

# C-Track

## Festoon Systems

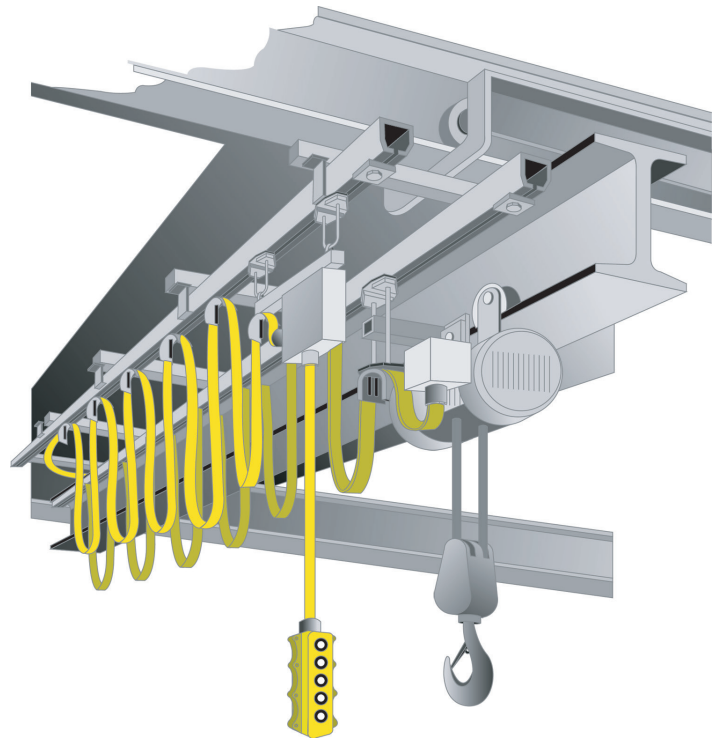
Magnetek's Electromotive Systems Standard C-Track and Heavy-Duty C-Track Festoon Systems efficiently and economically deliver power and control to cranes used in a variety of industrial environments. These versatile systems can be furnished with a myriad of options, offering you maximum flexibility in the design of your festoon system. Components are available from stock, allowing you to meet the needs of today's most demanding customers. In addition, Magnetek offers a full range of round, flat, and specialty cable, designed specifically for festooning applications.

### Features

- Standard or Heavy-Duty C-Track
- Stainless or galvanized steel
- A variety of track support hardware allows you to mount your system at the recommended 5-foot intervals
- Track provided in convenient lengths, connected with a simple coupling assembly
- Single and double trolley saddles for both flat and round cable
- 3" and 5" trolley frames
- Trolleys available in a variety of design configurations including tow and control box trolleys.
- All trolleys have ball bearing wheels and are capable of supporting 150 lbs. each.

Build your own system with our festooning hardware and cable, or let Magnetek completely assemble and wire your system to your specifications. Whatever your requirements, Magnetek can provide the power and control you need in a C-Track Festoon System.

For more information contact Magnetek Material Handling or your local Magnetek Sales Representative.



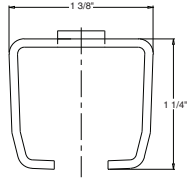
**MAGNETEK**  
MATERIAL HANDLING

**ELECTROMOTIVE SYSTEMS  
TELEMOTIVE  
ENRANGE  
MONDEL**

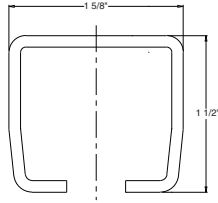
YOUR ONE-STOP-SOURCE FOR MATERIAL HANDLING CONTROL SOLUTIONS

## Track Sections and Cross Arm Brackets

**Standard Duty**



**Heavy-Duty**



Track System	Catalog Number	Weight
Standard Duty	F-CT10 (10' length galvanized)	10 lbs.
	F-CT20 (20' length galvanized)	20 lbs.
	F-CTX (X' length galvanized)*	1.0 lbs./ft.
	F-CT10-SS (10' length stainless steel)	10 lbs.
Heavy-Duty	F-12CT10 (10' length galvanized)	15 lbs.
	F-12CT20 (20' length galvanized)	30 lbs.
	F-12CTX (X' length galvanized)*	1.5 lbs./ft.

\* C-Track sections may be cut to specific lengths to be used as cross arm brackets.

## Joint Assembly

Heavy gauge plated steel coupling to join and align two C-Track sections.



**F-CTJ**

Track System	Catalog Number	Weight
Standard Duty	F-CTJ (gold dichromate finish)	1.0 lbs.
	F-CTJ-SS (stainless steel)	1.0 lbs.
	F-CTJW (weld sleeve)*	1.0 lbs.
Heavy-Duty	F-12CTJ (gold dichromate finish)	1.0 lbs.

\* Weld Sleeve is not plated.

## Tow Arm

18" section of C-Track on a mounting bracket. Unit is to be mounted on moving equipment, which is to be electrified. One required with each tow trolley.



**F-CTA**

Track System	Catalog Number	Weight
Standard & Heavy-Duty	F-CTA (powder coat finish)	3.5 lbs.
Standard Duty	F-CTA-SS (stainless steel)	3.5 lbs.

## Cross Arm Mounting Bracket

Heavy gauge steel for mounting C-Track cross arm brackets to a fixed structure.



Track System	Catalog Number	X-DIM*	Weight
Standard & Heavy-Duty	F-CTC	.50"	0.25 lbs.
	F-CTC-A	0.75"	0.25 lbs.
	F-CTC-B	0.625"	0.25 lbs.
	F-CTC-C	1.00"	0.25 lbs.

\* Flange thickness of mounting structure.

## Hanger Assembly

### Standard Profile

Heavy gauge steel for use when supporting C-Track in areas where extra spacing may be required.



**F-CTHB**

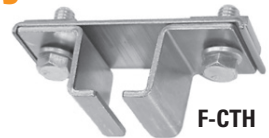
Track System	Catalog Number	Weight
Standard Duty	F-CTHB (gold dichromate finish)	0.4 lbs.

(Support C-Track every 5 feet.)

## Hanger Assembly

### Low Profile

Heavy gauge steel for use when clamping C-Track from C-Track cross arm brackets.



**F-CTH**

Track System	Catalog Number	Weight
Standard Duty	F-CTH (gold dichromate finish)	0.6 lbs.
	F-CTH-SS (stainless steel)	0.6 lbs.
Heavy-Duty	F-12CTH (gold dichromate finish)	1.1 lbs.

(Support C-Track every 5 feet.)

## Hanger Assembly

### C-Hanger

Heavy gauge steel for use when supporting C-Track with single anchor bolt for quick and easy installation.



**F-CTH-C**

Track System	Catalog Number	Weight
Standard Duty	F-CTH-C (galvanized)	0.4 lbs.

(Support C-Track every 5 feet.)

## End Cable Clamp

Nylon molded cable saddle with hardware to secure cable at the storage end of the track. One required for each run of C-Track.

F-CTE



Track System	Catalog Number	Weight
Standard & Heavy-Duty	F-CTE	0.75 lbs.
	F-CTE-2 (double saddle)	1.25 lbs.
	R-CTE (single round saddle)	0.75 lbs.
	R-CTE-2 (double round saddle)	1.25 lbs.
Standard Duty	F-CTE-SS (stainless steel)	0.75 lbs.

## End Stop

For use in closing the active travel end of a C-Track run. One required for each run of C-Track.

F-CTS



Track System	Catalog Number	Weight
Standard & Heavy-Duty	F-CTS	0.24 lbs.
Standard Duty	F-CTS-SS (stainless steel)	0.24 lbs.

## End Cap

Plastic boot fits over each end on C-Track. Two required per each run of C-Track.

F-EC



Track System	Catalog Number	Weight
Standard & Heavy-Duty	F-EC	0.1 lbs.

## Trolleys

Nylon cable saddle and plated steel trolley used to support flat cable. Cables may be stacked in the saddle. Flat and round cable saddle configurations are available. Contact factory. 150 lb. capacity each trolley.



Flat Cable  
Trolley  
F-CC5



Flat Cable Double  
Saddle Trolley  
F-CC5-2

## Tow Trolley

Trolley and saddle assembly used in conjunction with a tow arm assembly. Cables may be stacked in the saddle. Flat and round cable saddle configurations are available.

F-CCT



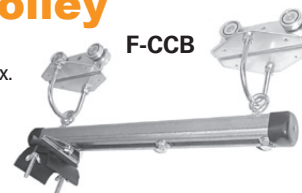
Track System	Catalog Number	Weight
Standard Duty	F-CCT	1.6 lbs.
	F-CCTX1 (corrosion resistant*)	1.6 lbs.
	F-CCT-2 (double saddle)	2.25 lbs.
	R-CCT (single round saddle)	2.0 lbs.
	R-CCT-2 (double round saddle)	2.25 lbs.
Heavy-Duty	F-12CCT (single saddle)	2.1 lbs.
	F-12CCT-2 (double saddle)	2.9 lbs.
	R-12CCT (single round saddle)	2.65 lbs.

