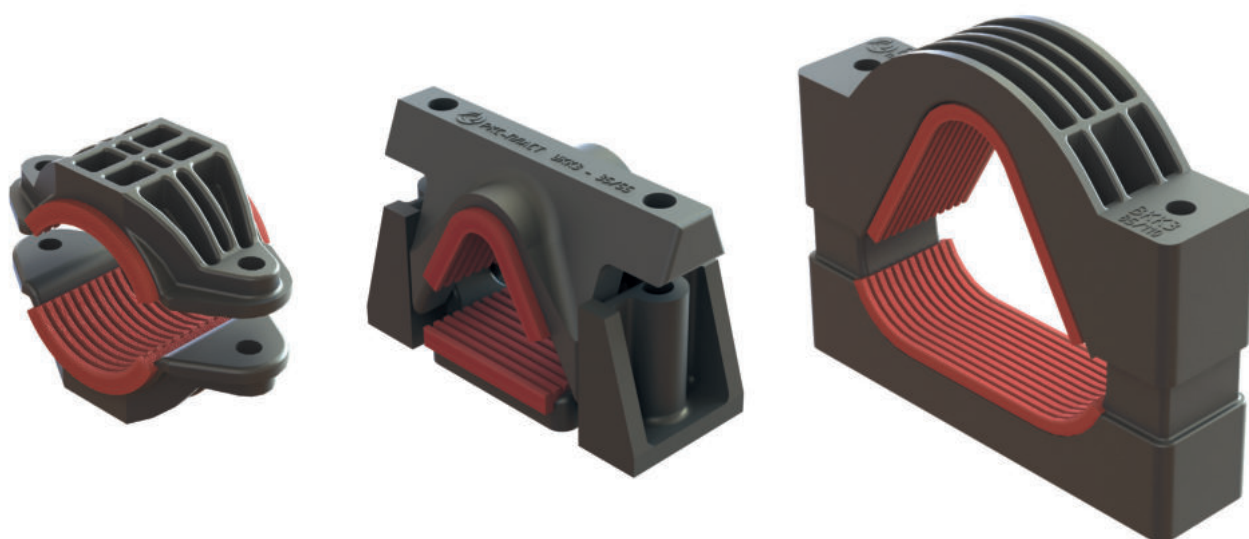
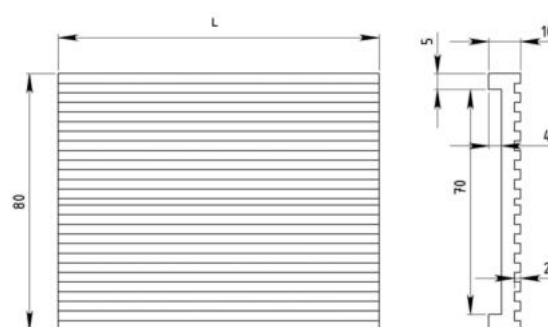
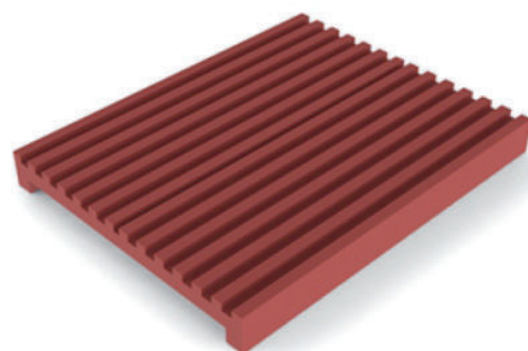
Fire safety

The gasket is made of noncombustible material.

Consumption

Order in meters with allowing for one clamp:

- VKK series - 0.2 m;
- UKK3 series - 0.3 m;
- VKK3 series - 0.4 m.



LPZS (signaling and protective polymer sheets)

Application

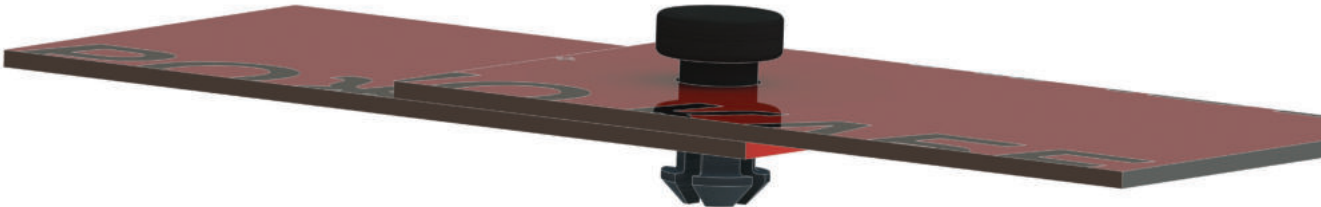
LPZS are purposed for protecting cables and joints from mechanical damages. They signal about having a cable line in there. They are applicable for the 1-500 kV cable lines.

LPZS are HDPE plates with size 1500x250x4 mm (for cables up to 35 kV) and 1500x500x8 mm (for cables above 35 kV) with one hole (two and more when necessary) on both ends. Subject to a customer approval, LPZS size can be changed. LPZS surface is covered with film with warnings.



In order to enhance the cable protection level and for purposes of better mountability LPZS are to be joined into a single structure. To join LPZS among themselves, special fastening elements are to be used (supplied in a delivery package together with LPZS). The fastening elements are manufactured from the same material as the plates in order to achieve maximal facilitation of mounting. When using these clamps, mounting can be performed by one worker only without employing special tools.

Name	Articl number	Length, mm	Width, mm	Thicknes, mm	Impact strength, MPa	Tensile strength, MPa	Frost resistance °C
LPZS	11001	1500	250	4	41,9	20	– 60
	11002	1500	500	8	41,9	20	– 60

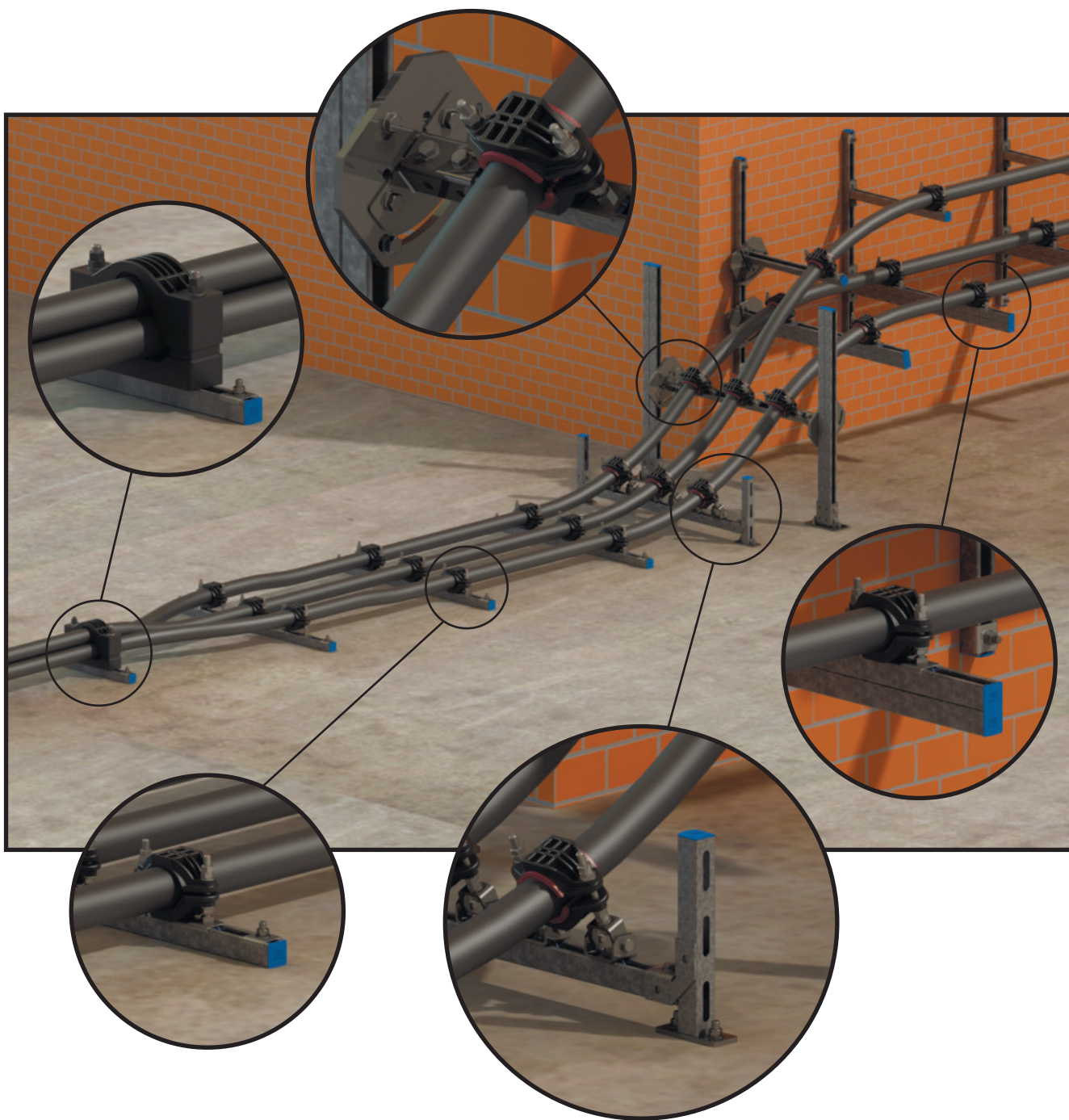


MS MOUNTING SYSTEM

MS mounting system

MS mounting system is designed for medium and heavy loads.

The system is notable for particular versatility and wide range of application due to a great variety of profiles, connecting and fastening elements.



MS MOUNTING SYSTEM

MSP mounting profiles

Advantages:

- high bearing capacity;
- convenient and quick mounting due to specially designed connection types;
- high corrosion resistance.

Technical data:

Material:

St3sp according to GOST 380; 08ps according to GOST 1050-88;

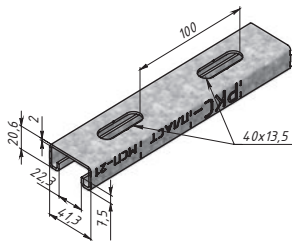
- plating: hot zinc plating (H), 40-200 mkm. according to GOST 9.307-89;
- plating: cold zinc plating (C), 10-20 mkm. according to GOST 9.301-86. Allowable bending force for each profile size is shown in appendix.

For additional information please contact "RKS-plast" engineering office.

Single mounting profiles

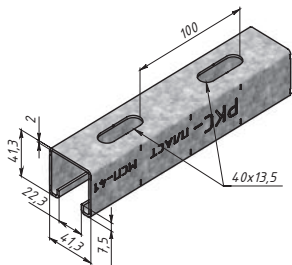
MSP-21 mounting profile

Name	Article	Height, mm	Length, mm	Steel thickness, mm	Weight l/m, kg
MSP-21 -H mounting profile, 6m	21101	21	6000	2*	1,48
MSP-21-C mounting profile, 6m	23101	21	6000	2*	1,48



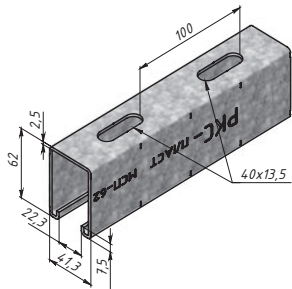
MSP-41 mounting profile

Name	Article	Height, mm	Length, mm	Steel thickness, mm	Weight l/m, kg
MSP-41-H mounting profile, 6m	21111	41	6000	2*	2,09
MSP-41-C mounting profile, 6m	23111	41	6000	2*	2,09



MSP-62 mounting profile

Name	Article	Height, mm	Length, mm	Steel thickness, mm	Weight l/m, kg
MSP-62-H mounting profile, 6m	21121	62	6000	2,5	3,38
MSP-62-C mounting profile, 6m	23121	62	6000	2,5	3,38



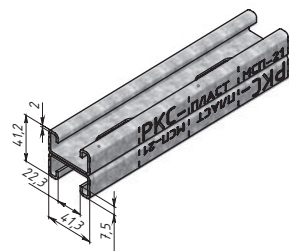
* it is possible to manufacture profiles with a thickness of 2.5 mm steel on request.

MS MOUNTING SYSTEM

Double mounting profiles

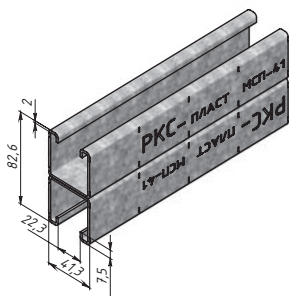
Advantages:

- high bearing capacity;
- convenient and quick mounting due to specially designed connection types;
- easy mounting in two directions.



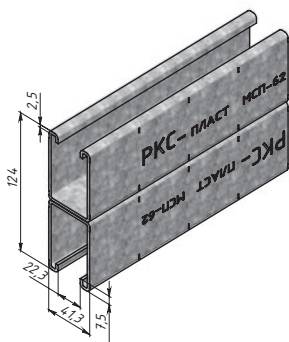
MSP-21D mounting profile

Name	Article	Height, mm	Length, mm	Steel thickness, mm	Weight l/m, kg
MSP-21D-H mounting profile, 6m	21131	41	6000	2*	2,96
MSP-21D-C mounting profile, 6m	23131	41	6000	2*	2,96



MSP-41D mounting profile

Name	Article	Height, mm	Length, mm	Steel thickness, mm	Weight l/m, kg
MSP-41-H mounting profile, 6m	21141	83	6000	2*	4,25
MSP-41-C mounting profile, 6m	23141	83	6000	2*	4,25



MSP-124 mounting profile

Name	Article	Height, mm	Length, mm	Steel thickness, mm	Weight l/m, kg
MSP-62-H mounting profile, 6m	21151	62	6000	2,5	6,76
MSP-62-C mounting profile, 6m	23151	62	6000	2,5	6,76

* it is possible to manufacture profiles with a thickness of 2.5 mm steel on request.

Technical features

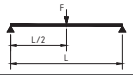
 Type	Steel allowable stress b_{allow} , N/mm ²	Profile weight l/m, kg	Profile crossection, cm ²	Inertia moment, cm ⁴		Resisting moment, cm ³	
				I_y	I_z	W_y	W_z
MSP-21	188	1,48	1,73	0,92	4,38	0,85	2,13
MSP-41		2,09	2,54	5,37	7,32	2,54	3,55
MSP-62		3,38	4,19	17,21	12,93	5,67	6,31
MSP-21D		2,96	3,46	4,98	8,78	2,42	4,25
MSP-41D		4,25	5,08	30,69	14,67	7,43	7,10
MSP-124		6,76	8,38	111,75	25,86	18,03	12,61

MS MOUNTING SYSTEM

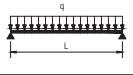
Maximum loads on MSP mounting profile

The following technical characteristics are valid for static loads.
All figures are calculated for steel allowable stress equal 188 N/mm² and correspond with maximal allowable bending L/200.

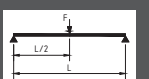
Maximum concentrated load, kN

Profile							
Length, mm (L)		500	1000	1500	2000	2500	3000
MSP-21		1,23	0,45	0,20	0,11	0,07	0,05
MSP-41		3,54	1,77	1,11	0,63	0,40	0,28
MSP-62		8,11	4,06	2,70	2,03	1,39	0,96
MSP-21D		3,64	1,82	1,12	0,63	0,40	0,28
MSP-41D		11,18	5,59	3,73	2,79	2,24	1,72
MSP-124		27,11	13,55	9,04	6,78	5,42	4,52

Maximum distributed load, kN/m

Profile							
Length, mm (L)		500	1000	1500	2000	2500	3000
MSP-21		4,93	0,72	0,21	0,09	0,05	0,03
MSP-41		14,16	3,54	1,19	0,50	0,26	0,15
MSP-62		32,46	8,11	3,61	1,73	0,89	0,52
MSP-21D		14,54	3,64	1,19	0,50	0,26	0,15
MSP-41D		44,70	11,18	4,97	2,79	1,58	0,92
MSP-124		108,43	27,11	12,05	6,78	4,34	3,01

Maximum length of the profile under concentrated load, mm

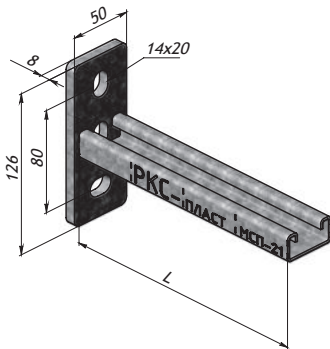
Load on the profile, kN (F)							
		MSP-21	MSP-41	MSP-62	MSP-21D	MSP-41D	MSP-124
0,25		1300	3150	5800	3100	7800	15000
0,50		900	2200	4100	2200	5500	10600
0,75		750	1800	3400	1800	4500	8600
1,00		600	1550	2900	1550	3900	7500
1,50		400	1150	2400	1200	3200	6100
2,00		300	850	2000	900	2700	5300
2,50		240	700	1600	720	2200	4700
3,00		150	580	1350	600	1850	4300
4,00		440	440	1000	450	1350	3300
5,00		-	350	800	360	1100	2700
6,00		-	290	670	300	930	2250
7,00		-	250	570	250	790	1900
8,00		-	200	500	220	690	1650

MS MOUNTING SYSTEM

MSK cantilevers

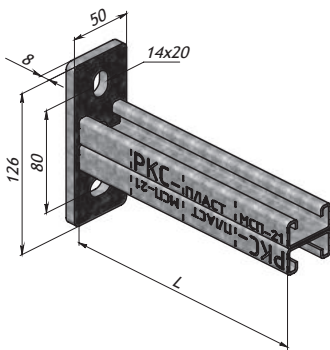
Technical data:

- St3sp according to GOST 380; 08ps according to GOST 1050-88;
- plating: hot zinc plating (H), 40-200 mkm. according to GOST 9.307-89.



MSK-21 cantilever

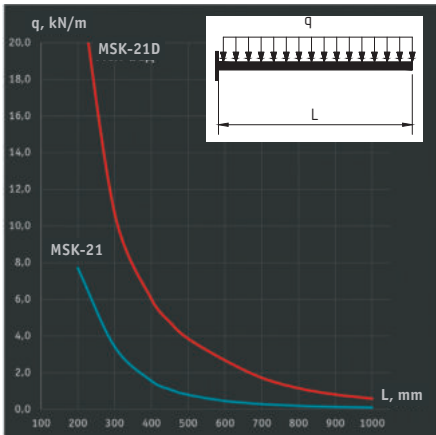
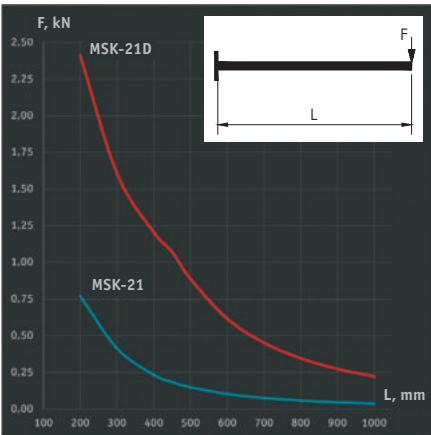
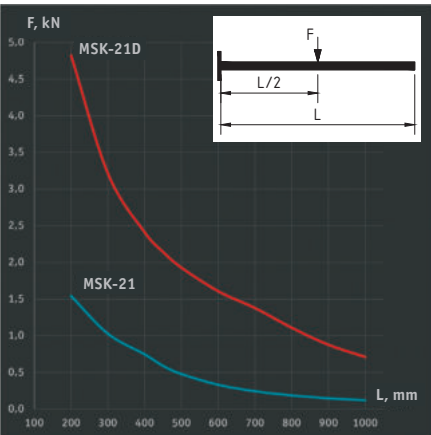
Name	Article	Profile	Profile length L, mm	Weight g/pc.
MSK-21/100-H cantilever	21201-010	MSP-21-H	100	500
MSK-21/200-H cantilever	21201-020	MSP-21-H	200	640
MSK-21/300-H cantilever	21201-030	MSP-21-H	300	790
MSK-21/400-H cantilever	21201-040	MSP-21-H	400	940
MSK-21/500-H cantilever	21201-050	MSP-21-H	500	1090
MSK-21/600-H cantilever	21201-060	MSP-21-H	600	1240
MSK-21/700-H cantilever	21201-070	MSP-21-H	700	1390
MSK-21/800-H cantilever	21201-080	MSP-21-H	800	1530
MSK-21/900-H cantilever	21201-090	MSP-21-H	900	1680
MSK-21/1000-H cantilever	21201-100	MSP-21-H	1000	1830



MSK-21D cantilever

Name	Article	Profile	Profile length L, mm	Weight g/pc.
MSK-21D/100-H cantilever	21226-010	MSP-21D-H	100	640
MSK-21D/200-H cantilever	21226-020	MSP-21D-H	200	940
MSK-21D/300-H cantilever	21226-030	MSP-21D-H	300	1240
MSK-21D/400-H cantilever	21226-040	MSP-21D-H	400	1530
MSK-21D/500-H cantilever	21226-050	MSP-21D-H	500	1830
MSK-21D/600-H cantilever	21226-060	MSP-21D-H	600	2130
MSK-21D/700-H cantilever	21226-070	MSP-21D-H	700	2420
MSK-21D/800-H cantilever	21226-080	MSP-21D-H	800	2720
MSK-21D/900-H cantilever	21226-090	MSP-21D-H	900	3020
MSK-21D/1000-H cantilever	21226-100	MSP-21D-H	1000	3310

Technical features of MSK-21 and MSK-21D cantilevers



Specific technical characteristics are valid for static loads.

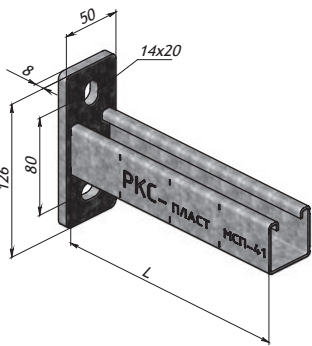
All figures are calculated for steel allowable stress equal 188 N/mm² and correspond with maximal allowable bending L/200.

MS MOUNTING SYSTEM

MSK cantilevers

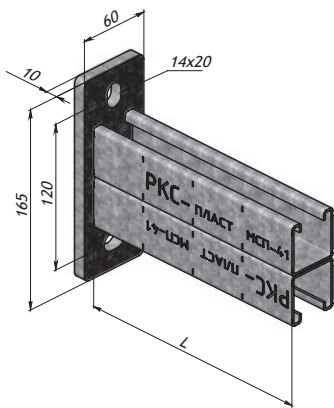
MSK-41 cantilever

Name	Article	Profile	Profile length L, mm	Weight g/pc.
MSK-41/100-H cantilever	21211-010	MSP-41-H	100	590
MSK-41/200-H cantilever	21211-020	MSP-41-H	200	800
MSK-41/300-H cantilever	21211-030	MSP-41-H	300	1000
MSK-41/400-H cantilever	21211-040	MSP-41-H	400	1210
MSK-41/500-H cantilever	21211-050	MSP-41-H	500	1420
MSK-41/600-H cantilever	21211-060	MSP-41-H	600	1620
MSK-41/700-H cantilever	21211-070	MSP-41-H	700	1840
MSK-41/800-H cantilever	21211-080	MSP-41-H	800	2040
MSK-41/900-H cantilever	21211-090	MSP-41-H	900	2250
MSK-41/1000-H cantilever	21211-100	MSP-41-H	1000	2460

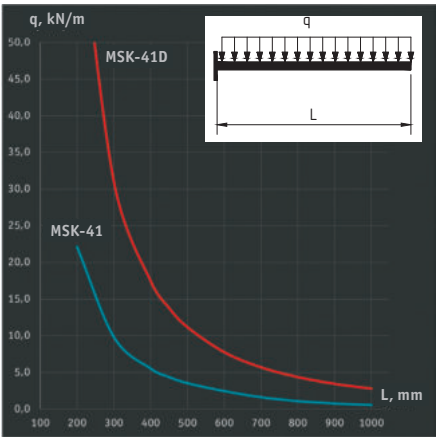
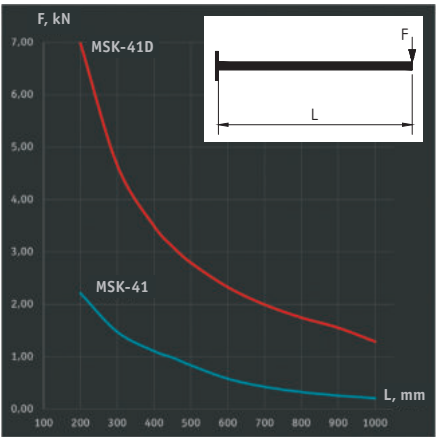
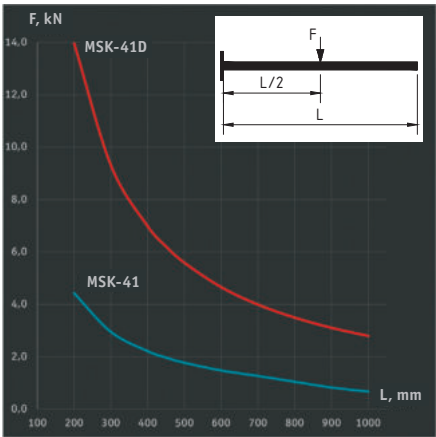


MSK-41 D cantilever

Name	Article	Profile	Profile length L, mm	Weight g/pc.
MSK-41D/100-H cantilever	21236-010	MSP-41D-H	100	1110
MSK-41D/200-H cantilever	21236-020	MSP-41D-H	200	1530
MSK-41D/300-H cantilever	21236-030	MSP-41D-H	300	1950
MSK-41D/400-H cantilever	21236-040	MSP-41D-H	400	2380
MSK-41D/500-H cantilever	21236-050	MSP-41D-H	500	2800
MSK-41D/600-H cantilever	21236-060	MSP-41D-H	600	3220
MSK-41D/700-H cantilever	21236-070	MSP-41D-H	700	3640
MSK-41D/800-H cantilever	21236-080	MSP-41D-H	800	4070
MSK-41D/900-H cantilever	21236-090	MSP-41D-H	900	4490
MSK-41D/1000-H cantilever	21236-100	MSP-41D-H	1000	4920



Technical features of MSK-41 and MSK-21D cantilevers

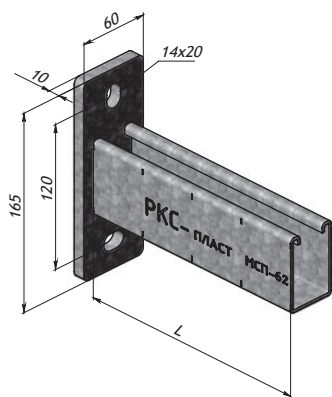


Specific technical characteristics are valid for static loads.

All figures are calculated for steel allowable stress equal 188 N/mm² and correspond with maximal allowable bending L/200.

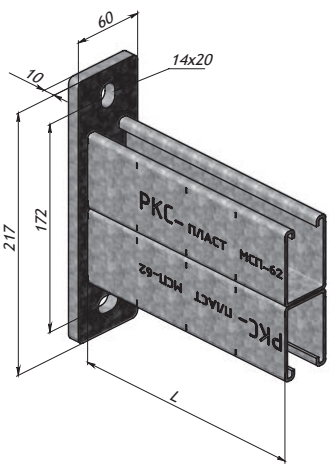
MS MOUNTING SYSTEM

MSK cantilevers



MSK-62 cantilever

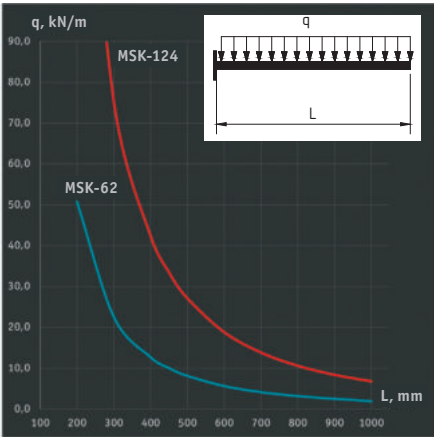
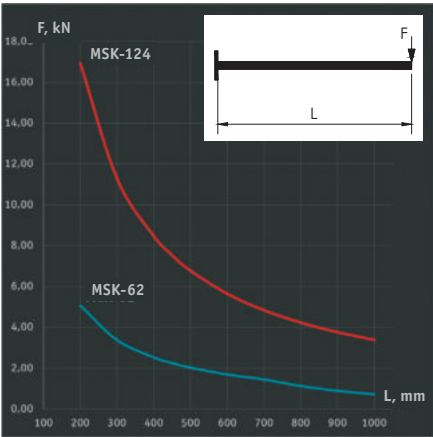
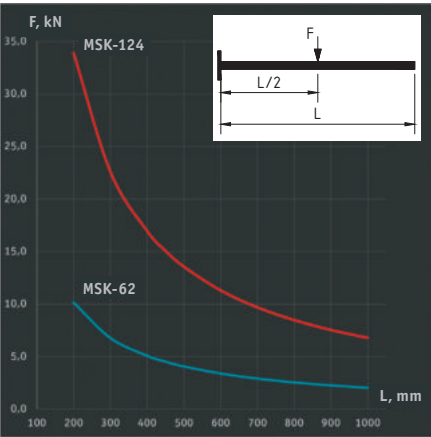
Name	Article	Profile	Profile length L, mm	Weight g/pc.
MSK-62/100-H cantilever	21221-010	MSP-62-H	100	910
MSK-62/200-H cantilever	21221-020	MSP-62-H	200	1250
MSK-62/300-H cantilever	21221-030	MSP-62-H	300	1590
MSK-62/400-H cantilever	21221-040	MSP-62-H	400	1930
MSK-62/500-H cantilever	21221-050	MSP-62-H	500	2270
MSK-62/600-H cantilever	21221-060	MSP-62-H	600	2610
MSK-62/700-H cantilever	21221-070	MSP-62-H	700	2960
MSK-62/800-H cantilever	21221-080	MSP-62-H	800	3300
MSK-62/900-H cantilever	21221-090	MSP-62-H	900	3640
MSK-62/1000-H cantilever	21221-100	MSP-62-H	1000	3980



MSK-124 cantilever

Name	Article	Profile	Profile length L, mm	Weight g/pc.
MSK-124/100-H cantilever	21241-010	MSP-124-H	100	1600
MSK-124/200-H cantilever	21241-020	MSP-124-H	200	2270
MSK-124/300-H cantilever	21241-030	MSP-124-H	300	2940
MSK-124/400-H cantilever	21241-040	MSP-124-H	400	3610
MSK-124/500-H cantilever	21241-050	MSP-124-H	500	4270
MSK-124/600-H cantilever	21241-060	MSP-124-H	600	4940
MSK-124/700-H cantilever	21241-070	MSP-124-H	700	5610
MSK-124/800-H cantilever	21241-080	MSP-124-H	800	6270
MSK-124/900-H cantilever	21241-090	MSP-124-H	900	6940
MSK-124/1000-H cantilever	21241-100	MSP-124-H	1000	7620

Technical features of MSK-62 and MSK-124 cantilevers



Specific technical characteristics are valid for static loads.

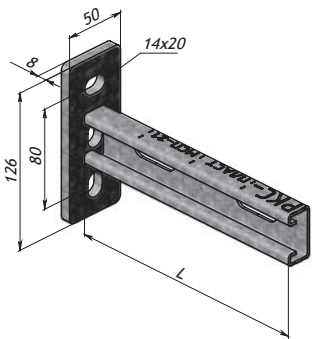
All figures are calculated for steel allowable stress equal 188 N/mm² and correspond with maximal allowable bending L/200.

