Festoon Systems for Square Rails Program 0270EX | 0280EX







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System Layouts

Festoon System with Towing Trolley



Festoon System with Control Unit Trolley



ATEX Accessories Program 0230 for ATEX

Protective Conductor



Protective Conductor Connection





Part No.: 02-S215-0002

• Material: galvanized steel

Tension Relief Rope/Potential Equalization



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 for Flat Cables



Cable Trolley



Technical details

Trolley body and cable supports:galvanized steelFasteners:galvanized steelRollers:ball bearing, galTemperature range:-20°C to +50°CMax. carrying capacity:32 kg

galvanized steel galvanized steel ball bearing, galvanized with ZZ-sealing -20°C to +50°C 32 kg





Towing Trolley





End Clamp

Cable Trolleys Part No.:	[kg]	Towing Trolleys Part No.:	[kg]	End Clamp Part No.:	[kg]	d _a [mm]	l _w [mm]	l _м [mm]	b₁ [mm]	b ₂ [mm]	s _{max} [mm]	k [mm]
027610-170x100EX	3.49	027620-200x100EX	4.27	027330-100x062EX	0.61		168*	175	100	72	30	130
027610-170x160EX	3.73	027620-200x160EX	4.62	027330-160x062EX	1.29	80	100	175	160	132	30	130
027610-200x100EX	3.62	027620-200x100EX	4.27	027330-100x062EX	0.61	00	200	175	100	72	45	130
027610-200x160EX	3.86	027620-200x160EX	4.62	027330-160x062EX	1.29		200	1/5	160	132	40	130
027612-220x100EX	3.78	027622-250x100EX	4.55	027332-100x062EX	0.73		218*	225	100	72	35	180
027612-220x160EX	4.11	027622-250x160EX	5.00	027332-160x062EX	1.08	125	210	225	160	132	30	100
027612-250x100EX	3.91	027622-250x100EX	4.55	027332-100x062EX	0.73	120	250	225	100	72	50	180
027612-250x160EX	4.24	027622-250x160EX	5.00	027332-160x062EX	1.08		200	220	160	132	00	100
027613-250x160EX	4.34	027623-250x160EX	5.10	027333-160x062EX	1.44		250	225	175	132	35	180
027613-250x200EX	4.73	027623-250x200EX	5.37	027333-200x062EX	1.91	160	200	225	215	172	30	100
027613-290x160EX	4.44	027623-320x160EX	5.20	027333-160x062EX	1.46	100	288*	295	175	132	50	050
027613-290x200EX	4.83	027623-320x200EX	5.47	027333-2000x062EX	1.91		200	290	215	172	30	250

* Towing Trolley with rubber buffer on one side only

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



Cable Trolley





Towing Trolley





End Clamp

Technical details

loonnoal aotano	
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 Part No.:	[kg]	Towing Trolleys Part No.:	[kg]	End Clamp Part No.:	[kg]	d _a [mm]	l _w [mm]	l _M [mm]	b₁ [mm]	b₂ [mm]	s _{max} [mm]	k [mm]
						found	frond	frond			fund	fund
027632-170x100EX	3.81	027642-200x100EX	4.58	027862-100x022EX	1.17	105	100	175	115	72	105	100
027632-170x160EX	4.19	027642-200x160EX	5.08	027862-160x022EX	1.42	125	168	175	175	132	12.5	130
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	100	210	220	175	132	10	100
027634-290x100EX	4.27	027644-320x100EX	5.04	027864-100x042EX	1.37				115	72		
027634-290x160EX	4.80	027644-320x160EX	5.68	027864-160x042EX	1.92	200	288	295	175	132	20	250
027634-290x200EX	5.00	027644-320x200EX	5.77	027864-200x042EX	2.32				215	172		

Cable Trolley for Round Cables with Cable Support Ø250, Ø320



Cable Trolley



106



End Clamp



Technical details

Trolley body and cable supports:galvanized steelFasteners:galvanized steelRollers:ball bearing, galvanized with ZZ-sealingTemperature range:-20°C to +50°CMax. carrying capacity:25 kg





Towing Trolley

Cable Trolleys Part No.:	[kg]	Towing Trolleys Part No.:	[kg]	End Clamp Part No.:	[kg]	d _a [mm]	l _w [mm]	I _M [mm]	b₁ [mm]	b₂ [mm]	S _{max} [mm]	k [mm]
027655-320x160EX	5.17	027665-320x160EX	6.05	027895-160x042EX	2.36				175	125		
027655-320x200EX	5.37	027665-320x200EX	6.14	027895-200x042EX	2.76	250	320	295	215	165	25	250
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				175	125		
027657-400x200EX	6.23	027667-400x200EX	7.00	027897-200x042EX	3.36	320	400	375	215	165	32	330
027657-400x250EX	6.83	027667-400x250EX	7.71	027897-250x042EX	3.96				265	215		

Control Unit Trolley Program 0270EX





Technical details

Trolley body and cable supports:galvanized steelFasteners:galvanized steelRollers:ball bearing, galvanized with ZZ-sealingTemperature range:-20°C to +50°C

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

Cable Trolley for Flat Cables



Cable Trolley



Technical details

Trolley body and cable supports:galvanized steelFasteners:galvanized steelRollers:ball bearing, galvanized with ZZ-sealingTemperature range:-20°C to +50°CMax. carrying capacity:36 kg



80

M8



Towing Trolley

End Clamp

1110

b2

b1

40x40 sq.

