

7

FITTINGS FOR LOW AND MEDIUM VOLTAGE OVERHEAD AND CABLE POWER LINES

2024

1st EDITION



Bezpol



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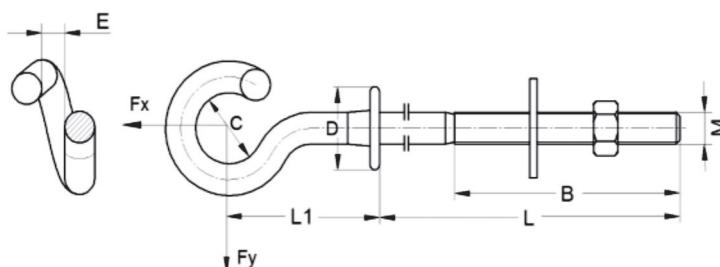
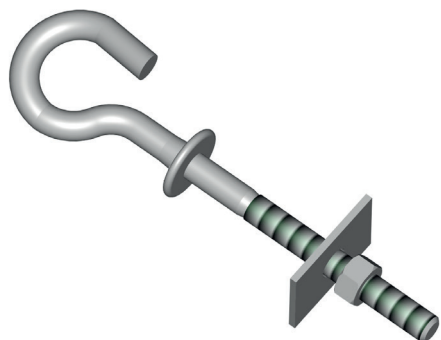
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FITTINGS FOR OVERHEAD POWER LINES

1. FITTINGS FOR CONSTRUCTION OF OVERHEAD POWER LINES

1.1. BOLTS

1.1.1. HOOK BOLT



BK 1001 to BK 1012

Material:

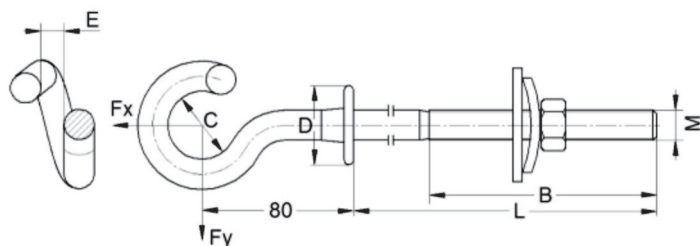
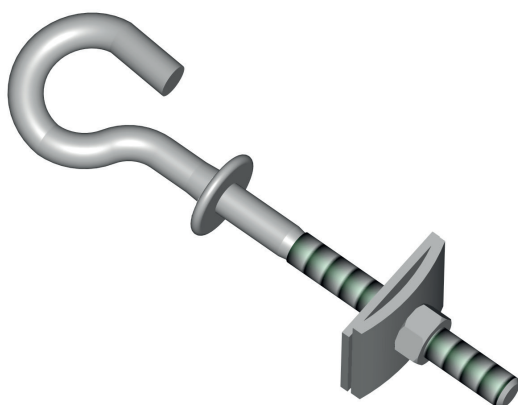
Hot dip galvanized steel

Applications:

The screwed down to supporting structures hook bolts are designed to suspend anchor clamps and suspension clamps that fasten self-supporting insulated conductors.

Catalog No.	KTM code	Type	Dimensions [mm]								Permissible load [kN]	
			Washer	M	B	L	L1	C	D	E	Fx	Fy
BK 1001	1131-600-953-160	SHPo 16/160	4x50x50	M16	120	160	80	36	42	20	11,9	3,5
BK 1002	1131-600-953-200	SHPo 16/200	4x50x50	M16	120	200	80	36	42	20	11,9	3,5
BK 1002/1	1131-600-953-215	SHPo 16/215	4x50x50	M16	120	215	80	36	42	20	11,9	3,5
BK 1002/2	1131-600-953-230	SHPo 16/230	4x50x50	M16	120	230	80	36	42	20	11,9	3,5
BK 1002/3	1131-600-953-220	SHPo 16/220	4x50x50	M16	120	220	80	36	42	20	11,9	3,5
BK 1003	1131-600-953-240	SHPo 16/240	4x50x50	M16	120	240	80	36	42	20	11,9	3,5
BK 1003/1	1131-600-953-255	SHPo 16/255	4x50x50	M16	120	255	80	36	42	20	11,9	3,5
BK 1003/2	1131-600-953-250	SHPo 16/250	4x50x50	M16	120	250	80	36	42	20	11,9	3,5
BK 1004	1131-600-953-300	SHPo 16/300	4x50x50	M16	120	300	80	36	42	20	11,9	3,5
BK 1005	1131-600-953-320	SHPo 16/320	4x50x50	M16	120	320	80	36	42	20	11,9	3,5
BK 1005/3	1131-600-953-350	SHPo 16/350	4x50x50	M16	120	350	80	36	42	20	11,9	3,5
BK 1005/2	1131-600-953-360	SHPo 16/360	4x50x50	M16	120	360	80	36	42	20	11,9	3,5
BK 1005/1	1131-600-953-400	SHPo 16/400	4x50x50	M16	120	400	80	36	42	20	11,9	3,5
BK 1006	1131-600-954-160	SHPo 20/160	4x60x60	M20	120	160	80	36	50	20	14,5	6
BK 1007	1131-600-954-200	SHPo 20/200	4x60x60	M20	120	200	80	36	50	20	14,5	6
BK 1008	1131-600-954-240	SHPo 20/240	4x60x60	M20	120	240	80	36	50	20	14,5	6
BK 1009	1131-600-954-250	SHPo 20/250	4x60x60	M20	120	250	80	36	50	20	14,5	6
BK 1010	1131-600-954-320	SHPo 20/320	4x60x60	M20	120	320	80	36	50	20	14,5	6
BK 1011	1131-600-954-350	SHPo 20/350	4x60x60	M20	120	350	80	36	50	20	14,5	6
BK 1012	1131-600-954-480	SHPo 20/480	4x60x60	M20	120	480	80	36	50	20	14,5	6

1.1.1.1. COMPLETE HOOK BOLT



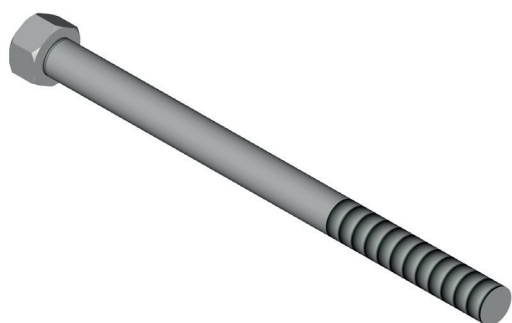
BK 1013 to BK 1031

Material:*Hot galvanized steel***Applications:**

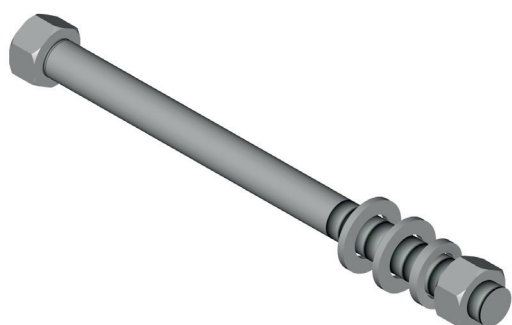
The screwed down to supporting structures hook bolts are designed to suspend anchor clamps and through clamps that fasten self-supporting insulated conductors.

Catalog No.	KTM code	Type	Dimensions [mm]									Permissible load [kN]	
			D	Washer	M	B	L	C	D	E	Fx	Fy	
BK 1013	1131-600-913-160	SHPkm 16/160	42	4x60x60	M16	120	160	36	42	20	11,9	3,5	
BK 1014	1131-600-913-200	SHPkm 16/200	42	4x60x60	M16	120	200	36	42	20	11,9	3,5	
BK 1015	1131-600-913-215	SHPkm 16/215	42	4x60x60	M16	120	215	36	42	20	11,9	3,5	
BK 1016	1131-600-913-240	SHPkm 16/240	42	4x60x60	M16	120	240	36	42	20	11,9	3,5	
BK 1017	1131-600-913-255	SHPkm 16/255	42	4x60x60	M16	120	255	36	42	20	11,9	3,5	
BK 1018	1131-600-913-300	SHPkm 16/300	42	4x60x60	M16	120	300	36	42	20	11,9	3,5	
BK 1019	1131-600-913-320	SHPkm 16/320	42	4x60x60	M16	120	320	36	42	20	11,9	3,5	
BK 1020	1131-600-913-360	SHPkm 16/360	42	4x60x60	M16	120	360	36	42	20	11,9	3,5	
BK 1021	1131-600-913-420	SHPkm 16/420	42	4x60x60	M16	120	420	36	42	20	11,9	3,5	
BK 1022	1131-600-913-500	SHPkm 16/500	42	4x60x60	M16	120	500	36	42	20	11,9	3,5	
BK 1023	1131-600-914-200	SHPkm 20/200	50	4x60x60	M20	120	200	36	50	20	14,5	6	
BK 1024	1131-600-914-220	SHPkm 20/220	50	4x60x60	M20	120	220	36	50	20	14,5	6	
BK 1025	1131-600-914-240	SHPkm 20/240	50	4x60x60	M20	120	240	36	50	20	14,5	6	
BK 1026	1131-600-914-250	SHPkm 20/250	50	4x60x60	M20	120	250	36	50	20	14,5	6	
BK 1027	1131-600-914-280	SHPkm 20/280	50	4x60x60	M20	120	280	36	50	20	14,5	6	
BK 1028	1131-600-914-310	SHPkm 20/310	50	4x60x60	M20	120	310	36	50	20	14,5	6	
BK 1029	1131-600-914-320	SHPkm 20/320	50	4x60x60	M20	120	320	36	50	20	14,5	6	
BK 1030	1131-600-914-360	SHPkm 20/360	50	4x60x60	M20	120	360	36	50	20	14,5	6	
BK 1031	1131-600-914-510	SHPkm 20/510	50	4x60x60	M20	120	510	36	50	20	14,5	6	

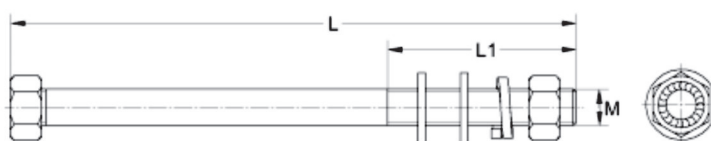
1.1.2. LONG MACHINE BOLT (assembling bolt) - SWP



