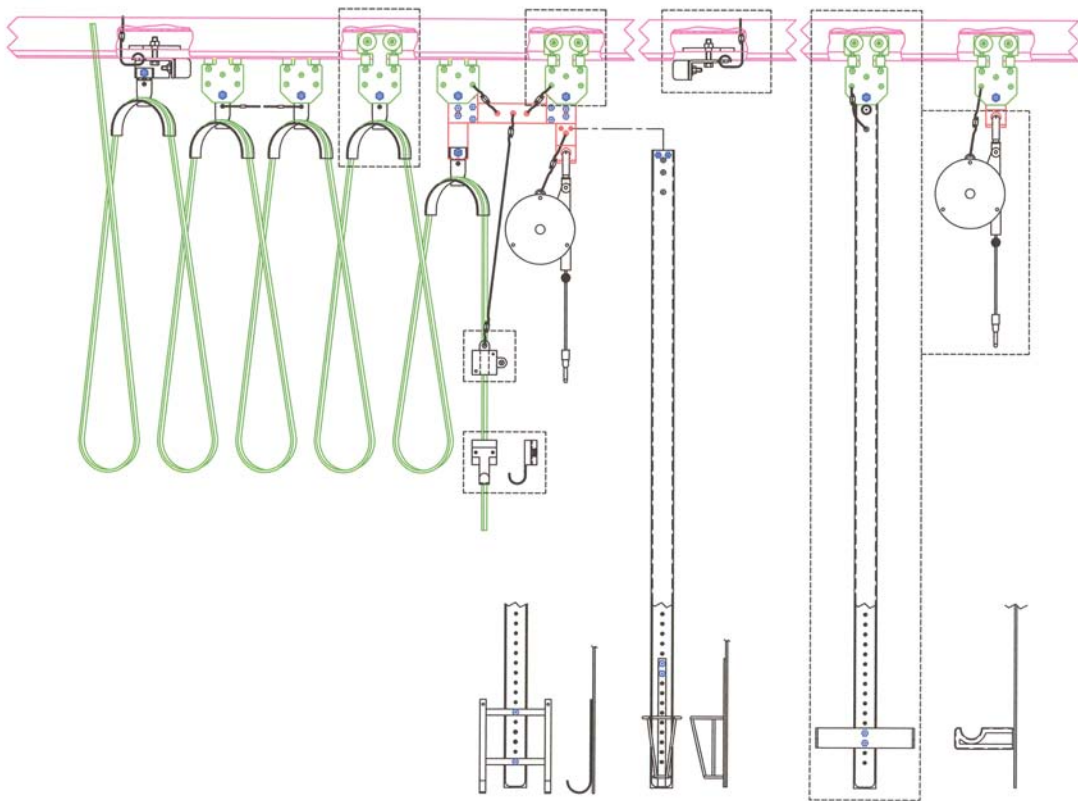




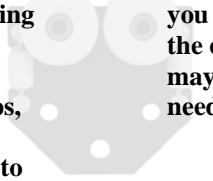
Festoon Products Catalog 2008



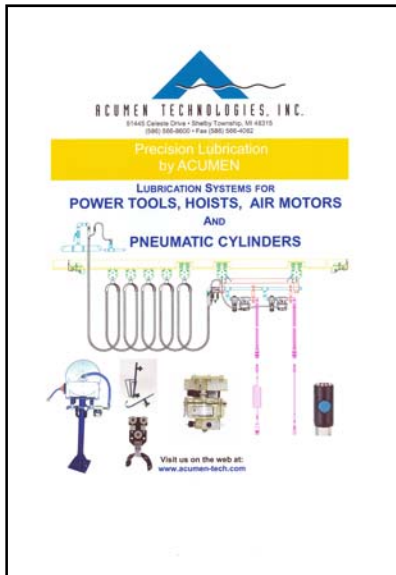
**51445 Celeste Drive
Shelby Twp., MI 48315
Phone: 586-566-8600
Fax: 586-566-4062**

All the Acumen Festoon Products are designed to provide an orderly festooning of your electrical cable or air hose minimizing wear and tear. The combination of trolleys, saddles, clamps, tool hooks, rail stops and balancers provide a complete engineered system to

eliminate your festooning problems. If you don't see what you are looking for in the catalog please call or e-mail us, we may have a custom product to meet your needs.



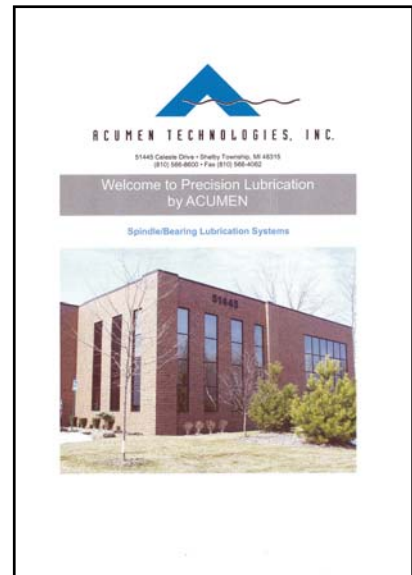
See Our Catalogs For Other Acumen Products.