MS MOUNTING SYSTEM

MSK cantilevers

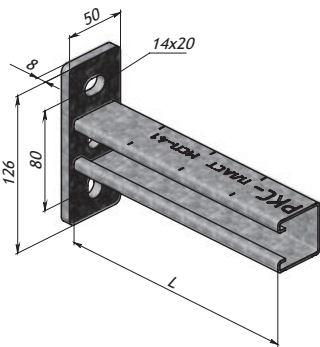
MSK-21-P cantilever

Name	Article	Profile	Profile length L, mm	Weight g/pc.
MSK-21/100P-H cantilever	21206-010	MSP-21-H	100	500
MSK-21/200P-H cantilever	21206-020	MSP-21-H	200	640
MSK-21/300P-H cantilever	21206-030	MSP-21-H	300	790
MSK-21/400P-H cantilever	21206-040	MSP-21-H	400	940
MSK-21/500P-H cantilever	21206-050	MSP-21-H	500	1090
MSK-21/600P-H cantilever	21206-060	MSP-21-H	600	1240
MSK-21/700P-H cantilever	21206-070	MSP-21-H	700	1390
MSK-21/800P-H cantilever	21206-080	MSP-21-H	800	1530
MSK-21/900P-H cantilever	21206-090	MSP-21-H	900	1680
MSK-21/1000P-H cantilever	21206-100	MSP-21-H	1000	1830



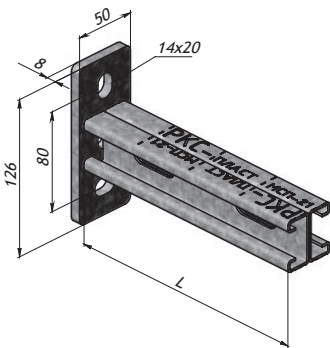
MSK-41-P cantilever

Name	Article	Profile	Profile length L, mm	Weight g/pc.
MSK-41/100P-H cantilever	21216-010	MSP-41-H	100	590
MSK-41/200P-H cantilever	21216-020	MSP-41-H	200	800
MSK-41/300P-H cantilever	21216-030	MSP-41-H	300	1000
MSK-41/400P-H cantilever	21216-040	MSP-41-H	400	1210
MSK-41/500P-H cantilever	21216-050	MSP-41-H	500	1420
MSK-41/600P-H cantilever	21216-060	MSP-41-H	600	1620
MSK-41/700P-H cantilever	21216-070	MSP-41-H	700	1840
MSK-41/800P-H cantilever	21216-080	MSP-41-H	800	2040
MSK-41/900P-H cantilever	21216-090	MSP-41-H	900	2250
MSK-41/1000P-H cantilever	21216-100	MSP-41-H	1000	2460



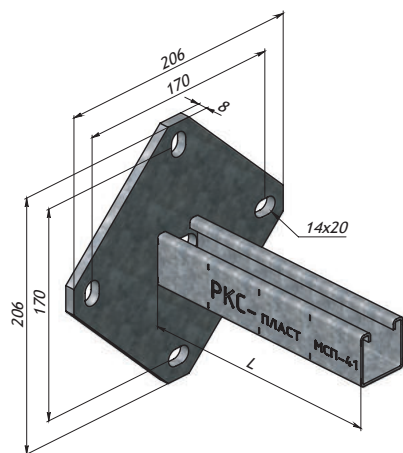
MSK-21D-P cantilever

Name	Article	Profile	Profile length L, mm	Weight g/pc.
MSK-21D/100P-H cantilever	21231-010	MSP-21D-H	100	640
MSK-21D/200P-H cantilever	21231-020	MSP-21D-H	200	940
MSK-21D/300P-H cantilever	21231-030	MSP-21D-H	300	1240
MSK-21D/400P-H cantilever	21231-040	MSP-21D-H	400	1530
MSK-21D/500P-H cantilever	21231-050	MSP-21D-H	500	1830
MSK-21D/600P-H cantilever	21231-060	MSP-21D-H	600	2130
MSK-21D/700P-H cantilever	21231-070	MSP-21D-H	700	2420
MSK-21D/800P-H cantilever	21231-080	MSP-21D-H	800	2720
MSK-21D/900P-H cantilever	21231-090	MSP-21D-H	900	3020
MSK-21D/1000P-H cantilever	21231-100	MSP-21D-H	1000	3310



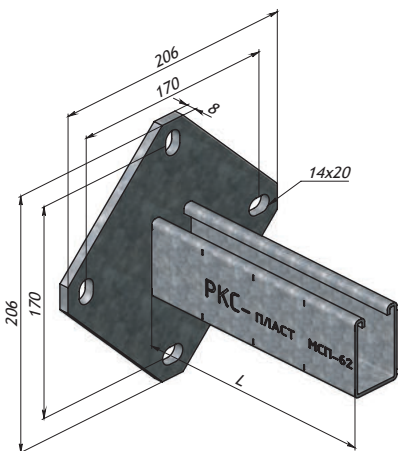
MS MOUNTING SYSTEM

MSK-U cantilevers



MSK-U-41 cantilever

Name	Article	Profile	Profile length L, mm	Weight g/pc.
MSK-U-41/100-H	21256-010	MSP-41-H	100	1670
MSK-U-41/200-H	21256-020	MSP-41-H	200	1880
MSK-U-41/300-H	21256-030	MSP-41-H	300	2090
MSK-U-41/400-H	21256-040	MSP-41-H	400	2300
MSK-U-41/500-H	21256-050	MSP-41-H	500	2500
MSK-U-41/600-H	21256-060	MSP-41-H	600	2710
MSK-U-41/700-H	21256-070	MSP-41-H	700	2920
MSK-U-41/800-H	21256-080	MSP-41-H	800	3130
MSK-U-41/900-H	21256-090	MSP-41-H	900	3330
MSK-U-41/1000-H	21256-100	MSP-41-H	1000	3540
MSK-U-41/1100-H	21256-110	MSP-41-H	1100	3750
MSK-U-41/1200-H	21256-120	MSP-41-H	1200	3960
MSK-U-41/1300-H	21256-130	MSP-41-H	1300	4170
MSK-U-41/1400-H	21256-140	MSP-41-H	1400	4370
MSK-U-41/1500-H	21256-150	MSP-41-H	1500	4580



MSK-U-62 cantilever

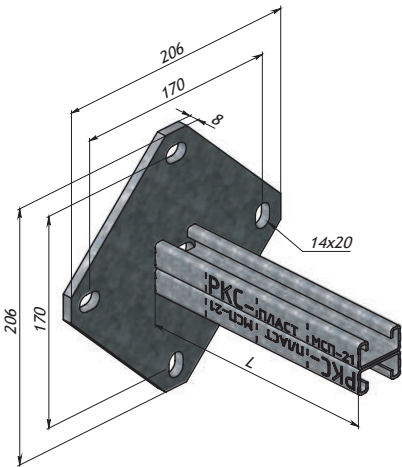
Name	Article	Profile	Profile length L, mm	Weight g/pc.
MSK-U-62/100-H	21261-010	MSP-62-H	100	1810
MSK-U-62/200-H	21261-020	MSP-62-H	200	2140
MSK-U-62/300-H	21261-030	MSP-62-H	300	2480
MSK-U-62/400-H	21261-040	MSP-62-H	400	2810
MSK-U-62/500-H	21261-050	MSP-62-H	500	3150
MSK-U-62/600-H	21261-060	MSP-62-H	600	3480
MSK-U-62/700-H	21261-070	MSP-62-H	700	3810
MSK-U-62/800-H	21261-080	MSP-62-H	800	4150
MSK-U-62/900-H	21261-090	MSP-62-H	900	4480
MSK-U-62/1000-H	21261-100	MSP-62-H	1000	4820
MSK-U-62/1100-H	21261-110	MSP-62-H	1100	5150
MSK-U-62/1200-H	21261-120	MSP-62-H	1200	5480
MSK-U-62/1300-H	21261-130	MSP-62-H	1300	5820
MSK-U-62/1400-H	21261-140	MSP-62-H	1400	6150
MSK-U-62/1500-H	21261-150	MSP-62-H	1500	6490

MS MOUNTING SYSTEM

MSK-U cantilevers

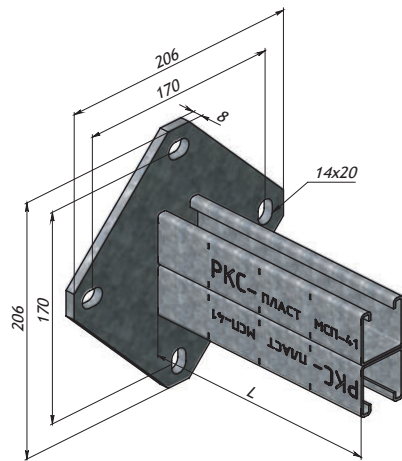
MSK-U-21D cantilever

Name	Article	Profile	Profile length L, mm	Weight g/pc.
MSK-U-21D/100-H	21266-010	MSP-21D-H	100	1770
MSK-U-21D/200-H	21266-020	MSP-21D-H	200	2060
MSK-U-21D/300-H	21266-030	MSP-21D-H	300	2340
MSK-U-21D/400-H	21266-040	MSP-21D-H	400	2630
MSK-U-21D/500-H	21266-050	MSP-21D-H	500	2910
MSK-U-21D/600-H	21266-060	MSP-21D-H	600	3200
MSK-U-21D/700-H	21266-070	MSP-21D-H	700	3490
MSK-U-21D/800-H	21266-080	MSP-21D-H	800	3770
MSK-U-21D/900-H	21266-090	MSP-21D-H	900	4060
MSK-U-21D/1000-H	21266-100	MSP-21D-H	1000	4340
MSK-U-21D/1100-H	21266-110	MSP-21D-H	1100	4630
MSK-U-21D/1200-H	21266-120	MSP-21D-H	1200	4920
MSK-U-21D/1300-H	21266-130	MSP-21D-H	1300	5200
MSK-U-21D/1400-H	21266-140	MSP-21D-H	1400	5490
MSK-U-21D/1500-H	21266-150	MSP-21D-H	1500	5770



MSK-U-41D cantilever

Name	Article	Profile	Profile length L, mm	Weight g/pc.
MSK-U-41D/100-H	21271-010	MSP-41D-H	100	1900
MSK-U-41D/200-H	21271-020	MSP-41D-H	200	2320
MSK-U-41D/300-H	21271-030	MSP-41D-H	300	2730
MSK-U-41D/400-H	21271-040	MSP-41D-H	400	3150
MSK-U-41D/500-H	21271-050	MSP-41D-H	500	3570
MSK-U-41D/600-H	21271-060	MSP-41D-H	600	3980
MSK-U-41D/700-H	21271-070	MSP-41D-H	700	4400
MSK-U-41D/800-H	21271-080	MSP-41D-H	800	4820
MSK-U-41D/900-H	21271-090	MSP-41D-H	900	5230
MSK-U-41D/1000-H	21271-100	MSP-41D-H	1000	5650
MSK-U-41D/1100-H	21271-110	MSP-41D-H	1100	6070
MSK-U-41D/1200-H	21271-120	MSP-41D-H	1200	6480
MSK-U-41D/1300-H	21271-130	MSP-41D-H	1300	6900
MSK-U-41D/1400-H	21271-140	MSP-41D-H	1400	7320
MSK-U-41D/1500-H	21271-150	MSP-41D-H	1500	7730
MSK-U-41D/1600-H	21271-160	MSP-41D-H	1600	8150
MSK-U-41D/1700-H	21271-170	MSP-41D-H	1700	8560
MSK-U-41D/1800-H	21271-180	MSP-41D-H	1800	8980
MSK-U-41D/1900-H	21271-190	MSP-41D-H	1900	9400
MSK-U-41D/2000-H	21271-200	MSP-41D-H	2000	9810



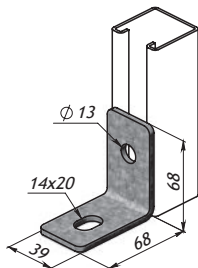
MS MOUNTING SYSTEM

MS0 piers

MS0 piers are used to connect the profile to various types of base materials.

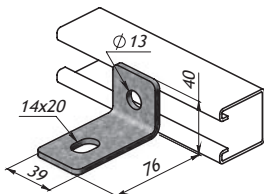
Technical data:

- St3sp material according to GOST 380;
- steel thickness: 4mm;
- plating: hot zinc plating (H), 40-200 mkm. according to GOST 9.307-89.



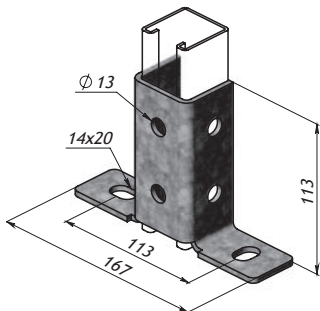
MS0-2 pier

Name	Article	For the profile	Weight, kg/pc.
MS0-2-H pier	21301	For all profile types	0,16



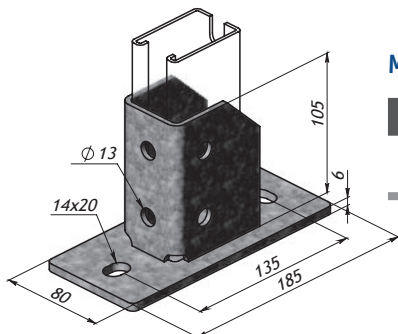
MS0-3 pier

Name	Article	For the profile	Weight, kg/pc.
MS0-3-H pier	21303	For all profile types	0,12



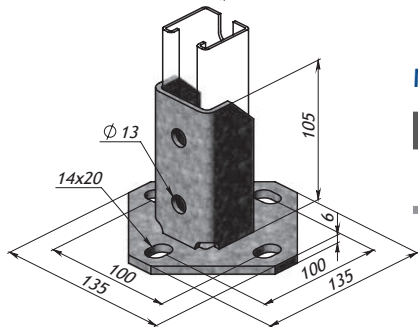
MS0-2/2 pier

Name	Article	For the profile	Weight, kg/pc.
MS0-2/2-H pier	21311	For all profile types	0,52



MS0-21-62 pier

Name	Article	For the profile	Weight, kg/pc.
MS0-21-62-H pier	21313	MSP-21, MSP-41, MSP-62, MSP-21D	1,24



MS0-21-62/45 pier

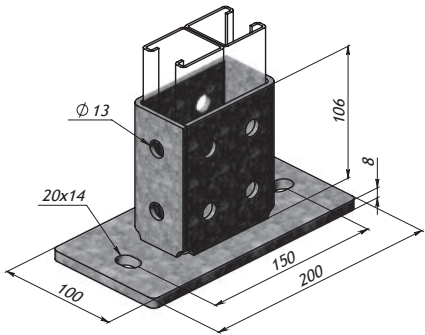
Name	Article	For the profile	Weight, kg/pc.
MS0-21-62/45-H pier	21315	MSP-21, MSP-41, MSP-62, MSP-21D	0,89

MS MOUNTING SYSTEM

MSO piers

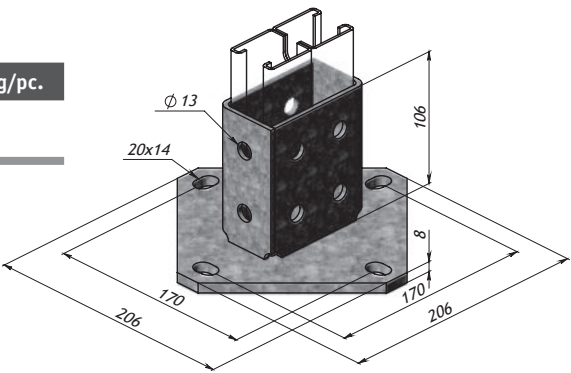
MSO-82 pier

Name	Article	For the profile	Weight, kg/pc.
MSO-82-H pier	21321	MSP-41D, 2xMSP-41, 2xMSP-21D	2,01



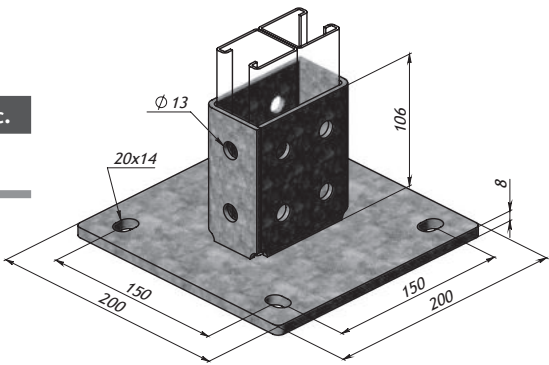
MSO-82/45 pier

Name	Article	For the profile	Weight, kg/pc.
MSO-82/45-H pier	21323	MSP-41D, 2xMSP-41, 2xMSP-21D	2,35



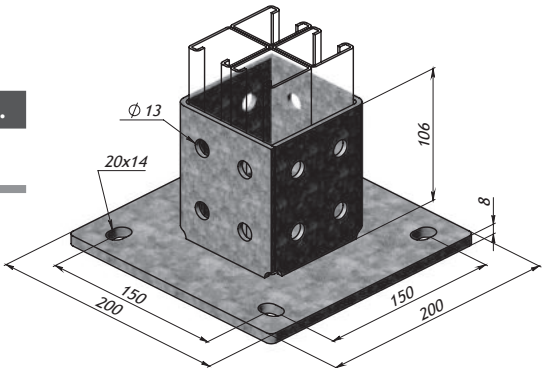
MSO-U-82 pier

Name	Article	For the profile	Weight, kg/pc.
MSO-U-82-H pier	21325	MSP-41D, 2xMSP-41, 2xMSP-21D	3,27



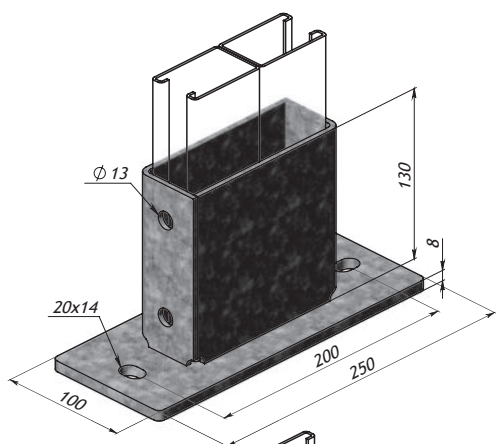
MSO-82D pier

Name	Article	For the profile	Weight, kg/pc.
MSO-82D-H pier	21331	2xMSP-41D	3,53



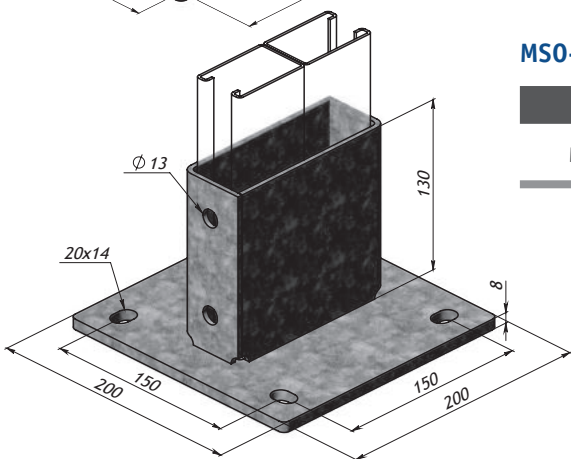
MS MOUNTING SYSTEM

MS0 piers



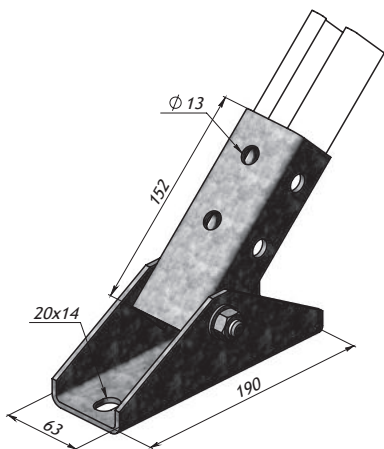
MS0-124 pier

Name	Article	For the profile	Weight, kg/pc.
MS0-124-H pier	21341	MSP-124	2,96



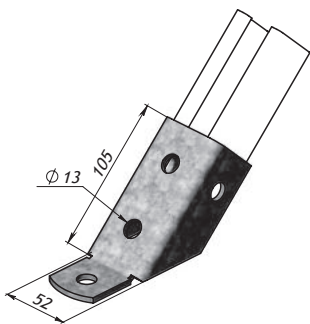
MS0-U-124 pier

Name	Article	For the profile	Weight, kg/pc.
MS0-U-124-H pier	21345	MSP-124	3,87



MS0-P pier

Name	Article	For the profile	Weight, kg/pc.
MS0-P-H pier	21351	MSP-21, MSP-41, MSP-21D	1,48



MS0-45 pier

Name	Article	For the profile	Weight, kg/pc.
MS0-45-H pier	21356	MSP-21, MSP-41, MSP-21D	0,41

MS MOUNTING SYSTEM

MSD connectors

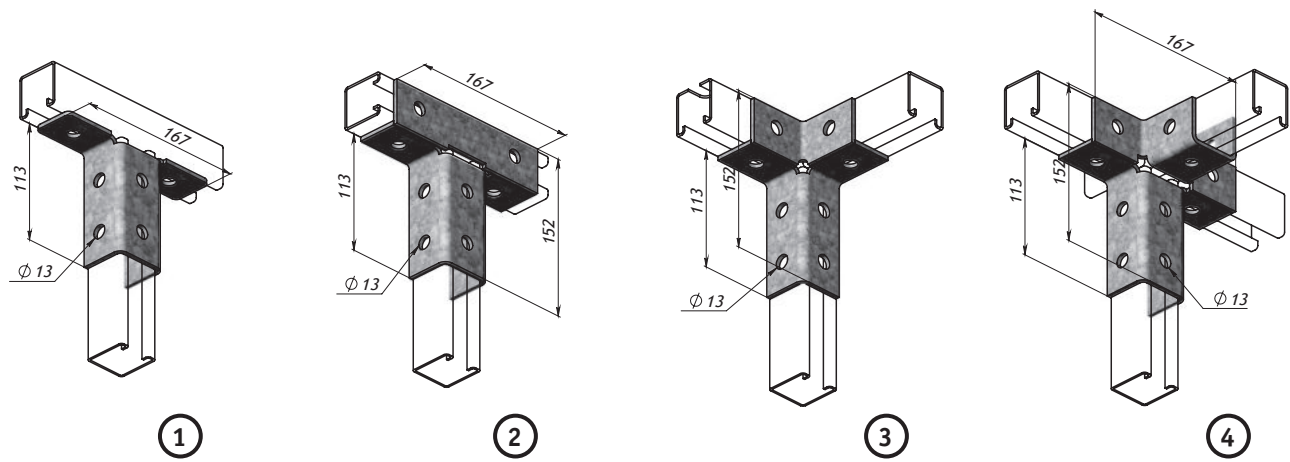
MSD connectors are applied to connect profiles to each other.

Technical data:

- St3sp material according to GOST 380;
- steel thickness: 4mm;
- plating: hot zinc plating (H), 40-200 mkm. according to GOST 9.307-89.

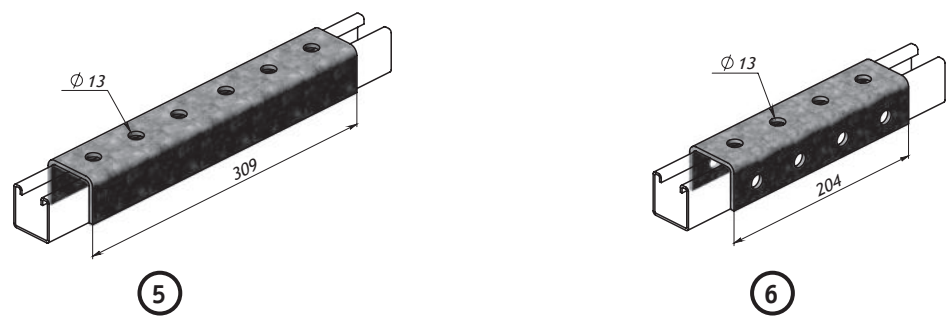
MSD connectors

Name	Article	Weight, kg/pc.	Drawing
MSD-2-H connector	21501	0,53	1
MSD-2/1-H connector	21503	0,74	2
MSD-3-H connector	21505	0,53	3
MSD-4-H connector	21507	0,9	4



MSD connectors

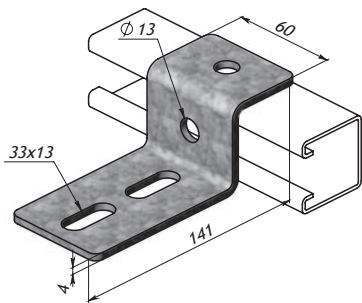
Name	Article	Weight, kg/pc.	Drawing
MSD-6-H connector	21511	1,18	5
MSD-12-H connector	21515	0,74	6



MSD-6 and MSD-12 connectors are applied to extend MSP profile.

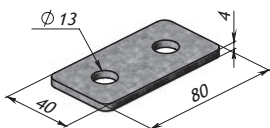
MS MOUNTING SYSTEM

MSD connectors



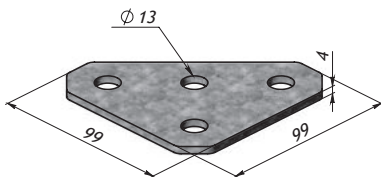
MSD-150 connector

Name	Article	Weight, kg/pc.
MSD-150-H connector	21521	0,31



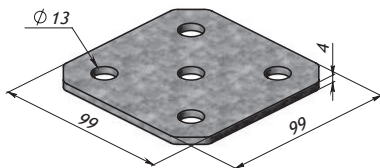
MSD-P-2 connector

Name	Article	Weight, kg/pc.
MSD-P-2-H connector	21531	0,09



MSD-P-3 connector

Name	Article	Weight, kg/pc.
MSD-P-3-H connector	21533	0,23



MSD-P-4 connector

Name	Article	Weight, kg/pc.
MSD-P-4-H connector	21535	0,31

MS MOUNTING SYSTEM

MSU angles

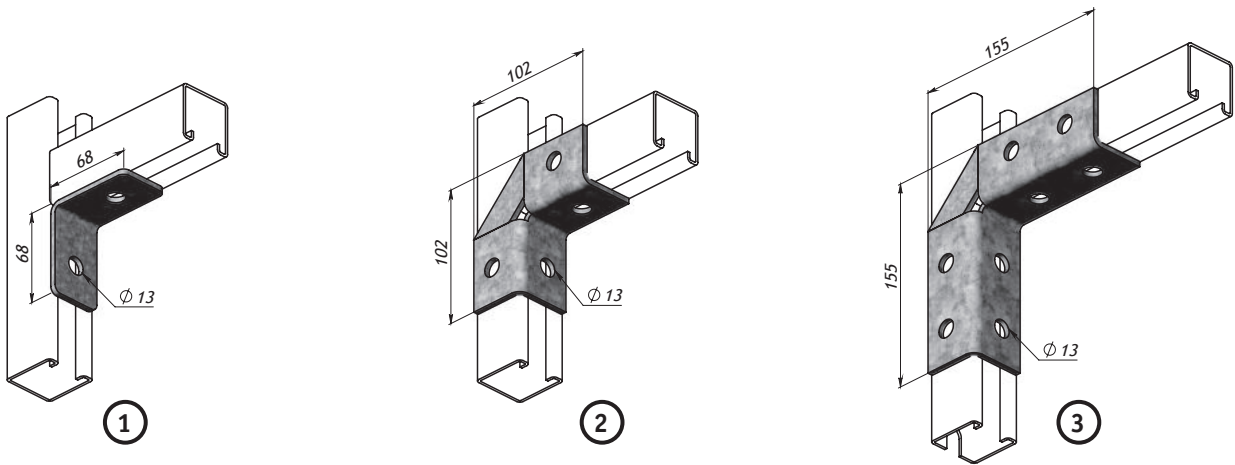
MSU angles are applied to connect profiles to each other.

Technical data:

- St3sp material according to GOST 380;
- steel thickness: 4mm;
- plating: hot zinc plating (H), 40-200 mkm. according to GOST 9.307-89.

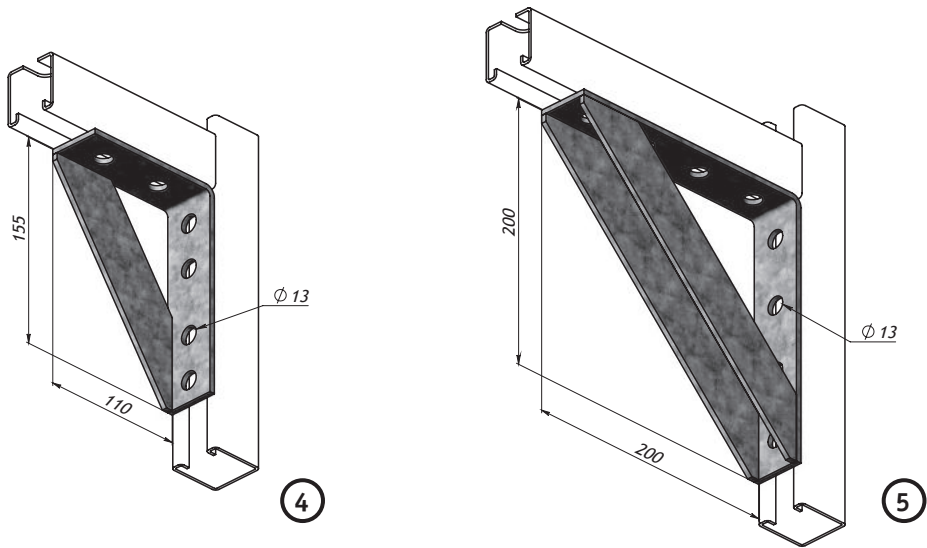
MSU angles

Name	Article	Weight, kg/pc.	Drawing
MSU-2/90-H angle	21401	0,16	1
MSU-4/90-H angle	21405	0,31	2
MSU-8/90-H angle	21409	0,54	3



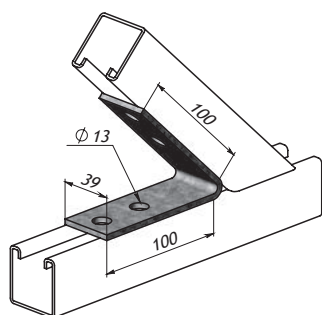
MSU-K angle bracket

Name	Article	Weight, kg/pc.	Drawing
MSU-K-H angle bracket	21411	0,49	4
MSU-K-2-H angle bracket	21413	1,05	5



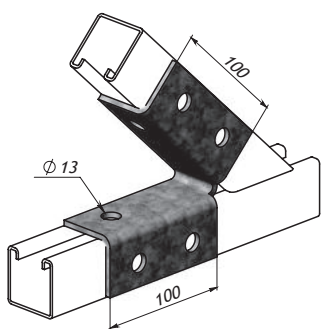
MS MOUNTING SYSTEM

MSU angles



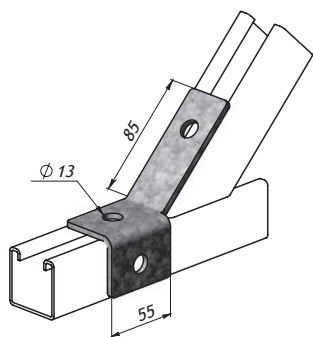
MSU-4/45 angles

Name	Article	Weight, kg/pc.
MSU-4/45-H angle	21421	0,24



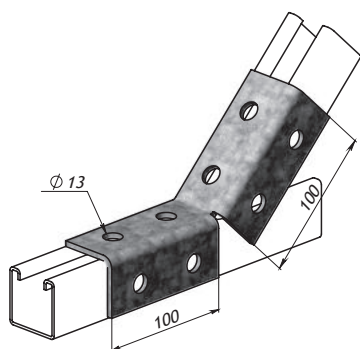
MSU-6/45 angles

Name	Article	Weight, kg/pc.
MSU-6/45-H angle	21425	0,48



MSU-3/135 angles

Name	Article	Weight, kg/pc.
MSU-3/135-H angle	21431	0,22



MSU-8/135 angles

Name	Article	Weight, kg/pc.
MSU-8/135-H angle	21435	0,49

MS MOUNTING SYSTEM

MSS connecting brackets

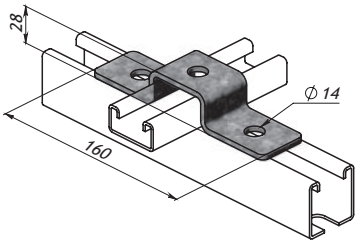
MSS connecting brackets are applied for connecting profiles to each other, as well as for mounting profiles to various types of base materials.

