

# FESTOON CABLE SYSTEMS

## WIRE ROPE FESTOON KITS

Brochure & Installation Guide



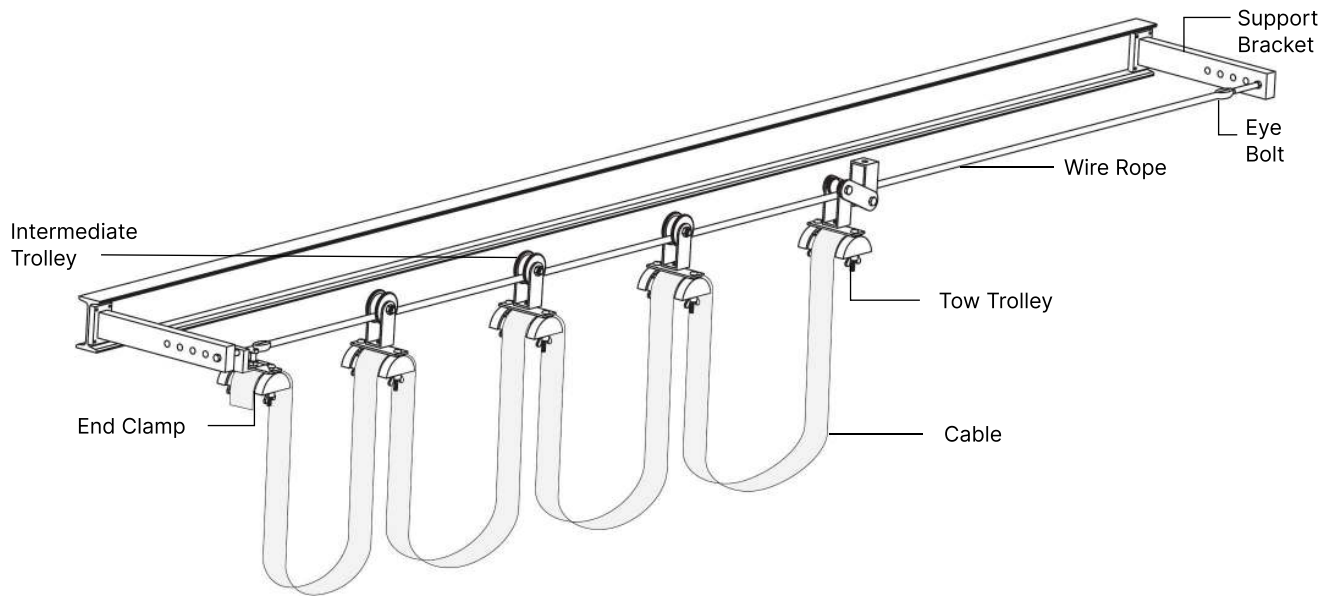


# TABLE OF CONTENTS

<b>WIRE ROPE KIT COMPONENTS</b>	PAGE 01
<b>FLAT CABLE TROLLEYS</b>	PAGE 02
<b>ROUND CABLE TROLLEYS</b>	PAGE 03
<b>FLAT CABLE SPECIFICATIONS</b>	PAGE 04
<b>ROUND CABLE SPECIFICATIONS</b>	PAGE 05
<b>FLAT CABLE CONNECTORS</b>	PAGE 06
<b>INSTALLATION GUIDE</b>	PAGE 08

# Wire Rope Festoon Systems

## Wire Rope Kit Festoon Systems



### Description & Usage

Wire rope festoon systems are ideal for light duty applications with limited distance and speed requirements or where C-track cannot be installed. Systems can be purchased as complete packages or as individual components.

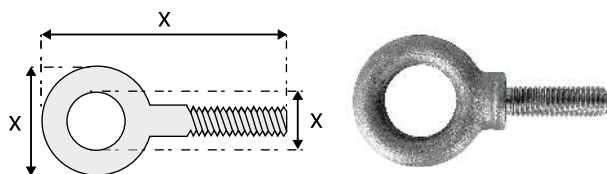
Complete systems include wire rope, trolleys, rope clamps, thimbles, eye bolts and an end clamp. Specially engineered systems are available on request.

