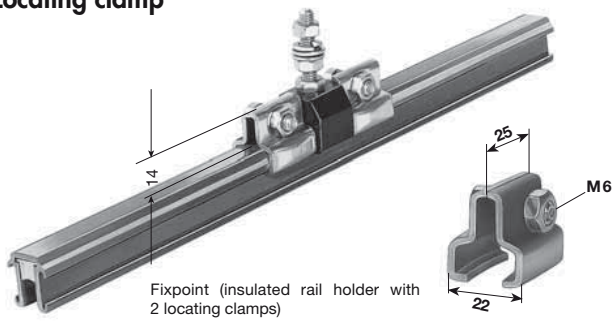




ACCESSORIES FOR U 20

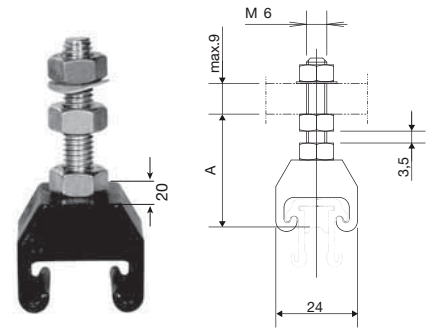
Locating clamp



Type	Weight kg	Order- No.
USK 20 K 4⁽¹⁾	0,028	120 140

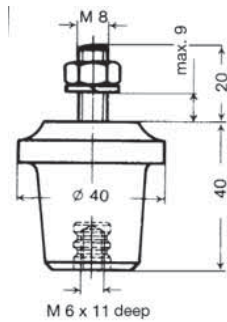
Insulated hangers⁽²⁾

Type	A
U20/50 CH	33
U20/50 C	34
U20/50 AC	35
U20/50 CE	



Type	Weight kg	Order- No.
UAM 20	0,025	126 540
UAM 20 K 4⁽¹⁾	0,025	126 542

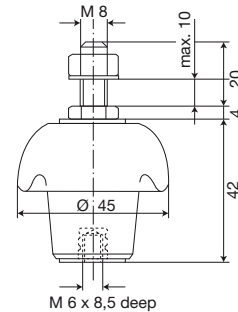
Insulator⁽²⁾



Cantilever strength = 3000 N
Leakage distance = 60 mm

Type	Weight kg	Order- No.
GH 40-M 6	0,075	121 060
GH 40-M 6 K 4⁽¹⁾	0,075	126 544

Insulator⁽²⁾ for aggressive mediums

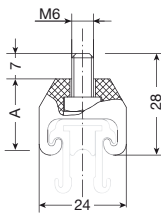


cantilever strength = 1000 N
Leakage distance = 62 mm

Type	Weight kg	Order- No.
UIK 42-M 6 K 4⁽¹⁾	0,110	120 883

Rail holder for insulators

for conductor rails U20/50 CH, 20/50 C, U20/50 AC and U20/50 CE

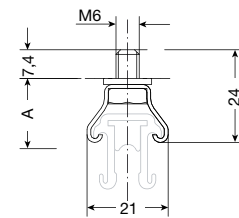


Type	A
U20/50 CH	20
U20/50 C	21
U20/50 AC	22
U20/50 CE	

Supplied with bolt M 6 x 12

Type	Weight kg	Order- No.
UAK 20	0,010	126 546
UAK 20 K 4⁽¹⁾	0,010	126 548

for conductor rails U 20/50 CH, 20/50 C, U 20/50 AC and U 20/50 CE

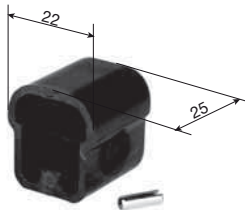


Type	A
U20/50 CH	17
U20/50 C	18
U20/50 AC	19
U20/50 CE	

Supplied with bolt M 6 x 10 and spring washer

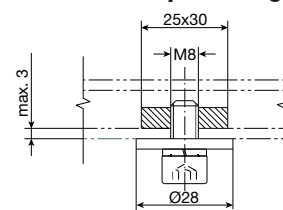
Type	Weight kg	Order- No.
UAS 20 K 4⁽¹⁾	0,014	126 550
UAS 20 K 4⁽¹⁾-H⁽³⁾	0,014	120 755

End caps incl. Locking pin



Type	Weight kg	Order- No.
UK 20-L	0,010	120 120
UK 20-M	0,010	120 987

Securing element for compact hangers KH 20/5....



