Product Overview I-Beam Festoon Systems







Count on it!



On the go! **Program 0350** cable trolley system on a steel mill overhead bridge crane

We move your business: where ever materials are being handled, you will find tailor-made Conductix-Wampfler solutions for the flexible transfer of energy, data, gases, and fluids.

What makes Conductix-Wampfler truly unique is its depth of experience and comprehensive know-how in the development and production of festoon systems. These systems carry flat and round cables for the transfer of electrical energy and data. Hoses are also carried to handle fluids, air, or gases.

Conductix-Wampfler festoon systems are hard at work worldwide in steel mills, ports, zinc plating shops, and compost preparation facilities, to name a few applications. Highly developed technology and standardized, modular designs ensure the optimal operational life of the systems, even in the roughest of environments.

Assemblies are easily done on site and within the shortest amount of time; service and maintenance are quick and easy. Conductix-Wampfler festoon systems save time and minimize costs throughout their operational life.

As a system supplier, Conductix-Wampfler offers its customers comprehensive all-around service. This includes the delivery of all metal components, such as cable trolleys, towing trolleys, and end clamps. We also offer expert consulting to plan your overall system, select and acquire the optimal cables and equipment, choose the right logistical concept, and commission the system on-site.

With our festoon systems, critical energy and data are delivered safely, reliably, and permanently wherever they're needed.

All over the world! Count on it!



Open the gates!

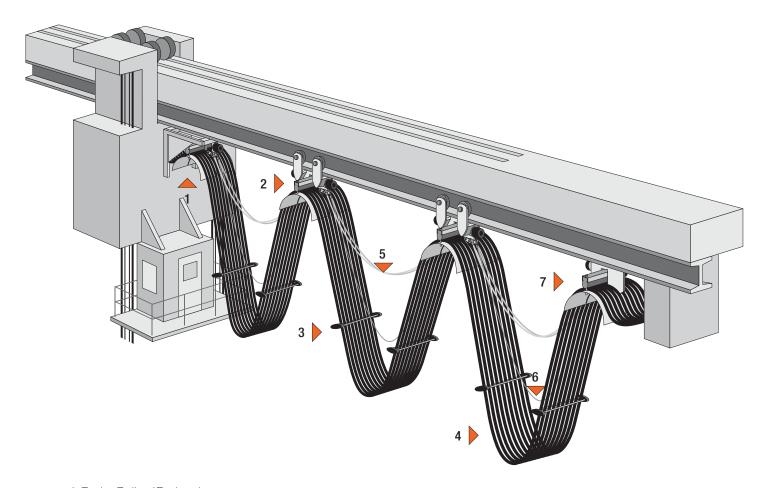
Program 0330 cable trolley system on a lock



Carrying a heavy load! **Program 0380** motorized cable trolley system in combination with **Program 0375** on an STS-container crane.



