

ENCLOSED CONDUCTOR RAILS

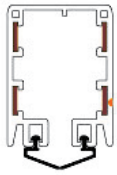


In our offer:

- enclosed conductor rails
- open conductor rails
- crane cabs
- power and control cables:
 - flat
 - round
 - for control panels
- drag chain
- crane runway
- large cable trolleys
- hoists
- cranes



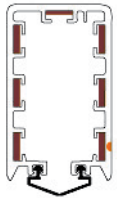
FLEXSISTEM



MODEL RANGE RMBC-56

ENCLOSED CONDUCTOR RAILS

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MODEL RANGE RMBC-52

ENCLOSED CONDUCTOR RAILS

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ANOTHER MODEL RANGES- BY INQUIRY

Overall

Enclosed conductor rail system RMBC is protected from direct contact and is designed for indoor and outdoor use.

It is made of a set of copper conductors in a hard blue PVC case,

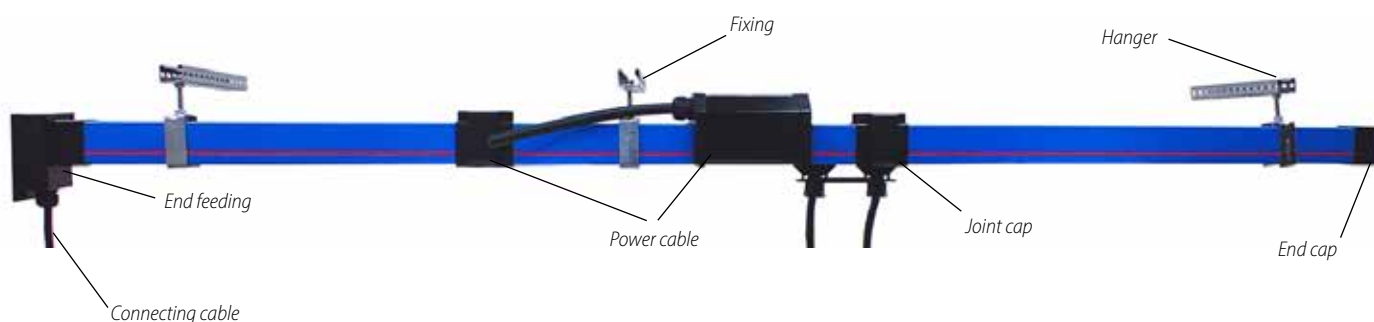
For current 35 to 240 A

Collector moves inside the case by means of rolls.

Copper graphite brushes equipped with springs are used for power transmission.

Product is in compliance with ISO9001:2009 and CE

System display



Technic specifications

Electric properties:

Current Max.	240A
Voltage Max.	690V
Insulation resistance	30–40KV/MM
Resistance	$5 \times 10^{15} \text{ Ohm} \times \text{cm}$
Surface resistance	$10^{13} \text{ Ohm} \times \text{cm}$
Consistency to change of voltage	CT1600–2.7

Agent inhibiting fire:

Self-extinguishing
Class B1 without agents inhibiting fire,

Mechanical properties:

Strength of flexure	$75\text{N/mm}^2 \pm 10\%$
Tension strength	$40\text{N/mm}^2 \pm 10\%$

Temperature range:

Standard case	-20°C do $+70^\circ\text{C}$
Case resistant to high temperatures	-20°C do $+115^\circ\text{C}$
Case resistant to low temperatures	-40°C do $+80^\circ\text{C}$

Sustainability to chemical agents

50% Sulphuric acid
Petrol
Mineral oil lubricant
Concentrated hydrochloric acid

Case

Synthetic plastic case with 4 to 16 copper conductors

4 m Standard length

Other lengths – on request

Grounding is marked in accordance with international color code.

Constructions of case and of current collector guarantee observation of staging

Connections

Fixation by screw-holt joint and installation of joint cap.

Energy supply

Connection of electrical energy is possible in the middle or the ends of the track.

Protection

Open butt ends of conductor bar of type RMBC closed end cap

Hangers

Standard fastenings for mounting conductor bar RMBC type on crane beams are available.

Conductor bar RMBC type is equipped with sliding and fixpoint hangers.

Standard clearance between fixing points in internal and external systems is indicated in mounting manual diagrams.

Extension areas

The extension areas are required to compensate the different expansion between copper conductors and steel construction in varying temperatures without interrupting electrical power

Anti-condensation areas

This areas are used for transfer of the power rail to outdoor areas to avoid condensation. The power rail system is not separated electrically.

Areas of feeding and switches

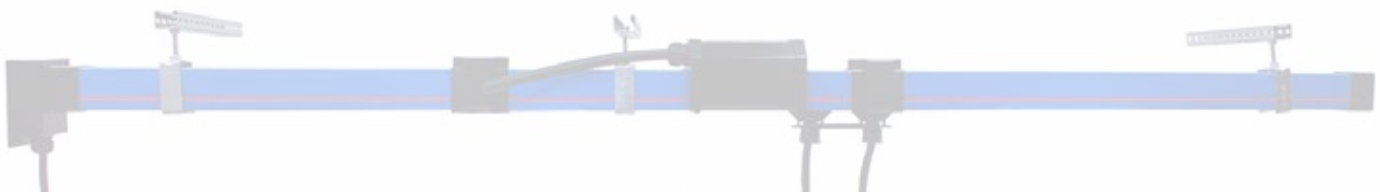
Information is on pages 7,9.

Dead sections

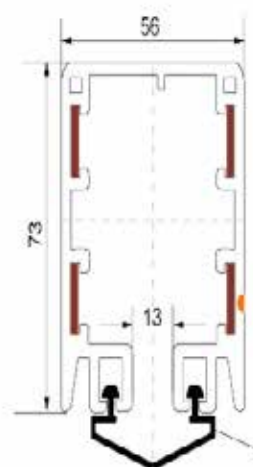
There are variants: air gap version (5mm), insulating pieces (35 mm). The design of the power supply must be considered for each specific case.

Current collectors

The current collector are made from re-inforced polyester fiberglass for high strength and light weight. Spring loaded carbon brushes maintain uniform contact. Connecting cables and hinged or flexible towing arms included. Double collectors for transfer applications and higher amperage.



