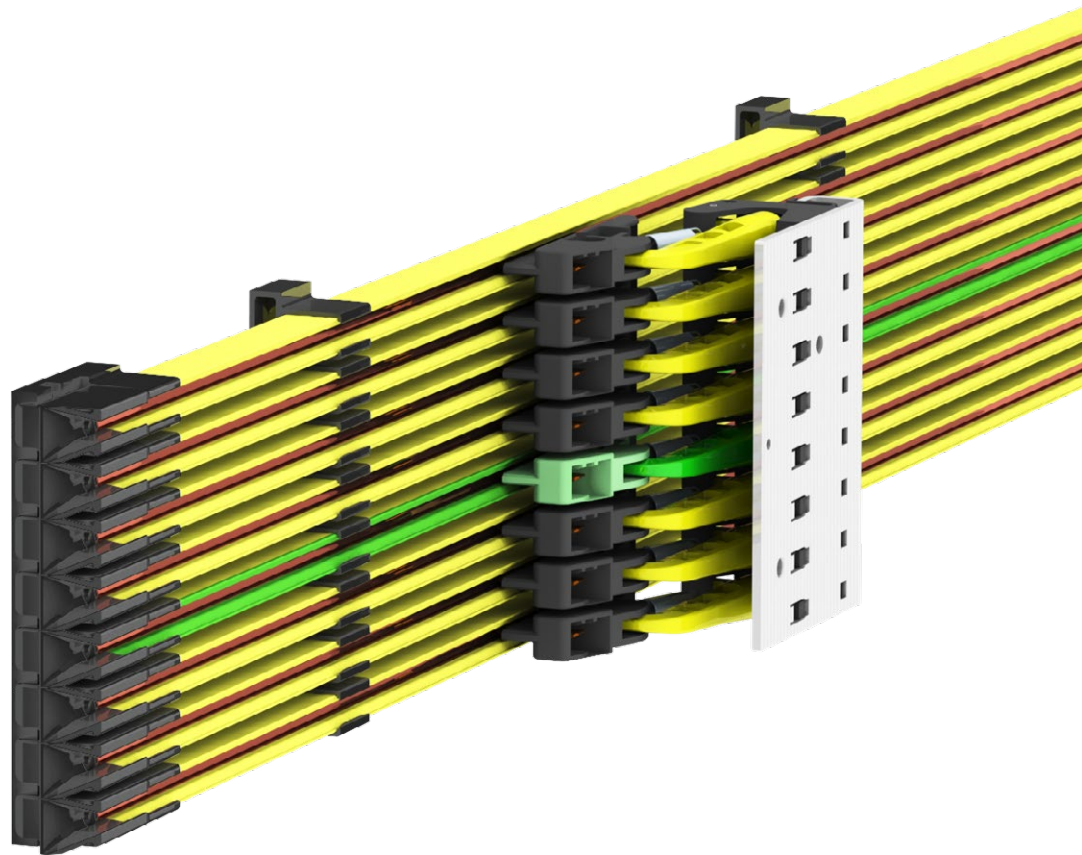


Single-Pole Insulated Conductor Rail Program 0815





KAT 0815-0004 – for General Applications

- Linear and curved applications
- Circular arrangements



KAT 0815-0003 – for Electrified Monorail Systems



KAT 0835 – for Shuttle Systems

Complementary Documents

Operating Instruction:

BAL0815-0001-EN SingleFlexLine

Installation Instruction:

MV0815-0008-0001-EN Mounting the BCB support profile (SEW)

Operating Instructions (for electrified monorail systems only):

BAL0800-0002-EN Operating Instructions Rail Cleaner

BAL0815-0001-EN Collector Brush Sensor Unit

Maintenance Instructions:

WV0800-0001-EN Cleaning of Conductor Rails

WV0800-0002-EN Maintenance Schedule Conductor Rails

WV0800-0004-EN Copper Rail Applications

Contents

System Description	4
Technical Data	7
System Layout	9
Conductor Rails/Rail Connectors	10
Curves	11
Connectors	12
Connectors with Power Feed-In	13
Anchor Point	13
Hanger Clamps	14
End Caps	15
End Cap Base	16
End Caps for Transfer Points	17
Air Gap Insulation Sections	18
Expansion Units/Expansion Modules	19
Layout Considerations	24
Current Collectors	26
Towing Devices	28
Current Collector Modules	29
Configuration Options	30
Connecting Cables	31
Strain Relief	32
Barcode and QR Code Carrier	33
Terminal Box for Conductor Rail Connection	34
Wear Parts	35
Spare Parts	36
Tools	37

System Description

The single-pole insulated conductor rail from the 0815 program is touch-protected and suitable for use in dry indoor environments for any track layout.

- 100 Amps
- protected against direct contact
- little space requirement
- vertical and horizontal installation
- easy and quick installation

Conductor Rails

The conductor rails are available in copper and are insulated with a plastic cover. The standard delivery lengths are 4 m. The protective conductor insulation profile is marked yellow-green on both sides and along the entire length of the rail.

Curves

Curves for horizontal and vertical bends can be manufactured at the factory or on-site.

Suspension

The conductor rails are clipped into the rail brackets. The mounting spacing is max. 500 mm on straight sections and 400 mm on curves. Depending on the model, rail brackets are either securely screwed to an existing substructure or quickly clipped into it.

Thanks to our modular design, custom solutions are often possible.

Rail Connections

The individual conductor rails are connected using a proven and durable screw-based system. The connectors are easily accessible from the front of

the conductor rail and can be easily removed and reused during maintenance and repair. Full finger protection in accordance with IP2X is maintained even at the connector.

Power Feed

Power is supplied via a connector or end cap feed. With the connector feed, power can be supplied at any point in place of a connector.

The connection is made using crimp terminals for wire cross-sections ranging from 1.5 mm² to 10 mm². Another feed-in option is available at the end cap for transfers or separation points. This feed-in is achieved using crimp terminals for wire cross-sections ranging from 1.5 mm² to 6 mm².

End Caps for Transfer Points

For the transition at switches, end caps for transfer points are used, which enable a clean and effortless crossing.

Current Collectors

The current collector unit, which is very compact and constructed from just a few parts, consists of individual, fully insulated current collector arms that are movable in all directions. The individual current collectors are particularly easy to install and replace thanks to clip-on technology. The protective conductor current collector

is marked green and equipped with an anti-confusion mounting feature. The current collector heads can be inspected without disassembly and can be replaced quickly and easily. The current collector units are available in multi-pole versions. Copper-graphite is available as the brush material for high currents, and pure graphite for particularly long service life.

Selecting the correct material has a significant impact on the overall performance of the system.

Please contact us regarding this topic!

Installation

The installation of a conductor rail system should only be performed by trained personnel.

Comprehensive installation instructions and short, concise videos are available online to assist with installation. See also: Operating Instruction (BAL0815-0001-EN SingleFlexLine)

Protection against Direct Contact

A fully installed 0815 conductor rail system has protection class IP2X. This also applies to the current collectors when they are fully engaged with the conductor rail.

SingleFlexLine 0815 – Project Planning

The conductor rail system SingleFlexLine 0815 has been in use for several decades in a variety of applications, and has been adapted at component level for a wide variety of applications.

Intended Use

Moving indoor industrial applications with straight or curved tracks, e.g., logistics applications, packaging machines, and similar equipment. Indoor industrial applications in non-public areas where the equipment is installed out of reach or secured by other appropriate measures.

Technical Characteristics and Warranty

The components of the conductor rail system are designed for use and operation as a power supply in dry indoor environments. The system warranty becomes void if the system is used outside of this application, if operating parameters differ, or if third-party components are used or customer modifications are made.

Current Rating of Our Components

The rated current specifications apply at 100% duty cycle and an ambient temperature of 20°C. Please note, however, that in cases of prolonged idle operation, a high proportion of non-linear loads, or heavily contaminated environments, these values must be verified for the specific application.

Fuse Protection for Our Components

In terms of current-carrying capacity, sliding contact cables can be treated like standard PVC cables. Current loads exceeding the rated current for short durations—such as those possible in applications with standard circuit breakers and residual current devices—do not pose a problem.

Connection Cables

Connection cables differ, among other things, in conductor cross-section and outer jacket diameter. Under certain circumstances, not all outer diameters may be suitable for our feed-in systems. The maximum possible outer diameters can be found in the data sheet for the respective feed-in system.

Temperature-dependent expansion

Changes in ambient temperature result in thermal expansion. This expansion is compensated for by expansion modules. The design of the expansion modules is based on the system layout and ambient temperatures.

Product approvals

The conductor rail was developed in accordance with European and international standards, guidelines, and specifications. The applicable standards met are documented in the product data sheets or on the product labels.

SingleFlexLine 0815 – Project Planning

PE_{plus} Protective Conductor System

The PE protective conductor system provides reliable protective earthing in accordance with DIN VDE 0100-410. PH and PE current collectors, as well as current collector heads, are color-coded and equipped with protection against incorrect installation. To achieve the necessary safety level, we recommend a redundant design for the PE current collectors.

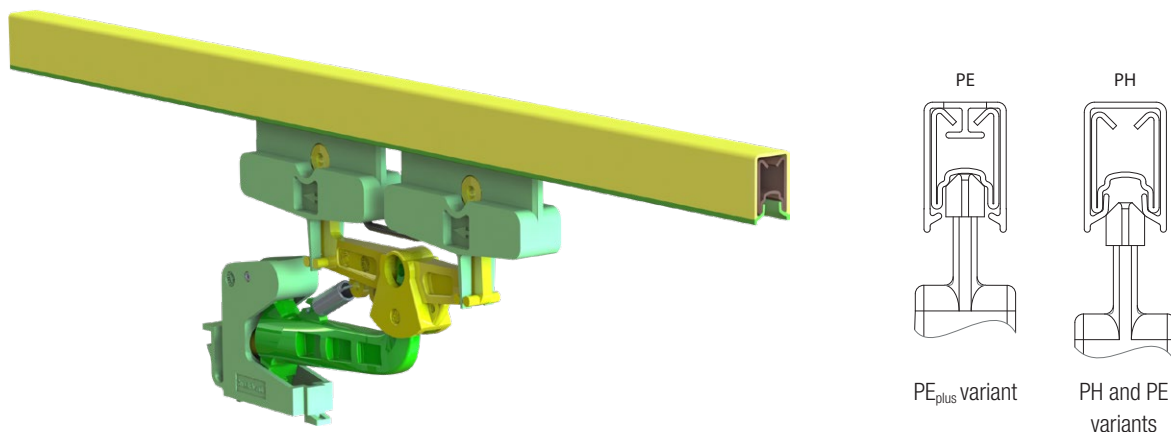
The PE_{plus} protective conductor system reliably prevents the PE current collector from coming into contact with a phase rail.

The PE current collector head is designed to be wider than the PH conductor rail. No electrical contact occurs between the PE current collector head and the electrically conductive parts of the PH conductor rail.

PE_{plus} was developed specifically for the requirements of automotive applications and can also enhance the safety level in other sectors. The redundant use of an additional PE current collector is also strongly recommended for PE_{plus}.

PE-Position

The PE position can often be freely selected in the 0815 conductor rail system. However, to ensure compatibility with common standards, we strongly recommend positioning the PE on the 4th pole. For pole counts less than 4, the PE is typically placed on the 1st or last pole.



Technical Data

General Information	
Conductor Rail	Conductor material: Cu-EPT; insulating sleeve: PVC
Type	0815 SingleFlexLine
Scope of application	Moving industrial indoor applications with linear and curved track paths, e.g., logistics applications, packaging machines, and similar systems
Installation orientation	Horizontal installation of the conductor rail, with the current collector engaging from the side or from below
PE Position	By default, the 4th pole – other positions are possible, but not recommended

Mechanical Parameters	
Rail length	4000 mm
Pole spacing	14 mm
Insulation material for rails	Rigid PVC, color RAL 1018 (yellow)
Max. mounting distance	500 mm on linear sections; varies on curved sections
Max. lateral offset at transitions with end caps/transition caps	± 3 mm, horizontal and vertical, for End Caps 081574 and 081577
Max. gap size at transitions with end caps/transition caps	5 mm
Maximum crossing speed on pickup guides	No pickup guides in the 0815 program
Installation clearances, on all sides	4 mm
Speed during engagement	Maximum 400 m/min, on a linear path

Temperature Range	
Ambient temperature during operation	-15 °C to +55 °C
Air humidity during operation	Max. 50% rel. at 40 °C
Storage temperature range	-30 °C to +55 °C, dry, no condensation
Max. component temperature	80° C

Electrical Parameters	
Rated voltage	500 V
System rated current at 100% duty cycle	100 A
Rated current of the current collector	16 A to 35 A
Cross-sectional area of the conductor rail	25 mm ²
Protection class	IP2X (systems with the current collector in full contact and without transfers, exit points, or pickup guides)
Ohmic resistance	0.000778 at 20°C
Impedance at 14 mm pole spacing/50 Hz	0.0008071 Ohm/m at 20°C
Degree of contamination	3. Dry conductive contamination; conductivity caused by condensation
Dielectric strength	22.4 kV/mm according to DIN 53481

All rated current specifications are based on CE-relevant EN/IEC standards.

Different national standards may apply in other markets.