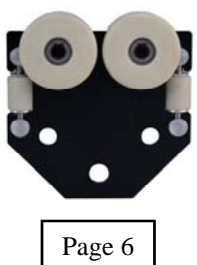
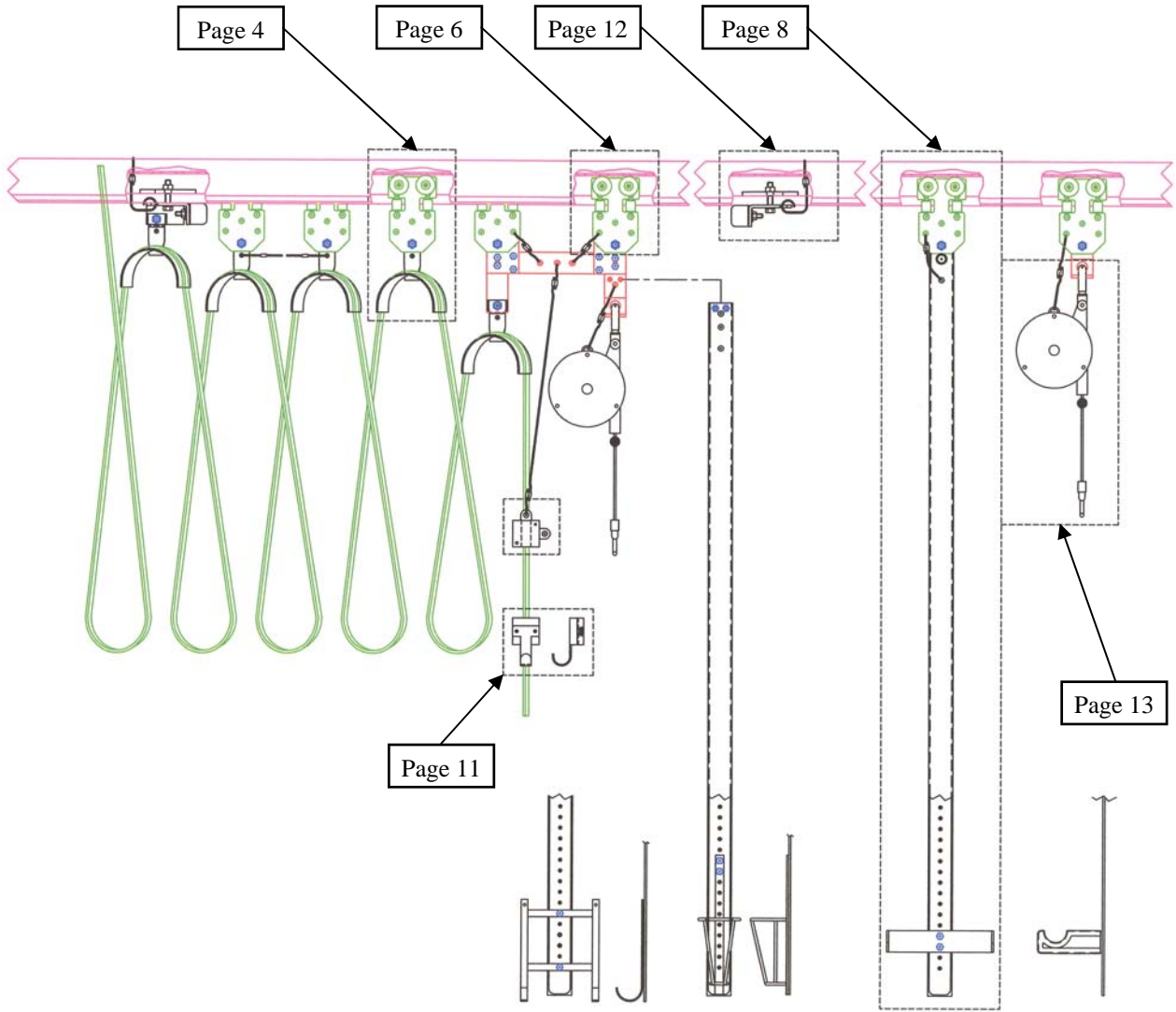
Lubrication Systems For Power Tools, Hoists, Air Motors & Pneumatic Cylinders



Lubrication Systems For Chains & Drilling Systems



Lubrication Systems For Spindle Bearings



FCT	E	V	6.25	B	A
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Festoon Cable Trolley