MODEL RANGE RMBC-56 – TECHNICAL DATA – CATALOG NUMBERS



Conductor bar code

RMBC 56

RMBC56 – Enclosed conductor bar

4 – Conductors

n – Conductor section (mm²)

m – Max. Current

① – 14.5 mm

② – 17.6mm

③ – 21.0mm

Sealing stripe for order.

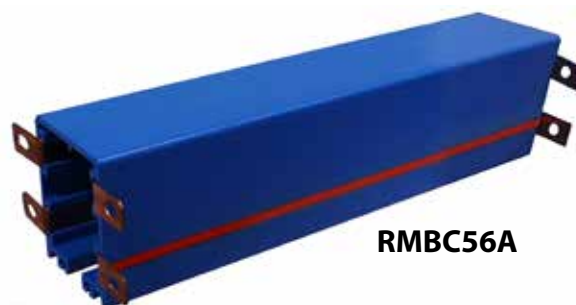
Length

Length 4 m,

other lengths on request - not more than 6 m

Bent track

Radius R min: 0.8 m



RMBC56A

Type	Number of conductors	Conductor section (mm ²)	Current Max. (A)	Leakage- gap (mm)	Voltage Max. (V)	Change of voltage (Ω /km)	Weight (kg/m)	Catalog №
RMBC56A-4-8/35	① 4	8	35	35	690	1.944	2.09	100035
RMBC56A-4-10/50	① 4	10	50	35	690	1.656	2.16	100050
RMBC56A-4-12/65	4	12	65	35	690	1.321	2.23	100065
RMBC56A-4-15/80	4	15	80	35	690	1.137	2.30	100080
RMBC56A-4-20/100	② 4	20	100	33	690	1.011	2.43	100100
RMBC56A-4-25/120	4	25	120	33	690	0.713	2.56	100120
RMBC56A-4-35/140	4	35	140	33	690	0.522	2.95	100140
RMBC56A-4-50/170	4	50	170	33	690	0.337	3.25	100170
RMBC56A-4-70.210	4	70	210	33	690	0.265	3.85	100210
RMBC56A-4-80/240	③ 4	80	240	30	690	0.223	4.16	100240

Current collector for the conductor bar 4-pole

56OD-4/25 56OD-4/40



Current collector 25A for conductor rail 35A
Current collector 40A for conductor bar more 50A
Use tow arms 56ZB/53 or 56ZB/55

Connection cable

4x2,5 for 25A

4x4 for 40A

Conventional length 0,8 m – other lengths on request

Type	Weight (kg)	Number of conductors	Current Max.	Catalog Nº
56OD-4/25	0.65	4	25A	100325
56OD-4/40	0.70	4	40A	100340

56OD-4/60



Current collector 60A for conductor rail 120A-170A
Use tow arm 56ZB/54

Connection cable

2 cables section 4x6

Conventional length 0,8 m – other lengths on request

Type	Weight (kg)	Number of conductors	Current Max.	Catalog Nº
56OD-4/60	1.35	4	60A	100360

56OD-4/80



Current collector 80A for conductor rail 140A-240A

Connection cable

2 cables section 4x10

Conventional length 0,8 m – other lengths on request

Use tow arm 56ZB/54

Type	Weight (kg)	Number of conductors	Current Max.	Catalog Nº
56OD-4/80	1.30	4	80A	100380

Current collector for the bent conductor bar 4-pole

56 ODK-4/25
56 ODK-4/40



For track with $R > 800$ mm
Use tow arms 56ZB/53

Connection cable

4x2,5 for 25A

4x4 for 40A

Conventional length 0,8 m – other lengths on request

Type	Weight (kg)	Number of conductors	Current Max.	Catalog Nº
56ODK-4/25	0.50	4	25A	100327
56ODK-4/40	0.60	4	40A	100342

* Parallel can be connected 3 current collectors.

Brush of collector

56SW-1



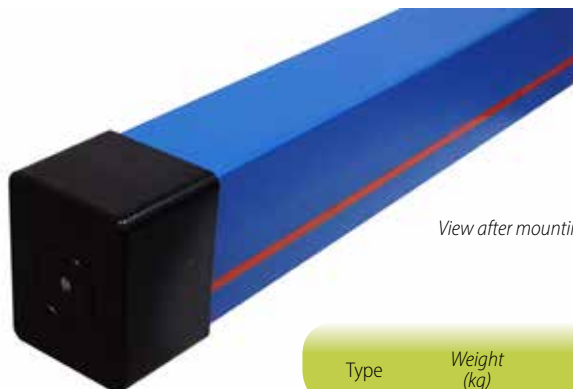
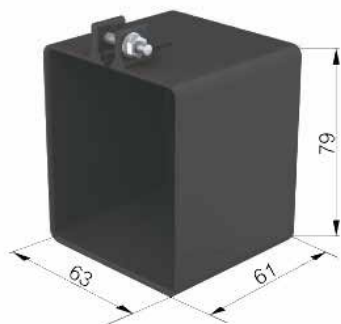
Type	Weight (kg)	Catalog Nº	Applied in the current collector
56SW-1	0.04	100390	56OD-4/25;56OD-4/40 56OD4/60;56OD-4/80 56OD3/60;56D-3/80

56SW-2



Type	Weight (kg)	Catalog Nº	Applied in the current collector
56SW-2	0.04	100391	56ODK-4/25;56ODK-4/40