Technical data:

- St3sp material according to GOST 380;
- steel thickness: 4mm;
- plating: hot zinc plating (H), 40-200 mkm. according to GOST 9.307-89.

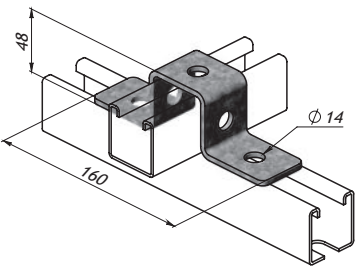
MSS-21 connecting bracket

Name	Article	For the profile	Weight, kg/pc.
MSS-21-H connecting bracket	21601	MSP-21	0,23



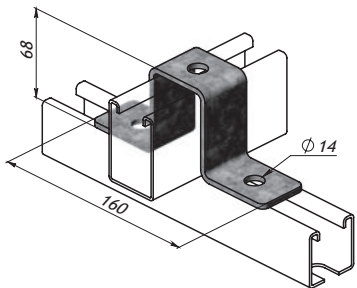
MSS-41 connecting bracket

Name	Article	For the profile	Weight, kg/pc.
MSS-41-H connecting bracket	21603	MSP-41, MSP-21D	0,28



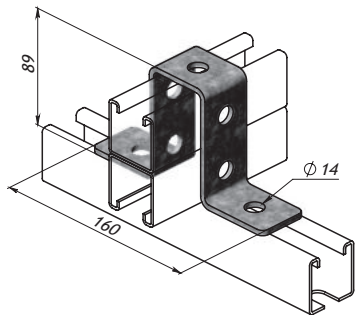
MSS-62 connecting bracket

Name	Article	For the profile	Weight, kg/pc.
MSS-62-H connecting bracket	21607	MSP-62	0,34



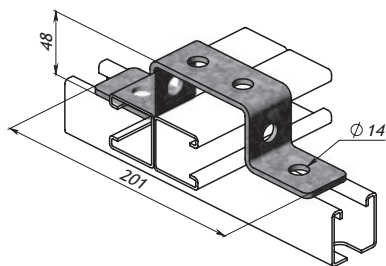
MSS-82 connecting bracket

Name	Article	For the profile	Weight, kg/pc.
MSS-82-H connecting bracket	21609	MSP-41D	0,36



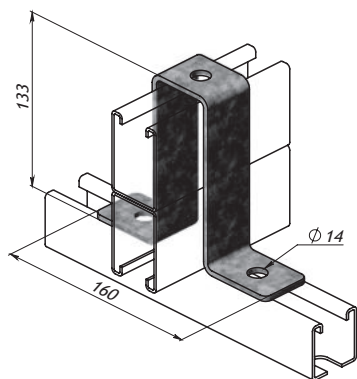
MS MOUNTING SYSTEM

MSS connecting brackets



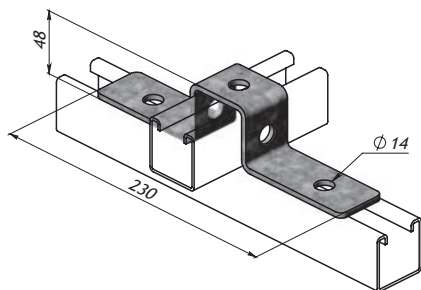
MSS-41D connecting bracket

Name	Article	For the profile	Weight, kg/pc.
MSS-41D -H connecting bracket	21611	2xMSP-41, MSP-41D	0,31



MSS-124 connecting bracket

Name	Article	For the profile	Weight, kg/pc.
MSS-124 -H connecting bracket	21613	MSP-124	0,48



MSS-A41 connecting bracket

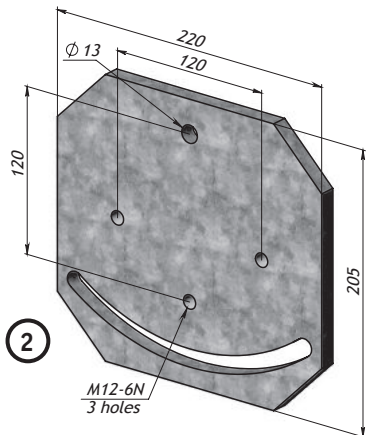
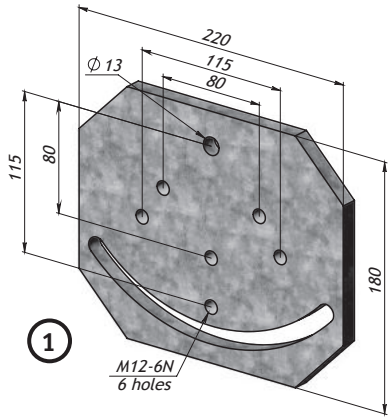
Name	Article	For the profile	Weight, kg/pc.
MSS-A41 -H connecting bracket	21621	MSP-41, MSP-21D	0,37

MSR turnplates

Technical data:

- St3sp material according to GOST 380;
- steel thickness: 12 mm;
- plating: hot zinc plating (H), 40-200 mkm. according to GOST 9.307-89.

Name	Article	Weight, kg/pc.	Drawing
MSR7-41-H turnplate	21741	2,96	1
MSR-82-H turnplate	21743	3,63	2

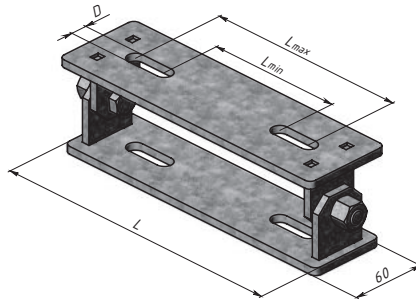


MSN hinges

Technical data:

- St3sp material according to GOST 380;
- steel thickness: 6 mm;
- plating: hot zinc plating (H), 40-200 mkm. according to GOST 9.307-89.

Name	Article	For fasteners	Weight, kg/pc.	MSN-M10-1-N hinge	Dimensions, mm		
					L _{min}	L _{max}	D
MSN-M10-1-H hinge	21735	RKK-25/40, RKK-40/60	1,27	165	51	99	11
MSN-M10-2-H hinge	21736	UKK-60	1,45	200	66	134	11
MSN-M12-1-H hinge	21737	UKK3-35/50, UKK3-35/55, VKK-65/90, VKK-85/105	1,75	235	108	162	13
MSN-M12-2-H hinge	21738	UKK3-40/70, VKK-100/125, VKK-125/150	2,06	285	158	212	13
MSN-M16-1-H hinge	21739	VKK-145/170, VKK3-65/90, VKK3-85/110	2,59	360	197	283	17
MSN-M16-2-H hinge	21740	VKK3-110/135	2,89	410	227	333	17



MS MOUNTING SYSTEM

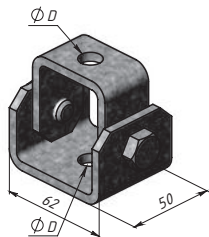
Accessories

MSN-U universal hinges

Technical data:

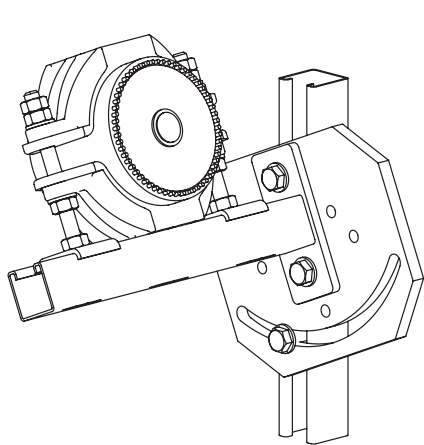
- St3sp material according to GOST 380;
- steel thickness: 5 mm;
- plating: cold zinc plating* (C), 10-20 mkm. according to GOST 9.301-86.

** it is possible to manufacture with hot zinc plating to order.*

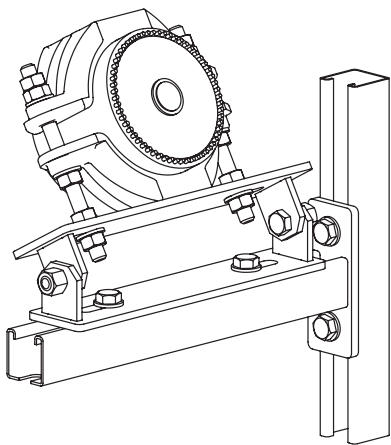


Name	Article	Weight, kg/pc.	D, mm
MSN-U-M12 universal hinge	21727	0,43	13
MSN-U-M16 universal hinge	21729	0,42	17

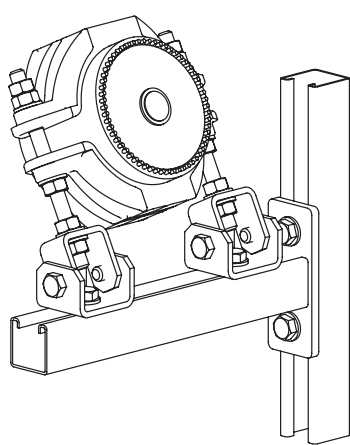
Examples of using elements to turn the cable



MSR turnplate



MSN hinge

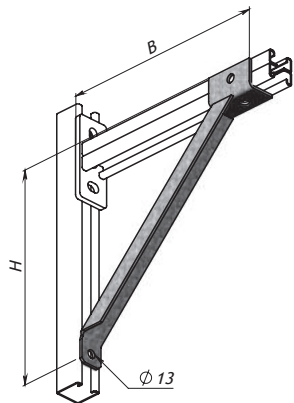


MSN-U universal hinges

MSK-K cantilever strut

Technical data:

- St3sp material according to GOST 380;
- steel thickness: 4 mm;
- plating: hot zinc plating (H), 40-200 mkm. according to GOST 9.307-89.



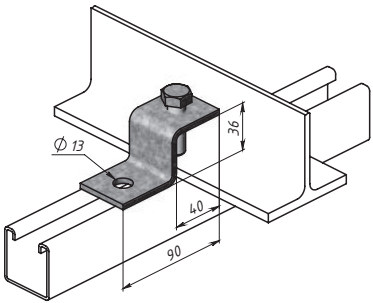
Name	Article	Weight, kg/pc.	B, mm	H, mm
MSK-K-328-H cantilever strut	21801	0,96	324	328
MSK-K-525-H cantilever strut	21803	1,56	524	528

MSB-2 girder clamp

Technical data:

- St3sp material according to GOST 380;
 - steel thickness: 4 mm;
 - plating: hot zinc plating (H), 40-200 mkm. according to GOST 9.307-89.
- Delivered complete with a clamp bolt.

Name	Article	Weight, kg/pc
MSB-2-H 21701 girder clamp	21701	0,19

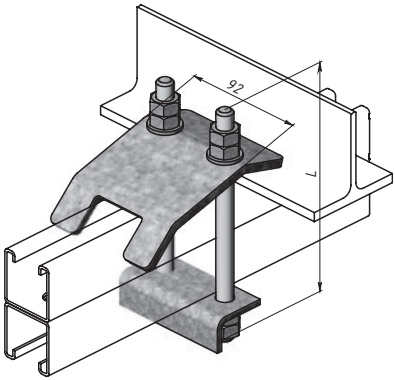


MSB girder clamp

Technical data:

- St3sp material according to GOST 380;
- plating: hot zinc plating (H), 40-200 mkm. according to GOST 9.307-89.

Name	Article	Weight, kg/pc.	L, mm
MSB-21-41-H girder clamp	21703	1,08	130
MSB-41-82-H girder clamp	21705	1,16	175
MSB-82-124-H girder clamp	21707	1,23	215

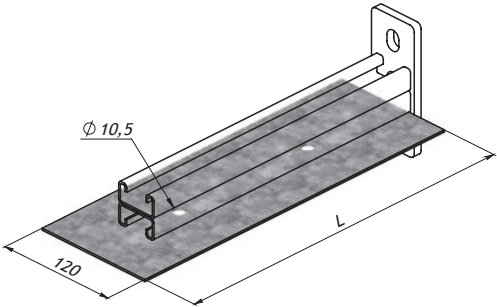


MSSA bearing plate

Technical data:

- St3sp material according to GOST 380;
- steel thickness: 2 mm;
- plating: hot zinc plating (H), 40-200 mkm. according to GOST 9.307-89.

Name	Article	Weight, kg/pc. L,	L, mm	N
MSAA-350x120-H bearing plate	21783	0,65	350	2
MSAA-500x120-H bearing plate	21785	0,93	500	3

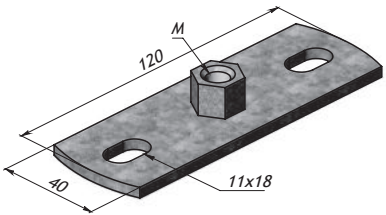


MGS2 bearing plate

Technical data:

- St3sp material according to GOST 380;
- steel thickness: 4 mm;
- plating: cold zinc plating* (C), 10-20 mkm. according to GOST 9.301-86.

Name	Article	Weight, kg/pc.	M thread
MGS2-M10 bearing plate	23793	0,15	M10
MGS2-M12 bearing plate	23795	0,16	M12
MGS2-M16 bearing plate	23797	0,19	M16



MS MOUNTING SYSTEM

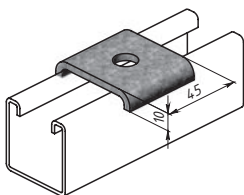
Accessories

MSSH mounting washer

Technical data:

- St3sp material according to GOST 380;
- steel thickness: 4 mm;
- plating: cold zinc plating* (C), 10-20 mkm. according to GOST 9.301-86.

** it is possible to manufacture with hot zinc plating to order.*



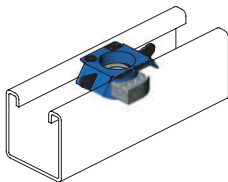
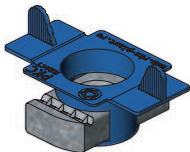
Name	Article	Pin hole	Weight, kg/pc.
MSSH-9 mounting washer	23713	M8	0,082
MSSH-11 mounting washer	23715	M10	0,081
MSSH-13 mounting washer	23717	M12	0,080
MSSH-17 mounting washer	23719	M16	0,076

MSG mounting nut

Technical data:

- St3sp material according to GOST 380;
- plating: cold zinc plating* (C), 10-20 mkm. according to GOST 9.301-86.

** it is possible to manufacture with hot zinc plating to order.*

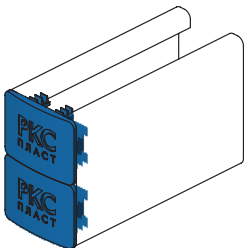


Name	Article	Thread	Weight, kg/pc.
MSG-M8 mounting nut	23753	M8	0,028
MSG-M10 mounting nut	23755	M10	0,035
MSG-M12 mounting nut	23757	M12	0,033
MSG-M16 mounting nut	23759	M16	0,062

MSE decoration cap

Technical data:

- material is polypropylene (PP) according to GOST 26996-86.



Name	Article	For the profile	Weight, kg/pc.
MSE-21 decoration cap	26763	MSP-21, MSP-21D	0,003
MSE-31 decoration cap	26764	MSP-62, MSP-124	0,005
MSE-41 decoration cap	26765	MSP-41, MSP-41D	0,006

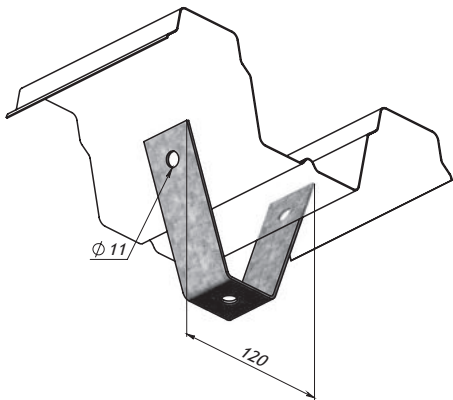
Accessories

PP corrugated deck suspension

Technical data:

- St3sp material according to GOST 380;
- steel thickness: 2 mm;
- plating: hot zinc plating (H), 40-200 mkm. according to GOST 9.307-89.

Name	Article	Weight, kg/pc.
PP-M10-N corrugated deck suspension	21815	0,16

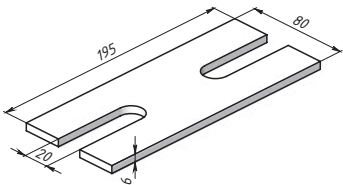


MSI-2 plate

Technical data:

- material is HDP according to GOST 16338-85;
- thickness: 6 mm.

Name	Article	Weight, kg/pc.
MSI-2 plate	26771	0,07

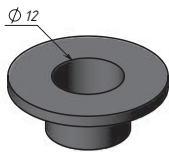


MSI-10 insulating washer

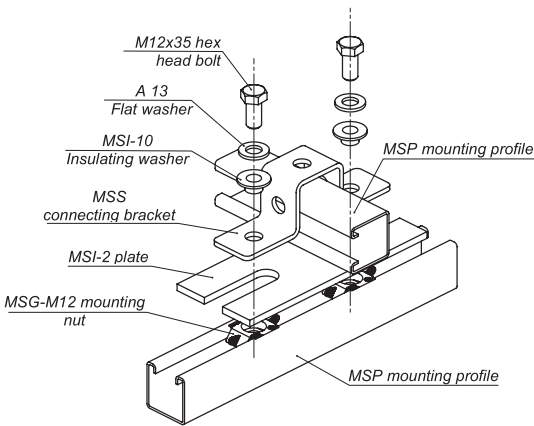
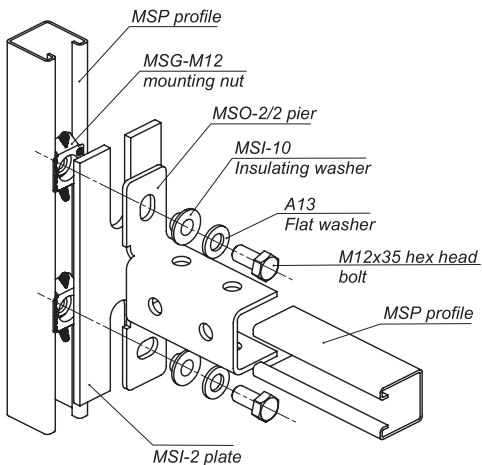
Technical data:

- material is HDP according to GOST 16338-85;

Name	Article	Weight, kg/pc.
MSI-10 insulating washer	26773	0,001

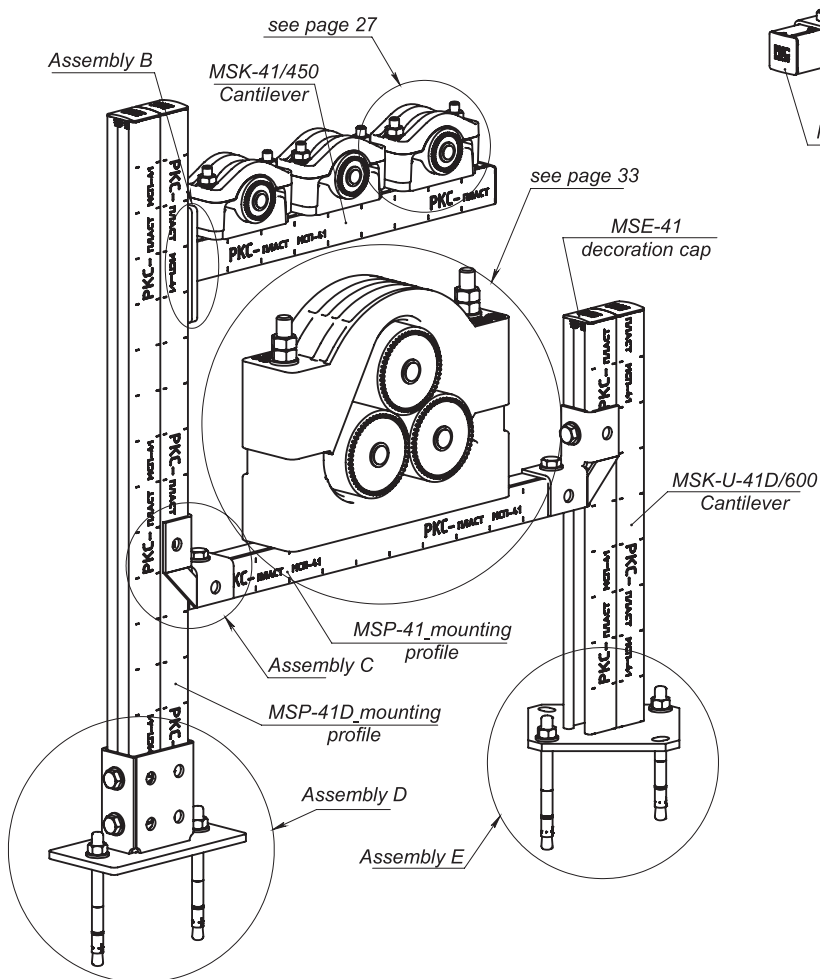
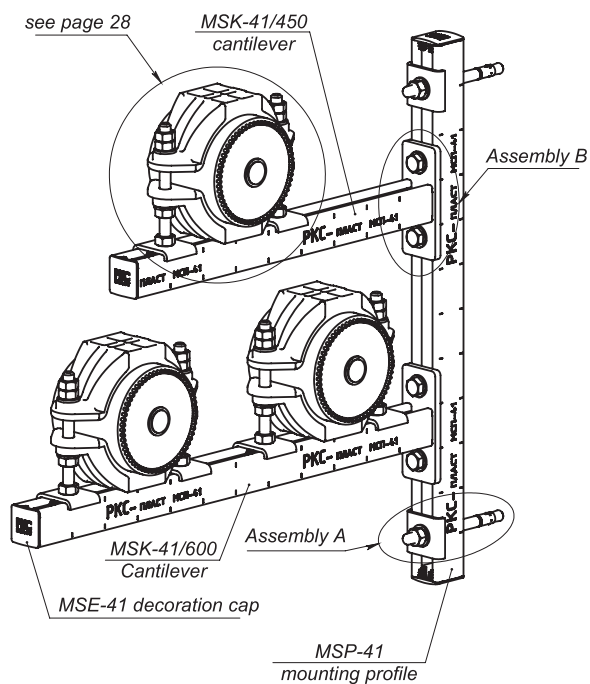
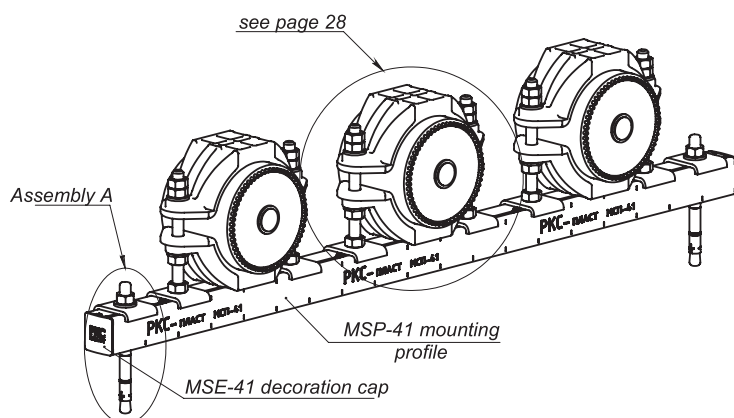


Examples of using MSI-2 plate and MSI-10 insulating washer



MS MOUNTING SYSTEM

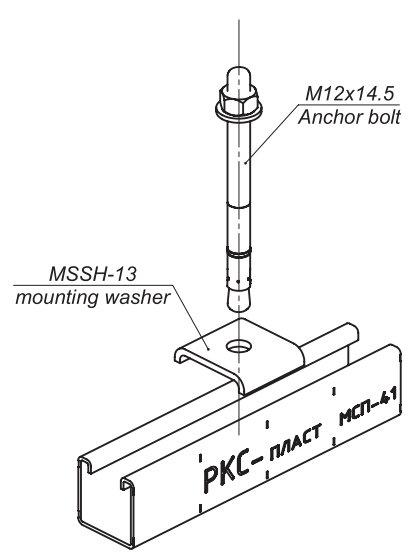
Standard sub-assemblies



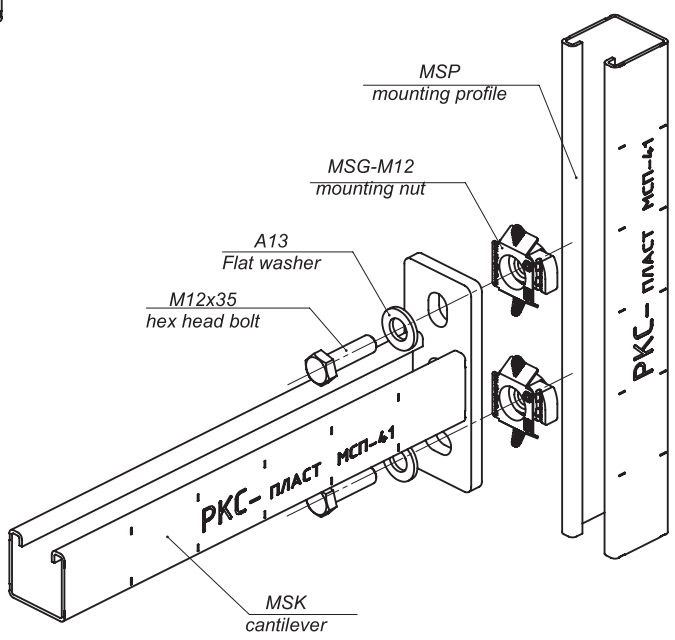
MS MOUNTING SYSTEM

Standard sub-assemblies

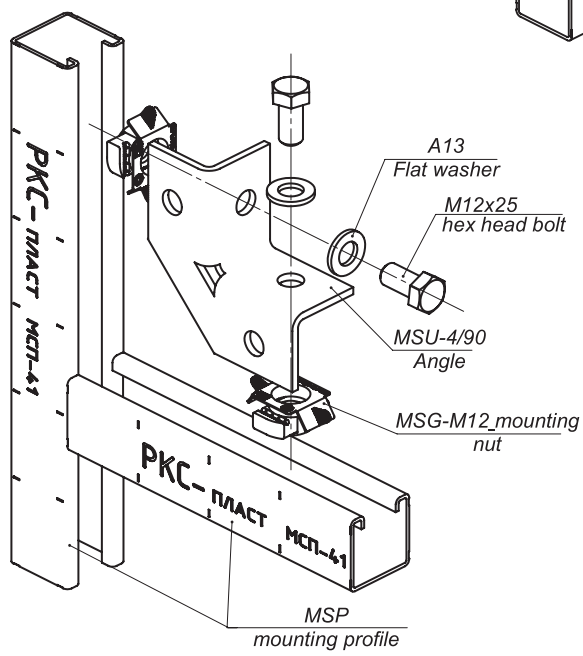
Assembly A



Assembly B



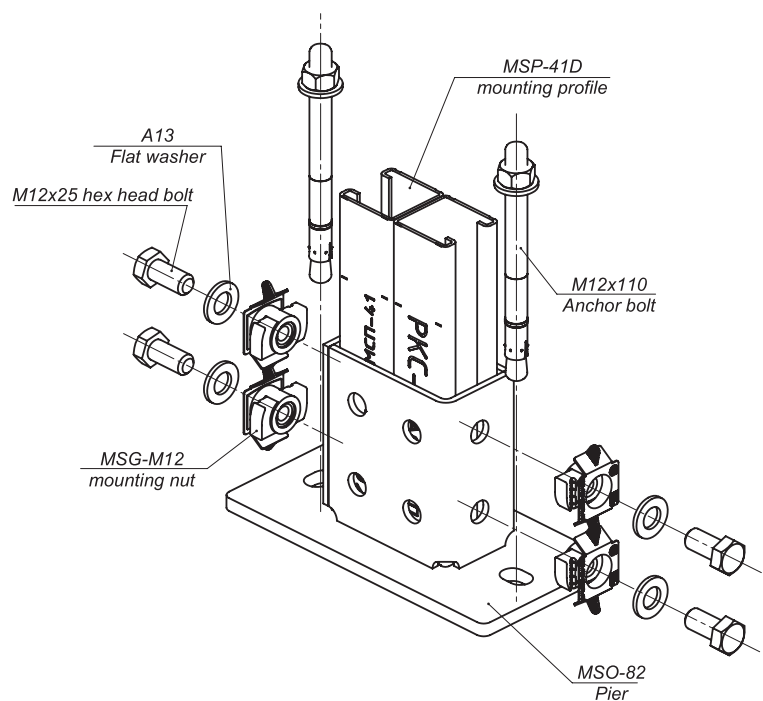
Assembly C



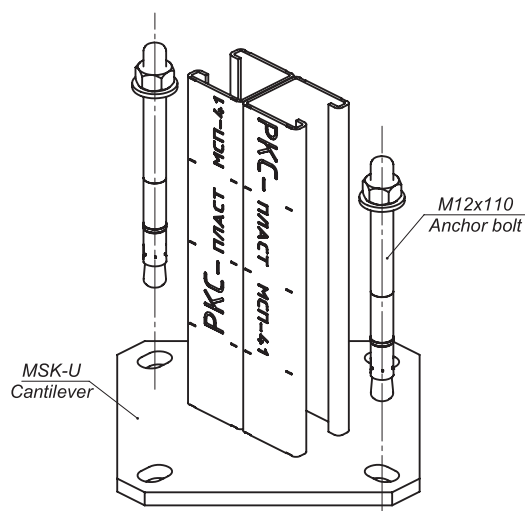
MS MOUNTING SYSTEM

Standard sub-assemblies

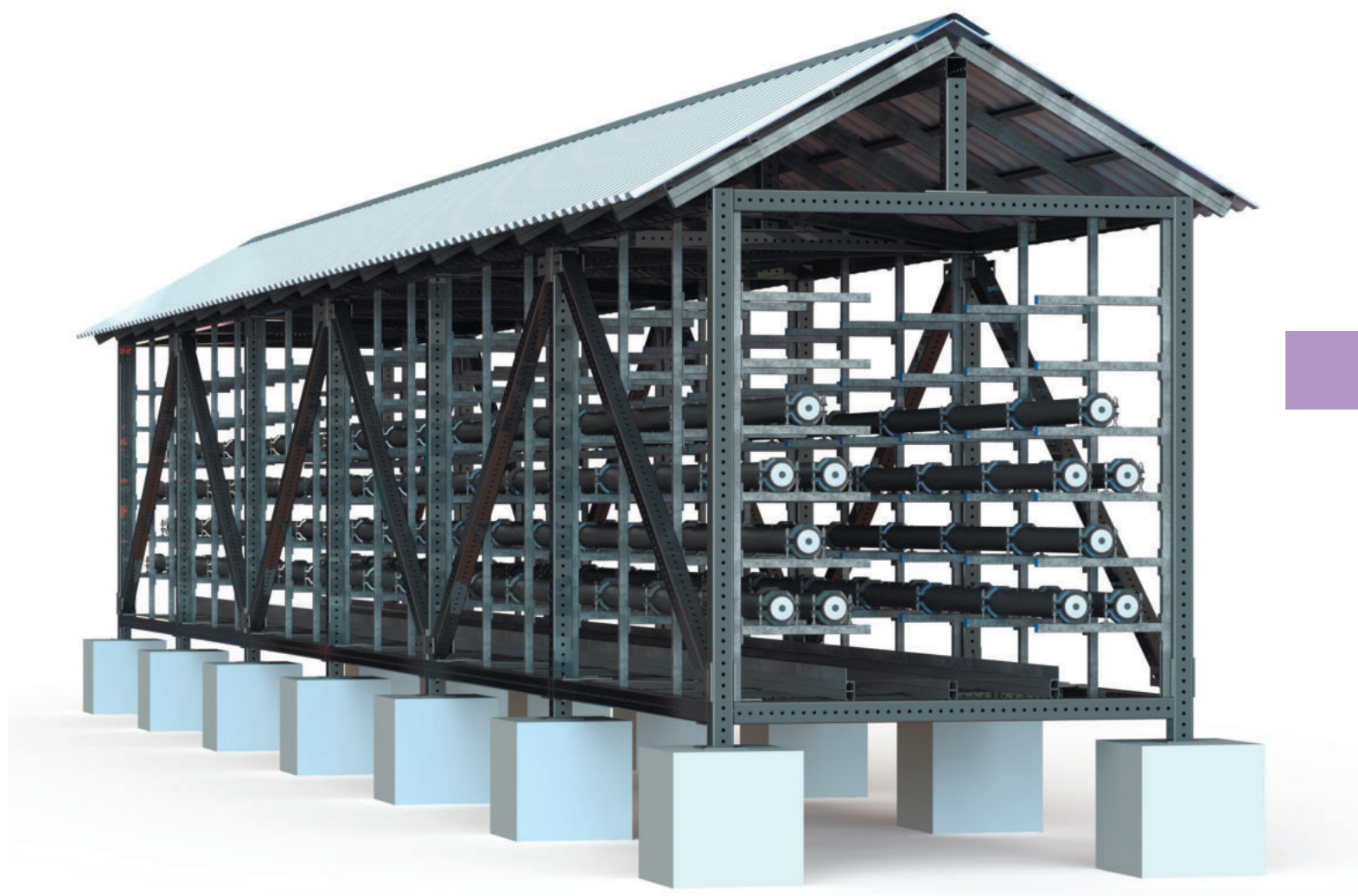
Assembly D



Assembly E



MT MOUNTING SYSTEM



MT mounting system is designed for heavy loads.

