



# Festoon Systems for C-Rails Program 0230EX



# ATEX – Introduction

---

## General Notes

---

Our ATEX festoon systems are comprised of standard parts from our 0230 and 0240 programs – plus ATEX components. ATEX festoon systems can be expanded with standard 0230 and 0240 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		 <b>WARNING!</b> Operation not permitted
--------------------	--	--

### • Other Areas with Potentially Explosive Atmosphere – Gas

Zone 0	Potentially explosive atmosphere present continuously or for long periods or frequently	 <b>WARNING!</b> 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	 <b>WARNING!</b> 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

# Contents

---

## **ATEX – Introduction**

General Notes .....	2
Conductix-Wampfler Festoon Systems according to ATEX – Areas of Application .....	2

---

## **System Layout**

### **Program 0230 for ATEX**

Festoon System with Towing Trolley.....	4
Festoon System with Control Unit Trolley .....	4

---

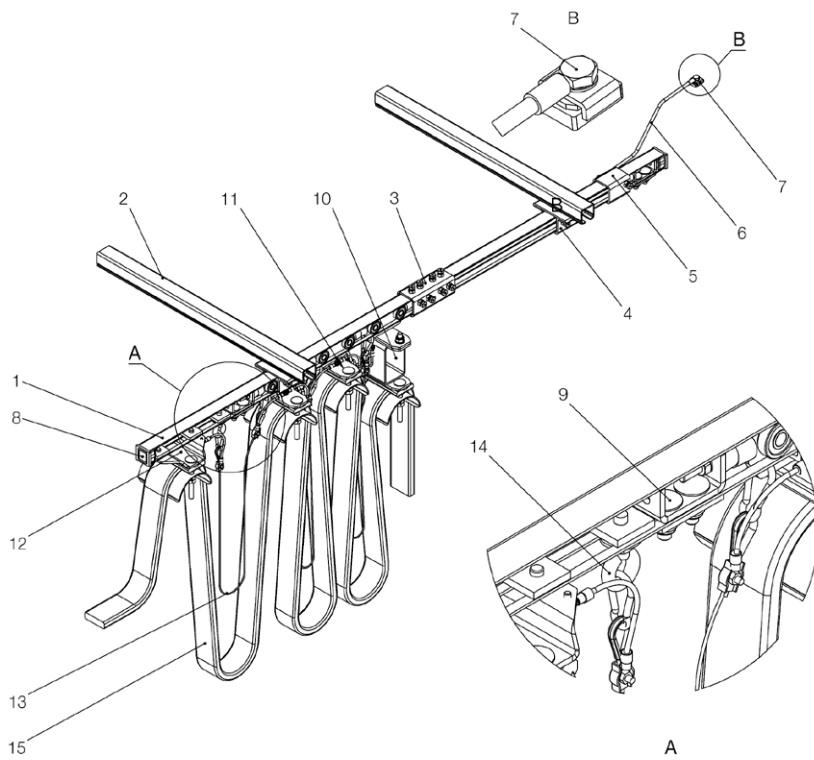
## **ATEX Accessories**

### **Program 0230 for ATEX**

Protective Conductor .....	5
Protective Conductor Connection .....	5
Tension Relief Rope/Potential Equalization .....	5
Ground Terminal Clamp .....	5
Cable Trolley for Flat Cables Program 0230EX.....	6
Cable Trolley for Round Cables Program 0230EX.....	7
Control Unit Trolley Program 0230EX.....	7