BK 1050 to BK 1056



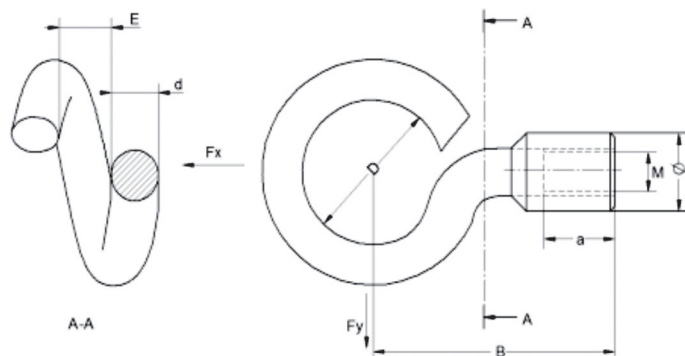
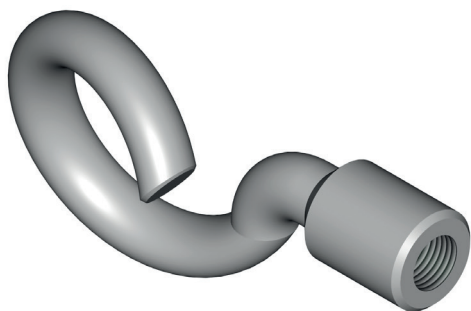
BK 1057 to BK 1062

**Material:***Hot galvanized steel***Applications:***The long machine bolts are designed to twin two ZN type concrete poles and to fix line fittings on the poles.*

Catalog No.	KTM code	Type	L	M	L1
BK 1050	1131-600-963-220	SWP 16/220	220	M16	120
BK 1051	1131-600-963-250	SWP 16/250	250	M16	120
BK 1052	1131-600-963-300	SWP 16/300	300	M16	120
BK 1053	1131-600-963-420	SWP 16/420	420	M16	120
BK 1054	1131-600-964-200	SWP 20/200	200	M20	120
BK 1055	1131-600-964-250	SWP 20/250	250	M20	120
BK 1056	1131-600-964-300	SWP 20 /300	300	M20	120
BK 1057	1131-601-963-220	SWPkm 16/220	220	M16	120
BK 1058	1131-601-963-250	SWPkm 16/250	250	M16	120
BK 1059	1131-601-963-300	SWPkm 16/300	300	M16	120
BK 1060	1131-601-964-200	SWPkm 20/200	200	M20	120
BK 1061	1131-601-964-250	SWPkm 20/250	250	M20	120
BK 1062	1131-601-964-300	SWPkm 20/300	300	M20	120

1.2. HOOKS

1.2.1. NUT HOOKS

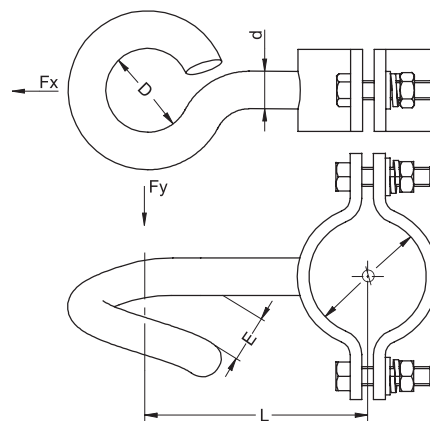
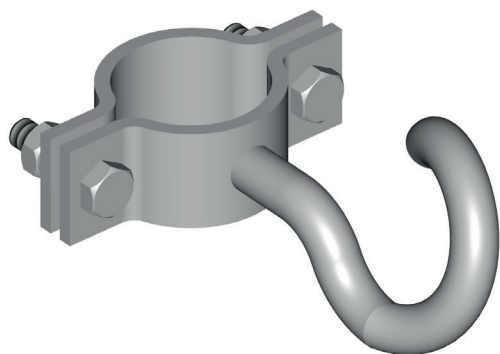


BK 1101 to BK 1103

Material:*Hot galvanized steel***Applications:***The nut hooks are designed to mount the anchor clamps or the suspension clamps on the line poles.*

Catalog No.	KTM code	Type	M	d	B	Ø	a	D	E	Permissible load [kN]	
										Fx	Fy
BK 1101	1131-600-913-056	HNP 12	M12	12	70	20	16	36	13	3	1,6
BK 1102	1131-600-913-057	HNP 16	M16	16	76	26	20	36	20	7,5	3,5
BK 1103	1131-600-913-060	HNP 20	M 20	20	80	30	22	36	20	13,5	6

1.2.2. HOOKS WITH PIPE CLAMPS - UNS

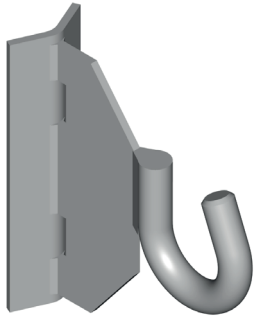


BK 1100 and BK 1100/1

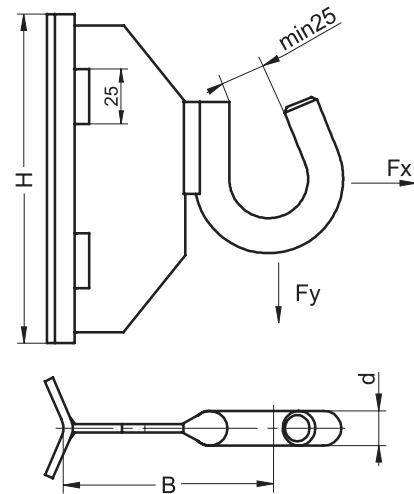
Material:*Stal ocynkowana ogniowo***Applications:***The hooks with pipe clamps are designed to fasten conductors of low voltage overhead power lines on masts and tubular arms.*

Catalog No.	KTM code	Type	L	D	E	Ø	d	Permissible load [kN]	
								Fx	Fy
BK 1100	1131-690-016-050	UNS 16/50	95	36	20	50	16	7,5	3,5
BK 1100/1	1131-690-016-062	UNS 16/62	100	36	20	62	16	7,5	3,5

1.2.3. HOOKS



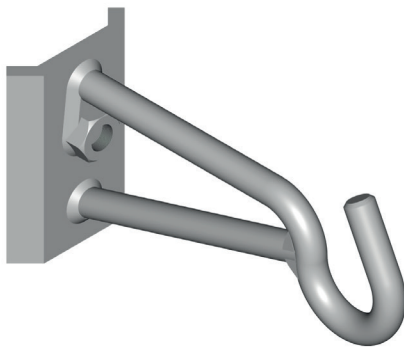
BK 1104 and BK 1105

Material:*Hot galvanized steel***Applications:**

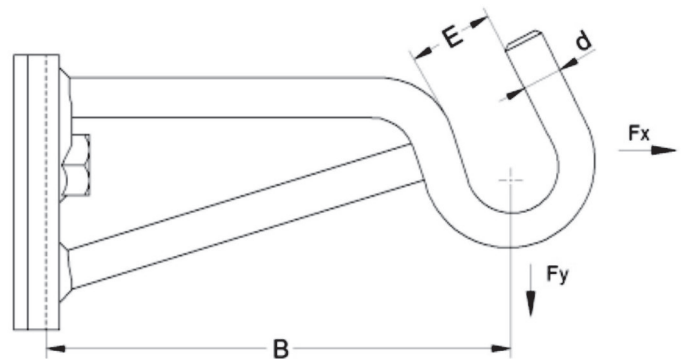
The HST type hooks are designed to mount the anchor clamps and the suspension clamps on round poles by means of steel straps.

Catalog No.	KTM code	Type	H	d	B	Permissible load [kN]	
						F _x	F _y
BK 1104	1131-600-913-016	HST 16	150	16	86	7,3	3,3
BK 1105	1131-600-913-020	HST 20	150	20	90	13,5	6,0

1.2.4. EXTENDED NUT HOOKS



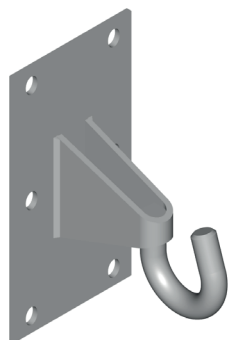
BK 1108 and BK 1109

Material:*Hot galvanized steel***Applications:**

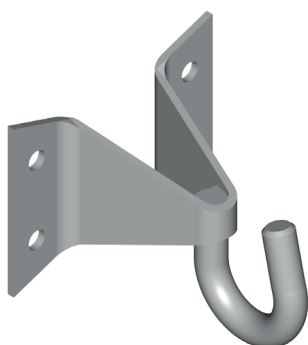
The extended nut hooks are designed to fix the corner suspension clamps on walls of buildings or on poles.

Catalog No.	KTM code	Type	d	M	B	E	F _x [kN]	F _y [kN]
BK 1108	1131-600-943-016	HND 16	16	M16	200	25	7,5	3,5
BK 1109	1131-600-943-020	HND 20	20	M20	200	25	13,5	6

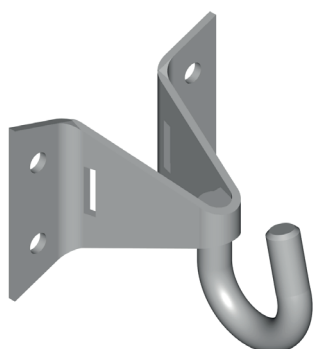
1.2.5. WALL MOUNTED HOOKS



BK 1110 and BK 1111



BK 1113 and BK 1114



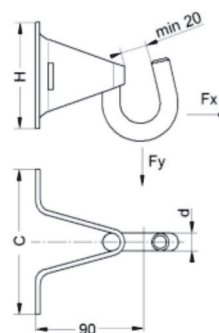
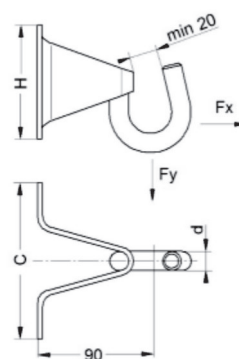
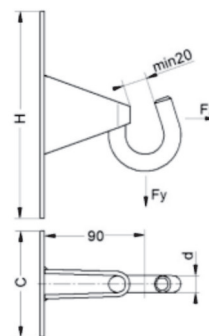
BK 1115 and BK 1116

Material:

Hot galvanized steel

Applications:

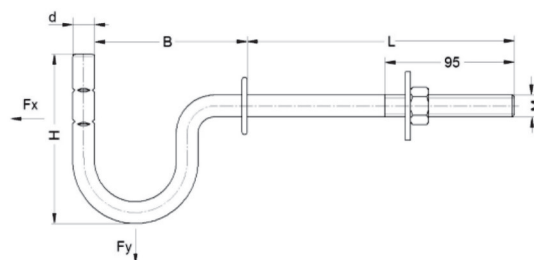
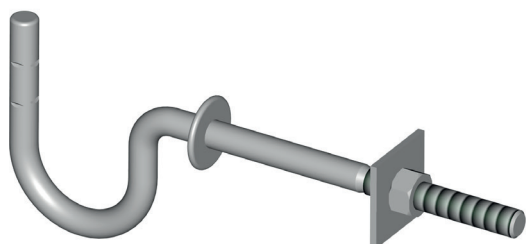
The wall mounted hooks are designed to mount the anchor clamps and the suspension clamps on flat surfaces (e.g. on walls of buildings).



