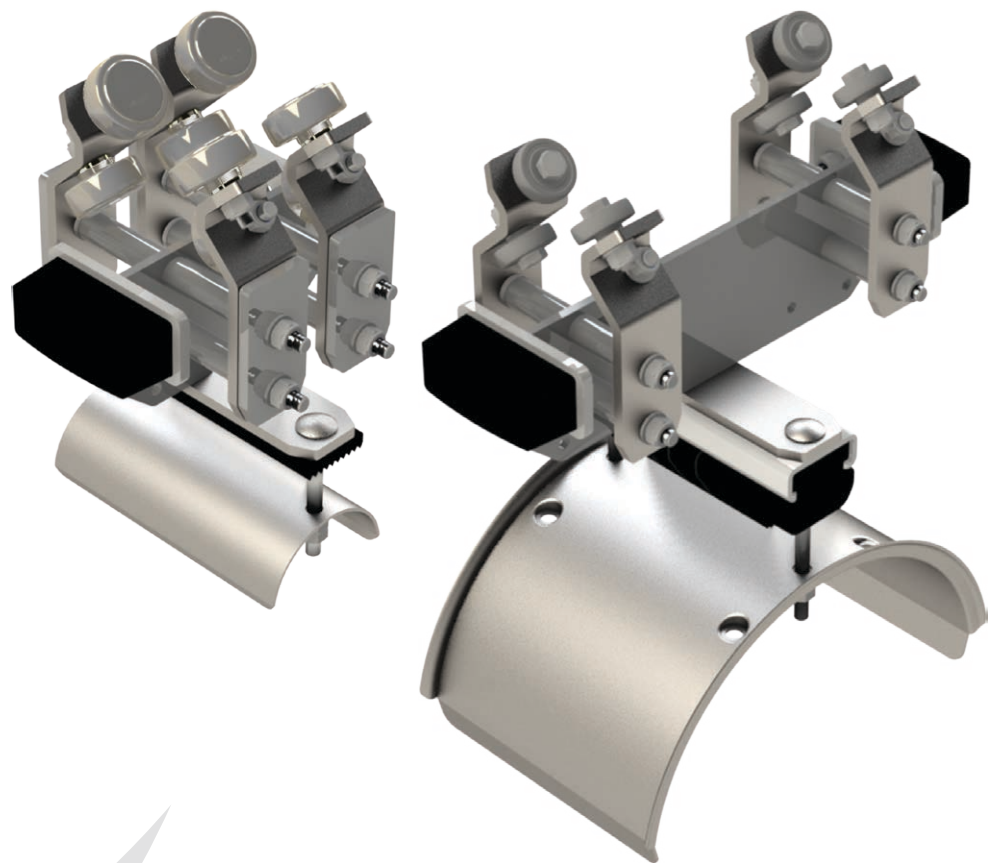


Festoon Systems for Square Rails

Program 0270EX | 0280EX

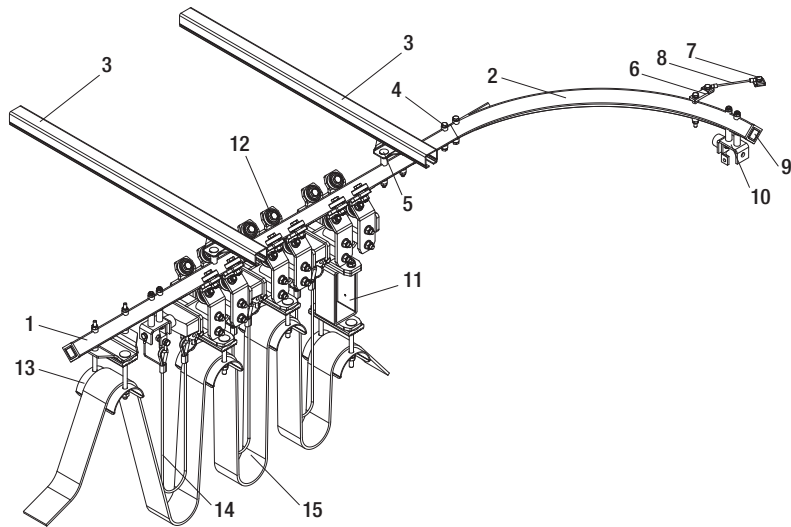


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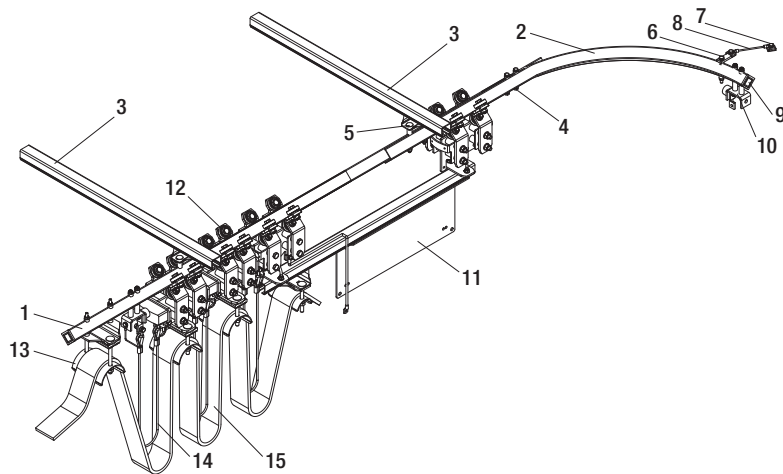
System Layouts

Festoon System with Towing Trolley



- ① Square Rail
- ② Rail Curve
- ③ Support Arm
- ④ Track Coupler
- ⑤ Support Bracket
- ⑥ Ground Terminal Clamp
- ⑦ Protective Conductor Connection
- ⑧ Protective Conductor
- ⑨ End Cap
- ⑩ End Stop
- ⑪ Towing Trolley EX
- ⑫ Cable trolley EX
- ⑬ End Clamp EX
- ⑭ Tension Relief Rope/Potential Equalization
- ⑮ Cable

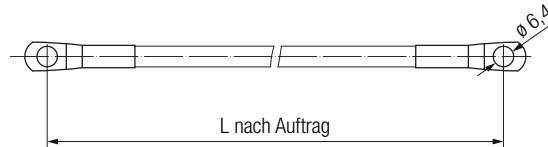
Festoon System with Control Unit Trolley