\* Corrosion resistant tow trolley includes stainless steel frame and wheels.

## Control Box Trolley

Two trolleys mounted on a C-Track section used to support a control box. Unit includes hardware and cable saddle. Flat and round cable saddle configurations are available.

F-CCB



Track System	Catalog Number	Weight
Standard Duty	F-CCB	5.00 lbs.
	F-CCBX1 (corrosion resistant*)	5.00 lbs.
	F-CCB-2 (double saddle)	5.30 lbs.
	R-CCB (single round saddle)	5.30 lbs.
Heavy-Duty	F-12CCB (single saddle)	5.40 lbs.
	F-12CCB-2 (double saddle)	5.70 lbs.
	R-12CCB (single round saddle)	5.40 lbs.

\* Corrosion resistant trolley includes stainless steel frames and wheels.

Track System	Catalog Number	Weight
Standard Duty-3" Trolley Frame	F-CC3	.7 lbs.
	F-CC3X1 (corrosion resistant*)	.7 lbs.
	R-CC3 (single round saddle)	1 lbs.
Standard Duty-5" Trolley Frame	F-CC5	1 lbs.
	F-CC5X1 (corrosion resistant*)	1 lbs.
	F-CC5-2 (double saddle)	1.3 lbs.
	R-CC5 (single round saddle)	1.3 lbs.
	R-CC5-2 (double round saddle)	1.6 lbs.
Heavy-Duty	F-12CC5 (single saddle)	1.4 lbs.
	F-12CC5-2 (double saddle)	1.7 lbs.
	R-12CC5 (single round saddle)	1.7 lbs.
	R-12CC5-2 (double round saddle)	2 lbs.

\* Corrosion resistant trolley stainless steel frame and wheels.

# Electromotive™ Cable

Magnetek furnishes a variety of Electromotive Systems cable specifically designed for festoon applications. The cable is available in a round or flat design, comes standard in a safety yellow color, and most sizes are available for same day shipment.

## Standard Cable Specifications\* :

- Indoor/Outdoor festoon flat cable and round pendant control cable
- 105° C (221° F) 600 volt A.C., 250 volt D.C.
- Conductors are annealed copper
- Each conductor has color coded jacket
- Jacket rating -40° C (-40° F) to 105° C (221° F).\*\*
- Resistant to UV, ozone, water, oil and weather
- 4, 8, or 12 conductor flat cable
- 8, 12, 16 or 24 conductor round pendant control cable
- #2 Awg through #16 flat cable
- #16 Awg round pendant control cable

\* Special cables are also available—contact the factory for more information.

Festoon Cable		Cable Grips		
Catalog Number	AWG/Conductors	Catalog Number	For Cables	Thread Type
F-2/4	2 Awg-4 Conductors	F-4CG1	(1) F-6/4 or (2) F-12/8	1.50" NPT
F-4/4	4 Awg-4 Conductors	F-4CG2	(1) F-10/4	1.00" NPT
F-6/4	6 Awg-4 Conductors	F-4CG3	(1) F-12/4 or (1) F-14/4	1.00" NPT
F-8/4	8 Awg-4 Conductors	F-4CG4	(1) F-2/4	2.00" NPT
F-10/4	10 Awg-4 Conductors	F-4CG11	(1) F-12/8	1.50" NPT
F-12/4	12 Awg-4 Conductors	F-4CG3	(1) F-12/4 or (1) F-14/4	1.00" NPT
F-14/4	14 Awg-4 Conductors	F-4/8CG2	(1) F-12/4 or (1) F-14/4 & (1) F-14/8 or (1) F-16/8	1.25" NPT
F-12/8	12 Awg-8 Conductors	F-8CG1	(1) F-14/8 or (1) F-16/8	1.25" NPT
F-14/8	14 Awg-8 Conductors	F-8CG2	(2) F-14/8 or (2) F-16/8 or (1) F-8/4	1.25" NPT
F-16/8	16 Awg-8 Conductors	F-12CG1	(1) F-14/12 or (1) F-16/12	2.00" NPT
F-14/12	14 Awg-12 Conductors	F-12CG2	(2) F-14/12 or (2) F-16/12 or (1) F-4/4	2.00" NPT
F-16/12	16 Awg-12 Conductors	F-12CG3	(3) F-14/12 or (3) F-16/12	2.00" NPT

Cable available in specific lengths or in full reels of 500 or 1000 feet.

Cable available in black color—Add Suffix "-B" to the catalog number.

\*\*Magnetek's flat cable is rated -40°C to 105°C. Round cable is rated -10°C to 90°C. However, they are not recommended for severe flexing or impact at temperatures below -10°C.

For severe flexing applications below -10°C, contact the factory for more information

Pendant		Cable Grips		
Catalog Number	AWG/Conductors	Catalog Number	Cable Diameter	Thread Type
	<b>Strain Relief</b>			
R-16/8/SR	16 Awg-8 Conductors	R-CG0	0.236" to 0.472" Inches Cable	.050" NPT
R-16/12/SR	16 Awg-12 Conductors	R-CG1	0.394" to 0.709" Inches Cable	0.75" NPT
R-16/16/SR	16 Awg-16 Conductors	R-CG2	0.591" to 1.000" Inches Cable	1.00" NPT
R-16/24/SR	16 Awg-24 Conductors			
	<b>Non Strain Relief</b>			
R-16/8	16 Awg-8 Conductors			
R-16/12	16 Awg-12 Conductors			
R-16/16	16 Awg-16 Conductors			
R-16/24	16 Awg-24 Conductors			
R-16/30	16 Awg-30 Conductors			

**Special flat and round cables are available. Contact the factory for additional information.**



**MAGNETEK**  
MATERIAL HANDLING

**ELECTROMOTIVE SYSTEMS  
TELEMOTIVE  
ENRANGE  
MONDEL**

Distributed by Ergonomic Partners ♦ Sales@ErgonomicPartners.com ♦ p:(314) 884-8884 ♦ www.ErgonomicPartners.com

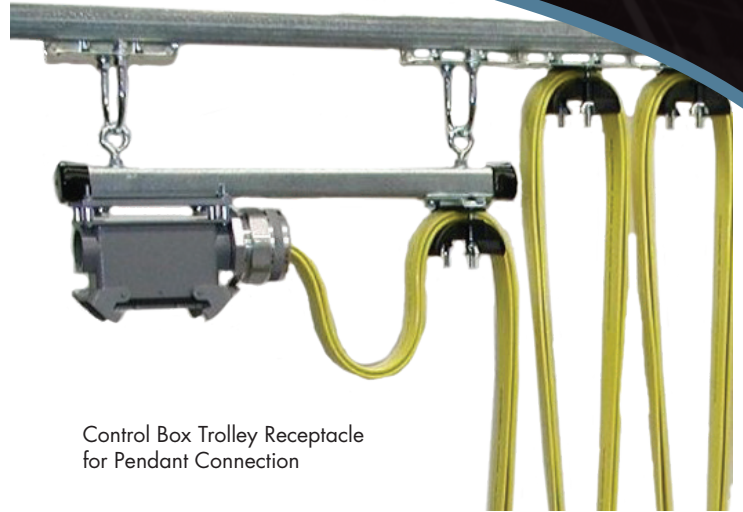
# PLUG & PLAY

## FESTOON SYSTEMS

### Reduce festoon installation time with Magnetek's Electromotive Systems Industrial Duty Plug and Receptacles for junction box termination points.

Our system comes with rugged die cast aluminum housings with dual locking elements to ensure a secure connection. A standard 16-Pin plug and receptacle is offered for applications from 16–60 Amps and for wire sizes up to 14 AWG. The plugs and receptacles are UL recognized and CSA approved. Numerous options are available to meet your needs.

Magnetek can provide "Plug and Play" hardware for almost every festoon system. Plug and Play hardware, along with our pre-assembly options, can significantly reduce installation costs. Please consult the factory with your application requirements.