Type	Weight kg	Order- No.
SE 8	0,055	170 677
SE 8 K 4⁽¹⁾	0,055	170 955

⁽¹⁾ Stainless steel hardware

⁽²⁾ For installation in slotted holes use on both sides discs according to DIN 9021.

⁽³⁾ For aggressive mediums

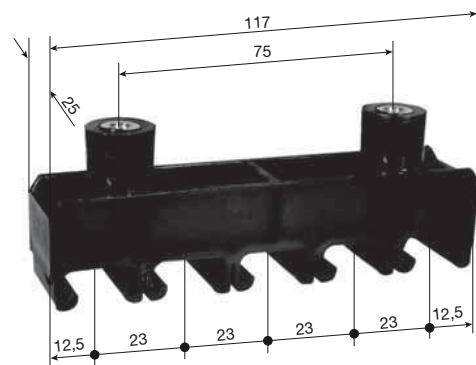
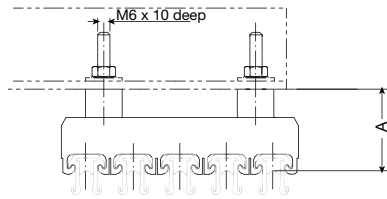


Any number of conductors poles can be assembled with compact hangers.

Can only be used with collectors of type KST. The joints and feeds have to be arranged staggered.

Compact hangers, 5 poles to be bolted ⁽²⁾

Type	A
U20/50 CH	41
U20/50 C	42
U20/50 AC	43
U20/50 CE	43

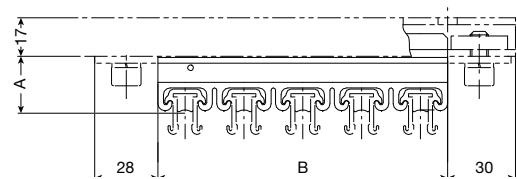
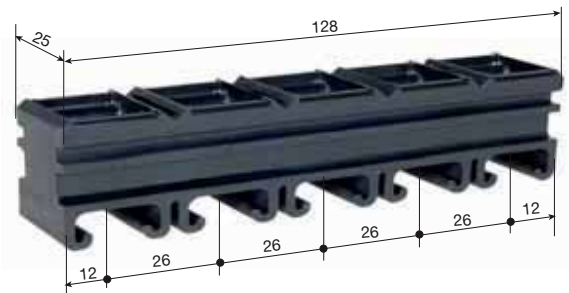


Type	Weight kg	Order- No.
KA 20/5	0,041	126 613

Compact hangers for bracket profiles 38/17 G

Typ	A
U20/50 CH	23
U20/50 C	24
U20/50 AC	25
U20/50 CE	25

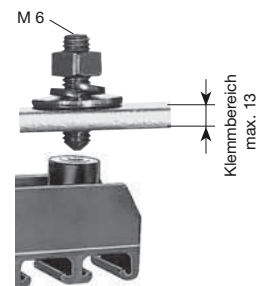
Type	B	Weight kg	Order- No.
KH 20/5-1	24	0,008	120 933
KH 20/5-2	50	0,018	120 934
KH 20/5-3	76	0,028	126 614
KH 20/5-4	102	0,038	126 615
KH 20/5-5	128	0,048	126 616



Attachment hardware for compact hangers, insulated hangers and insulators

for 1 KA 20/5 are 2 pcs. BE 6 required.

Type	Weight kg	Order- No.
BE 6	0,015	120 406
BE 6 K 4 ⁽¹⁾	0,015	120 778

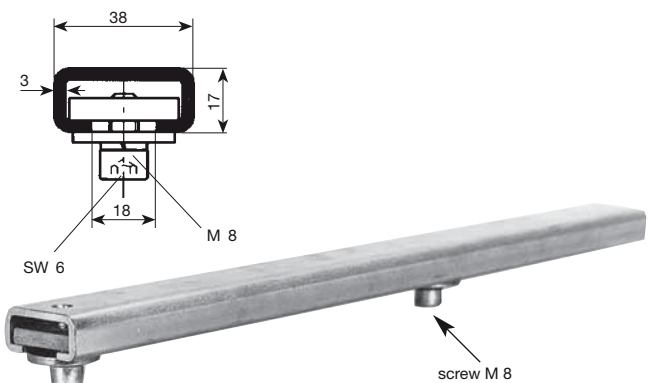


Bracket profiles 38/17

incl. locking hardware

Type	Length mm	max. poles	Weight kg	Order- No.
HU 20/230	230	5	0,520	120 833
HU 20/360	360	10	0,750	120 834
HU 20/490	490	15	0,970	120 835

Longer Bracket profiles on request.