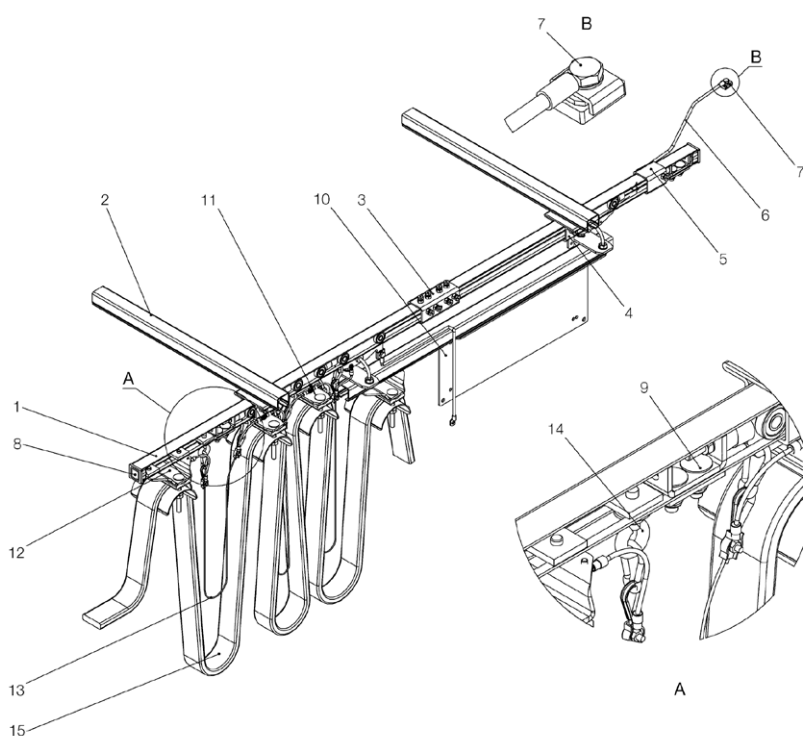
# System Layout Program 0230 for ATEX

## Festoon System with Towing Trolley



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

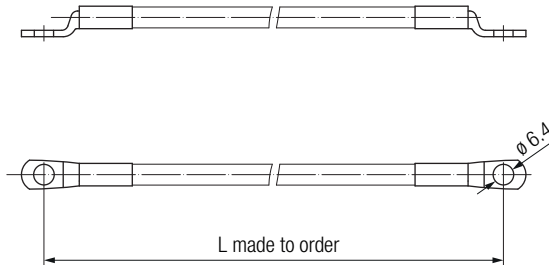
## Festoon System with Control Unit Trolley



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

# ATEX Accessories Program 0230 for ATEX

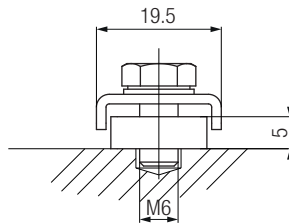
## Protective Conductor



**Part No.: 02-S215-0006**

- Cross section 10 mm<sup>2</sup>

## Protective Conductor Connection



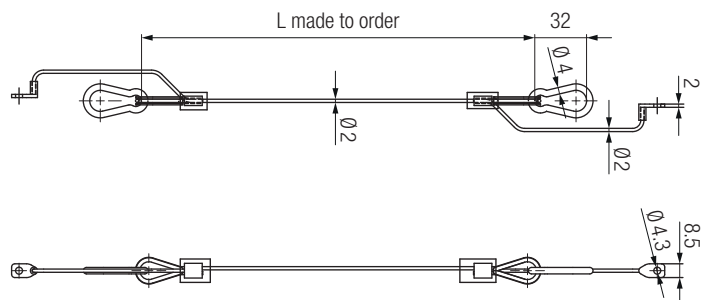
**Part No.: 02-S215-0002**

- Material: galvanized steel

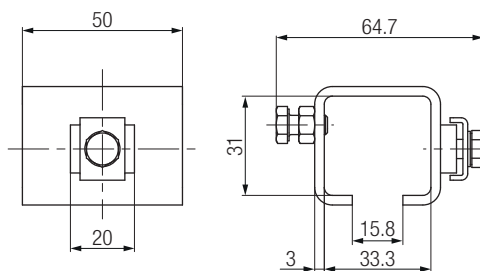
## Tension Relief Rope/Potential Equalization

**Part No.: 020330-02EX**

- Cross section: 2 mm
- Material: galvanized steel



## Ground Terminal Clamp

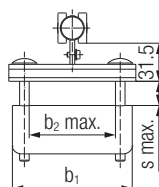
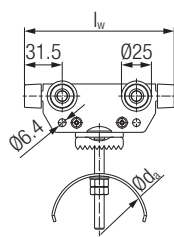