Application:

- cable tray systems;
- metal structures for high and ultra-high voltage cable lines;
- raised floors with increased load requirements;
- frame of quick-assembly structures..

Advantages:

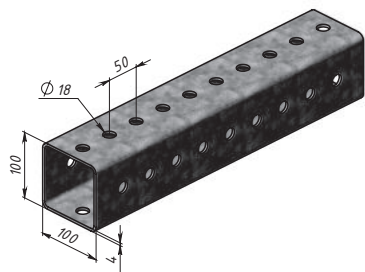
- cross section of the bearing profile meets the increased requirements for the bearing capacity;
- full compatibility with MS mounting system;
- possibility of mounting from all sides of the profile;
- convenient and quick mounting without welding.

MT MOUNTING SYSTEM

MTP mounting profile

Technical data:

- S245 steel according to GOST 27772-88;
- plating: hot zinc plating (H), 40-200 mkm. according to GOST 9.307-89; Allowable bending force for each profile size is shown in appendix.



MTP-100 mounting profile

Name	Article	Length, mm	Steel thickness, mm	Weight l/m, kg
MTP-100-H mounting profile, 3m	35101	3000	4	11,01

Technical features

	Steel allowable stress b_{allow} , N/mm ²	Profile weight l/m, kg	Profile crosssection, cm ²	Inertia moment $J_z=J_y$, cm ⁴	Resisting moment $W_z=W_y$, cm ³
MTP-100	188	11,01	15,08	229,71	45,94

Maximum loads on MTP mounting profile

The following technical characteristics are valid for static loads.
All figures are calculated for steel allowable stress equal 188 N/mm² and correspond with maximal allowable bending L/200.

I Length, mm (L)	500	1000	1500	2000	2500	3000
Concentrated load, kN						
	69,1	34,5	23,0	17,3	13,8	11,5
Distributed load, kN/m						
	276,4	69,1	30,7	17,3	11,1	6,8

MT MOUNTING SYSTEM

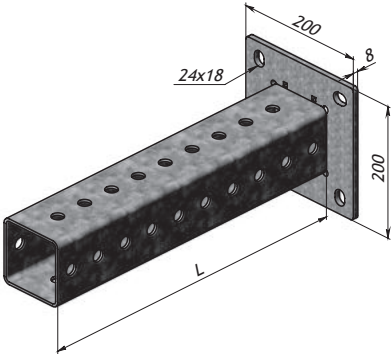
MTK cantilevers

Technical data:

- S245 steel according to GOST 27772-88;
- plating: hot zinc plating (H), 40-200 mkm. according to GOST 9.307-89.

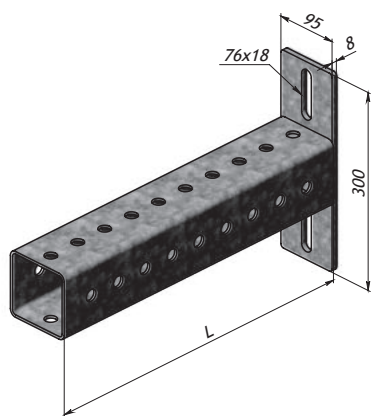
MTK-100 cantilever

Name	Article	Profile length L, mm	Weight, kg/pc.
MTK-100/500-H cantilever	35201-050	500	7,88
MTK-100/600-H cantilever	35201-060	600	8,98
MTK-100/700-H cantilever	35201-070	700	10,08
MTK-100/800-H cantilever	35201-080	800	11,18
MTK-100/900-H cantilever	35201-090	900	12,28
MTK-100/1000-H cantilever	35201-100	1000	13,39
MTK-100/1100-H cantilever	35201-110	1100	14,49
MTK-100/1200-H cantilever	35201-120	1200	15,59
MTK-100/1300-H cantilever	35201-130	1300	16,69
MTK-100/1400-H cantilever	35201-140	1400	17,79
MTK-100/1500-H cantilever	35201-150	1500	18,89
MTK-100/1600-H cantilever	35201-160	1600	19,99
MTK-100/1700-H cantilever	35201-170	1700	21,09
MTK-100/1800-H cantilever	35201-180	1800	22,19
MTK-100/1900-H cantilever	35201-190	1900	23,29
MTK-100/2000-H cantilever	35201-200	2000	24,39
MTK-100/2100-H cantilever	35201-210	2100	25,5
MTK-100/2200-H cantilever	35201-220	2200	26,6
MTK-100/2300-H cantilever	35201-230	2300	27,7
MTK-100/2400-H cantilever	35201-240	2400	28,8
MTK-100/2500-H cantilever	35201-250	2500	29,9
MTK-100/2600-H cantilever	35201-260	2600	31
MTK-100/2700-H cantilever	35201-270	2700	32,1
MTK-100/2800-H cantilever	35201-280	2800	33,2
MTK-100/2900-H cantilever	35201-290	2900	34,3
MTK-100/3000-H cantilever	35201-300	3000	35,4



MT MOUNTING SYSTEM

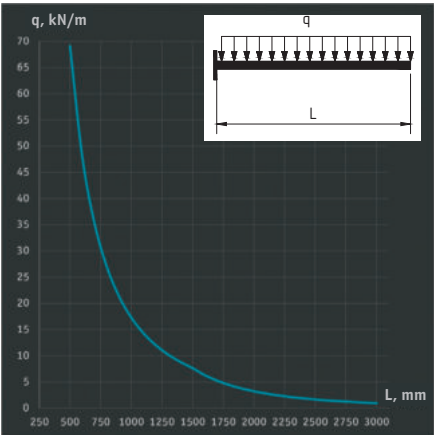
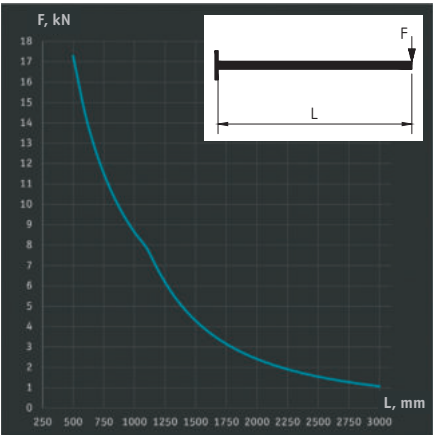
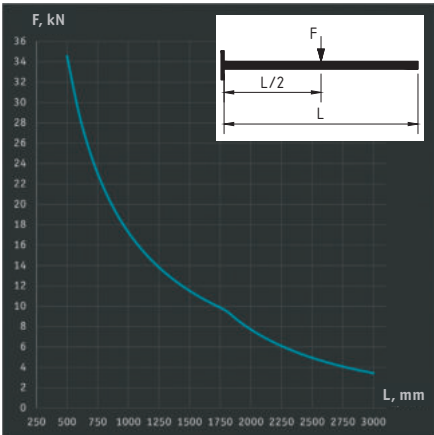
MTK cantilevers



MTK2-100 cantilever

Name	Article	Profile length L, mm	Weight, kg/pc.
MTK2-100/500-H cantilever	35211-050	500	7,14
MTK2-100/600-H cantilever	35211-060	600	8,24
MTK2-100/700-H cantilever	35211-070	700	9,34
MTK2-100/800-H cantilever	35211-080	800	10,44
MTK2-100/900-H cantilever	35211-090	900	11,54
MTK2-100/1000-H cantilever	35211-100	1000	12,64
MTK2-100/1100-H cantilever	35211-110	1100	13,75
MTK2-100/1200-H cantilever	35211-120	1200	14,85
MTK2-100/1300-H cantilever	35211-130	1300	15,95
MTK2-100/1400-H cantilever	35211-140	1400	17,05
MTK2-100/1500-H cantilever	35211-150	1500	18,15
MTK2-100/1600-H cantilever	35211-160	1600	19,25
MTK2-100/1700-H cantilever	35211-170	1700	20,35
MTK2-100/1800-H cantilever	35211-180	1800	21,45
MTK2-100/1900-H cantilever	35211-190	1900	22,55
MTK2-100/2000-H cantilever	35211-200	2000	23,65
MTK2-100/2100-H cantilever	35211-210	2100	24,75
MTK2-100/2200-H cantilever	35211-220	2200	25,85
MTK2-100/2300-H cantilever	35211-230	2300	26,95
MTK2-100/2400-H cantilever	35211-240	2400	28,05
MTK2-100/2500-H cantilever	35211-250	2500	29,16
MTK2-100/2600-H cantilever	35211-260	2600	30,16
MTK2-100/2700-H cantilever	35211-270	2700	31,16
MTK2-100/2800-H cantilever	35211-280	2800	32,16
MTK2-100/2900-H cantilever	35211-290	2900	33,16
MTK2-100/3000-H cantilever	35211-300	3000	34,16

Technical features of MTK-100 and MTK2-100 cantilevers



Specific technical characteristics are valid for static loads.
All figures are calculated for steel allowable stress equal 188 N/mm² and correspond with maximal allowable bending $L/200$.

MT MOUNTING SYSTEM

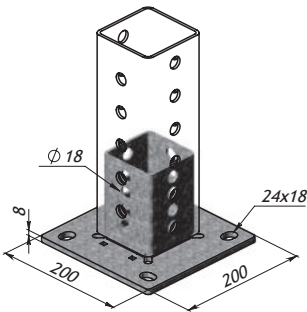
MT0 piers

Technical data:

- S245 steel according to GOST 27772-88;
- plating: hot zinc plating (H), 40-200 mkm. according to GOST 9.307-89.

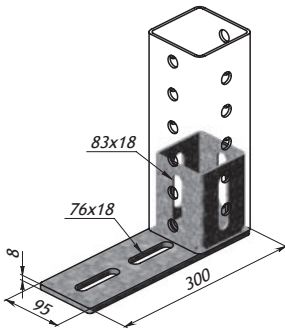
MT0-100 pier

Name	Article	Weight, kg/pc.
MT0-100-H pier	35301	3,48



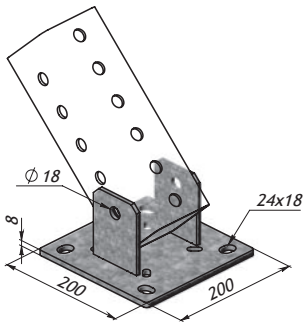
MT0-1 pier

Name	Article	Weight, kg/pc.
MT0-1-H pier	35311	2,57



MT0-SH-100 swivel pier

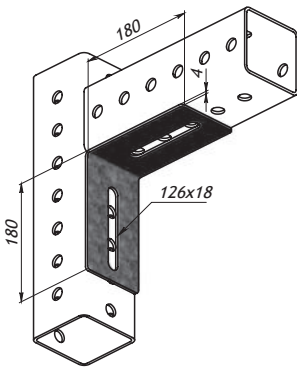
Name	Article	Weight, kg/pc.
MT0-SH-100-H swivel pier	35321	3,1



MTU angle

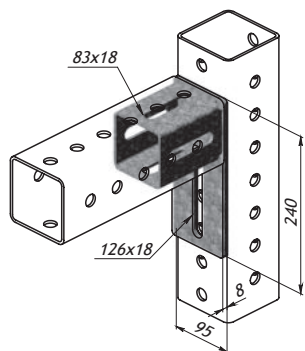
MTU-1 angle

Name	Article	Weight, kg/pc.
MTU-1-H angle	35401	0,92



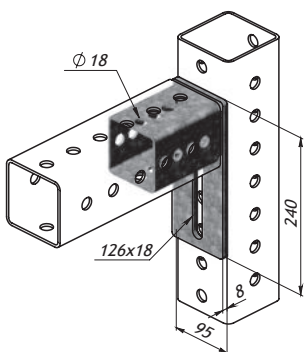
MT MOUNTING SYSTEM

MTD connectors



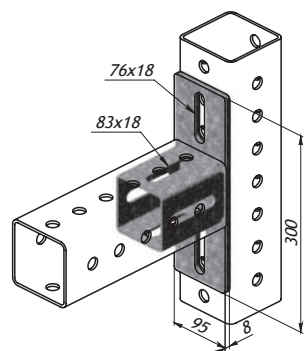
MTD-1 connector

Name	Article	Weight, kg/pc.
MTD-1-H connector	35501	2,24



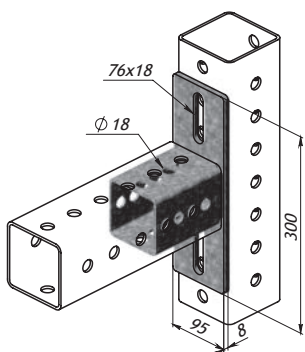
MTD-1/4 connector

Name	Article	Weight, kg/pc.
MTD-1/4-H connector	35503	2,4



MTD-2 connector

Name	Article	Weight, kg/pc.
MTD-2-H connector	35511	2,58



MTD-2/4 connector

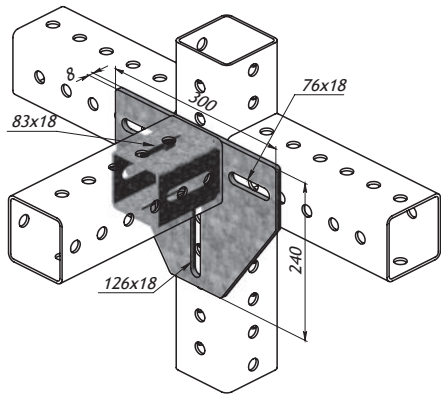
Name	Article	Weight, kg/pc.
MTD-2/4-H connector	35513	2,74

MT MOUNTING SYSTEM

MTD connectors

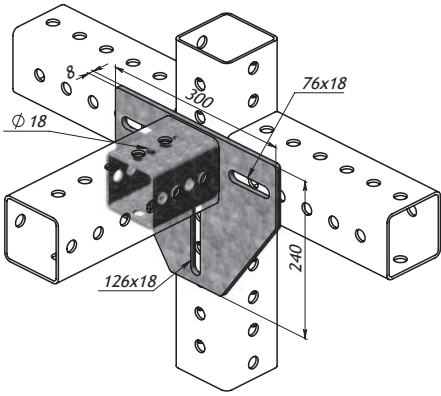
MTD-3 connector

Name	Article	Weight, kg/pc.
MTD-3-H connector	35521	4,22



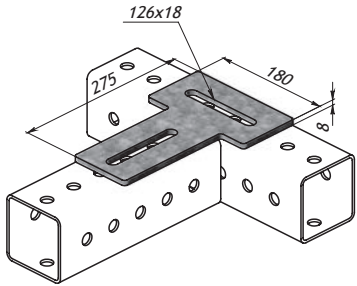
MTD-3/4 connector

Name	Article	Weight, kg/pc.
MTD-3/4-H connector	35523	4,38



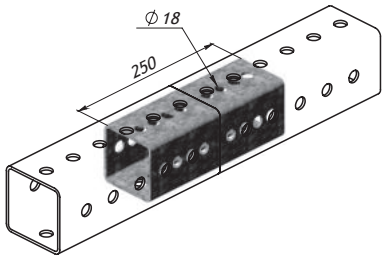
MTD-4 connector

Name	Article	Weight, kg/pc.
MTD-4-H connector	35531	1,87



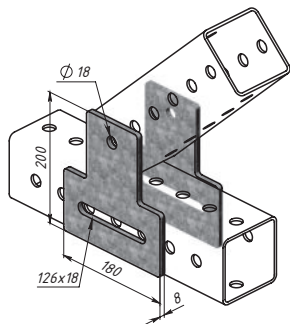
MTD-32 connector

Name	Article	Weight, kg/pc.
MTD-32-H connector	35541	2,26



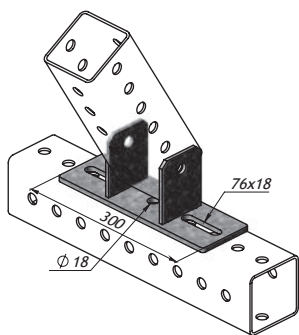
MT MOUNTING SYSTEM

MTD connectors



MTD-SH-100 swivel connector

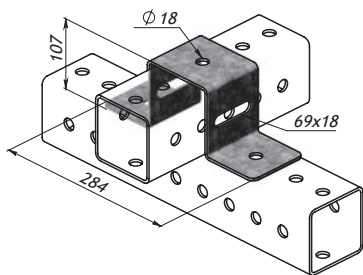
Name	Article	Weight, kg/pc.
MTD-SH-100-H swivel connector	35551	3,1



MTD-SH-2 swivel connector

Name	Article	Weight, kg/pc.
MTD-SH-2-H swivel connector	35553	2,35

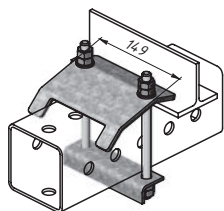
MTS connecting bracket



MTS-100 connecting bracket

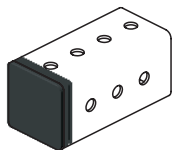
Name	Article	Weight, kg/pc.
MTS-100-H connecting bracket	35601	1,32

Accessories



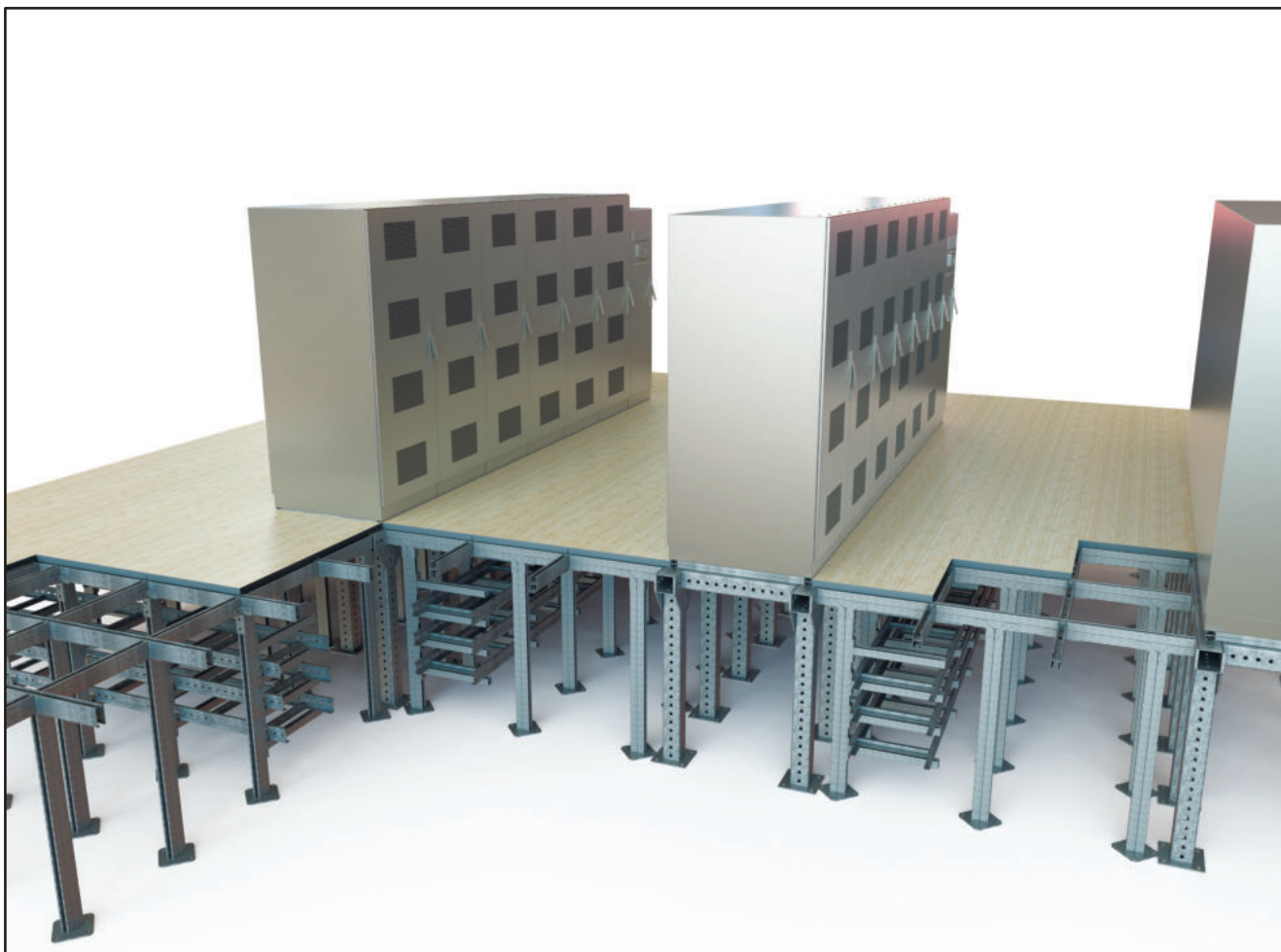
MTB-100 girder clamp

Name	Article	Weight, kg/pc.
MTB-100-H girder clamp	35701	1,58



MTE-100 decoration cap

Name	Article	Weight, kg/pc.
MTE-100 decoration cap	38761	1,58



Raised floors are a structure of various elements of mounting systems, forming a «second floor». The raised floor arrangement allows you to place various engineering communications and systems under it, which makes it possible to maximize the use of the room space.

The raised floor reliably protects all communications from mechanical influences, while providing easy access to them for maintenance.

The raised floor design consists of several levels:

- pier columns;
- grid of mounting profiles and connecting elements;
- floor slab.

Application:

- buildings of closed switchgear;
 - buildings of open switch platforms;
 - transformer substations;
 - server rooms;
 - production facilities;
- as well as office spaces, auditoriums, conference rooms, etc.

RAISED FLOORS

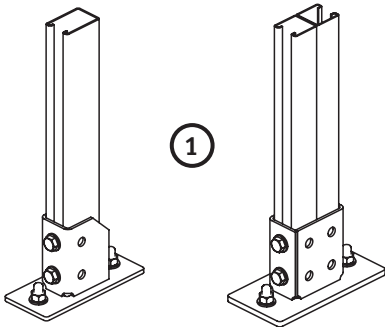
Raised floor columns

The following components are used as raised floor columns in MS and MT systems:

MS mounting system:

- assembled MSP mounting profiles with MSO piers;
- MSK and MSK-U cantilevers.

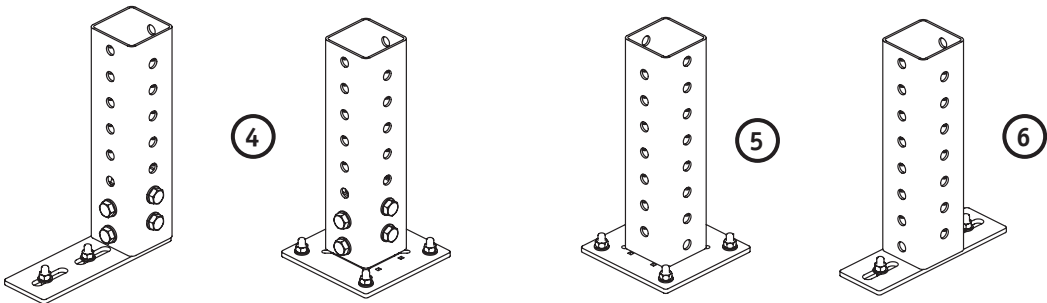
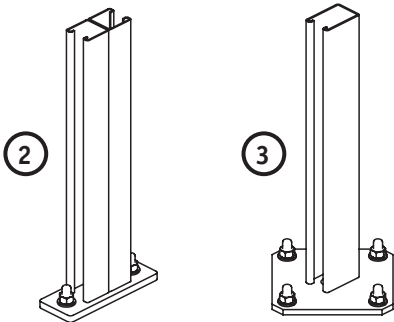
Name	Pages	Drawing
MSP mounting profile	39-40	1
MSO piers	48-50	1
MSK cantilevers	42-45	2
MSK-U cantilevers	46-47	3



MT mounting system:

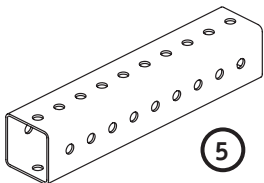
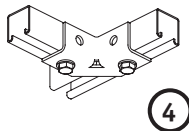
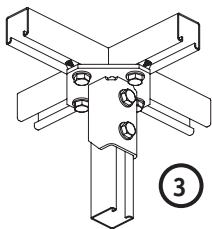
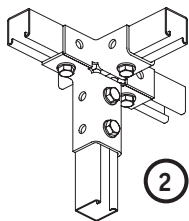
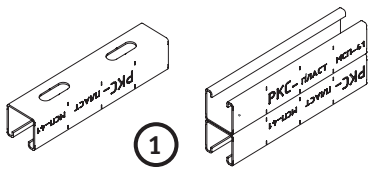
- assembled MTP-100 mounting profiles with MTO piers;
- MTK-100 and MTK2-100 cantilevers.

Name	Pages	Drawing
MTP-100 mounting profile	66	4
MTO piers	69	4
MTK-100 cantilevers	67	5
MTK2-100 cantilevers	68	6



Raised floor grid

The raised floor grid consists of profiles and connecting elements.



MS mounting system:

- MSP mounting profiles.

The following components are mainly used as connecting elements:

- MSD connectors;
- MSU angles;
- MSO piers.

Name	Pages	Drawing
MSP mounting profile	39-40	1
MSD connectors	51-52	2
MSO piers	48-50	3
MSU angles	53-54	4

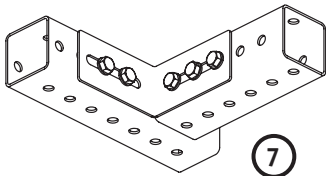
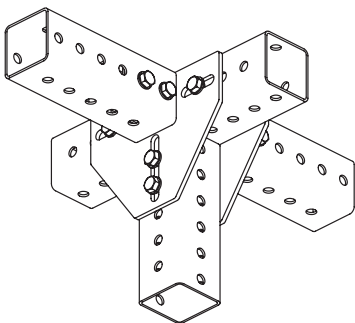
MT mounting system:

- MSP mounting profiles.

The following components are mainly used as connecting elements:

- MTD connectors;
- MTU connectors.

Name	Pages	Drawing
MTP mounting profile	66	5
MTD connectors	70-72	6
MTU angles	69	7



RAISED FLOORS

Raised floor plates

PF-SK raised floor plates

The basis of PF-SK (1) type plates is calcium sulfate with the addition of cellulose fibers.

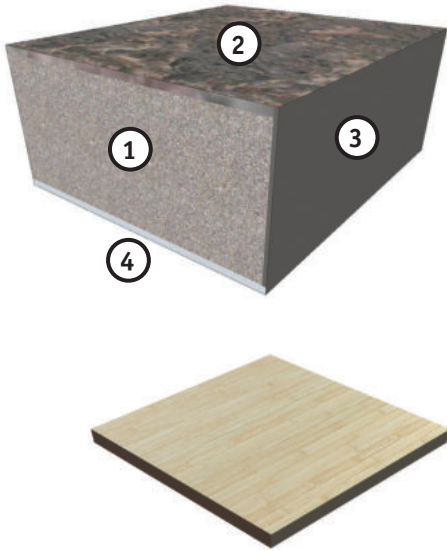
The top coating of the plate (2) can be antistatic PVC or linoleum. On request, this coating can be made from other materials.

The bottom coating of the plate (4) can be aluminum foil or galvanized steel sheet (for high loads).

It is possible to manufacture plates without top and/or bottom coating.

On the sides plates (3) are edged with a synthetic PVC tape, which makes it possible to remove static electricity. If desired, this coating may not be available.

PF-SK raised floor plates meet the highest requirements of fire safety equipment, and also have a high load-bearing capacity, which allows them to be used in a variety of types of buildings and structures.

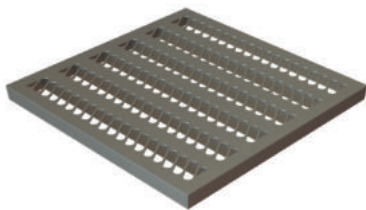


Name	Article	Density, kg/m ³	Thickness, mm	Weight, kg	Payload, N	Breaking load, N	Distributed load, N/m ²
PF-SK 28 AL raised floor plate	35001-028	1500	30	15,5	2 000	≥ 4 000	≥ 15 000
PF-SK 30 AL raised floor plate	35001-030	1500	32	16,7	2 200	≥ 4 400	≥ 15 000
PF-SK 32 AL raised floor plate	35001-032	1500	34	17,9	2 500	≥ 5 000	≥ 15 000
PF-SK 34 AL raised floor plate	35001-034	1500	36	19,0	3 000	≥ 6 000	≥ 20 000
PF-SK 36 AL raised floor plate	35001-036	1500	38	20,2	3 200	≥ 6 400	≥ 20 000
PF-SK 38 AL raised floor plate	35001-038	1500	40	21,4	4 000	≥ 8 000	≥ 25 000
PF-SK 40 AL raised floor plate	35001-040	1500	42	22,6	4 500	≥ 9 000	≥ 30 000
PF-SK 42 AL raised floor plate	35001-042	1500	44	23,8	5 000	≥ 10 000	≥ 35 000
PF-SK 28 ST raised floor plate	35002-028	1500	30,5	16,5	3 000	≥ 6 000	≥ 20 000
PF-SK 30 ST raised floor plate	35002-030	1500	32,5	17,7	3 200	≥ 6 200	≥ 20 000
PF-SK 32 ST raised floor plate	35002-032	1500	34,5	18,9	3 200	≥ 6 400	≥ 20 000
PF-SK 34 ST raised floor plate	35002-034	1500	36,5	20,0	4 000	≥ 8 000	≥ 25 000
PF-SK 36 ST raised floor plate	35002-036	1500	38,5	21,2	4 000	≥ 8 000	≥ 25 000
PF-SK 38 ST raised floor plate	35002-038	1500	40,5	22,4	4 400	≥ 9 000	≥ 30 000
PF-SK 40 ST raised floor plate	35002-040	1500	42,5	23,6	5 500	≥ 10 000	≥ 35 000
PF-SK 42 ST raised floor plate	35002-042	1500	44,5	24,8	6 400	≥ 12 000	≥ 40 000

Note: in the name «PF-SK 36 AL raised floor plate»: 36 is the thickness of calcium sulfate in mm; AL (ST) is the version of the lower coating of the plate - aluminum foil (steel sheet).