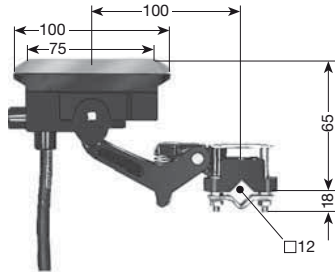
⁽¹⁾ Stainless steel hardware.

⁽²⁾ For installation in slotted holes use on both sided discs according to DIN 9021.



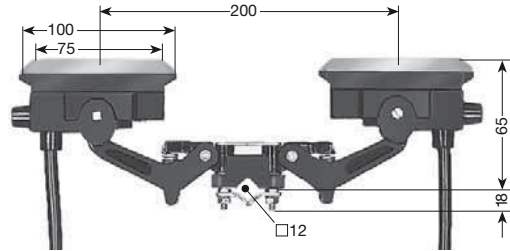
CURRENT COLLECTORS FOR U 20

Current collectors



with 2 m connecting cable
lift and swivel ± 20 mm
contact pressure: approx. 9 N

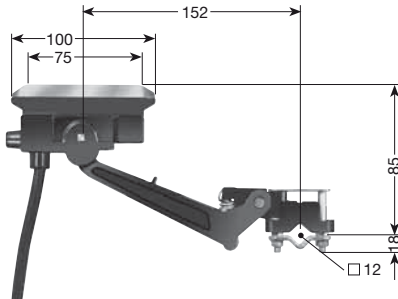
Double collectors



with 2 x 2 m connecting cable
lift and swivel ± 20 mm
contact pressure: approx. 9 N per Brush

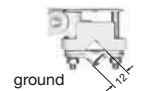
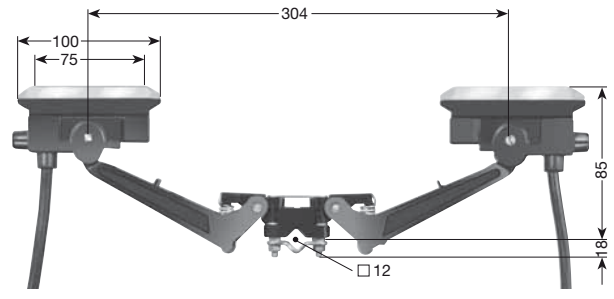
Type ⁽¹⁾	Am- pacity A	Connecting cable		Weight kg	Order- No.		Type ⁽¹⁾	Am- pacity A	Connecting cable		Weight kg	Order- No.	
		mm ²	ø max/ mm		phase black	ground yellow			mm ²	ø max/ mm		phase black	ground yellow
KST 15	15	2,5	4,4	0,256	150 891	150 892	KDST 30	30	2,5	4,4	0,471	150 897	150 898
KST 40	40	6,0	11,0	0,428	152 840	152 850	KDST 80	80	6,0	11,0	0,821	152 960	152 970
KST 60	60	10,0	12,5	0,588	153 675	153 676	KDST 120	120	10,0	12,5	1,114	153 679	153 680

Current collectors



with 2 m connecting cable
lift and swivel ± 40 mm
contact pressure: approx. 9 N

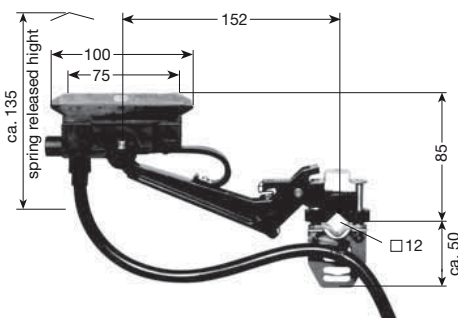
Double collectors



with 2 x 2 m connecting cable
lift and swivel ± 40 mm
contact pressure: approx. 9 N per brush