- ① Square Rail
- ② Rail Curve
- ③ Support Arm
- ④ Track Coupler
- ⑤ Support Bracket
- ⑥ Ground Terminal Clamp
- ⑦ Protective Conductor Connection
- ⑧ Protective Conductor
- ⑨ End Cap
- ⑩ End Stop
- ⑪ Control Unit Trolley Upper Parts
- ⑫ Cable trolley EX
- ⑬ End Clamp EX
- ⑭ Tension Relief Rope/Potential Equalization
- ⑮ Cable

ATEX Accessories Program 0230 for ATEX

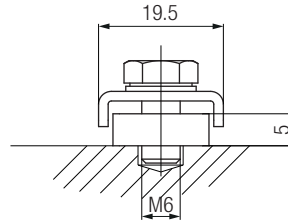
Protective Conductor



Part No.: 02-S215-0006

- Cross section 10 mm²

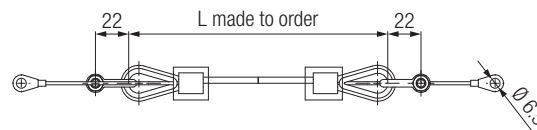
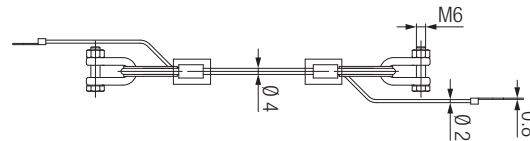
Protective Conductor Connection



Part No.: 02-S215-0002

- Material: galvanized steel

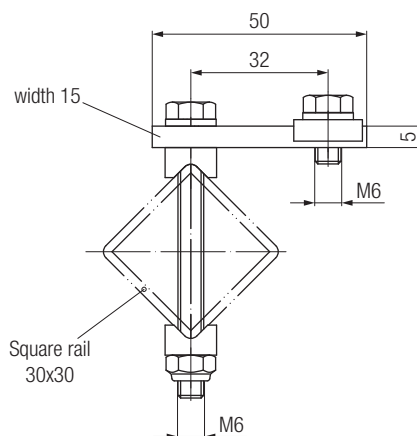
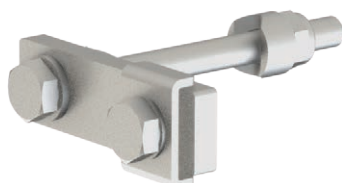
Tension Relief Rope/Potential Equalization



Part No.: 020330-04EX

- Cross section: 4 mm
- Material: galvanized steel

Ground Terminal Clamp



Part No.: 02-E007-0003

(for Program 0270EX)

- Material: galvanized steel
- Weight: 0.070 kg

Part No.: 02-E007-0010

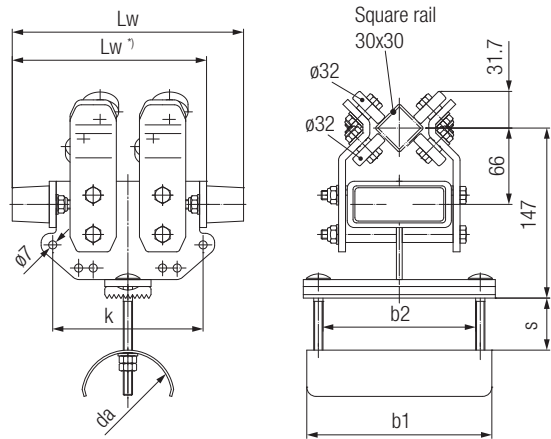
(for Program 0280EX)

- Material: galvanized steel
- Weight: 0.080 kg

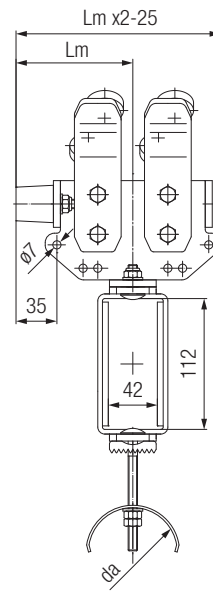
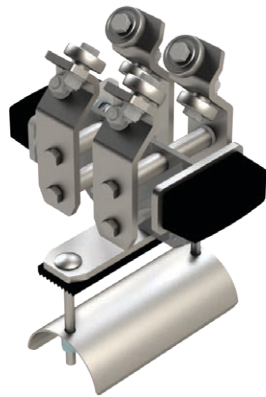
Cable Trolley

Program 0270EX

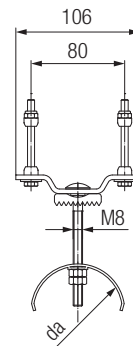
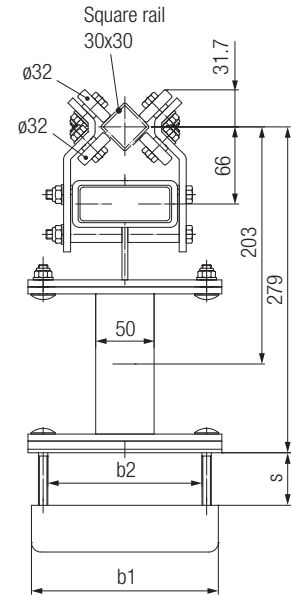
Cable Trolley for Flat Cables



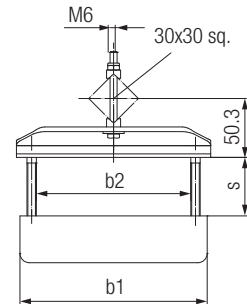
Cable Trolley



Towing Trolley



End Clamp



Technical details

Trolley body and cable supports: galvanized steel
 Fasteners: galvanized steel
 Rollers: ball bearing, galvanized with ZZ-sealing
 Temperature range: -20°C to +50°C
 Max. carrying capacity: 32 kg