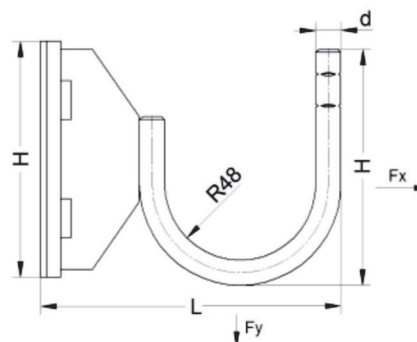
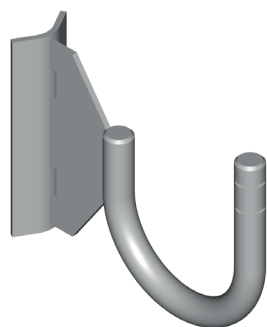
Catalog No.	KTM code	Type	H	C	d	F (x) [kN]	F (y) [kN]
BK 1110	1131-600-923-012	HPN 12	195	100	12	2,8	1,4
BK 1111	1131-600-923-016	HPN 16	195	100	16	7	3,2
BK 1113	1131-600-933-012	HNL 12	95	130	12	3	1,6
BK 1114	1131-600-933-016	HNL 16	95	130	16	7,5	3,5
BK 1115	1131-600-933-112	HNL 12 do taśmy	95	130	12	2,8	1,4
BK 1116	1131-600-933-116	HNL 16 do taśmy	95	130	16	7	3,4

1.3. INSULATOR HOLDERS

1.3.1. HOOK TYPE INSULATOR HOLDER



BK 1300 to BK 1309



BK 1106 and BK 1107

Material:

Hot galvanized steel

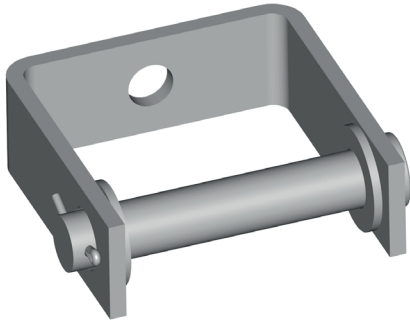
Applications:

The insulator holders are designed to fix low voltage post insulators.

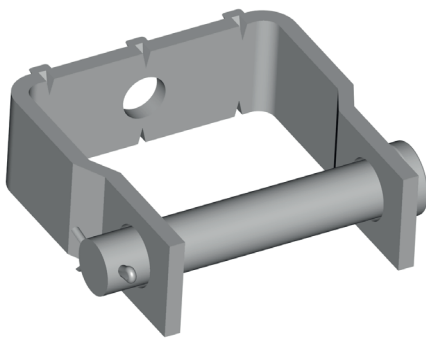
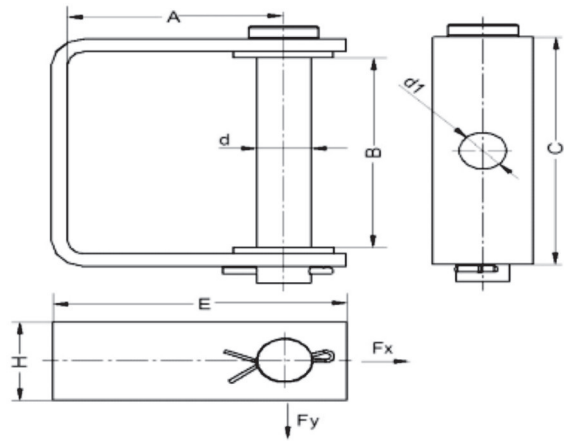
Catalog No.	KTM code	Type	Dimensions [mm]					Washer	Load	
			d	M	L	B	H		Fx	Fy
BK 1300	1131-690-943-200	THS 16/200	16	M16	200	110	16	50 x 50 x 4	6,8	5,5
BK 1301	1131-690-943-250	THS 16/250	16	M16	250	110	16	50 x 50 x 4	6,8	5,5
BK 1302	1131-690-943-300	THS 16/300	16	M16	300	110	116	50 x 50 x 4	6,8	5,5
BK 1303	1131-690-943-350	THS 16/350	16	M16	350	110	16	50 x 50 x 4	6,8	5,5
BK 1304	1131-690-943-400	THS 16/400	16	M16	400	110	16	50 x 50 x 4	6,8	5,5
BK 1305	1131-690-944-200	THS 20/200	20	M20	200	120	124	60 x 60 x 4	11,0	8,3
BK 1306	1131-690-944-250	THS 20/250	20	M20	250	120	124	60 x 60 x 4	11,0	8,3
BK 1307	1131-690-944-300	THS 20/300	20	M20	300	120	124	60 x 60 x 4	11,0	8,3
BK 1308	1131-690-944-350	THS 20/350	20	M20	350	120	124	60 x 60 x 4	11,0	8,3
BK 1309	1131-690-944-400	THS 20/400	20	M20	400	120	124	60 x 60 x 4	11,0	8,3

Catalog No.	KTM code	Type	d	H	L	F (x) kN	F (y) kN
BK 1106	1131-690-916-016	HTT 16	16	150	190	7,3	3,3
BK 1107	1131-690-920-020	HTT 20	20	150	198	13,5	6

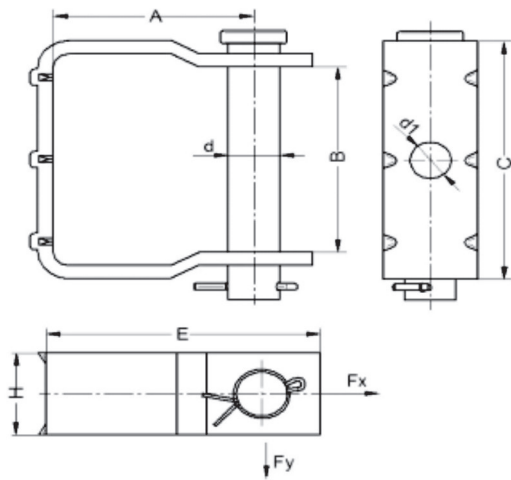
1.3.2. CLEVIS TYPE INSULATOR HOLDERS



BK 1310 and BK 1311



BK 1312 and BK 1313



Material:

Hot galvanized steel

Applications:

The clevis type insulator holders are designed to fix the S type spool insulators on supporting structures of overhead power lines.

Catalog No.	KTM code	Type	Dimensions [mm]							Load [kN]		Insulator type
			A	H	B	d	d1	C	E	Fx	Fy	
BK 1310	1131-690-902-080	TKS 80	95	50	90	18	17	121	120	5	4	S80/2
BK 1311	1131-690-902-115	TKS 115	115	50	130	27	22	146	145	9	5	S115/2

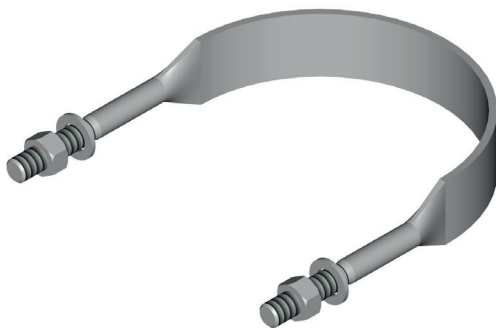
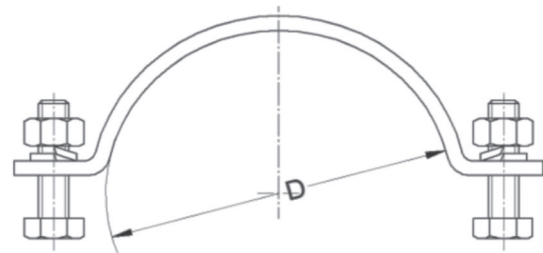
Catalog No.	KTM code	Type	Dimensions [mm]							Load [kN]		Insulator type
			A	H	B	d	d1	C	E	Fx	Fy	
BK 1312	1131-690-912-080	TKS 80W	90	50	85	18	18	121	115	5	4	S80/2
BK 1313	1131-690-912-115	TKS 115W	110	50	121	27	22	146	145	9	5	S115/2

1.4. FASTENING HARDWARE

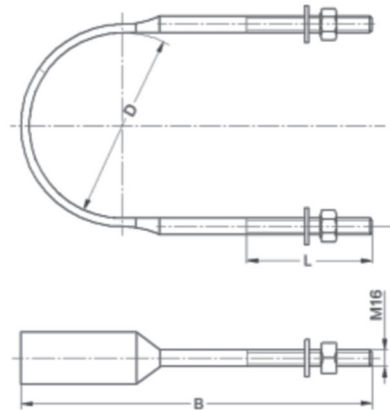
1.4.1. HALF CLAMPS



BK 1201 to BK 1208



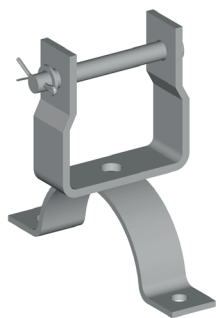
BK 1209 and BK 1210

Flat bar dimensions
[mm]