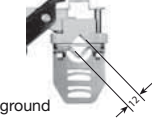
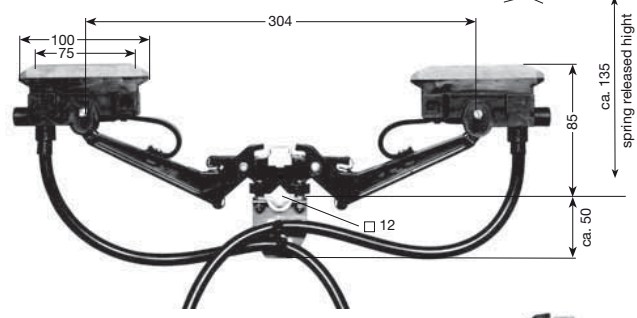
Type ⁽¹⁾	Am- pacity A	Connecting cable		Weight kg	Order- No.		Type ⁽¹⁾	Am- pacity A	Connecting cable		Weight kg	Order- No.	
		mm ²	ø max/ mm		phase black	ground yellow			mm ²	ø max/ mm		phase black	ground yellow
KSTL 15	15	2,5	4,4	0,272	150 893	150 894	KDSTL 30	30	2,5	4,4	0,492	150 899	150 901
KSTL 40	40	6,0	11,0	0,453	152 860	152 870	KDSTL 80	80	6,0	11,0	0,822	152 980	152 990
KSTL 60	60	10,0	12,5	0,591	153 677	153 678	KDSTL 120	120	10,0	12,5	1,188	153 681	153 682

Current collectors for transfer funnels EMK 20⁽¹⁾



with 2 m connecting cable
lift ± 20 mm
swivel ± 40 mm
contact pressure: approx. 9 N

Double collectors for transfer funnels EMK 20⁽¹⁾



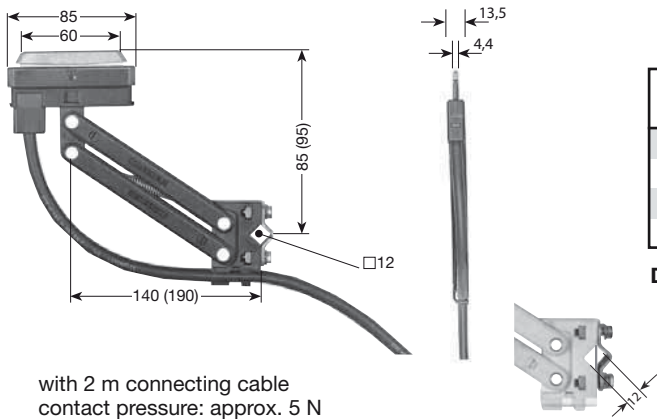
with 2 x 2 m connecting cable
lift ± 20 mm
swivel ± 40 mm
contact pressure: approx. 9 N per brush

Type ⁽¹⁾	Am- pacity A	Connecting cable		Weight kg	Order- No.		Type ⁽¹⁾	Am- pacity A	Connecting cable		Weight kg	Order- No.	
		mm ²	ø max/ mm		phase black	ground yellow			mm ²	ø max/ mm		phase black	ground yellow
KSTLU 15	15	2,5	4,4	0,313	150 895	150 896	KDSTLU 30	30	2,5	4,4	0,541	150 902	150 903
KSTLU 40	40	6,0	11,0	0,499	153 791	153 792	KDSTLU 80	80	6,0	11,0	0,895	153 786	153 787
KSTLU 60	60	10,0	12,5	0,652	153 793	153 794	KDSTLU 120	120	10,0	12,5	1,231	153 795	153 796

(1) Suffix types e.g. KST 15 \rightarrow KST 15 PH Order- No. 150 891
(2) Collectors locate in unstressed condition automatic to phase center.
Ampacity while using stainless steel conductors on request.