Saddle/Trolley Type

- A-Saddle with 1/2" Bolt, Nut & Spacer
- B-Saddle Only
- C-Saddle with 1/4" Snap Hook
- D-Saddle with 3/8" Snap hook
- E-Saddle & Trolley for Unified ETA4 Rail
- F-Saddle & Trolley for Unified ETA8 Rail
- G-Saddle & Trolley for Knight 4100 Rail
- H-Saddle & Trolley for Knight 4500-7500 Rail
- I-Saddle & Trolley for Knight 5300 Rail
- J-Saddle & Trolley for Knight 5500-5700 Rail
- K-Saddle & Trolley for Demag KBK I Rail
- L-Saddle & Trolley for Demag KBK II,III Rail
- M-Saddle & Trolley for Zimmerman ZRA1 Rail
- N-Saddle & Trolley for Zimmerman ZRA2 Rail
- O-Saddle & Trolley for 4" I Beam
- P-Saddle & Trolley for Demag KBK 100 Rail
- Q-Saddle & Trolley for Duct O Wire, Aluma-Track
- R-Saddle & Trolley for 3" I-Beam
- S-Saddle & Trolley for Zimmerman ZRAT Rail
- T-Saddle & Trolley for Unistrut Rail
- U-Saddle & Trolley for Klien 19.5mm Rail
- V-Saddle & Trolley for 3.25 Flange, Flat Rail
- W-Saddle & Trolley for 3.33 Flange, Flat Rail
(fits 0.438 and 0.688 thick flange)
- X-Saddle & Trolley for 6" I-Beam
- Y-Saddle & Trolley for ZRS2,ZRS3 Rail
- Z-Saddle & Trolley for Knight TR2000 Rail
- 01-Saddle & Trolley for Lode Rail 500lb
- 02-Saddel & Trolley for Gorbel GLC, GLM 500lb Rail
- 03-Saddle & Trolley for Hubbel Rail 40
- 04-Saddle & Trolley for Wampfler C-Rail Track 40
- 05-Saddle & Trolley for Gorbel GLC, GLM 250lb Rail
- 06-Saddle & Trolley for Grobel AL, ALM 150lb Rail
- 07-Saddle & Trolley for Gorbel AL, ALM 250/500lb
- 08-Saddle & Trolley for Grobel AL, ALM
1000/2000/4000lb Rail
- 09-Saddle & Trolley for Gorbel GLC, GLM 1000lb Rail
- 10-Saddle & Trolley for Gorbel GLC, GLM
2000/4000lb Rail
- 11-Saddle & Trolley for Hollywood Rail
- 12-Saddle & Trolley for Alfarail ARS200

Hold Down

- V-Velcro
- B-Bolt Down

Saddle Diameter

2.00", 6.25", 12" (Inches)

Saddle Angle

- A-0 Degrees
- B-30 Degrees

Options

- No Options-Leave Blank
- A-Dual Trolley (optional on 12' saddle only)

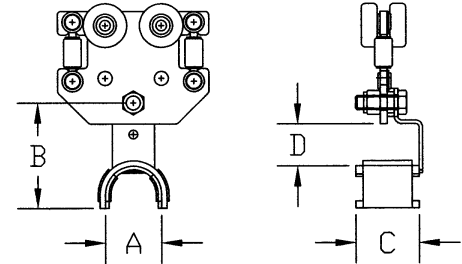
The Acumen Festoon Cable Trolley is uniquely designed for flat or round electrical cable or hose. A large trolley selection is available to fit most manufacturer's tool rail. Our unique design helps to provide an orderly festooning of your electrical cables or air hose minimizing wear and tear. The saddles are positioned at a 30 degree angle to the tool rail which allows the hose or cable to store neatly in the home position and take up minimal space. The Velcro straps allow quick installation and adjustment without damaging the electrical cables.

2" Diameter Festoon Cable Trolley



A-Diameter 2"
 B-Height 3.75"
 C-Width 2.25"
 D-Max. Cable Diameter 1.50"

Maximum Load Capacity: 100lbs

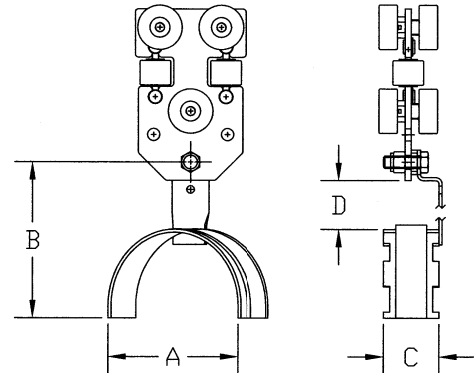


6.25" Diameter Festoon Cable Trolley



A-Diameter 6.25"
 B-Height 6.375"
 C-Width 2.25"
 D-Max. Cable Diameter 2.00"

Maximum Load Capacity: 100lbs

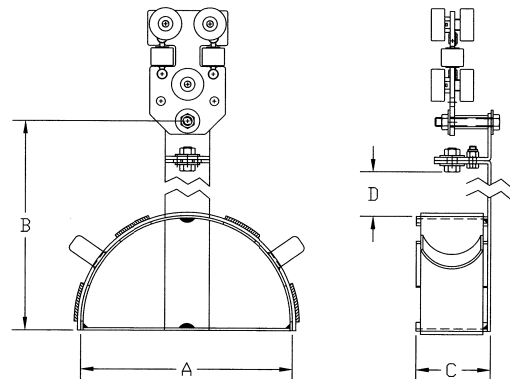


12" Diameter Festoon Cable Trolley

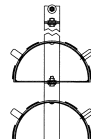


A-Diameter 12"
 B-Height 11.86"
 C-Width 4.00"
 D-Max. Cable Diameter 2.53"

