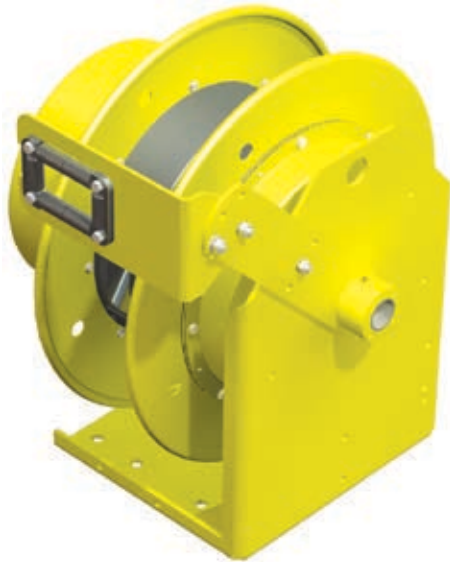


1900 & 2400 Series PowerReel®

Our 1900 Series and 2400 Series PowerReels® handle larger and longer cables and are top-quality, low-cost alternatives to other high-capacity spring reels. These reels offer heavy-duty performance at competitive prices.



1900 Series Reel Shown



1900 and 2400 Series Reels are ideal for:

- Utility trucks
- Large cable-end accessories
- Aviation hangars
- Overhead hoists and cranes (Class A-C)
- Automated material handling
- Truck cranes and ladder trucks

Standard Features

- Excellent performance for industrial indoor and outdoor applications. Built to NEMA 4 standards for wet or dry environments.
- Heavy-duty, all-steel construction
- Two-piece roller guide can be repositioned to four different locations
- Ball stop and ratchet assembly come standard with all "Lift/Drag" models.
- Sealed, lifetime lubricated spring motor canister for easy and safe spring replacement
- A variety of ring amp ratings from 35-150 amps.
- 600 volt rating (1-4 conductors). 250 volts (5 or more conductors) per UL requirements. Operating range: -22°F to 220°F.
- CSA Certified

Choosing a 1900-2400 Series Cable Reel:

- Use the Specification Data Sheets on pages 4-5 to determine your needs. Contact the factory for quotations.
- Be sure to specify enough cable - see "Cable Length Needed" on page 5.
- Reels are sized to handle Type SOOW-A, Type W, or Type G-GC cable.

IMPORTANT

If the reel will be paying out and retracting at a very high cycle rate and/or operating in an exceptionally harsh environment you may need **Premium Cable** - see Appendix VII, page 43 - contact Conductix-Wampfler for details.

Suggested Reel Options For Other Options, see pages 20-31

Option	Purpose	Details on Page:	Spool Size In. (mm)	Part No.
Guide Rail Set	To Protect Spool Flanges	n/a	19 x 5 (483 x 127)	40212A
Guide Rail Set	To Protect Spool Flanges	n/a	24 x 5 (610 x 127)	40212B
Guide Rail Set	To Protect Spool Flanges	n/a	19 x 8 (483 x 203)	40212AA
Guide Rail Set	To Protect Spool Flanges	n/a	24 x 8 (483 x 203)	40212BB
Spool Lock	To Keep the Spool From Rotating	26	n/a	40260A or 40260B
Pivot Base	Allows reel to pivot <360°	24	n/a	40274
Swivel Base	Allows reel to swivel 360°	25	n/a	