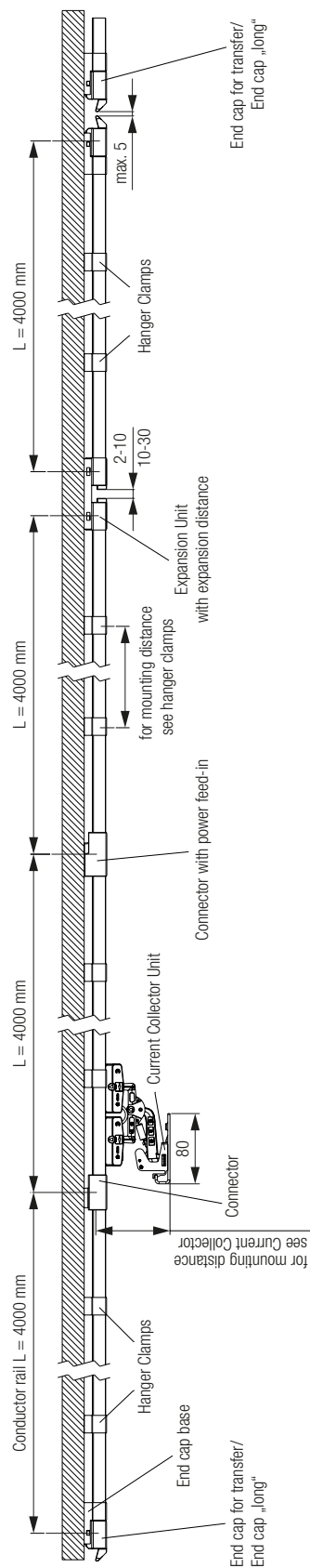
Technical Data

Relevant standards	
Insulation Coordination for Electrical Equipment in Low-Voltage Installations - Part 1: Principles, Requirements, and Tests	IEC 60664-1:2007 EN 60664-1:2007 DIN EN 60664-1 VDE 0110-1
Safety of machinery - Electrical equipment of machines - Part 1: General requirements	IEC 60204 - 1:2005 EN 60204-1:2006 DIN EN 60204-1 VDE 0113-1: 2007-06
Protection against accidental contact / Enclosure protection ratings	IEC 60529:1989 + A1:1999 + A2:2013 EN 60529:1991 A1:2000 A2:2013 DIN EN 60529 VDE 0470-1: 2014-09 VDE 0470 Part 1 / EN 60 529 / IEC 60 529 EN 60 204 Part 1/32
UL Classification/Flammability Requirements for insulation materials regarding flame resistance and self-extinguishing properties	UL94-V0 (IEC) DIN EN 60695-11-10B3, 3
Clearance and creepage distances	according to pollution degree 3; creepage distances according to DIN VDE 0110 Part 1
Overvoltage category	Category III according to DIN VDE 0100-443

Note: Subject to technical changes. For applications other than those described here or under different operating conditions, please consult us to verify technical feasibility. Technical specifications may be mutually exclusive. In case of doubt, we also recommend verifying suitability.

System Layout

Program 0815 – Symbolic Representation



Notes on Layout/Installation Guidelines:

- Observe the installation spacing even when the track is not linear (curves)
- Observe the wheel contact point in applications with curves
- Current collector cables must be laid without tension, allow for free movement, and be highly flexible
- Install the current collectors so that the connecting cables cannot become snagged and the movement of the arms cannot be restricted (e.g., by mounting screws that are too long)

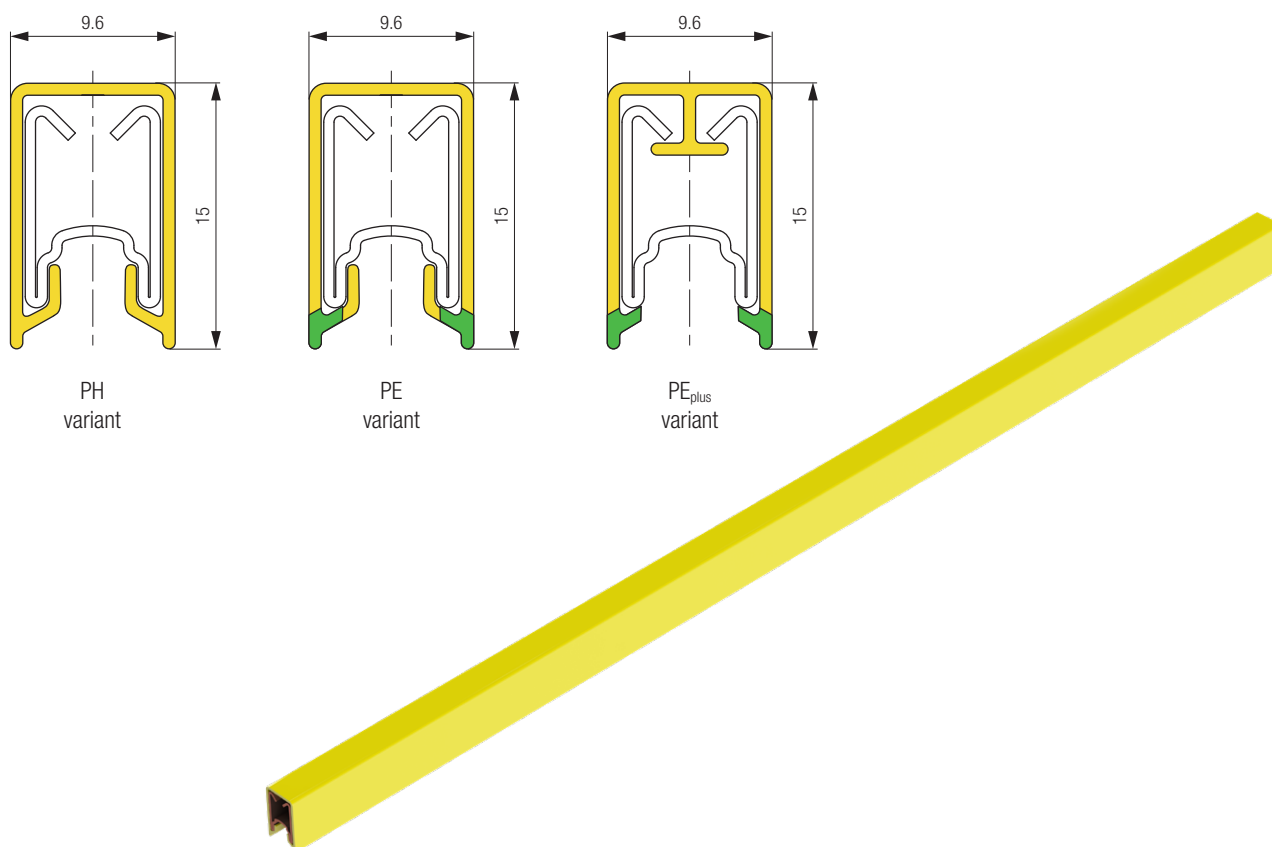
Basic Components

Conductor Rails

The SingleFlexLine 0815 is available as a phase rail and a PE rail, each in 4-meter lengths.

The conductor material consists of high-quality Cu-EPT and offers maximum electrical conductivity. The insulation material is made of durable PVC and ensures safe operation over a long period of time.

The two available PE protective conductor systems each have a different application focus. We are happy to assist you with any questions.



Part No.	Type	Rated current	Length	Usage	Conductor material	Insulation material	Weight
081516-4X11	CONDUCTOR RAIL 0815 CU100A PVC _{PH} 4M	100 A	4 m	PH	copper	PVC	1.06 kg
081516-4X12	CONDUCTOR RAIL 0815 CU100A PVC _{PE} 4M	100 A	4 m	PE	copper	PVC	1.06 kg
081516-4X14	CONDUCTOR RAIL 0815 CU100A PVC _{PE+} 4M	100 A	4 m	PE _{plus}	copper	PVC	1.06 kg
081516-4X15	CONDUCTOR RAIL 0815 CU100A PVC _{PE+} 4M	100 A	4 m	PE _{plus} curves	copper	PVC	1.06 kg

Shorter lengths with configurator 08151-X#

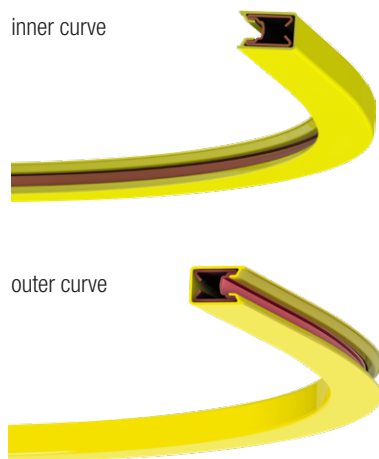
Optional Parts

Curved Conductor Rails

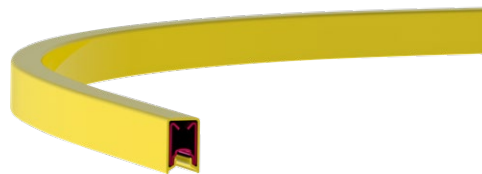
Curved Conductor Rails are manufactured at the factory using a special process that ensures a perfect fit for rings and segmented curves. No further processing of the bends is required for installation.

Curved Conductor Rails and curves have a different mounting spacing than straight conductor rails. For more information on this, see the Hanger Clamps section.

Vertical rail arrangement



Horizontal rail arrangement



Part No.	Type	Weight
08151X-XNB	Curved Conductor Rail 0815 PH/PE/PE configured	variable

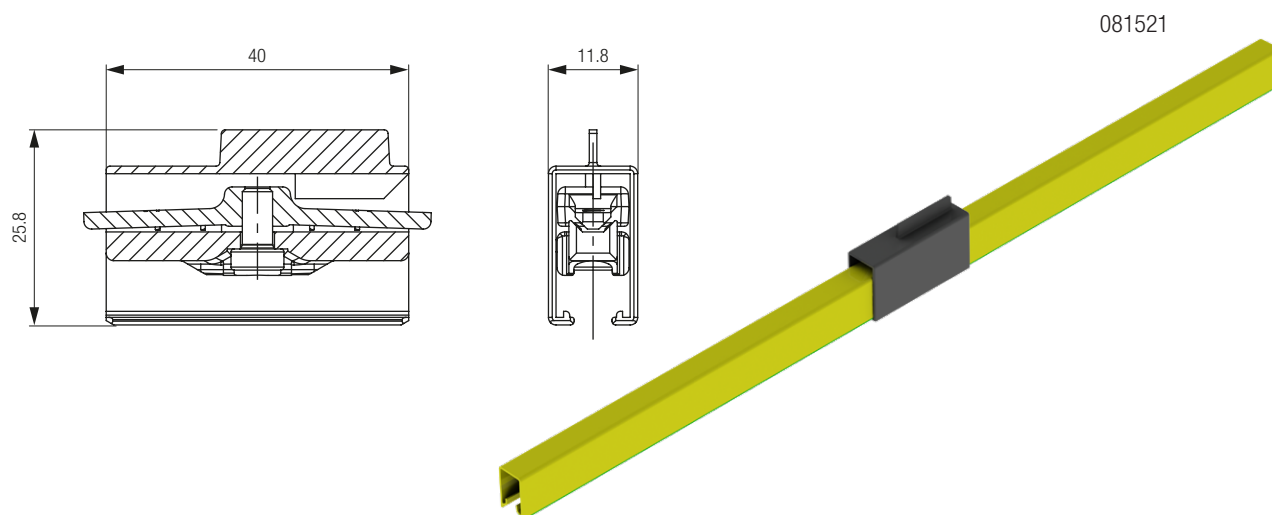
Parameter	Explanation
Rated current & conductor material	Which conductor rail should be used as the basis for the curve?
PH, PE or PE _{plus}	Depending on the intended use of the rail: Phase, PE, or PE _{plus}
Type of curve	For any application where you want to directly use a radius from a drawing, the CIRCLE variant is the right choice. You will then receive a conductor rail bend that can be installed to form a circle with your specified radius. For special applications and existing systems, the STRAIGHT SECTION variant is the right choice. Please contact us!
Radius	The minimum and maximum radii that can be produced depend on the bending direction and the choice of material. Typical bending lengths for program 0815 from 800 mm to approximately 5,000 mm. Please contact us!
Opening angle	Opening angle in degrees. Please also refer to the explanation of the curve type.

Basic Components

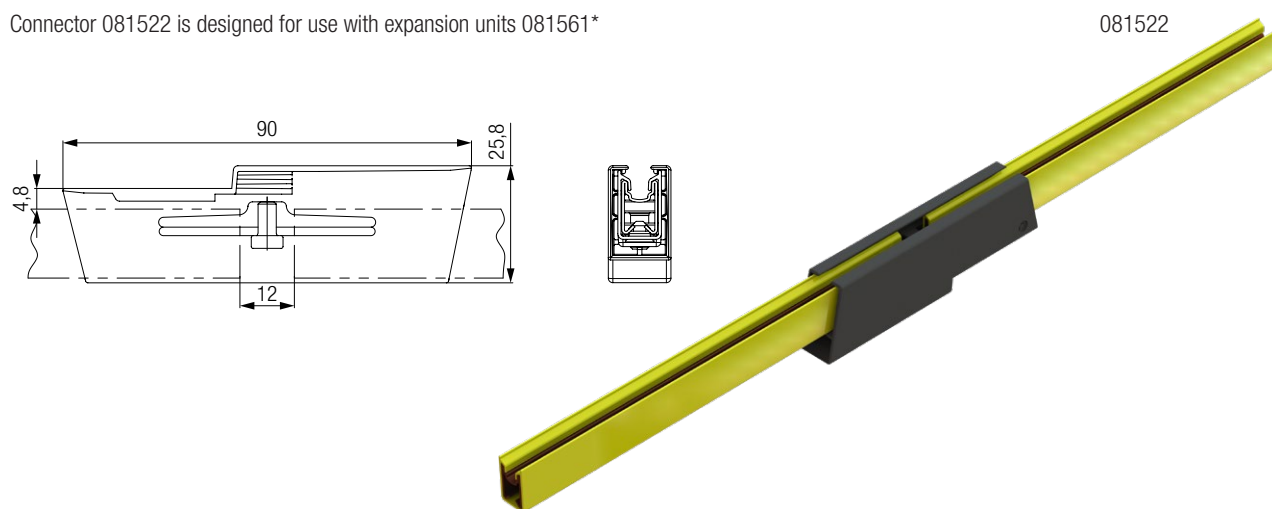
Connectors

Rail connectors establish a secure electrical and mechanical connection between two conductor rails.