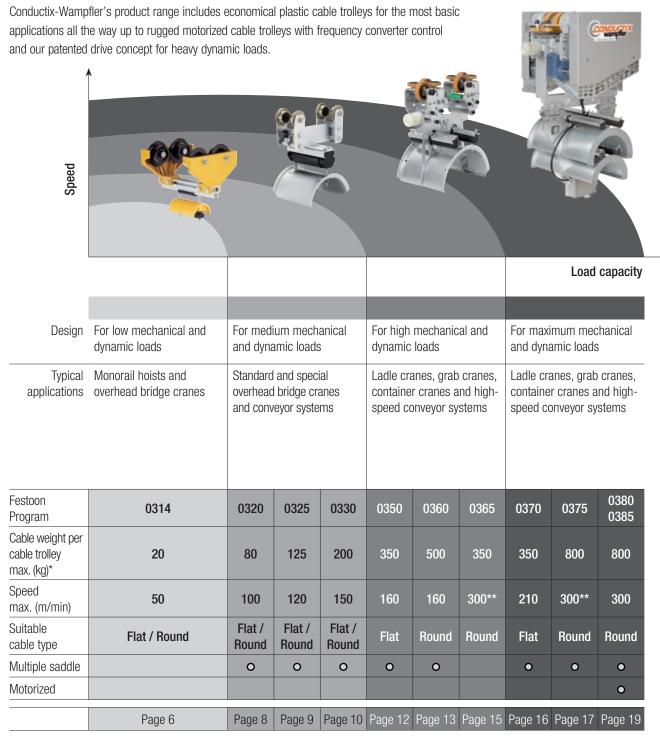
System Layout



- 1. Towing Trolley / Towing clamp
- 2. Cable Trolley
- 3. Cable Organizer
- 4. Cables
- 5. Elastic Damping Device
- 6. Tension Relief Rope
- 7. End Clamp

Complete Overview of Cable Trolleys

Program 0314 – 0385 for I-Beams



 $^{^\}star$ Depends on roller size/roller material $^{\star\star}$ In combination with motorized trolleys

Plastic **flat** or **round cable trolleys** trolleys, center-loaded, for lighter cable packages. Flanged-guided plastic rollers for simple I-beam applications. Two, three, or four rollers.

These cable trolleys generally run on the same I-beam as the electric vehicle.



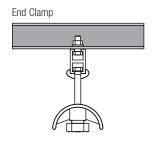
Smooth and wear-resistantplastic rollers, with friction bearings
and stainless steel axle

Adjustable side-shields for quick and easy adjustment to different beam widths.

Simple and quick assembly through the use of patented plastic split nuts

Main applications:

- Electric chain hoists, e.g., on swiveling cranes
- Travelling hoists
- Standard cranes
- Transport systems
- Electric and air supply for machinery



Max. travel speed	50 m/min
Max. load capacity	20 kg*
Main rollers	Diameter: 40 mm design: flanged rollers Material: polyamide
Ambient temperature	-20°C +60°C
Applications	Indoor / outdoor
Acid-proof design	Available by request
Resistance to chemicals	Special designs on request
Curved	Optional
I-beam	Parallel flange / tapered flange

^{*} Depends on roller arrangement









Compact **round** or **flat cable trolleys**, center-loading, made of galvanized steel for medium speeds and cable weights.

Main applications:

- Standard bridge cranes
- Conveyor systems
- Electric hoist units
- Transport systems

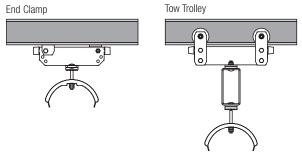


Maintenance-free and permanently lubricated anti-friction bearing rollers

Rubber buffers to minimize shock load

Hot dipped galvanized steel parts for maximum protection against corrosion

One-piece roll formed saddle for maximum bending strength at low weight, available in a variety of different widths and radii



otanuara application data	
Max. travel speed	100 m/min*
Max. load capacity	80 kg*
Main rollers	Diameter: 40 mm design: flanged / non flanged
	Material: steel / Polyurethane, others on request
Ambient temperature	-30°C +80°C*
Applications	Indoor / outdoor
Design	Hot-dipped galvanized steel stainless steel powder-coated painted
Resistance to chemicals	Special designs on request
Curved	Optional
I-beam	Parallel flange / tapered flange

^{*} Depends on roller size/roller material









Compact **round** or **flat cable trolleys**, center-loading, made of hotdipped galvanized steel for medium mechanical and dynamic loads.