### Wire Rope Kit System Components



#### Nylon Coated Wire Rope

7 x 19 strand core with 3/16" bare OD, 1/4" coated OD



#### Eye Bolts

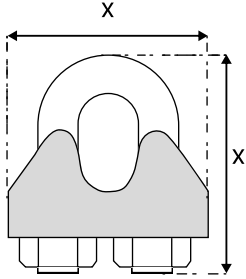
Eye bolts are used to anchor each end of the wire rope onto the support structure.

Required: 2  
Material: Galvanized Steel

# Wire Rope Festoon Systems

## Wire Rope Kit Festoon Systems

### Wire Rope Kit System Components

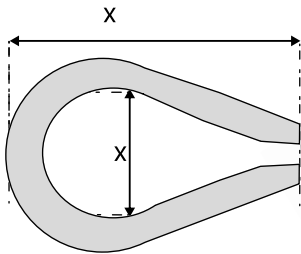


#### Wire Rope Clamps

Wire rope clamps are used to clamp the loose end of wire rope that has been looped back.

Required: 4

Material: Zinc Plated Galvanized Steel



#### Galvanized Thimble

Thimbles are used to strengthen the eye of the wire rope and protect it from abrasion.

Required: 2

Material: Zinc Plated Steel

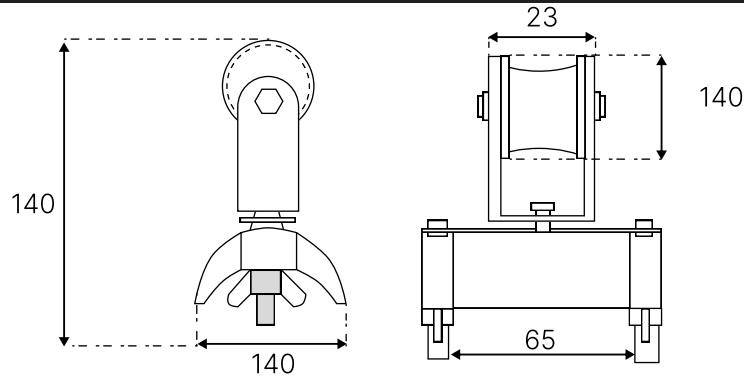
### Description & Usage

Wire rope festoon systems are ideal for light duty applications with limited distance and speed requirements or where C-track cannot be installed. Systems can be purchased as complete packages or as individual components

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# Wire Rope Festoon Systems

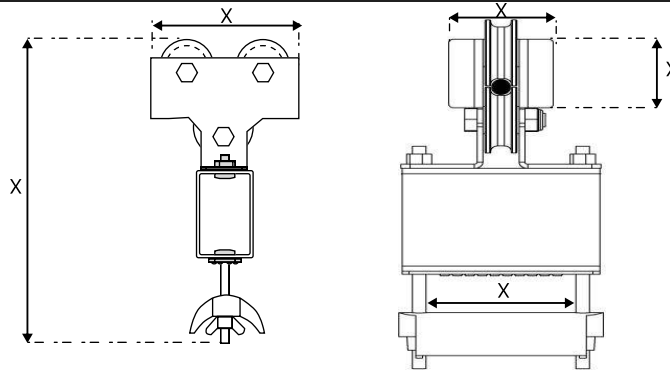
## Flat Cable Trolleys & Accessories



### Materials

- Galvanized Rollers
- Plastic Saddle
- Galvanized Carrier
- Galvanized Fastener
- Rubber Clamp

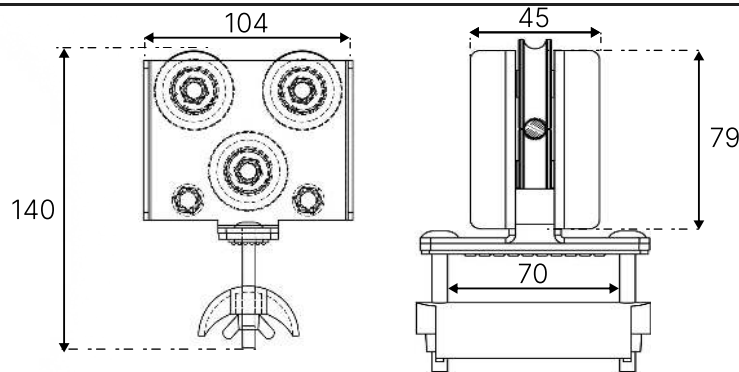
**230R035** Single Wheel Wire Rope Trolley