Our standard connector 081521 is the best choice for almost all applications, but other connectors may be used in specific cases.



Connector 081522 is designed for use with expansion units 081561*



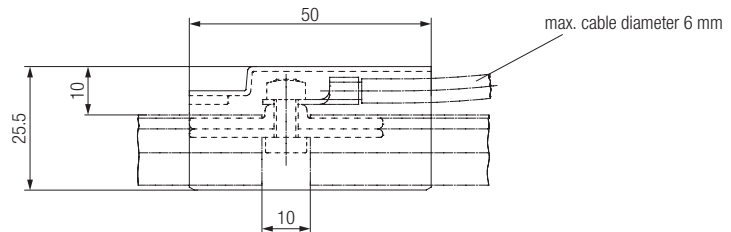
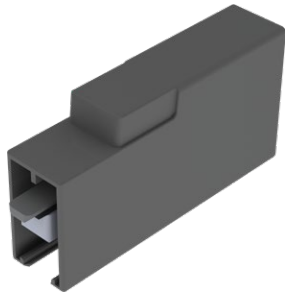
Part No.	Type	Usage	PH / PE / PE _{plus}	Weight
081521	CONNECTOR 0815 1P SC	for standard applications	all variants	0.016 kg
081522	CONNECTOR 0815 SC	for use with expansion units or for easier insertion*	all variants	0.022 kg

* For use only with a notching tool

Basic Components

Connectors with Power Feed-In

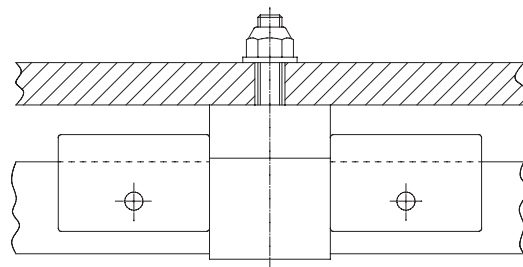
The power supply is based on the basic principle of a rail connector but provides an additional power supply point. Please note that there are restrictions on the outer diameter of the connecting cables; most common cable types are compatible up to a cross-sectional area of 6 mm² (cables with thinner sheaths, up to 10 mm² depending on the type). In the Connecting Cables section, you will find suitable, pre-assembled connecting cables for this component.



Part No.	Type	Usage	Max. cable cross-section	PH / PE / PE _{plus}	Weight
081551-1	POWER FEED L 0815 2,5 MM2	for all uses	1,5-2,5 mm ²	all variants	0.022 kg
081551-2	POWER FEED L 0815 6 MM2	for all uses	4-6 mm ²	all variants	0.022 kg
081551-3	POWER FEED L 0815 10 MM2	for all uses	5-10 mm ²	all variants	0.022 kg

Anchor Point

To prevent the conductor rail from moving due to thermal expansion and friction, it must be secured in place. This is achieved by installing two anchor points per pole, mounted on either side of the rail clamp. If a rail clamp is only clamped in place, we recommend screwing it down for a more secure hold. The position and number of anchor points depend on the system layout. The number and position of the anchor points are determined during system design.



Part No.	Type	Weight
081531	1 x Anchor Point	0.002 kg

Note: Two anchor point caps are required per pole and anchor point

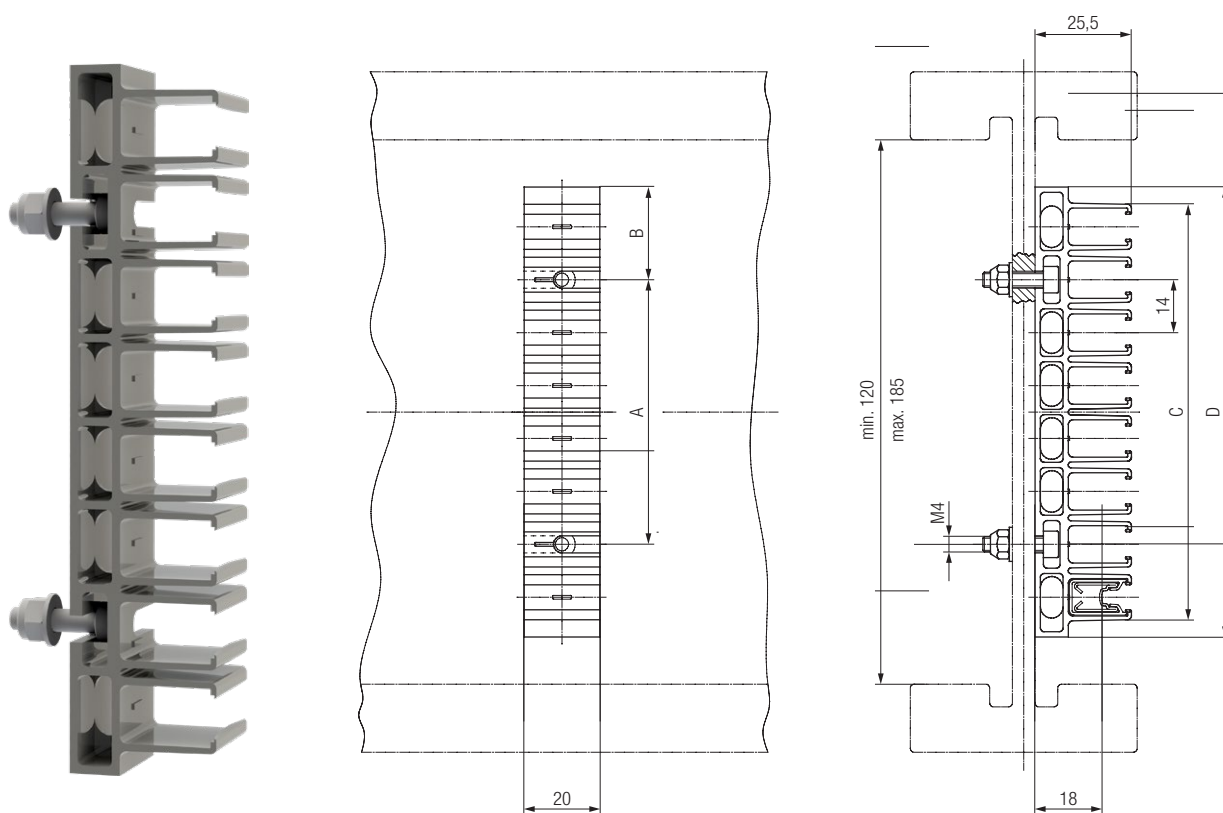
Basic Components

Hanger Clamps

Hanger clamps are used to secure the conductor rail to the customer's substructure. The hanger clamp allows for movement or expansion in the axial direction. Among other things, this compensates for thermal expansion but can also be helpful during installation. Depending on the type of installation, we recommend different mounting spacings.

Recommended mounting distance:

- 500 mm on linear sections
- 400 mm on vertically curved conductor rails
- 250 mm on horizontally curved conductor rails



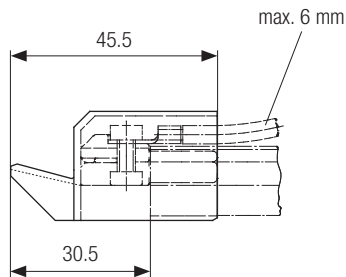
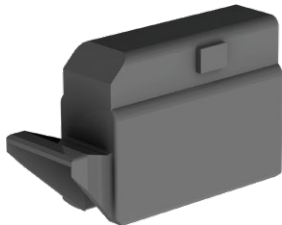
Part No.	Type	No. of poles	A [mm]	B [mm]	C [mm]	D [mm]	Weight
081543-02X14	HANGER CLAMP 0815 2P14 6KT PC	2	-	21	26	28	0.009 kg
081543-03X14	HANGER CLAMP 0815 3P14 6KT PC	3	-	21	40	42	0.01 kg
081543-04X14	HANGER CLAMP 0815 4P14 6KT PC	4	28	7	54	56	0.019 kg
081543-05X14	HANGER CLAMP 0815 5P14 6KT PC	5	28	21	68	70	0.021 kg
081543-06X14	HANGER CLAMP 0815 6P14 6KT PC	6	42	21	82	84	0.023 kg
081543-08X14	HANGER CLAMP 0815 8P14 6KT PC	8	70	24.5	110	119	0.025 kg

Delivery includes mounting kit (DIN 912 4x16 screw + washers + nuts)

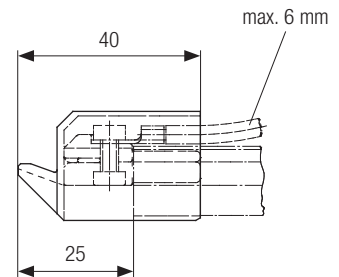
Basic Components

End Caps

End caps are required at both ends of every conductor rail system. They serve as terminations and also provide a feed-in option for cables with an outer diameter of up to 6 mm. When combined with an end cap base, this design is also suitable for transfers.



For all applications, including those involving transfers. However, for mere electrified monorail systems, we recommend type 08157A.



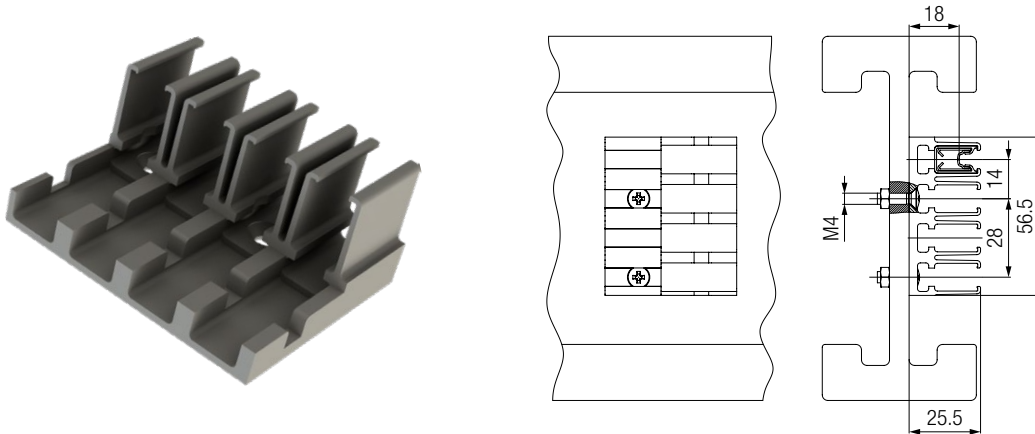
A component **not recommended for transfers**, requiring slightly less space.

Part No.	Use case	Cross-section	Weight
081574-01x14x0	End cap 40 mm for 14 mm pole spacing	without power feed	0.016 kg
081574-01x14x2		1.5 - 2.5 mm ²	0.018 kg
081574-01x14x6		4.0 - 6.0 mm ²	0.018 kg
081576-01x14x0	End cap for transfer points 45 mm for 14 mm pole spacing, lateral deviation ± 5 mm	without power feed	0.016 kg
081576-01x14x2		1.5 - 2.5 mm ²	0.018 kg
081576-01x14x6		4.0 - 6.0 mm ²	0.018 kg

Basic Components

End Cap Base for End Caps, types 081574 and 081576

End caps are snapped into an end cap base. This base holds the end caps in place and helps secure them against each other during transfers. An end cap base serves as and replaces an anchor point. Please also refer to the “Expansion” section. However, for applications involving multiple transfers, we recommend the end cap unit for ProEMS.



Part No.	Type	No. of poles	Fastener position	Width	weight
08-E012-0178	END CAP BASE 0815 1P L=47MM	1	Symmetrical	14 mm	0.003 kg
08-E012-0374	END CAP BASE 0815 2P L=47MM LE oder R	2	Asymmetrical	28 mm	0.008 kg
08-E012-0224	END CAP BASE 0815 3P L=47MM	3	Symmetrical	42 mm	0.013 kg
08-E012-0177	END CAP BASE 0815 4P L=47MM LE	4	Asymmetrical	56 mm	0.030 kg
08-E012-0185	END CAP BASE 0815 5P L=47MM LE oder R	5	Asymmetrical	70 mm	0.019 kg
08-E012-0399	END CAP BASE 0815 6P L=47MM	6	Symmetrical	84 mm	0.025 kg
08-E012-0075	END CAP BASE 0815 8P L=47MM	8	Symmetrical	112 mm	0.030 kg

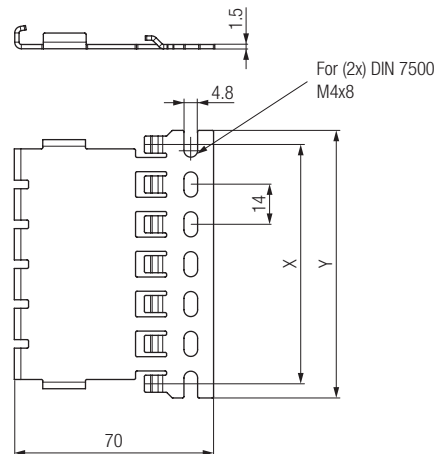
Basic Components

End Cap 08157A, specifically for Electrified Monorail Systems (EMS)

These assemblies were specifically designed for transfers in EMS track profiles and always have the PE on the 4th pole.

They can be positioned perpendicular to the direction of travel and allow for easy adjustment of end caps at switch points.

Like all end caps at transfers, this assembly also secures the rail firmly to the supporting surface and therefore always serves as a fixed point.