Control Box Trolley Receptacle  
for Pendant Connection

### PLUGS

#### Side entry plug 16 pin male

PS-8C



#### Top entry plug 16 pin male

PT-8C

### RECEPTACLES

#### Bulkhead connector 16 pin female

RB



#### In-line receptacle 16 pin female

RI-8C-2



**MAGNETEK**  
MATERIAL HANDLING

**ELECTROMOTIVE SYSTEMS**

[www.ErgonomicPartners.com](http://www.ErgonomicPartners.com) | [Sales@ErgonomicPartners.com](mailto:Sales@ErgonomicPartners.com)

N49 W13650 Campbell Drive  
Menomonee Falls, WI 53051

MH186\_Plug and Play  
© Magnetek, Inc. 2014

YOUR ONE-STOP SOURCE FOR MATERIAL HANDLING CONTROL SOLUTIONS



# Heavy-Duty Aluminum Festoon Systems

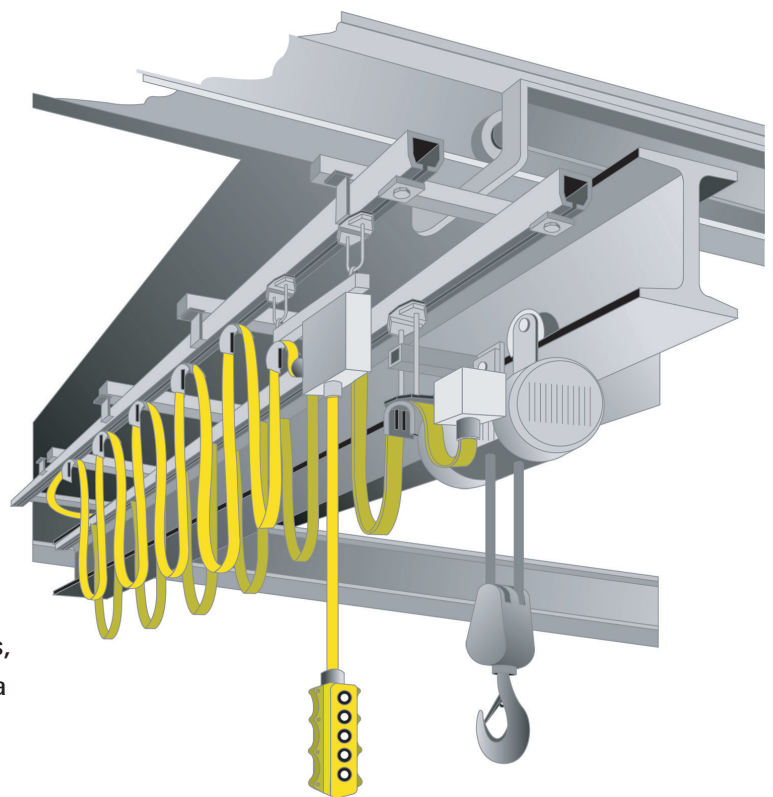
Magnetek's Electromotive Systems Heavy-Duty Aluminum Festoon Systems, designed for environments requiring a more rugged track, efficiently and economically deliver power and control to cranes or monorails where festooning is applicable. These versatile systems can be furnished with a myriad of options, offering you maximum flexibility in the design of your festoon system. Components are also available from stock, allowing you to meet the needs of today's most demanding customers. In addition, Magnetek offers a full range of round, flat, and specialty cable, designed specifically for festooning applications.

## Features

- 3" and 5" trolley frames
- Track may be formed to a minimum of a 36" radius
- Extruded aluminum track construction, in convenient lengths that simply bolt together
- Heavy-Duty coupling assembly
- Track may be formed to match the radii of curved material handling systems
- Tracks supported every 10 feet and the rounded portion serves as an extremely smooth runway for the cable trolleys
- Single and double flat and round cable trolley saddles available
- Trolleys are equipped with ball bearing wheels capable of traveling at speeds of 250 feet per minute. Each trolley can be supplied with anti-lift up rollers and is capable of supporting 150 lbs. of cable.

Build your own system with our festooning hardware and cable, or let Magnetek completely assemble and wire your system to your specifications. Whatever your requirements, Magnetek can provide the power and control you need in a Heavy-Duty Aluminum Festoon System.

For more information contact Magnetek Material Handling or your local Magnetek Sales Representative.



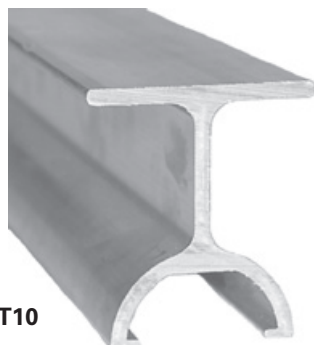
**MAGNETEK**  
MATERIAL HANDLING

**ELECTROMOTIVE SYSTEMS  
TELEMOTIVE  
ENRANGE  
MONDEL**

YOUR ONE-STOP-SOURCE FOR MATERIAL HANDLING CONTROL SOLUTIONS

## Heavy-Duty Aluminum Track

Heavy-duty track sections are manufactured of an aluminum extrusion, provided in 10' and 20' lengths. Sections may be formed to a minimum of 36" radius. Consult factory for details on formed sections. Sections may also be provided in cut-to-order lengths.



F-HT10

Track System	Catalog Number	Weight
Heavy-Duty	F-HT10 (10' length)	10 lbs.
	F-HT20 (20' length)	20 lbs.
	F-HTX ("X" length)*	1.0 lb./ft.

\*Track sections may be cut to specific length (in one foot increments)

## Tow Arm/Cable Saddle Assembly

Nylon cable saddle attached to a steel track to mount on moving equipment. Cable saddles are available for flat and round cable configurations.



F-HTA

Track System	Catalog Number	Weight
Heavy-Duty	F-HTA (powder coat finish)	3.25 lbs.
	F-HTA-SS (stainless steel)	3.25 lbs.
	F-HTA-2 (double saddle)	4.00 lbs.
	R-HTA (single round saddle)	3.50 lbs.
	R-HTA-2 (double round saddle)	4.00 lbs.

## Joint Assembly

Coupling set consists of two parts. The top portion is used to bolt sections of heavy-duty track together. Bolts are inserted through the pre-punched holes in the track sections and the top coupling plate, then securely fastened on the top. The lower portion is installed through the curved section, and tightened with set screws.



F-HTJ

Track System	Catalog Number	Weight
Heavy-Duty	F-HTJ (gold dichromate finish)	1.5 lbs.

## Hanger Assembly

Heavy gauge steel used to mount heavy-duty sections supporting channel or bracket.



F-HTH

Track System	Catalog Number	Weight
Heavy-Duty	F-HTH (gold dichromate finish)	0.8 lbs.

## End Cable Clamp

Nylon cable saddle with hardware used to secure cable at the storage end of the track. One required for each run of heavy-duty track. Cable saddles are available for flat and round cable configurations.

**F-HTE**



Track System	Catalog Number	Weight
Heavy-Duty	F-HTE	0.9 lbs.
	F-HTE-SS (stainless steel)	0.9 lbs.
	F-HTE-2 (double saddle)	1.7 lbs.
	R-HTE (single round saddle)	1.0 lbs.
	R-HTE-2 (double round saddle)	1.25 lbs.

## End Stop

For use in closing the active travel end of a heavy-duty track run. One required for each run of heavy-duty track.

**F-HTS**

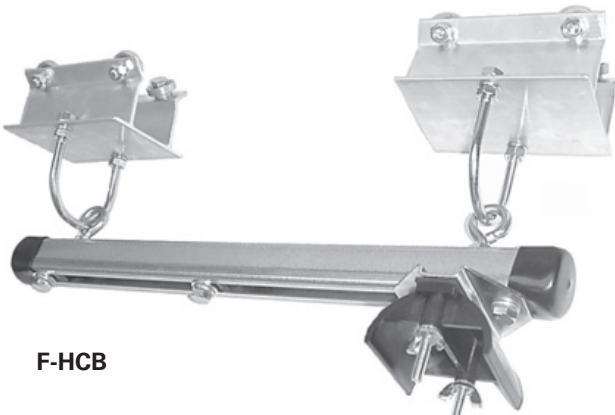


Track System	Catalog Number	Weight
Heavy-Duty	F-HTS (gold dichromate finish)	0.6 lbs.
	F-HTS-SS (stainless steel)	0.6 lbs.

## Control Box Trolley

Two heavy-duty trolleys mounted to a C-Track section used to support a control box. Equipped with hardware and cable saddle. Flat and round cable saddle configurations are available.

**F-HCB**



Track System	Catalog Number	Weight
Heavy-Duty	F-HCB	5.20 lbs.
	F-HCBX1 (corrosion resistant*)	5.20 lbs.
	F-HCB-2 (double saddle)	5.50 lbs.
	R-HCB (single round saddle)	5.20 lbs.
	R-HCB-2 (double round saddle)	5.50 lbs.

\* Corrosion resistant trolley includes stainless steel parts and wheels. Steel parts are epoxy coated.

## Trolley

Nylon cable saddle and aluminum trolley used to support flat cable. Cables may be stacked in the saddle. Flat and round cable saddle configurations are available. 150 lb. capacity each trolley.

**Heavy-Duty  
Trolley With  
Anti-Lift Wheels**

**F-HC5A**



**Heavy-Duty  
Trolley**

**F-HC5**



Track System	Catalog Number	Weight
3" Trolley Frame	F-HC3	0.85 lbs.
5" Trolley Frame	F-HC5	1.25 lbs.
	F-HC5A (anti-lift rollers)	1.25 lbs.
	F-HC5X1 (corrosion resistant*)	1.25 lbs.
	F-HC5-2 (double saddle)	2.25 lbs.
	R-HC5 (single round saddle)	1.75 lbs.
	R-HC5-2 (double round saddle)	2.25 lbs.