End cap 56OK

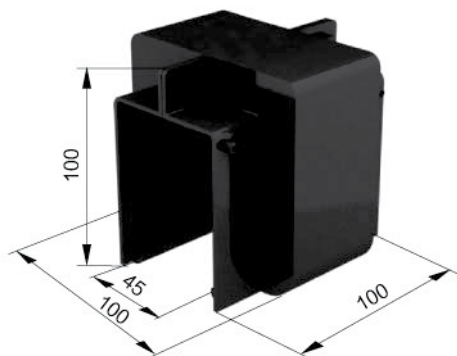


View after mounting

Type	Weight (kg)	Material	Catalog Nº
56OK	0.065	Plastic	100405

Protection of connections

56 OP-5



Mounting on latch, simple

Type	Weight (kg)	Material	Catalog N°
56OP-5	0.10	Plastic	100401

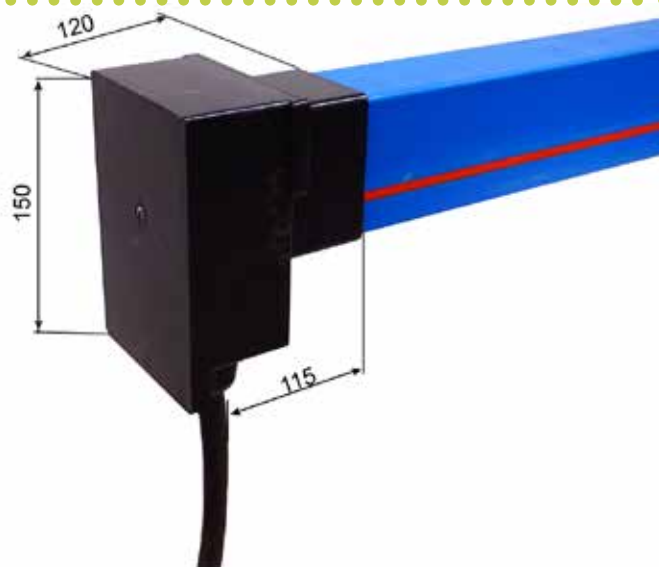
Joint cap 56OZ



Type	Weight (kg)	Material	Catalog N°
56OZ	0.16	Plastic	100406

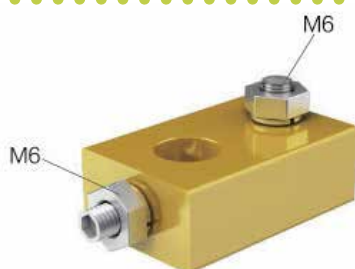
End cap with hole with joints 56OZK

Apply for conductor bar 35A - 240A



Type	Weight (kg)	Material	Catalog N°
56OKZ	0.25	Plastic	100501

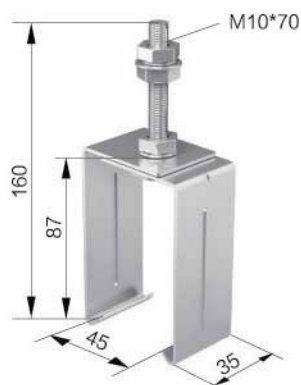
Connection for end feeding



Type	Weight (kg)	Material	Catalog N°
56ZZ-1	0.06	Brass	100502

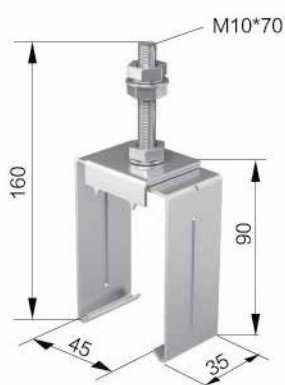
Hanger

56WS-1



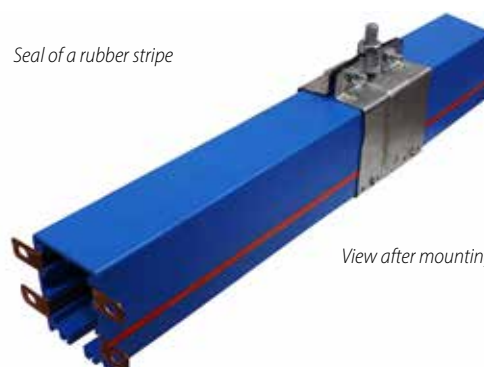
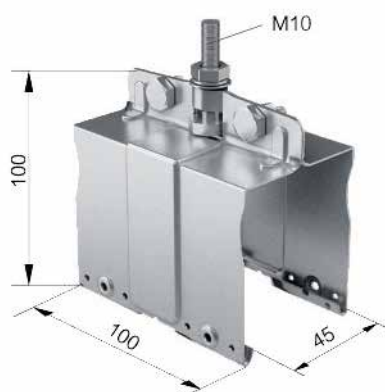
Type	Weight (kg)	Material	Catalog №
56WS-1	0.17	Steel	100403

56WS-2



Typ Tun	Masa (kg) Bec (kg)	Materiał Mamepuan	Nr katalogowy № po kat.
56WS-2	0.21	Steel	100404

56WS-3



Seal of a rubber stripe

View after mounting

Type	Weight (kg)	Material	Catalog №
56WS-3	0.28	Steel	100408

Line feeding



* 0.5 m standard segment of conductor bar.
Other lengths – on request

Type	Catalog №
56OZ-8/35	100503
56OZ-10/50	100506
56OZ-12/65	100507
56OZ-15/80	100509
56O-20/100	100511
56OZ-25/120	100513
56OZ-35/140	100515
56OZ-50/170	100517
56OZ-70/210	100519
56OZ-80/240	100521

Feeding terminal clip



Type	Nr katalogowy № по кат.
56ZP-35A	100504
56ZP-50A	100505
56ZP-65A	100508
56ZP-80A	100510
56ZP-100A	100512
56ZP-120A	100514
56ZP-140A	100516
56ZP-170A	100518
56ZP-210A	100520
56ZP-240A	100522

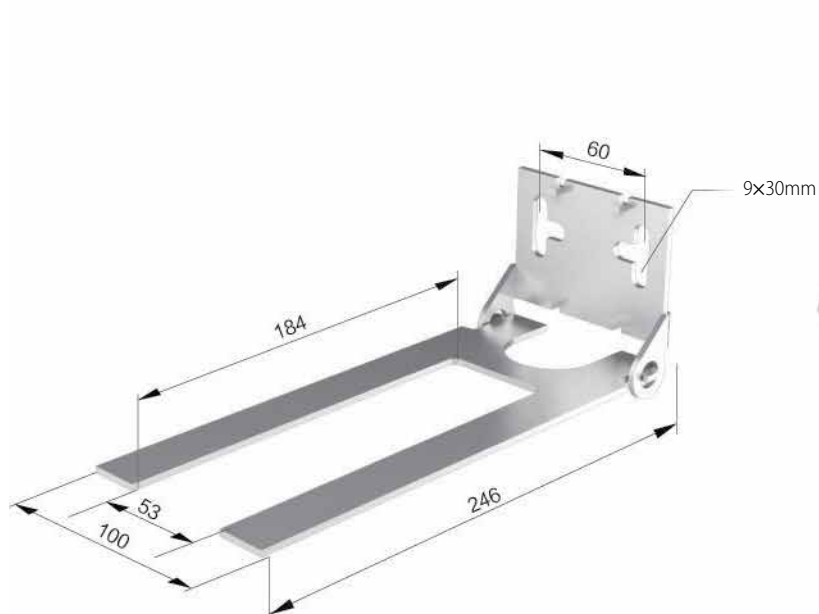
Indicator Led

Used to all conductor bars



Type	Weight (kg)	Nr katalogowy № по кат.
56LED	0.28	100407

Tow arm



Type	Weight (kg)	Material	Catalog Nº
56ZB/53	0.53	Steel	100392
56ZB/54	0.5	Steel	100393