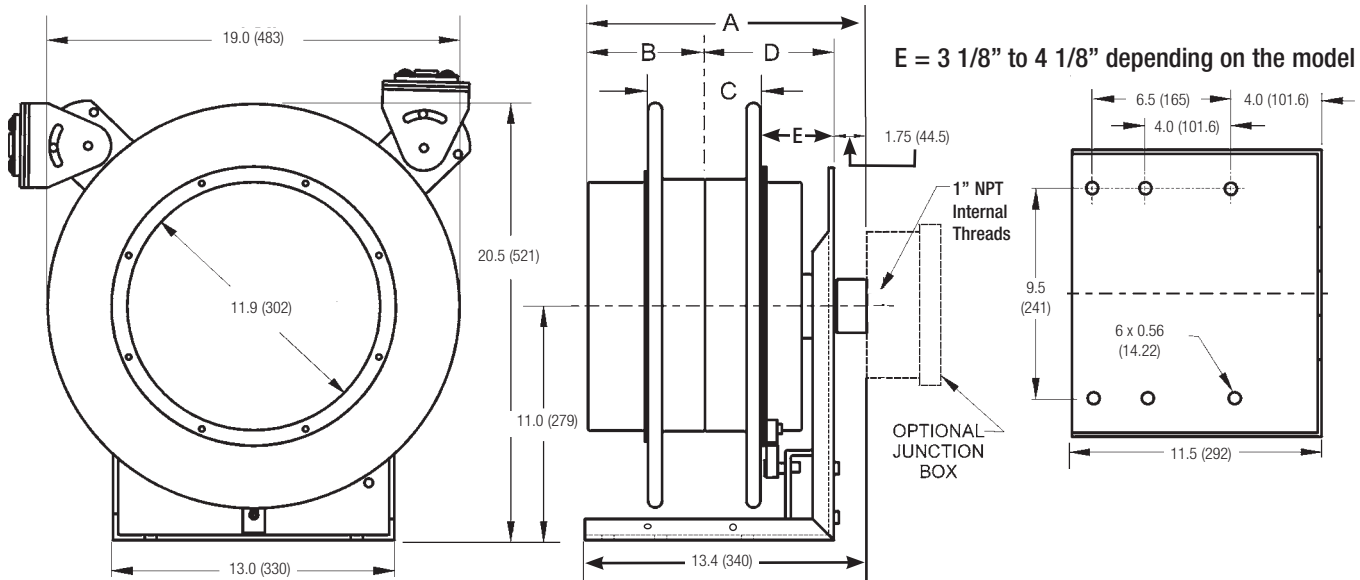
NEMA 4 Junction Boxes

Cable Size	Cable O.D. Inches	Part No.	Cable O.D. Inches	Part. No.	Cable O.D. Inches	Part. No.
	w/ 1" NPT		w/ 1.25" NPT		w/ 1.50" NPT	
4 Conductor, 16-8 AWG	0.31 - 0.95	40923	n/a	n/a	n/a	n/a
4 Conductor, 6-2 AWG	n/a	n/a	0.875 - 1.245	40924	n/a	n/a
12 Conductor	0.31 - 0.95	40925A	0.875 - 1.245	40925B	n/a	n/a
24 Conductor	0.31 - 0.95	40926A	0.875 - 1.245	40926B	1.156 - 1.495	40926C
30 Conductor	n/a	n/a	0.875 - 1.245	40927B	1.156 - 1.495	40927C