Transfer clearance (cap to cap): max. 5 mm

Vertical deviation: max. ± 3 mm

Lateral deviation: max. ± 5 mm

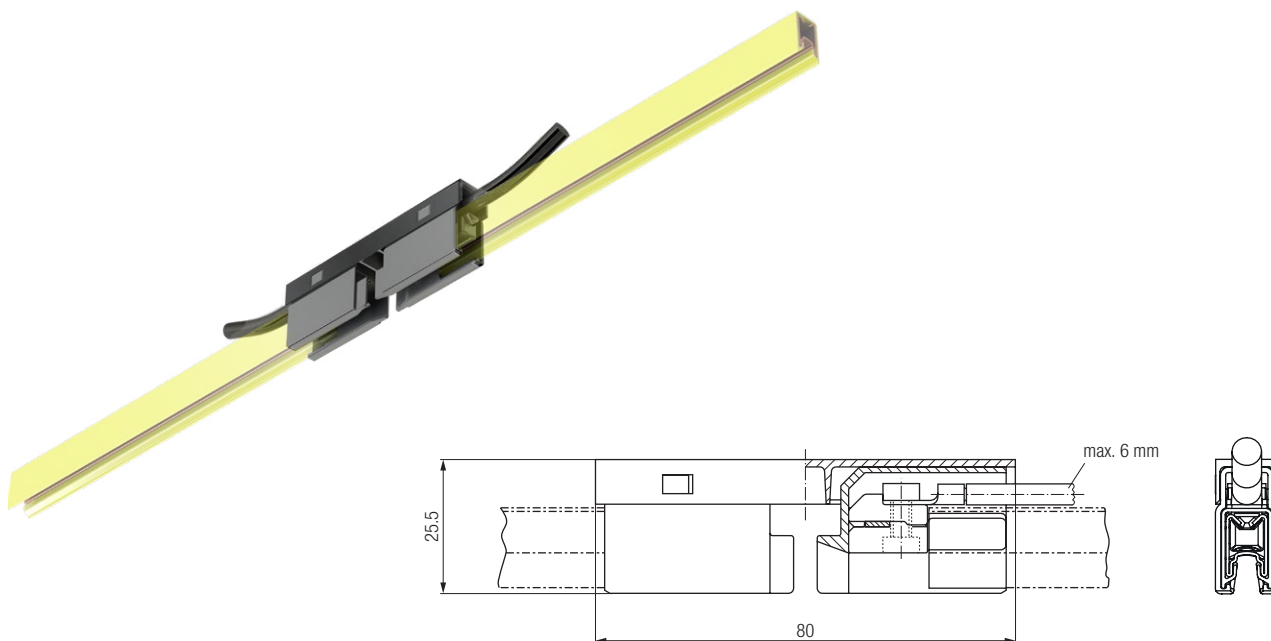
Part No.	Type	Version	X	Y	Weight
08157A-04x14x5	End cap unit complete with clamping piece and ring terminal 1.5 - 2.5 mm ² , without cable	4-pole (3 x PH + 1 x PE _{plus})	56 mm	66 mm	0.13 kg
08157A-06x14x5		6-pole (5 x PH + 1 x PE _{plus})	84 mm	94 mm	0.19 kg
08157A-08x14x5		8-pole (7 x PH + 1 x PE _{plus})	112 mm	122 mm	0.25 kg
08157A-04x14x7	End cap unit complete with clamping piece and ring terminal 4 - 6 mm ² , without cable	4-pole (3 x PH + 1 x PE _{plus})	56 mm	66 mm	0.13 kg
08157A-06x14x7		6-pole (5 x PH + 1 x PE _{plus})	84 mm	94 mm	0.19 kg
08157A-08x14x7		8-pole (7 x PH + 1 x PE _{plus})	112 mm	122 mm	0.25 kg

Optional Parts

Air Gap Insulation Sections

Air gaps are like connectors and establish a mechanical, but not an electrical, connection between two conductor rails.

They can be single-pole or multi-pole and are typically used to separate signal or safety blocks. The separation is always safe and complies with all creepage distances. However, current collectors or current collector heads can bypass this separation.



Part No.	Type	Cross-section	PH/PE/PE _{plus}	Weight
081594-2	AIR GAP SECTION 0815 1P LT=4,5MM	1.5 – 2.5 mm ²	PH/PE	0.04 kg
081594-5	AIR GAP SECTION 0815 1P LT=4,5MM PEplus	1.5 – 2.5 mm ²	PE _{plus}	0.04 kg
081594-3	AIR GAP SECTION 0815 1P LT=4,5MM	4.0 – 6.0 mm ²	PH/PE	0.04 kg
081594-7	AIR GAP SECTION 0815 1P LT=4,5MM PE+	4.0 – 6.0 mm ²	PE _{plus}	0.04 kg

Optional Parts

Expansion Joints – Overview

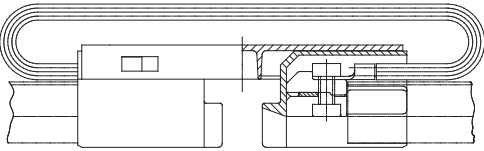
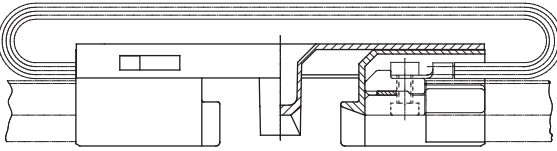
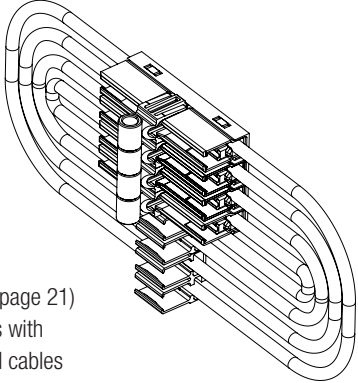
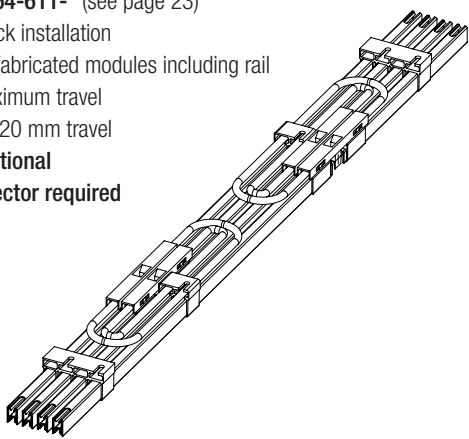
Expansion units or expansion modules compensate for changes in length within the conductor rail system. A change in length may be caused by the substructure, a change in ambient temperature, or the system's own heat generation. If length compensation is not provided, damage to the conductor rail system may occur that is not easy to repair.

Various expansion units and expansion modules are available for different applications.

Single-pole units are flexible in application but require more installation time.

Multi-pole modules are installed more quickly but require slightly more preparation and planning.

All expansion units have a continuous rated current of 54 A and reduce the continuous rated current of the entire system accordingly.

	8 mm	20 mm
Expansion units	 081561-311 (see page 20) + Versatile + 1 x 8 mm - Individual part - Note wiring - Short intermediate length	 081562-311 (see page 22) + Maximum extension travel for individual component + Versatile application + 1 x 20 mm - Individual component - Note wiring
Expansion modules	 081561-3* (see page 21) + Individual parts with pre-assembled cables + 1x8 mm travel - Individual parts	 081564-611-* (see page 23) + Quick installation + Prefabricated modules including rail + Maximum travel + 1 x 20 mm travel ! Additional connector required

Optional Parts

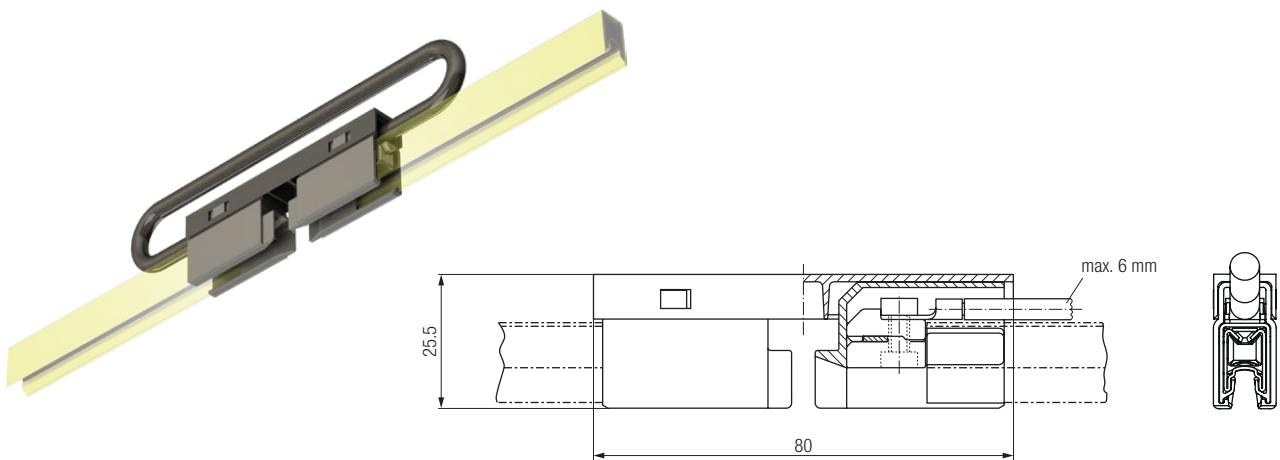
Expansion Unit 8 mm, single-pole for flexible use

The 8 mm expansion unit is the standard expansion unit for the 0815 series. It can be used in all applications without restriction.

Technical Data

- Max. expansion travel per element and pole: 8 mm
- Available as single-pole and multi-pole units
- Different versions for PH & PE and PEplus
- Compatible with all 0815 pantographs
- Rated current: 54 A

Single-pole connector for flexible use



Part No.	Type	No. of poles	PH/PE/PE _{plus}	Expansion distance	Rated current	PE position
081561-311	EXPANSION UNIT 0815 1P WC54A GA	1	PH & PE	8 mm	54 A	any
081561-3114	EXPANSION UNIT 0815 WC50A PE+GA	1	PE _{plus}	8 mm	54 A	any

For 1 x 8 mm Expansion Unit									
Δt_{total}		No expansion joints required	Intermediate length a	Open ends in one direction	Examples: Number of expansion units required with 2 open ends				
					1	2	3	4	5
	10 K	< 8 m	48 m	100 m	148 m	196 m	244 m	292 m	340 m
	20 K	< 8 m	24 m	100 m	124 m	148 m	172 m	196 m	220 m
	30 K	< 8 m	16 m	100 m	116 m	132 m	148 m	164 m	180 m
	40 K	< 8 m	12 m	100 m	112 m	124 m	136 m	148 m	160 m
	50 K	< 8 m	10 m	100 m	110 m	119 m	129 m	139 m	148 m

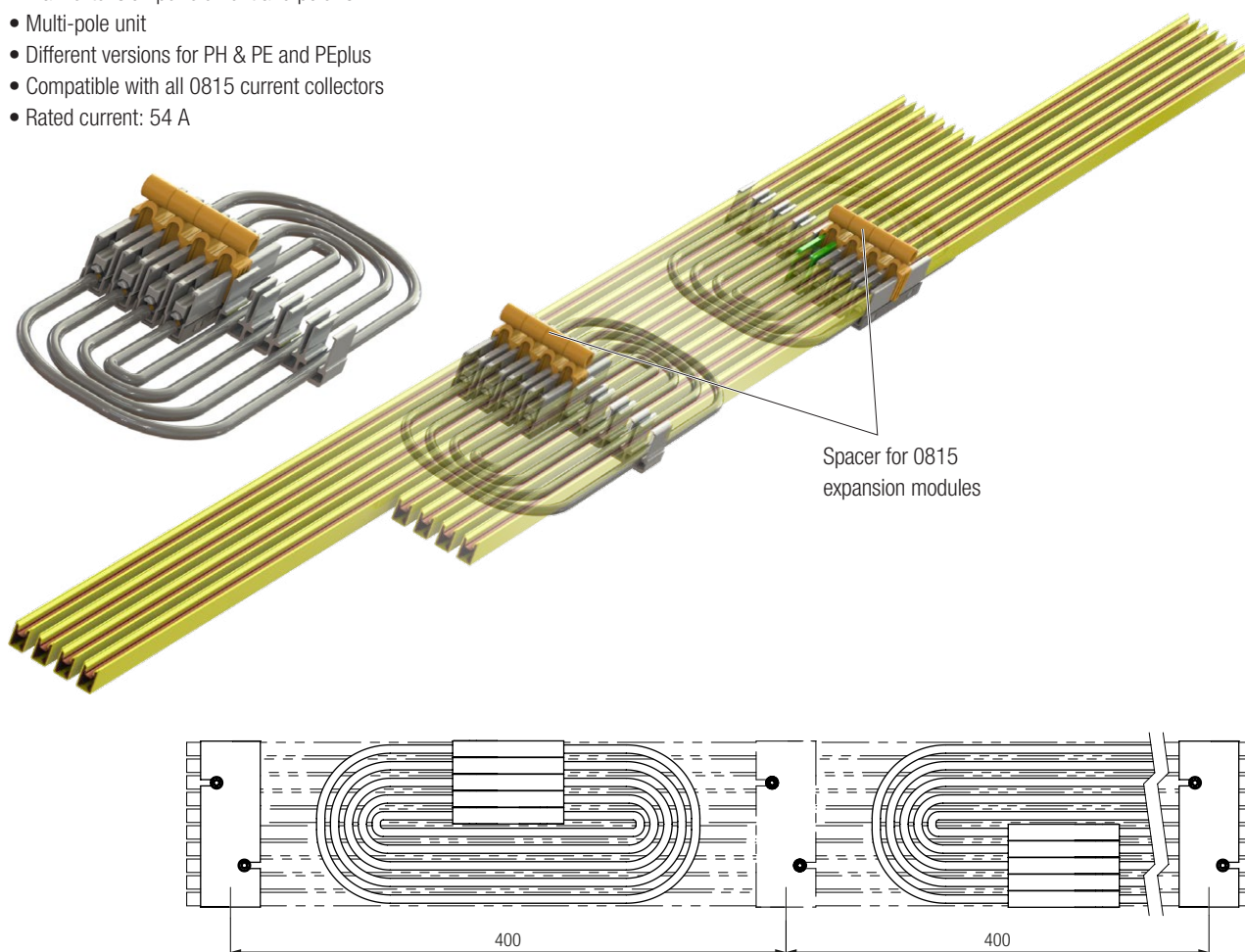
Optional Parts

Expansion Module 8 mm, for quick installation

The modules are delivered as kits and must be assembled on-site. Using spacer 08-Z009-0014P, the otherwise very time-consuming process of adjusting the expansion gaps can be reduced to just a few seconds. The spacers are reusable and can be used for many installations. All 0815 connectors can be used with these modules.