Maximum Load Capacity:
 Single Trolley 100lbs
 Dual Trolley 200lbs



Saddles Can Be Stacked To
 Handle Additional Cable Bundles



Saddle Shown

30 Degrees Out Of Position.

Festoon Trolley

FT	E	
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Festoon Trolley

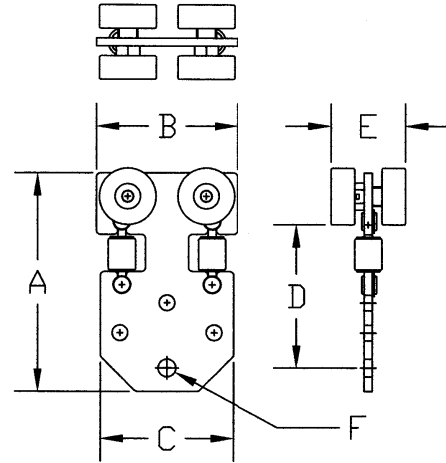
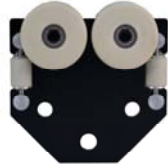
Trolley Type

- E-Trolley for Unified ETA4 Rail
- F-Trolley for Unified ETA8 Rail
- G-Trolley for Knight 4100 Rail
- H-Trolley for Knight 4500-7500 Rail
- I-Trolley for Knight 5300 Rail
- J-Trolley for Knight 5500-5700 Rail
- K-Trolley for Demag KBK I Rail
- L-Trolley for Demag KBK II,III Rail
- M-Trolley for Zimmerman ZRA1 Rail
- N-Trolley for Zimmerman ZRA2 Rail
- O-Trolley for 4" I Beam
- P-Trolley for Demag KBK 100 Rail
- Q-Trolley for Duct-O-Wire, Aluma-Track
- R-Trolley for 3" I Beam
- S-Trolley for Zimmerman ZRAT Rail
- T-Trolley for Unistrut Rail
- U-Trolley for Klien 19.5mm Rail
- V-Trolley for 3.25 Flange, Flat Rail
- W-Trolley for 3.33 Flange, Flat Rail
(fits 0.438 and 0.688 thick flange)
- X-Trolley for 6" I-Beam
- Y-Trolley for ZRS2, ZRS3 Rail
- Z-Trolley for Knight TR2000 Rail
- 01-Saddle & Trolley for Lode Rail 500lb
- 02-Saddel & Trolley for Gorbel GLC, GLM 500lb Rail
- 03-Saddle & Trolley for Hubbel Rail 40
- 04-Saddle & Trolley for Wampfler C-Rail Track 40
- 05-Saddle & Trolley for Gorbel GLC, GLM 250lb Rail
- 06-Saddle & Trolley for Grobel AL, ALM 150lb Rail
- 07-Saddle & Trolley for Gorbel AL, ALM 250/500lb
- 08-Saddle & Trolley for Grobel AL, ALM
1000/2000/4000lb Rail
- 09-Saddle & Trolley for Gorbel GLC, GLM 1000lb Rail
- 10-Saddle & Trolley for Gorbel GLC, GLM
2000/4000lb Rail
- 11-Saddle & Trolley for Hollywood Rail
- 12-Saddle & Trolley for Alfarail ARS200

Options

- No Option-Leave Blank
- A-Trolley with 1/4" Snap Hook
- B-Trolley 3/8" Snap hook
- C-Trolley with 1/2" Bolt & Nut

The Acumen Festoon Trolley is uniquely designed with side rollers and anti-kick up wheels to prevent the trolley from locking in the rail. Not all festooning applications apply the load directly below the trolley. Even when a side load is applied the trolley will move smoothly in the rail.



Part Number	Max. Load (lbs)	A	B	C	D	E	F	Wt.	Part Number	Max. Load (lbs)	A	B	C	D	E	F	Wt.
FTE	200	7	4.5	4.25	4.59	2.38	Ø0.56		FT05	200	4	5.38	5.38	2.12	1.19	Ø0.56	
FTF	200	7	4.5	4.25	4.59	2.75	Ø0.56		FT06	200						Ø0.56	
FTG	200	7	4.5	4.25	4.59	2.38	Ø0.56		FT07								
FTH	200	7	4.5	4.25	4.59	2.75	Ø0.56		FT08								
FTI	200	5	5.38	5.38	2.56	1.71	Ø0.56		FT09								
FTJ	200	7	4.5	4.25	4.38	2.64	Ø0.56		FT10								
FTK	200	5	5.38	5.38	2.56	1.71	Ø0.56		FT11								
FTL	200	7	4.5	4.25	4.38	2.64	Ø0.56		FT12								
FTM	200	5	5.38	5.38	2.56	1.71	Ø0.56										
FTN	200	7	4.5	4.25	4.38	2.64	Ø0.56										
FTO	200	5.1	5.75	5.75	2.79	2.50	Ø0.56										
FTP	200	5	5.38	5.38	2.91	1.58	Ø0.56										
FTQ	200						Ø0.56										
FTR	200	5.1	5.75	5.75	2.73	2.25	Ø0.56										
FTS	200	5	5.38	5.38	2.91	1.58	Ø0.56										
FTT	200	4	5.38	5.38	2.19	1.25	Ø0.56										
FTU	200						Ø0.56										
FTV	200						Ø0.56										
FTW	200	5.6	5.75	5.75	3.41	3.25	Ø0.56										
FTX	200						Ø0.56										
FTY	200	7	4.5	4.25	4.38	2.64	Ø0.56										
FTZ	200						Ø0.56										
FT01	200	4	5.38	5.38	1.98	1.58	Ø0.56										
FT02	200	4	5.38	5.38	1.98	1.58	Ø0.56										
FT03	200	4	5.38	5.38	2.12	1.19	Ø0.56										
FT04	200	4	5.38	5.38	2.12	1.19	Ø0.56										