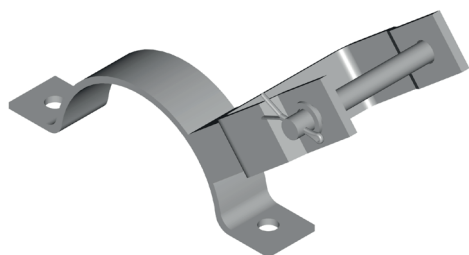
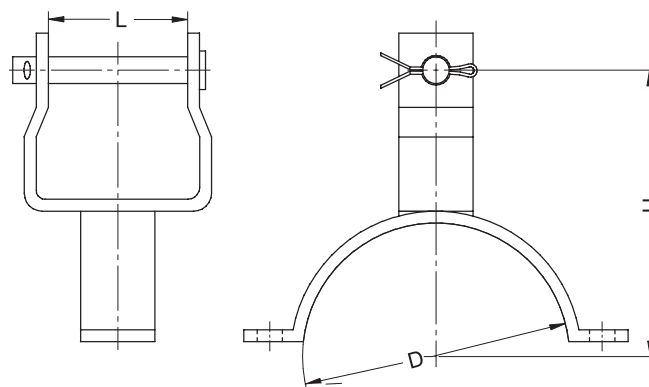
Catalog No.	KTM code	Type	D	Bolt M	
BK 1201	1131-690-180-404	OSO 180/4	180	40 x 4	M 12 x 60
BK 1202	1131-690-200-404	OSO 200/4	200	40 x 4	M 12 x 60
BK 1203	1131-690-220-404	OSO 220/4	220	40 x 4	M 12 x 60
BK 1204	1131-690-240-404	OSO 240/4	240	40 x 4	M 12 x 60
BK 1205	1131-690-180-506	OSO 180/6	180	50 x 6	M 16 x 65
BK 1206	1131-690-200-506	OSO 200/6	200	50 x 6	M 16 x 65
BK 1207	1131-690-220-506	OSO 220/6	220	50 x 6	M 16 x 65
BK 1208	1131-690-240-506	OSO 240/6	240	50 x 6	M 16 x 65

Catalog No.	KTM code	Type	D [mm]	L[mm]	B[mm]
BK 1209	1131-690-130-081	OK 130	130	95	210
BK 1210	1131-690-170-081	OK 170	170	110	240

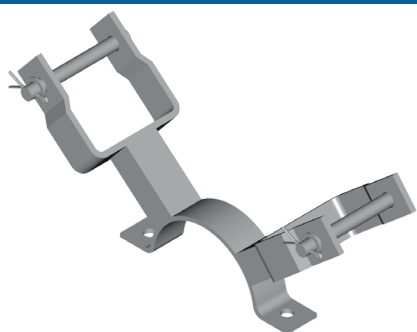
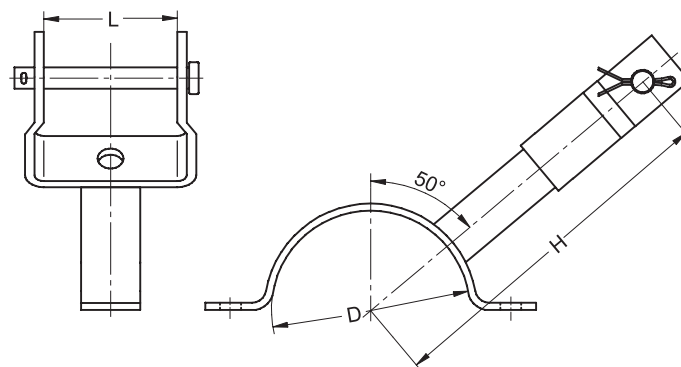
1.4.2. HEAVY DUTY INSULATOR HOLDERS



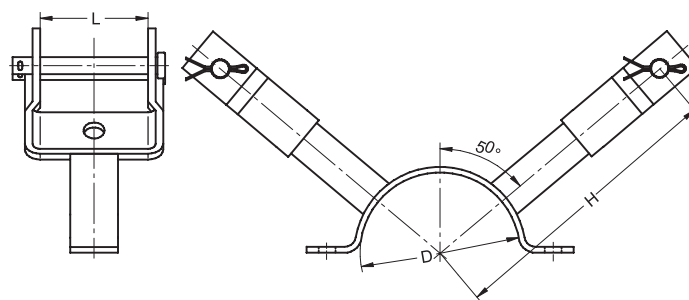
BK 8100 to BK 8105



BK 8106 and BK 8107



BK 8108 and BK 8109



Material:

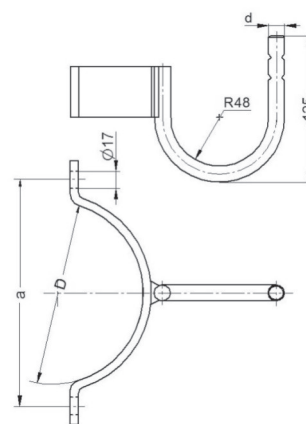
Hot galvanized steel

Applications:

The heavy duty insulator holders are designed to fix the S type spool insulators on round poles.

Catalog No.	KTM code	Type	TKS type	Pole diameter D [mm]	H	L	For insulator
BK 8100	1131-690-180-080	Km 1.1	TKS 80 W	180	285	85	S80
BK 8101	1131-690-200-080	Km 1.2	TKS 80 W	200	305	85	S80
BK 8102	1131-690-240-080	Km 1.3	TKS 80 W	240	345	85	S80
BK 8103	1131-690-180-115	Km 2.1	TKS 115 W	180	305	121	S115
BK 8104	1131-690-200-115	Km 2.2	TKS 115 W	200	325	121	S115
BK 8105	1131-690-240-115	Km 2.3	TKS 115 W	240	365	121	S115
BK 8106	1131-690-241-080	Km 7	TKS 80 W	240	345	85	S80
BK 8107	1131-690-241-115	Km 8	TKS 115 W	240	345	121	S115
BK 8108	1131-690-242-080	Km 9	TKS 80 W	240	345	85	S80
BK 8109	1131-690-242-115	Km 10	TKS 115 W	240	345	125	S115

1.4.3. HOOK TYPE INSULATOR HOLDER WITH HALF CLAMP



BK 8110 to BK 8113

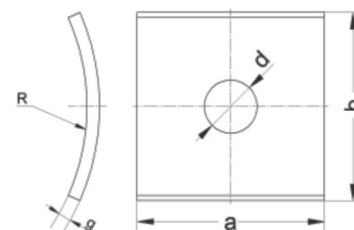
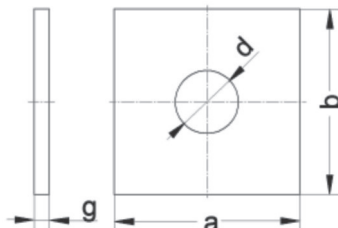
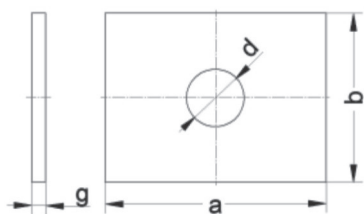
Material:*Stal ocynkowana ogniowo***Applications:**

The hook type insulator holder with half clamp is designed to mount suspension or anchor insulator strings on the supporting structures.

Dimensions

Catalog No.	KTM code	Type	D	d	a	Insulator type
BK 8110	1131-690-916-180	Kp – 1	180	16	226	N – 80
BK 8111	1131-690-920-180	Kp – 2	180	20	226	N – 95
BK 8112	1131-690-916-240	Kp – 3	240	16	286	N – 80
BK 8113	1131-690-920-240	Kp – 4	240	20	286	N – 95

1.4.4. PODKŁADKI



BK 1211 and BK 1212

BK 1213 and BK 1214

BK 1215 and BK 1216

Material:*Hot galvanized steel***Applications:**

The washers are designed to fasten various fittings on round poles.

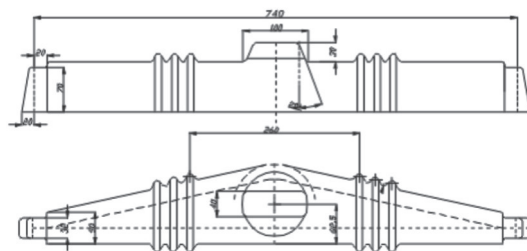
Catalog No.	KTM code	Type	Hole for bolt	Dimension [mm]				
				a	b	g	R	d
BK 1211	0653-712-065-016	PZP 16	M 16	65	50	4	-	17
BK 1212	0653-712-065-020	PZP 20	M 20	65	50	4	-	21
BK 1213	0653-712-050-016	PKP 16	M 16	50	50	4	-	17
BK 1214	0653-712-060-020	PKP 20	M 20	60	60	4	-	21
BK 1215	0653-712-060-016	PSP 16	M 16	60	60	5	70	17
BK 1216	0653-712-060-020	PSP 20	M 20	60	60	5	70	21

2. OTHER FITTINGS

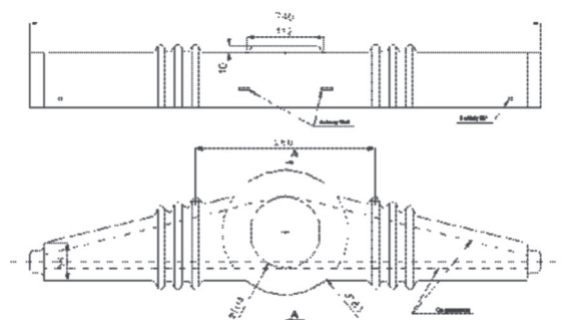
2.1. INSULATING PROTECTIONS FOR POST INSULATORS



BK 7001



BK 7002



Material:

PVC with additives for increasing UV resistance and molded by means of the vacuum thermoforming technology.

Assembling:

The protection's body is put on the first shed of the insulator in such a way that it protects a passage of conductor through the insulator as well as segments of conductor before and after the insulator, and next the protection's body is fastened by means of cable ties.

Applications:

This insulating protection protects connections on high and medium voltage post insulators against line to line faults and earth faults caused by birds.

Zalety:

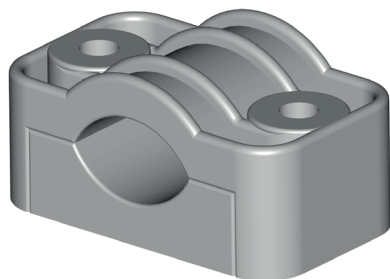
Easy assembling,
Reliable fixing on the insulator (cable ties that fix this protection are placed below the fixation line on the insulator's shed),
Resistant to UV radiation and temperature variations.