\* Corrosion resistant trolley includes stainless steel parts and wheels. Steel parts are epoxy coated.



# Electromotive™ Cable

Magnetek furnishes a variety of Electromotive Systems cable specifically designed for festoon applications. The cable is available in a round or flat design, comes standard in a safety yellow color, and most sizes are available for same day shipment.

## Standard Cable Specifications\*:

- Indoor/Outdoor festoon flat cable and round pendant control cable
- 105° C (221° F) 600 volt A.C., 250 volt D.C.
- Conductors are annealed copper
- Each conductor has color coded jacket
- Jacket rating -40° C (-40° F) to 105° C (221° F).\*\*
- Resistant to UV, ozone, water, oil and weather
- 4, 8, or 12 conductor flat cable
- 8, 12, 16 or 24 conductor round pendant control cable
- #2 Awg through #16 flat cable
- #16 Awg round pendant control cable

\* Special cables are also available—contact the factory for more information.

Festoon Cable		Cable Grips		
Catalog Number	AWG/Conductors	Catalog Number	For Cables	Thread Type
F-2/4	2 Awg-4 Conductors	F-4CG1	(1) F-6/4 or (2) F-12/8	1.50" NPT
F-4/4	4 Awg-4 Conductors	F-4CG2	(1) F-10/4	1.00" NPT
F-6/4	6 Awg-4 Conductors	F-4CG3	(1) F-12/4 or (1) F-14/4	1.00" NPT
F-8/4	8 Awg-4 Conductors	F-4CG4	(1) F-2/4	2.00" NPT
F-10/4	10 Awg-4 Conductors	F-4CG11	(1) F-12/8	1.50" NPT
F-12/4	12 Awg-4 Conductors	F-4CG3	(1) F-12/4 or (1) F-14/4	1.00" NPT
F-14/4	14 Awg-4 Conductors	F-4/8CG2	(1) F-12/4 or (1) F-14/4 & (1) F-14/8 or (1) F-16/8	1.25" NPT
F-12/8	12 Awg-8 Conductors	F-8CG1	(1) F-14/8 or (1) F-16/8	1.25" NPT
F-14/8	14 Awg-8 Conductors	F-8CG2	(2) F-14/8 or (2) F-16/8 or (1) F-8/4	1.25" NPT
F-16/8	16 Awg-8 Conductors	F-12CG1	(1) F-14/12 or (1) F-16/12	2.00" NPT
F-14/12	14 Awg-12 Conductors	F-12CG2	(2) F-14/12 or (2) F-16/12 or (1) F-4/4	2.00" NPT
F-16/12	16 Awg-12 Conductors	F-12CG3	(3) F-14/12 or (3) F-16/12	2.00" NPT

Cable available in specific lengths or in full reels of 500 or 1000 feet.

Cable available in black color—Add Suffix "-B" to the catalog number.

\*\*Magnetek's flat cable is rated -40°C to 105°C. Round cable is rated -10°C to 90°C. However, they are not recommended for severe flexing or impact at temperatures below -10°C.

For severe flexing applications below -10°C, contact the factory for more information

Pendant		Cable Grips		
Catalog Number	AWG/Conductors	Catalog Number	Cable Diameter	Thread Type
	<b>Strain Relief</b>			
R-16/SR	16 Awg-8 Conductors	R-CG0	0.236" to 0.472" Inches Cable	.050" NPT
R-16/SR	16 Awg-12 Conductors	R-CG1	0.394" to 0.709" Inches Cable	0.75" NPT
R-16/SR	16 Awg-16 Conductors	R-CG2	0.591" to 1.000" Inches Cable	1.00" NPT
R-16/SR	16 Awg-24 Conductors			
	<b>Non Strain Relief</b>			
R-16/8	16 Awg-8 Conductors			
R-16/12	16 Awg-12 Conductors			
R-16/16	16 Awg-16 Conductors			
R-16/24	16 Awg-24 Conductors			
R-16/30	16 Awg-30 Conductors			

**Special flat and round cables are available. Contact the factory for additional information.**



**MAGNETEK**  
MATERIAL HANDLING

**ELECTROMOTIVE SYSTEMS  
TELEMOTIVE  
ENRANGE  
MONDEL**

Distributed by Ergonomic Partners ♦ Sales@ErgonomicPartners.com ♦ p:(314) 884-8884 ♦ www.ErgonomicPartners.com

# Heavy-Duty I-Beam Festoon Systems

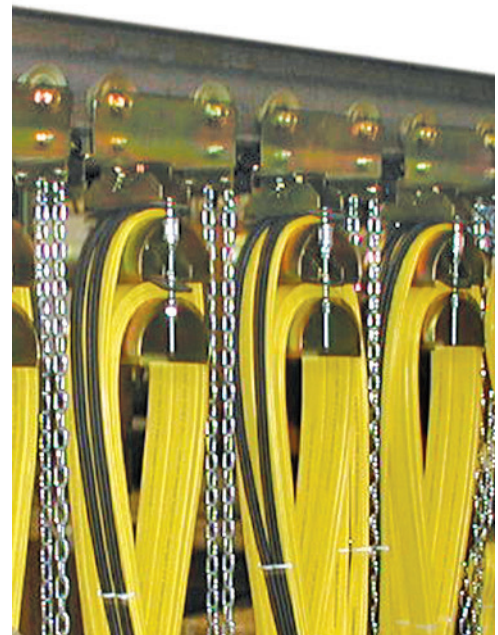
Magnetek's Electromotive Systems Heavy-Duty I-Beam Festoon Systems efficiently and economically deliver power and control to cranes used in a variety of industrial environments. They are perfectly suited for overhead, gantry, container, mill-duty or any cranes operating in harsh, heavy-duty environments.

## Features

- I-Beam trolleys are available in multiple design configurations, are zinc plated, and feature ball bearing, lifetime lubricated wheels
- Designed to festoon flat or round cables using 3", 4" or 6" American Standard I-Beam
- Hardware designed for higher duty applications with trolleys capable of supporting loads up to 250 lbs.
- Stainless steel trolleys available on special order basis
- Single and double flat cable trolley saddles available
- Trolley bumpers
- Returnable festoon shipping stands available for pre-assembled systems—eliminates expense of custom fabricated shipping stands
- Full range of cable available

This system can be purchased from Magnetek pre-wired and assembled to your specifications. Whatever your requirements, Magnetek can provide the power and control you need in a Heavy-Duty I-Beam Festoon System.

For more information contact Magnetek Material Handling or your local Magnetek Sales Representative.



*Heavy-Duty I-Beam Festoon*



**MAGNETEK**  
MATERIAL HANDLING

**ELECTROMOTIVE SYSTEMS  
TELEMOTIVE  
ENRANGE  
MONDEL**

YOUR ONE-STOP-SOURCE FOR MATERIAL HANDLING CONTROL SOLUTIONS

Distributed by Ergonomic Partners ♦ Sales@ErgonomicPartners.com ♦ p:(314) 884-8884 ♦ www.ErgonomicPartners.com

## Tow Arm

### 3", 4" or 6" I-Beam\*

Cable saddle attached to a heavy gauge steel track to mount on moving equipment which is to be electrified. Tow arm assembly may be used alone or in conjunction with tow trolleys.



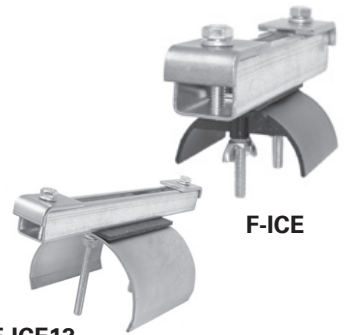
F-ICTA

Track System	Catalog Number	Saddle Radius	Weight
3" or 4" I-Beam	F-ICTA (powder coat finish)	1.50"	3.25 lbs.
	F-ICTA-SS (stainless steel)	1.50"	3.25 lbs.
	F-ICTA-2 (double saddle)	1.50"	3.55 lbs.
	R-ICTA (round single saddle)	—	3.25 lbs.
6" I-Beam	F-ICTA13 (single saddle)	3.00"	6.25 lbs.
	F-ICTA13-2 (double saddle)	3.00"	8.25 lbs.

## End Clamp

### 3", 4" or 6" I-Beam\*

Cable saddle with hardware used to secure cable at storage end of the track. One required for each run of I-Beam systems. Flat and round cable saddle configurations are available.