Lever arm

56RWS060



Type	Material	Catalog Nº
56RWS060	Steel	100701

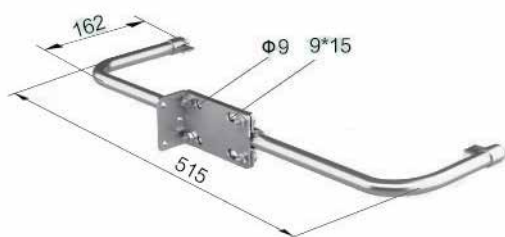
Tow arm

56RWS061



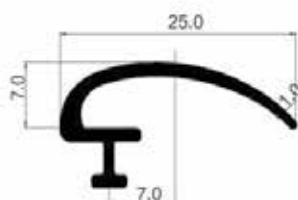
Type	Material	Catalog Nº
56RWS061	Steel	100706

Tow arm



Type	Weight (kg)	Material	Catalog Nº
56ZB/55	1.55	Steel	100394

Sealing stripe 56GU

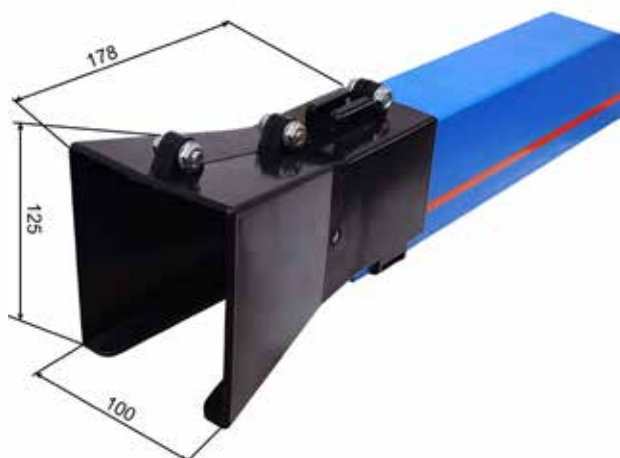


Type	Weight (kg)	Material	Catalog Nº
56GU	0.065	Plastic	100604

The sealing strip should be used in the case of environments with significant dustiness or those that must be resistant to inflammation.