1900 & 2400 Series PowerReel® Dimensions

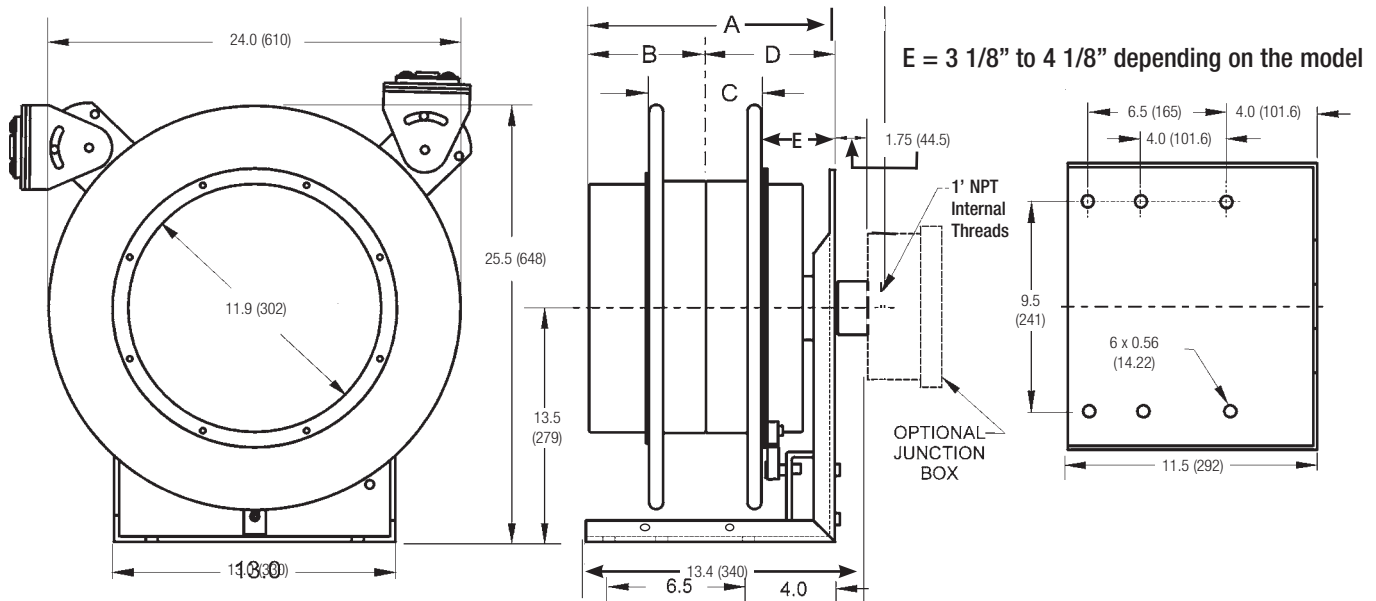
1900 Series Dimensions

Dimensions A through D will vary depending on the model and can be provided with quote.



2400 Series Dimensions

Dimensions A through D will vary depending on the model and can be provided with quote.



Options and Accessories Reference Chart

For your convenience, the chart below lists each series of reel, the option, and whether that option is available for that reel series. Options and accessories are described on the pages listed in the second column. Some reel models include common add-on options as standard features of the basic reel.

**Need assistance with choosing accessories?
Contact Conductix-Wampfler at 1-800-521-4888**

		Reel Series				
		1200	1400	1500	1900 2400 2500	3200 3600 3500
		Reel Series Page Number				
Accessory	Accessory Page Number	6-9	10-13	18	14-15, 19	16-17, 19
Ball Stops	21	Std	Std *	Std	Std *	Add-on
Cable Grip	21	Add-on	Add-on	Add-on	Add-on	Add-on
External Spring Tensioning Device	16	-	-	-	-	Std
Flop-Over Guide Kit	13	-	Add-on	-	-	-
Guide Rail Set	14	-	-	-	Add-on	Std
Hand Lamps	9,13,22	Std*	Add-on	Add-on	Add-on	Add-on
Junction Box	14	-	-	-	Add-on	Std
Limit Switch	27	Call	Call	Call	Add-on	Add-on
Marine Duty	27	-	-	-	Call	Call
Pivot Base (345°)	24	Add-on	Add-on	Add-on	Add-on	Add-on
Push-Button Pendants	27	Add-on	Add-on	Add-on	Add-on	Add-on
Quick-Change Spring Motor	16	-	-	-	-	Std
Ratchet	26	Std	Std	Std	Std *	Add-on
Receptacle Boxes	23	Std *	Add-on	-	Add-on	Add-on
ReelSafe Brake	26	-	Add-on	Call	Add-on	Add-on
Roller Guides	28-30	Std	Std	Std	Std	Std
Slip Ring Assemblies (Special)	31	-	Call	Call	Call	Call
Spool Lock	26	-	-	-	Add-on	Add-on
Swing Mount	6	Add-on	Add-on	-	-	-
Swivel Base	25	Add-on	Add-on	Add-on	Add-on	Add-on
Hazardous Location Swivel Base	25	-	-	Add on	Add-on 2500 only	Add-on 3500 only