**Part No.: 02-E007-0001**

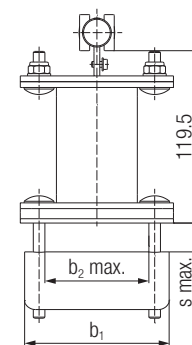
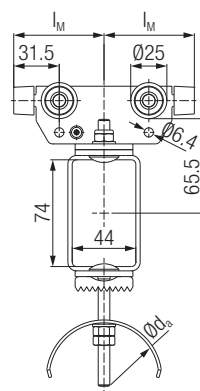
- Material: galvanized steel
- Weight: 0.165 kg

# Cable Trolleys Program 0230 for ATEX

## Cable Trolleys for Flat Cables Program 0230EX



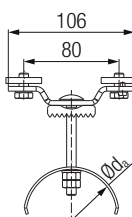
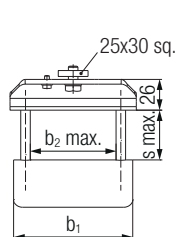
Cable Trolley



Towing Trolley

### Technical details

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



End Clamp

Cable Trolleys Part No.:	[kg]	Towing Trolleys Part No.:	[kg]	End Clamps Part No.:	[kg]	d <sub>a</sub>	l <sub>w</sub>	l <sub>m</sub>	b <sub>1</sub>	b <sub>2 max</sub>	s <sub>max</sub>
						[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
023330-125x100EX	0.65	023335-125x100EX	1.19	024230-100x042EX	0.70	80	125	62,5	100	72	20
023330-125x160EX	0.86	023335-125x160EX	1.52	024230-160x042EX	0.93				160	132	
023330-160x100EX	0.70	023335-160x100EX	1.24	024230-100x042EX	0.70		160	80	100	72	38
023330-160x160EX	0.90	023335-160x160EX	1.56	024230-160x042EX	0.95				160	132	
023330-200x100EX	0.77	023335-200x100EX	1.31	024230-100x062EX	0.70		200	100	100	72	58
023330-200x160EX	0.97	023335-200x160EX	1.63	024230-160x062EX	0.95				160	132	
023332-160x100EX	0.82	023337-160x100EX	1.36	024232-100x042EX	0.80	125	160	80	100	72	15
023332-160x160EX	1.11	023337-160x160EX	1.77	024232-160x042EX	1.13				160	132	
023332-200x100EX	0.87	023337-200x100EX	1.40	024232-100x042EX	0.80		200	100	100	72	35
023332-200x160EX	1.16	023337-200x160EX	1.82	024232-160x042EX	1.13				160	132	
023332-250x100EX	0.94	023337-250x100EX	1.48	024232-100x062EX	0.82		250	125	100	72	60
023332-250x160EX	1.24	023337-250x160EX	1.90	024232-160x062EX	1.15				160	132	
023333-200x100EX	1.02	023338-200x100EX	1.56	024233-100x042EX	1.00	160	200	100	100	72	18
023333-200x160EX	1.40	023338-200x160EX	2.06	024233-160x042EX	1.40				175	132	
023333-250x100EX	0.95	023338-250x100EX	1.49	024233-100x042EX	1.00		250	125	100	72	42
023333-250x160EX	1.34	023338-250x160EX	2.00	024233-160x042EX	1.40				175	132	