Current collectors

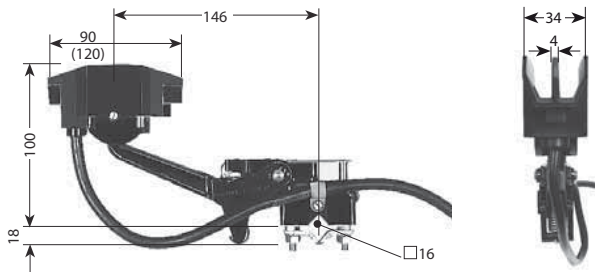


with 2 m connecting cable
contact pressure: approx. 5 N

Type	Am- pacity A	Connecting-Cable		lift & swivel mm	Weight kg	Order- No.	
		mm ²	ø max/ mm			phase black	ground yellow
KST 30	30	2,5	5	± 20	0,240	152 085	152 086
KST 55	55	6,0	11	± 20	0,368	154 438	154 439
KSTL 30	30	2,5	5	± 30	0,240	152 089	152 091
KSTL 55	55	6,0	11	± 30	0,368	154 443	154 444

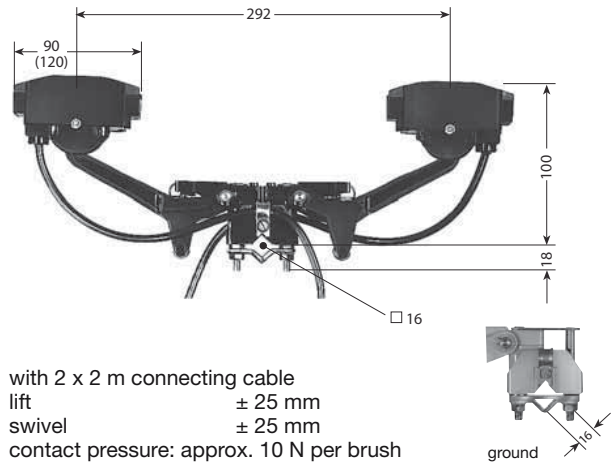
Dimensions in parenthesis for KSTL

Current collectors⁽¹⁾



with 2 m connecting cable
lift ± 25 mm
swivel ± 25 mm
contact pressure: approx. 10 N

Double collectors⁽¹⁾



with 2 x 2 m connecting cable
lift ± 25 mm
swivel ± 25 mm
contact pressure: approx. 10 N per brush

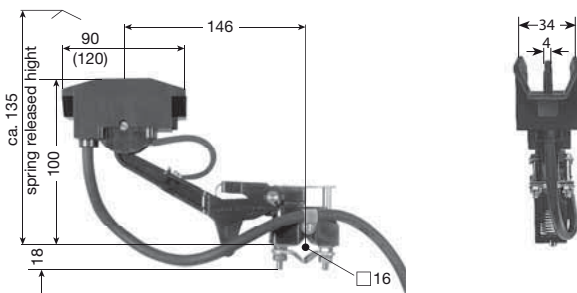
Type	Am- pacity A	Connecting-Cable		Weight kg	Order- No.	
		mm ²	ø max/ mm		phase black	ground yellow
UST 40	40	6	11,0	0,605	120 961	120 962
UST 60	60	10	12,5	0,875	120 963	120 964

Dimension in parenthesis for UST 60

Type	Am- pacity A	Connecting-Cable		Weight kg	Order- No.	
		mm ²	ø max/ mm		phase black	ground yellow
UDST 80	80	6	11,0	1,100	120 965	120 966
UDST 120	120	10	12,5	1,600	120 967	120 968

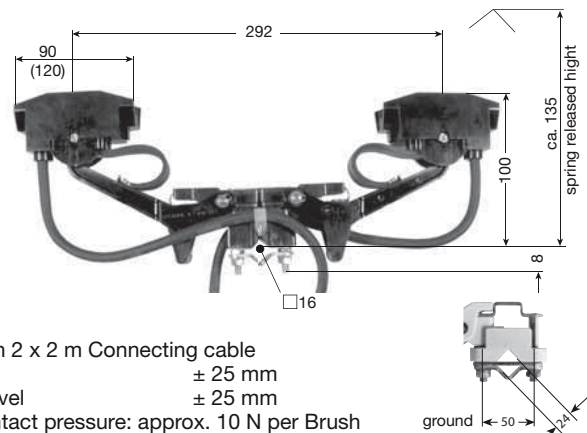
Dimension in parenthesis for UDST 120

Current collectors for transfer funnels EM⁽¹⁾



with 2 m connecting cable
lift ± 25 mm
swivel ± 25 mm
contact pressure: approx. 10 N