### Materials

- Galvanized Rollers
- Plastic Saddle
- Galvanized Carrier
- Galvanized Fastener
- Rubber Clamp

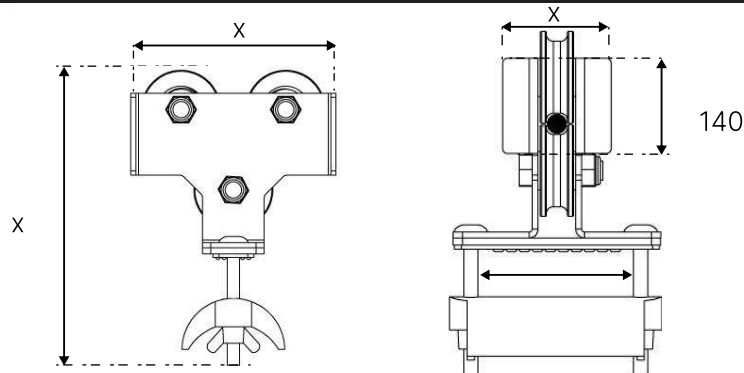
**230R042** Triple Wheel Wire Rope Tow Trolley



### Materials

- Galvanized Rollers
- Plastic Saddle
- Galvanized Carrier
- Galvanized Fastener
- Rubber Clamp

**230R051** Heavy Duty Triple Wheel Wire Rope Trolley



### Materials

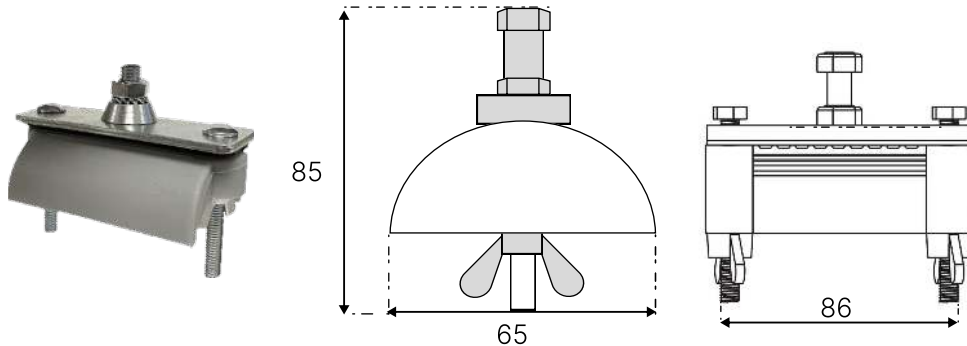
- Galvanized Rollers
- Plastic Saddle
- Galvanized Carrier
- Galvanized Fastener
- Rubber Clamp

**230R040** Standard Duty Triple Wheel Wire Rope Trolley



# Wire Rope Festoon Systems

## Flat Cable Trolleys & Accessories



### Materials

- Plastic Saddle
- Galvanized Carrier
- Galvanized Fastener
- Rubber Clamp

**230R035** Single Wheel Wire Rope Trolley

## Flat Cable Trolley Specifications

PART #	WIRE ROPE SIZE	LOAD CAPACITY	OPERATING TEMPERATURE	TRAVEL SPEED	WEIGHT
<b>230R035</b>	6 - 8 mm	7 kg	-30°C to +70°C	50 m/min	0.221
<b>230R040</b>	6 - 8 mm	21 kg	-30°C to +70°C	50 m/min	0.283
<b>230R042</b>	6 - 8 mm	21 kg	-30°C to +70°C	50 m/min	0.350
<b>230R051</b>	6 - 8 mm	21 kg	-30°C to +70°C	50 m/min	0.484