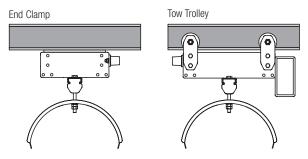
Maintenance-free, permanently lubricated anti-friction bearing rollers for higher loading capacities and speeds

Hot dipped galvanized steel parts for high protection against corrosion

One-piece roll formed saddle for maximum bending strength and minimum weight, available in a variety of different widths and radii

Main applications:

- Bridge cranes
- Conveyor applications
- Electric hoists
- Transport systems



Standard application data

otaniaara appnoation aata	
Max. travel speed	120 m/min*
Max. load capacity	125 kg*
Main rollers	Diameter: 50 mm design: flanged / non flanged
	Material: steel / Polyurethane, others on request
Ambient temperature	-30°C +80°C*
Applications	Indoor / outdoor
Design	Hot-dipped galvanized steel stainless steel powder-coated painted
Resistance to chemicals	Special designs on request
Curved	Optional
I-beam	Parallel flange / tapered flange

* Depends on roller size/roller material









Our fastest and strongest **round** or **flat cable trolleys** for average loads. Made of hot-dipped galvanized steel for average speeds and higher loads with four-point suspension.

Main applications:

- Bridge cranes
- Conveyor systems
- Electric hoists
- Transport systems



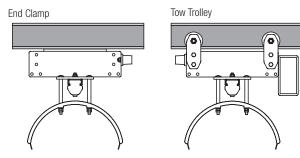
High load capacity main rollers with extra large ball bearing diameters

Maintenance-free permanently lubricated anti-friction bearing rollers for higher loading capacities and speeds

Robust, rectangular rubber buffers to minimize shock load

Hot dipped galvanized steel parts for high protection against corrosion

One-piece roll formed saddle for maximum bending strength and minimum weight, available in a variety of different widths and radii



Standard application data

Max. travel speed	150 m/min*
Max. load capacity	200 kg*
Main rollers	Diameter: 63 mm design: flanged / non flanged
	Material: steel / Polyurethane, others on request
Ambient temperature	-30°C +80°C*
Applications	Indoor / outdoor
Design	Hot-dipped galvanized steel stainless steel powder-coated painted
Resistance to chemicals	Special designs on request
Curved	Optional
I-beam	Parallel flange / tapered flange
	*D ! !! ! / !!

* Depends on roller size/roller material











Cable trolley with single or multi layer side-loading cable supports for **flat cables**.

Suitable for medium mechanical and dynamic loads including traversing operation with lateral forces. Also suitable for short work cycles and high speeds.



- Bridge cranes
- Gantry cranes
- Stacker cranes (RMG's, RTG's)
- Ladle cranes
- Stacker and reclaimers
- Conveyor systems
- Transport systems



Maintenance-free, permanently lubricated high load capacity

main rollers with extra large ball bearings and special seals for the toughest environmental conditions

Optimized running gear

for precise tracking performance

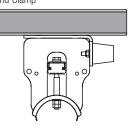
Stable rubber clamp profile for safe cable support even with large cable packages

Stainless steel hardware

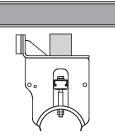
for permanent protection against corrosion

One-piece cable saddle welded to the center plate for high loads









Standard application data

Max. travel speed	160 m/min*
Max. load capacity	350 kg*
Main rollers	Diameter: 50/63/80/100 mm design: flanged / non flanged
	Material: steel / Polyurethane, others on request
Ambient temperature	-30°C +80°C*
Applications	Indoor / outdoor I sea climate
Design	Hot-dipped galvanized steel stainless steel powder-coated painted
Resistance to chemicals	Special designs on request
Curved	Optional
I-beam	Parallel flange / tapered flange

* Depends on roller size/roller material











Cable trolley with single or multi layer side-loading cable supports for **round cables**.

Suitable for high mechanical and dynamic loads including traversing operation with lateral forces. Also suitable for short work cycles and high speeds.