Catalog No.	KTM code	Type	.. Weight	Insulator type
BK 7001	1362-112-125-078	OIW.LWP	0,4 kg	LWP 8/24 LWP 12,5/24
BK 7002	1369-900-175-074	St 20	0,5 kg	St 20

CABLE CLAMPS

3. CABLE CLAMPS

3.1. CABLE CLAMP - UKB-2



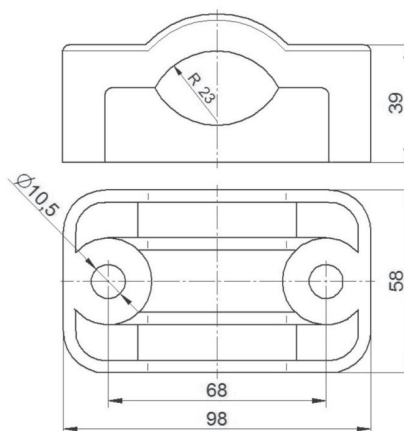
BK 3400

Material:

Black colored self-extinguishing polyamide resistant to UV radiation and ozone.

Applications:

The UKB-2 cable clamp is designed to fasten cables and pipes with diameter of 25 - 46 mm at outdoor and indoor power facilities. These cable clamps feature high resistance to mechanical and thermal deformations within the temperature range from -40 °C to +120 °C.



Catalog No.

KTM code

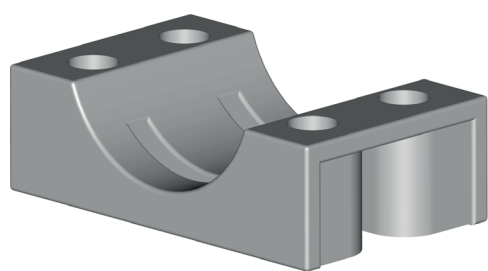
Type

BK 3400

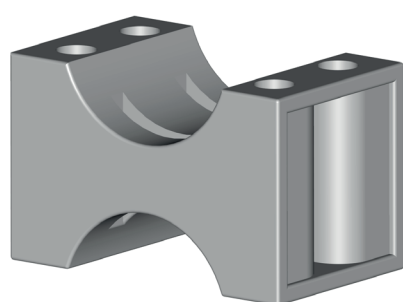
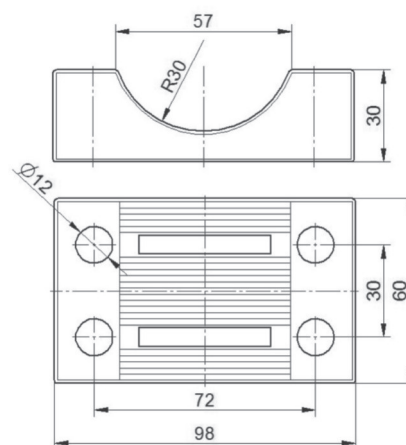
1131-590-000-002

UKB-2

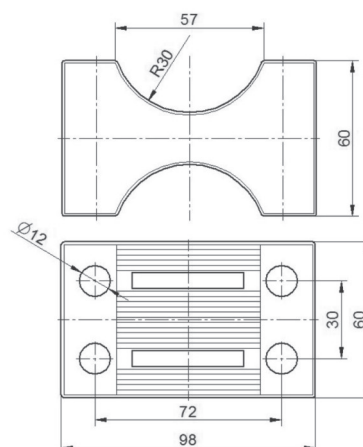
3.2. MODULAR CABLE CLAMP - 1/2 UKS and UKS



BK 3416



BK 3415

**Material:**

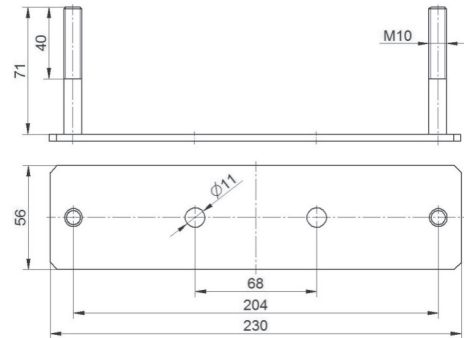
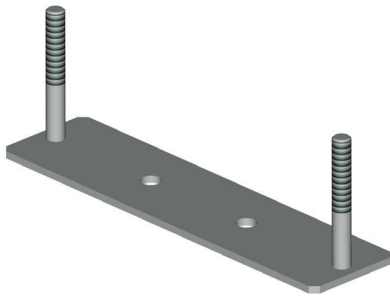
Polyamide

Applications:

The UKS and 1/2 UKS cable clamps are designed to fasten cables and pipes with diameter of 41 - 60 mm at outdoor and indoor power facilities.

Catalog No.	KTM code	Type
BK 3416	1131-590-000-005	1/2 UKS
BK 3415	1131-590-000-003	UKS

3.3. DOUBLING BRACKET FOR THE UKB-2(o) CABLE CLAMPS



BK 3403

Material:

Hot galvanized steel

Applications:

The doubling bracket is used as an intermediate holder for the UKB-2(o) cable clamps – it enables to fasten two cables with diameter of 25 to 46 mm on round poles by means of steel tape.

Catalog No.

KTM code

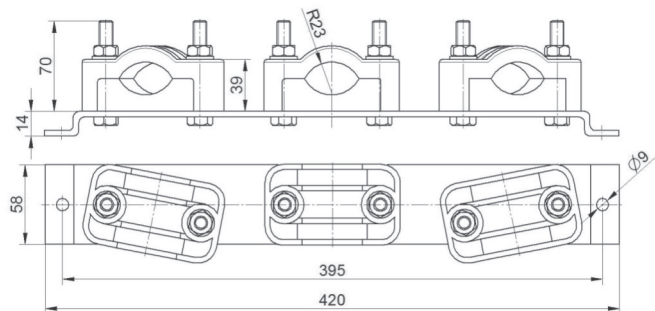
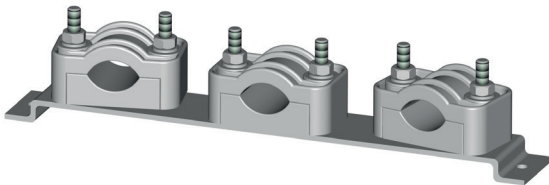
Type

BK 3403

1131-590-000-022

UKB-2(o)

3.4 CABLE CLAMP BLOCK - ULR-2



BK 3406

Material:

1. *The UKB-2 cable clamps - self-extinguishing polyamide, resistant to UV radiation*
2. *The ULR mounting base – hot dip galvanized steel*

Applications:

This cable clamp block is used to fasten three cables with diameter of 25 to 46 mm laid on flat surfaces. The cable clamp block may be mounted on a pole by means of bolts or screws.

Catalog No.

KTM code

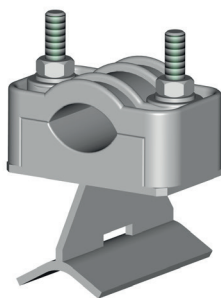
Type

BK 3406

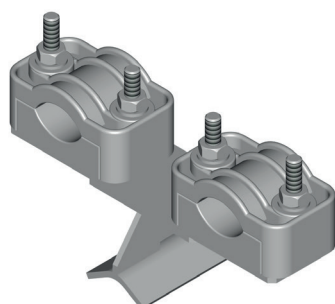
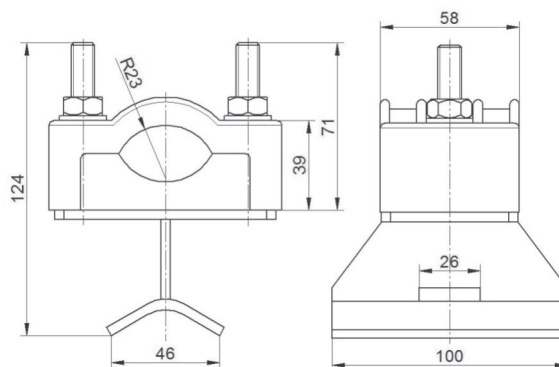
1131-591-000-032

ULR-2

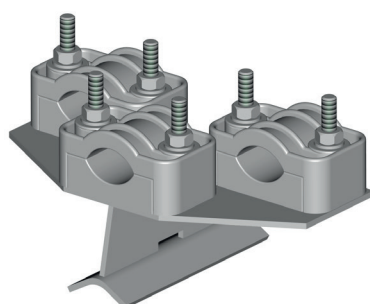
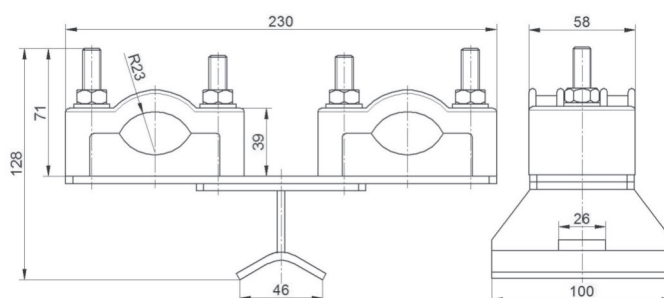
3.5. COMPLETE CABLE CLAMPS WITH BRACKET FOR FIXING CABLES ON ROUND POLES UKB-2(o)km, 2xUKB-2(o)km, 3xUKB-2(o)km



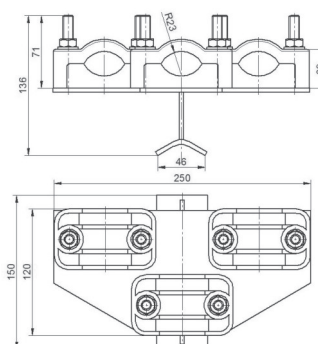
BK 3401



BK 3402



BK 3404



Material:

1. The UKB-2 cable clamps - self-extinguishing polyamide, resistant to UV radiation
2. The mounting bracket – hot dip galvanized steel

Applications:

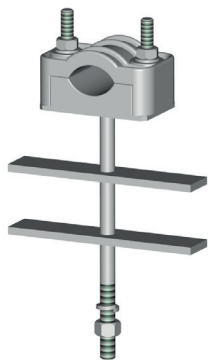
These cable clamps are designed to fasten cable with 25 to 46 mm diameter laid on round poles. The mounting bracket is fastened to the pole by means of stainless steel tape.