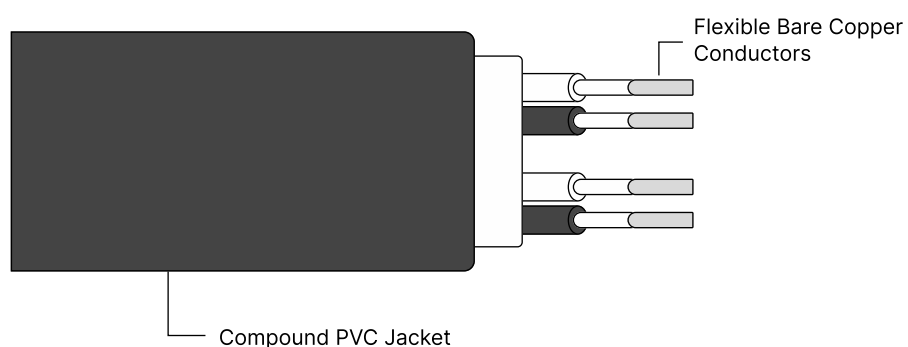
# Wire Rope Festoon Flat Cable

Yellow PVC Flat Cable, 105°C, 600 Volts, UL & CSA\*\*

PART #	SIZE AWG	NO. OF CONDUCTORS	NO. OF STRANDS	AMPACITY	INSULATION (inches)	DIMENSIONS	WEIGHT (kg/m)
FC0204	2	4	665	120	0.060	0.560 × 1.955	1.27
FC0404	4	4	420	90	0.060	0.490 × 1.690	0.75
FC0604	6	4	266	70	0.060	0.430 × 1.450	0.60
FC0804	8	4	168	50	0.045	0.365 × 1.190	0.42
FC1004	10	4	105	40	0.030	0.270 × 0.880	0.24
FC1204	12	4	65	30	0.030	0.230 × 0.710	0.16
FC1208	12	8	65	21	0.030	0.230 × 1.340	0.32
FC1404	14	4	41	25	0.030	0.210 × 0.625	0.12
FC1408	14	8	41	17	0.030	0.210 × 1.175	0.22
FC1412	14	12	41	17	0.030	0.210 × 1.700	0.34
FC1608	16	8	65	15	0.030	0.200 × 1.100	0.18
FC1612	16	12	65	15	0.030	0.200 × 1.605	0.27
FC1616	16	12	65	15	0.030	0.200 × 2.250	0.36

Not recommended for severe flexing or impact at temperatures below -40°C \*\*

## Spec Sheet, Features and Benefits



### Description

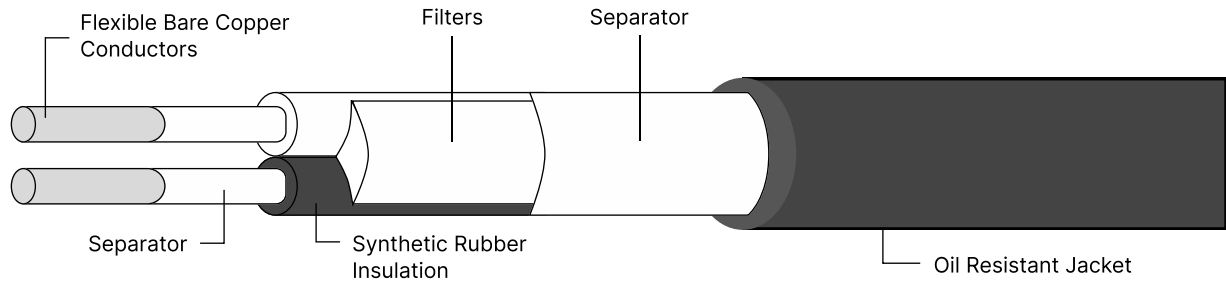
Conductor of soft drawn bare copper with insulation of 105°C colour coded PVC jacket. Operating temperature of -40°C to +105°C. UV resistant, FT1 and VW-1 rated.

### Application

For use with festoon systems for the conveyance of electrical power to equipment with lateral traversing motion. UL listed for indoor or outdoor applications (tested at -35°C to 105°C)

# Wire Rope Festoon Round Cable

## Spec Sheet, Features and Trolleys



### Description

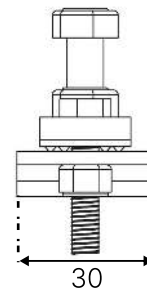
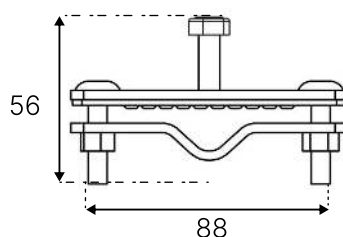
Conductor of soft drawn bare copper with insulation of 105°C colour coded PVC jacket. Operating temperature of -40°C to +105°C. UV resistant, FT1 and VW-1 rated.