Main applications:

- Scrap and ladle cranes in steel mills
- STS-container cranes
- Heavy-duty scrap cranes in steel mills
- High-speed conveyor systems



Maintenance-free, permanently lubricated high load capacity main rollers with extra large ball

bearings and special seals for the toughest environmental conditions

Stainless steel hardware

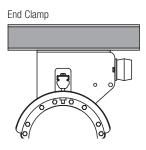
for permanent protection against corrosion

Stable rubber clamp profile for optimal cable support even with large cable packages

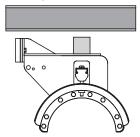
Robust hollow rubber bumpers for maximum energy absorption

of high mechanical and dynamic shock loads — single or double-sided

Roll formed saddle for maximum bending resistance and low weight







• •	
Max. travel speed	160 m/min*
Max. load capacity	500 kg*
Main rollers	Diameter: 50/63/80/100/112/125 mm design: flanged / non flanged
	Material: steel / Polyurethane, others on request
Ambient temperature	-30°C +80°C*
Applications	Indoor / outdoor I sea climate
Design	Hot-dipped galvanized steel stainless steel powder-coated painted
Resistance to chemicals	Special designs on request
Curved	Optional
I-beam	Parallel flange / tapered flange

^{*} Depends on roller size/roller material









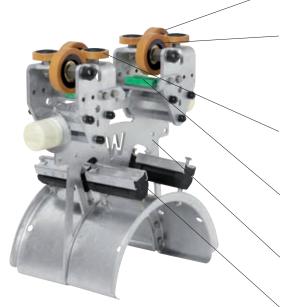


High-speed cable trolley with single layer side-loading cable supports for **round cables**.

Suitable for maximum mechanical and dynamic loads including traversing operation with strong lateral forces. Also suitable for short work cycles and high work speeds.

For high speeds 0365 is used

with a motorized cable trolley.



Patented roller arrangement

for smooth operation

Maintenance-free, permanently lubricated main rollers for maximum load capacity with extra large ball bearings and special seals for the toughest environmental conditions

Web-guided side guide rollers

for low wear and low noise emission even at high speeds

Special polymer glide plate

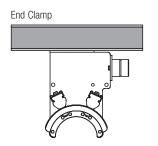
for optimal guidance under maximum mechanical loads

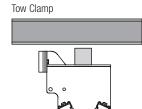
One-piece continuous center plate for maximum stability

Double V-lined cable clamp for optimal cable support

Main applications:

- STS-container cranes
- Ladle cranes
- Heavy-duty grab cranes
- High-speed conveyor systems





Max. travel speed	300 m/min* (in combination with motorized trolleys)
Max. load capacity	350 kg*
Main rollers	Diameter: 112/125 mm design:non flanged
	Material: steel / Polyurethane, others on request
Ambient temperature	-30°C +50°C
Applications	Indoor / outdoor I sea climate
Design	Hot-dipped galvanized steel stainless steel powder-coated painted
Resistance to chemicals	Special designs on request
Curved	Optional
I-beam	Parallel flange / tapered flange

^{*} Depends on roller size/roller material











Rugged cable trolley with multiple layer side-loading cable saddles for **flat cables**.

Suitable for maximum mechanical and dynamic loads including traversing operation with lateral forces. Also suitable for short work cycles and high speeds.



Maintenance-free, permanently lubricated main rollers for high load capacity with extra large ball bearings and special seals for the toughest environmental conditions

Web-guided side rollers for low wear and low noise emission even at high speeds

Robust rubber or cellular buffers for maximum energy absorption of high mechanical and dynamic shock loads

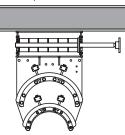
Double V-lined cable clamp for optimal cable support

Compact design – saddle diameters are synchronized with the optimized minimum bending radii of the flat cable packages

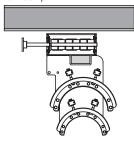
Main applications:

- Casting cranes
- Scrap cranes
- Ladle cranes
- High-speed conveyor systems
- Transport systems









Max. travel speed	210 m/min*
Max. load capacity	350 kg*
Main rollers	Diameter: 125/160 mm design: non flanged
	Material: steel / Polyurethane, others on request
Ambient temperature	-30°C +50°C
Applications	Indoor / outdoor I sea climate
Design	Hot-dipped galvanized steel stainless steel powder-coated painted
Resistance to chemicals	Special designs on request
Curved	Optional
I-beam	Parallel flange / tapered flange

^{*} Depends on roller size/roller material









Cable trolley with multi layer side-loading cable saddles for **round cables**.