Guiding element

560T



Type	Weight (kg)	Material	Catalog Nº
560T	0.22	Plastic	100601

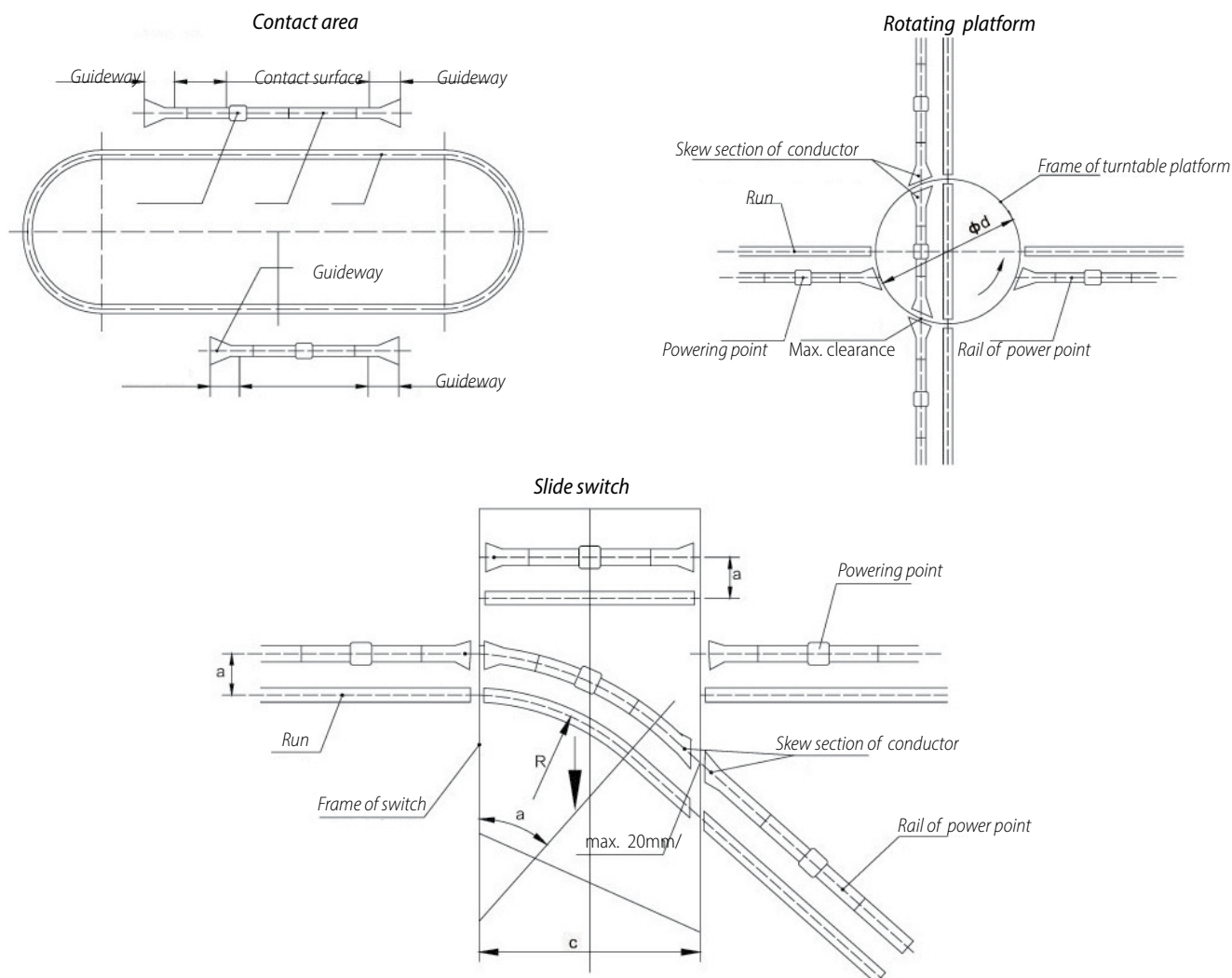
Flexible tow arm

56TE



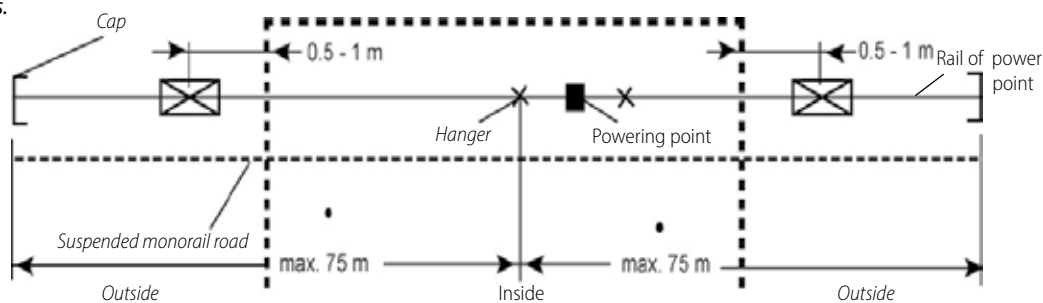
Type	Weight (kg)	Material	Catalog Nº
56TE	1.35	Plastic, cooper, stainless steel	100602

Use guiding element



Anti-condensation areas

With special screw-holt joint at both ends.



Use

Anti-condensate areas should be used in situations where the RMBC system is partly inside and partly outside, for avoid condensation on the outside.

Warm air finds a way out thanks to anti-condensate areas.

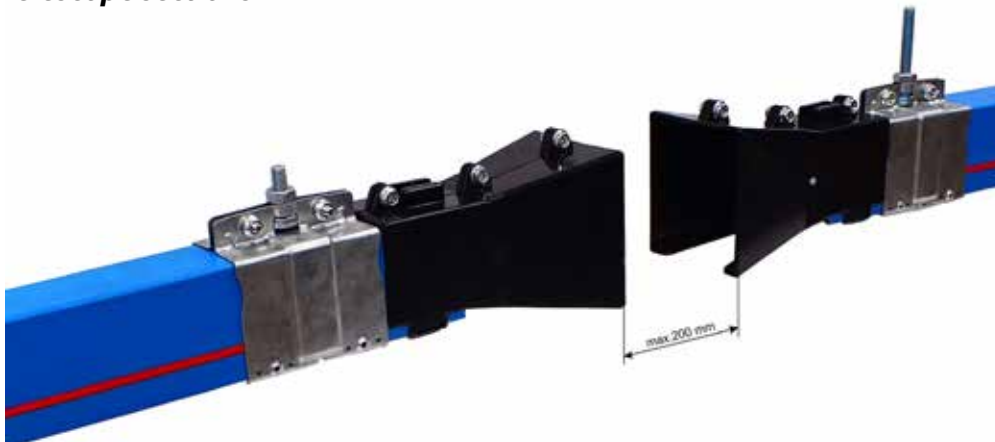
The anti-condensate area does not affect the power supply of the RMBC system.

Mounting

Anti-condensation section must be placed directly (maximum 0.5 - 1 m) at the transition point to the outside of the system.

* Anti-condensate areas should be mounted for longer track.

Telescope sections



Type	Catalog Nº
56ST	100603

Feeding

The RMBC system consists of two independent electrical circuits separated by telescope segments.

Each of these segments must be connected to the power supply independently.

In the case where the system operates both inside and outside, the main energy source may be inside.

In this case, install the terminal on the right side of the sliding section and connect it to the main power supply via a flexible cable.

Current collectors

To avoid loss of contact with the power supply when crossing the telescope section, two current collectors of suitable size must be attached, located at least 500 mm from the center.

In the case of higher energy requirements and the use of double current collectors, consideration should be given to the possibility of connecting two sets.

Flexible tow arm

The current collectors must be installed in flexible spring tow arms.

Install

The telescope section is mounted between two fixed hangers.

The RMBC system is equipped the sliding hangers installed by the instructions.

The indicator "X" of the surface during the passage depends on the ambient temperature during the installation of the system.

The diagram shows a system with 200 m distance between the reference points.

Example

$t = 28^{\circ}\text{C}$

$\Delta t = 76^{\circ}\text{C} (-20^{\circ}\text{C} - +56^{\circ}\text{C})$

$X = 75\text{mm}$

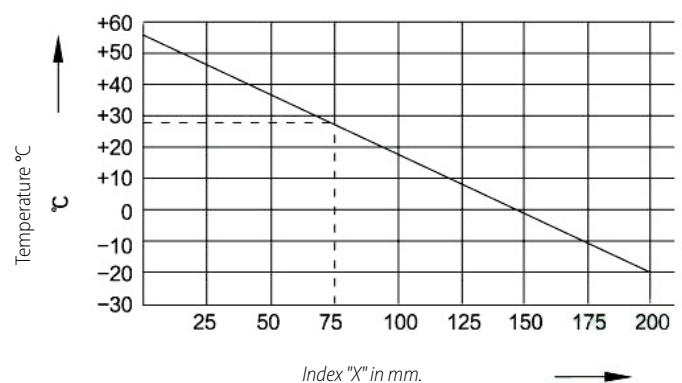


Fig.1

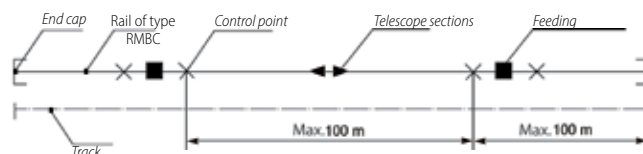


Fig.2

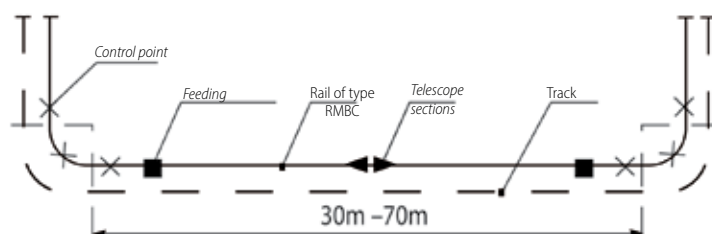
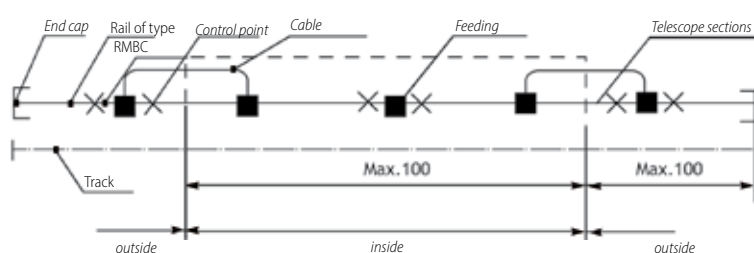


Fig.3



The telescope section is mounted on the part of the RMBC system about 1 meter long and serves to equalize the differences when temperature changes.