Technical Specifications

- Max. extension per element and pole: 8 mm
- Multi-pole unit
- Different versions for PH & PE and PEplus
- Compatible with all 0815 current collectors
- Rated current: 54 A



Part No.	Type	No. of poles	PH/PE/PE _{plus}	Expansion distance	Rated current	PE position
081561-341	EXPANSION UNIT 0815 4P WC54A GA	4	PH & PE	8 mm	54 A	4
081561-3415	EXPANSION UNIT 0815 4P WC50A PE+GA	4	PE _{plus}	8 mm	54 A	4
081561-361	EXPANSION UNIT 0815 6P WC54A GA	6	PH & PE	8 mm	54 A	4
081561-3615	EXPANSION UNIT 0815 6P WC50A PE+GA	6	PE _{plus}	8 mm	54 A	4
081561-381	EXPANSION UNIT 0815 8P WC54A GA	8	PH & PE	8 mm	54 A	4
081561-3815	EXPANSION UNIT 0815 8P WC50A PE+GA	8	PE _{plus}	8 mm	54 A	4
081561-301	EXPANSION UNIT 0815 10P WC54A GA	10	PH & PE	8 mm	54 A	4
08-Z009-0014P	ADJUSTING AID SET EXPANSION MODULE 0815 *	1	all variants	8 mm	54 A	—

* If the installation aid is used, different tables must be used to determine the number of expansion units.
See Installation Instruction MAL 0815 for more information.

Optional Parts

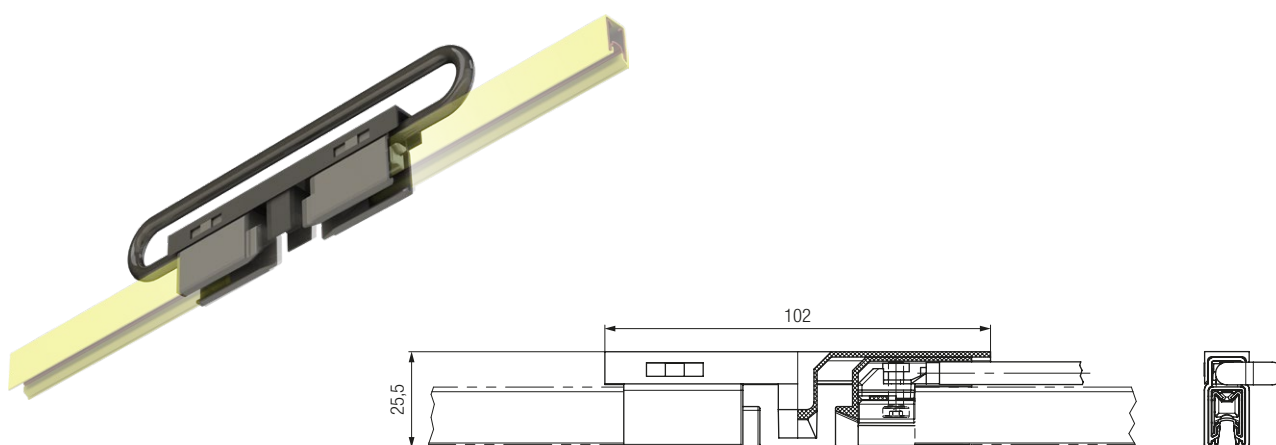
Expansion Unit 20 mm, single-pole for flexible use

The 20-mm expansion unit provides more expansion travel per unit than the 8-mm expansion units, but is less suitable for use with single current collectors, as these cannot pass through the expanding section without interruption.

Technical Specifications

- Max. travel per element and pole: 20 mm
- Available as single-pole and multi-pole units
- Different versions for PH & PE and PEplus
- Rated current: 54 A

Single-pole connector for flexible use



Part No.	Type	No. of poles	PH/PE/PE _{plus}	Expansion distance	Rated current	PE position
081562-311	EXPANSION UNIT 0815 1P WC54A GA	1	PH & PE	20 mm	54 A	any
081562-3114	EXPANSION UNIT 0815 1P WC54A PEplus GA	1	PE _{plus}	20 mm	54 A	any

For 1 x 20 mm Expansion Unit									
Δt_{total}		No expansion joints required	Intermediate length a	Open ends in one direction	Examples: Number of expansion units required with 2 open ends				
					1	2	3	4	5
	10 K	< 8 m	121 m	100 m	221 m	342 m	463 m	584 m	705 m
	20 K	< 8 m	60 m	100 m	160 m	220 m	280 m	340 m	400 m
	30 K	< 8 m	40 m	100 m	140 m	180 m	220 m	260 m	300 m
	40 K	< 8 m	30 m	100 m	130 m	160 m	190 m	220 m	250 m
	50 K	< 8 m	24 m	100 m	124 m	148 m	173 m	197 m	221 m

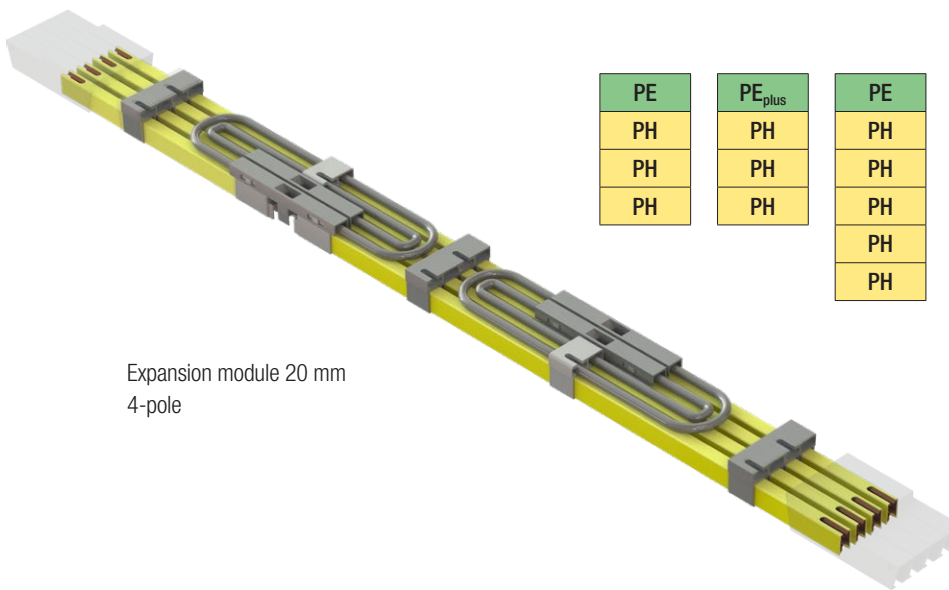
Optional Parts

Expansion Module 20 mm, for quick installation

Type 081564-611x expansion modules are pre-assembled modules that include cabling. These modules allow for quick and easy installation by simply sliding them into place and reduce installation time to a minimum. We recommend them primarily for Electrified Monorail Systems (EMS). However, in principle, the modules can be used for all types of applications.

The modules are available in 2-, 3-, and 4-pole versions and can be combined with other modules as desired. By combining modules, any number of poles can be created.

2 PH	2 PH + ProfiDAT	3 PH	3 PH + ProfiDAT	3 PH	4 PH + PE	4 PH + PE _{plus}	6 PH + PE	6 PH + PE _{plus}	7 PH + PE	7 PH + PE
PH	PH	PH	PH	PH	PH	PH	PH	PH	PH	PH
PH	PH	PH	PH	PH	PH	PH	PH	PH	PH	PH
	ProfiDAT	PH	PH	PH	PH	PH	PH	PH	PH	PH
			ProfiDAT	PH	PE	PE _{plus}	PE	PE _{plus}	PE	PE/PE _{plus}
							PH	PH	PH	PH
							PH	PH	PH	PH



Expansion module 20 mm
4-pole

PE	PE _{plus}	PE	PE _{plus}	PE _{plus}	PE _{plus}
PH	PH	PH	PH	PH	PH
PH	PH	PH	PH	PH	PH
PH	PH	PH	PH	PH	PH
		PH	PH	PH	PH
		PH	PH	PH	PH

Part No.	Type	No. of poles	PH/PE/PE _{plus}	Expansion distance	Rated current	PE position
081564-611-3211	EXPANSION UNIT 0815 2P CU54A PH	2	PH	23 mm	54 A	PH only
081564-611-3311	EXPANSION UNIT 0815 3P CU54A PH	3	PH	23 mm	54 A	PH only
081564-611-3411	EXPANSION UNIT 0815 4P CU54A PH	4	PH	23 mm	54 A	PH only
081564-611-3412	EXPANSION UNIT 0815 4P CU54A PE	4	PE	23 mm	54 A	4
081564-611-3415	EXPANSION UNIT 0815 4P CU54A PEplus	4	PE _{plus}	23 mm	54 A	4
081522	CONNECTOR 0815 SC	1	for all variants	23 mm	54 A	-
08-S902-0002P	ADJUSTING AID DV 0815 20MM 50% OPEN	1	for all variants	23 mm	54 A	-

* If the installation aid is used, different tables must be used to determine the number of expansion units.
See Installation Instruction MAL 0815 for more information.

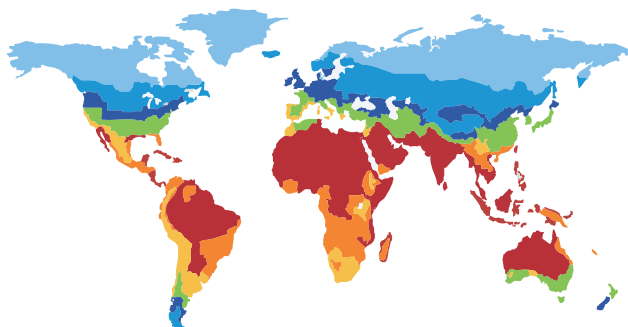
Special connectors (081522) **are required on both sides for installation** in all cases; these are not included with the expansion modules.

Optional Parts

Design of Systems with Expansion Units

The thermal expansion of a system always depends on the actual temperature difference in a specific application. The temperature difference is composed of various factors:

1. Changes in ambient temperature
 2. Self-heating due to electrical current
 3. Radiant heat from the surroundings
 4. Cooling effects caused by environmental factors
 5. Cooling by convection
- etc.



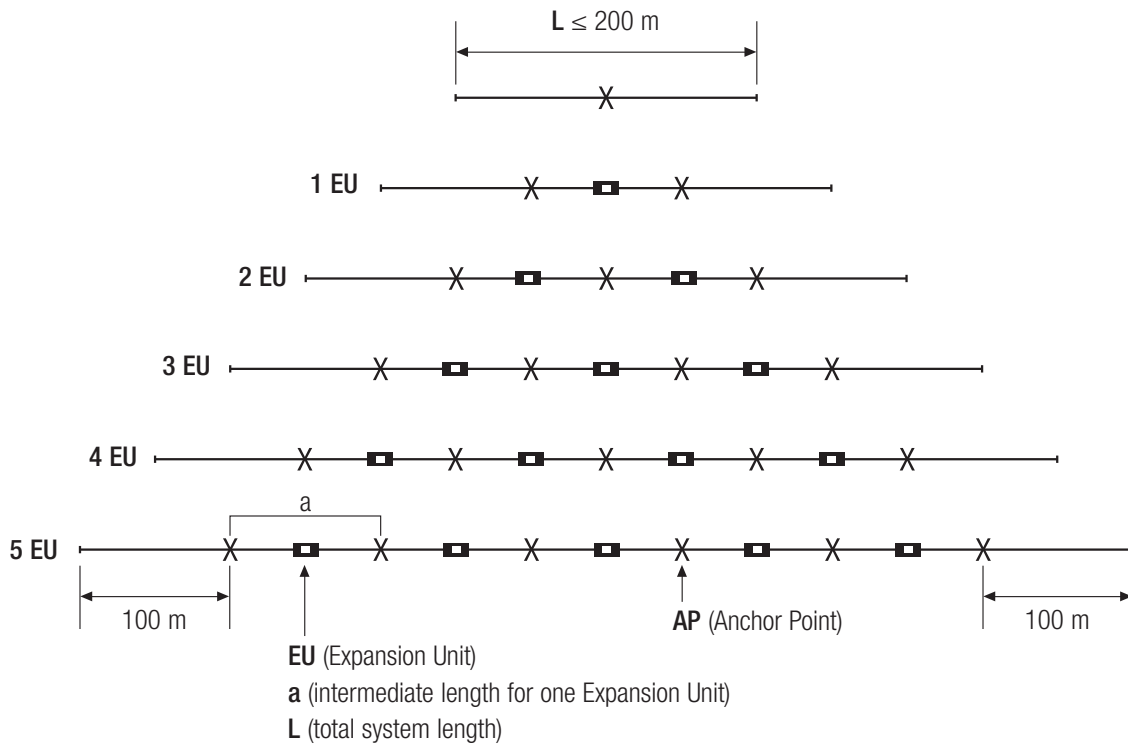
In addition, the installation location and the type or workload of the system influence the temperature. A true value can therefore hardly be determined theoretically; a measurement in the specific application is often the only way to determine exact values.