F-ICE13

Track System	Catalog Number	Saddle Radius	Weight
3" or 4" I-Beam	F-ICE	1.50"	3.50 lbs.
	F-ICE-SS (stainless steel)	1.50"	3.50 lbs.
	F-ICE-2 (double saddle)	1.50"	3.80 lbs.
	R-ICE (single round saddle)	—	3.50 lbs.
6" I-Beam	F-ICE13	3.00"	6.50 lbs.
	F-ICE13-2 (double saddle)	3.00"	8.50 lbs.

## Tow Trolley

### 3" or 4" I-Beam\*

Trolley and saddle assembly. Used in conjunction with a tow arm assembly. Cables may be stacked in the saddle. Flat and round cable saddle configurations are available.



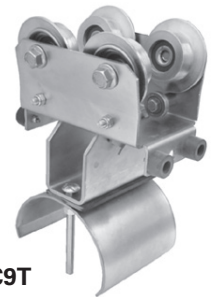
F-IC3T

Track System	Catalog Number	Weight
3" or 4" I-Beam	F-IC3T	4.75 lbs.
	F-IC3T-2 (double saddle)	5.50 lbs.
	F-IC3T-SS (stainless steel)	4.75 lbs.

## Tow Trolley

### 6" I-Beam\*

Trolley and saddle assembly. Used in conjunction with a tow arm assembly. Cables may be stacked in the saddle. Double saddle configurations are available.



F-IC9T

Track System	Catalog Number	Weight
6" I-Beam	F-IC9T	13.00 lbs.
	F-IC9T-2 (double saddle)	15.50 lbs.
	F-IC13T (single saddle)	20.00 lbs.
	F-IC13T-2 (double saddle)	22.50 lbs.

## Control Box Trolley

### 3" or 4" I-Beam\*

Plated steel trolley without a cable saddle, used to support a F-JB1 or F-JB2 junction box.



F-IC3B

Track System	Catalog Number	Weight
3" or 4" I-Beam	F-IC3B	3.5 lbs.
	F-IC3B-SS (stainless steel)	3.5 lbs.

## Trolley

### 3" or 4" I-Beam\*

Nylon cable saddle and plated steel trolley used to support flat cable. Cables may be stacked in the saddle. Flat and round cable saddle configurations are available. 250 lbs. capacity each trolley.



F-IC3

Track System	Catalog Number	Weight
3" or 4" I-Beam	F-IC3	3.50 lbs.
	F-IC3-SS (stainless steel)	3.50 lbs.
	F-IC3-B (with bumpers)	4.10 lbs.
	F-IC3-2 (double saddle)	3.85 lbs.
	R-IC3 (single round saddle)	3.85 lbs.

\*Denotes American Standard I-Beam sections.

## Trolley Severe Duty

### 6" I-Beam\*

Saddle and plated steel trolley to support flat cable. Cables may be stacked in the saddle. Double saddle configurations are available. Trolleys also feature anti-lift rollers. 250 pound capacity each trolley.

Track System	Catalog Number	Weight
9" Frame	F-IC9*	15.50 lbs.
	F-IC9-2 (double saddle)	15.50 lbs.
13" Frame	F-IC13*	19.00 lbs.
	F-IC13-2 (double saddle)	22.00 lbs.

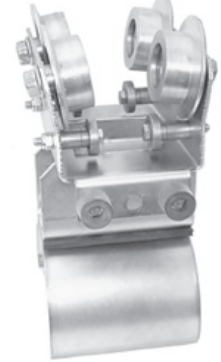
\* Re-greaseable wheels with grease fittings available. Add suffix "-G" to the catalog number.

I-Beam Trolley  
9" Length



F-IC9

I-Beam Trolley  
13" Length



F-IC13

## Junction Boxes/Terminal Strips

For use with C-Track, Heavy-Duty Aluminum, 3", 4" or 6" I-Beam systems. Steel junction box for termination of cables. Also requires terminal strip and cable clamps, order separately.

Track System	Catalog Number	Dimensions	Weight
All Systems	F-JB1	6" X 8" X 4"	5.00 lbs.
	F-JB2	8" X 10" X 4"	7.50 lbs.
	F-JB3	10" X 12" X 4"	8.00 lbs.

Track System	Catalog Number		Weight
All Systems	F-TS1	8 Pole	0.45 lbs.
	F-TS2	12 Pole	0.45 lbs.

F-TS1—Terminal strip 8-Pole for F-JB1 (1 terminal strip per box)

F-TS2—Terminal strip 12-Pole for F-JB2 & F-JB3  
(Up to 2 strips per F-JB2 Junction Box and  
3 strips per F-JB3 Junction Box)

## Festoon Shipping Stands

Now you can eliminate the expense of custom fabricated festoon shipping stands when ordering assembled festoon systems. We now offer our customers a returnable festoon shipping stand that significantly reduces system costs. Our festoon shipping stands have been designed in a standard size that's adjustable to accommodate up to three 10-foot I-Beams so customers can hang systems with longer storage lengths and more trolleys. Plus, our stands have been designed to be collapsible to minimize the return freight cost for our customers.



Disassembled Festoon Shipping Stand



Assembled Festoon Shipping Stand

# Electromotive™ Cable

Magnetek furnishes a variety of Electromotive Systems cable specifically designed for festoon applications. The cable is available in a round or flat design, comes standard in a safety yellow color, and most sizes are available for same day shipment.

## Standard Cable Specifications\*:

- Indoor/Outdoor festoon flat cable and round pendant control cable
- 105° C (221° F) 600 volt A.C., 250 volt D.C.
- Conductors are annealed copper
- Each conductor has color coded jacket
- Jacket rating -40° C (-40° F) to 105° C (221° F).\*\*
- Resistant to UV, ozone, water, oil and weather
- 4, 8, or 12 conductor flat cable
- 8, 12, 16 or 24 conductor round pendant control cable
- #2 Awg through #16 flat cable
- #16 Awg round pendant control cable

\* Special cables are also available—contact the factory for more information.

Festoon Cable		Cable Grips		
Catalog Number	AWG/Conductors	Catalog Number	For Cables	Thread Type
F-2/4	2 Awg-4 Conductors	F-4CG1	(1) F-6/4 or (2) F-12/8	1.50" NPT
F-4/4	4 Awg-4 Conductors	F-4CG2	(1) F-10/4	1.00" NPT
F-6/4	6 Awg-4 Conductors	F-4CG3	(1) F-12/4 or (1) F-14/4	1.00" NPT
F-8/4	8 Awg-4 Conductors	F-4CG4	(1) F-2/4	2.00" NPT
F-10/4	10 Awg-4 Conductors	F-4CG11	(1) F-12/8	1.50" NPT
F-12/4	12 Awg-4 Conductors	F-4CG3	(1) F-12/4 or (1) F-14/4	1.00" NPT
F-14/4	14 Awg-4 Conductors	F-4/8CG2	(1) F-12/4 or (1) F-14/4 & (1) F-14/8 or (1) F-16/8	1.25" NPT
F-12/8	12 Awg-8 Conductors	F-8CG1	(1) F-14/8 or (1) F-16/8	1.25" NPT
F-14/8	14 Awg-8 Conductors	F-8CG2	(2) F-14/8 or (2) F-16/8 or (1) F-8/4	1.25" NPT
F-16/8	16 Awg-8 Conductors	F-12CG1	(1) F-14/12 or (1) F-16/12	2.00" NPT
F-14/12	14 Awg-12 Conductors	F-12CG2	(2) F-14/12 or (2) F-16/12 or (1) F-4/4	2.00" NPT
F-16/12	16 Awg-12 Conductors	F-12CG3	(3) F-14/12 or (3) F-16/12	2.00" NPT

Cable available in specific lengths or in full reels of 500 or 1000 feet.

Cable available in black color—Add Suffix “-B” to the catalog number.

\*\*Magnetek's flat cable is rated -40°C to 105°C. Round cable is rated -10°C to 90°C. However, they are not recommended for severe flexing or impact at temperatures below -10°C.