### Application

For use with festoon systems for the conveyance of electrical power to equipment with lateral traversing motion. UL listed for indoor or outdoor applications (tested at -35°C to 105°C)

## Round Cable Trolleys & Accessories

PART #	WIRE ROPE SIZE	LOAD CAPACITY	OPERATING TEMPERATURE	TRAVEL SPEED	WEIGHT
<b>230R031</b>	6 - 8 mm	7 kg	-30°C to +70°C	50 m/min	0.221
<b>230R039</b>	6 - 8 mm	21 kg	-30°C to +70°C	50 m/min	0.283
<b>230R041</b>	6 - 8 mm	21 kg	-30°C to +70°C	50 m/min	0.350
<b>230R052</b>	6 - 8 mm	21 kg	-30°C to +70°C	50 m/min	0.484



### Materials

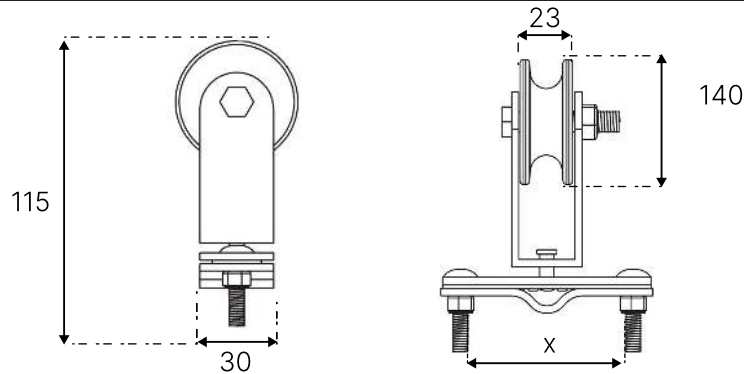
- Plastic Saddle
- Galvanized Carrier
- Galvanized Fastener
- Rubber Clamp

**230R034** End Clamp For Flat Cable Trolley



# Wire Rope Festoon Systems

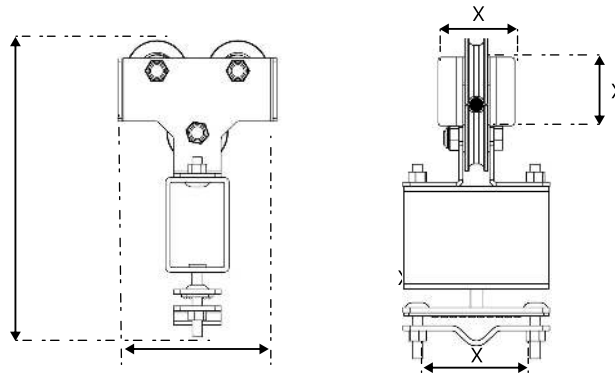
## Round Cable Trolleys & Accessories



### Materials

- Galvanized Rollers
- Plastic Saddle
- Galvanized Carrier
- Galvanized Fastener
- Rubber Clamp

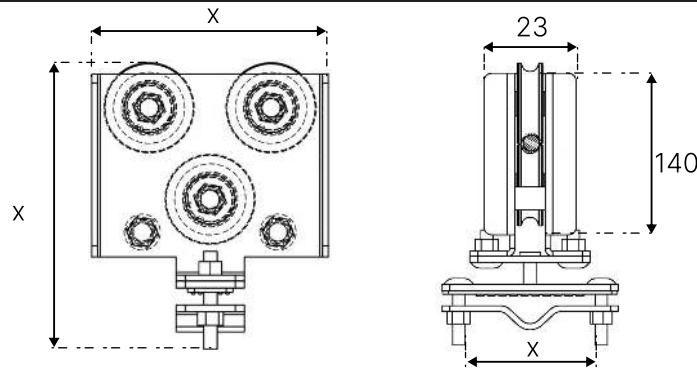
**230R031** Single Wheel Wire Rope Trolley



### Materials

- Galvanized Rollers
- Plastic Saddle
- Galvanized Carrier
- Galvanized Fastener
- Rubber Clamp