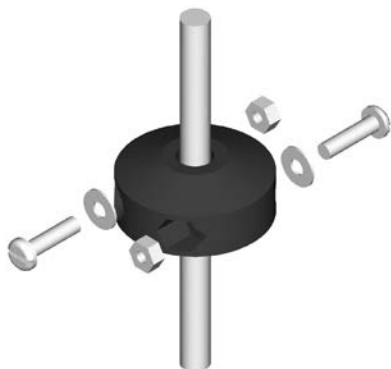
*** Selected models ONLY**

Ball Stops and Cable Grips

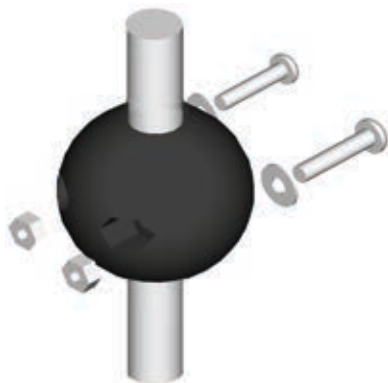
Ball Stops



Type A - Round with spring



Type B - Split Donut



Type C - Split Round

Ball Stops, also referred to as “Cable Stops” or “Bumper Stops” are:

- Generally used for manually operated “Lift/Drag” applications govern retraction length. Stops are required when cable-end accessories such as hand lamps and receptacle boxes are installed on the reels.
- Ball stops are included with all 1200 Series reels.
- Ball stops are included on 1400, 1500, 1900, 2400 and 2500 Series reels “Lift/Drag” application only.

Type	For Outside Cable Dia of: inches (mm)	For Reel Series:	Part No.
A	0.19 to 0.44 (4.8 to 11.2)	1200 or 1400 only Not for 1500	34885
B	0.44 to 0.62 (11.2 to 15.7)	Any	34474
B	0.63 to 0.75 (16.0 to 19.1)	Any	34475
B	0.75 to 1.05 (19.1 to 26.7)	Any	34476
C	0.44 to 1.38 (11.2 to 15.7)	Any	533328-K

Cable Grips



Also referred to as “Kellems” grips, these devices are recommended to maximize cable life. They relieve the concentrated strain on individual conductors at the cable termination point. In most installations, the eye of the cable grip is connected to an eye bolt or U-bolt. This allows free movement between the cable and the grip. Include a generous cable loop to minimize the strain on the cable.

Strongly Recommended for “stretch” applications - see page 4.

For Outside Cable Dia of: inches (mm)	Part No.
0.43 to 0.61 (10.9 to 15.5)	03622
0.61 to 0.74 (15.5 to 18.8)	03623
0.74 to 0.99 (18.8 to 25.1)	03624
0.99 to 1.24 (25.1 to 31.5)	03625
1.25 to 1.49 (31.8 to 37.8)	03626

Hand Lamps

Hand Lamps provide extra lighting in applications where proper lighting is required for safety or convenience. Suitable for indoor use on all 3 conductor 16 AWG & 14 AWG cable reels. Standard on selected 1200 Series PowerReels - see page 9. Available in incandescent or fluorescent type in standard and hazardous duty models.

Ratchet (page 26) and ball stop (page 21) are required and may need to be ordered separately if they are not standard on the host reel. Please refer to chart on page 20.

Hand Lamps are ideal for:

- Manufacturing work cells
- Automotive work bays
- School shop areas
- Recreation centers
- Maintenance shops
- Maintenance trucks & trailers

Incandescent Hand Lamp



The HSR has a high impact yellow handle with recessed on/off switch and 15 amp, 125 volt outlet on the side. Features a grounded steel reflector cage with swivel hanger. Accepts up to 14/3 SJ00W-A cable. 100-watt rough service bulb not included.

UL listed for indoor use.

Part No.	Wt lb (kg)
HSR	1.3 (.59)

Fluorescent Hand Lamp



The FHL has rubber handles with switch and hanger. Features a plastic non-glare shield with cool operating 13-watt lamp (included). Ballast is mounted on the feeder cord. For use with 16 or 14 AWG 3 conductor SJ00W-A cable only.

UL listed for indoor use.

Part No.	Wt lb (kg)
FHL	1.2 (.55)

Hazardous Duty Incandescent Hand Lamp



Ideal when a hand lamp needs to be used in a hazardous location. Light-weight construction. Features non-sparking aluminum guard with full swivel hook and high impact glass reinforced phenolic handle. Resists heat up to 300° F. Accepts up to 14/3 SOOW-A cable. 100 Watt, 120 Volt.