Double collector for transfer funnels EM⁽¹⁾



with 2 x 2 m Connecting cable
lift ± 25 mm
swivel ± 25 mm
contact pressure: approx. 10 N per Brush

Type	Am- pacity A	Connecting-Cable		Weight kg	Order- No.	
		mm ²	ø max/ mm		phase black	ground yellow
USTU 40	40	6	11,0	0,635	120 969	120 970
USTU 60	60	10	12,5	0,815	120 971	120 972

Dimension in parenthesis for USTU 60

Type	Am- pacity A	Connecting-Cable		Weight kg	Order- No.	
		mm ²	ø max/ mm		phase black	ground yellow
UDSTU 80	80	6	11,0	1,160	120 973	120 974
UDSTU 120	120	10	12,5	1,550	120 975	120 976

Dimension in parenthesis for UDSTU 120

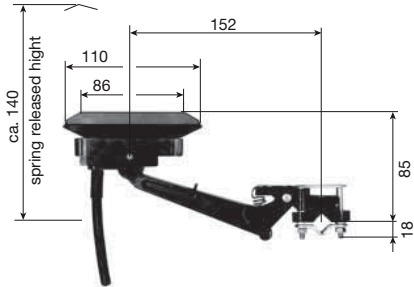
⁽¹⁾ Collectors UST -UDST and USTU - UDSTU only for 35 mm phase distance.
Ampacity while using stainless steel conductors on request.



CURRENT COLLECTORS FOR U 20

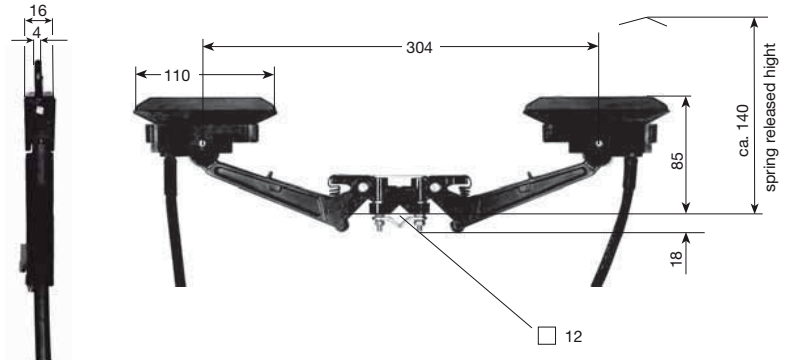
Use in aggressive mediums like pickling plants, galvanizing plants and galvanic systems.

Current collectors phase⁽¹⁾



with 2 m connecting cable
lift +30 mm / -40 mm
swivel \pm 35 mm
contact pressure: approx. 9 N

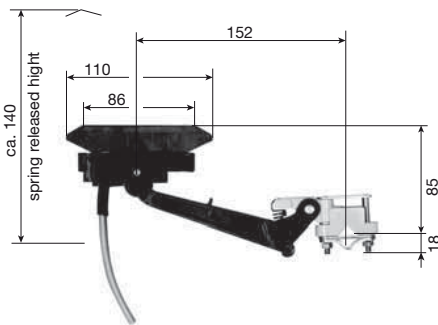
Double collectors phase⁽¹⁾



with 2 m connecting cable
lift +30 mm / -40 mm
swivel \pm 35 mm
contact pressure: approx. 9 N per brush

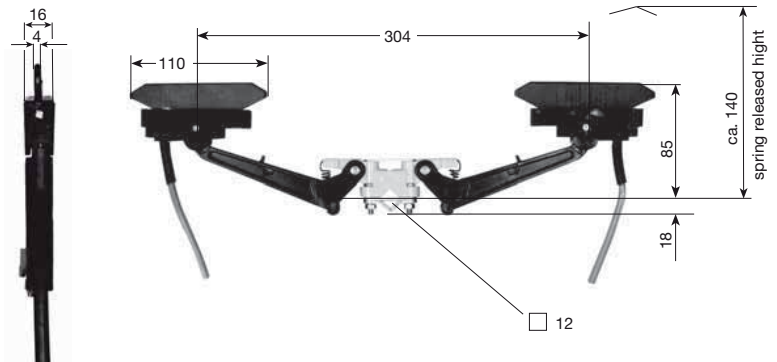
Type ⁽¹⁾	Am- pacity A	Connecting cable mm ² ϕ max/ mm		Weight kg	Order- No. phase black
KSTL 35 VB PH	35	6,0	11,0	0,410	121 186
KDSTL 70 VB PH	70	6,0	11,0	0,750	121 188