The conductor bar is electrically separated into 2 parts by the telescope section. Provide each of these sections with a separate feeding. The telescope sections use in the following situations:

1. For conductor rail length exceeding 200 m. The maximum distance between the two reference points, between which the telescope section is located, is 100 m (see Figure 1).
2. In case the conductor rail passes from the inside to the outside. Thus, icing of the outer part is prevented, since warm air finds an outlet and no condensation forms on the rails (see Figure 2). Alternative solution: Anti-condensation section (see page 11)
3. If the conductor rail length between two turns is more than 20 m (compare Figure 3). A decrease in indicators may be required during temperature fluctuations. In this situation you should consult the manufacturer.

Dead sections

Permanent clearance in phase at conductor.
For use with curved connectors.

Insulation within 3-5 mm
Drawing demonstrating the permanent clearance in phase at conductor.
We ask for information on which wire should be disconnected.
The constant gap in the phase is set by the manufacturer.



Type	Catalog №
56PZJ (35A)	100530
56PZJ (50A)	100531
56PZJ (65A)	100532
56PZJ (80A)	100533
56PZJ (100A)	100534
56PZJ (120A)	100535
56PZJ (140A)	100536
56PZJ (170A)	100537
56PZJ (210A)	100538
56PZJ (240A)	100539

Care

— After installing, make sure that the hangers are moved straight (in a perpendicular position) after the screws are tightened in such a way as to ensure free movement along the rail.

The rail must be installed exact straight and parallel path with the equipment.

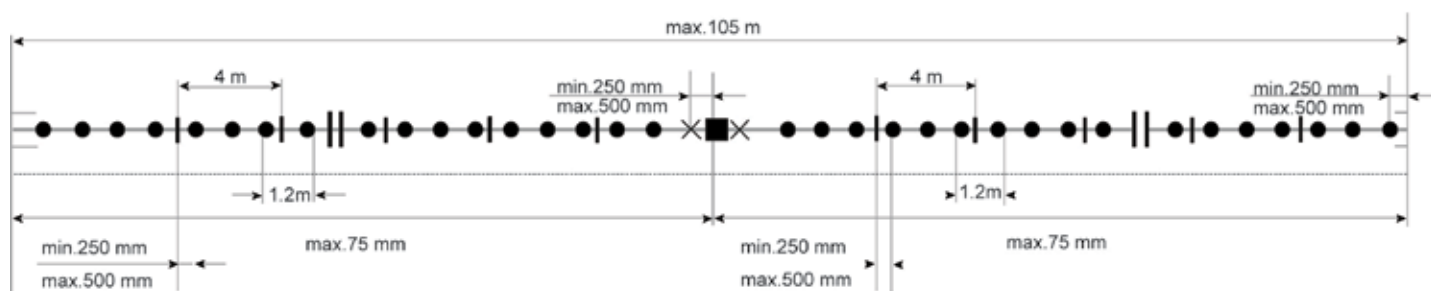
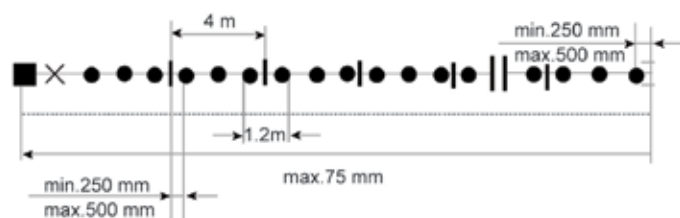
— Before starting the system. Check whether the current collectors are free, lack of excessive resistance caused by a too narrow lumen, or whether the current collector pulls the current collector too tightly.

— Each quarter, and a maximum of once a year (depending on the operating frequency and path length), it is necessary to check the wear of carbon brushes and other mechanical parts by replacing them if necessary.

Symbols explanation*

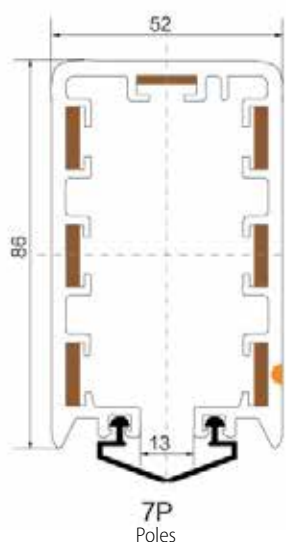
- Conductor bar
- Location of equipment
- |— Method of connecting
- X— Hanger
- Sliding hanger
- [— End cap
- End feeding
- Feeding along the line route
- ||— Insulating element

*Feed end joint



MODEL RANGE -52

TECHNICAL DATA CATALOG NUMBERS



Conductor bar code RMBC52 -4(5,6,7)-n/m

RMBC52 – Enclosed conductor bar

4,5,6,7 Poles

n – Conductor section

m – Max current

Width of copper conductor 12.5 mm



Length

Standard length is 4 m, other lengths to request – not more than 6 m.