PF-MK raised floor plates

The basis of PF-MK plates is a metal frame with stiffening ribs. The upper steel sheet can be solid and perforated. This type of plates is made to order.



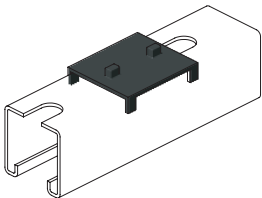
NF-41 fixing bar

Application:

- designed for fixing raised floor plates on the mounting profile.

Technical data:

- material is HDP according to GOST 16338-85.



Name	Article	Weight, kg/pc.
NF-41 fixing bar	35110	0,005

Screws for flat sheets

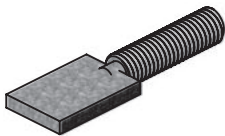
Application:

- designed for fixing raised floor plates on the mounting profile. It has a higher reliability compared to NF-41 fixing plate;
- MSV-M10 screw is applied in conjunction with MS mounting system. MTV-M10 screw is applied in conjunction with MT mounting system.

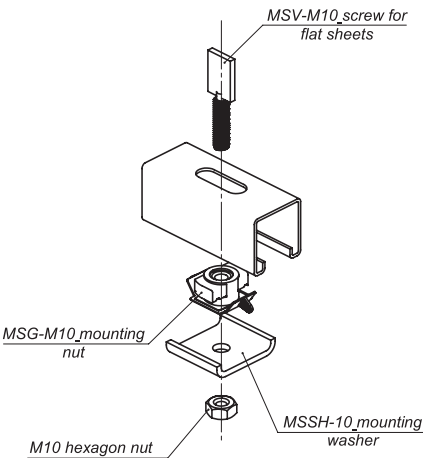
Technical data:

- St3sp material according to GOST 380;
- plating: cold zinc plating* (C), 10-20 mkm according to GOST 9.301-86.

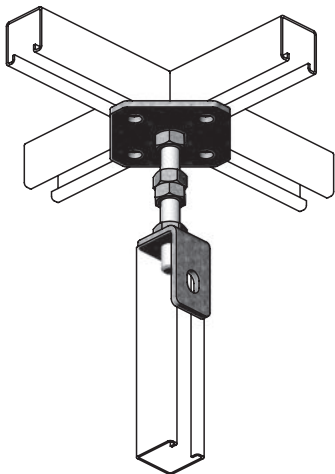
** it is possible to manufacture with hot zinc plating to order.*



Name	Article	Weight, kg/pc.
MSV-M10 screw for flat sheets	35111	0,04
MTV-M10 screw for flat sheets	35112	0,08



MSDR adjustable threaded connectors



Application:

- designed to connect the raised floor columns with a grid with the ability to adjust the height.

Technical data:

- S245 steel according to GOST 27772-88;
- plating: hot zinc plating (H), 40-200 mkm. according to GOST 9.307-89.

Name	Article	Weight, kg/pc.
MSDR-41-2 adjustable threaded connector	35201	0,78
MSDR-41-3 adjustable threaded connector	35202	0,86
MSDR-41-4 adjustable threaded connector	35203	0,96
MSDR-62-2 adjustable threaded connector	35211	0,82
MSDR-62-3 adjustable threaded connector	35212	0,90
MSDR-62-4 adjustable threaded connector	35213	1,00

** the last digit in the name indicates the number of holes and the top plate configuration.*

RAISED FLOORS

Loads

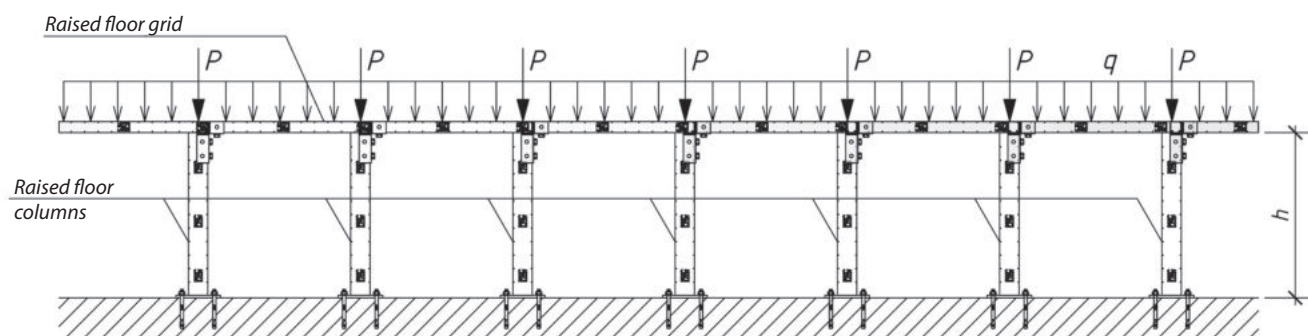
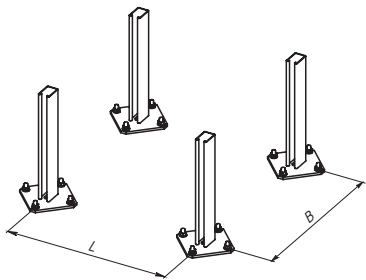


Table for determining the type of raised floor column profile by load (axial compression) P, kN

Profile type	Raised floor height h, mm												
	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500
MSP-41	40,4	36,7	32,3	27,5	22,9	19,0	15,8	13,3	11,3	9,7	8,4	7,4	6,5
MSP-62	69,6	65,5	60,6	54,9	48,7	42,4	36,6	31,5	27,3	23,7	20,7	18,2	16,1
MSP-21D	52,4	46,4	39,3	32,2	26,1	21,3	17,5	14,6	12,4	10,6	9,1	8,0	7,0
MSP-41D	86,7	83,1	78,5	72,3	64,6	56,2	48,1	41,0	35,1	30,2	26,2	22,9	20,2
MSP-124	143,2	137,4	130,1	120,4	108,2	94,5	81,2	69,5	59,5	51,3	44,6	39,0	34,4

Table for determining the type of raised floor grid profile by q load at longitudinal bending, kN/m²

Column mounting step LxB, mm	MSP-41	MSP-62	MSP-21D	MSP-41D	MSP-124
600x600	16,38	37,57	16,83	51,75	125,50
900x600	7,28	16,70	7,48	23,00	55,78
1200x600	3,87	9,38	3,87	12,93	31,38
1200x1200	1,93	4,69	1,93	6,47	15,69



Specific technical characteristics are valid for static loads.

All figures are calculated for steel allowable stress equal 188 N/mm² and correspond with maximal allowable bending L/200.

RAISED FLOORS

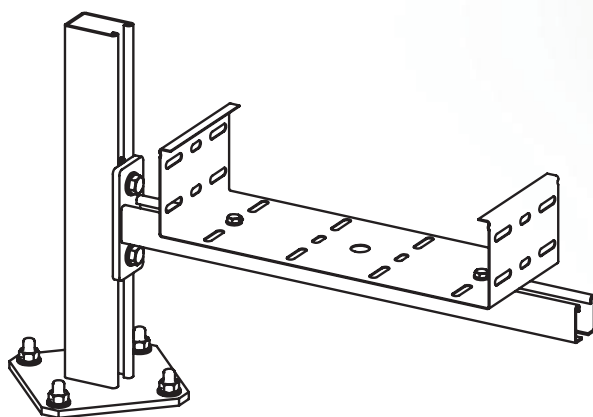
Trays in the raised floor space

For laying electrical networks, as well as other communications inside the raised floor structure, trays of various types and sizes can be used, such as:

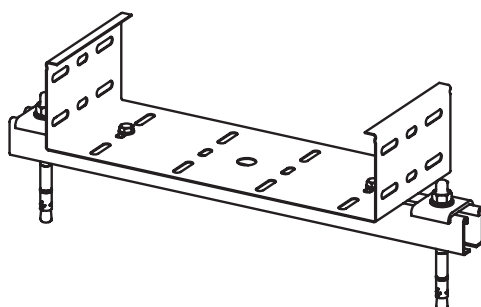
- ladder trays;
- sheet trays;
- perforated sheet trays;
- wire cable trays.

Examples of typical solutions for the arrangement of trays in the raised floor space

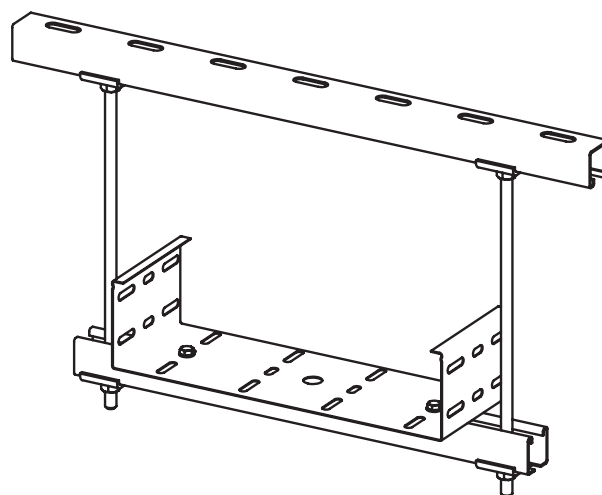
Mounting the trays with the help of cantilevers



Fixing the trays to the floor with the help of mounting profile



Fixing the trays to the mounting profile of the raised floor grid with the help of studs



METALWARE AND ANCHOR

Hardware metalware



Material: 10 steel.
DIN 976-1 (GOST 1759.0-87)

Threaded stud, zinc plated

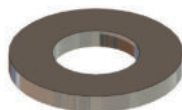
Name	Article	Thread	Length, mm	Packing, pcs.	Weight, kg/pc.
M8x1000	20235	M8	1000	15	0,3
M10x1000	20236	M10	1000	15	0,35
M12x1000	20237	M12	1000	15	0,6
M16x1000	20238	M16	1000	15	1,2



Material: 20 steel.
DIN 933 (GOST 1759.0-87)

Hexagon head screw, zinc plated

Name	Article	Thread	L, mm	Wrench size, s	Packing, pcs.	Weight, kg/pc.
M8x25	80002-25	M8	25	13	100	10
M10x25	80003-25	M10	25	17	100	24
M10x35	80003-35	M10	35	17	100	31
M10x55	80003-55	M10	55	17	100	44
M12x22	80004-22	M12	22	19	50	34
M12x25	80004-25	M12	25	19	50	35
M12x35	80004-35	M12	35	19	50	42



Material: 08 steel.
DIN 125 (GOST 1759.0-87)

Flat washer, zinc plated

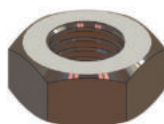
Name	Article	DA, mm	S, mm	DI, mm	Nom. size	Packing, pcs.	Weight, kg/pc.
A8,4	20250	16	1,6	8,4	8	100	1,8
A10,5	20251	20	2	10,5	10	100	3
A13	20252	24	2,5	13	12	100	6
A17	20253	30	3	17	16	100	11



Material: 08 steel.
DIN 9021 (GOST 6958-78)

Increased flat washer, zinc plated

Name	Article	DA, mm	S, mm	DI, mm	Nom. size	Packing, pcs.	Weight, kg/pc.
A8,4	68302	24	2	8,4	8	100	6
A10,5	68303	30	2,5	10,5	10	100	12
A13	68304	37	3	13	12	100	22
A17	68305	50	3	17	16	100	41



Material: 10 steel.
DIN 934 (GOST 1759.0-87)

Hexagon nut, zinc plated

Name	Article	Thread	e, mm	m, mm	Wrench size, s	Packing, pcs.	Weight, kg/pc.
M8	20260	M8	14,38	6,5	13	100	5,5
M10	20261	M10	18,9	8	17	100	10
M12	20262	M12	21,1	10	19	100	16
M16	20263	M16	26,75	13	24	50	29

Anchor bolt

Anchor bolt:

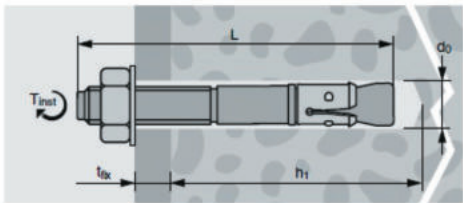
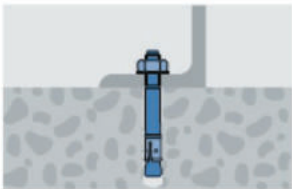
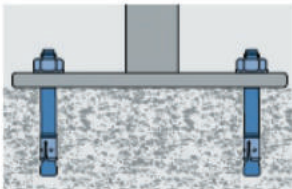
- a special design of the segmented expansion ring ensures fixation in a base material - reliable rigid double cantilevers;
- 1.4016 EN 10088 stainless steel spacer assembly;
- controlled wedging;
- galvanized steel with zinc thickness over 10 mkm;
- hot zinc plating with plating thickness over 45 mkm;
- pre-assembly or straight-through mounting.

Base material:

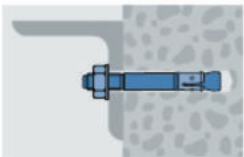
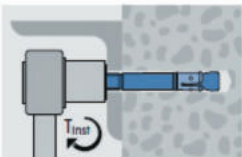
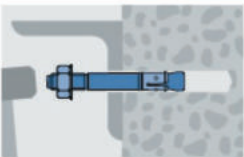
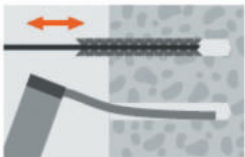
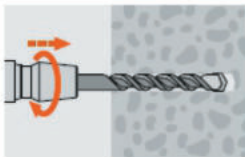
Concrete blocks without cracks.

Application:

Enclosures, steel profiles, equipment fastening, fagade substructures, racks, cable trays etc.



Mounting



Name	Article	Anchor and drill diameter, mm	Anchor length, L, mm	Effective length t _{fix} , mm	Hole depth h ₁ , mm	Break-out force, kN	Shear load, kN	Wrench size, s	Tightening torque, kN	Packing, pcs.
M8x95 anchor bolt	20270	8	95	30	65	6,6	8,0	13	15	100
M8x115 anchor bolt	20271	8	115	50	65	6,6	8,0	13	15	50
M10x70 anchor bolt	20272	10	70	10	50	7,6	11,2	17	30	100
M10x110 anchor bolt	20273	10	110	30	75	7,6	11,2	17	30	50
M10x140 anchor bolt	20274	10	140	60	75	7,6	11,2	17	30	50
M10x180 anchor bolt	20275	10	180	100	75	7,6	11,2	17	30	50
M12x110 anchor bolt	20276	12	110	15	90	9,9	16,3	19	50	50
M12x145 anchor bolt	20277	12	145	50	90	9,9	16,3	19	50	50
M12x185 anchor bolt	20278	12	180	90	90	9,9	16,3	19	50	50
M16x90 anchor bolt	20279	16	90	5	65	11,9	30,3	24	100	50
M16x130 anchor bolt	20280	16	130	15	100	11,9	30,3	24	100	50
M16x160 anchor bolt	20281	16	160	45	100	11,9	30,3	24	100	50

METALWARE AND ANCHOR

Drive-in anchor

Drive-in anchor:

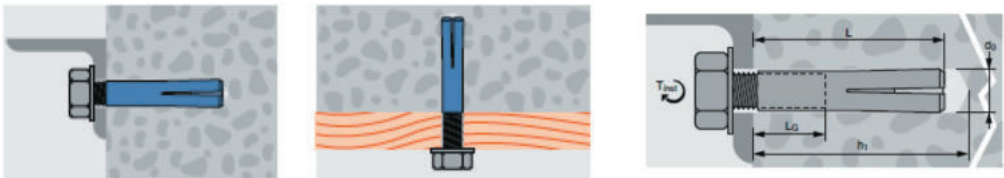
- quick and easy mounting with the adjusting device;
- stainless steel version for outdoor use (ESAr);
- zinc plated, plating thickness over 5 mkm;
- first assembly.

Base material:

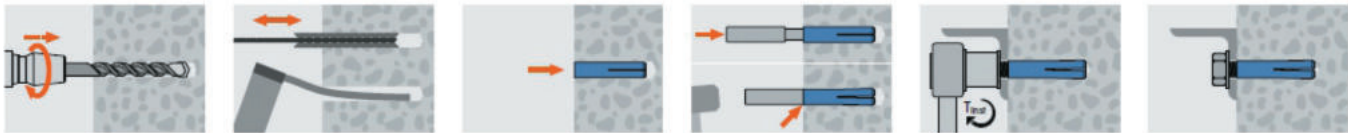
Concrete blocks without cracks.

Application:

Pipelines, ventilation systems, cable channels.



Mounting



Name	Article	Anchor and drill diameter, mm	Anchor length, L, mm	Hole depth h ₁ , mm	Thread	Thread length L _G , mm	Break-out force, kN	Tightening torque, kN	Packing, pcs.
M6x25 drive-in anchor	20290	8	25	27	M6	11	0,6	4,5	100
M8x30 drive-in anchor	20291	10	30	32	M8	14	1,2	11	100
M10x40 drive-in anchor	20292	12	40	44	M10	15	3,0	15	50
M12x50 drive-in anchor	20293	15	50	54	M12	18	5,3	35	50
M16x65 drive-in anchor	20294	20	65	71	M16	23	7,4	60	50

LADDER TRAYS

Ladder tray section LLP 50; 65; 80; 100 mm

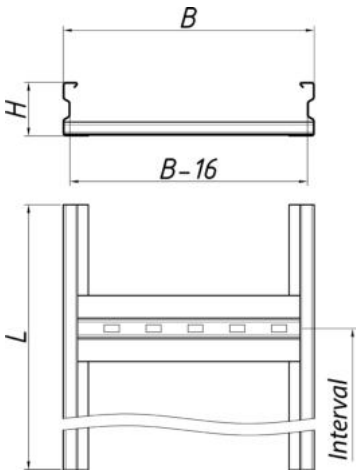
Application

For cable and wire laying when mounting cables both vertically and horizontally.

The products are manufactured according to the requirements of GOST 52868-2007.

Specifics:

- Mounting outside and inside of premises.
- Made for various climatic zones and of various climatic versions. Applicable for civil and industrial construction. For use in corrosive and aggressive environment, in petrochemical refinery plants, in gas and chemical industries, metallurgy and food industry.
- High bearing capacity.
- Tray bridges are fastened by bulge technique without damaging protective layer.
- The length of the straight section is 3000 mm.
- Material - 08ps steel.
- Standard make: hot zinc plating, cold zinc plating.



Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight l/m, kg
Tray height 50 mm						
LLP-200-50	50101	3000	200	50	1,2	2,51
LLP-200-50	50102	3000	200	50	1,2	2,51
LLP-300-50	50103	3000	300	50	1,2	2,94
LLP-300-50	50104	3000	300	50	1,2	2,94
LLP-400-50	50105	3000	400	50	1,2	3,35
LLP-400-50	50106	3000	400	50	1,2	3,35
LLP-500-50	50107	3000	500	50	1,2	3,78
LLP-500-50	50108	3000	500	50	1,2	3,78
LLP-600-50	50109	3000	600	50	1,2	4,21
LLP-600-50	50110	3000	600	50	1,2	4,21

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight l/m, kg
Tray height 80 mm						
LLP-200-80	50121	3000	200	80	1,2	3,00
LLP-200-80	50122	3000	200	80	1,2	3,00
LLP-300-80	50123	3000	300	80	1,2	3,25
LLP-300-80	50124	3000	300	80	1,2	3,25
LLP-400-80	50125	3000	400	80	1,2	3,51
LLP-400-80	50126	3000	400	80	1,2	3,51
LLP-500-80	50127	3000	500	80	1,2	3,76
LLP-500-80	50128	3000	500	80	1,2	3,76
LLP-600-80	50129	3000	600	80	1,2	4,02
LLP-600-80	50130	3000	600	80	1,2	4,02

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight l/m, kg
Tray height 65 mm						
LLP-200-65	50111	3000	200	65	1,2	2,71
LLP-200-65	50112	3000	200	65	1,2	2,71
LLP-300-65	50113	3000	300	65	1,2	2,97
LLP-300-65	50114	3000	300	65	1,2	2,97
LLP-400-65	50115	3000	400	65	1,2	3,22
LLP-400-65	50116	3000	400	65	1,2	3,22
LLP-500-65	50117	3000	500	65	1,2	3,48
LLP-500-65	50118	3000	500	65	1,2	3,48
LLP-600-65	50119	3000	600	65	1,2	3,74
LLP-600-65	50120	3000	600	65	1,2	3,74

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight l/m, kg
Tray height 100 mm						
LLP-200-100	50131	3000	200	100	1,2	3,37
LLP-200-100	50132	3000	200	100	1,2	3,37
LLP-300-100	50133	3000	300	100	1,2	3,62
LLP-300-100	50134	3000	300	100	1,2	3,62
LLP-400-100	50135	3000	400	100	1,2	3,88
LLP-400-100	50136	3000	400	100	1,2	3,88
LLP-500-100	50137	3000	500	100	1,2	4,14
LLP-500-100	50138	3000	500	100	1,2	4,14
LLP-600-100	50139	3000	600	100	1,2	4,39
LLP-600-100	50140	3000	600	100	1,2	4,39

Metalware used: M8.

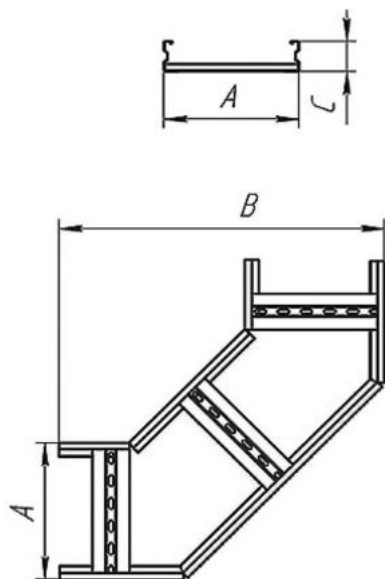
To couple together, LS connectors and LSSH swivel tray connectors with M8 metalware set are used.

To fix a tray to a shelf or an arm, a LPN tray tower clamp completed with M 10x35 bolt is used.

hot zinc plating
cold zinc plating

LADDER TRAYS

Horizontal angle 90° LLG 50; 65; 80; 100 mm



Application

Used for a horizontal turn of a cable line path by 90°.

The products are manufactured according to the requirements of GOST 52868-2007.

Specifics:

- Material - 08ps steel.
- Standard make: hot zinc plating, cold zinc plating.
- For coupling with a tray straight section are used:
 - LS tray connectors complete with M8 metalware;
 - LSSH swivel tray connectors complete with M8 fasteners.
- To fix a tray to a shelf or an arm, a LPN tray lower clamp completed with M10x35 bolt is used.

Type	Art.	Length, mm (B)	Width, mm (A)	Height, mm (C)	Thickness, mm	Weight, kg
Tray height 50 mm						
LLG-200-50	50201	600	200	50	1,2	1,87
LLG-200-50	50202	600	200	50	1,2	1,87
LLG-300-50	50203	700	300	50	1,2	2,27
LLG-300-50	50204	700	300	50	1,2	2,27
LLG-400-50	50205	800	400	50	1,2	2,69
LLG-400-50	50206	800	400	50	1,2	2,69
LLG-500-50	50207	900	500	50	1,2	3,10
LLG-500-50	50208	900	500	50	1,2	3,10
LLG-600-50	50209	1000	600	50	1,2	3,51
LLG-600-50	50210	1000	600	50	1,2	3,51

Type	Art.	Length, mm (B)	Width, mm (A)	Height, mm (C)	Thickness, mm	Weight, kg
Tray height 80 mm						
LLG-200-80	50221	600	200	80	1,2	2,71
LLG-200-80	50222	600	200	80	1,2	2,71
LLG-300-80	50223	700	300	80	1,2	3,21
LLG-300-80	50224	700	300	80	1,2	3,21
LLG-400-80	50225	800	400	80	1,2	3,72
LLG-400-80	50226	800	400	80	1,2	3,72
LLG-500-80	50227	900	500	80	1,2	4,22
LLG-500-80	50228	900	500	80	1,2	4,22
LLG-600-80	50229	1000	600	80	1,2	4,72
LLG-600-80	50230	1000	600	80	1,2	4,72

Type	Art.	Length, mm (B)	Width, mm (A)	Height, mm (C)	Thickness, mm	Weight, kg
Tray height 65 mm						
LLG-200-65	50211	600	200	65	1,2	2,47
LLG-200-65	50212	600	200	65	1,2	2,47
LLG-300-65	50213	700	300	65	1,2	2,95
LLG-300-65	50214	700	300	65	1,2	2,95
LLG-400-65	50215	800	400	65	1,2	3,43
LLG-400-65	50216	800	400	65	1,2	3,43
LLG-500-65	50217	900	500	65	1,2	3,91
LLG-500-65	50218	900	500	65	1,2	3,91
LLG-600-65	50219	1000	600	65	1,2	4,38
LLG-600-65	50220	1000	600	65	1,2	4,38

Type	Art.	Length, mm (B)	Width, mm (A)	Height, mm (C)	Thickness, mm	Weight, kg
Tray height 100 mm						
LLG-200-100	50231	600	200	100	1,2	3,03
LLG-200-100	50232	600	200	100	1,2	3,03
LLG-300-100	50233	700	300	100	1,2	3,57
LLG-300-100	50234	700	300	100	1,2	3,57
LLG-400-100	50235	800	400	100	1,2	4,11
LLG-400-100	50236	800	400	100	1,2	4,11
LLG-500-100	50237	900	500	100	1,2	4,64
LLG-500-100	50238	900	500	100	1,2	4,64
LLG-600-100	50239	1000	600	100	1,2	5,17
LLG-600-100	50240	1000	600	100	1,2	5,17

hot zinc plating

cold zinc plating

LADDER TRAYS

vertical angle with 90° rise LVP 50; 65; 80; 100 mm

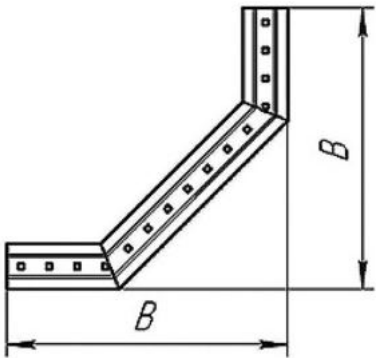
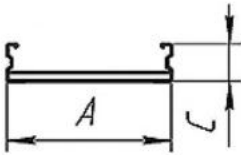
Application

Used for a turn of a cable line path by 90° upwards.

The products are manufactured according to the requirements of GOST 52868-2007.

Specifics:

- Material - 08ps steel.
- Standard make: hot zinc plating, cold zinc plating.
- For coupling with a tray straight section are used:
 - LS tray connectors complete with M8 metalware;
 - LSSH swivel tray connectors complete with M8 fasteners.
- To fix a tray to a shelf or an arm, a LPN tray lower clamp completed with M10x35 bolt is used.



Type	Art.	Length, mm (B)	Width, mm (A)	Height, mm (C)	Thickness, mm	Weight, kg
Tray height 50 mm						
LVP-200-50	50301	500	200	50	1,2	2,14
LVP-200-50	50302	500	200	50	1,2	2,14
LVP-300-50	50303	500	300	50	1,2	2,47
LVP-300-50	50304	500	300	50	1,2	2,47
LVP-400-50	50305	500	400	50	1,2	2,80
LVP-400-50	50306	500	400	50	1,2	2,80
LVP-500-50	50307	500	500	50	1,2	3,12
LVP-500-50	50308	500	500	50	1,2	3,12
LVP-600-50	50309	500	600	50	1,2	3,45
LVP-600-50	50310	500	600	50	1,2	3,45

Type	Art.	Length, mm (B)	Width, mm (A)	Height, mm (C)	Thickness, mm	Weight, kg
Tray height 80 mm						
LVP-200-80	50321	500	200	80	1,2	2,68
LVP-200-80	50322	500	200	80	1,2	2,68
LVP-300-80	50323	500	300	80	1,2	2,97
LVP-300-80	50324	500	300	80	1,2	2,97
LVP-400-80	50325	500	400	80	1,2	3,25
LVP-400-80	50326	500	400	80	1,2	3,25
LVP-500-80	50327	500	500	80	1,2	3,54
LVP-500-80	50328	500	500	80	1,2	3,54
LVP-600-80	50329	500	600	80	1,2	3,83
LVP-600-80	50330	500	600	80	1,2	3,83

Type	Art.	Length, mm (B)	Width, mm (A)	Height, mm (C)	Thickness, mm	Weight, kg
Tray height 65 mm						
LVP-200-65	50311	500	200	65	1,2	2,44
LVP-200-65	50312	500	200	65	1,2	2,44
LVP-300-65	50313	500	300	65	1,2	2,73
LVP-300-65	50314	500	300	65	1,2	2,73
LVP-400-65	50315	500	400	65	1,2	3,02
LVP-400-65	50316	500	400	65	1,2	3,02
LVP-500-65	50317	500	500	65	1,2	3,30
LVP-500-65	50318	500	500	65	1,2	3,30
LVP-600-65	50319	500	600	65	1,2	3,59
LVP-600-65	50320	500	600	65	1,2	3,59

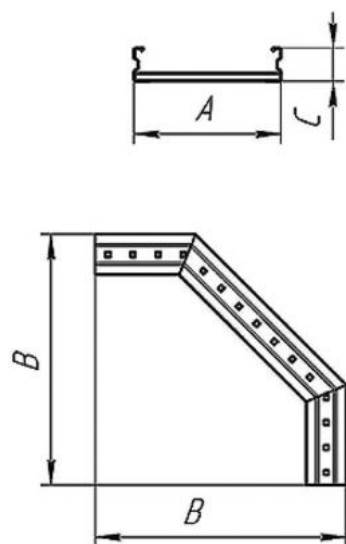
Type	Art.	Length, mm (B)	Width, mm (A)	Height, mm (C)	Thickness, mm	Weight, kg
Tray height 100 mm						
LVP-200-100	50331	500	200	100	1,2	3,00
LVP-200-100	50332	500	200	100	1,2	3,00
LVP-300-100	50333	500	300	100	1,2	3,28
LVP-300-100	50334	500	300	100	1,2	3,28
LVP-400-100	50335	500	400	100	1,2	3,57
LVP-400-100	50336	500	400	100	1,2	3,57
LVP-500-100	50337	500	500	100	1,2	3,86
LVP-500-100	50338	500	500	100	1,2	3,86
LVP-600-100	50339	500	600	100	1,2	4,14
LVP-600-100	50340	500	600	100	1,2	4,14

hot zinc plating

cold zinc plating

LADDER TRAYS

Vertical angle with 90° slope LVS 50; 65; 80; 100 mm



Application

Used for a turn of a cable line path by 90° downwards.

The products are manufactured according to the requirements of GOST 52868-2007.

Specifics:

- Material - 08ps steel.
- Standard make: hot zinc plating, cold zinc plating.
- For coupling with a tray straight section are used:
 - LS tray connectors complete with M8 metalware;
 - LSSH swivel tray connectors complete with M8 fasteners.
- To fix a tray to a shelf or an arm, a LPN tray lower clamp completed with M10x35 bolt is used.