For severe flexing applications below -10°C, contact the factory for more information

Pendant		Cable Grips		
Catalog Number	AWG/Conductors	Catalog Number	Cable Diameter	Thread Type
	<b>Strain Relief</b>			
R-16/8SR	16 Awg-8 Conductors	R-CG0	0.236" to 0.472" Inches Cable	.050" NPT
R-16/12SR	16 Awg-12 Conductors	R-CG1	0.394" to 0.709" Inches Cable	0.75" NPT
R-16/16SR	16 Awg-16 Conductors	R-CG2	0.591" to 1.000" Inches Cable	1.00" NPT
R-16/24SR	16 Awg-24 Conductors			
	<b>Non Strain Relief</b>			
R-16/8	16 Awg-8 Conductors			
R-16/12	16 Awg-12 Conductors			
R-16/16	16 Awg-16 Conductors			
R-16/24	16 Awg-24 Conductors			
R-16/30	16 Awg-30 Conductors			

**Special flat and round cables are available. Contact the factory for additional information.**



**MAGNETEK**  
MATERIAL HANDLING

**ELECTROMOTIVE SYSTEMS  
TELEMOTIVE  
ENRANGE  
MONDEL**

Distributed by Ergonomic Partners ♦ Sales@ErgonomicPartners.com ♦ p:(314) 884-8884 ♦ www.ErgonomicPartners.com

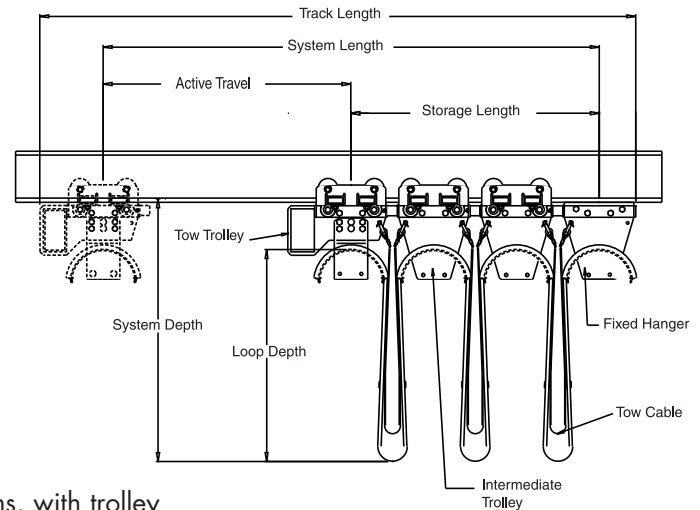


# Mill Duty I-Beam Festoon Systems

Magnetek's Electromotive Systems Mill Duty I-Beam Festoon Systems efficiently and economically deliver power and control to cranes used in a variety of severe industrial environments.

## Features

- Capacity of flanged main wheel trolley:
  - 800 lbs. @ 400 ft./min.
  - 600 lbs. @ 600 ft./min.
- Trolleys manufactured from low carbon steel and are zinc plated with gold dichromate finish
- Bar clamps are available to secure cable
- Capacity of non-flanged trolley wheel (with side guide wheels)
  - 1,000 lbs. @ 400 ft./min.
  - 800 lbs. @ 600 ft./min.
- Trolleys are available with galvanized finish
- Trolleys are available in stainless steel



Trolleys are available for installation on 6" through 12" I-Beams, with trolley wheels from 2.25" to 4" in diameter. Whatever your requirements, Magnetek can provide the power and control you need in a Mill Duty I-Beam Festoon System.

Track Length	Total length of festoon track or I-Beam
System Length	Total extended length of festoon system. Centerline of end cable clamp to centerline of tow trolley/tow bar.
Storage Length	Distance from centerline of tow trolley to centerline of end cable clamp when festooned equipment is parked in the starting position. Storage distance may become exceedingly long on longer festoon systems but can be shortened by increasing the loop depth of the cable.
Active Travel	Actual tow trolley travel distance of festooned equipment from the starting position to the final position along the track length.
System Depth	The distance from the running surface of the track or I-Beam to the lower most point of the cable loop.
Loop Depth	The distance from the trolley saddle surface to the lower most point of the cable loop.
Tow Trolley	Outer trolley that provides an area to interface with the tow bar that is mounted on the traveling portion of the festooned equipment.
Intermediate Trolley	Trolleys are located between the tow trolley and the end cable clamp providing cable support as system expands.
Fixed Hanger/End Cable Clamp	Secures cable at the beginning of the festoon system, reducing cable stress at the termination points.
Tow Cable/Chain	Cable or chain secured between each trolley to reduce cable stress along the festoon system. Primarily used in applications with heavy cable loads or high travel speeds.

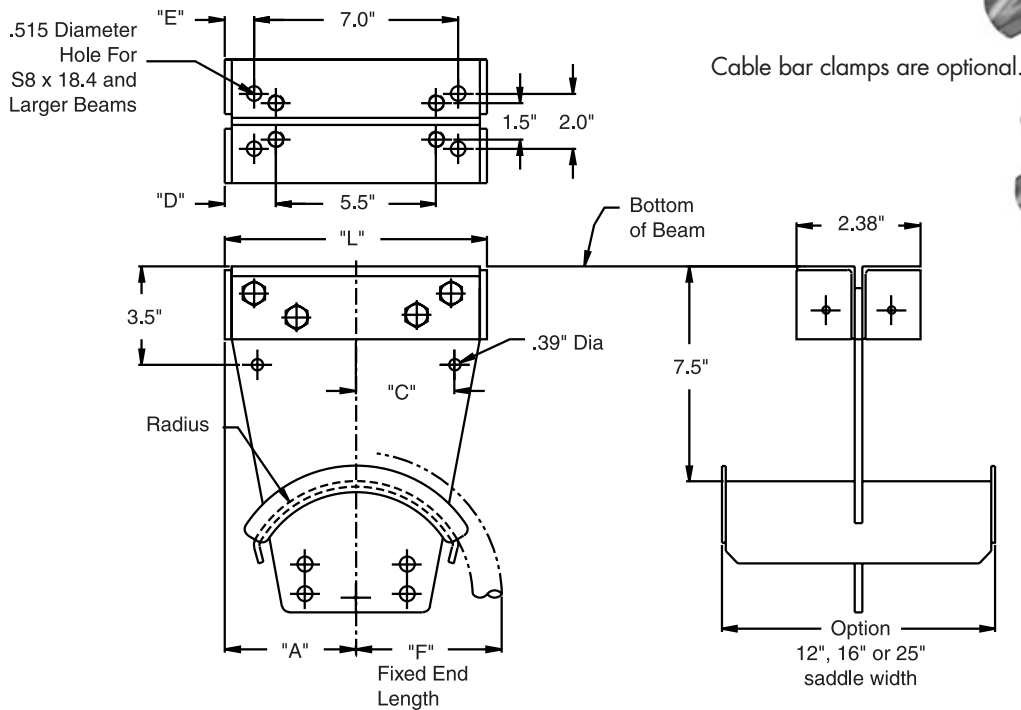


**MAGNETEK**  
MATERIAL HANDLING

**ELECTROMOTIVE SYSTEMS**  
**TELEMOTIVE**  
**ENRANGE**  
**MONDEL**

## Mill Duty Fixed Cable Clamp

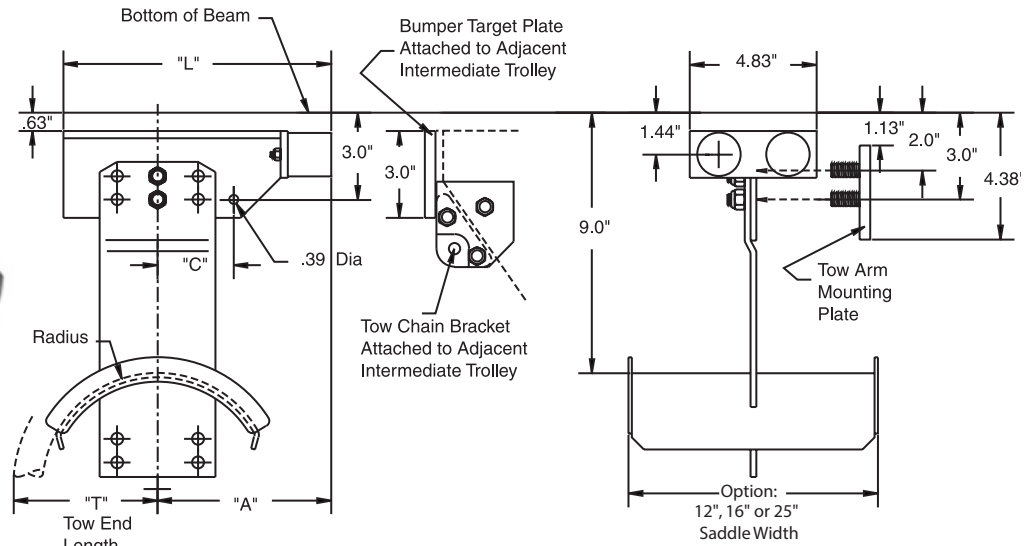
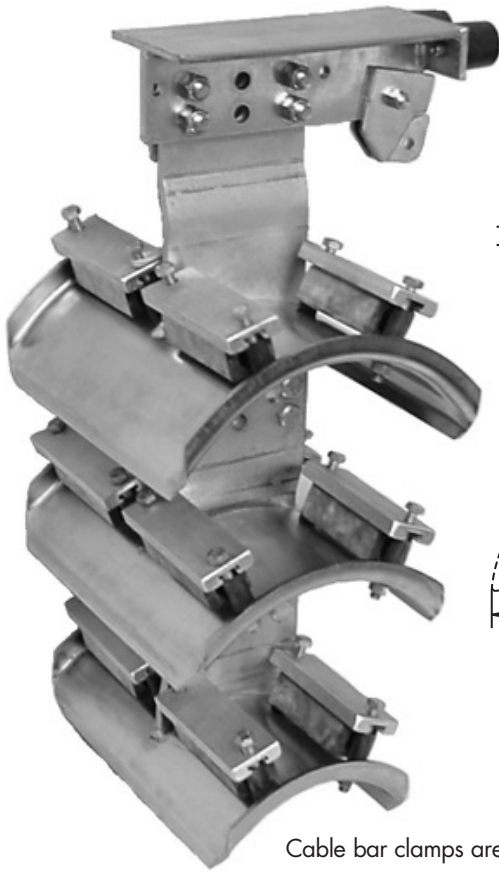
Fixed cable clamp provides strain relief at the stationary end of the festoon system. The fixed end clamp may be bolted or welded directly to the lower flange of the I-Beam.