Spacing between fastenings

1,2 m for straight sections

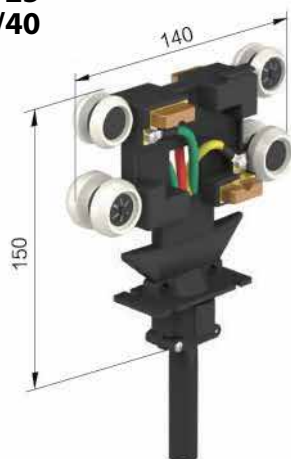
Bent track

For 4-poles 1500mm min R $\geq$ 1.5m conductor bars only

Type	Number of poles	Conductor section (mm ²)	Current Max (A)	Leakage-gap (mm)	Voltage Max. (V)	Change of voltage (Ω /km)	Weight (kg/m)	Catalog №.
RMBC52-4-10/50	4	10	50	55	690	1.656	2.05	204050
RMBC52-5-10/50	5	10	50	15	690	1.656	2.14	205050
RMBC52-6-10/50	6	10	50	15	690	1.656	2.23	206050
RMBC52-7-10/50	7	10	50	15	690	1.656	2.32	207050
RMBC52-4-15/80	4	15	80	55	690	1.137	2.32	204080
RMBC52-5-15/80	5	15	80	15	690	1.137	2.44	205080
RMBC52-6-15/80	6	15	80	15	690	1.137	2.58	206080
RMBC52-7-15/80	7	15	80	15	690	1.137	2.71	207080
RMBC52-4-20/100	4	20	100	55	690	1.011	2.47	204100
RMBC52-5-20/100	5	20	100	15	690	1.011	2.65	205100
RMBC52-6-20/100	6	20	100	15	690	1.011	2.83	206100
RMBC52-7-20/100	7	20	100	15	690	1.011	2.99	207100
RMBC52-4-25/120	4	25	120	55	690	0.713	2.63	204120
RMBC52-5-25/120	5	25	120	15	690	0.713	2.83	205120
RMBC52-6-25/120	6	25	120	15	690	0.713	3.02	206120
RMBC52-7-25/120	7	25	120	15	690	0.713	3.27	207120
RMBC52-4-35/140	4	35	140	55	690	0.522	2.97	204140
RMBC52-5-35/140	5	35	140	15	690	0.522	3.25	205140
RMBC52-6-35/140	6	35	140	15	690	0.522	3.58	206140
RMBC52-7-35/140	7	35	140	15	690	0.522	3.87	207140

Current collector

52OD-4/25 52OD-4/40



Current collector 25A/40A for conductor rail 35A-50A
Current collector 40A for conductor rail 65A-120A

Tow arm (see page 10)

Connection cable

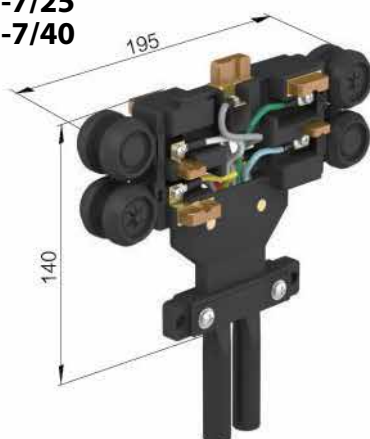
4x2,5 for 25A

4x4 for 40A

Standard length is 0.8 m, other lengths to request.

Type	Weight (kg)	Number of conductors	Current Max. (A)	Catalog N°
56OD-4/25	0.52	4	25A	204325
52OD-4/40	0.61	4	40A	204320

52OD-7/25 52OD-7/40



Tow arm (see page 10)

Connection cable

9x2,5 for 25A

Standard length is 0.8 m, other lengths to request.

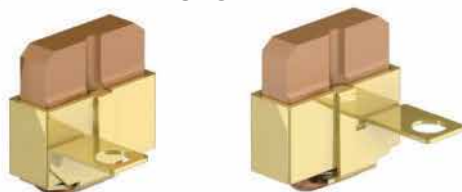
Type	Weight (kg)	Number of conductors	Current Max. (A)	Catalog N°
56OD-7/25	0.98	7	25A	207325
52OD-7/40	1.07	7	40A	207340

* 3 or more current collectors can possibly be connected on straight tracks

Brushes of the current collector

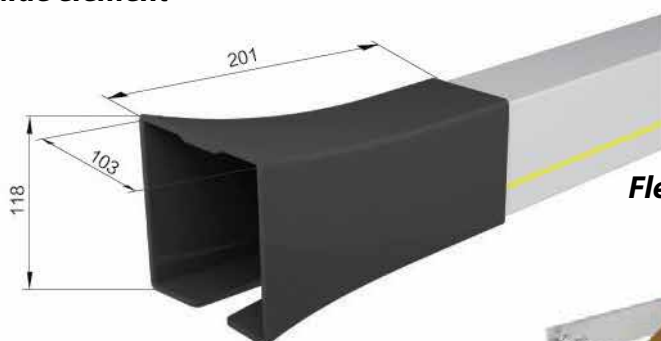
52SW-1

52SW-2



Type	Weight (kg)	Catalog N°	Used in current collectors
52SW-1	0.03	200301	52OD-4/25, 52OD-4/40 52OD-7/25, 52OD-7/40
52SW-2	0.03	200302	52OD-7/25, 52OD-7/40

Guide element



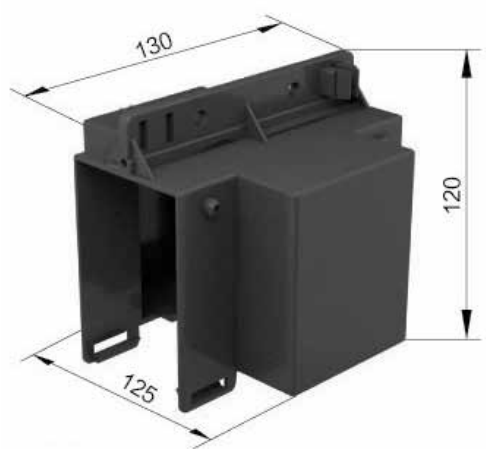
Flexible tow arm



Type	Weight (kg)	Material	Catalog N°
52OT	0.21	Plastic	200401

Type	Catalog N°
52ZE	200402

Join cap



3mm Ø rubber seal can be applied

Type	Weight (kg)	Material	Catalog N°
52OP-5	0.22	Plastic	200403

Hanger



Type	Weight (kg)	Material	Catalog N°
52OP-8	0.26	Steel	200404

Hanger

52WS-1 Hanger



Steel	Weight (kg)	Material	Catalog N°
52WS-1	0.21	Steel	200406

52WS-2 Hanger



Steel	Weight (kg)	Material	Catalog N°
52WS-2	0.17	Steel	200405

Screw-holt joint



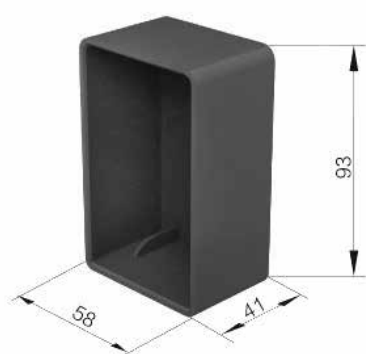
Type	Weight (kg)	Material	Catalog N°
52ZS-80A	0.041	steely, Steel case with copper plate	200415
52ZS-120A	0.048		200416
52ZS-140A	0.052		200417