Suitable for maximum mechanical and dynamic loads including traversing operation and strong lateral forces.

Suitable for short work cycles and high speeds when combined with powered cable trolleys.

Maintenance-free, permanently lubricated main rollers for high load capacity with extra large ball bearings and special seals for the toughest environmental conditions

Web-guided side rollers for low wear and low noise emission even at high speeds

Individually removable side shields for easy replacement of the rollers

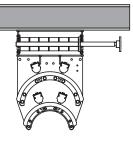
One-piece continuous center plate for maximum stability

Double V-lines cable clamp for optimal cable support of the round cables

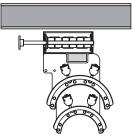
Main applications:

- STS-container cranes
- Scrap and ladle cranes in steel mills
- High-speed conveyor systems
- Transport systems





Tow Clamp



• •	
Max. travel speed	300 m/min* (in combination with motorized trolleys)
Max. load capacity	800 kg*
Main rollers	Diameter: 125/160 mm design: non flanged
	Material: steel / Polyurethane, others on request
Ambient temperature	-30°C +50°C
Applications	Indoor / outdoor I sea climate
Design	Hot-dipped galvanized steel stainless steel powder-coated painted
Resistance to chemicals	Special designs on request
Curved	Optional
I-beam	Parallel flange / tapered flange

^{*} Depends on roller size/roller material









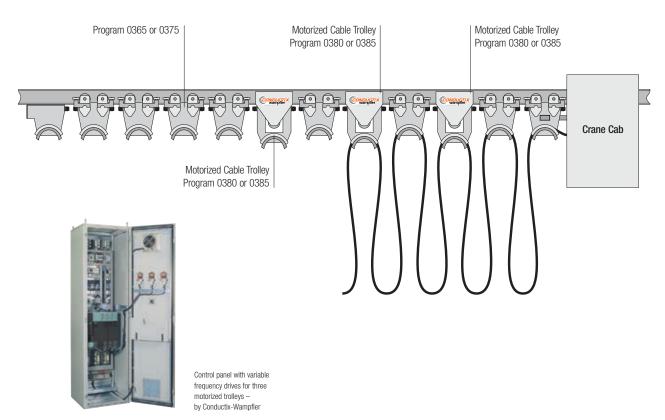
Motorized Festoon-Systems

The speed and acceleration of today's container handling systems often exceed the physical limitations of conventional festoon systems, especially when managing large cable packages.

Combining motorized cable trolleys with non-motorized cable trolleys allows for controlled acceleration and deceleration. Synchronization with the crane cab makes it possible to increase the travel speeds of the entire system enormously. Wear and maintenance work are reduced considerably, which increases the availability of the complete facility and minimizes overall costs.



System sketch





Motorized main cable trolley with magnetic switch for back reach limit stops Program 0380 | 0385

Motorized cable trolley for **round cables** with a patented compact drive (program 0380) or with a gear motor (program 0385).

The entire system consists of motorized cable trolleys, a frequency converter control for optimizing movement, and cable trolleys from programs 0365 and 0375.

Main applications:

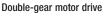
- High-speed STS-container cranes of all Panamax classes
- Special overhead bridge cranes
- Scrap and ladle cranes in steel mills
- High-speed conveyor systems
- Transport systems



Compact power unit

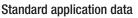
with standard motor, heating element, and thermal overload protection

Heavy duty rubber or cellular buffers to minimize the most severe mechanical and dynamic shock loads



to increase capacity and range

Double V-lined trolley clamp for optimal cable support



Stanuaru application uata	
Max. travel speed	300 m/min*
Max. load capacity	800 kg*
Main rollers	Diameter: 125/160 mm design: non flanged
	Material: steel / Polyurethane, others on request
Ambient temperature	-30°C +50°C
Applications	Indoor / outdoor I sea climate
Design	Hot-dipped galvanized steel stainless steel powder-coated painted
Resistance to chemicals	Special designs on request
I-beam	Parallel flange

^{*} Depends on roller size/roller material













Perfect Interaction

Use of the appropriate Conductix-Wampfler accessories increases the safety, the availability, and the operational life of the entire festoon system. Conductix-Wampfler accessories, selected from a wide range of options, are optimally coordinated with the appropriate cable trolley line and allow for the counterbalancing of unfavorable operating conditions.