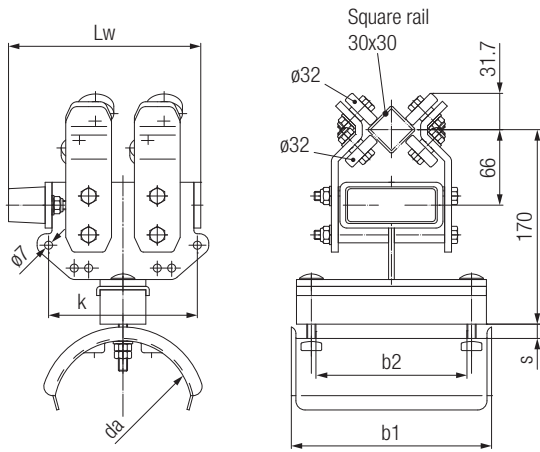
Cable Trolleys Part No.:	[kg]	Towing Trolleys Part No.:	[kg]	End Clamp Part No.:	[kg]	d _a [mm]	l _w [mm]	l _m [mm]	b ₁ [mm]	b ₂ [mm]	s _{max} [mm]	k [mm]
027610-170x100EX	3.49	027620-200x100EX	4.27	027330-100x062EX	0.61	80	168*	175	100	72	30	130
027610-170x160EX	3.73	027620-200x160EX	4.62	027330-160x062EX	1.29				160	132		
027610-200x100EX	3.62	027620-200x100EX	4.27	027330-100x062EX	0.61		200	175	100	72	45	130
027610-200x160EX	3.86	027620-200x160EX	4.62	027330-160x062EX	1.29				160	132		
027612-220x100EX	3.78	027622-250x100EX	4.55	027332-100x062EX	0.73	125	218*	225	100	72	35	180
027612-220x160EX	4.11	027622-250x160EX	5.00	027332-160x062EX	1.08				160	132		
027612-250x100EX	3.91	027622-250x100EX	4.55	027332-100x062EX	0.73		250	225	100	72	50	180
027612-250x160EX	4.24	027622-250x160EX	5.00	027332-160x062EX	1.08				160	132		
027613-250x160EX	4.34	027623-250x160EX	5.10	027333-160x062EX	1.44	160	250	225	175	132	35	180
027613-250x200EX	4.73	027623-250x200EX	5.37	027333-200x062EX	1.91				215	172		
027613-290x160EX	4.44	027623-320x160EX	5.20	027333-160x062EX	1.46		288*	295	175	132	50	250
027613-290x200EX	4.83	027623-320x200EX	5.47	027333-200x062EX	1.91				215	172		

* Towing Trolley with rubber buffer on one side only

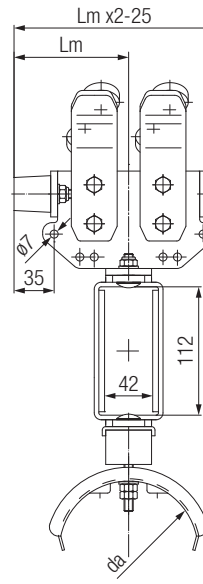
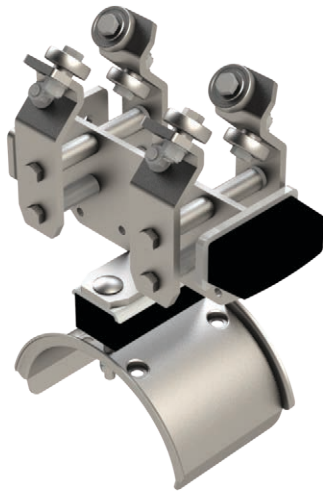
Cable Trolley

Program 0270EX

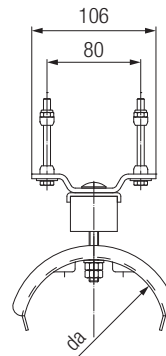
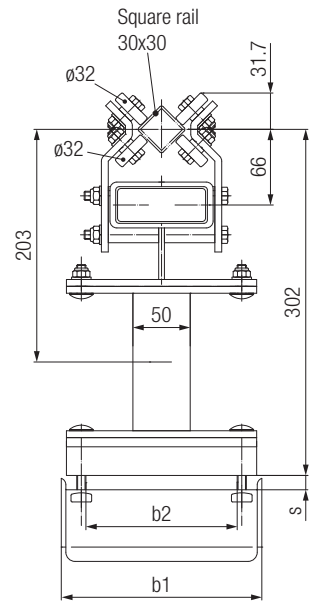
Cable Trolley for Round Cables with Cable Support Ø125, Ø160, Ø200



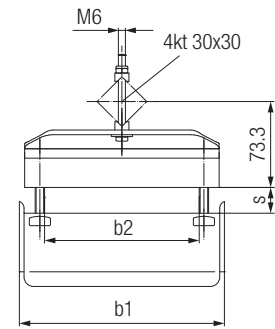
Cable Trolley



Towing Trolley



End Clamp



Technical details

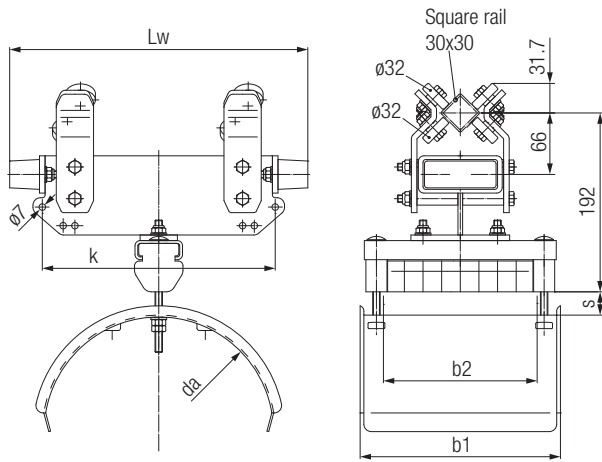
Trolley body and cable supports: galvanized steel
 Fasteners: galvanized steel
 Rollers: ball bearing, galvanized with ZZ-sealing
 Temperature range: -20°C to +50°C
 Max. carrying capacity: 25 kg

Cable Trolleys		Towing Trolleys		End Clamp		d_a	l_w	l_M	b_1	b_2	s_{max}	k
Part No.:	[kg]	Part No.:	[kg]	Part No.:	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
027632-170x100EX	3.81	027642-200x100EX	4.58	027862-100x022EX	1.17	125	168	175	115	72	12.5	130
027632-170x160EX	4.19	027642-200x160EX	5.08	027862-160x022EX	1.42				175	132		
027633-220x100EX	4.13	027643-250x100EX	4.90	027863-100x042EX	1.27	160	218	225	115	72	16	180
027633-220x160EX	4.57	027643-250x160EX	5.45	027863-160x042EX	1.67				175	132		
027634-290x100EX	4.27	027644-320x100EX	5.04	027864-100x042EX	1.37	200	288	295	115	72	20	250
027634-290x160EX	4.80	027644-320x160EX	5.68	027864-160x042EX	1.92				175	132		
027634-290x200EX	5.00	027644-320x200EX	5.77	027864-200x042EX	2.32				215	172		