Type	Art.	Length, mm (B)	Width, mm (A)	Height, mm (C)	Thickness, mm	Weight, kg
Tray height 50 mm						
LVS-200-50	50401	500	200	50	1,2	2,14
LVS-200-50	50402	500	200	50	1,2	2,14
LVS-300-50	50403	500	300	50	1,2	2,47
LVS-300-50	50404	500	300	50	1,2	2,47
LVS-400-50	50405	500	400	50	1,2	2,80
LVS-400-50	50406	500	400	50	1,2	2,80
LVS-500-50	50407	500	500	50	1,2	3,12
LVS-500-50	50408	500	500	50	1,2	3,12
LVS-600-50	50409	500	600	50	1,2	3,45
LVS-600-50	50410	500	600	50	1,2	3,45

Type	Art.	Length, mm (B)	Width, mm (A)	Height, mm (C)	Thickness, mm	Weight, kg
Tray height 80 mm						
LVS-200-80	50421	500	200	80	1,2	2,68
LVS-200-80	50422	500	200	80	1,2	2,68
LVS-300-80	50423	500	300	80	1,2	2,97
LVS-300-80	50424	500	300	80	1,2	2,97
LVS-400-80	50425	500	400	80	1,2	3,25
LVS-400-80	50426	500	400	80	1,2	3,25
LVS-500-80	50427	500	500	80	1,2	3,54
LVS-500-80	50428	500	500	80	1,2	3,54
LVS-600-80	50429	500	600	80	1,2	3,83
LVS-600-80	50430	500	600	80	1,2	3,83

hot zinc plating cold zinc plating

Type	Art.	Length, mm (B)	Width, mm (A)	Height, mm (C)	Thickness, mm	Weight, kg
Tray height 65 mm						
LVS-200-65	50411	500	200	65	1,2	2,44
LVS-200-65	50412	500	200	65	1,2	2,44
LVS-300-65	50413	500	300	65	1,2	2,73
LVS-300-65	50414	500	300	65	1,2	2,73
LVS-400-65	50415	500	400	65	1,2	3,02
LVS-400-65	50416	500	400	65	1,2	3,02
LVS-500-65	50417	500	500	65	1,2	3,30
LVS-500-65	50418	500	500	65	1,2	3,30
LVS-600-65	50419	500	600	65	1,2	3,59
LVS-600-65	50420	500	600	65	1,2	3,59

Type	Art.	Length, mm (B)	Width, mm (A)	Height, mm (C)	Thickness, mm	Weight, kg
Tray height 100 mm						
LVS-200-100	50431	500	200	100	1,2	3,00
LVS-200-100	50432	500	200	100	1,2	3,00
LVS-300-100	50433	500	300	100	1,2	3,28
LVS-300-100	50434	500	300	100	1,2	3,28
LVS-400-100	50435	500	400	100	1,2	3,57
LVS-400-100	50436	500	400	100	1,2	3,57
LVS-500-100	50437	500	500	100	1,2	3,86
LVS-500-100	50438	500	500	100	1,2	3,86
LVS-600-100	50439	500	600	100	1,2	4,14
LVS-600-100	50440	500	600	100	1,2	4,14

LADDER TRAYS

T-shape angle LIT 50; 65; 80; 100 mm

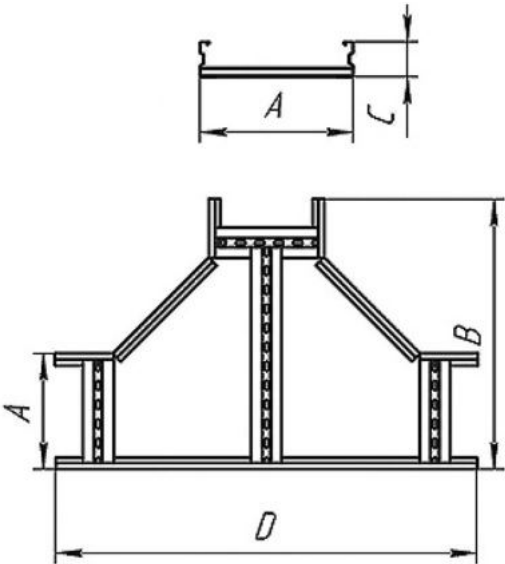
Application

Used for a horizontal turn of a cable line path by 90°.

The products are manufactured according to the requirements of GOST 52868-2007.

Specifics:

- Material - 08ps steel.
- Standard make: hot zinc plating, cold zinc plating.
- For coupling with a tray straight section are used:
 - LS tray connectors complete with M8 metalware;
 - LSSH swivel tray connectors complete with M8 fasteners.
- To fix a tray to a shelf or an arm, a LPN tray lower clamp completed with M10x35 bolt is used.



Type	Art.	Length, mm (D)	Width, mm (B)	Width, mm (A)	Height, mm (C)	Thickn-ess, mm	Weight, kg
Tray height 50 mm							
LLT-200-50	50501	1000	600	200	50	1,2	2,72
LLT-200-50	50502	1000	600	200	50	1,2	2,72
LLT-300-50	50503	1100	700	300	50	1,2	3,17
LLT-300-50	50504	1100	700	300	50	1,2	3,17
LLT-400-50	50505	1200	800	400	50	1,2	4,22
LLT-400-50	50506	1200	800	400	50	1,2	4,22
LLT-500-50	50507	1300	900	500	50	1,2	4,76
LLT-500-50	50508	1300	900	500	50	1,2	4,76
LLT-600-50	50509	1400	1000	600	50	1,2	5,30
LLT-600-50	50510	1400	1000	600	50	1,2	5,30

Type	Art.	Length, mm (D)	Width, mm (B)	Width, mm (A)	Height, mm (C)	Thickn-ess, mm	Weight, kg
Tray height 80 mm							
LLT-200-80	50521	1000	600	200	80	1,2	4,04
LLT-200-80	50522	1000	600	200	80	1,2	4,04
LLT-300-80	50523	1100	700	300	80	1,2	4,56
LLT-300-80	50524	1100	700	300	80	1,2	4,56
LLT-400-80	50525	1200	800	400	80	1,2	5,07
LLT-400-80	50526	1200	800	400	80	1,2	5,07
LLT-500-80	50527	1300	900	500	80	1,2	5,58
LLT-500-80	50528	1300	900	500	80	1,2	5,58
LLT-600-80	50529	1400	1000	600	80	1,2	6,10
LLT-600-80	50530	1400	1000	600	80	1,2	6,10

Type	Art.	Length, mm (D)	Width, mm (B)	Width, mm (A)	Height, mm (C)	Thickn-ess, mm	Weight, kg
Tray height 65 mm							
LLT-200-65	50511	1000	600	200	65	1,2	3,70
LLT-200-65	50512	1000	600	200	65	1,2	3,70
LLT-300-65	50513	1100	700	300	65	1,2	4,20
LLT-300-65	50514	1100	700	300	65	1,2	4,20
LLT-400-65	50515	1200	800	400	65	1,2	4,70
LLT-400-65	50516	1200	800	400	65	1,2	4,70
LLT-500-65	50517	1300	900	500	65	1,2	5,20
LLT-500-65	50518	1300	900	500	65	1,2	5,20
LLT-600-65	50519	1400	1000	600	65	1,2	5,69
LLT-600-65	50520	1400	1000	600	65	1,2	5,69

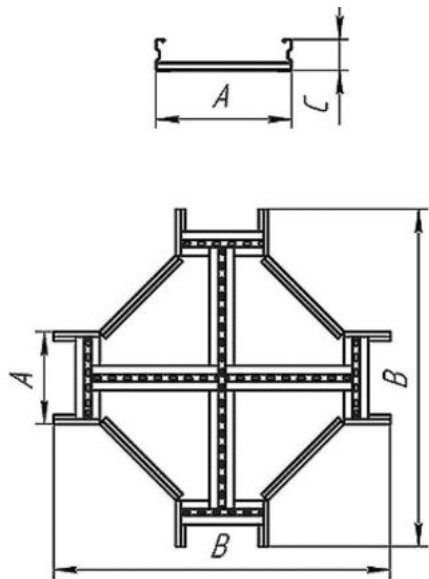
Type	Art.	Length, mm (D)	Width, mm (B)	Width, mm (A)	Height, mm (C)	Thickn-ess, mm	Weight, kg
Tray height 100 mm							
LLT-200-100	50531	1000	600	200	100	1,2	4,50
LLT-200-100	50532	1000	600	200	100	1,2	4,50
LLT-300-100	50533	1100	700	300	100	1,2	5,03
LLT-300-100	50534	1100	700	300	100	1,2	5,03
LLT-400-100	50535	1200	800	400	100	1,2	5,57
LLT-400-100	50536	1200	800	400	100	1,2	5,57
LLT-500-100	50537	1300	900	500	100	1,2	6,10
LLT-500-100	50538	1300	900	500	100	1,2	6,10
LLT-600-100	50539	1400	1000	600	100	1,2	6,63
LLT-600-100	50540	1400	1000	600	100	1,2	6,63

hot zinc plating

cold zinc plating

LADDER TRAYS

X-shape angle LLX 50; 65; 80; 100 mm



Application

Used for a horizontal turn of a cable line path by 90° in four directions.

The products are manufactured according to the requirements of GOST 52868-2007.

Specifics:

- Material - 08ps steel.
- Standard make: hot zinc plating, cold zinc plating.
- For coupling with a tray straight section are used:
 - LS tray connectors complete with M8 metalware;
 - LSSH swivel tray connectors complete with M8 fasteners.
- To fix a tray to a shelf or an arm, a LPN tray lower clamp completed with M10x35 bolt is used.

Type	Art.	Length, mm (B)	Width, mm (A)	Height, mm (C)	Thickness, mm	Weight, kg
Tray height 50 mm						
LLX-200-50	50601	1000	200	50	1,2	3,80
LLX-200-50	50602	1000	200	50	1,2	3,80
LLX-300-50	50603	1100	300	50	1,2	4,45
LLX-300-50	50604	1100	300	50	1,2	4,45
LLX-400-50	50605	1200	400	50	1,2	5,08
LLX-400-50	50606	1200	400	50	1,2	5,08
LLX-500-50	50607	1300	500	50	1,2	5,72
LLX-500-50	50608	1300	500	50	1,2	5,72
LLX-600-50	50609	1400	600	50	1,2	6,36
LLX-600-50	50610	1400	600	50	1,2	6,36

Type	Art.	Length, mm (B)	Width, mm (A)	Height, mm (C)	Thickness, mm	Weight, kg
Tray height 65 mm						
LLX-200-65	50611	1000	200	65	1,2	3,57
LLX-200-65	50612	1000	200	65	1,2	3,57
LLX-300-65	50613	1100	300	65	1,2	3,95
LLX-300-65	50614	1100	300	65	1,2	3,95
LLX-400-65	50615	1200	400	65	1,2	4,33
LLX-400-65	50616	1200	400	65	1,2	4,33
LLX-500-65	50617	1300	500	65	1,2	4,72
LLX-500-65	50618	1300	500	65	1,2	4,72
LLX-600-65	50619	1400	600	65	1,2	5,10
LLX-600-65	50620	1400	600	65	1,2	5,10

Type	Art.	Length, mm (B)	Width, mm (A)	Height, mm (C)	Thickness, mm	Weight, kg
Tray height 80 mm						
LLX-200-80	50621	1000	200	80	1,2	3,96
LLX-200-80	50622	1000	200	80	1,2	3,96
LLX-300-80	50623	1100	300	80	1,2	4,34
LLX-300-80	50624	1100	300	80	1,2	4,34
LLX-400-80	50625	1200	400	80	1,2	4,73
LLX-400-80	50626	1200	400	80	1,2	4,73
LLX-500-80	50627	1300	500	80	1,2	5,11
LLX-500-80	50628	1300	500	80	1,2	5,11
LLX-600-80	50629	1400	600	80	1,2	5,49
LLX-600-80	50630	1400	600	80	1,2	5,49

Type	Art.	Length, mm (B)	Width, mm (A)	Height, mm (C)	Thickness, mm	Weight, kg
Tray height 100 mm						
LLX-200-100	50631	1000	200	100	1,2	4,48
LLX-200-100	50632	1000	200	100	1,2	4,48
LLX-300-100	50633	1100	300	100	1,2	4,87
LLX-300-100	50634	1100	300	100	1,2	4,87
LLX-400-100	50635	1200	400	100	1,2	5,25
LLX-400-100	50636	1200	400	100	1,2	5,25
LLX-500-100	50637	1300	500	100	1,2	5,63
LLX-500-100	50638	1300	500	100	1,2	5,63
LLX-600-100	50639	1400	600	100	1,2	6,02
LLX-600-100	50640	1400	600	100	1,2	6,02

hot zinc plating

cold zinc plating

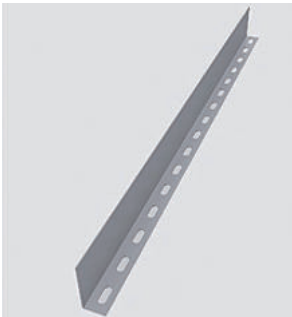
LADDER TRAYS

LR separator

For separating cables and lines with different voltages and functions. Used for inserting into tray straight sections with height of 50; 65; 80; 100 mm.
Fastened to tray bridges with M8 metalware (included).

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight l/m, kg
LR-50	51001	3000	25	30	0,7	0,30
LR-65	51002	3000	25	45	0,7	0,38
LR-80	51003	3000	25	60	0,7	0,45
LR-100	51004	3000	25	80	0,7	0,57

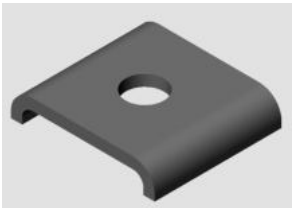


LPN tray lower clamp

For fastening ladder tray straight sections with height of 50; 65; 80; 100 mm to shelves and support arms. Delivered complete with M10 metalware.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
LPN-M10	51101	50	45	10	3	0,09

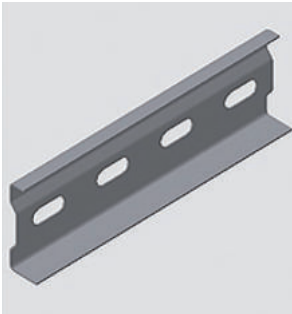


LS straight tray connector

For connecting together tray straight sections with height of 50; 65; 80; 100 mm.
Delivered complete with M8 metalware.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
LS-50	51301	200	15	45	1,2	0,16
LS-65	51302	200	15	60	1,2	0,23
LS-80	51303	200	15	75	1,2	0,26
LS-100	51304	200	15	95	1,2	0,30



LSSH swivel tray connector

For connecting together straight sections with height of 50; 65; 80; 100 mm at angle from 0 to 90 degrees. Delivered complete with M8 metalware nonassembled: 2 planks separately, metalware separately.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
LSSH-50	51401	155	20	45	1,2	0,16
LSSH-65	51402	152	20	60	1,2	0,23
LSSH-80	51403	152	20	75	1,2	0,26
LSSH-100	51404	152	20	95	1,2	0,30



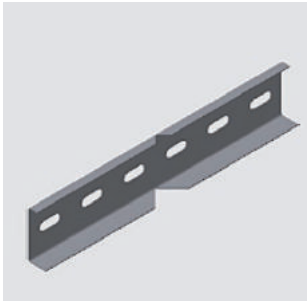
LADDER TRAYS

LU angle tray connector

For connecting together tray straight sections with height of 50; 65; 80; 100 mm at an angle.
Delivered complete with M8 metalware.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
LU-50	51701	200	20	45	1,2	0,24
LU-65	51702	200	20	60	1,2	0,35
LU-80	51703	200	20	75	1,2	0,39
LU-100	51704	200	20	95	1,2	0,45

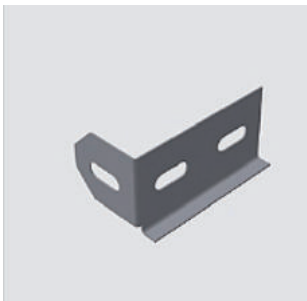


LUT butt-end angle tray connector

For connecting together tray straight sections with height of 50; 65; 80; 100 mm vertically, for fastening tray's butt-end to a floor, ceiling or to another tray side.
Delivered complete with M8 metalware.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
LUT-50	51801	100	100	45	1,2	0,12
LUT-65	51802	100	100	60	1,2	0,17
LUT-80	51803	100	100	75	1,2	0,19
LUT-100	51804	100	100	95	1,2	0,22



LK tray lid

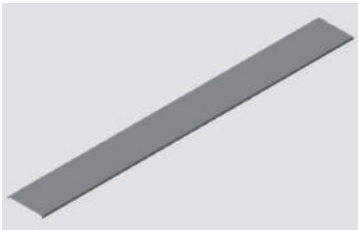
For protecting cable from mechanical damages.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight l/m, kg
LK-200	51501	3000	206	12	0,7	1,24
LK-200	51502	3000	206	12	0,7	1,24
LK-300	51503	3000	306	12	1,0	2,56
LK-300	51504	3000	306	12	1,0	2,56
LK-400	51505	3000	406	12	1,0	3,34
LK-400	51506	3000	406	12	1,0	3,34
LK-500	51507	3000	506	12	1,0	4,12
LK-500	51508	3000	506	12	1,0	4,12
LK-600	51509	3000	606	12	1,0	4,90
LK-600	51510	3000	606	12	1,0	4,90

 hot zinc plating

 cold zinc plating



LADDER TRAYS

LKS tray lid

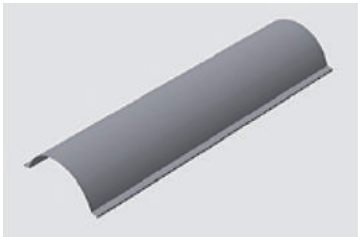
Mainly for reduction of snow load when mounting outdoors.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
LKS-200	51511	2500	206	55	0,7	2,37
LKS-200	51512	2500	206	55	0,7	2,37
LKS-300	51513	2500	306	85	1,0	3,52
LKS-300	51514	2500	306	85	1,0	3,52
LKS-400	51515	2500	406	95	1,0	4,49
LKS-400	51516	2500	406	95	1,0	4,49
LKS-500	51517	2500	506	140	1,0	5,82
LKS-500	51518	2500	506	140	1,0	5,82
LKS-600	51519	2500	606	160	1,0	6,61
LKS-600	51520	2500	606	160	1,0	6,61

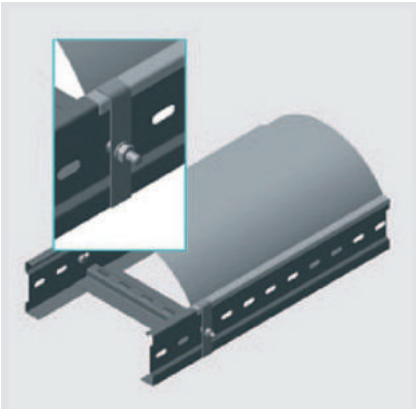
hot zinc plating

cold zinc plating



LKP lid clamp

For mounting a lid on a LLP tray straight section with height 50; 65; 80; 100 mm. The clamp is fastened to the tray side walls with M8 metalware.



Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Weight, kg
LKP-50	51601	20	12	52	0,02
LKP-65	51602	20	12	67	0,02
LKP-80	51603	20	12	82	0,03
LKP-100	51604	20	12	102	0,06

For detailed information please contact our specialist.

SHEET TRAYS WITH INTERLOCK

Blind sheet tray straight section LG 50; 80; 100 mm

Application

For laying cable lines both horizontally and vertically.

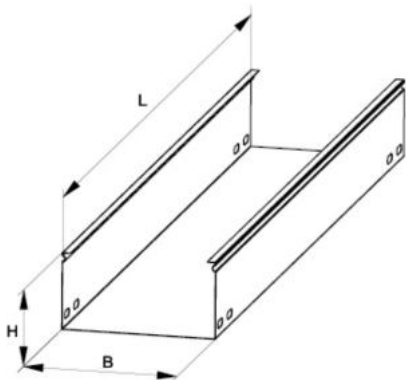
The products are manufactured according to the requirements of GOST 52868-2007.

Specifics:

- Mounting outside and inside of premises.
- Applicable for civil and industrial constructions. For use in corrosive aggressive environment, in petrochemical refinery plants, in gas and chemical industries, metallurgy and food industry.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight l/m, kg
Tray height 50 mm						
LG-200-50	60101	3000	200	50	1,0	1,83
LG-200-50	60102	3000	200	50	1,0	1,83
LG-300-50	60103	3000	300	50	1,0	3,43
LG-300-50	60104	3000	300	50	1,0	3,43
LG-400-50	60105	3000	400	50	1,0	4,23
LG-400-50	60106	3000	400	50	1,0	4,23
LG-500-50	60107	3000	500	50	1,0	5,03
LG-500-50	60108	3000	500	50	1,0	5,03
LG-600-50	60109	3000	600	50	1,0	5,87
LG-600-50	60110	3000	600	50	1,0	5,87
Tray height 80 mm						
LG-200-80	60201	3000	200	80	1,0	2,17
LG-200-80	60202	3000	200	80	1,0	2,17
LG-300-80	60203	3000	300	80	1,0	3,90
LG-300-80	60204	3000	300	80	1,0	3,90
LG-400-80	60205	3000	400	80	1,0	4,70
LG-400-80	60206	3000	400	80	1,0	4,70
LG-500-80	60207	3000	500	80	1,0	5,50
LG-500-80	60208	3000	500	80	1,0	5,50
LG-600-80	60209	3000	600	80	1,0	6,30
LG-600-80	60210	3000	600	80	1,0	6,30
Tray height 100 mm						
LG-200-100	60301	3000	200	100	1,0	3,43
LG-200-100	60302	3000	200	100	1,0	3,43
LG-300-100	60303	3000	300	100	1,0	4,20
LG-300-100	60304	3000	300	100	1,0	4,20
LG-400-100	60305	3000	400	100	1,0	5,03
LG-400-100	60306	3000	400	100	1,0	5,03
LG-500-100	60307	3000	500	100	1,0	5,87
LG-500-100	60308	3000	500	100	1,0	5,87



- High bearing capacity.
- A lid is fixed on the tray bed with profiled interlock.
- Straight section length is 3000 mm.
- The thickness of the steel is 1.0 mm according to the requirements of GOST 20783-81 for the intensity of the distributed load.
- Material - 08 ps.
- Standard make: hot zinc plating, cold zinc plating, stainless steel upon ordering.

Metalware used: M8. To couple together, LS connectors and LSSH swivel tray connectors with M8 metalware set are used.

- hot zinc plating
- cold zinc plating

SHEET TRAYS WITH INTERLOCK

Perforated sheet tray straight section LP 50; 80; 100 mm

Application

For laying cable lines both horizontally and vertically.

The products are manufactured according to the requirements of GOST 52868-2007.

Specifics:

- Mounting outside and inside of premises.
- Applicable for civil and industrial constructions. For use in corrosive aggressive environment, in petrochemical refinery plants, in gas and chemical industries, metallurgy and food industry.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight l/m, kg
Tray height 50 mm						
LP-200-50	60401	3000	200	50	1,0	1,67
LP-200-50	60402	3000	200	50	1,0	1,67
LP-300-50	60403	3000	300	50	1,0	3,10
LP-300-50	60404	3000	300	50	1,0	3,10
LP-400-50	60405	3000	400	50	1,0	3,60
LP-400-50	60406	3000	400	50	1,0	3,60
LP-500-50	60407	3000	500	50	1,0	4,27
LP-500-50	60408	3000	500	50	1,0	4,27
LP-600-50	60409	3000	600	50	1,0	5,00
LP-600-50	60410	3000	600	50	1,0	5,00
Tray height 80 mm						
LP-200-80	60501	3000	200	80	1,0	1,97
LP-200-80	60502	3000	200	80	1,0	1,97
LP-300-80	60503	3000	300	80	1,0	3,50
LP-300-80	60504	3000	300	80	1,0	3,50
LP-400-80	60505	3000	400	80	1,0	4,03
LP-400-80	60506	3000	400	80	1,0	4,03
LP-500-80	60507	3000	500	80	1,0	4,70
LP-500-80	60508	3000	500	80	1,0	4,70
LP-600-80	60509	3000	600	80	1,0	5,40
LP-600-80	60510	3000	600	80	1,0	5,40
Tray height 100 mm						
LP-200-100	60601	3000	200	100	1,0	3,10
LP-200-100	60602	3000	200	100	1,0	3,10
LP-300-100	60603	3000	300	100	1,0	3,60
LP-300-100	60604	3000	300	100	1,0	3,60
LP-400-100	60605	3000	400	100	1,0	4,30
LP-400-100	60606	3000	400	100	1,0	4,30
LP-500-100	60607	3000	500	100	1,0	5,00
LP-500-100	60608	3000	500	100	1,0	5,00



- High bearing capacity.
- Trays with width 300-400 mm are strengthened with additional stiffening ribs on the tray bed.
- A lid is fixed on the tray bed with profiled interlock.
- Straight section length is 3000 mm.
- The thickness of the steel is 1.0 mm according to the requirements of GOST R 52868-2007 to the intensity of the distributed load.
- Material - 08 ps.
- Standard make: hot zinc plating, cold zinc plating, stainless steel upon ordering.

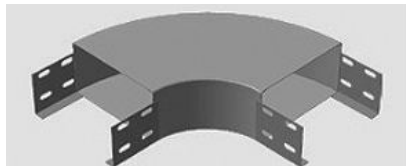
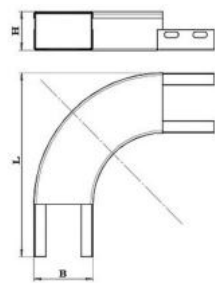
Metalware used: M8. To couple together, LS connectors and LSSH swivel tray connectors with M8 metalware set are used.

hot zinc plating

cold zinc plating

SHEET TRAYS WITH INTERLOCK

LGP 90°horizontal anale



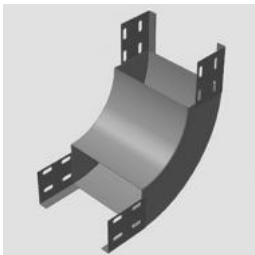
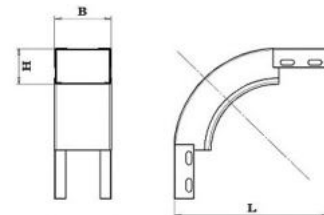
Application

Used for a horizontal turn of a cable line path by 90°. Material - 08 ps.

Standard make: hot zinc plating, cold zinc plating. The stainless steel is manufactured

upon ordering. A lid is fixed on the tray bed with profiled interlock. The sections are supplied completed with lids.

LPP vertical angle, rise 90°



Application

Used for a turn of a cable line path by 90° upwards. Material - 08 ps.

Standard make: hot zinc plating, cold zinc plating. The stainless steel is manufactured upon ordering. A lid is fixed on the tray bed with profiled interlock. The sections are supplied completed with lids.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
Tray height 50 mm						
LGP-200-50	60701	410	200	50	1,0	1,14
LGP-200-50	60702	410	200	50	1,0	1,14
LGP-300-50	60703	510	300	50	1,0	1,70
LGP-300-50	60704	510	300	50	1,0	1,70
LGP-400-50	60705	610	400	50	1,0	2,37
LGP-400-50	60706	610	400	50	1,0	2,37
LGP-500-50	60707	710	500	50	1,0	5,54
LGP-500-50	60708	710	500	50	1,0	5,54
LGP-600-50	60709	810	600	50	1,0	7,30
LGP-600-50	60710	810	600	50	1,0	7,30
Tray height 80 mm						
LGP-200-80	60711	410	200	80	1,0	1,30
LGP-200-80	60712	410	200	80	1,0	1,30
LGP-300-80	60713	510	300	80	1,0	1,89
LGP-300-80	60714	510	300	80	1,0	1,89
LGP-400-80	60715	610	400	80	1,0	2,61
LGP-400-80	60716	610	400	80	1,0	2,61
LGP-500-80	60717	710	500	80	1,0	5,82
LGP-500-80	60718	710	500	80	1,0	5,82
LGP-600-80	60719	810	600	80	1,0	7,62
LGP-600-80	60720	810	600	80	1,0	7,62
Tray height 100 mm						
LGP-200-100	60721	410	200	100	1,0	1,53
LGP-200-100	60722	410	200	100	1,0	1,53
LGP-300-100	60723	510	300	100	1,0	2,15
LGP-300-100	60724	510	300	100	1,0	2,15
LGP-400-100	60725	610	400	100	1,0	2,89
LGP-400-100	60726	610	400	100	1,0	2,89
LGP-500-100	60727	710	500	100	1,0	6,13
LGP-500-100	60728	710	500	100	1,0	6,13

hot zinc plating

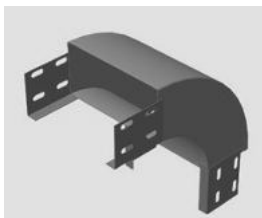
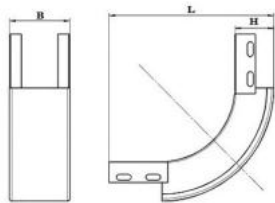
cold zinc plating

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
Tray height 50 mm						
LPP-200-50	60801	425	200	50	1,0	1,22
LPP-200-50	60802	425	200	50	1,0	1,22
LPP-300-50	60803	525	300	50	1,0	1,66
LPP-300-50	60804	525	300	50	1,0	1,66
LPP-400-50	60805	625	400	50	1,0	1,98
LPP-400-50	60806	625	400	50	1,0	1,98
LPP-500-50	60807	725	500	50	1,0	2,29
LPP-500-50	60808	725	500	50	1,0	2,29
LPP-600-50	60809	825	600	50	1,0	2,66
LPP-600-50	60810	825	600	50	1,0	2,66
Tray height 80 mm						
LPP-200-80	60811	425	200	80	1,0	1,45
LPP-200-80	60812	425	200	80	1,0	1,45
LPP-300-80	60813	525	300	80	1,0	1,93
LPP-300-80	60814	525	300	80	1,0	1,93
LPP-400-80	60815	625	400	80	1,0	2,29
LPP-400-80	60816	625	400	80	1,0	2,29
LPP-500-80	60817	725	500	80	1,0	2,62
LPP-500-80	60818	725	500	80	1,0	2,62
LPP-600-80	60819	825	600	80	1,0	3,03
LPP-600-80	60820	825	600	80	1,0	3,03
Tray height 100 mm						
LPP-200-100	60821	425	200	100	1,0	1,72
LPP-200-100	60822	425	200	100	1,0	1,72
LPP-300-100	60823	525	300	100	1,0	2,22
LPP-300-100	60824	525	300	100	1,0	2,22
LPP-400-100	60825	625	400	100	1,0	2,61
LPP-400-100	60826	625	400	100	1,0	2,61
LPP-500-100	60827	725	500	100	1,0	2,99
LPP-500-100	60828	725	500	100	1,0	2,99

SHEET TRAYS WITH INTERLOCK

LGVS vertical angle, slope 90°



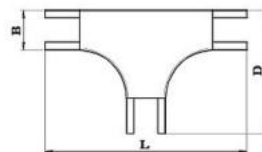
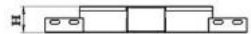
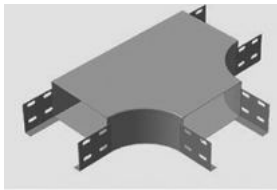
Application

Used for a turn of a cable line path by 90° downwards. Material - 08 ps. Standard make: hot zinc plating, cold zinc plating, stainless steel upon ordering. A lid is fixed on the tray bed with profiled interlock. The sections are supplied completed with lids.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
Tray height 50 mm						
LGVS-200-50	60901	263	200	50	1,0	1,22
LGVS-200-50	60902	263	200	50	1,0	1,22
LGVS-300-50	60903	263	300	50	1,0	1,68
LGVS-300-50	60904	263	300	50	1,0	1,68
LGVS-400-50	60905	263	400	50	1,0	1,99
LGVS-400-50	60906	263	400	50	1,0	1,99
LGVS-500-50	60907	263	500	50	1,0	2,32
LGVS-500-50	60908	263	500	50	1,0	2,32
LGVS-600-50	60909	263	600	50	1,0	2,68
LGVS-600-50	60310	263	600	50	1,0	2,68
Tray height 80 mm						
LGVS-200-80	60911	293	200	80	1,0	1,45
LGVS-200-80	60912	293	200	80	1,0	1,45
LGVS-300-80	60913	293	300	80	1,0	1,97
LGVS-300-80	60914	293	300	80	1,0	1,97
LGVS-400-80	60915	293	400	80	1,0	2,31
LGVS-400-80	60916	293	400	80	1,0	2,31
LGVS-500-80	60917	293	500	80	1,0	2,65
LGVS-500-80	60918	293	500	80	1,0	2,65
LGVS-600-80	60919	293	600	80	1,0	3,06
LGVS-600-80	60920	293	600	80	1,0	3,06
Tray height 100 mm						
LGVS-200-100	60921	313	200	100	1,0	1,72
LGVS-200-100	60922	313	200	100	1,0	1,72
LGVS-300-100	60923	313	300	100	1,0	2,28
LGVS-300-100	60924	313	300	100	1,0	2,28
LGVS-400-100	60925	313	400	100	1,0	2,63
LGVS-400-100	60926	313	400	100	1,0	2,63
LGVS-500-100	60927	313	500	100	1,0	3,02
LGVS-500-100	60928	313	500	100	1,0	3,02

LGT T-shape angle



Application

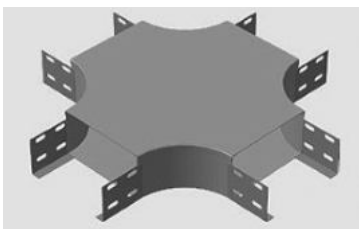
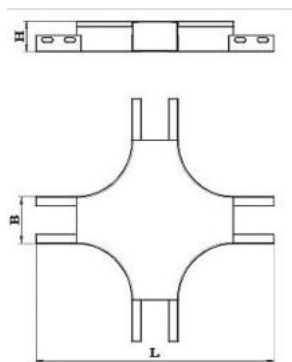
Used for a horizontal turn of a cable line path by 90°. Material - 08 ps. Standard make: hot zinc plating, cold zinc plating. The stainless steel is manufactured upon ordering. A lid is fixed on the tray bed with profiled interlock. The sections are supplied completed with lids.