In practice, it is therefore often easier to work with empirical values.

Installation location	Assessment of conditions	Examples	Temperature difference
Inside	Normal working environment	Warehouses, workshops	20 K to 30 K
Inside	Harsh environments	Electrolytic cells, smelting furnaces, cold storage facilities	40 K to 60 K
Outside*	Continental climates	Much of the United States, Canada, Russia	70 K to 80 K
Outside*	Maritime climates	Central Europe	60 K to 70 K
Outside*	Highly maritime climates	Ports in tropical regions	40 K to 50 K

* Only products suitable for this purpose, such as Program 0812 or 0813
We'd be happy to advise you on the development, design, and installation of your expansion concept!

Optional Parts



- **Intermediate length**

The distance between two anchor points, or other components that act as anchor points (pickup guides, end caps with end cap bases, curves). This distance should never be exceeded, but it is usually not necessary to cut the standard rail to size for this reason.

- **Free length**

The free length is the distance a conductor rail can extend in one direction without requiring expansion joints. One end is fixed, and the other end can extend freely without external forces.

- **Anchor point**

Anchor points are actual components and must be installed separately. However, other components have a similar effect and must be included in the planning if necessary (pickup guides, funnels, end cap bases, etc.). As a rule of thumb: an additional fixed point should always be installed for curves and pickup guides; on long straight sections, this can be omitted in case of doubt, e.g., to bridge large expansion points in the substructure.

- **Curves, transfers, and funnels**

Various components can limit or restrict the expansion of the conductor rail, including pickup guides, crossings, and funnels. In these cases, they must always be treated as fixed points. However, since these components often lack the mechanical stability to fulfill this function, we recommend setting an additional fixed point just before the component in such cases.

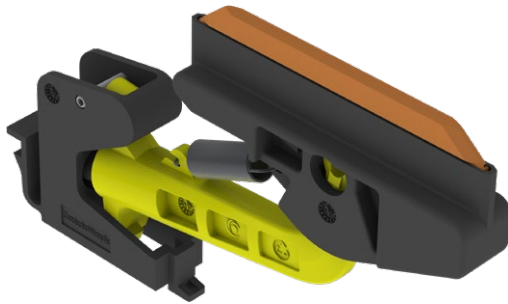
- **Expansion elements**

Expansion elements must be set to an exact value during installation. You can find more information on this in our installation instructions.

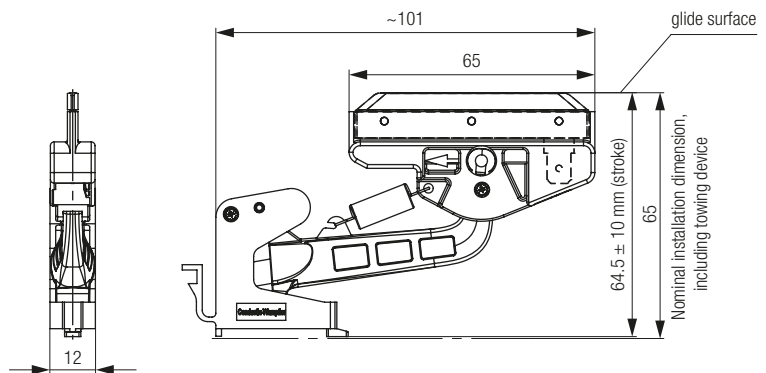
Basic Components

Current Collectors 14 mm pole spacing, individual part

Single-pole current collectors with a simple current collector head as a single component. The corresponding towing device is required for installation. For rated currents up to 35 A.



Connection: 6.3 mm flat plug
Model shown: universal
Max. stroke: ± 10 mm
Max. lateral offset: ± 10 mm



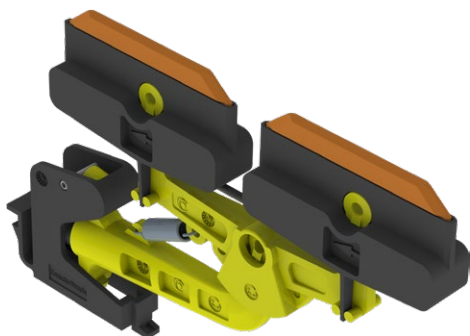
Part No.	Rated current	Material	Working direction	PH / PE / PE _{plus}	Remarks
081506-0141	16 A	Graphite	Towing and reversing	PH	Collector
081506-0142	16 A	Graphite	Towing and reversing	PE	For low voltage and older systems only
081506-0142-CE	16 A	Graphite	Towing and reversing	PE	With misconnection protection, CE-compliant
081507-0141	35 A	Copper-graphite	Towing and reversing	PH	Collector
081507-0142	35 A	Copper-graphite	Towing and reversing	PE	For low voltage and older systems only
081507-0142-CE	35 A	Copper-graphite	Towing and reversing	PE	With misconnection protection, CE-compliant

Basic Components

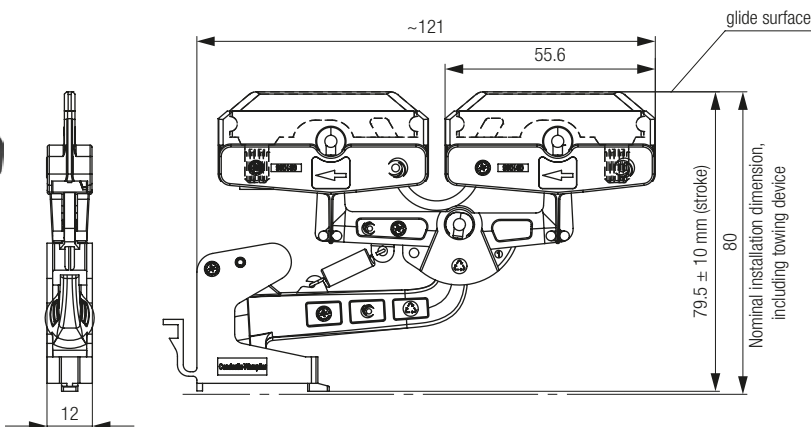
Dual Current Collectors with 2 x 50 mm contact length for 2 x 16 A / 2 x 25 A, 1-pole; with 2 plug connections

Single-pole current collectors with a dual-head design as a single unit. This current collector features a dual-head design that provides better electrical contact. The corresponding towing device is required for installation.

For rated currents up to 25 A.



Connection: flat plug
Model shown: towing operation
Max. stroke: ± 10 mm
Max. lateral offset: ± 10 mm



Part No.	Rated current	Material	Working direction	PH / PE / PE _{plus}	Remarks
081508-0141	2 x 16 A	Graphite	Towing	PH	
081508-0142	2 x 16 A	Graphite	Towing	PE	For low voltage and older systems only
081508-0144	2 x 16 A	Graphite	Towing	PE _{plus}	With misconnection protection, CE-compliant, with PE _{plus}
081508-0142-CE	2 x 16 A	Graphite	Towing	PE	With misconnection protection, CE-compliant
081508-01415	2 x 16 A	Graphite	Reversing	PH	
081508-01425	2 x 16 A	Graphite	Reversing	PE	For low voltage and older systems only
081508-01425-CE	2 x 16 A	Graphite	Reversing	PE	With misconnection protection, CE-compliant
081509-0141	2 x 25 A	Copper-graphite	Towing	PH	
081509-0142	2 x 25 A	Copper-graphite	Towing	PE	For low voltage and older systems only
081509-0144	2 x 25 A	Copper-graphite	Towing	PE _{plus}	With misconnection protection, CE-compliant, with PE _{plus}
081509-0142-CE	2 x 25 A	Copper-graphite	Towing	PE	With misconnection protection, CE-compliant
081509-01415	2 x 25 A	Copper-graphite	Reversing	PH	
081509-01425	2 x 25 A	Copper-graphite	Reversing	PE	For low voltage and older systems only
081509-01425-CE	2 x 25 A	Copper-graphite	Reversing	PE	With misconnection protection, CE-compliant

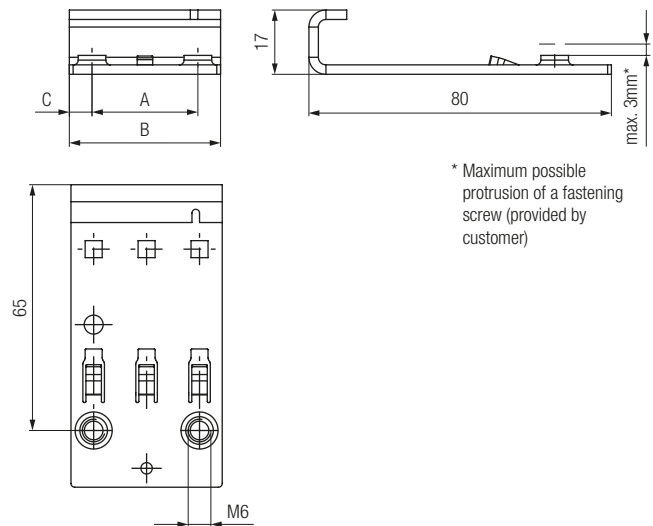
Basic Components

Towing Devices

Drivers are screwed onto a customer-supplied substructure.
Current collectors are snapped onto the towing device without tools.
To comply with standards, the PE can only be mounted on one side.



Fig.:
3-pole towing device

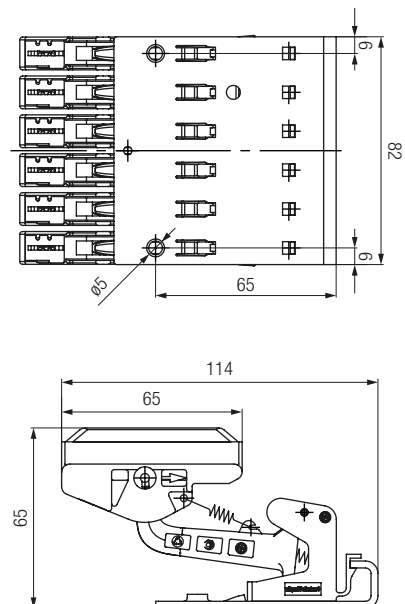
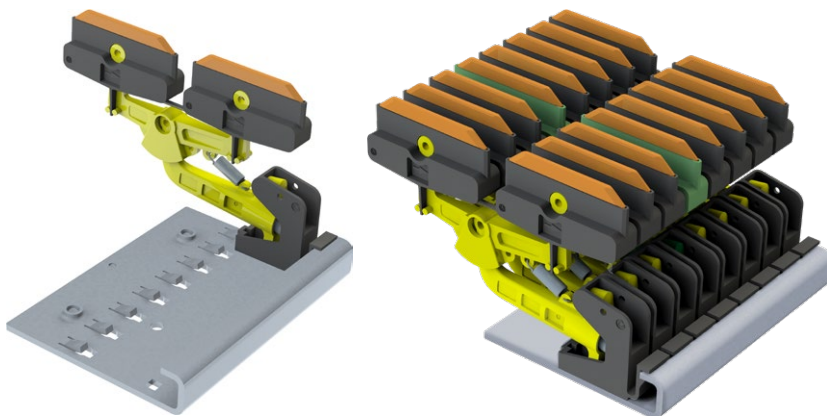


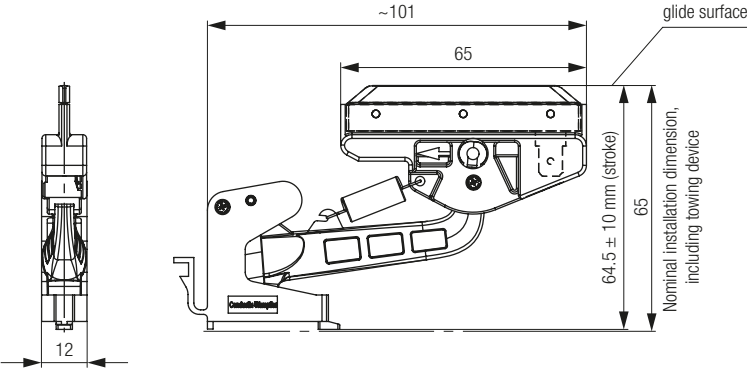
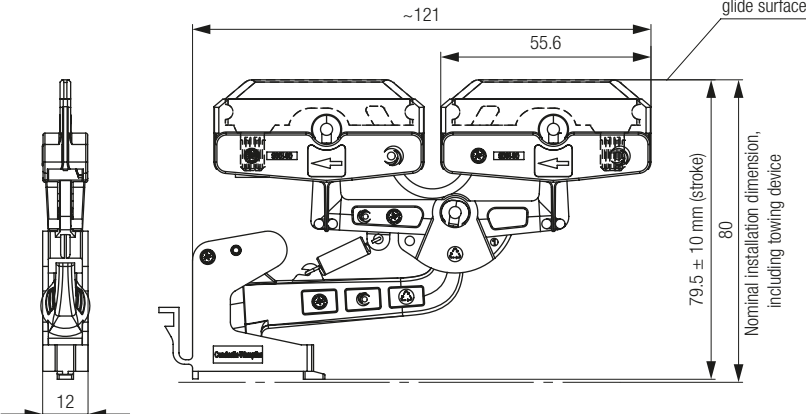
Part No.	No. of poles	Weight	PE position	A	B	C
081055-14X02X000X000	2P	0.049 kg	no PE position	15 mm	26 mm	5.5 mm
081055-14X02X001X000			1			
081055-14X02X002X000			2			
081055-14X03X000X000	3P	0.075 kg	no PE position	28 mm	40 mm	6 mm
081055-14X03X001X000			1			
081055-14X03X002X000			2			
081055-14X03X003X000			3			
081055-14X04X000X000	4P	0.102 kg	no PE position	42 mm	54 mm	6 mm
081055-14X04X001X000			1			
081055-14X04X002X000			2			
081055-14X04X003X000			3			
081055-14X04X004X000			4			
081055-14X05X000X000	5P	0.128 kg	no PE position	56 mm	68 mm	6 mm
081055-14X05X001X000			1			
081055-14X05X002X000			2			
081055-14X05X003X000			3			
081055-14X05X004X000			4			
081055-14X05X005X000			5			
081055-14X06X000X000	6P	0.155 kg	no PE position	70 mm	82 mm	6 mm
081055-14X06X001X000			1			
081055-14X06X002X000			2			
081055-14X06X003X000			3			
081055-14X06X004X000			4			
081055-14X06X005X000			5			
081055-14X06X006X000			6			

Basic Components

Current Collector Modules

Individual current collectors are assembled into current collector modules together with towing devices. Current collectors and modules are available individually or as pre-assembled modules. Using modules can be easier in new installations. Modules can be easily customized to your specifications in terms of the number of poles, type of current collector, and orientation.