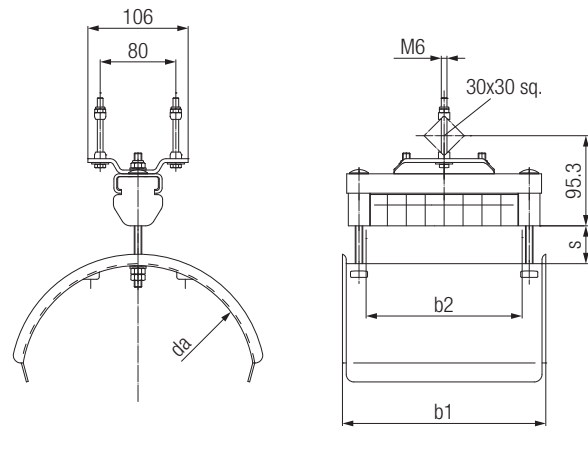
Cable Trolley

Program 0270EX

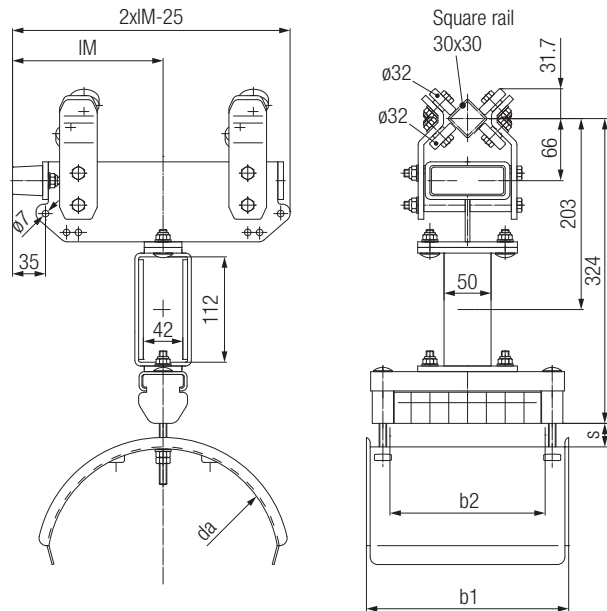
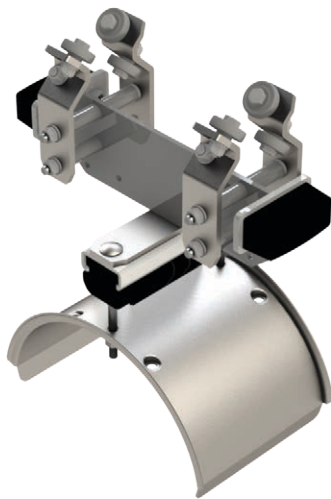
Cable Trolley for Round Cables with Cable Support Ø250, Ø320



Cable Trolley



End Clamp



Towing Trolley

Technical details

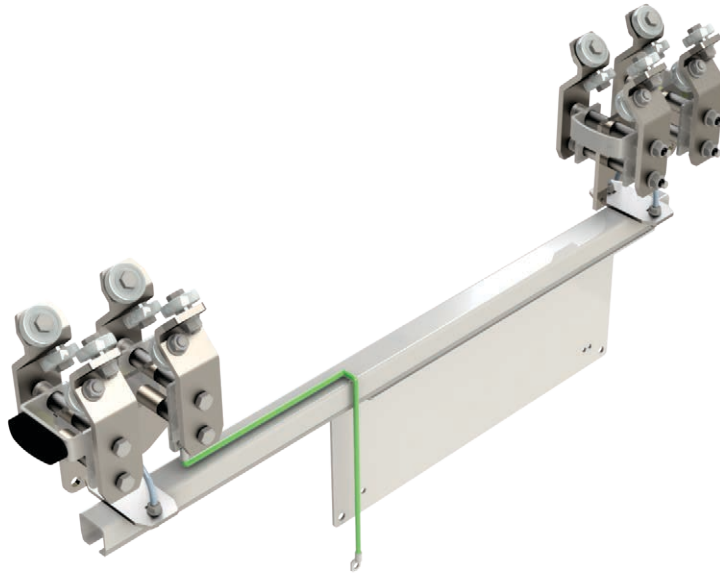
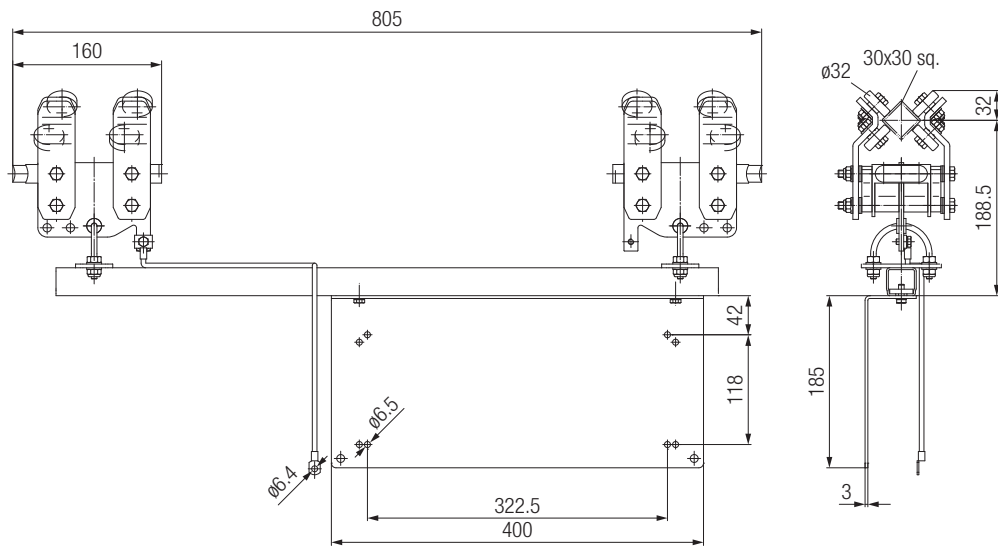
Trolley body and cable supports: galvanized steel
 Fasteners: galvanized steel
 Rollers: ball bearing, galvanized with ZZ-sealing
 Temperature range: -20°C to +50°C
 Max. carrying capacity: 25 kg