Technical features

Type	Art.	Length, mm (L)	Length, mm (D)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
Tray height 50 mm							
LGT-200-50	61101	629	416	200	50	1,0	2,72
LGT-200-50	61102	629	416	200	50	1,0	2,72
LGT-300-50	61103	729	516	300	50	1,0	4,15
LGT-300-50	61104	729	516	300	50	1,0	4,15
LGT-400-50	61105	829	616	400	50	1,0	5,89
LGT-400-50	61106	829	616	400	50	1,0	5,89
LGT-500-50	61107	929	716	500	50	1,0	7,92
LGT-500-50	61108	929	716	500	50	1,0	7,92
LGT-600-50	61109	1029	816	600	50	1,0	10,30
LGT-600-50	61110	1029	816	600	50	1,0	10,30
Tray height 80 mm							
LGT-200-80	61111	629	416	200	80	1,0	2,91
LGT-200-80	61112	629	416	200	80	1,0	2,91
LGT-300-80	61113	729	516	300	80	1,0	4,36
LGT-300-80	61114	729	516	300	80	1,0	4,36
LGT-400-80	61115	829	616	400	80	1,0	6,12
LGT-400-80	61116	829	616	400	80	1,0	6,12
LGT-500-80	61117	929	716	500	80	1,0	8,19
LGT-500-80	61118	929	716	500	80	1,0	8,19
LGT-600-80	61119	1029	816	600	80	1,0	10,59
LGT-600-80	61120	1029	816	600	80	1,0	10,59
Tray height 100 mm							
LGT-200-100	61121	629	416	200	100	1,0	3,22
LGT-200-100	61122	629	416	200	100	1,0	3,22
LGT-300-100	61123	729	516	300	100	1,0	4,69
LGT-300-100	61124	729	516	300	100	1,0	4,69
LGT-400-100	61125	829	616	400	100	1,0	6,47
LGT-400-100	61126	829	616	400	100	1,0	6,47
LGT-500-100	61127	929	716	500	100	1,0	8,56
LGT-500-100	61128	929	716	500	100	1,0	8,56

SHEET TRAYS WITH INTERLOCK

LGXX-shape angle



Application

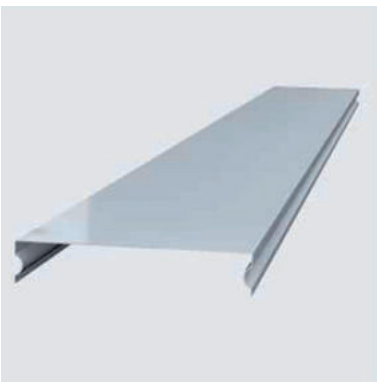
Used for a horizontal turn of a cable line path by 90° in four directions.

Material - 08 ps. Standard make: hot zinc plating, cold zinc plating. The stainless steel is manufactured upon ordering. A lid is fixed on the tray bed with profiled interlock. The sections are supplied completed with lids

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
Tray height 50 mm						
LGX-200-50	61201	263	200	50	1,0	3,28
LGX-200-50	61202	263	200	50	1,0	3,28
LGX-300-50	61203	263	300	50	1,0	4,84
LGX-300-50	61204	263	300	50	1,0	4,84
LGX-400-50	61205	263	400	50	1,0	6,71
LGX-400-50	61206	263	400	50	1,0	6,71
LGX-500-50	61207	263	500	50	1,0	8,84
LGX-500-50	61208	263	500	50	1,0	8,84
LGX-600-50	61209	263	600	50	1,0	11,33
LGX-600-50	61210	263	600	50	1,0	11,33
Tray height 80 mm						
LGX-200-80	61211	293	200	80	1,0	3,44
LGX-200-80	61212	293	200	80	1,0	3,44
LGX-300-80	61213	293	300	80	1,0	5,00
LGX-300-80	61214	293	300	80	1,0	5,00
LGX-400-80	61215	293	400	80	1,0	6,87
LGX-400-80	61216	293	400	80	1,0	6,87
LGX-500-80	61217	293	500	80	1,0	9,02
LGX-500-80	61218	293	500	80	1,0	9,02
LGX-600-80	61219	293	600	80	1,0	11,52
LGX-600-80	61220	293	600	80	1,0	11,52
Tray height 100 mm						
LGX-200-100	61221	313	200	100	1,0	3,80
LGX-200-100	61222	313	200	100	1,0	3,80
LGX-300-100	61223	313	300	100	1,0	5,36
LGX-300-100	61224	313	300	100	1,0	5,36
LGX-400-100	61225	313	400	100	1,0	7,23
LGX-400-100	61226	313	400	100	1,0	7,23
LGX-500-100	61227	313	500	100	1,0	9,39
LGX-500-100	61228	313	500	100	1,0	9,39

LGK Iid



Application

For providing IP20 protection grade.

The products are manufactured according to the requirements of GOST 52868-2007.

Specifics:

- Mounted on the tray bed without tools.
- The length of the straight section is 3000 mm.
- The thickness of the steel is 1.0 mm according to the requirements of GOST R 52868-2007 to the intensity of the distributed load.
- Material - 08 ps.
- Standard make: hot zinc plating, cold zinc plating. The stainless steel is manufactured upon ordering.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight l/m, kg
LGK-200	61301	3000	200	16	1,0	1,13
LGK-200	61302	3000	200	16	1,0	1,13
LGK-300	61303	3000	300	16	1,0	1,63
LGK-300	61304	3000	300	16	1,0	1,63
LGK-400	61305	3000	400	16	1,0	2,80
LGK-400	61306	3000	400	16	1,0	2,80
LGK-500	61307	3000	500	16	1,0	3,47
LGK-500	61308	3000	500	16	1,0	3,47
LGK-600	61309	3000	600	16	1,0	4,10
LGK-600	61310	3000	600	16	1,0	4,10

For the tray lid complementary fixation additional fixators are used. They are necessary when mounting outdoors, in especially windy areas, for protection from vandalism, cold zinc plating.

hot zinc plating

cold zinc plating

SHEET TRAYS WITH INTERLOCK

LR separator

For providing electromagnetic compatibility for different type cables.
Delivered complete with M8 metalware.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight l/m, kg
LR-50	61401	3000	30	45	1,0	0,6
LR-80	61402	3000	30	75	1,0	0,8
LR-100	61403	3000	30	95	1,0	1,0



SLG tray connector

For connecting straight sections together.
Delivered complete with M8 metalware.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
SLG-200	61501	200	200	35	1,5	0,60
SLG-300	61502	200	300	35	1,5	0,90
SLG-400	61503	200	400	35	1,5	1,10
SLG-500	61504	200	500	35	1,5	1,40



LS tray connector

For connecting together straight sections with height 50 mm and 100 mm.
Delivered complete with M8 metalware.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
LS-50	61601	200	20	45	1,2	0,1
LS-80	61602	200	20	75	1,2	0,15
LS-100	61603	200	20	95	1,2	0,2



LSSH swivel tray connector

For connecting together straight sections with height 50 mm and 100 mm at angle from 0 to 90 degrees. Delivered complete with M8 metalware. Delivered nonassembled: 2 planks separately, metalware separately.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
LSSH-50	61701	150	-	45	1,2	0,24
LSSH-80	61702	150	-	75	1,2	0,45
LSSH-100	61703	200	-	95	1,5	0,54



SHEET TRAYS

Sheet tray straight section LGV 50; 80; 100 mm

Application

For laying cable lines both horizontally and vertically.
The products are manufactured according to the requirements of GOST 52868-2007.

Specifics:

- Mounting outside and inside of premises.
- Applicable for civil and industrial constructions. For use in corrosive aggressive environment, in petrochemical refinery plants, in gas and chemical industries, metallurgy and food industry.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight l/m, kg
Tray height 50 mm						
LGV-200-50	63101	3000	200	50	1,5	3,50
LGV-200-50	63102	3000	200	50	2,0	5,20
LGV-300-50	63103	3000	300	50	1,5	5,90
LGV-300-50	63104	3000	300	50	2,0	6,80
LGV-400-50	63105	3000	400	50	1,5	6,20
LGV-400-50	63106	3000	400	50	2,0	8,50
LGV-500-50	63107	3000	500	50	1,5	7,66
LGV-500-50	63108	3000	500	50	2,0	10,10
LGV-600-50	63109	3000	600	50	1,5	8,90
LGV-600-50	63110	3000	600	50	2,0	11,70
Tray height 100 mm						
LGV-200-100	63201	3000	200	100	1,5	5,19
LGV-200-100	63202	3000	200	100	2,0	6,80
LGV-300-100	63203	3000	300	100	1,5	6,42
LGV-300-100	63204	3000	300	100	2,0	8,50
LGV-400-100	63205	3000	400	100	1,5	7,66
LGV-400-100	63206	3000	400	100	2,0	10,10
LGV-500-100	63207	3000	500	100	1,5	8,89
LGV-500-100	63208	3000	500	100	2,0	11,70
LGV-600-100	63209	3000	600	100	1,5	10,13
LGV-600-100	63210	3000	600	100	2,0	13,30
Tray height 200 mm						
LGV-200-200	63301	3000	200	200	1,5	7,66
LGV-200-200	63302	3000	200	200	2,0	10,10
LGV-300-200	63303	3000	300	200	1,5	8,89
LGV-300-200	63304	3000	300	200	2,0	11,70
LGV-400-200	63305	3000	400	200	1,5	10,13
LGV-400-200	63306	3000	400	200	2,0	13,30
LGV-500-200	63307	3000	500	200	1,5	11,37
LGV-500-200	63308	3000	500	200	2,0	14,90
LGV-600-200	63309	3000	600	200	1,5	12,60
LGV-600-200	63310	3000	600	200	2,0	16,60



- High bearing capacity.
- Straight section length is 3000 mm.
- The thickness of steel is 1.5 and 2.0 mm according to the requirements of GOST 20783-81 for the intensity of distributed load.
- Material - 08ps. St3.
- Standard make: hot zinc plating, cold zinc plating. The stainless steel is manufactured upon ordering.

Metalware used: M8. To couple together, LSV connectors and LSSHV swivel tray connectors with M8 metalware set are used.

 cold zinc plating

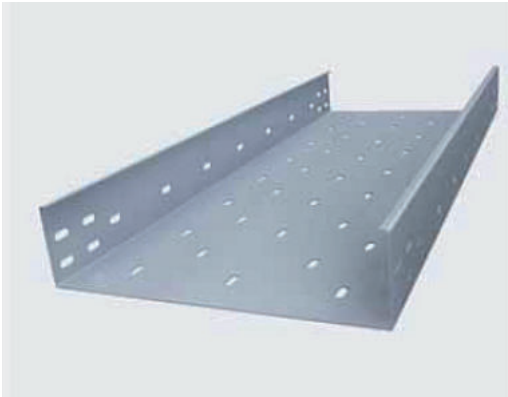
Sheet tray straight section LPV 50; 100; 200 mm

Application
For laying cable lines both horizontally and vertically.
The products are manufactured according to the requirements of GOST 52868-2007.

- Specifics:**
- Mounting outside and inside of premises.
 - Applicable for civil and industrial constructions. For use in corrosive aggressive environment, in petrochemical refinery plants, in gas and chemical industries, metallurgy and food industry.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weightl/m, kg
Tray height 50 mm						
LPV-200-50	63401	3000	200	50	1,5	3,15
LPV-200-50	63402	3000	200	50	2,0	4,69
LPV-300-50	63403	3000	300	50	1,5	5,31
LPV-300-50	63404	3000	300	50	2,0	6,15
LPV-400-50	63405	3000	400	50	1,5	5,58
LPV-400-50	63406	3000	400	50	2,0	7,61
LPV-500-50	63407	3000	500	50	1,5	6,89
LPV-500-50	63408	3000	500	50	2,0	9,08
LPV-600-50	63409	3000	600	50	1,5	8,00
LPV-600-50	63410	3000	600	50	2,0	10,55
Tray height 100 mm						
LPV-200-100	63501	3000	200	100	1,5	4,67
LPV-200-100	63502	3000	200	100	2,0	5,80
LPV-300-100	63503	3000	300	100	1,5	5,78
LPV-300-100	63504	3000	300	100	2,0	7,62
LPV-400-100	63505	3000	400	100	1,5	6,89
LPV-400-100	63506	3000	400	100	2,0	8,58
LPV-500-100	63507	3000	500	100	1,5	8,00
LPV-500-100	63508	3000	500	100	2,0	9,96
LPV-600-100	63509	3000	600	100	1,5	9,12
LPV-600-100	63510	3000	600	100	2,0	11,35
Tray height 200 mm						
LPV-200-200	63601	3000	200	200	1,5	6,89
LPV-200-200	63602	3000	200	200	2,0	8,58
LPV-300-200	63603	3000	300	200	1,5	8,00
LPV-300-200	63604	3000	300	200	2,0	9,96
LPV-400-200	63605	3000	400	200	1,5	9,12
LPV-400-200	63606	3000	400	200	2,0	11,35
LPV-500-200	63607	3000	500	200	1,5	10,23
LPV-500-200	63608	3000	500	200	2,0	12,73
LPV-600-200	63609	3000	600	200	1,5	11,34
LPV-600-200	63610	3000	600	200	2,0	14,11



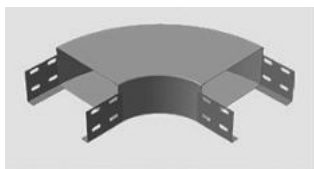
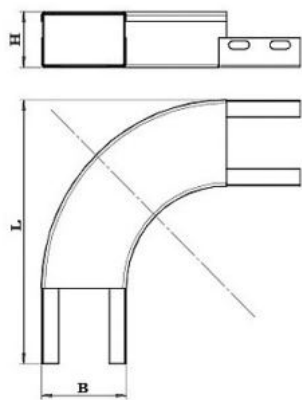
- High bearing capacity.
- Straight section length is 3000 mm.
- The thickness of steel is 1.5 and 2.0 mm according to the requirements of GOST 20783-81 for the intensity of distributed load.
- Material - 08ps, St3.
- Standard make: hot zinc plating, cold zinc plating. The stainless steel is manufactured upon ordering.

Metalware used: M8. To couple together, LSV connectors and LSSHV swivel tray connectors with M8 metalware set are used.

 cold zinc plating

SHEET TRAYS

LGPV 90°horizontal angle



Application

Used for a horizontal turn of a cable line path by 90°.

Specifics:

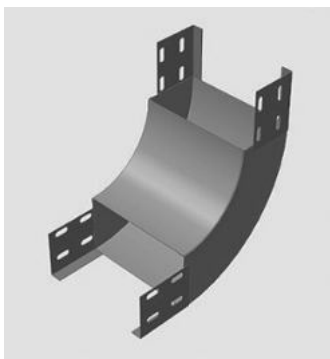
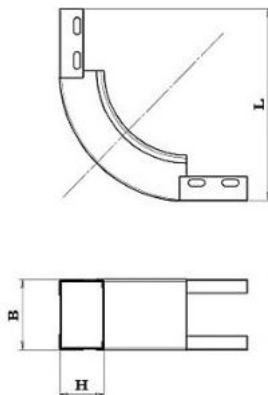
- Material - 08ps.
- Delivered complete with a lid, a lid fixator, connectors and metalware.
- Standard make: cold zinc plating. Hot zinc plating and stainless steel are upon ordering.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
Tray height 50 mm						
LGPV-200-50	64401	425	200	50	1,5	3,07
LGPV-300-50	64402	525	300	50	1,5	5,01
LGPV-400-50	64403	625	400	50	1,5	7,42
LGPV-500-50	64404	725	500	50	1,5	10,31
LGPV-600-50	64405	825	600	50	1,5	13,66
Tray height 100 mm						
LGPV-200-100	64406	425	200	100	1,5	3,54
LGPV-300-100	64407	525	300	100	1,5	5,60
LGPV-400-100	64408	625	400	100	1,5	8,13
LGPV-500-100	64409	725	500	100	1,5	11,19
LGPV-600-100	64410	825	600	100	1,5	14,66
Tray height 200 mm						
LGPV-200-200	64411	425	200	200	1,5	4,54
LGPV-300-200	64412	525	300	200	1,5	6,83
LGPV-400-200	64413	625	400	200	1,5	9,60
LGPV-500-200	64414	725	500	200	1,5	12,90
LGPV-600-200	64415	825	600	200	1,5	16,61

cold zinc plating

LPPV vertical angle, rise 90°



Application

Used for a turn of a cable line path by 90° upwards.

Specifics:

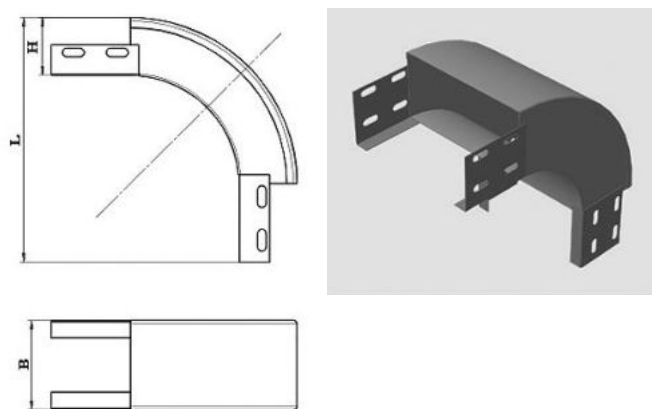
- Material - 08ps.
- Delivered complete with a lid, a lid fixator, connectors and metalware.
- Standard make: cold zinc plating. Hot zinc plating and stainless steel are upon ordering.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
Tray height 50 mm						
LPPV-200-50	64501	425	200	50	1,5	1,42
LPPV-300-50	64502	525	300	50	1,5	1,95
LPPV-400-50	64503	625	400	50	1,5	2,48
LPPV-500-50	64504	725	500	50	1,5	3,01
LPPV-600-50	64505	825	600	50	1,5	3,54
Tray height 100 mm						
LPPV-200-100	64506	425	200	100	1,5	1,95
LPPV-300-100	64507	525	300	100	1,5	2,60
LPPV-400-100	64508	625	400	100	1,5	3,24
LPPV-500-100	64509	725	500	100	1,5	3,83
LPPV-600-100	64510	825	600	100	1,5	4,48
Tray height 200 mm						
LPPV-200-200	64511	425	200	200	1,5	3,36
LPPV-300-200	64512	525	300	200	1,5	4,13
LPPV-400-200	64513	625	400	200	1,5	4,95
LPPV-500-200	64514	725	500	200	1,5	5,77
LPPV-600-200	64515	825	600	200	1,5	6,60

cold zinc plating

LGVV vertical angle, slope 90°



Application
Used for a turn of a cable line path by 90° downwards.

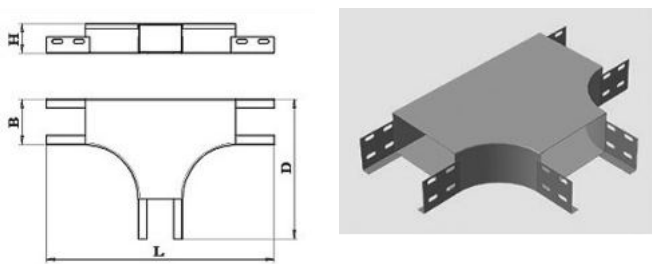
- Specifics:**
- Material - 08ps.
 - Delivered complete with a lid, a lid fixator, connectors and metalware.
 - Standard make: cold zinc plating. Hot zinc plating and stainless steel are upon ordering.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
Tray height 50 mm						
LGVV-200-50	64601	425	200	50	1,5	1,36
LGVV-300-50	64602	525	300	50	1,5	1,89
LGVV-400-50	64603	625	400	50	1,5	2,42
LGVV-500-50	64604	725	500	50	1,5	3,01
LGVV-600-50	64605	825	600	50	1,5	3,54
Tray height 100 mm						
LGVV-200-100	64606	425	200	100	1,5	1,95
LGVV-300-100	64607	525	300	100	1,5	2,54
LGVV-400-100	64608	625	400	100	1,5	3,18
LGVV-500-100	64609	725	500	100	1,5	3,83
LGVV-600-100	64610	825	600	100	1,5	4,42
Tray height 200 mm						
LGVV-200-200	64611	425	200	200	1,5	3,30
LGVV-300-200	64612	525	300	200	1,5	4,13
LGVV-400-200	64613	625	400	200	1,5	4,89
LGVV-500-200	64614	725	500	200	1,5	5,72
LGVV-600-200	64615	825	600	200	1,5	6,54

cold zinc plating

LGTV T-shape angle



Application
Used for a horizontal turn of a cable line path by 90°.

- Specifics:**
- Material - 08ps.
 - Delivered complete with a lid, a lid fixator, connectors and metalware.
 - Standard make: cold zinc plating. Hot zinc plating and stainless steel are upon ordering.

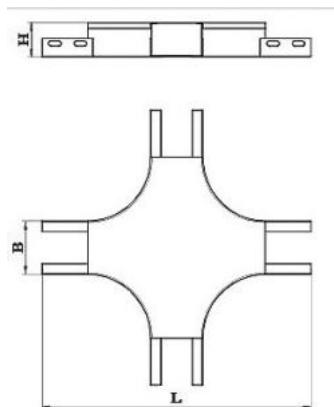
Technical features

Type	Art.	Length, mm (L)	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
Tray height 50 mm							
LGTV-200-50	64701	650	425	200	50	1,5	3,71
LGTV-300-50	64702	750	525	300	50	1,5	5,89
LGTV-400-50	64703	850	625	400	50	1,5	8,48
LGTV-500-50	64704	950	725	500	50	1,5	11,60
LGTV-600-50	64705	1050	825	600	50	1,5	15,14
Tray height 100 mm							
LGTV-200-100	64706	650	425	200	100	1,5	4,19
LGTV-300-100	64707	750	525	300	100	1,5	6,42
LGTV-400-100	64708	850	625	400	100	1,5	9,13
LGTV-500-100	64709	950	725	500	100	1,5	12,25
LGTV-600-100	64710	1050	825	600	100	1,5	15,90
Tray height 200 mm							
LGTV-200-200	64711	650	425	200	200	1,5	5,19
LGTV-300-200	64712	750	525	300	200	1,5	7,54
LGTV-400-200	64713	850	625	400	200	1,5	10,31
LGTV-500-200	64714	950	725	500	200	1,5	13,60
LGTV-600-200	64715	1050	825	600	200	1,5	17,37

cold zinc plating

SHEET TRAYS

LGXVX-shape angle



Application

Used for a horizontal turn of a cable line path by 90° in four directions.

Specifics:

- Material - 08ps.
- Delivered complete with a lid, a lid fixator, connectors and metalware.
- Standard make: cold zinc plating. Hot zinc plating and stainless steel are upon ordering.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
Tray height 50 mm						
LGXV-200-50	64801	650	200	50	1,5	4,42
LGXV-300-50	64802	750	300	50	1,5	6,78
LGXV-400-50	64803	850	400	50	1,5	9,60
LGXV-500-50	64804	950	500	50	1,5	12,90
LGXV-600-50	64805	1050	600	50	1,5	16,67
Tray height 100 mm						
LGXV-200-100	64806	650	200	100	1,5	4,89
LGXV-300-100	64807	750	300	100	1,5	7,25
LGXV-400-100	64808	850	400	100	1,5	10,07
LGXV-500-100	64809	950	500	100	1,5	13,37
LGXV-600-100	64810	1050	600	100	1,5	17,14
Tray height 200 mm						
LGXV-200-200	64811	650	200	200	1,5	5,83
LGXV-300-200	64812	750	300	200	1,5	8,19
LGXV-400-200	64813	850	400	200	1,5	11,01
LGXV-500-200	64814	950	500	200	1,5	14,31
LGXV-600-200	64815	1050	600	200	1,5	18,08

 cold zinc plating

LGKV lid



Application

Used for protection from mechanical damage and dust.

The products are manufactured according to the requirements of GOST 52868-2007.

Specifics:

- Made of 1.5 mm thickness steel.
- Straight section length is 3000 mm.
- Material - 08ps, St3.
- Standard make: cold zinc plating. Hot zinc plating and stainless steel are upon ordering.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
LGKV-200	65301	3000	200	15	1,5	2,80
LGKV-300	65302	3000	300	15	1,5	4,40
LGKV-400	65303	3000	400	15	1,5	5,30
LGKV-500	65304	3000	500	15	1,5	6,50
LGKV-600	65305	3000	600	15	1,5	7,70

 cold zinc plating

SHEET TRAYS

LSV tray connector

For connecting together tray straight sections with height of 50; 100; 200 mm.
Delivered complete with M8 metalware.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
LSV-50	66601	200	20	45	1,5	0,17
LSV-100	66602	200	20	95	1,5	0,22
LSV-200	66603	200	20	195	1,5	0,52

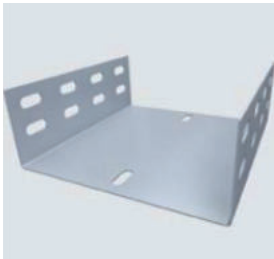


SLGV tray connector

For connecting straight sections together.
Delivered complete with M8 metalware.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
Tray height 50 mm						
SLGV-200-50	66501	200	200	50	1,5	0,73
SLGV-300-50	66502	200	300	50	1,5	0,97
SLGV-400-50	66503	200	400	50	1,5	1,22
SLGV-500-50	66504	200	500	50	1,5	1,46
SLGV-600-50	66505	200	600	50	1,5	1,70
Tray height 100 mm						
SLGV-200-100	66506	200	200	100	1,5	0,97
SLGV-300-100	66507	200	300	100	1,5	1,22
SLGV-400-100	66508	200	400	100	1,5	1,46
SLGV-500-100	66509	200	500	100	1,5	1,70
SLGV-600-100	66510	200	600	100	1,5	1,95
Tray height 200 mm						
SLGV-200-200	66511	200	200	200	1,5	1,46
SLGV-300-200	66512	200	300	200	1,5	1,70
SLGV-400-200	66513	200	400	200	1,5	1,95
SLGV-500-200	66514	200	500	200	1,5	2,20
SLGV-600-200	66515	200	600	200	1,5	2,40



LSSHV swivel tray connector

For connecting together straight sections with height 50 mm and 100 mm at angle from 0 to 90°.
Delivered complete with M8 metalware nonassembled: 2 planks separately, metalware separately.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
LSSHV-50	66701	150	-	46	1,5	0,24
LSSHV-100	66702	200	-	95	1,5	0,54
LSSHV-200	66703	300	-	160	1,5	1,10



SHEET TRAYS

LRV separator

For providing electromagnetic compatibility for different type cables.
Delivered complete with M8 metalware.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight l/m, kg
LRV-50	66801	3000	30	45	1,0	0,6
LRV-100	66802	3000	30	95	1,0	1,0
LRV-200	66803	3000	30	195	1,2	2,1



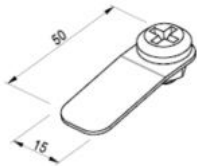
LFK lid fixator

Additional retaining mechanisms of the tray lid are used to ensure additional fixation of the LFK lid. This allows using the trays either in a vertical or horizontal mounting in especially windy places and provides vandalism protection. LFK lid retaining mechanism is used in trays with 200 mm section.

6 fixators are necessary for a lid with length of 3000 mm.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
LFK	66901	50	15	2,5	1,5	0,01



LPK lid fixator

LPK lid fixator is used in especially windy places and where the quick dismantling will be not required after mounting completion. 4 fixators are necessary for a lid with length of 3000 mm.

Technical features

Type	Art.	Length, mm (L)	Width, mm (B)	Height, mm (H)	Thickness, mm	Weight, kg
LPK-50	66902	-	30	35	1,5	0,01
LPK-100	66903	-	30	65	1,5	0,02
LPK-200	66904	-	30	115	1,5	0,03



CABLE LADDERS

KR cable ladder straight section



Cable ladders represent a new generation cable structures. Increased bearing capacity at lower metal specific amount offers an optimal price for high quality. When using cable ladders for spanning distances over 6 meters, you get the product with increased strength due to the special shape profile and not for the increased metal thickness. That results in lower metal consumption and low price at high bearing characteristics.

Application

For laying cables on cable bridges and in tunnels, indoors where distances between supports can reach 6 meters, where the tray load may be high, outdoors with high snow load.

Specifics:

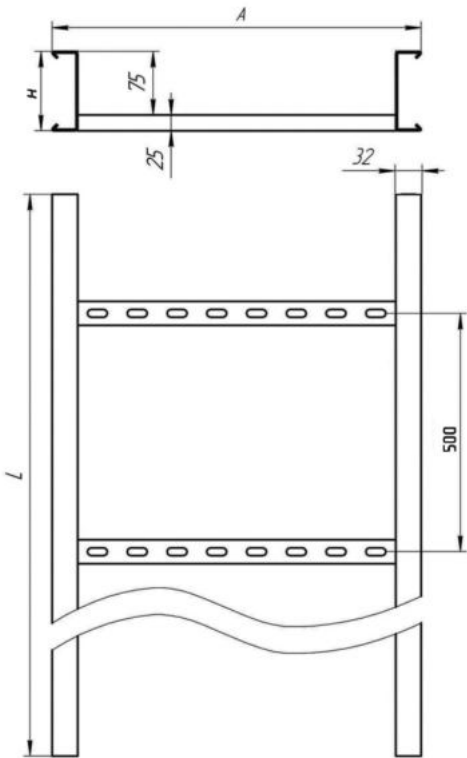
- cable ladders are made for various climatic zones and of various climatic versions;
- used in industrial construction;
- special solutions are used for lowering snow loads;
- cable ladders for big spans are used in corrosive and aggressive environment, in petrochemical refinery plants, in gas and chemical industries and metallurgy;
- high bearing capacity;
- distances between supports up to 6 meters inclusively.

The products are manufactured according to the requirements of GOST 52868-2007.

Standard make: hot zinc plating, cold zinc plating.

Straight section length is 3000 mm. Sections with 6000 mm length are made to order. C-profile with 2 mm thickness is used for bearing crosspieces. Gaps between crosspieces is 500 mm.