Part No.	Type	Electrical Data	Mechanical Data
081506-X#		16 A Graphite	Max. stroke: ± 10 mm Max. lateral offset: ± 10 mm
081507-X#		35 A Copper-graphite	Common version for reversing and towing operation
081508-X#		2 x 16 A Graphite	Max. stroke: ± 10 mm Max. lateral offset: ± 10 mm
081509-X#		2 x 25 A Copper-graphite	a special version for each of the reversing and towing modes

Basic Components

Configuration Options

Single current collectors, Types 081506 & 081507

should always be installed in pairs; we recommend using a single unit only after extensive testing or a corresponding standards compliance test.

Dual current collectors, Types 081508 & 081509

feature dual contacts in a single component and provide a significantly more reliable electrical connection. Using them as a single component is simpler in this case. However, for applications with PE, we always recommend a second current collector for redundant protection.

ProEMS current collectors, types 08150A & 08150B

are a further development of our current collectors specifically for Electrified Monorail Systems (EMS) applications. They feature an integrated connection cable with a terminal block for direct cable connection. ProEMS current collectors can be installed in all towed applications but, due to their design, are not suitable for prolonged operation or operations with regular impacts.

Copper-graphite < > Pure graphite

Copper-graphite is a mixture of copper and graphite optimized for high current levels. Its higher toughness and hardness also make it ideal for running in a new system. Any minor burrs are ground down, improving performance over time.

Pure graphite consists largely of graphite and has a significantly higher service life per carbon brush. However, pure graphite is softer than copper-graphite and cannot grind down minor burrs on its own; we therefore recommend only copper-graphite for the initial equipment of your system.

Number of Poles

Total number of poles, including PH and PE.

Protective conductor

Applications at a certain voltage require a protective conductor and thus a PE collector.

PE position

The PE position can be freely selected for types 081506 through 081509. However, to ensure compatibility with common industry standards and other components, we always recommend placing the PE in the 4th position from the top.

Entry Sliding Contact

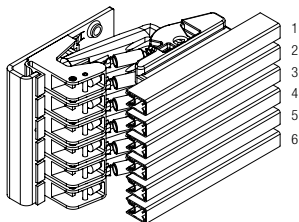
The 0815 is designed for side entry. The current collectors are optimized for this operating mode and require no special adaptation.

Variant

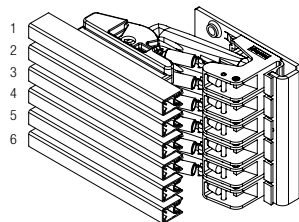
Current collectors can be mounted in two directions (Variant 1 and Variant 2). Since not all current collectors can be easily rotated, they must be ordered in the correct variant for the specific application.

In this example, the 6th pole is connected to the PE rail in each case:

Variant 1



Variant 2



Reversing < > Towing operation

For some of our current collectors, a small compensation for friction forces at the head is necessary to achieve a long service life. In these cases, there are two different variants: a “towing” and a “reversing” current collector.

Towing means that the current collector points backward in the direction of travel and is towed behind the vehicle. Towing-type current collectors can also be operated in reversing mode for short periods; however, this operating mode must be the exception, as it can otherwise lead to malfunctions or significantly increased wear.

Basic Components

Connecting Cables

Our connecting cables are highly flexible and optimized for use with current collectors. Thanks to their high flexibility, they reduce the forces acting on the current collector and increase the service life of the entire system.

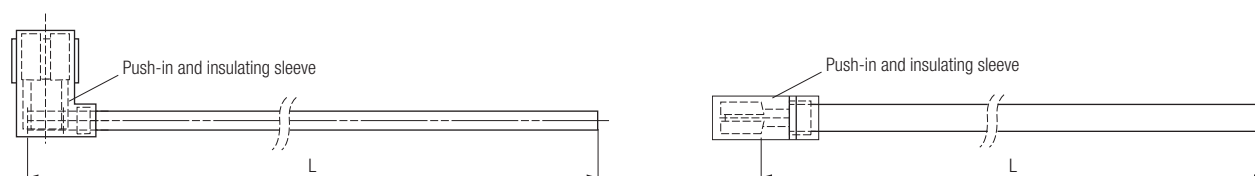
Double-insulated connecting cables are often required for outdoor installation—in cases where additional protection is already in place, a single-insulated connecting cable may also be used.

The connectors we use allow for only one orientation when plugging in, thereby preventing accidental damage to the connector.

Current collector connection cables can be configured in terms of

- length
- cross-section
- PH or PE
- and connection type

For applications in Program 0815, cross-sections ranging from 1.5 mm² to 4 mm² are suitable.



Connection cables can be ordered via the **081X09-L# configurator**

Part No.	Cross-section	AWG	PH / PE	Insulation	Cable end	straight / 90°	Cable diameter	Current strength
080009-01.00X01.5X1112	1.5 mm ²	16	PH	single	push-in sleeve	straight	3.0 mm	24 A
080009-01.00X01.5X1113	1.5 mm ²	16	PH	single	push-in sleeve	90°	3.0 mm	24 A
080009-01.00X01.5X2112	1.5 mm ²	16	PH	dual	push-in sleeve	straight	4.0 mm	24 A
080009-01.00X01.5X2113	1.5 mm ²	16	PH	dual	push-in sleeve	90°	4.0 mm	24 A
080009-01.00X01.5X1122	1.5 mm ²	16	PE	single	push-in sleeve	straight	3.0 mm	24 A
080009-01.00X01.5X1123	1.5 mm ²	16	PE	single	push-in sleeve	90°	3.0 mm	24 A
080009-01.00X02.5X1112	2.5 mm ²	14	PH	single	push-in sleeve	straight	3.5 mm	30 A
080009-01.00X02.5X1113	2.5 mm ²	14	PH	single	push-in sleeve	90°	3.5 mm	30 A
080009-01.00X02.5X2112	2.5 mm ²	14	PH	dual	push-in sleeve	straight	5.0 mm	30 A
080009-01.00X02.5X2113	2.5 mm ²	14	PH	dual	push-in sleeve	90°	5.0 mm	30 A
080009-01.00X02.5X1122	2.5 mm ²	14	PE	single	push-in sleeve	straight	3.5 mm	30 A
080009-01.00X02.5X1123	2.5 mm ²	14	PE	single	push-in sleeve	90°	3.5 mm	30 A
080009-01.00X04.0X2112	4.0 mm ²	12	PH	dual	push-in sleeve	straight	5.0 mm	35 A
080009-01.00X04.0X1121	4.0 mm ²	12	PE	single	push-in sleeve	straight	3.5 mm	35 A

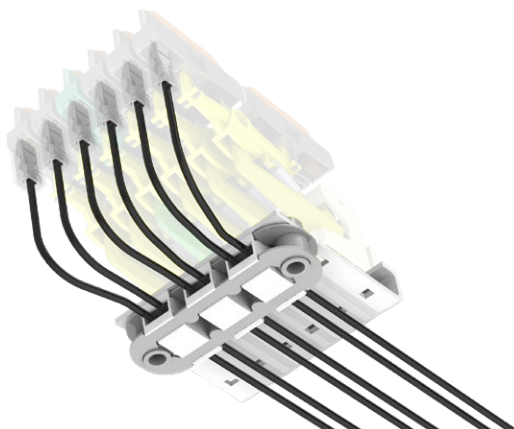
1-meter cable lengths – other lengths available via the **081X09-L# configurator**.

All rated current specifications are based on CE-relevant EN/IEC standards. Different national standards may apply in other markets.

Optional Parts

Strain Relief for Connection Cable on Current Collectors 081506- / 081509-

To prevent the connection cable from affecting the current collectors, we recommend using the optional cable package. The unit is mounted below the towing device and ensures that the cable is guided without tension or lateral force.

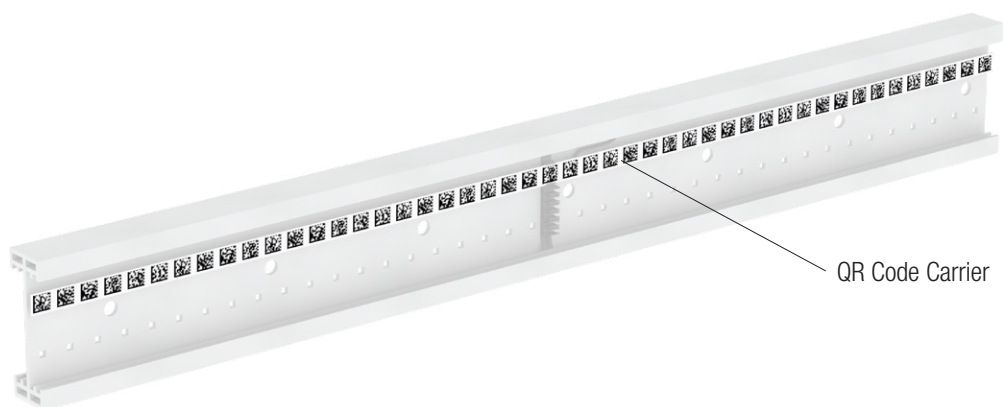


Configuration item	Ordering parameter				
08-L020-0210	Cross section	Number of poles	Current-collector type	Cable length	PE in 4th position (coding)
	1.5 mm ²	2/4	081506-... / 081507-...	0.2 to 2 m	
	2.5 mm ²	6	081508-... / 081509-...		
	4.0 mm ²	8			Yes/No

Optional Parts

Barcode and QR Code Carrier

The mounting system for optical positioning systems (e.g., Sick, Leuze, Pepperl+Fuchs) is based on 4- or 6-meter-long aluminum profiles that are 35 mm wide. The strip snaps into the slots on the combination clamps and serves as an adhesive surface for attaching the respective code strip.



Part No.	Type	Version	Weight
08-B020-6780	PROFILE BCB SUPPORT 4000X35X2MM	Aluminum profile	0.76 kg
0094938	Screws for fastening	EJOT PT SCREW K30X8 WN1423	0.20 kg
08-L020-0255	Grounding kit	CABLE SET PE BARCODE BAND	0.45 kg

The grounding kit includes mounting hardware and pre-assembled cables for establishing the ground connection between the insulated suspended code strip and the EMS support profile. One ground connection must be provided per profile.

Optional Parts

Terminal Box for Conductor Rail Connection

Terminal box with rear cable entry for direct mounting on an EMS support profile. The rear openings allow for easy cable routing through an opening in the support profile.

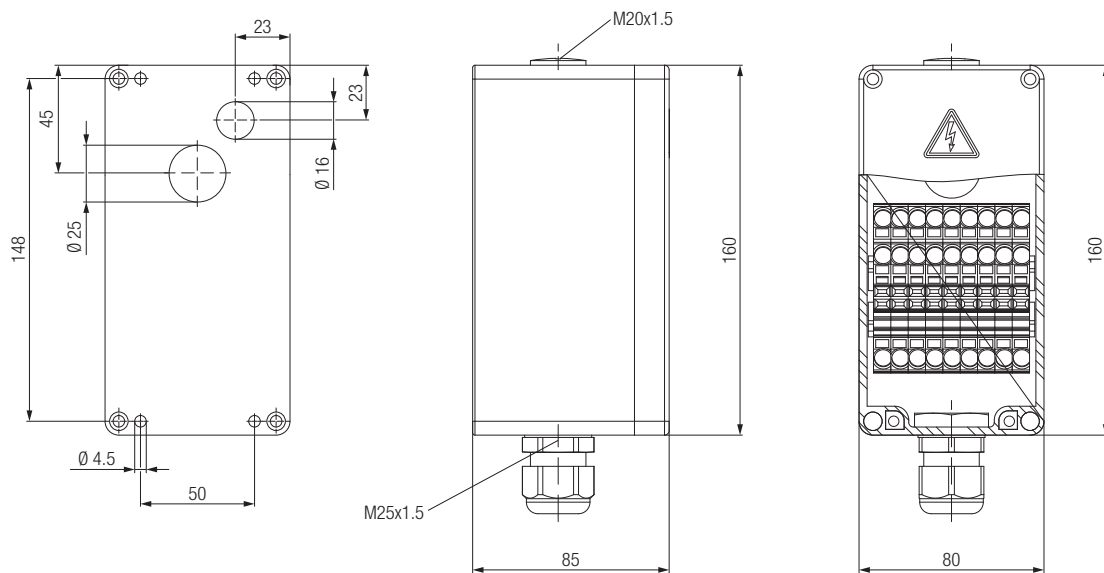
Part No.: 08-K040-0354

Protection class: IP10, IP21 with covered cable entry

Weight: 0.5 kg

Scope of delivery:

- Terminal box with rear feed-through
- 7 PH 3-wire feed-through terminals 0.5 – 10 mm²,
- 2 PE 3-wire feed-through terminals 0.5 – 10 mm²,
- Ground connection 6 mm²
- Mounting hardware: 5 self-tapping screws DIN 7513 M4x12,
- M20x1.5 screws

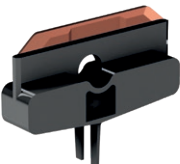


Wear Parts

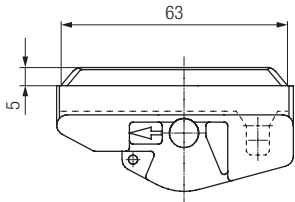
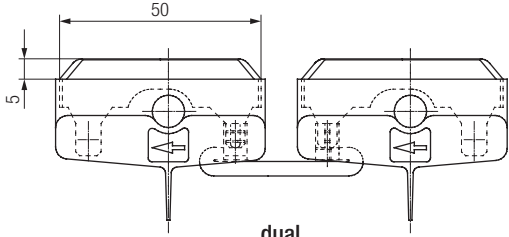
Current Collector Heads

Copper-graphite current collector heads are the preferred choice for higher current loads and as initial equipment. Their high copper content not only allows for high rated currents but also makes them more mechanically stable. Both properties make them ideal for initial installation or for systems operating in harsh environments.