Cable Trolleys		Towing Trolleys		End Clamp		d_a	l_w	l_m	b_1	b_2	s_{max}	k
Part No.:	[kg]	Part No.:	[kg]	Part No.:	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
027655-320x160EX	5.17	027665-320x160EX	6.05	027895-160x042EX	2.36	250	320	295	175	125	25	250
027655-320x200EX	5.37	027665-320x200EX	6.14	027895-200x042EX	2.76				215	165		
027655-320x250EX	5.87	027665-320x250EX	6.75	027895-250x042EX	3.26				265	215		
027657-400x160EX	6.03	027667-400x160EX	6.91	027897-160x042EX	2.96	320	400	375	175	125	32	330
027657-400x200EX	6.23	027667-400x200EX	7.00	027897-200x042EX	3.36				215	165		
027657-400x250EX	6.83	027667-400x250EX	7.71	027897-250x042EX	3.96				265	215		

Cable Trolley

Program 0270EX

Control Unit Trolley Program 0270EX



Technical details

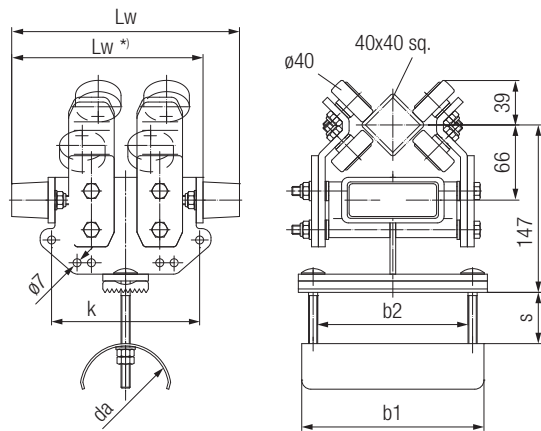
Trolley body and cable supports: galvanized steel
 Fasteners: galvanized steel
 Rollers: ball bearing, galvanized with ZZ-sealing
 Temperature range: -20°C to +50°C

Control Unit Trolley Part No.:	Max. carrying capacity: [kg]	Weight [kg]
02-S024-0016	32	9.15

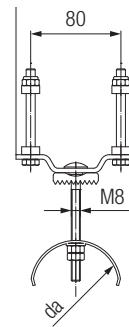
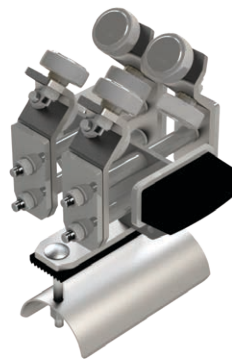
Cable Trolley

Program 0280EX

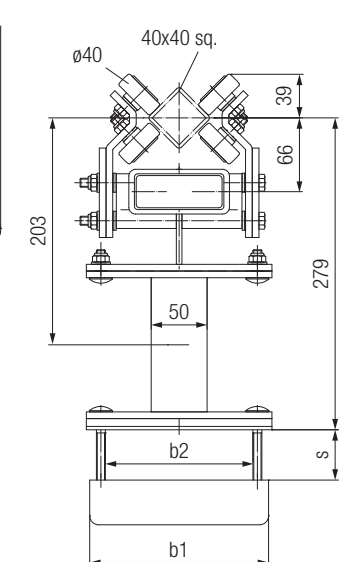
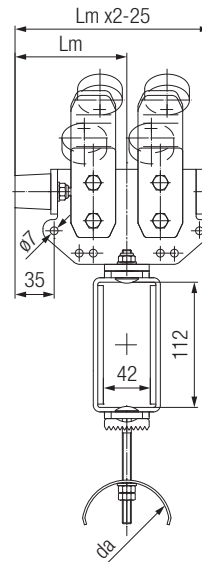
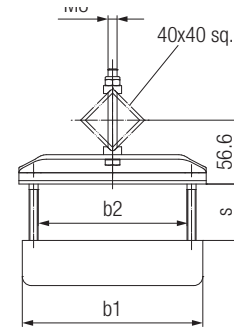
Cable Trolley for Flat Cables



Cable Trolley



End Clamp



Towing Trolley

Technical details

Trolley body and cable supports: galvanized steel
 Fasteners: galvanized steel
 Rollers: ball bearing, galvanized with ZZ-sealing
 Temperature range: -20°C to +50°C
 Max. carrying capacity: 36 kg

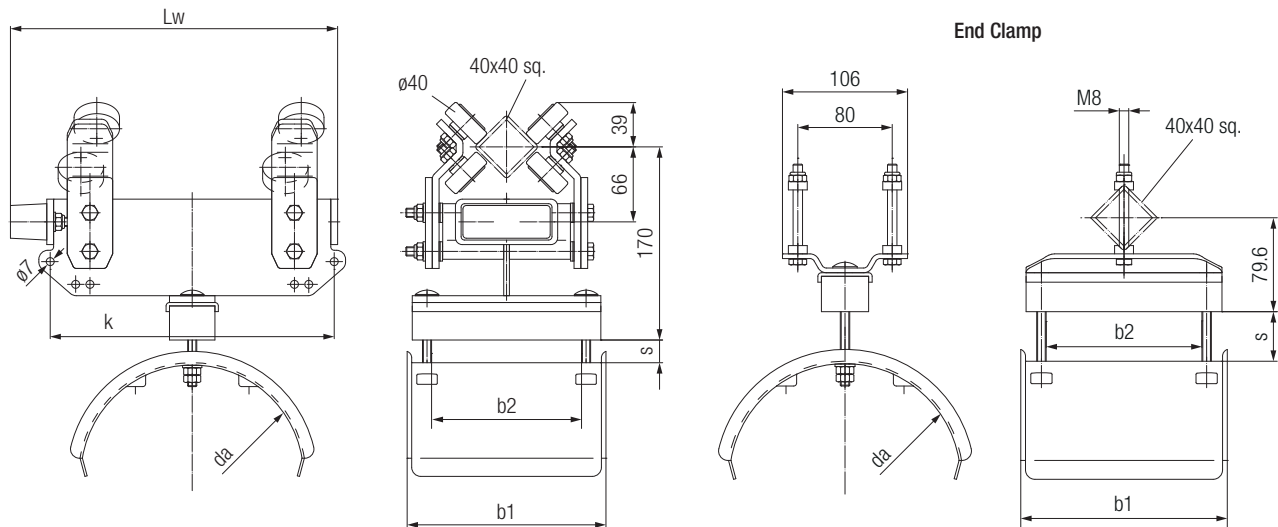
Cable Trolleys Part No.:	[kg]	Towing Trolleys Part No.:	[kg]	End Clamp Part No.:	[kg]	d _a [mm]	l _w [mm]	l _M [mm]	b ₁ [mm]	b _{2max} [mm]	s _{max} [mm]	k [mm]
028250-170x100EX	4.49	028260-200x100EX	5.26	028230-100x062EX	0.90	80	168*	175	100	72	30	130
028250-170x160EX	4.73	028260-200x160EX	5.62	028230-160x062EX	1.34				160	132		
028250-200x100EX	4.62	028260-200x100EX	5.26	028230-100x062EX	0.90		200	175	100	72	45	130
028250-200x160EX	4.86	028260-200x160EX	5.62	028230-160x062EX	1.34				160	132		
028252-220x100EX	4.78	028262-250x100EX	5.55	028232-100x062EX	0.78	125	218*	225	100	72	35	180
028252-220x160EX	5.11	028262-250x160EX	6.00	028232-160x062EX	1.13				160	132		
028252-250x100EX	4.91	028262-250x100EX	5.55	028232-100x062EX	0.78		250	225	100	72	50	180
028252-250x160EX	5.24	028262-250x160EX	6.00	028232-160x062EX	1.13				160	132		
028253-250x160EX	5.34	028263-250x160EX	6.10	028233-160x042EX	1.48	160	250	225	175	132	35	180
028253-250x200EX	5.73	028263-250x200EX	6.37	028233-200x042EX	1.93				215	172		
028253-290x160EX	5.44	028263-320x160EX	6.20	028233-160x062EX	1.50		288*	295	175	132	50	250
028253-290x200EX	5.83	028263-320x200EX	6.47	028233-200x062EX	1.95				215	172		