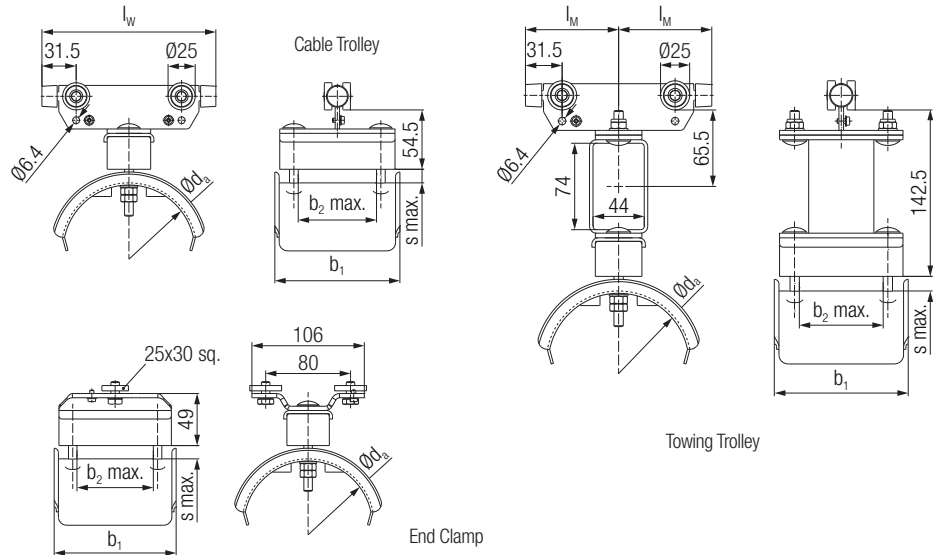
# Cable Trolleys Program 0230 for ATEX

## Cable Trolleys for Round Cables Program 0230EX



### Technical details

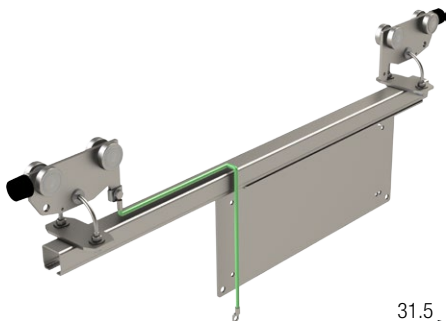
- Trolley body and cable supports: galvanized steel
- Fasteners: galvanized steel
- Standard rollers: ball bearing, galvanized with ZZ-sealing
- Temperature range: -20°C to +50°C
- Max. carrying capacity: 20 kg



Cable Trolleys Part No.:	[kg]	Towing Trolleys Part No.:	[kg]	End Clamps Part No.:	[kg]	d <sub>a</sub>	l <sub>w</sub>	l <sub>m</sub>	b <sub>1</sub>	b <sub>2 max</sub>	s <sub>max</sub>
						[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
023345-160x100EX	0.90	023347-160x100EX	1.45	024462-100EX	0.95	125	160	80	115	72	12,5
023345-160x160EX	1.19	023347-160x160EX	1.90	024462-160EX	1.37				175	132	
023345-200x100EX	1.20	023347-200x100EX	1.68	024463-100EX	1.05	160	200	100	115	72	16
023345-200x160EX	1.59	023347-200x160EX	2.14	024463-160EX	1.53				175	132	
023345-250x100EX	1.35	023347-250x100EX	1.83	024464-100EX	1.17	200	250	125	115	72	20
023345-250x160EX	1.88	023347-250x160EX	2.43	024464-160EX	1.71				175	132	
023345-320x100EX	1.77	023347-320x100EX	2.25	024465-100EX	1.33	250	320	160	115	72	25
023345-320x160EX	2.25	023347-320x160EX	2.80	024465-160EX	1.93				175	132	

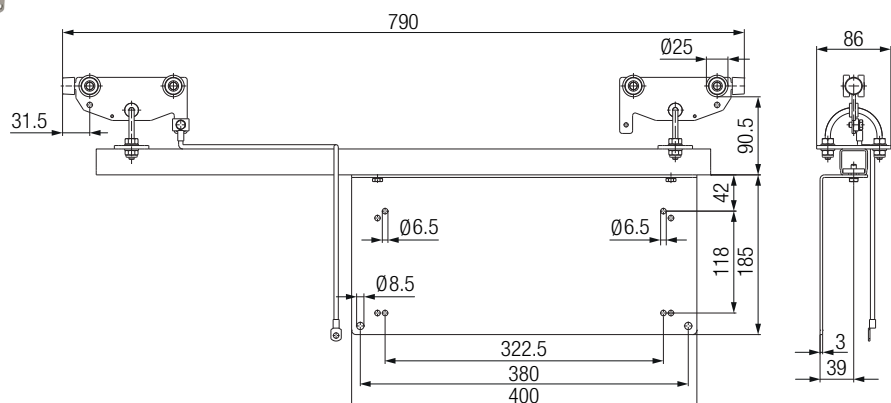
# Control Unit Trolley Program 0230 for ATEX

## Control Unit Trolley Upper Parts Programm 0230EX



### 02-S023-0325

- Trolley body and cable supports: galvanized steel
- Fasteners: galvanized steel
- Standard rollers: ball bearing, galvanized with ZZ-sealing
- Temperature range: -20°C to +50°C
- Max. carrying capacity: 32 kg
- Weight: 4.48 kg



# 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.com/en/  
contact-search](http://www.conductix.com/en/contact-search)**