KR-100 straight section



Technical features

Type	Article number.	Max. load, kN/m		Length, mm (L)	Width, mm (A)	Height, mm (H)	Weight l/m, kg
		3 m	6 m				
KR-200-100	70101	2,35	0,63	3000	264	100	5,67
KR-200-100	70102			3000	264	100	5,67
KR-300-100	70103			3000	364	100	6,00
KR-300-100	70104			3000	364	100	6,00
KR-400-100	70105			3000	464	100	6,33
KR-400-100	70106			3000	464	100	6,33
KR-500-100	70107			3000	564	100	6,67
KR-500-100	70108			3000	564	100	6,67
KR-600-100	70109			3000	664	100	7,00
KR-600-100	70110			3000	664	100	7,00

hot zinc plating

cold zinc plating

CABLE LADDERS

KR-150 straight section

Technical features

Type	Article number.	Max. load, kN/m		Length, mm (L)	Width, mm (A)	Height, mm (H)	Weight l/m, kg
		3 m	6 m				
KR-200-150	70111	4,14	1,04	3000	264	150	7,17
KR-200-150	70112			3000	264	150	7,17
KR-300-150	70113			3000	364	150	7,50
KR-300-150	70114			3000	364	150	7,50
KR-400-150	70115			3000	464	150	7,83
KR-400-150	70116			3000	464	150	7,83
KR-500-150	70117			3000	564	150	8,17
KR-500-150	70118			3000	564	150	8,17
KR-600-150	70119			3000	664	150	8,50
KR-600-150	70120			3000	664	150	8,50

KR-200 straight section

Technical features

Type	Article number.	Max. load, kN/m		Length, mm (L)	Width, mm (A)	Height, mm (H)	Weight l/m, kg
		3 m	6 m				
KR-200-200	70121	5,59	1,32	3000	264	200	8,50
KR-200-200	70122			3000	264	200	8,50
KR-300-200	70123			3000	364	200	8,83
KR-300-200	70124			3000	364	200	8,83
KR-400-200	70125			3000	464	200	9,17
KR-400-200	70126			3000	464	200	9,17
KR-500-200	70127			3000	564	200	9,50
KR-500-200	70128			3000	564	200	9,50
KR-600-200	70129			3000	664	200	9,83
KR-600-200	70130			3000	664	200	9,83

- hot zinc plating
- cold zinc plating

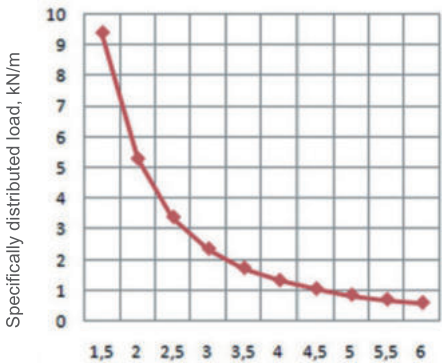
Metalware used: M8.

To couple together, KRSP connectors, KRSU angle connectors and KRSSH swivel tray connectors with M8 metalware sets are used.

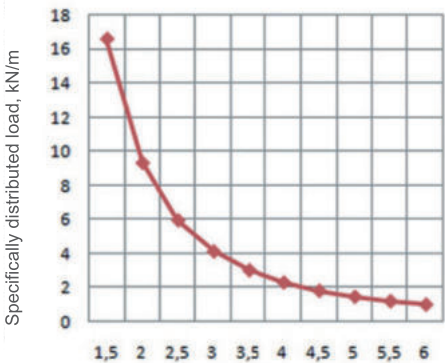
To fix a tray to a shelf or an arm, a KRN tray lower clamp completed with M10x35 bolts is used.

Cable ladders of non-standard height and width are made upon order.

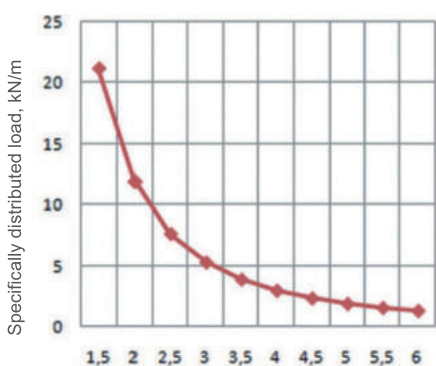
The diagram of specific load dependence on the distance between KR-100 tray supports



The diagram of specific load dependence on the distance between KR-150 tray supports



The diagram of specific load dependence on the distance between KR-200 tray supports



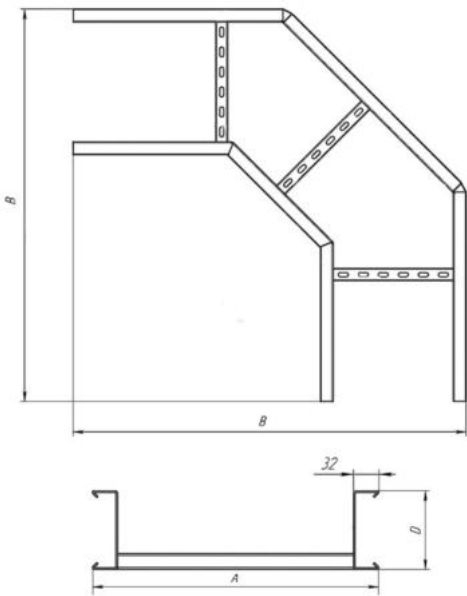
CABLE LADDERS

KRU 90° horizontal angle

Technical features

Type	Art.	Length, mm (B)	Width, mm (A)	Height, mm (D)	Weight, kg
Cable ladder height 100 mm					
KRU-200-100	70201	882	264	100	7,36
KRU-200-100	70202	882	264	100	7,36
KRU-300-100	70203	982	364	100	8,20
KRU-300-100	70204	982	364	100	8,20
KRU-400-100	70205	1082	464	100	9,10
KRU-400-100	70206	1082	464	100	9,10
KRU-500-100	70207	1182	564	100	9,83
KRU-500-100	70208	1182	564	100	9,83
KRU-600-100	70209	1282	664	100	10,65
KRU-600-100	70210	1282	664	100	10,65
Cable ladder height 150 mm					
KRU-200-150	70211	882	264	150	9,33
KRU-200-150	70212	882	264	150	9,33
KRU-300-150	70213	982	364	150	10,3
KRU-300-150	70214	982	364	150	10,3
KRU-400-150	70215	1082	464	150	11,22
KRU-400-150	70216	1082	464	150	11,22
KRU-500-150	70217	1182	564	150	12,18
KRU-500-150	70218	1182	564	150	12,18
KRU-600-150	70219	1282	664	150	12,72
KRU-600-150	70220	1282	664	150	12,72
Cable ladder height 200 mm					
KRU-200-200	70221	882	264	200	11,3
KRU-200-200	70222	882	264	200	11,3
KRU-300-200	70223	982	364	200	12,4
KRU-300-200	70224	982	364	200	12,4
KRU-400-200	70225	1082	464	200	13,44
KRU-400-200	70226	1082	464	200	13,44
KRU-500-200	70227	1182	564	200	14,54
KRU-500-200	70228	1182	564	200	14,54
KRU-600-200	70229	1282	664	200	15,2
KRU-600-200	70230	1282	664	200	15,2

	hot zinc plating
	cold zinc plating



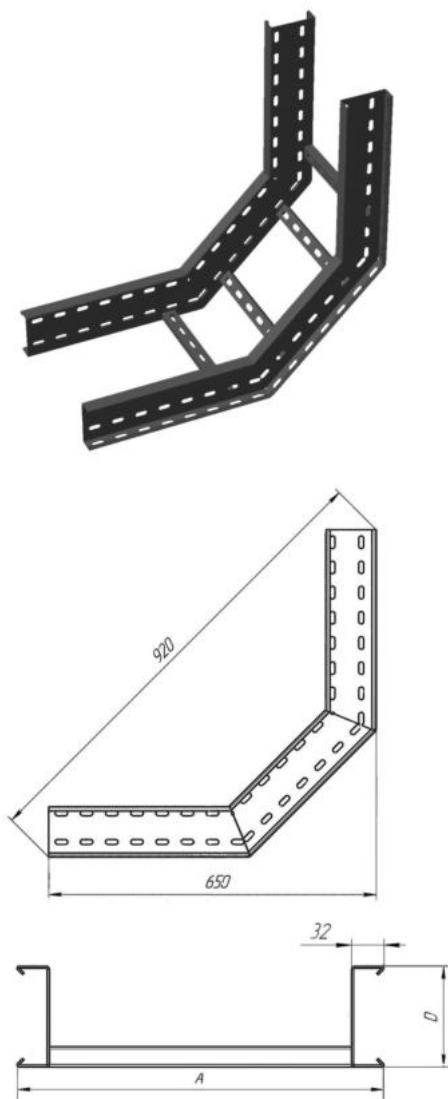
Application:
Used for a horizontal turn of a cable line path by 90°.

The products are manufactured according to the requirements of GOST 52868-2007.

- Specifics:**
- Standard make: hot zinc plating, cold zinc plating.
 - Metalware used: M8.
 - To couple together:
 - KRSP connector with M8 metalware sets;
 - KRSSH swivel tray connector with M8 metalware sets is used.
 - To fix a tray to a shelf or an arm, a KRN tray lower clamp completed with M10x35 bolts is used.

CABLE LADDERS

KRP vertical angle, rise 90°



Application:
Used for a horizontal turn of a cable line path by 90°.

The products are manufactured according to the requirements of GOST 52868-2007.

- Specifics:**
- Standard make: hot zinc plating, cold zinc plating.
 - Metalware used: M8.
 - To couple together:
 - KRSP connector with M8 metalware sets;
 - KRSSH swivel tray connector with M8 metalware sets is used.
 - To fix a tray to a shelf or an arm, a KRN tray lower clamp completed with M10x35 bolts is used.

Technical features

Type	Art.	Length, mm (B)	Width, mm (A)	Height, mm (D)	Weight, kg
Cable ladder height 100 mm					
KRP-200-100	70301	650	264	100	6,92
KRP-200-100	70302	650	264	100	6,92
KRP-300-100	70303	650	364	100	7,32
KRP-300-100	70304	650	364	100	7,32
KRP-400-100	70305	650	464	100	7,72
KRP-400-100	70306	650	464	100	7,72
KRP-500-100	70307	650	564	100	8,12
KRP-500-100	70308	650	564	100	8,12
KRP-600-100	70309	650	664	100	8,52
KRP-600-100	70310	650	664	100	8,52
Cable ladder height 150 mm					
KRP-200-150	70311	650	264	150	7,2
KRP-200-150	70312	650	264	150	7,2
KRP-300-150	70313	650	364	150	7,6
KRP-300-150	70314	650	364	150	7,6
KRP-400-150	70315	650	464	150	8,0
KRP-400-150	70316	650	464	150	8,0
KRP-500-150	70317	650	564	150	8,4
KRP-500-150	70318	650	564	150	8,4
KRP-600-150	70319	650	664	150	8,8
KRP-600-150	70320	650	664	150	8,8
Cable ladder height 200 mm					
KRP-200-200	70321	650	264	200	8,4
KRP-200-200	70322	650	264	200	8,4
KRP-300-200	70323	650	364	200	8,8
KRP-300-200	70324	650	364	200	8,8
KRP-400-200	70325	650	464	200	9,2
KRP-400-200	70326	650	464	200	9,2
KRP-500-200	70327	650	564	200	9,6
KRP-500-200	70328	650	564	200	9,6
KRP-600-200	70329	650	664	200	10,0
KRP-600-200	70330	650	664	200	10,0

- hot zinc plating
- cold zinc plating

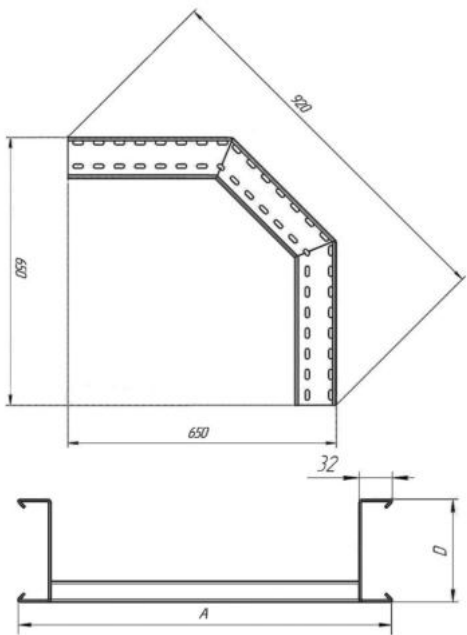
CABLE LADDERS

KRS vertical angle, slope 90°

Technical features

Type	Art.	Length, mm (B)	Width, mm (A)	Height, mm (D)	Weight, kg
Cable ladder height 100 mm					
KRS-200-100	70401	650	264	100	6,92
KRS-200-100	70402	650	264	100	6,92
KRS-300-100	70403	650	364	100	7,32
KRS-300-100	70404	650	364	100	7,32
KRS-400-100	70405	650	464	100	7,72
KRS-400-100	70406	650	464	100	7,72
KRS-500-100	70407	650	564	100	8,12
KRS-500-100	70408	650	564	100	8,12
KRS-600-100	70409	650	664	100	8,52
KRS-600-100	70410	650	664	100	8,52
Cable ladder height 150 mm					
KRS-200-150	70411	650	264	150	7,2
KRS-200-150	70412	650	264	150	7,2
KRS-300-150	70413	650	364	150	7,6
KRS-300-150	70414	650	364	150	7,6
KRS-400-150	70415	650	464	150	8,0
KRS-400-150	70416	650	464	150	8,0
KRS-500-150	70417	650	564	150	8,4
KRS-500-150	70418	650	564	150	8,4
KRS-600-150	70419	650	664	150	8,8
KRS-600-150	70420	650	664	150	8,8
Cable ladder height 200 mm					
KRS-200-200	70421	650	264	200	8,4
KRS-200-200	70422	650	264	200	8,4
KRS-300-200	70423	650	364	200	8,8
KRS-300-200	70424	650	364	200	8,8
KRS-400-200	70425	650	464	200	9,2
KRS-400-200	70426	650	464	200	9,2
KRS-500-200	70427	650	564	200	9,6
KRS-500-200	70428	650	564	200	9,6
KRS-600-200	70429	650	664	200	10,0
KRS-600-200	70430	650	664	200	10,0

- hot zinc plating
- cold zinc plating



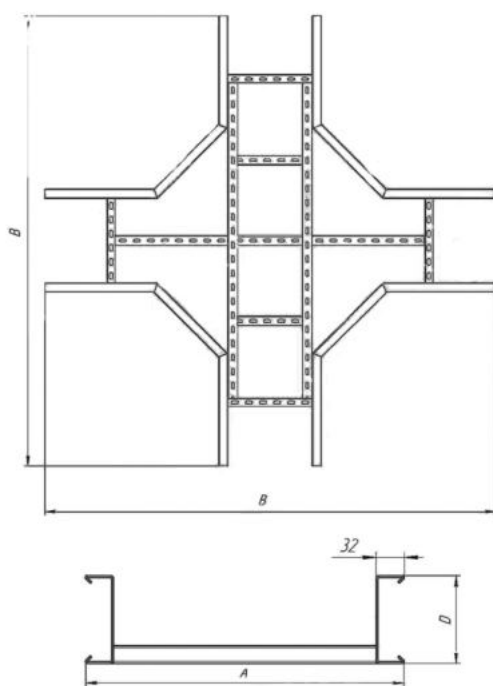
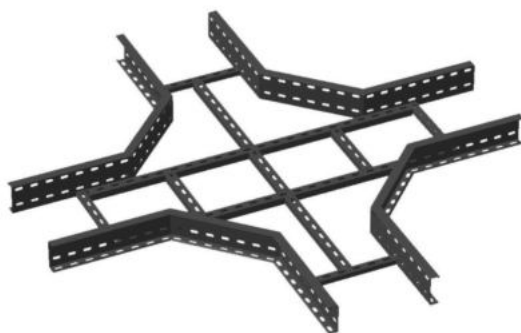
Application:
Used for a turn of a cable line path by 90° downwards.

The products are manufactured according to the requirements of GOST 52868-2007.

- Specifics:**
- Standard make: hot zinc plating, cold zinc plating.
 - Metalware used: M8.
 - To couple together:
 - KRSP connector with M8 metalware sets;
 - KRSSH swivel tray connector with M8 metalware sets is used.
 - To fix a tray to a shelf or an arm, a KRN tray lower clamp completed with M10x35 bolts is used.

CABLE LADDERS

KRX X-shape angle



Application:

Used for a horizontal turn of a cable line path by 90° in four directions.

The products are manufactured according to the requirements of GOST 52868-2007.

Specifics:

- Standard make: hot zinc plating, cold zinc plating.
- Metalware used: M8.
- To couple together:
 - KRSP connector with M8 metalware sets;
 - KRSSH swivel tray connector with M8 metalware sets is used.
- To fix a tray to a shelf or an arm, a KRN tray lower clamp completed with M10x35 bolts is used.

Technical features

Type	Art.	Length, mm (B)	Width, mm (A)	Height, mm (D)	Weight, kg
Cable ladder height 100 mm					
KRX-200-100	70501	1500	264	100	15,42
KRX-200-100	70502	1500	264	100	15,42
KRX-300-100	70503	1600	364	100	16,26
KRX-300-100	70504	1600	364	100	16,26
KRX-400-100	70505	1700	464	100	17,09
KRX-400-100	70506	1700	464	100	17,09
KRX-500-100	70507	1800	564	100	18,76
KRX-500-100	70508	1800	564	100	18,76
KRX-600-100	70509	1900	664	100	19,87
KRX-600-100	70510	1900	664	100	19,87
Cable ladder height 150 mm					
KRX-200-150	70511	1500	264	150	19,71
KRX-200-150	70512	1500	264	150	19,71
KRX-300-150	70513	1600	364	150	20,54
KRX-300-150	70514	1600	364	150	20,54
KRX-400-150	70515	1700	464	150	21,37
KRX-400-150	70516	1700	464	150	21,37
KRX-500-150	70517	1800	564	150	22,21
KRX-500-150	70518	1800	564	150	22,21
KRX-600-150	70519	1900	664	150	23,32
KRX-600-150	70520	1900	664	150	23,32
Cable ladder height 200 mm					
KRX-200-200	70521	1500	264	200	23,16
KRX-200-200	70522	1500	264	200	23,16
KRX-300-200	70523	1600	364	200	23,99
KRX-300-200	70524	1600	364	200	23,99
KRX-400-200	70525	1700	464	200	24,82
KRX-400-200	70526	1700	464	200	24,82
KRX-500-200	70527	1800	564	200	25,66
KRX-500-200	70528	1800	564	200	25,66
KRX-600-200	70529	1900	664	200	26,93
KRX-600-200	70530	1900	664	200	26,93

hot zinc plating

cold zinc plating

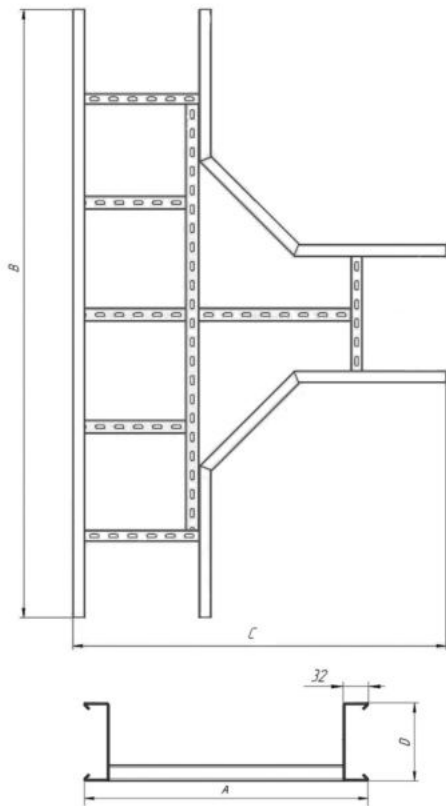
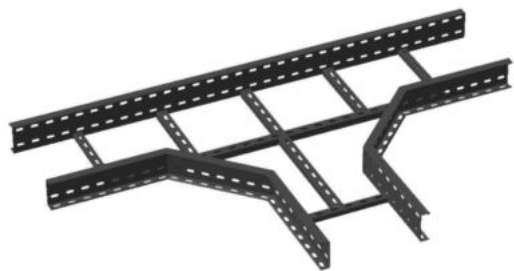
CABLE LADDERS

KRT T-shape angle

Technical features

Type	Art.	Length, mm (B)	Width, mm (A)	Length, mm (C)	Height, mm (D)	Weight, kg
Cable ladder height 100 mm						
KRT-200-100	70601	1500	264	882	100	11,96
KRT-200-100	70602	1500	264	882	100	11,96
KRT-300-100	70603	1600	364	982	100	12,88
KRT-300-100	70604	1600	364	982	100	12,88
KRT-400-100	70605	1700	464	1082	100	13,80
KRT-400-100	70606	1700	464	1082	100	13,80
KRT-500-100	70607	1800	564	1182	100	14,71
KRT-500-100	70608	1800	564	1182	100	14,71
KRT-600-100	70609	1900	664	1282	100	15,63
KRT-600-100	70610	1900	664	1282	100	15,63
Cable ladder height 150 mm						
KRT-200-150	70611	1500	264	882	150	14,78
KRT-200-150	70612	1500	264	882	150	14,78
KRT-300-150	70613	1600	364	982	150	15,80
KRT-300-150	70614	1600	364	982	150	15,80
KRT-400-150	70615	1700	464	1082	150	16,79
KRT-400-150	70616	1700	464	1082	150	16,79
KRT-500-150	70617	1800	564	1182	150	17,78
KRT-500-150	70618	1800	564	1182	150	17,78
KRT-600-150	70619	1900	664	1282	150	18,78
KRT-600-150	70620	1900	664	1282	150	18,78
Cable ladder height 200 mm						
KRT-200-200	70621	1500	264	882	200	17,66
KRT-200-200	70622	1500	264	882	200	17,66
KRT-300-200	70623	1600	364	982	200	18,73
KRT-300-200	70624	1600	364	982	200	18,73
KRT-400-200	70625	1700	464	1082	200	19,80
KRT-400-200	70626	1700	464	1082	200	19,80
KRT-500-200	70627	1800	564	1182	200	20,86
KRT-500-200	70628	1800	564	1182	200	20,86
KRT-600-200	70629	1900	664	1282	200	21,93
KRT-600-200	70630	1900	664	1282	200	21,93

	hot zinc plating
	cold zinc plating



Application:

Used for a horizontal turn of a cable line path by 90°.

The products are manufactured according to the requirements of GOST 52868-2007.

Specifics:

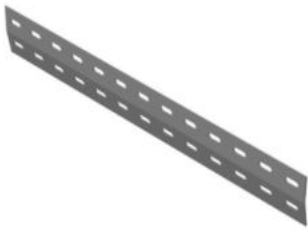
- Standard make: hot zinc plating, cold zinc plating.
- Metalware used: M8.
- To couple together:
 - KRSP connector with M8 metalware sets;
 - KRSSH swivel tray connector with M8 metalware sets is used.
- To fix a tray to a shelf or an arm, a KRN tray lower clamp completed with M10x35 bolts is used.

CABLE LADDERS

KRSP straight connector

Technical features

Type	Article number.	Length, mm	Width, mm	Height, mm	Weight, kg
KRSP-100	70701	600	7	96	0,50
KRSP-100	70702	600	7	96	0,50
KRSP-150	70703	600	7	146	0,70
KRSP-150	70704	600	7	146	0,70
KRSP-200	70705	600	7	195	1,00
KRSP-200	70706	600	7	195	1,00

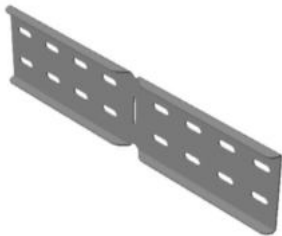


For connecting straight sections together.
Delivered complete with M8 metalware.

KRSU angle connector

Technical features

Type	Article number.	Length, mm	Width, mm	Height, mm	Weight, kg
KRSU-100	70707	400	17	96	0,82
KRSU-100	70708	400	17	96	0,82
KRSU-150	70709	400	17	146	1,23
KRSU-150	70710	400	17	146	1,23
KRSU-200	70711	400	17	196	1,60
KRSU-200	70712	400	17	196	1,60



For connecting straight sections together at an angle.
Delivered complete with M8 metalware.

KRSSH swivel connector

Technical features

Type	Article number.	Length, mm	Width, mm	Height, mm	Weight, kg
KRSSH-100	70713	275	17	96	1,12
KRSSH-100	70714	275	17	96	1,12
KRSSH-150	70715	300	17	146	1,70
KRSSH-150	70716	300	17	146	1,70
KRSSH-200	70717	316	17	196	2,10
KRSSH-200	70718	316	17	196	2,10

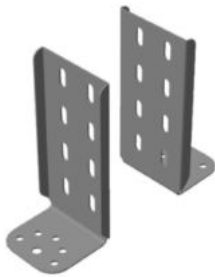


For connecting straight sections together at an angle from 0° to 90°. Delivered bodily and complete with M8 metalware.

KRSSH-G angle connector

Technical features

Type	Article number.	Length, mm	Width, mm	Height, mm	Weight, kg
KRSSH-G-100	70719	200	100	96	1,12
KRSSH-G-100	70720	200	100	96	1,12
KRSSH-G-150	70721	200	100	146	1,70
KRSSH-G-150	70722	200	100	146	1,70
KRSSH-G-200	70723	200	100	196	2,10
KRSSH-G-200	70724	200	100	196	2,10



For mounting ladder straight sections vertically, for fastening ladder's butt-end to a floor, ceiling or to another ladder side. Delivered complete with M8 metalware.

hot zinc plating

cold zinc plating

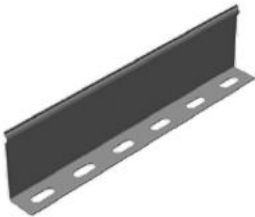
CABLE LADDERS

KRR separator

For separating cables and lines with different voltages and functions. Used for installing in the ladder straight sections. Fastened to ladder bridges. Delivered with M8 metalware.

Technical features

Type	Article number.	Length, mm	Width, mm	Height, mm	Weight l/m, kg
KRR-100	70801	2000	30	70	0,78
KRR-100	70802	2000	30	70	0,78
KRR-150	70803	2000	30	120	1,18
KRR-150	70804	2000	30	120	1,18
KRR-200	70805	2000	30	170	1,57
KRR-200	70806	2000	30	170	1,57



KRN lower clamp

For fastening straight sections of the cable ladder to shelves and supporting arms. Delivered with M8 metalware.

Technical features

Type	Article number.	Length, mm	Width, mm	Height, mm	Weight, kg
KRN	70901	75	40	45	0,20
KRN	70902	75	40	45	0,20



KRPK lid clamp

For mounting a lid on the ladder straight section.

Technical features

Type	Article number.	Length, mm	Width, mm	Height, mm	Weight, kg
KRPK	70903	17	20	40	0,04
KRPK	70904	17	20	40	0,04



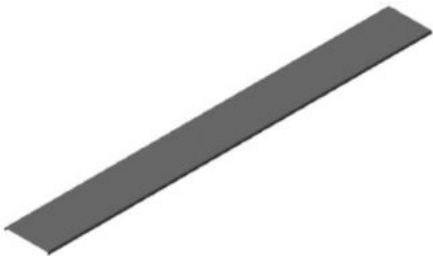
 hot zinc plating  cold zinc plating

CABLE LADDERS

KRKP straight lid

Technical features

Type	Article number.	Length, mm	Width, mm	Height, mm	Thickness, mm	Weight l/m, kg
KRKP-270	71001	2000	270	15	1	2,23
KRKP-270	71002	2000	270	15	1	2,23
KRKP-370	71003	2000	370	15	1	3,01
KRKP-370	71004	2000	370	15	1	3,01
KRKP-470	71005	2000	470	15	1	3,79
KRKP-470	71006	2000	470	15	1	3,79
KRKP-570	71007	2000	570	15	1	4,59
KRKP-570	71008	2000	570	15	1	4,59
KRKP-670	71009	2000	670	15	1,2	6,43
KRKP-670	71010	2000	670	15	1,2	6,43



For protecting cable from mechanical damages, dust and solar radiation.

KRSR radial snow protection lid

Technical features

Type	Article number.	Length, mm	Width, mm	Height, mm	Thickness, mm	Weight l/m, kg
KRSR-270	71011	2000	270	70	1	2,60
KRSR-270	71012	2000	270	70	1	2,60
KRSR-370	71013	2000	370	102	1	3,58
KRSR-370	71014	2000	370	102	1	3,58
KRSR-470	71015	2000	470	111	1	4,32
KRSR-470	71016	2000	470	111	1	4,32
KRSR-570	71017	2000	570	120	1	5,08
KRSR-570	71018	2000	570	120	1	5,08
KRSR-670	71019	2000	670	130	1	5,86
KRSR-670	71020	2000	670	130	1	5,86



Mainly for reduction of snow load when mounting outdoors.

hot zinc plating

cold zinc plating

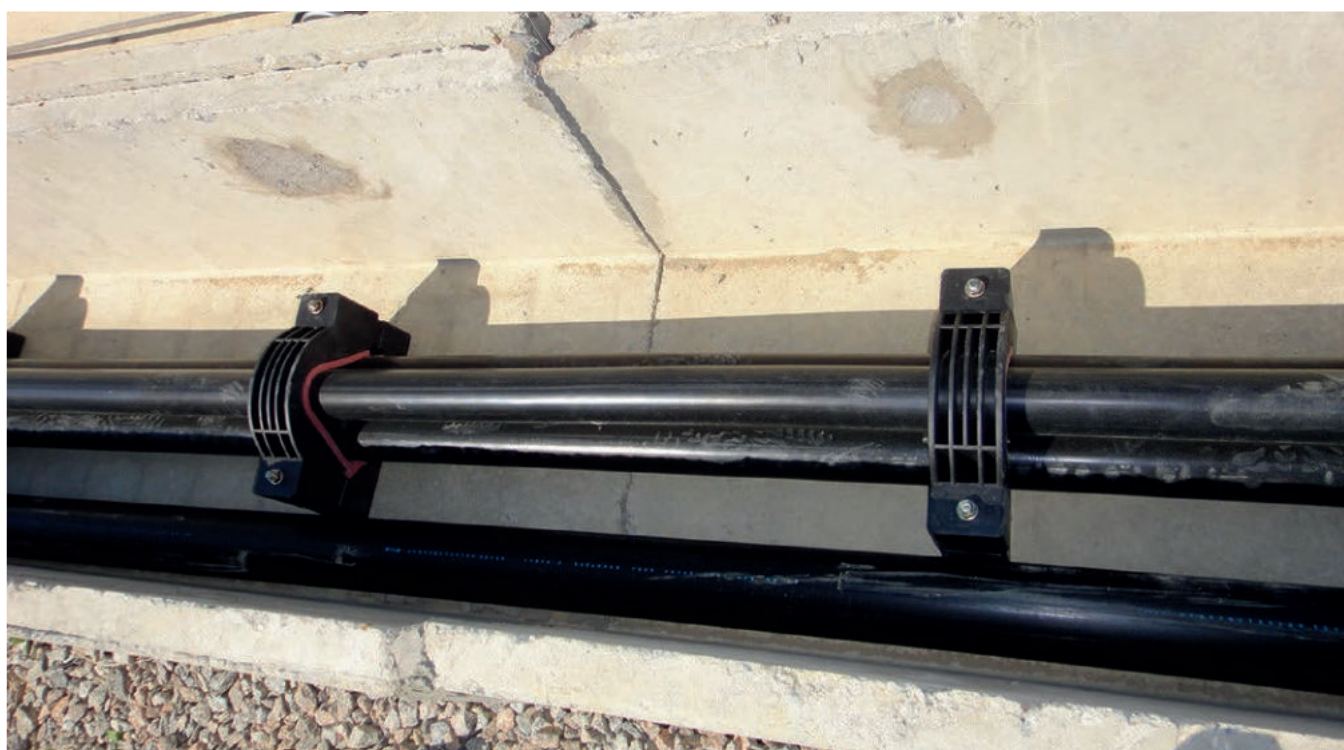
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