UL listed

Part No.	Wt lb (kg)
XHL	4.9 (2.22)

Hand Lamps and Receptacle Boxes

Hazardous Duty Fluorescent Hand Lamp



Ideal when a hand lamp needs to be used in a hazardous location. Light-weight construction. Features non-sparking plastic guard with full swivel hook and high impact glass reinforced phenolic handle. Resists heat up to 300 degrees F. Accepts 16/3 SOOW-A cable. 13 Watt, 120 Volt

UL listed

Part No.	Wt lb (kg)
100211-PL	4.9 (2.22)

Receptacle Boxes

Receptacle boxes mounted to the reel cable supply mobile power where it is needed. They are standard on some models of 1200 Series reels - see page 8. They can also be wired to other PowerReels and can accommodate up to 12/3 SOOW-A cable.

Made from a heavy duty, molded yellow thermoplastic elastomer (TPE), these boxes have an internal cord grip and are oil resistant and impervious to most chemicals.

Ratchet (page 26) and Ball Stop (page 21) are required and are standard on the reels that most commonly use a receptacle box - see page 20.

UL Listed and CSA approved.



Receptacle Boxes are ideal for:

- Factory work cells
- Automotive work bays
- School shop areas
- Recreation centers
- Maintenance shops
- Maintenance trucks & trailers

Description	Part No.
Dual 15 amp 125 volt duplex (4 outlets total)	RB
Dual 20 amp 125 volt duplex (4 outlets total)	RB-5-20R

Ground Fault Circuit Interrupter (GFCI)



A Ground Fault Circuit Interrupter (GFCI) and plug assembly can be mounted onto the feeder cord of some reels. It comes standard on 1200 reels with part numbers ending in "17" - see page 8.

345 Degree Pivot Base

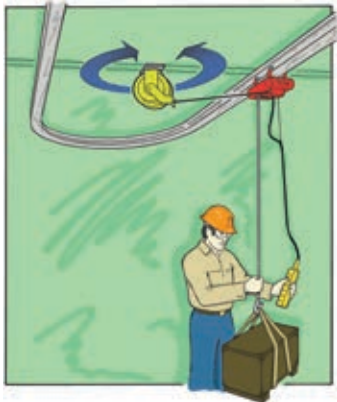


Pivot Bases allow the cable reel to pivot back and forth for alternating directions of cable payout. See part number chart below for maximum rotation.

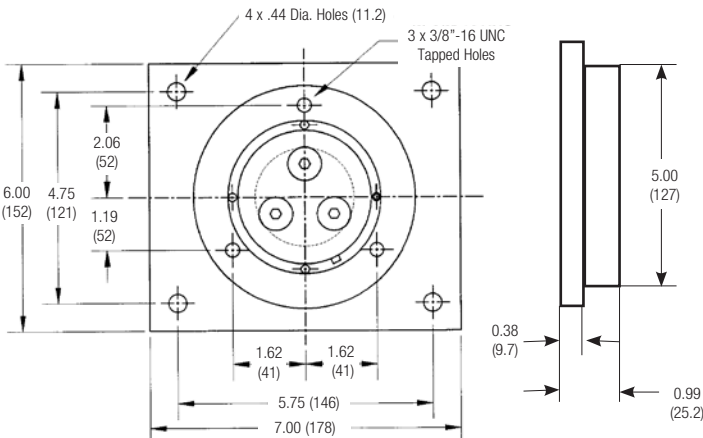
If the cable is to be paid out at more than 15 degrees away from parallel with the spool flanges, a pivot base should be used.

Note that Swivel Bases are available for applications that require a full 360 degree rotation - see page 25. Pivot Bases are ordered based on the specific series of reel used - see chart below.