Current collectors, ground⁽²⁾

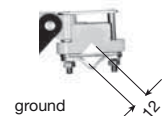


with 2 m connecting cable
lift +30 mm / -40 mm
swivel \pm 35 mm
contact pressure: approx. 9 N

Double collectors, ground⁽²⁾



with 2 m connecting cable
lift +30 mm / -40 mm
swivel \pm 35 mm
contact pressure: approx. 9 N per brush

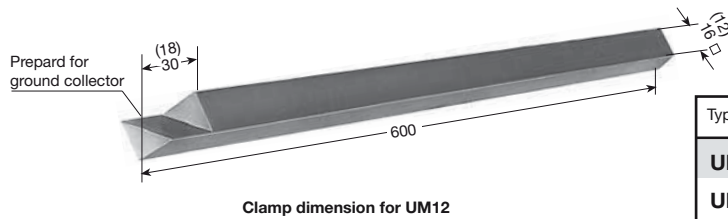


Type ⁽¹⁾	Am- pacity A	Connecting cable mm ² ϕ max/ mm		Weight kg	Order- No. phase black
KSTL 35 V PE	35	6,0	6,0	0,328	121 187
KDSTL 70 V PE	70	6,0	6,0	0,554	121 189

(1) Phase with touch protection
(2) PE without touch protection



Collector bracket for KST and UST



Type	Weight kg	Order- No.
UM 12 (for KST)	0,675	153 506
UM 12 K4⁽¹⁾ (for KST..V)	0,688	121 162
UM 16 (for UST)	1,175	126 574

With a length above 600 mm for the towing arm a support have to be considered on site to prevent bending or twisting.

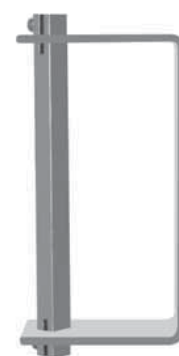
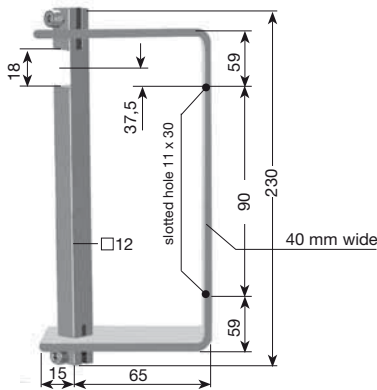
Longer length are available.

Collector brackets

for current collectors
KST / KDST see page 10

for current collectors
KST see page 10

for control collectors
KST / KDST



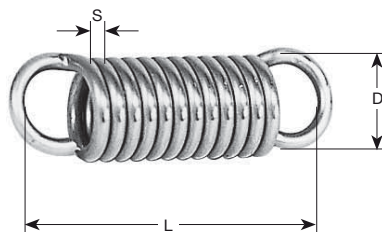
Type	Weight kg	Order- No.
UMAS 12 HS-A 200	0,740	121 092

Type	Weight kg	Order- No.
UMAS 12 HS-B 200	0,740	121 093

Type	Weight kg	Order- No.
UMAS 12 ST 200	0,740	121 094

Suitable for phase distance of max. 55 mm (3 pole + ground).

Tension springs



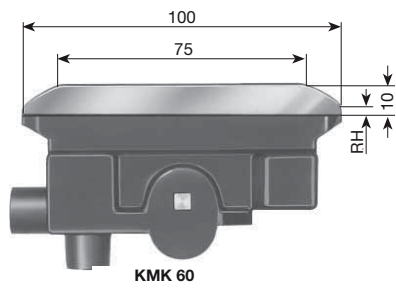
Type	for current collectors	Weight kg	S mm	D mm	L mm	Order- No.
ZF 3	KST 15 thru KDST 120	0,003	1,2	10,8	28,5	153 516
ZF 4	KSTL 15 thru KDSTL 120 and KSTLU 15 thru KDSTLU 120	0,004	1,3	11,0	29,0	153 517
ZF 4H	KSTL 35 thru KDSTL 70	0,004	1,3	11,0	29,0	170 601
ZF 5	UST 40, USTU 40, UDST 80, UDSTU 80 UST 60, USTU 60, UDST 120, UDSTU 120	0,007	1,5	13,8	40,0	126 585

⁽¹⁾ Stainless steel hardware.