SADDLE															
Type	Radius	Dim "L"	Dim "F"	Dim "A"	Dim "E"	Dim "D"	Dim "C"	Type	Radius	Dim "L"	Dim "F"	Dim "A"	Dim "E"	Dim "D"	Dim "C"
A4	4"	9.00"	5.00"	4.50"	1.00"	1.75"	3.38"	E6	6"	15.50"	8.25"	7.75"	4.25"	5.00"	5.37"
B4	4"	9.00"	5.00"	4.50"	1.00"	1.75"	3.38"	F6	6"	15.50"	8.25"	7.75"	4.25"	5.00"	5.37"
C4	4"	9.00"	5.00"	4.50"	1.00"	1.75"	3.38"	A8	8"	18.50"	9.75"	9.25"	5.75"	6.50"	7.55"
D4	4"	11.00"	6.00"	5.50"	2.00"	2.75"	3.38"	B8	8"	18.50"	9.75"	9.25"	5.75"	6.50"	7.55"
E4	4"	11.00"	6.00"	5.50"	2.00"	2.75"	3.38"	C8	8"	18.50"	9.75"	9.25"	5.75"	6.50"	7.55"
F4	4"	11.00"	6.00"	5.50"	2.00"	2.75"	3.38"	D8	8"	20.50"	10.75"	10.25"	6.75"	7.50"	7.55"
A6	6"	13.50"	7.25"	6.75"	3.25"	4.00"	5.37"	E8	8"	20.50"	10.75"	10.25"	6.75"	7.50"	7.55"
B6	6"	13.50"	7.25"	6.75"	3.25"	4.00"	5.37"	F8	8"	20.50"	10.75"	10.25"	6.75"	7.50"	7.55"
C6	6"	13.50"	7.25"	6.75"	3.25"	4.00"	5.37"	AØ	10"	23.50"	12.25"	11.75"	8.25"	9.00"	9.83"
D6	6"	15.50"	8.25"	7.75"	4.25"	5.00"	5.37"								

## Mill Duty Tow Cable Clamp

A less expensive alternative to a tow trolley, the tow cable clamp is designed to be mounted to the moving equipment directly in-line with the festoon system. The tow cable clamp is not recommended for equipment that may have vertical movement of 2.00 inches or more while traveling the overall length of the system.

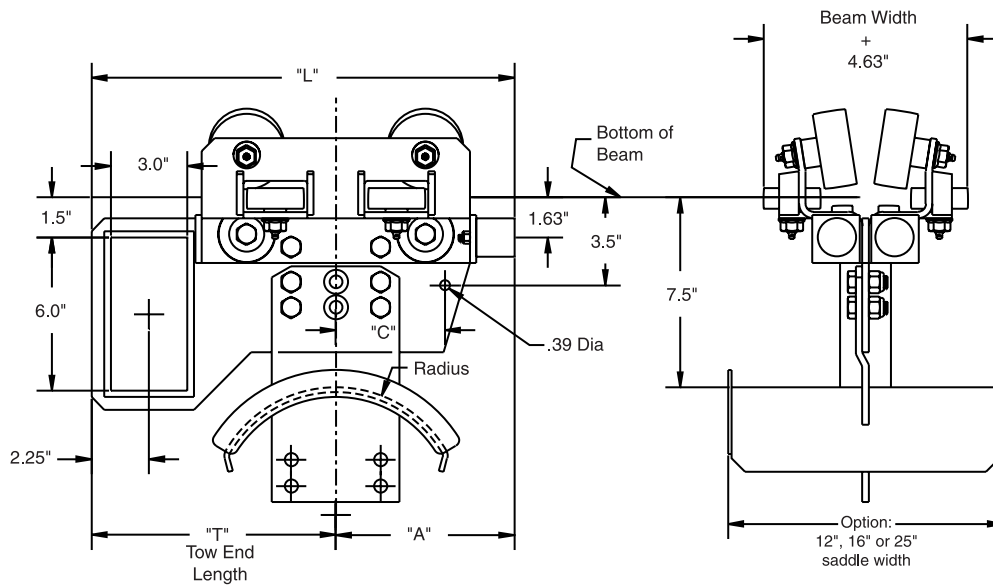


Cable bar clamps are optional.

SADDLE											
Type	Radius	Dim "L"	Dim "A"	Dim "T"	Dim "C"	Type	Radius	Dim "L"	Dim "A"	Dim "T"	Dim "C"
A4	4"	9.75"	6.00"	5.00"	3.38"	F6	6"	12.50"	9.25"	8.25"	5.37"
B4	4"	9.75"	6.00"	5.00"	3.38"	A8	8"	14.00"	10.75"	9.75"	7.55"
C4	4"	9.75"	6.00"	5.00"	3.38"	B8	8"	14.00"	10.75"	9.75"	7.55"
D4	4"	10.25"	7.00"	6.00"	3.38"	C8	8"	14.00"	10.75"	9.75"	7.55"
E4	4"	10.25"	7.00"	6.00"	3.38"	D8	8"	15.00"	11.75"	10.75"	7.55"
F4	4"	10.25"	7.00"	6.00"	3.38"	E8	8"	15.00"	11.75"	10.75"	7.55"
A6	6"	11.50"	8.25"	7.25"	5.37"	F8	8"	15.00"	11.75"	10.75"	7.55"
B6	6"	11.50"	8.25"	7.25"	5.37"	AØ	10"	16.50"	13.25"	12.25"	9.83"
C6	6"	11.50"	8.25"	7.25"	5.37"	BØ	10"	16.50"	13.25"	12.25"	9.83"
D6	6"	12.50"	9.25"	8.25"	5.37"	CØ	10"	16.50"	13.25"	12.25"	9.83"
E6	6"	12.50"	9.25"	8.25"	5.37"						

## Mill Duty Tow Trolley

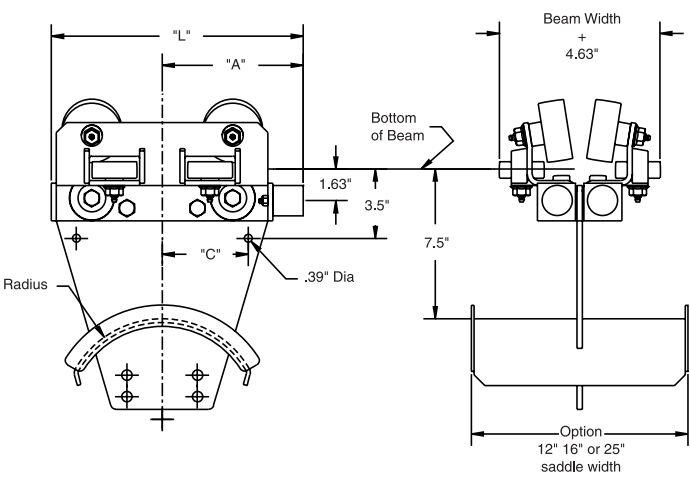
The tow bar passes through the slot of the front end of the tow trolley to propel the trolley. The slot is oversized to provide ample room for the tow bar that eliminates any binding that may occur while system is in motion. It is recommended that anti-lift rollers be used on tow trolleys to prevent trolley from lifting while in motion.