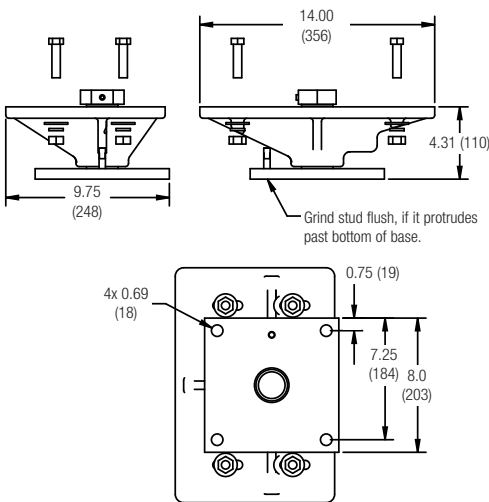
Reel Series	Maximum Rotation (Degrees)	Part No.	Wt lb (kg)
1200 and 1400	345	PVB	7.5 (3.40)
1500	345	XPVB	20.0 (9.07)
1900 & 2400	330	40274	43.0 (19.51)
2500	330	40274X	43.0 (19.51)
3200 & 3600	330	P3-3200	103.0 (46.72)



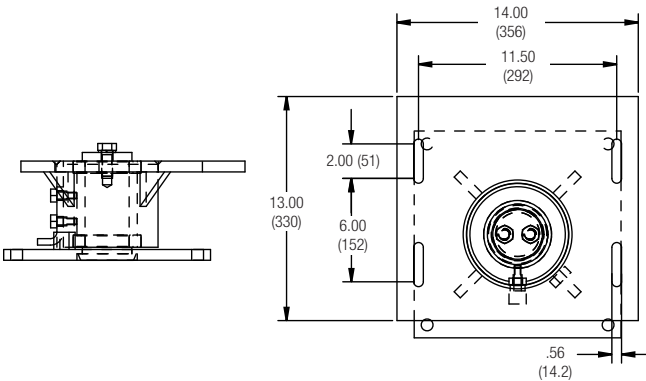
PVB Dimensions



40274 and 40274X



P3-3200



360 Degree Swivel Bases



1200 / 1400 Swivel Shown



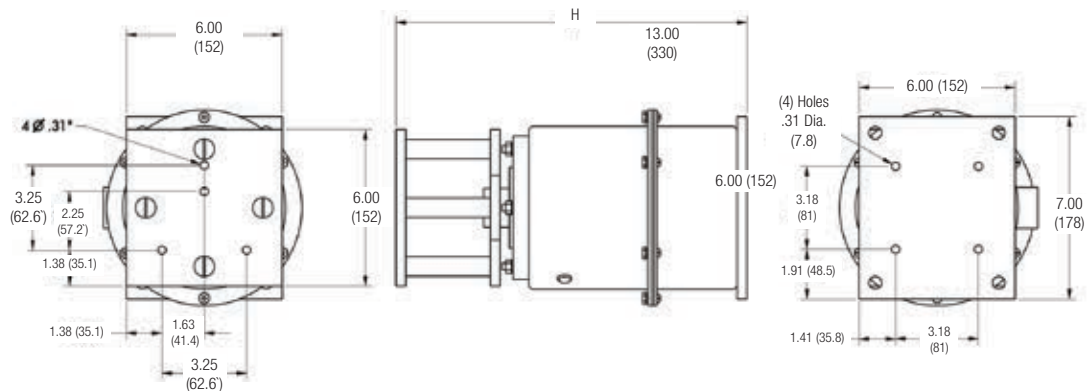
Swivel Bases allow reels to rotate 360 degrees in applications where continuous electrical rotation is required. They feature completely free running ball bearings in a water-tight and dust-tight enclosure. Access holes are provided for simple slip ring inspection. Hazardous duty version is available - see page 19.

Standard top and side fittings: 1.0 inch NPT for cable diameters ranging from 0.50 to 0.75 inches.

Contact factory regarding fittings for larger size cable.

1200 and 1400 Swivel Bases				
# Cond	Amps	Volts	dim "H"	Part No.
3	35	600	13.5 (343)	38036
4	35	600	13.5 (343)	38036B
5	35	250	15.0 (381)	38036C
6	35	250	15.0 (381)	38036D
8	35	250	16.5 (419)	38036E
10	35	250	16.5 (419)	38036F
12	35	250	18.5 (471)	38036G