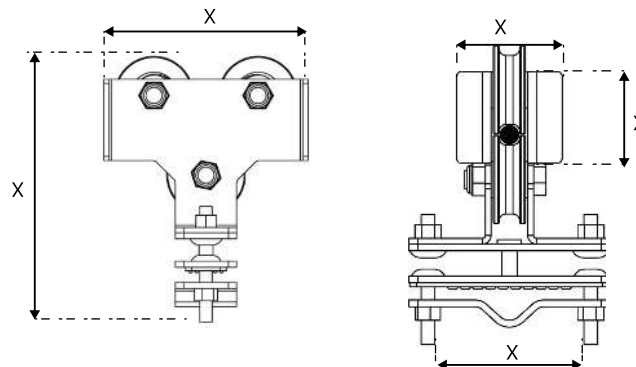
**230R041** Triple Wheel Wire Rope Tow Trolley



### Materials

- Galvanized Rollers
- Plastic Saddle
- Galvanized Carrier
- Galvanized Fastener
- Rubber Clamp

**230R052** Heavy Duty Triple Wheel Wire Rope Trolley



### Materials

- Galvanized Rollers
- Plastic Saddle
- Galvanized Carrier
- Galvanized Fastener
- Rubber Clamp

**230R039** Standard Duty Triple Wheel Wire Rope Trolley

# Wire Rope Festoon Systems

## Round Cable Connectors



### Heat Shrinkable Cable Connector

Used for single and multiple cable groupings (exceeds navy requirements for tightness and integrity. Connectors are water tight, corrosion resistant and flame retardant

PART #	LENGTH	CABLE OPENING	DRILL SIZE
<b>WGLS100</b>	1.250"	0.750"	1.000"
<b>WGLS110</b>	3.750"	1.100"	1.380"
<b>WGLS160</b>	4.250"	1.600"	2.000"
<b>WGLS206</b>	6.250"	2.060"	2.360"
<b>WGLS290</b>	7.000"	2.900"	3.500"



### Plastic Strain-Relief Cable Connector

Used in industrial application to protect and seal cables and wires across panels or machine walls. Each connector is constructed of standard liquid-tight polyamide.

PART #	LENGTH	CABLE OPENING	DRILL SIZE
<b>WGLS100</b>	1.250"	0.750"	1.000"
<b>WGLS110</b>	3.750"	1.100"	1.380"
<b>WGLS160</b>	4.250"	1.600"	2.000"
<b>WGLS206</b>	6.250"	2.060"	2.360"
<b>WGLS290</b>	7.000"	2.900"	3.500"
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<b>WGLS290</b>	7.000"	2.900"	3.500"



# Wire Rope Festoon Systems

## Flat Cable Connectors



### Cable Connector for Flat Cable

Used to connect flat cable to power source or junction box.

PART #	KNOCKOUT	WIDTH	HEIGHT
<b>WGL100</b>	1.000"	0.500"	0.750"
<b>WGL125</b>	1.250"	0.625"	1.062"
<b>WGL150</b>	1.500"	0.750"	1.250"
<b>WGL200</b>	2.000"	1.062"	1.625"



### PG21 Cable Connector for Flat Cable

Used to connect flat cable to power source or junction box.

PART #	AWG	CONDUCTORS	WIDTH
<b>504 328 44</b>	16	4	1.181"
<b>504 547 44</b>	16	8	1.299"
<b>504 548 44</b>	16	12	1.535"



### Aluminum Cable Connector for Flat Cable

Used to terminate flat cable at power source or junction box with rubber bushing.

PART #	AWG	CONDUCTORS	NPS
<b>FC-1216C</b>	16	12	2.000"
<b>FC-816C</b>	16	8	1.250"
<b>FC-414C</b>	14,12	4	1.000"
<b>FC-410C</b>	10	4	1.000"
<b>FC-48C</b>	8	4	1.250"
<b>FC-46C</b>	6	4	1.500"
<b>FC-44C</b>	4	4	2.000"
<b>FC-42C</b>	2	4	2.000"