TSB	A	72	A		
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Tool Support Bar

Trolley Type

- A-Bar Only with 1/2" Bolt, Nut & Spacer
- B-Bar Only, 9/16" Mounting Hole
- C-Bar Only with Holes for Universal Steel
- D-Bar Only with Special Mounting, See "S" Numbers *
- E-Bar & Trolley for Unified ETA4 Rail
- F-Bar & Trolley for Unified ETA8 Rail
- G-Bar & Trolley for Knight 4100 Rail
- H-Bar & Trolley for Knight 4500-7500 Rail
- I-Bar & Trolley for Knight 5300 Rail
- J-Bar & Trolley for Knight 5500-5700 Rail
- K-Bar & Trolley for Demag KBK I Rail
- L-Bar & Trolley for Demag KBK II,III Rail
- M-Bar & Trolley for Zimmerman ZRA1 Rail
- N-Bar & Trolley for Zimmerman ZRA2 Rail
- O-Bar & Trolley for 4" I Beam
- P-Bar & Trolley for Demag KBK 100 Rail
- Q-Bar & Trolley for Duct O Wire, Aluma-Track
- R-Bar & Trolley for 3" I-Beam
- S-Bar & Trolley for Zimmerman ZRAT Rail
- T-Bar & Trolley for Unistrut Rail
- U-Bar & Trolley for Klien 19.5mm Rail
- V-Bar & Trolley for 3.25 Flange, Flat Rail
- W-Bar & Trolley for 3.33 Flange, Flat Rail
(fits 0.438 and 0.688 thick flange)
- X-Bar & Trolley for 6" I-Beam
- Y-Bar & Trolley for ZRS2,ZRS3 Rail
- Z-Bar & Trolley for Knight TR2000 Rail
- 01-Saddle & Trolley for Lode Rail 500lb
- 02-Saddel & Trolley for Gorbel GLC, GLM 500lb Rail
- 03-Saddle & Trolley for Hubbel Rail 40
- 04-Saddle & Trolley for Wampfler C-Rail Track 40
- 05-Saddle & Trolley for Gorbel GLC, GLM 250lb Rail
- 06-Saddle & Trolley for Grobel AL, ALM 150lb Rail
- 07-Saddle & Trolley for Gorbel AL, ALM 250/500lb
- 08-Saddle & Trolley for Grobel AL, ALM
1000/2000/4000lb Rail
- 09-Saddle & Trolley for Gorbel GLC, GLM 1000lb Rail
- 10-Saddle & Trolley for Gorbel GLC, GLM
2000/4000lb Rail
- 11-Saddle & Trolley for Hollywood Rail
- 12-Saddle & Trolley for Alfarail ARS200

Bar Length Inches

Note: To determine bar length. Measure distance from bottom of the tool rail to the floor. Subtract trolley dimension D (Page 7). Subtract desired height off floor.

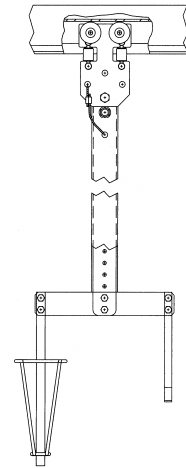
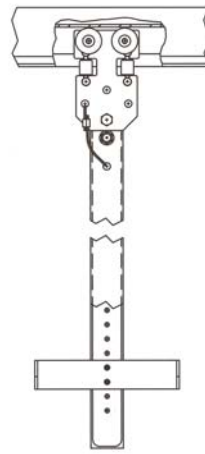
Tool Support Type

- A-6" Cage (TS-6C)
- B-8" Cage (TS-8C)
- C-Single "J" Hook (TS-1J)
- D-Double J, 10" Cradle for Right Angle Tools (TS-10J)

2nd Tool Support Type

3rd Tool Support Type

* Trolley Type D
Bar Only With Custom Mounting Holes
See Acumen "S" Numbers



A-6" Cage



B-8" Cage



C-Single "J" Hook



D-Double "J" 10" Wide

Cable Clamp Block

CCB	1	F	0.00 X 0.00
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Cable Clamp Block

Number Of Cable Slots

Type Of Cable

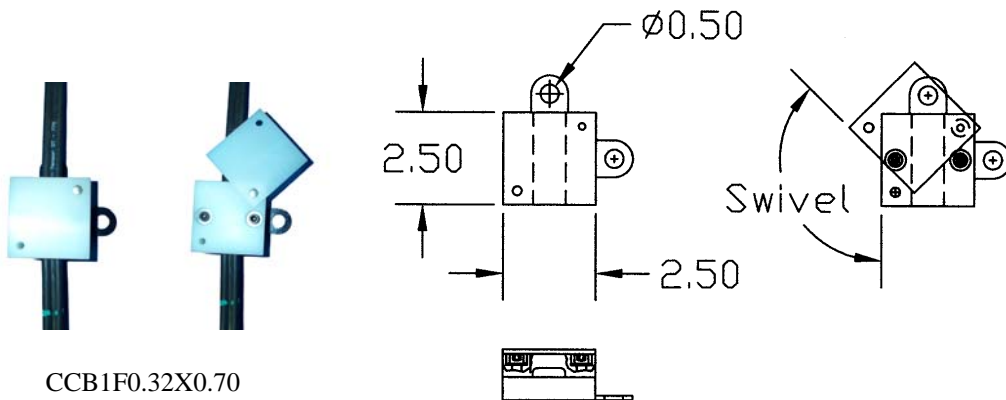
F-Flat Cable
R-Round Cable

Cable Dimension Or Diameter

Flat Cable = 0.00" X 0.00"
Round Cable = 0.00"