1200 / 1400 Swivel Base Dimensions

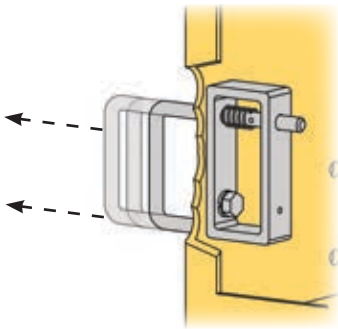


1900 and 2400 Series Swivel Bases			
# Cond	Amps	Volts	Part No.
3	35	600	SM-33-P***-8
4	35	600	SM-34-P***-8
5	35	250	SM-35-P***-8
6	35	250	SM-36-P***-8
8	35	250	SM-38-P***-8
10	35	250	SM-310-P***-8
12	35	250	SM-312-P***-8

1500 Series Swivel Bases			
# Cond	Amps	Volts	Part No.
3	35	600	XSM-33-XPVB
4	35	600	XSM-34-XPVB
5	35	250	XSM-35-XPVB
6	35	250	XSM-36-XPVB
8	35	250	XSM-38-XPVB
10	35	250	XSM-310-XPVB
12	35	250	XSM-312-XPVB

Optional Spool Locks, Ratchets, and Brake

Spool Locks



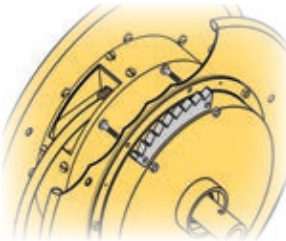
Spool Locks hold the spool in place to prevent rotation of the reel in adverse conditions or during routine maintenance. Can be included with 1900 through 3600 Series Reels.

Spool Locks are used for:

- Overhead cranes
- Rail cars
- Reel maintenance situations

For Reel Series	Part No.
1900-2400	40260A or 40260B (depending on reel - consult factory)
3200-3600	44333

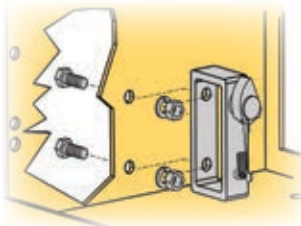
Ratchets



Ratchets are spring activated mechanisms that temporarily lock the spool in place at selected points in the cable payout. The ratchet is released by pulling the cable. Ratchets are standard on 1900, 2400 and 2500 Series “Lift/Drag” Reels. For 3200 through 3600 Series, they need to be specified on quote/order.

Ratchets are used for:

- Manually operated reels
- Lift/Drag applications
- see page 4
- Reels with hand lamps, receptacle boxes, or pendants installed



For Reel Series	Part No.
1900-2400	40251A-K or 40251B-K *
3200-3600	43418

* This part number is for replacement as 1900, 2400 and 2500 Series Lift/Drag reels now have ratchets included standard.

ReelSafe Brake



The “ReelSafe” brake (U.S. Patent # 6488224) limits the retraction speed of a spring-powered reel. This device greatly reduces the chance that an accidental uncontrolled cable retraction will occur, thereby reducing the risk of personal injury or property damage.

The ReelSafe is preset at the factory to a safe speed, but it can be adjusted to the user’s preference after reel installation. Some variation in retraction rate will be noticeable during large temperature variations such as seasonal temperature change, and minor adjustments may be necessary.

For Reel Series	Part No. (ReelSafe Brake Unit Only *)
1400	42900
1900-2400	42900
3200-3600	42900

* Final part number character determined upon order entry based on reel style.

Other Options

Limit Switches

Rotary cam-type limit switches are used when an electrical interlock between cable payout length and other electrical equipment is required. These are adjustable for accurate location of the tripping mechanism. A variety of internal gear ratios are available so that the selection of the proper ratio will give maximum rotation of the actuator. The standard limit switch consists of a 2-element switch to provide 2 NO (normally open) and 2 NC (normally closed) sets of contacts in a NEMA 4 enclosure.

Limit Switches are used for:

- 1900 through 3600 Series Reels
- Pendant Switches
- Overrun Control

Limit Switches	Part No.
Contact Factory for Consultation	To be Determined

Marine Duty Option

Marine Duty option is available for 1900 through 3600 Series PowerReels® used in applications around bodies of water and other moist environments as defined by marine specifications IEEE-45 and U.S. Coast Guard specification ABS. Hardware is stainless steel, reel shaft is zinc plated, and the slip ring leads are fully sealed at both ends of the shaft.