* Towing Trolley with rubber buffer on one side only

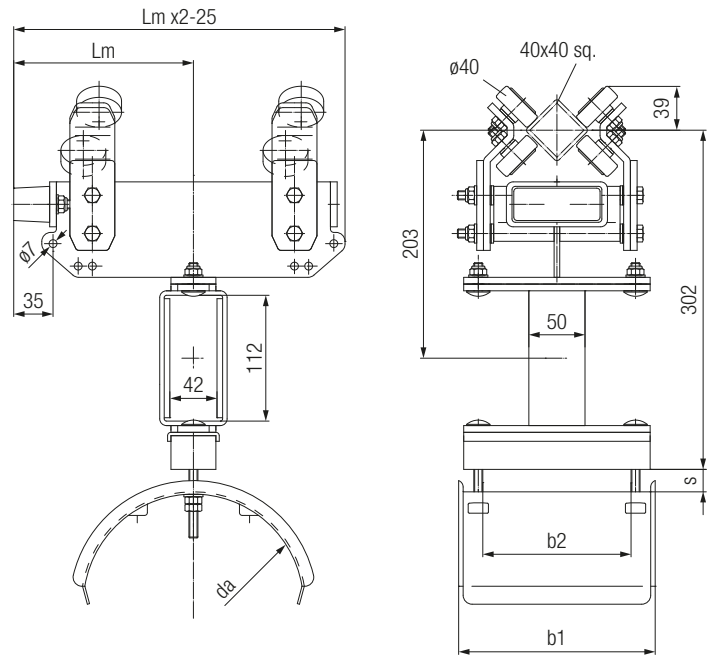
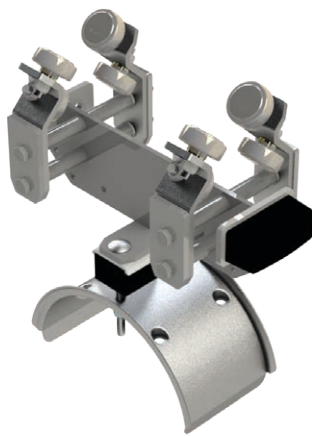
Cable Trolley

Program 0280EX

Cable Trolley for Round Cables with Cable Support $\varnothing 125$, $\varnothing 160$, $\varnothing 200$



Cable Trolley



Towing Trolley

Technical details

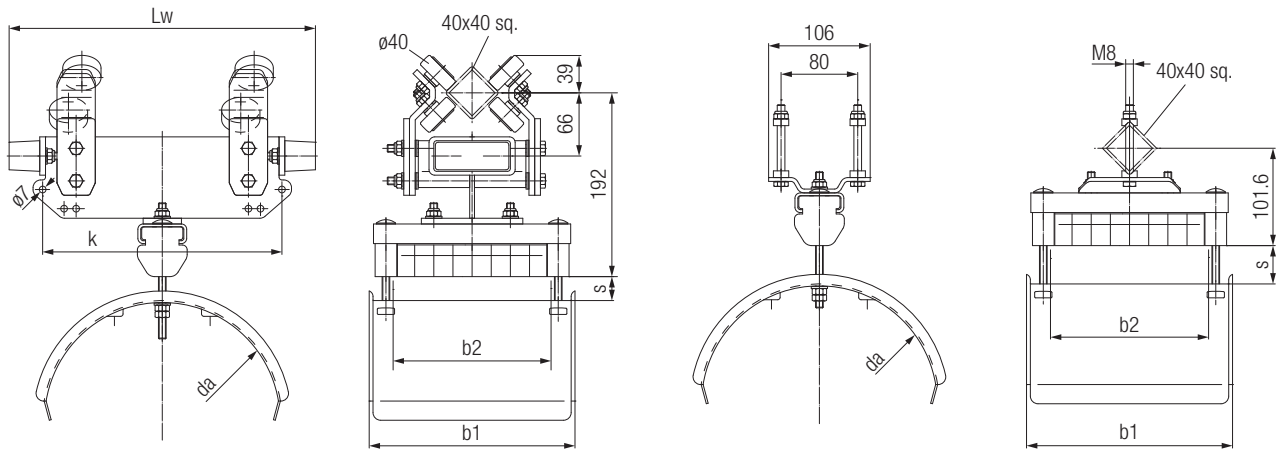
Trolley body and cable supports: galvanized steel
 Fasteners: galvanized steel
 Rollers: ball bearing, galvanized with ZZ-sealing
 Temperature range: -20°C to +50°C
 Max. carrying capacity: 36 kg