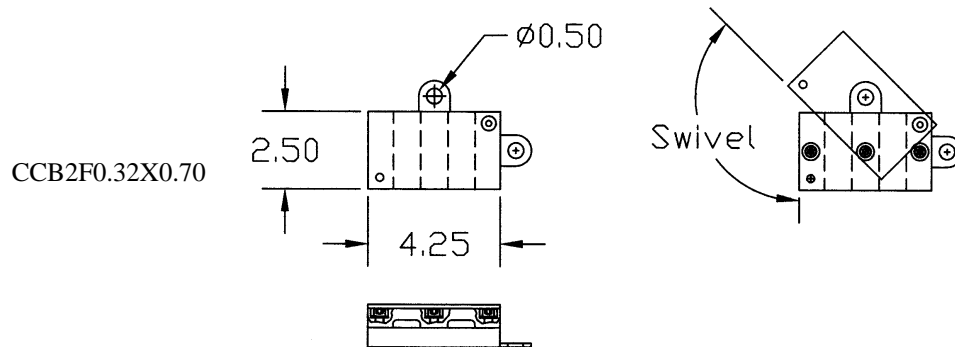
Common Cables:

Atlas Copco Tensor Flat Cable = 0.32 X 0.70



CCB1F0.32X0.70

Tamperproof Cover Swivels
Up To Expose The Clamp Screws.
Error Proofing Tag Hole Is Provided.



CCB2F0.32X0.70

Cable Tool Support

CTS	F	0.00 X 0.00
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Cable Tool Support

Type Of Cable

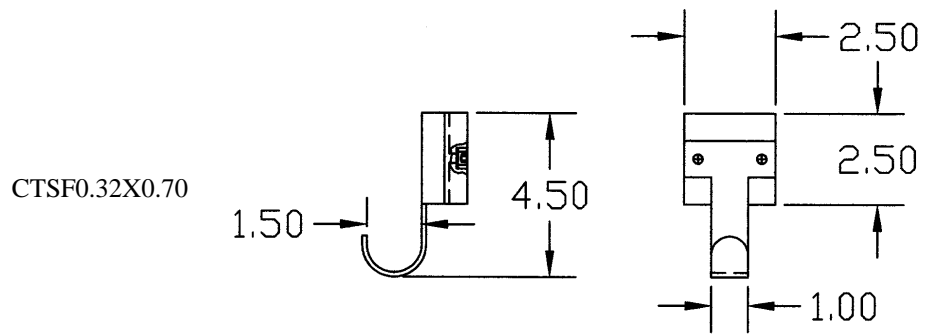
- F-Flat Cable
- R-Round Cable

Cable Dimension Or Diameter

Flat Cable = 0.00" X 0.00"
 Round Cable = 0.00"

Common Cables:

Atlas Copco Tensor Flat Cable = 0.32 X 0.70



Cable Tool Support Attaches Directly To Flat or Round Cable

Mid Rail Stop

Rail Type

- E-Stop for Unified ETA4 Rail
- F-Stop for Unified ETA8 Rail
- G-Stop for Knight 4100 Rail
- H-Stop for Knight 4500-7500 Rail
- I-Stop for Knight 5300 Rail
- J-Stop for Knight 5500-5700 Rail
- K-Stop for Demag KBK I Rail
- L-Stop for Demag KBK II,III Rail
- M-Stop Zimmerman ZRA1 Rail
- N-Stop for Zimmerman ZRA2 Rail
- O-Stop for 4" I Beam
- P-Stop for Demag KBK 100 Rail
- Q-Stop for Duct O Wire, Aluma-Track
- R-Stop for 3" I-Beam
- S-Stop for Zimmerman ZRAT Rail
- T-Stop for Unistrut Rail
- U-Stop for Klien 19.5mm Rail
- V-Stop for 3.25 Flange, Flat Rail
- W-Saddle & Trolley for 3.33 Flange, Flat Rail
(fits 0.438 and 0.688 thick flange)
- X-Stop for 6" I-Beam
- Y-Stop for ZRS2,ZRS3 Rail
- Z-Stop for Knight TR2000 Rail
- 01-Saddle & Trolley for Lode Rail 500lb
- 02-Saddel & Trolley for Gorbels GLC, GLM 500lb Rail
- 03-Saddle & Trolley for Hubbel Rail 40
- 04-Saddle & Trolley for Wampfler C-Rail Track 40
- 05-Saddle & Trolley for Gorbels GLC, GLM 250lb Rail
- 06-Saddle & Trolley for Gorbels AL, ALM 150lb Rail
- 07-Saddle & Trolley for Gorbels AL, ALM 250/500lb
- 08-Saddle & Trolley for Gorbels AL, ALM
1000/2000/4000lb Rail
- 09-Saddle & Trolley for Gorbels GLC, GLM 1000lb Rail
- 10-Saddle & Trolley for Gorbels GLC, GLM
2000/4000lb Rail
- 11-Saddle & Trolley for Hollywood Rail
- 12-Saddle & Trolley for Alfarail ARS200