NOTE !

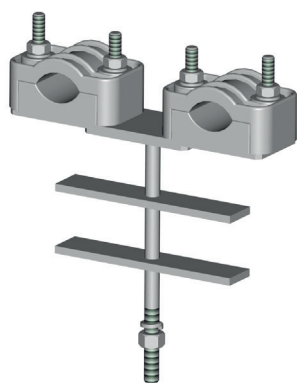
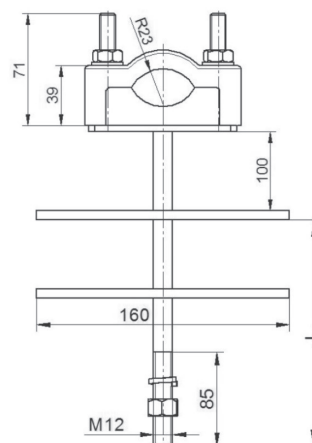
We offer also the mounting bases alone without the UKB cable clamps.

Catalog No.	KTM code	Type
BK 3401	1131-590-000-112	UKB-2 (o) km
BK 3402	1131-590-000-122	2 x UKB-2 (o) km
BK 3404	1131-590-000-132	3 x UKB-2 (o) km

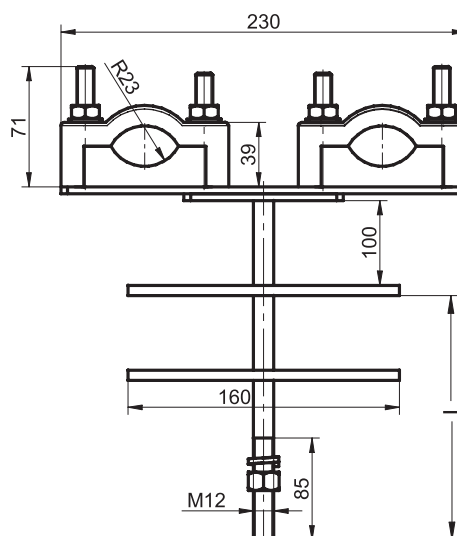
3.6. COMPLETE CABLE CLAMPS WITH BRACKET FOR FIXING CABLES ON THE ŻN TYPE CONCRETE POLES UKB-2(ż)km, 2xUKB-2(ż)km, 3xUKB-2(ż)km



BK 3407 to BK 3410



BK 3407/2 to BK 3410/2



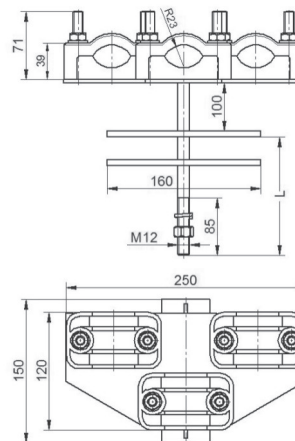
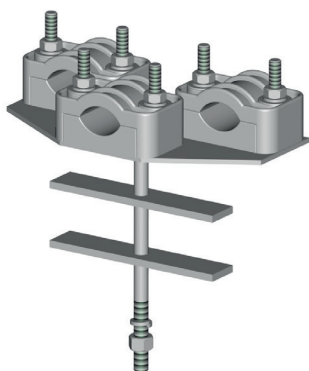
Material:

1. The UKB-2 cable clamps - self-extinguishing polyamide, resistant to UV radiation
2. The mounting bracket 2xUKB-2(o) – hot dip galvanized steel.

Applications:

The 2xUKB-2(ż)km cable clamps with bracket are used to fix cables with 25 to 46 mm diameter on the ŻN type concrete distribution poles.

Catalog No.	KTM code	Type	Dimensions [mm]	
				L
BK 3407	1131-590-200-112	UKB-2/200 (ż) km		200
BK 3408	1131-590-250-112	UKB-2/250 (ż) km		250
BK 3409	1131-590-300-112	UKB-2/300 (ż) km		300
BK 3410	1131-590-330-112	UKB-2/330 (ż) km		330
BK 3407/2	1131-590-200-122	2 x UKB-2/200 (ż) km		200
BK 3408/2	1131-590-250-122	2 x UKB-2/250 (ż) km		250
BK 3409/2	1131-590-300-122	2 x UKB-2/300 (ż) km		300
BK 3410/2	1131-590-330-122	2 x UKB-2/330 (ż) km		330



BK 3411 to BK 3414

Material:

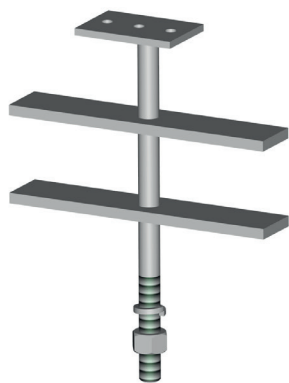
1. The UKB-2 cable clamps - self-extinguishing polyamide, resistant to UV radiation
2. The mounting bracket 3xUKB-2(o) – hot dip galvanized steel.

Applications:

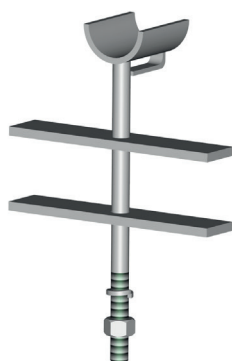
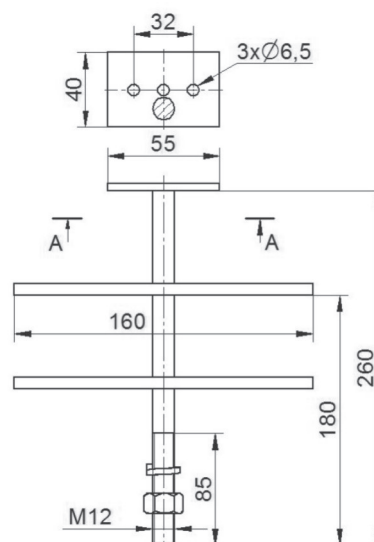
The 3xUKB-2(ż)km cable clamps with bracket are used to fix cables with 25 to 46 mm diameter on the ŻN type concrete distribution poles.

Catalog No.	KTM code	Type	Dimensions [mm]	
				L
BK 3411	1131-590-200-132	3 x UKB-2/200 (ż) km		200
BK 3412	1131-590-250-132	3 x UKB-2/250 (ż) km		250
BK 3413	1131-590-300-132	3 x UKB-2/300 (ż) km		300
BK 3414	1131-590-330-132	3 x UKB-2/330 (ż) km		330

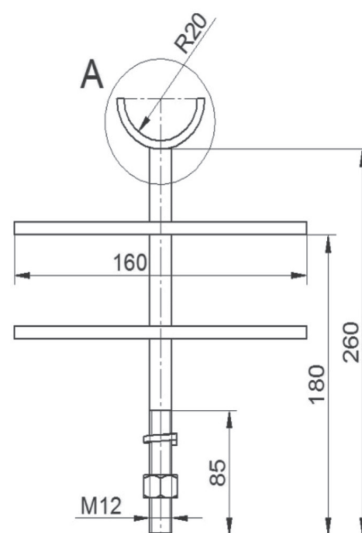
3.7. DISTANCE BRACKETS FOR FIXING CABLES ON THE ŻN TYPE CONCRETE DISTRIBUTION POLES - US 80/180(ż) and UMR-t



BK 3417



BK 3418

**Material:**

Hot galvanized steel

Applications:

The distance brackets are designed to fix cables on the ŻN type concrete distribution poles by means of cable ties as e.g. BIC 1530 or UK-60.

Catalog No.

KTM code

Type

BK 3417

1131-590-080-180

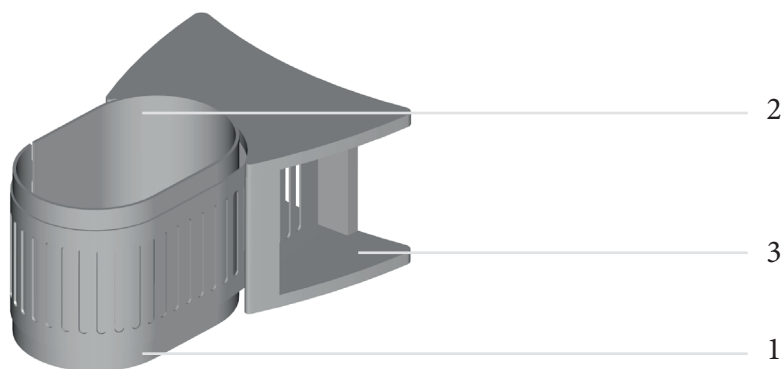
US 80/180(ż)

BK 3418

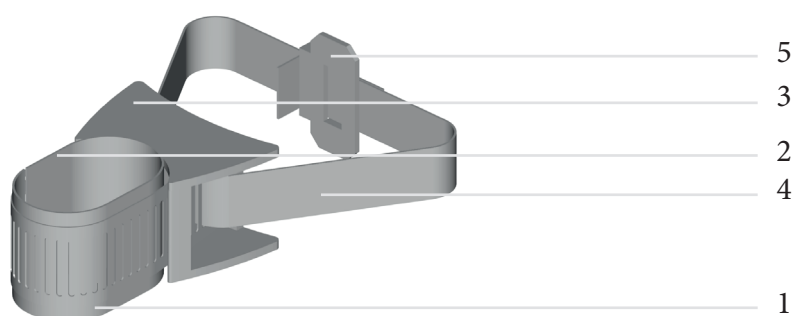
1131-590-181-020

UMR-t

3.8. DISTANCE CABLE CLAMPS - UPK and UPKT



BK 3427



BK 3428

Material:

1. Holder
2. Insulation tube
3. UPKT base
4. Fixing steel tape
5. Steel tape fastener

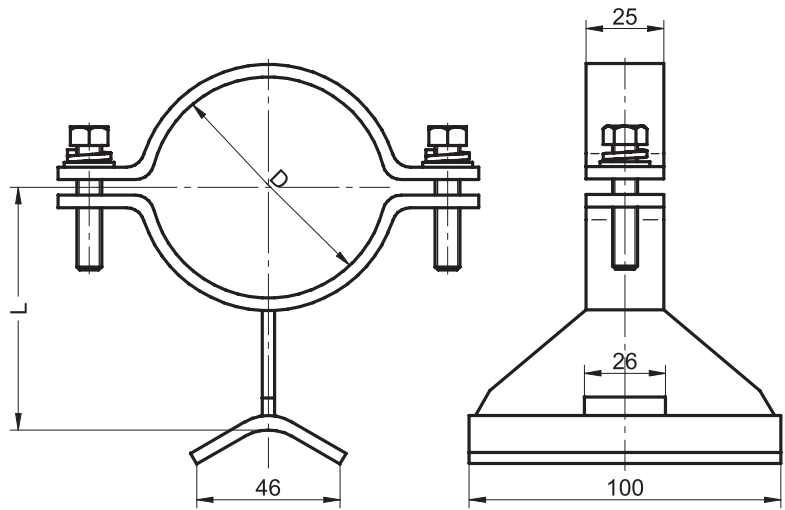
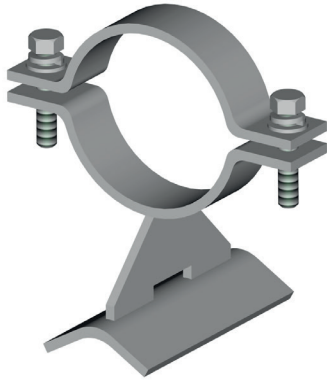
Applications:

The distance cable clamps are designed to fasten conductor bundles to poles, especially in case of laying cable down from the pole top to transformer station, disconnecter, distribution boxes or in case of overhead power line termination on the dead-end pole.

Catalog No.	KTM code	Type	Dimensions [mm]		Number of components that make a complete clamp
			Conductor bundle max. diameter	Distance from fixing surface	
BK 3427	1131-814-000-000	UPK	45	25	1, 2
BK 3428	1131-814-000-130	UPKT	45	25	1, 2, 3, 4

4. FITTINGS FOR FIXING CABLE PROTECTION PIPES

4.1. CLAMP FOR FIXING PROTECTION PIPES ON ROUND POLES - UMR(o)



BK 3419 to BK 3422

Material:

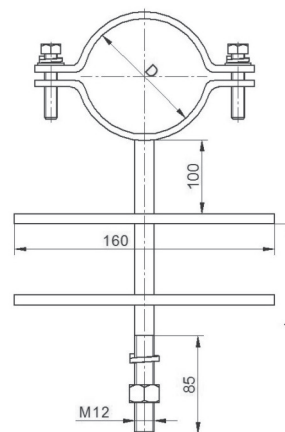
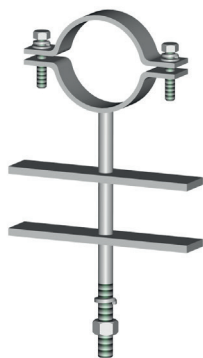
Hot galvanized steel

Applications:

The UMR-o clamps are designed to fix protection pipes on round poles by means of steel tape.

Catalog No.	KTM code	Type	D	L
BK 3419	1131-590-000-050	UMR (o) - 50	50	68
BK 3420	1131-590-000-075	UMR (o) - 75	75	80
BK 3421	1131-590-000-110	UMR (o) - 110	110	98
BK 3422	1131-590-000-160	UMR (o) - 160	160	122

4.2. BRACKETS WITH CLAMP FOR FIXING PROTECTION PIPES ON THE ŽN TYPE CONCRETE POLES - UMR(ž)



BK 3423 to BK 3426

Material:

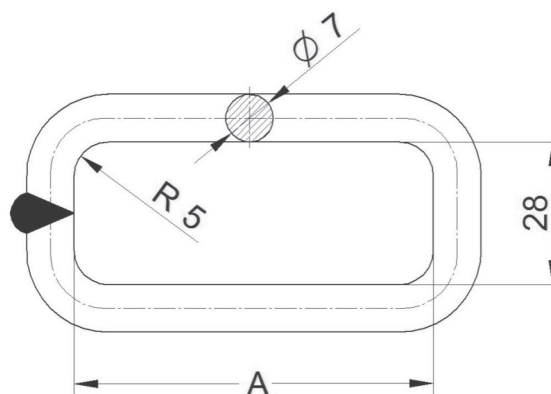
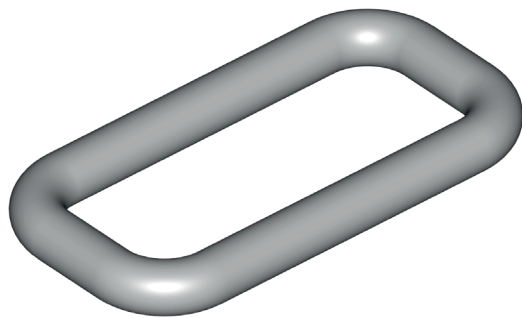
Hot galvanized steel

Applications:

The UMR(ž) clamps are designed to fix cable protection pipes on the ŽN type concrete distribution poles.

Catalog No.	KTM code	Type	D	L
BK 3423	1131-590-200-050	UMR (ž) 50/...	50	200
BK 3424	1131-590-200-075	UMR (ž) 75/...	75	200
BK 3425	1131-590-200-110	UMR (ž) 110/...	110	300
BK 3426	1131-590-200-160	UMR (ž) 160/...	160	330

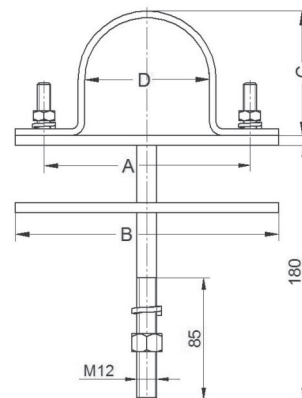
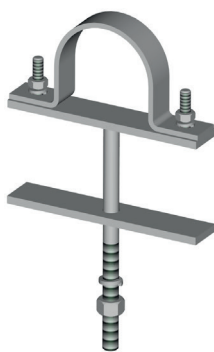
4.3 FRAMES FOR FIXING CABLE BUNDLES RK



BK 8314 to BK 8316

Catalog No.	KTM code	Type	A
BK 8314	1131-690-910-040	RK-1	40
BK 8315	1131-690-910-060	RK-2	60
BK 8316	1131-690-910-090	RK-3	90

4.4. BRACKET WITH HALF CLAMP FOR FIXING PROTECTION PIPES - WR1(ż)



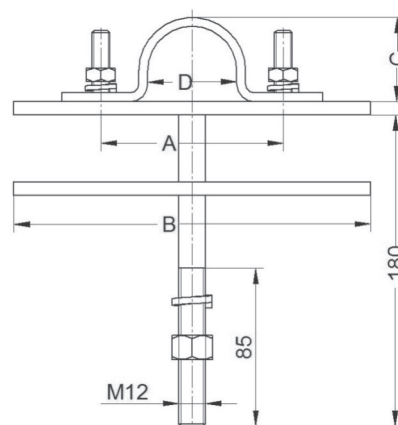
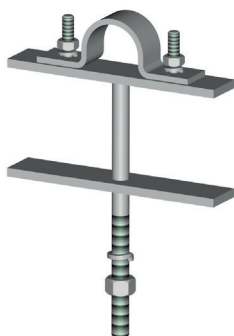
BK 8200 to BK 8202

Material:
Hot galvanized steel
Applications:

The WR1(ż) bracket with half clamp is designed to fix the AROTA pipes on the ŻN type concrete distribution poles.

Catalog No.	KTM code	Type	Dimensions [mm]			
			A	B	C	D
BK 8200	1131-591-180-050	WR1(ż) 50/180	92	160	47	51
BK 8201	1131-591-180-075	WR1(ż) 75/180	125	160	92	76
BK 8202	1131-591-180-110	WR1(ż) 110/180	150	170	107	112

4.5. UCHWYT BEZDYSTANSOWY UK(ż)



BK 3429 do BK 3430

Material:
Hot galvanized steel
Applications:

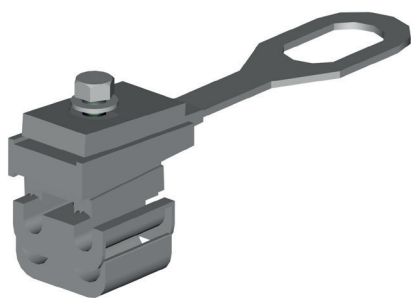
The UK(ż) bracket with low profile half clamp is designed to fix the AROTA pipes on the ŻN type concrete distribution poles.

Dimensions [mm]

Catalog No.	KTM code	Type	Dimensions [mm]				Ø Cable
			A	B	C	D	
BK 3429	1131-591-180-028	UK(ż) 28/180	70	160	22	28	28
BK 3430	1131-591-180-040	UK(ż) 40/180	125	160	92	40	40

5. OTHER FITTINGS

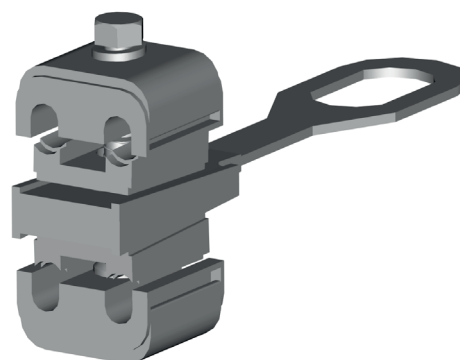
5.1. TENSION ANCHOR CLAMP - UOP 2x16-25, UOP 4x16-25



BK 3005

Components:

- clamp body – special aluminum alloy profile resistant to corrosion,
- hanger – hot galvanized steel,
- wedge clamp - glass fiber reinforced polyamide,
- M8 bolt with adequate mechanical strength,
- galvanized springs made of spring wire,
- aluminum washers for the UOP 2x16-25 anchor clamps.



BK 3006

Applications:

The tension anchor clamps are used in overhead power line systems made of insulated conductors. They are designed to fix line conductors to buildings' walls and to poles by means of standard hooks.

Technical parameters: conductor cross section 2x16-25 or 4x16-25.