Plug-in joint



Type	Weight (kg)	Material	Catalog N°
52PS-50A	0.031	Steel protection, copper	200418
52PS-80A	0.038		200419
52PS-100A	0.042		200420

End cap



End cap with hole with joints

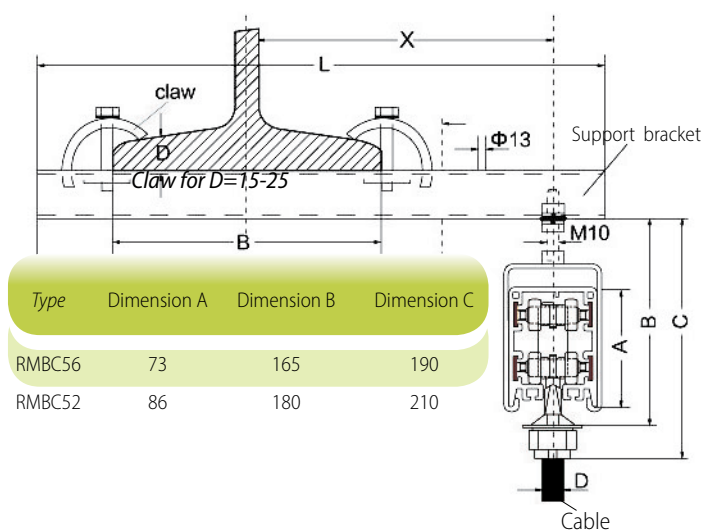
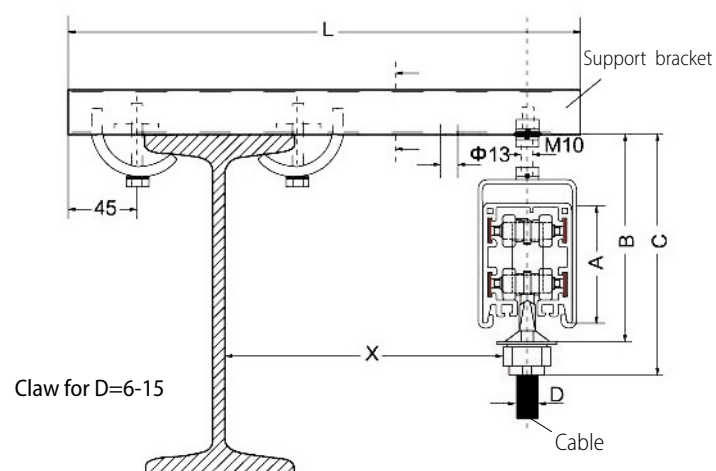


Type	Weight (kg)	Material	Catalog N°
52OK	0.05	Plastic	200413

Type	Weight (kg)	Material	Catalog N°
52OKZ	0.22	Plastic	200414

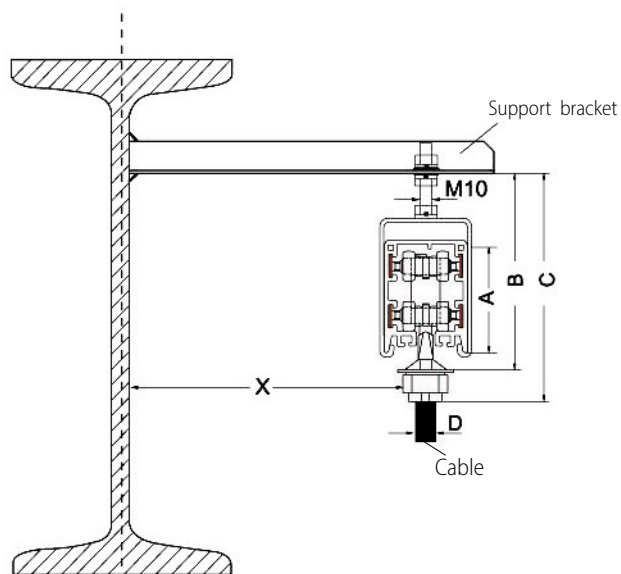
Manner of fastening

To be installed on the C - profile bracket
To be fastened with claws

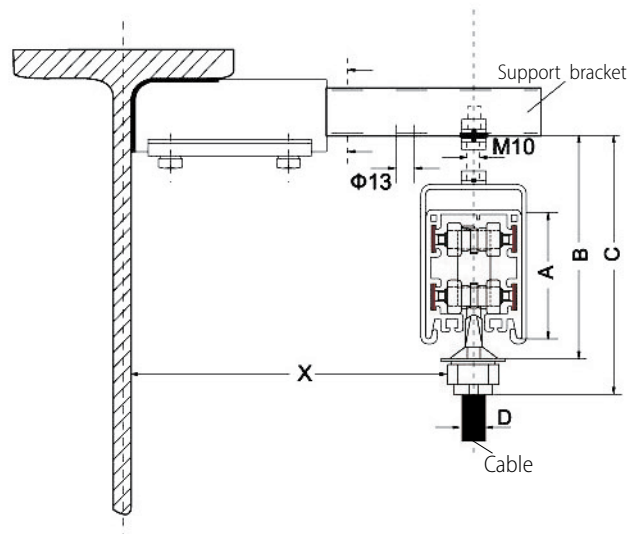


C-profile Brackets

Support bracket



C-profile brackets and claws
Fastening with C-profile brackets from 100 to 1200 mm in length
Catalog №№ :100781-100812
With the aid of claws
Catalog № :100790



C-profile brackets and welded bracket support
Fastening with C-profile brackets 100 to 1200 mm length
Catalog №№ :100781-1007812
And welded bracket support
Catalog № :100790

This image shows a full page of handwriting practice paper. It features multiple sets of horizontal dashed lines spaced evenly down the page, providing a guide for letter height and placement. The background is white, and the lines are light gray. There is no text or other markings on the page.

Your best partner



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