Cable Trolleys		Towing Trolleys		End Clamp		d_a	l_w	l_M	b_1	b_2	s_{max}	k
Part No.:	[kg]	Part No.:	[kg]	Part No.:	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
028272-170x100EX	4.81	028282-200x100EX	5.58	028362-100x022EX	1.22	125	168	175	115	72	12.5	130
028272-170x160EX	5.19	028282-200x160EX	6.08	028362-160x022EX	1.47				175	132		
028273-220x100EX	5.13	028283-250x100EX	5.90	028363-100x042EX	1.32	160	218	225	115	72	16	180
028273-220x160EX	5.57	028283-250x160EX	6.45	028363-160x042EX	1.72				175	132		
028274-290x100EX	5.27	028284-320x100EX	6.04	028364-100x042EX	1.42	200	288	295	115	72	20	250
028274-290x160EX	5.80	028284-320x160EX	6.68	028364-160x042EX	1.97				175	132		
028274-290x200EX	6.00	028284-320x200EX	6.77	028364-200x042EX	2.37				215	172		

Cable Trolley

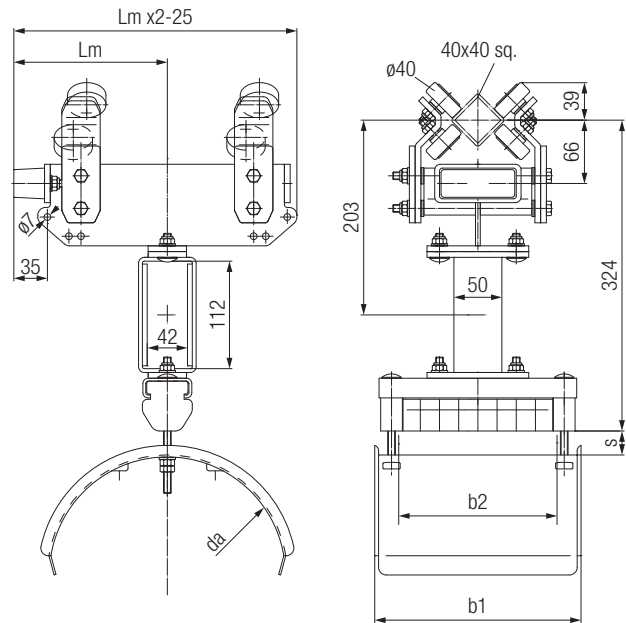
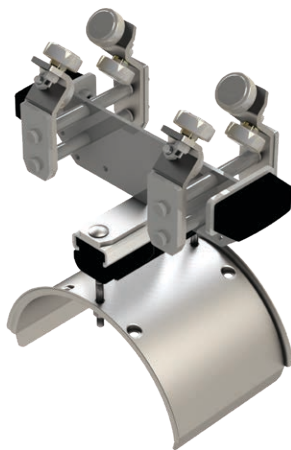
Program 0280EX

Cable Trolley for Round Cables with Cable Support Ø250, Ø320



Cable Trolley

End Clamp



Towing Trolley

Technical details

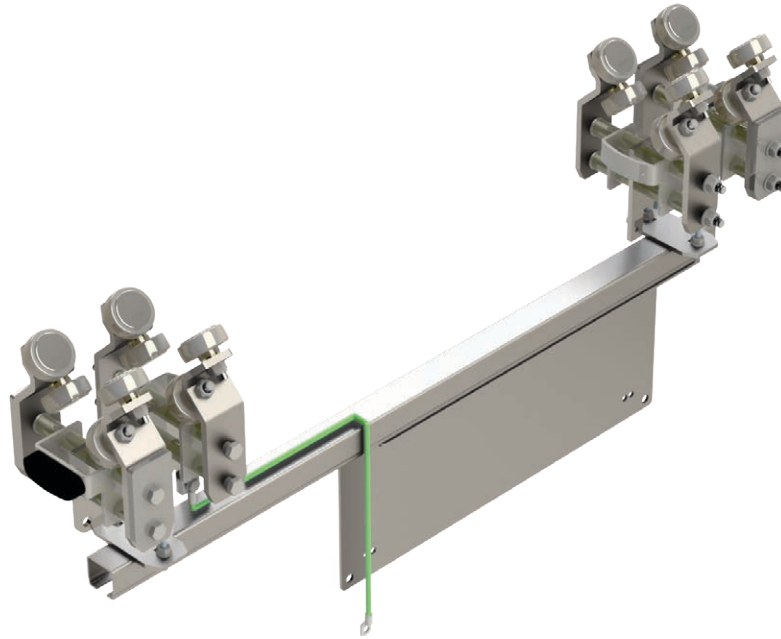
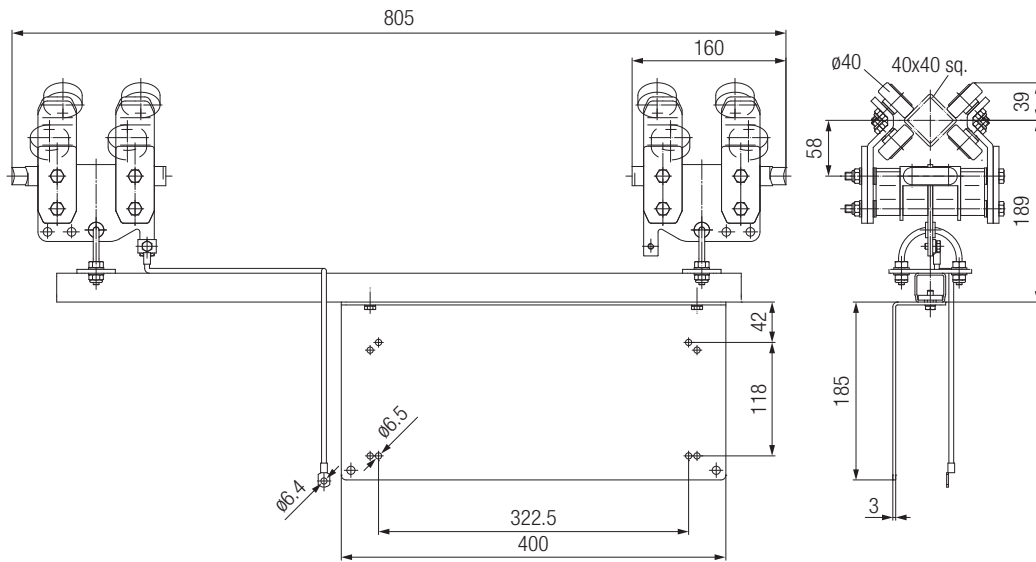
Trolley body and cable supports: galvanized steel
 Fasteners: galvanized steel
 Rollers: ball bearing, galvanized with ZZ-sealing
 Temperature range: -20°C to $+50^\circ\text{C}$
 Max. carrying capacity: 36 kg