Catalog No.	KTM code	Type	Conductor cross section	Tightening torque	Permissible load
BK 3005	1131-152-016-025	UOP2x16-25	2 x (16-25)	22 Nm	5,4 kN
BK 3006	1131-154-016-025	UOP4x16-25	4 x (16-25)	22 Nm	8,7 kN

5.2. CABLE ENTRIES

Applications and structure:

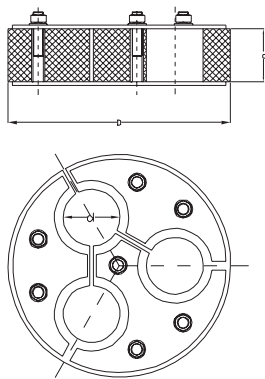
The cable entries are used to seal cables, wires and pipes that go through walls and other rigid horizontal and vertical building space dividers. They ensure waterproofness of such utility penetrations. The cable entry consists of a set of sealing rings. A rubber sealing pad is placed between upper and lower pressure plates made of acid-proof stainless steel. The pressure plates, depending on the shape of used rubber pad and layout of its holes, may be in the shape of crescents or half rings. The upper and lower pressure plates are joined together by means of bolts in cooperating pairs. The bolts tightening causes rubber deformation, seals cable entry and fixes the cable penetration in the mounting hole.

Catalog No.	Designation	Type	Outer diameter [mm]	Thickness [mm]	Number of holes	Cable hole diameter [mm]	Notes
BK 8400	Rubber cable penetration GPK 160/60/3x39,8	GPK 160/60/3x39,8	125	60	3	39,8	+ 3 cable hole plugs
BK 8401	Rubber cable penetration GPK 160/60/3x34,8	GPK 160/60/3x34,8	125	60	3	34,8	+ 3 cable hole plugs
BK 8402	Rubber cable penetration GPK 160/60/3x31,9	GPK 160/60/3x31,9	125	60	3	31,9	+ 3 cable hole plugs
BK 8420	Rubber cable penetration GPK 125/60/3x40,8	GPK 125/60/3x40,8	125	60	3	40,8	+ 3 cable hole plugs
BK 8421	Rubber cable penetration GPK 125/60/3x39,8	GPK 125/60/3x39,8	125	60	3	39,8	+ 3 cable hole plugs
BK 8422	Rubber cable penetration GPK 125/60/3x35,8	GPK 125/60/3x35,8	125	60	3	35,8	+ 3 cable hole plugs
BK 8423	Rubber cable penetration GPK 125/60/3x34,8	GPK 125/60/3x34,8	125	60	3	34,8	+ 3 cable hole plugs
BK 8424	Rubber cable penetration GPK 125/60/3x32,9	GPK 125/60/3x32,9	125	60	3	32,9	+ 3 cable hole plugs
BK 8425	Rubber cable penetration GPK 125/60/3x31,9	GPK 125/60/3x31,9	125	60	3	31,9	+ 3 cable hole plugs
BK 8440	Rubber cable penetration GPK 110/60/1x26,8	GPK 110/60/1x26,8	110	60	1	26,8	+ 1 cable hole plug
BK 8441	Rubber cable penetration GPK 110/60/1x28,9	GPK 110/60/1x28,9	110	60	1	28,9	+ 1 cable hole plug
BK 8442	Rubber cable penetration GPK 110/60/1x29,9	GPK 110/60/1x29,9	110	60	1	29,9	+ 1 cable hole plug
BK 8443	Rubber cable penetration GPK 110/60/1x36,1	GPK 110/60/1x36,1	110	60	1	36,1	+ 1 cable hole plug
BK 8444	Rubber cable penetration GPK 110/60/1x38,3	GPK 110/60/1x38,3	110	60	1	38,3	+ 1 cable hole plug
BK 8445	Rubber cable penetration GPK 110/60/1x40,4	GPK 110/60/1x40,4	110	60	1	40,4	+ 1 cable hole plug
BK 8446	Rubber cable penetration GPK 110/60/1x55,2	GPK 110/60/1x55,2	110	60	1	55,2	+ 1 cable hole plug
BK 8447	Rubber cable penetration GPK 110/60/1x56,2	GPK 110/60/1x56,2	110	60	1	56,2	+ 1 cable hole plug
BK 8470	Cable penetration plug ZGPK 125	ZGPK 125	125	30	-	-	-
BK 8471	Cable penetration plug ZGPK 110	ZGPK 110	110	30	-	-	-

5.2.1. THREE-HOLE CABLE ENTRY GPK - .../60/ 3x...



BK 8400 to BK 8425

**Applications:**

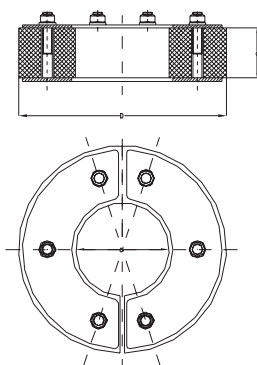
Realization of penetration through rigid horizontal and vertical building space dividers by three pipes or cables. These cable penetrations are used to protect cable passage from indoor transformer stations or pipe penetrations of heat pumps. The table below shows cross sections of the YHKXS cable conductors, but this cable entry may be used for all other cables with outer diameter equal to $d + 1,5$ mm.

Catalog No.	KTM code	Type	Cable YHAKXS	D	g	d
BK 8400	1373-123-160-398	GPK/160/60/3x39,8	1x240 [mm ²]	160	60	3x39,8
BK 8401	1373-123-160-348	GPK/160/60/3x34,8	1x120 [mm ²]	160	60	3x34,8
BK 8402	1373-123-160-319	GPK/160/60/3x31,9	1x70 [mm ²]	160	60	3x31,9
BK 8420	1373-123-125-408	GPK/125/60/3x40,8	1x300 [mm ²]	125	60	3x40,8
BK 8421	1373-123-125-398	GPK/125/60/3x39,8	1x240 [mm ²]	125	60	3x39,8
BK 8422	1373-123-125-358	GPK/125/60/3x35,8	1x120 [mm ²]	125	60	3x35,8
BK 8423	1373-123-125-348	GPK/125/60/3x34,8	1x120 [mm ²]	125	60	3x34,8
BK 8424	1373-123-125-329	GPK/125/60/3x32,9	1x120 [mm ²]	125	60	3x32,9
BK 8425	1373-123-125-319	GPK/125/60/3x31,9	1x70 [mm ²]	125	60	3x31,9

8.2.2. SINGLE HOLE CABLE ENTRY GPK/...../60/ 1x



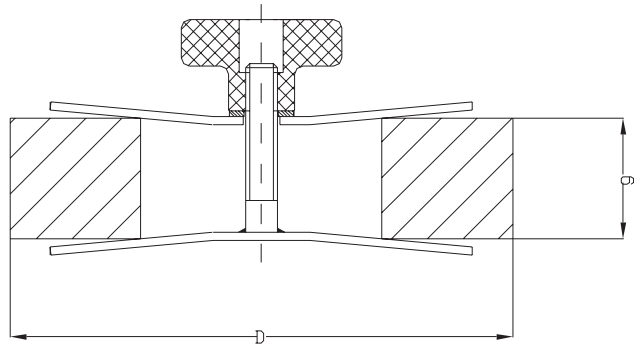
BK 8440 to BK 8447

**Applications:**

Realization of penetration through rigid horizontal and vertical building space dividers by single pipe or cable. These cable penetrations may be also used to protect pipe outputs (e.g. in deep wells). The table below shows cross sections of the YHKXS cable conductors, but this cable penetration may be used for all cables with outer diameter equal to $d + 1,5$ mm.

Catalog No.	KTM code	Type	Cable YHAKXS	D	g	d
BK 8440	1373-123-110-268	GPK/110/60/1x26,8	4x50 [mm ²]	110	60	1x26,8
BK 8441	1373-123-110-289	GPK/110/60/1x28,9	4x70 [mm ²]	110	60	1x28,9
BK 8442	1373-123-110-299	GPK/110/60/1x29,9	4x70 [mm ²]	110	60	1x29,9
BK 8443	1373-123-110-361	GPK/110/60/1x36,1	4x120 [mm ²]	110	60	1x36,1
BK 8444	1373-123-110-383	GPK/110/60/1x38,3	4x120 [mm ²]	110	60	1x38,3
BK 8445	1373-123-110-404	GPK/110/60/1x40,4	4x150 [mm ²]	110	60	1x40,4
BK 8446	1373-123-110-552	GPK/110/60/1x55,2	4x185 [mm ²]	110	60	1x55,2
BK 8447	1373-123-110-562	GPK/110/60/1x56,2	4x240 [mm ²]	110	60	1x56,2

5.2.3. CABLE ENTRY HOLE PLUG



BK 8470 and BK 8471

Applications:

Protection of unused cable entries against dirt and water penetration.

Catalog No.	KTM code	Type	Cable penetration plug	D	g
BK 8470	1373-123-125-000	ZGPK/125/30/Z	-	125	30
BK 8471	1373-123-110-000	ZGPK/110/30/Z	-	110	30

- Heating and ventilation of control cabinets
- Fittings and hardware for overhead power lines
- Equipment for transformers
- Earthing systems
- Cable accessories and substation equipment
- Current transformers **NEW!**
- Rectifiers and traction rectifier systems **NEW!**
- Earth fault current compensation systems **NEW!**
- Design and production of various equipment and components

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- Substation MV busbar insulation services.
- Mounting of MV substation busbars.
- Supply of the AFL, AFLs, ACSS, ACSS/TW and OPGW bare and insulated conductors **NEW!**
- Survey, consulting and selection of substation auxiliary power supply transformer's parameters **NEW!**
- Survey, consulting and selection of the substation grounding resistors **NEW!**

- Oil immersed and dry-type inverters
- Cast resin distribution transformers
- Oil immersed and dry-type earthing transformers
- Rectifiers **NEW!**
- Oil immersed and dry-type shunt reactors
- Cathode smoothing reactors **NEW!**
- Oil immersed and dry-type arc-suppression coils
- Current limiting reactors
- Transformer refurbishment services
- Adaptation of transformer voltage for wind power plant needs



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Bezpol

BEZPOL Sp. z o.o.

ul. Partyzantów 21
42 – 300 Myszków

NIP 577-040-07-32
phone. +48 34 313 07 77–80
Sales department . 33, 34
Marketing department .39 or +48 34 313 07 81
Fax 034 313 06 76
bezpol@bezpol.pl

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AC 070
QMS