Conductix-Wampfler offers the optimal components for every application — long-lasting and with the high quality you've come to expect.



From a wide range of rollers, large and small, Conductix-Wampfler will choose the optimal roller for the application.

Cable clamps

Cable Clamps control the alignment of each cable loop to prevent cables from twisting or overlapping.

Cable clamps greatly increase the operational life of the cables as well as the functional safety of the system.

Tension relief ropes prevent excessive tension on the cables. Suitable for every application with their various materials and designs.



Elastic damping devices optimize the movement of the system at high speeds and protect the cables.











Whether hot-dipped galvanizing, stainless steel, powder-coated or painted steel, Conductix-Wampfler always offers the right material and surface coating for the job.

Service – tailor-made

Complete service competence

The scope and depth of the Conductix-Wampfler range of services is based on the requests and requirements of the customers. From planning to long-term agreements, anything is possible – according to your needs. Plus, the more complex the system layout and the expectations of operational life and operational safety, the more sense it makes to utilize our competent service team. Ask us!

Project Planning

- Determining the application parameters
- Selecting the optimal cable trolley technology and suitable cables – optimized to customer requirements, application parameters and environmental factors

Pre-assembly

- Mounting the cable trolleys on the transport beam
- Laying out and aligning the cables
- Installing the equipment
- Loading and transporting the festoon system to its site of operation

Final assembly & inspection

- Ensuring the correct assembly on site
- Completing the installation, inspection, and commissioning using trained and experienced personnel

Maintenance & service

- Regular maintenance and inspections increase the operational life of the facility, ensuring its long-term availability
- Conductix-Wampfler service agreements: the "complete worry-free package"



The experts of Conductix-Wampfler assist our customers from planning through pre-assembly right up to the on-site installation – anywhere in the world!



Other Products from Conductix-Wampfler

The products described in the 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.



Energy guiding chains

The "Jack of all Trades" when it comes to managing energy and data cables and air and fluid hoses. A wide range of energy guiding chains are available for many industrial applications.



Air hoists and balancers

ENDO Air hoists accurately place delicate loads and continuously vary the speed for precise positioning. They run cool in continuous operations.



Bumpers

Conductix-Wampfler offers a complete range of bumpers for the auto industry, cranes, and heavy machinery. These include rubber, rubber/metal, and cellular types.



Spring balancers and retractors

ENDO spring balancers by Conductix-Wampfler are rugged, reliable high-precision positioning devices that reduce operator fatigue and assist with accurate tool placement.

www.conductix.us

MÉXICO BRAZIL USA / LATIN AMERICA CANADA 10102 F Street 1435 Norjohn Court Calle Treviño 983-C Rua Luiz Pionti, 110 Omaha, NE 68127 Unit 5 Zona Centro Vila Progresso Burlington, ON L7L 0E6 Apodaca, NL México 66600 Itu, São Paulo, Brasil CEP: 13313-534 **Customer Support Customer Support Customer Support Customer Support** Phone +1-800-521-4888 Phone +1-800-667-2487 Phone (+55 11) 4813 7330 Phone (+52 81) 1090 9519 (+52 81) 1090 9025 (+52 81) 1090 9013 Phone +1-402-339-9300 Phone +1-450-565-9900 +1-402-339-9627 (+52 81) 1090 9014 Fax Fax +1-450-951-8591 Fax Fax (+55 11) 4813 7357 info.mx@conductix.com info.us@conductix.com info.ca@conductix.com info.br@conductix.com

Contact us for our Global Sales Offices

latinamerica@conductix.com











KAT0300-0001-US