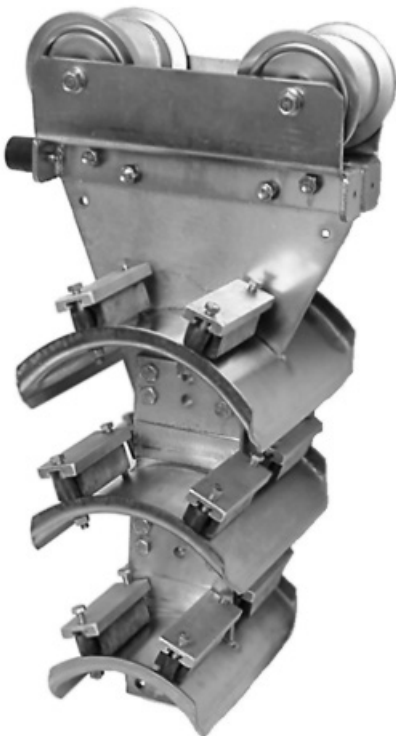
Cable bar clamps are optional

SADDLE											
Type	Radius	Dim "L"	Dim "A"	Dim "T"	Dim "C"	Type	Radius	Dim "L"	Dim "A"	Dim "T"	Dim "C"
A4	4"	14.50"	6.00"	8.60"	3.38"	F6	6"	21.00"	9.25"	11.80"	5.37"
B4	4"	14.50"	6.00"	8.60"	3.38"	A8	8"	24.00"	10.75"	13.30"	7.55"
C4	4"	14.50"	6.00"	8.60"	3.38"	B8	8"	24.00"	10.75"	13.30"	7.55"
D4	4"	16.50"	7.00"	9.60"	3.38"	C8	8"	24.00"	10.75"	13.30"	7.55"
E4	4"	16.50"	7.00"	9.60"	3.38"	D8	8"	26.00"	11.75"	14.30"	7.55"
F4	4"	16.50"	7.00"	9.60"	3.38"	E8	8"	26.00"	11.75"	14.30"	7.55"
A6	6"	19.00"	8.25"	10.80"	5.37"	F8	8"	26.00"	11.75"	14.30"	7.55"
B6	6"	19.00"	8.25"	10.80"	5.37"	AØ	10"	29.00"	13.25"	15.80"	9.83"
C6	6"	19.00"	8.25"	10.80"	5.37"	BØ	10"	29.00"	13.25"	15.80"	9.83"
D6	6"	21.00"	9.25"	11.80"	5.37"	CØ	10"	29.00"	13.25"	15.80"	9.83"
E6	6"	21.00"	9.25"	11.80"	5.37"						

# Mill Duty Intermediate Trolley



Trolleys are located between the tow trolley and end cable clamp providing cable support as the system expands. Large polyurethane bumpers on the end of each trolley are standard to damper impact between trolleys and end stops.



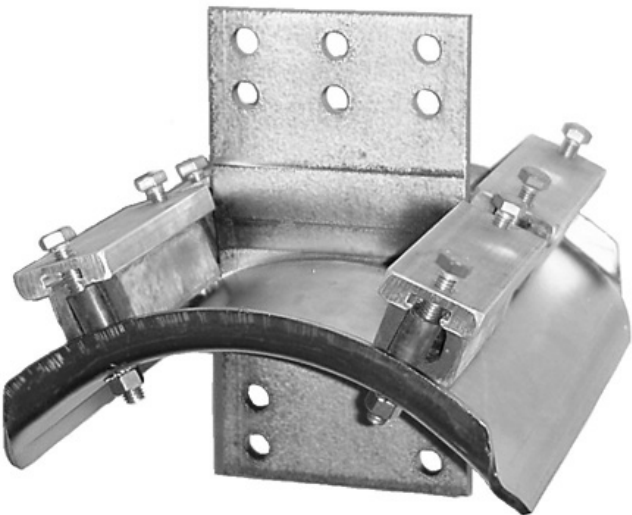
Cable bar clamps are optional

SADDLE									
Type	Radius	Dim "L"	Dim "A"	Dim "C"	Type	Radius	Dim "L"	Dim "A"	Dim "C"
A4	4"	10.50"	6.00"	3.38"	F6	6"	17.00"	9.25"	5.37"
B4	4"	10.50"	6.00"	3.38"	A8	8"	20.00"	10.75"	7.55"
C4	4"	10.50"	6.00"	3.38"	B8	8"	20.00"	10.75"	7.55"
D4	4"	12.50"	7.00"	3.38"	C8	8"	20.00"	10.75"	7.55"
E4	4"	12.50"	7.00"	3.38"	D8	8"	20.00"	11.75"	7.55"
F4	4"	12.50"	7.00"	3.38"	E8	8"	22.00"	11.75"	7.55"
A6	6"	15.00"	8.25"	5.37"	F8	8"	22.00"	11.75"	7.55"
B6	6"	15.00"	8.25"	5.37"	AØ	10"	25.00"	13.25"	9.83"
C6	6"	15.00"	8.25"	5.37"	BØ	10"	25.00"	13.25"	9.83"
D6	6"	17.00"	9.25"	5.37"	CØ	10"	25.00"	13.25"	9.83"
E6	6"	17.00"	9.25"	5.37"					

## Lower Saddle Assemblies

When configuring a component with lower saddles (2<sup>nd</sup> and 3<sup>rd</sup> saddles) the lower saddles must be at least 2" R less than the saddle immediately above it.

Configuration Guidelines		
Main Saddle	2nd Saddle	3rd Saddle
10"R	8"R	6"R
8"R	6"R	4"R
6"R	4"R	N/A





# Electromotive™ Cable

Magnetek furnishes a variety of Electromotive Systems cable specifically designed for festoon applications. The cable is available in a round or flat design, comes standard in a safety yellow color, and most sizes are available for same day shipment.

## Standard Cable Specifications\*:

- Indoor/Outdoor festoon flat cable and round pendant control cable
- 105° C (221° F) 600 volt A.C., 250 volt D.C.
- Conductors are annealed copper
- Each conductor has color coded jacket
- Jacket rating -40° C (-40° F) to 105° C (221° F).\*\*
- Resistant to UV, ozone, water, oil and weather
- 4, 8, or 12 conductor flat cable
- 8, 12, 16 or 24 conductor round pendant control cable
- #2 Awg through #16 flat cable
- #16 Awg round pendant control cable

\* Special cables are also available—contact the factory for more information.

Festoon Cable		Cable Grips		
Catalog Number	AWG/Conductors	Catalog Number	For Cables	Thread Type
F-2/4	2 Awg-4 Conductors	F-4CG1	(1) F-6/4 or (2) F-12/8	1.50" NPT
F-4/4	4 Awg-4 Conductors	F-4CG2	(1) F-10/4	1.00" NPT
F-6/4	6 Awg-4 Conductors	F-4CG3	(1) F-12/4 or (1) F-14/4	1.00" NPT
F-8/4	8 Awg-4 Conductors	F-4CG4	(1) F-2/4	2.00" NPT
F-10/4	10 Awg-4 Conductors	F-4CG11	(1) F-12/8	1.50" NPT
F-12/4	12 Awg-4 Conductors	F-4CG3	(1) F-12/4 or (1) F-14/4	1.00" NPT
F-14/4	14 Awg-4 Conductors	F-4/8CG2	(1) F-12/4 or (1) F-14/4 & (1) F-14/8 or (1) F-16/8	1.25" NPT
F-12/8	12 Awg-8 Conductors	F-8CG1	(1) F-14/8 or (1) F-16/8	1.25" NPT
F-14/8	14 Awg-8 Conductors	F-8CG2	(2) F-14/8 or (2) F-16/8 or (1) F-8/4	1.25" NPT
F-16/8	16 Awg-8 Conductors	F-12CG1	(1) F-14/12 or (1) F-16/12	2.00" NPT
F-14/12	14 Awg-12 Conductors	F-12CG2	(2) F-14/12 or (2) F-16/12 or (1) F-4/4	2.00" NPT
F-16/12	16 Awg-12 Conductors	F-12CG3	(3) F-14/12 or (3) F-16/12	2.00" NPT

Cable available in specific lengths or in full reels of 500 or 1000 feet.

Cable available in black color—Add Suffix "B" to the catalog number.

\*\*Magnetek's flat cable is rated -40°C to 105°C. Round cable is rated -10°C to 90°C. However, they are not recommended for severe flexing or impact at temperatures below -10°C.

For severe flexing applications below -10°C, contact the factory for more information

Pendant		Cable Grips		
Catalog Number	AWG/Conductors	Catalog Number	Cable Diameter	Thread Type
	<b>Strain Relief</b>			
R-16/8SR	16 Awg-8 Conductors	R-CG0	0.236" to 0.472" Inches Cable	.050" NPT
R-16/12SR	16 Awg-12 Conductors	R-CG1	0.394" to 0.709" Inches Cable	0.75" NPT
R-16/16SR	16 Awg-16 Conductors	R-CG2	0.591" to 1.000" Inches Cable	1.00" NPT
R-16/24SR	16 Awg-24 Conductors			
	<b>Non Strain Relief</b>			
R-16/8	16 Awg-8 Conductors			
R-16/12	16 Awg-12 Conductors			
R-16/16	16 Awg-16 Conductors			
R-16/24	16 Awg-24 Conductors			
R-16/30	16 Awg-30 Conductors			

Special flat and round cables are available. Contact the factory for additional information.



**MAGNETEK**  
MATERIAL HANDLING

**ELECTROMOTIVE SYSTEMS**  
**TELEMOTIVE**  
**ENRANGE**  
**MONDEL**

Distributed by Ergonomic Partners ♦ Sales@ErgonomicPartners.com ♦ p:(314) 884-8884 ♦ www.ErgonomicPartners.com