Pure graphite current collector heads have a longer service life and are suitable for systems with high mileage. Pure graphite current collector heads are less mechanically robust and may exhibit low mileage or break in systems that are not optimally installed.

	Copper-graphite	Pure graphite
Current load	+++	+
Durability Current Collector Head	+	+++
Durability Conductor Rail	+	+++
Breakage resistance	+++	+
		

For regulatory reasons, current collector heads are installed in different colors for PH and PE. A separate version (PE_{plus}) is also required for use in systems with PE_{plus} conductor rails.

Part No.	Type	Version	Weight
081006-124	16 A, PH	 single	0.01 kg
081006-224	16 A, PE		0.01 kg
081006-144	35 A, PH		0.02 kg
081006-244	35 A, PE		0.02 kg
081006-114	2 x 16 A, PH	 dual	0.02 kg
081006-214	2 x 16 A, PE		0.02 kg
081006-414	2 x 16 A, PE _{plus}		0.02 kg
081006-134	2 x 25 A, PH		0.03 kg
081006-234	2 x 25 A, PE		0.03 kg
081006-434	2 x 25 A, PE _{plus}		0.04 kg

Spare Parts

Stabilizing Springs for Current Collector Heads

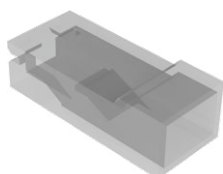
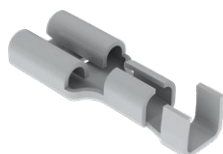
Replacement parts for lost or damaged springs from the 0815 current collector series.



Part No.	For current collector	Mode
08-Z-066RI	081508- / 081509-	Towing
08-Z-073I	081508- / 081509-	Reversing
08-RZ-037I	081506-	Towing and Reversing
	081507-	

Push-in Connectors for Current Collector Heads

New or replacement parts for custom-made current collector connection cables..



Part No.	Type	Cross-section	Program
08-925068-0	Insulation sleeve (for push-in sleeve)	1.5-6 mm ²	0815
GE-3008669	90° Insulation Sleeve and push-in Sleeve	1.5-2.5 mm ²	0815
08-K153-0078	Push-in sleeve	1.5-2.5 mm ²	0811, 0815
08-25791	Push-in sleeve	2.5-6 mm ²	0811, 0815

Tools

Bending Device

The bending device allows conductor rail curves to be bent flexibly and directly on site.

The use of such a bending device is particularly recommended for regular or flexible needs, as some training is required.

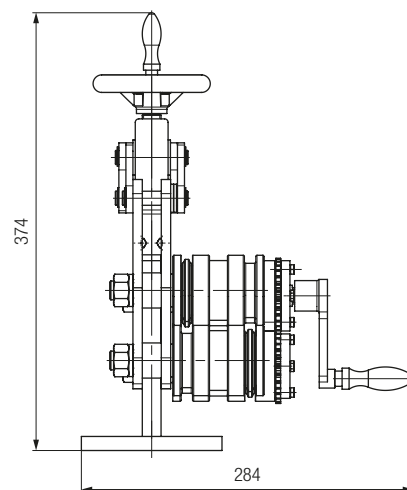
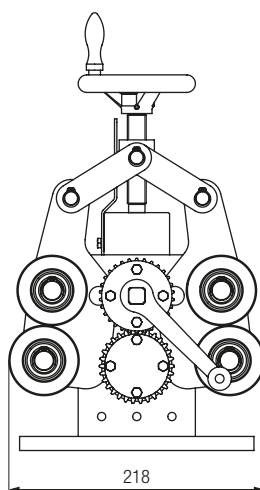
For occasional use, we recommend factory-made curves with higher precision and a special shape that is also suitable for complete rings.

PE_{plus} rails intended for use in curves must be prepared for this purpose at the factory.

Please use only **081516-4x15 for PE_{plus} curves**.

Bendable radii:

- vertical from 0.5 m to approx. 10 m
- horizontal from 1.5 m to approx. 10 m

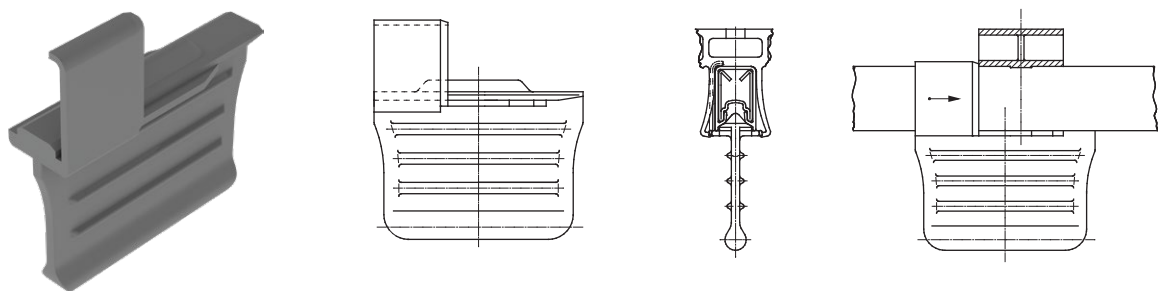


Part No.	Type	Weight
081091	Bending Device	17.5
08-V015-0357	Spare Part, INSERT FOR BENDING DEVICE 0815 PH/PE	0.051 kg
08-V015-0499	Spare Part, INSERT FOR BENDING DEVICE 0815 PE+	0.051 kg

Tools

Disassembly Tool

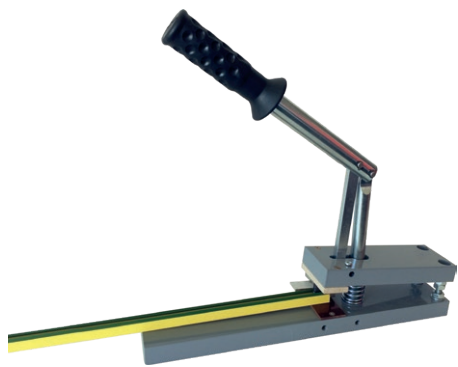
If you need to unclip conductor rails from their rail fasteners for repair, you can do so without tools—but it's often a bit tedious. Tool 081095 makes unclipping easier and saves valuable time.



Part No.	Type	Weight
081092	DISASSEMBLY TOOL FOR HANGER CLAMP 0815	0.006 kg

Notching Tool for PE_{plus} Rails

PE_{plus} rails have a notch at both ends. If PE_{plus} rails are cut to size, this notch must be reattached after cutting. The notch can be easily created using tool 081094.



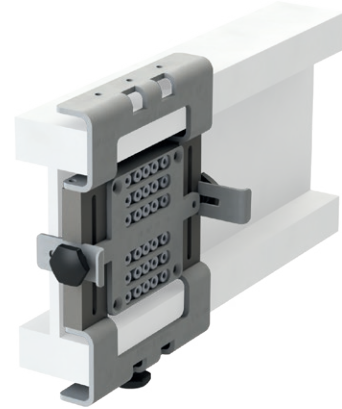
Part No.	Type	Weight
081094	NOTCHING TOOL 0815	4.8 kg
08-W100-0605	SPARE BLADE FOR NOTCHING TOOL 0815	0.08 kg

Tools/Cleaning

Installation Tool: Drilling Template

A drilling template is used for the quick and precise installation of end caps 08157A on transitions, lifters, and switch points.

The template is designed for use on straight and angled cuts of the support profile. By swapping the upper and lower components, it can be used on 180 mm and 240 mm track profiles. Maximum fillet width 8 mm.

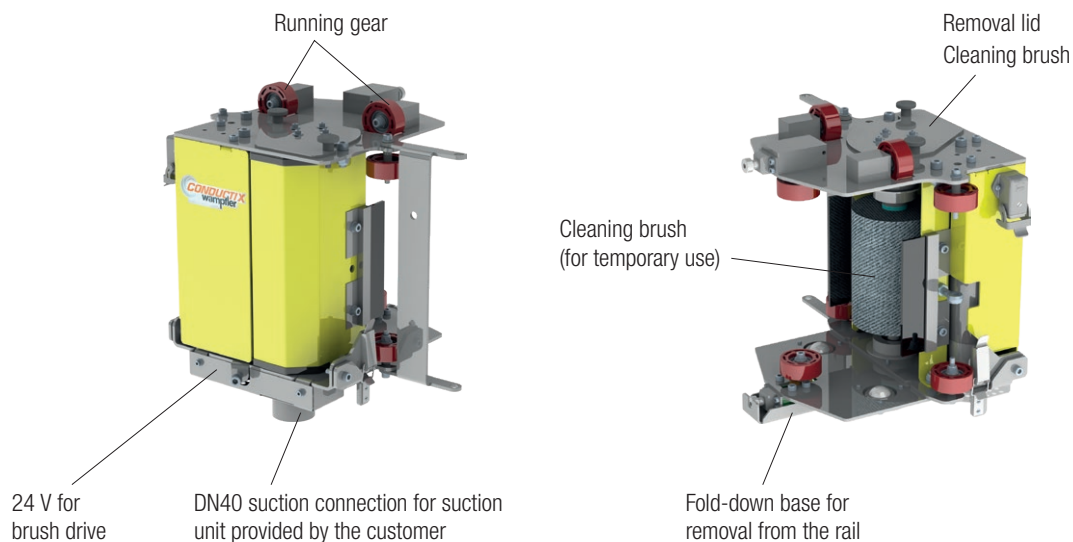


Scope of delivery:

- 1 x drilling template with adjustable stop and end stops
- 1 x mounting bracket for 180 mm running rails
- or
- 1 x mounting bracket for 240 mm running rails

Part No.	for Rail	Weight
08-V015-0474-001	180 mm	0.92 kg
08-V015-0474-002	240 mm	1.04 kg

Cleaning Unit



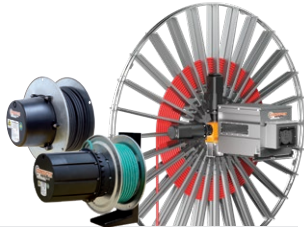
The conductor rail system can become dirty both during operation and due to external factors, which can compromise its reliability. Regular cleaning of the conductor rail and its surrounding area can remove this dirt and significantly improve the system's reliability. Depending on the extent and type of contamination, different cleaning methods and tools can be used.

We would be happy to advise you on your specific situation!

Additional information can also be found in the maintenance manual **"WV0800-0001-EN Cleaning of Conductor Rails"**

Your Applications – our Solutions

The solutions we deliver for your applications are based on your specific requirements. In many cases, a combination of several different Conductix-Wampfler systems can prove advantageous. You can count on Conductix-Wampfler for hands-on engineering support together with the optimum solution to safely meet your needs.



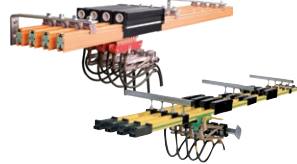
Cable and Hose Reels

Motor driven and spring driven reels by Conductix-Wampfler provide energy, data and media over a variety of distances, in all directions, fast and safe.



Festoon Systems

Conductix-Wampfler cable trolleys can be used in virtually every industrial application. They are reliable, robust and available in an enormous variety of dimensions and designs.



Conductor Rails

Available as enclosed or multiple unipole systems, Conductix-Wampfler conductor rails reliably move people and material.



Inductive Power Transfer

The no-contact system for transferring energy and data. For all tasks that depend on high speeds and absolute resistance to wear. Flexible installation when used with Automated Guided Vehicles.



Non-insulated Conductor Rails

Robust, non-insulated aluminum conductor rails with stainless steel cap provide the ideal basis for power supply of people movers and transit networks.



Radio Remote Controls

Safety remote control solutions customized to meet our customer needs with modern ergonomic design.



Reels, Retractors and Balancers

Available for hoses and cables, as classical reels or high-precision positioning aids for tools, we offer a complete range of reels and spring balancers.



Jib Booms

Complete with tool transporters, reels or an entire media supply system – safety and flexibility are key to the completion of difficult tasks.



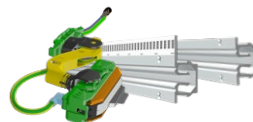
Slip Ring Assemblies

Whenever things are really "moving in circles", the proven slip ring assemblies by Conductix-Wampfler ensure the flawless transfer of energy and data. Here, everything revolves around flexibility and reliability!



Mobile Control Systems

Mobile control solutions for your plant – whether straightforward or intricate. Control and communication systems from LJU have been tried and tested in the automotive industry for decades.



ProfidAT

This data transfer system is a compact slotted waveguide and furthermore can be used as Grounding rail (PE) as well as positioning rail at the same time.



Charging Solutions

Whether inductive or conductive, this bundle of products offers always the perfect solution for all industrial charging tasks including the matching battery with integrated battery management system.

www.conductix.com

Conductix-Wampfler

has just one critical mission:

To provide you with energy and
data transmission systems that
will keep your operations up
and running 24/7/365.

To contact your nearest
sales office, please refer to:

www.conductix.contact