Cable Trolleys Part No.:	[kg]	Towing Trolleys Part No.:	[kg]	End Clamp Part No.:	[kg]	d_a [mm]	l_w [mm]	l_M [mm]	b_1 [mm]	b_2 [mm]	s_{max} [mm]	k [mm]
028465-320x160EX	6.17	028475-320x160EX	7.05	028395-160x042EX	2.40	250	320	295	175	125	25	250
028465-320x200EX	6.37	028475-320x200EX	7.14	028395-200x042EX	2.80				215	185		
028465-320x250EX	6.87	028475-320x250EX	7.75	028395-250x042EX	3.60				265	215		
028467-400x160EX	7.03	028477-400x160EX	7.91	028397-160x042EX	3.00	320	400	375	175	125	32	330
028467-400x200EX	7.23	028477-400x200EX	8.00	028397-200x042EX	3.40				215	165		
028467-400x250EX	7.83	028477-400x250EX	8.71	028397-250x042EX	4.00				265	215		

Cable Trolley

Program 0280EX

Control Unit Trolley Program 0280EX



Technical details

Trolley body and cable supports: galvanized steel
 Fasteners: galvanized steel
 Rollers: ball bearing, galvanized with ZZ-sealing
 Temperature range: -20°C to +50°C

Control Unit Trolley Part No.:	Max. carrying capacity: [kg]	Weight [kg]
02-S024-0017	40	11.1

Project Planning

General Notes

Our ATEX festoon systems are comprised of standard parts from our 0270 and 0280 programs – plus ATEX components. ATEX festoon systems can be expanded with standard 0270 and 0280 parts.

However, for ATEX applications there are some specifics to be taken into account:

Maximum running speed:

Conductix-Wampfler festoon systems according to ATEX are only to be used with a maximum speed of 1m/s!
Explosion protection becomes void when this speed limit is exceeded.

Cables and hoses:

Outer sheaths must be made from the following materials:

- Heavy polychloroprene or some similar synthetic elastomer
- Heavy rubber hoses or connecting cables of an equally robust composition
- No PVC cables/hoses!

Grounding:

To avoid any potential ignition processes, all chargeable conductive parts must be grounded.
All metal components of the festoon system are conductively connected. Additionally, the rail is grounded.

Electrical accessory equipment:


Accessory equipment supplied by the customer, such as junction boxes on control unit trolleys or teach pendants must be eligible for use in zones 1 and 21.
Respective product guides must be collected by the customer and added to the festoon system's documentation.

Conductix-Wampfler Festoon Systems according to ATEX – Areas of Application


• Mines and Mine Damp

No zones allocated		 WARNING! Operation not permitted
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• Other Areas with Potentially Explosive Atmosphere – Gas

Zone 0	Potentially explosive atmosphere present continuously or for long periods or frequently	 WARNING! Operation not permitted
Zone 1	Potentially explosive atmosphere likely to occur in normal operation occasionally	Operation permitted
Zone 2	Potentially explosive atmosphere not likely to occur in normal operation but, if it does occur, will persist for a short period only	Operation permitted

• Other Potentially Explosive Areas – Powder/Dust

Zone 20	Potentially explosive atmosphere present continuously or for long periods or frequently	 WARNING! Operation not permitted
Zone 21	Potentially explosive atmosphere likely to occur in normal operation occasionally	Operation permitted
Zone 22	Potentially explosive atmosphere not likely to occur in normal operation but, if it does occur, will persist for a short period only	Operation permitted

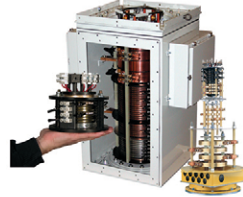
Other Products from Conductix-Wampfler

The products described in this catalog represent a few of the products from the broad spectrum of Conductix-Wampfler components and systems for the transfer of energy, data, gases, and fluids. The solutions we deliver for your applications are based on your specific requirements. In many cases, a combination of several different Conductix-Wampfler products are needed to fill the application. You can count on all of Conductix-Wampfler's business units for hands-on engineering support - coupled with the perfect solution to meet your energy management and control needs.



Motor driven cable reels

Motor driven reels by Conductix-Wampfler are the perfect solution for managing long lengths of heavy cable and hoses in very demanding industrial applications. Monospiral, level wind, and random wind spools.



Slip ring assemblies

Whenever powered machinery needs to rotate 360°, field proven slip ring assemblies by Conductix-Wampfler can flawlessly transfer energy and data. Here, everything revolves around flexibility and reliability.



Conductor bar

Whether they are enclosed conductor rails, expandable single-pole bar systems, or high amperage bar for demanding steel mill use up to 6000 amps. Conductix-Wampfler's conductor bar is the proven solution to reliably move people and material.



Spring driven cable reels

We have 60 years experience and trusted brands such as Insul-8, Wampfler, and IER. We offer small cord reels all the way to large multi-motor units, a wide range of accessories, and hazardous location reels.



Cable Festoon systems

It's hard to imagine Conductix-Wampfler cable trolleys not being used in virtually every industrial application. They are reliable and robust and available in an enormous variety of sizes and models.



Push Button Pendants

Our ergonomic pendants are ideally suited for industrial control applications. They are available in a wide range of configurations for overhead cranes and other machinery.



Radio remote controls

Safe, secure, and reliable radios use the latest in microprocessor technology. Available in several models for overhead crane control and other types of machinery.



Inductive Power Transfer IPT®

The contact-less system for transferring energy and data. For all tasks that depend on high speeds and absolute resistance to wear.



Data Transfer: ProfidAT® | Nexus

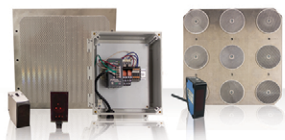
Safe & reliable wireless communication using slotted waveguide technology that's PROFIsafe compatible.

Nexus NB for narrow band signal transfer over power conductors



LJU Automation EMS Controller

Specialized controllers Programmable by parameters, Ideal for Electrified Monorails at automotive plants, with over 1500 in service worldwide. Adaptable for other applications



BridgeGuard™

Prevents crane to crane and crane to end collisions. IP69K rated for indoor and outdoor use, with a 3 ft to 150 ft range. Compliant with IEC 60068-2-6:2007



Air & Spring balancers | Air hoists

Conductix-Wampfler offers the full line of ENDO positioning devices. Rugged, reliable steel construction increasing safety and decreasing fatigue and body stress.

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