# Wire Rope Festoon Round Cable

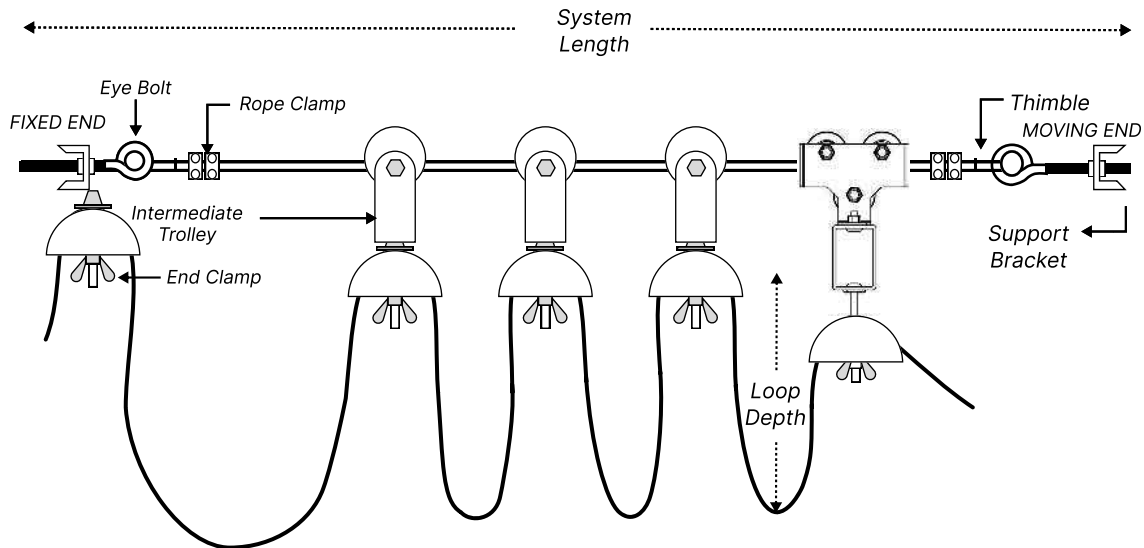
Black SOOW-A Round Cable, 90°C, 600 V, UL & CSA

PART #	SIZE AWG	NO. OF CONDUCTORS	AMPERAGE	DIAMETER (inches)	WEIGHT (kg/m)
830509	10	5	20	0.770	0.655
830609	10	6	20	0.810	0.693
830709	10	7	17	0.840	0.774
830809	10	8	17	0.870	0.798
831009	10	10	12	1.030	1.016
831209	10	12	12	1.070	1.192
831409	10	14	12	1.120	1.366
831609	10	16	12	1.180	1.540
830708	12	7	14	0.750	0.554
830808	12	8	14	0.800	0.622
830908	12	9	10	0.850	0.805
831008	12	10	10	0.930	0.871
831208	12	12	10	0.990	1.027
831408	12	14	10	1.040	1.083
831608	12	16	10	1.090	1.134
832008	12	20	9	1.200	1.372
833008	12	24	9	1.320	1.686
830507	14	5	12	0.670	0.405
830607	14	6	12	0.660	0.390
830707	14	7	10	0.710	0.414
830807	14	8	10	0.730	0.507
831007	14	10	7	0.770	0.610
831207	14	12	7	0.880	0.717
831607	14	16	7	1.000	0.935
832007	14	20	7	1.110	1.164
832407	14	24	6	1.170	1.205
830506	16	5	8	0.500	0.213
830606	16	6	8	0.490	0.254
830706	16	7	7	0.560	0.268
830806	16	8	7	0.510	0.299
831006	16	10	5	0.650	0.374
831206	16	12	5	0.700	0.445
831406	16	14	5	0.730	0.509
831606	16	16	5	0.760	0.546
832006	16	20	5	0.780	0.616



# Wire Rope Festoon Systems

## Diagram & Installation Guide



- 
- Step #1** Weld support brackets to supporting structure at the end of the system and mount end clamp to one support bracket.
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- Step #2** Install your short eye bolt on the same side as end clamp with eye facing inward, on support bracket. Install long eye bolt on other support bracket.
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- Step #3** Anchor wire rope to short eye bolts using thimble and wire clamps.
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- Step #4** Thread wire rope through each cable trolley with the tow trolley being the last one.
- 
- Step #5** Tie trolleys to fixed end eye bolt. This prevents the trolley weight from contributing to wire rope sagging while you complete step 6.
- 
- Step #6** Anchor the other end of wire rope to the long eye bolt at moving end then tighten the locking nut so wire rope does not sag
- 
- Step #7** Untie the trolleys and ensure they run smoothly along the length of the wire rope.
- 
- Step #8** Attach the tow bar to the hoist and insert the bar through the tow trolley box compartment
- 
- Step #9** Run entire system back and forth at least 3 times to ensure set up has been done correctly. If cable is fastened properly, it should extend in a straight line.
- 
- Step #10** Connect power and cycle system at slowest speed and observe motion to ensure system installation was successful
-