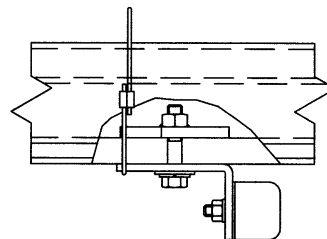
MRS

E

Options

- No Option-Leave Blank
- A-Orange Paint
- B-Tamperproof Bolt
- C-Stationary Saddle Flange

Note: All mid rail stops include safety cable.



Wampfler, Endo

- True Zero Gravity, with no drifting
- Tapered Drum, quality springs and bearings provide smooth travel.
- Tension Adjustment is easy and precise.
- EK-0 has casting made of high impact ABS plastic.
- EW series features cast aluminum case and forged swivel hook.

Model	Capacity lbs	Cable Travel	Dia. Of Cable	Weight lbs
EK-0	1.1-3.3	39.40"	3mm	1.10
EW-3	2.2-6.6	51.20"	3mm	3.10
EW-4	4.4-8.8	51.20"	3mm	3.20
EW-5	5.5-11.0	51.20"	3mm	3.30
EW-9	9.9-19.8	51.20"	4mm	7.50
EW-15	19.8-33.1	51.20"	4mm	8.40



Packers Kromer

Series 7228, Lightweight, Zero Gravity

- Locking Safety Hanger
- High Impact Housing
- Drum Lock Slot
- Steel Cable
- Quick Change Cable
- Safety Detent Models 3,4,5
- Stepless Tension Adjustment
- Safety Chain Installed
- Riveted Cold Rolled Spring
- Locking Safety Hook

Model	Capacity lbs	Cable Travel	Dia. Of Cable	Weight lbs
7228-1	.88-2.65	58.8"	3mm	3
7228-2	2.65-5.73	58.8"	3mm	3
7228-3	5.73-8.38	58.8"	3mm	3
7228-4	8.38-11.4	58.8"	3mm	3
7228-5	11.4-14.3	58.8"	3mm	3



Series 7230, Intermediate, Zero Gravity

- Floating Rotating Suspension
- High Impact Housing
- Recessed Safe Adjustments
- Safety Drum Lock
- Stepless Tension Adjustment
- Quick Change Cable
- Automatic Safety Detent
- Safety Chain Installed
- Riveted Cold Rolled Spring
- Optional Ratchet Lock (7231)

Model	Capacity lbs	Cable Travel	Dia. Of Cable	Weight lbs
7230-1	6.6-11	78"	3mm	8.5
7230-2	10.0-15	78"	3mm	8.5
7230-3	13.3-22	78"	3mm	8.5
7230-4	20.0-30	78"	3mm	8.5
7230-5	28.7-37	78"	3mm	8.5
7230-6	35.3-46.3	78"	3mm	8.5



Plastic Cable Saddles

- FHP20133-16 Cable Clip, 10mm-16mm
- FHP20133-25 Cable Clip, 17mm-25mm
- FHP20133-36 Cable Clip, 26mm-36mm
- FHP20133-50 Cable Clip, 37mm-50mm

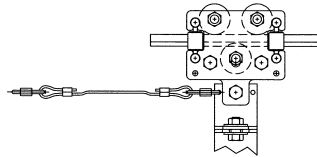


Trolley/Saddle Towing Cables

- 100 000062 00 1/8" 7X19 Steel Cable, Bulk
- 100 000063 00 Aluminum Oval Sleeve



Contact Acumen For Complete Cable Assemblies



Hooks

- 100 000744 00 1/4" Snap Hook
- 100 000054 00 3/8" Snap Hook

- 100 006289 00 1/4" Quick Link, Pear Shape



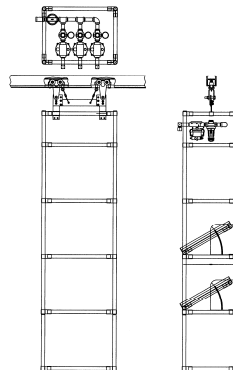
Miscellaneous

- 500 006365 00 Balancer Attachment Tab, 1" Diameter Balancer Hole, With 1/2" Bolt & Lock Nut, 3.5" Long



Contact Acumen Technologies for:

- Custom Suspension Options
- Tool & Parts Carrier Assemblies "Line Side Limos"
- Self Retracting Coiled Electrical Cable Assemblies



The following formulas are general guidelines for calculating the length of cable/hose and number of trolley/saddles needed. Differences in cable diameter, bend radius and desired extended tension will affect the calculations. This formula is based on a 1 to 1.8 ratio, travel length to actual length.