56.6

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		160*	175	100	72	- 30	120
028250-170x160EX	4.73	028260-200x160EX	5.62	028230-160x062EX	1.34	80	168*	1/5	160	132	30	130
028250-200x100EX	4.62	028260-200x100EX	5.26	028230-100x062EX	0.90	80	000	170	100	72	45	100
028250-200x160EX	4.86	028260-200x160EX	5.62	028230-160x062EX	1.34]	200	175	160	132	45	130
028252-220x100EX	4.78	028262-250x100EX	5.55	028232-100x062EX	0.78		010*	005	100	72	05	100
028252-220x160EX	5.11	028262-250x160EX	6.00	028232-160x062EX	1.13	105	218*	225	160	132	35	180
028252-250x100EX	4.91	028262-250x100EX	5.55	028232-100x062EX	0.78	125	250	225	100	72	50	100
028252-250x160EX	5.24	028262-250x160EX	6.00	028232-160x062EX	1.13		250	225	160	132	1 50	180
028253-250x160EX	5.34	028263-250x160EX	6.10	028233-160x042EX	1.48		050	005	175	132	- 35	100
028253-250x200EX	5.73	028263-250x200EX	6.37	028233-200x042EX	1.93	100	250	225	215	172	35	180
028253-290x160EX	5.44	028263-320x160EX	6.20	028233-160x062EX	1.50	160	000*	005	175	132	50	050
028253-290x200EX	5.83	028263-320x200EX	6.47	028233-200x062EX	1.95		288*	295	215	172	50	250

* Towing Trolley with rubber buffer on one side only

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









Cable 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





Towing Trolley

Cable Trolleys Part No.:	[kg]	Towing Trolleys Part No.:	[kg]	End Clamp Part No.:	[kg]	d _a [mm]	l _w [mm]	l _M [mm]	b₁ [mm]	b ₂ [mm]	s _{max} [mm]	k [mm]
028272-170x100EX	4.81	028282-200x100EX	5.58	028362-100x022EX	1.22	105	100	170	115	72	10.5	100
028272-170x160EX	5.19	028282-200x160EX	6.08	028362-160x022EX	1.47	125	168	175	175	132	12.5	130
028273-220x100EX	5.13	028283-250x100EX	5.90	028363-100x042EX	1.32	100	010	005	115	72	10	100
028273-220x160EX	5.57	028283-250x160EX	6.45	028363-160x042EX	1.72	160	218	225	175	132	16	180
028274-290x100EX	5.27	028284-320x100EX	6.04	028364-100x042EX	1.42				115	72		
028274-290x160EX	5.80	028284-320x160EX	6.68	028364-160x042EX	1.97	200	288	295	175	132	20	250
028274-290x200EX	6.00	028284-320x200EX	6.77	028364-200x042EX	2.37	1			215	172	1	

Cable Trolley for Round Cables with Cable Support Ø250, Ø320









Cable 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:	36 kg





Towing Trolley

Cable Trolleys Part No.:	[kg]	Towing Trolleys Part No.:	[kg]	End Clamp Part No.:	[kg]	d _a [mm]	l _w [mm]	I _M [mm]	b₁ [mm]	b ₂ [mm]	s _{max} [mm]	k [mm]
028465-320x160EX	6.17	028475-320x160EX	7.05	028395-160x042EX	2.40				175	125		
028465-320x200EX	6.37	028475-320x200EX	7.14	028395-200x042EX	2.80	250	320	295	215	185	25	250
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				175	125		
028467-400x200EX	7.23	028477-400x200EX	8.00	028397-200x042EX	3.40	320	400	375	215	165	32	330
028467-400x250EX	7.83	028477-400x250EX	8.71	028397-250x042EX	4.00				265	215		

Control Unit Trolley Program 0280EX



Technical details

Trolley body and cable supports:galvanized steelFasteners:galvanized steelRollers:ball bearing, galvanized with ZZ-sealingTemperature range:-20°C to +50°C

Control Unit Trolley	Max. carrying capacity:	Weight				
Part No.:	[kg]	[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

Your Applications – our Solutions

Festoon Systems from Conductix-Wampfler represent only one of the many solutions made possible by the broad spectrum of Conductix-Wampfler components for the transport of energy, data and fluid media. 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 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.



Festoon systems

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



Motorized Cable & Hose Reels Motorized reels by Conductix-Wampfler hold their own wherever energy, data, media and fluids have to cover the most diverse distances within a short amount of time – in all directions, fast and safe.



Energy guiding chains The "Jack of all trades" when it comes to transferring energy, data, air and fluid hoses. With their wide range, these energy guiding chains are the ideal solution for many industrial applications.



Conductor rails Whether they're enclosed conductor rails or expandable single-pole systems, the proven conductor rails by Conductix-Wampfler reliably move people and material.



Non-insulated conductor rails Extremely robust, non-insulated conductor rails with copper heads or stainless steel surfaces provide the ideal basis for rough applications, for example in steel mills or shipyards.



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!



Spring Cable & Hose Reels With their robust and efficient design Spring Cable and Hose Reels from Conductix-Wampfler are unbeatably reliable in supplying energy, signals, data and fluids to a vast range of tools, cranes and vehicles.



Inductive Power Transfer IPT® 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.



Conveyor systems Whether manual, semiautomatic or with Power & Free – flexibility is achieved with full customization concerning layout and location.



Retractors and Balancers Our wide range of high reliable retractors and balancers remove the load from your shoulders and allow you to reach top productivity.



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



Jib booms

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

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.

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