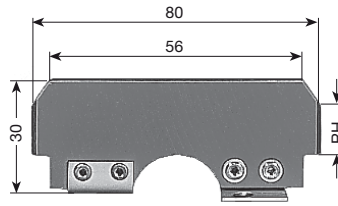


COLLECTOR COMPONENTS U 20

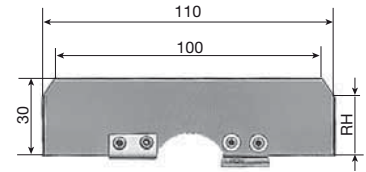
Copper-graphite brushes



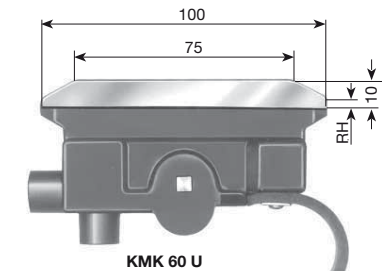
KMK 60



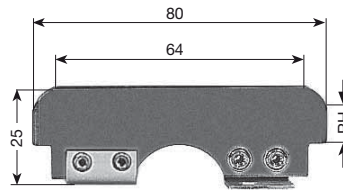
KMU 40



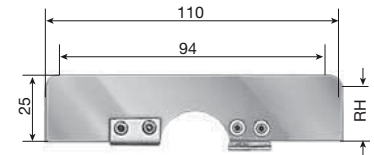
KMU 60



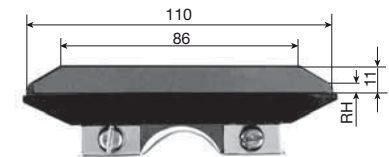
KMK 60 U



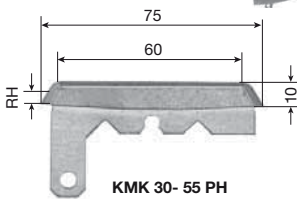
KMU 40 U



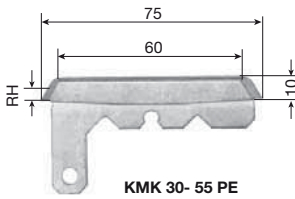
KMU 60 U



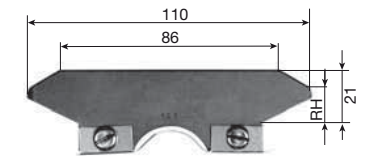
KMK 35 VB



KMK 30- 55 PH



KMK 30- 55 PE



KMK 35 V

Dim H: max. wear for U 20/50 C

Type	for current collectors	RH mm	Weight kg	Order- No.
KMK 60	KST 15, KST 40, KDST 30, KDST 80, KSTL 15, KSTL 40, KDSTL 30, KDSTL 80, KST 60, KDST 120, KSTL 60, KDSTL 120	3	0,110	153 512
KMK 60 U	KSTLU 15, KSTLU 40, KSTLU 60, KDSTLU 30, KDSTLU 80, KDSTLU 120	3	0,115	153 513
KMU 40	UST 40, UDST 80	12	0,060	126 579
KMU 40 U	USTU 40, UDSTU 80	12	0,050	126 696
KMU 60	UST 60, UDST 120	18	0,070	126 581
KMU 60 U	USTU 60, UDSTU 120	18	0,060	126 743
KMK 30-55, phase	KST 30, KST 55, KSTL 30, KSTL 55	2	0,031	154 440
KMK 30-55, ground	KST 30, KST 55, KSTL 30, KSTL 55	2	0,031	154 453
KMK 35 VB, phase	KSTL 35 VB, KDSTL 70 VB	5	0,030	121 063
KMK 35 V, ground	KSTL 35 V, KDSTL 70 V	14	0,030	121 062

Cable attachment clamp

for current collectors Type KSTLU, KDSTLU

Type	Weight kg	Order- No.
KBK⁽¹⁾	0,030	153 519