To Calculate Total Cable/Hose Length:

$$L=(t \cdot 1.8)+a+b$$

To Calculate Number of Trolley/Saddles Needed:

$$n=(L-a-b)/((d \cdot 2)+f)$$

t=[inches] Travel Length

L=[inches] Total Cable/Hose Length

d=[inches] Desired Drop From Festoon Cable Trolley

a=[inches] Additional Cable to Reach Source

b=[inches] Additional Cable to Reach Device

n=Number of Trolley/Saddles Needed

f=Acumen Saddle Factor

2" Saddle f=6.28

6.25" Saddle f=19.64

12" Saddle f=37.70

1/2" Diameter Hose Example

t=20ft (240") Travel Length

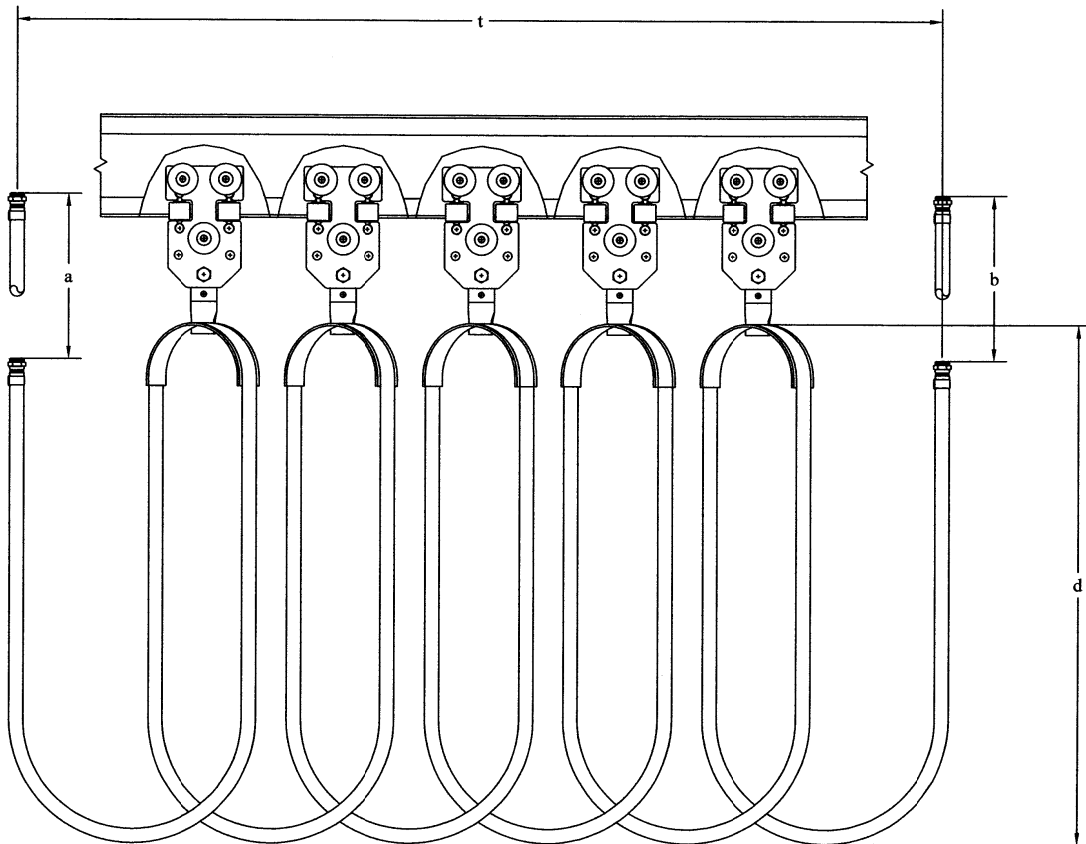
d=30" Desired Drop

a=0 Additional Hose

b=0 Additional Hose

T= 36ft (432") Total Hose Length

n=5 Trolley/Saddles Needed



EXPRESS LIMITED WARRANTY

Acumen Technologies, Inc. warrants to the Purchaser that the equipment delivered will be free from defects in material and workmanship for one year from date of purchase. This warranty does not cover normal service parts (such as filter elements) or parts that fail due to chemical attack*, abuse, improper service or use. The foregoing warranty is exclusive and in lieu of all other warranties whether written, oral, expressed or implied, including any WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE which are hereby expressly disclaimed.

If it appears within one year of the date of purchase that the equipment has not met the warranties above and the Purchaser notifies Acumen promptly, Acumen will correct any defect, at its option, either by repairing any defective part or at Acumen's sole option by making available at Acumen's plant a repaired or replacement part.

In no event will Acumen Technologies, Inc. be liable for losses due to business interruption, loss of profit, personal injury, cost of delay, or any special, indirect, incidental, or consequential damages.

* It is extremely important that our products be used in the proper environment. ABS, Polycarbonate, Nylon, Acetyl and other plastics are especially vulnerable to attack by certain chemicals and their fumes including compressor oils, cleaners, solvents, etc. Please consult with your chemical supplier to determine whether their products are injurious to the parts used in our products.

**PLEASE CONTACT THE FACTORY FOR THE AUTHORIZED
DISTRIBUTOR IN YOUR AREA.**

RETURNS

Products may be returned to the factory, freight prepaid, subject to inspection only upon express consent by Acumen Technologies, Inc. All returns are restricted to current standard goods in suitable condition for resale. Restock charges will apply. Please call for a Returned Goods Authorization Number.

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