Marine Duty Reels are ideal for:

- Ports and Terminals
- Water Treatment Plants
- Other Extremely Moist Areas

Limit Switches	Part No.
Contact Factory for Consultation	To be Determined

Push Button Pendants



Cable reels can be used to manage pendant cables and the push button pendant on the cable end. Conductix-Wampfler offers a complete line of ergonomically designed push button pendants - From 2 to 24 buttons.

Contact Conductix-Wampfler Sales and ask for the Pendant Catalog (CAT1001) or download it from www.conductix.us



Roller Guides, Type “A”

Conductix-Wampfler includes a 4 roller guide as a standard item on each spring driven cable reel. For special cable payout applications, we recommend our Type C - page 29.

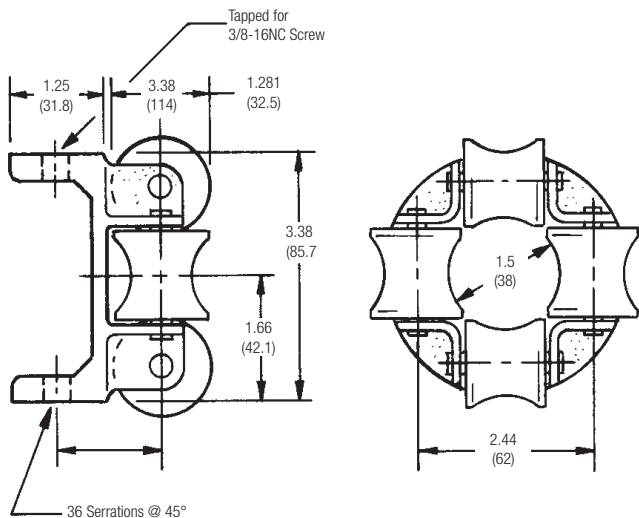
IMPORTANT NOTE: Do not use the standard rigid mount roller guide supplied with reel in a two-way payout application. Refer to pages 29-30 for Appropriate Options.

Type “A” Roller Guides are used to:

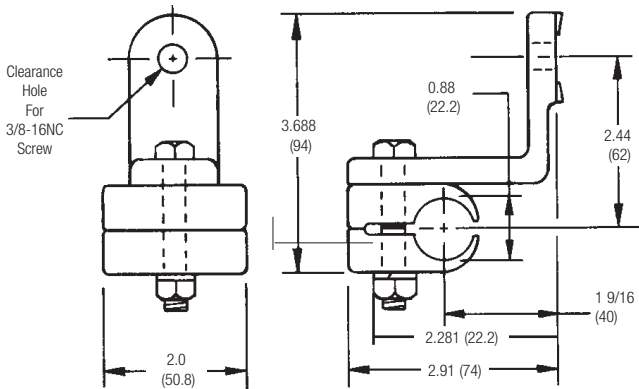
- Centering the cable on the spool
- Lift Applications
- Payouts not more than 15 degrees from tangent to the drum
- Single-direction stretch applications
- Providing a “seat” for a Ball Stop

Maximum Cable O.D. inches (mm)	Roller Guide Part No.	Roller Guide Mounting Set Part No. (for old E, F, H, and M Style Reels)
1.25 (32)	A2	AA
2.00 (51)	A3A	08397Z

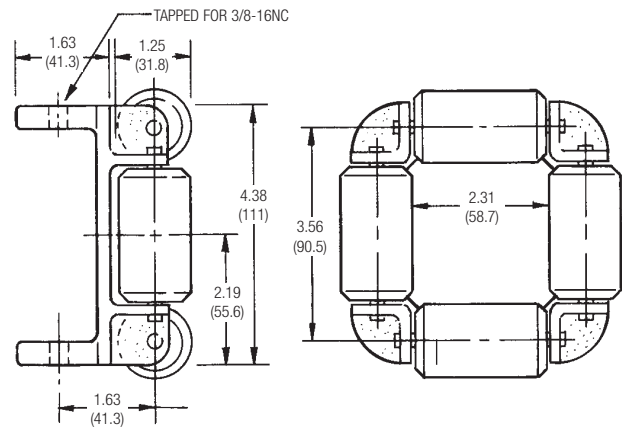
A2 Four Roller Guide



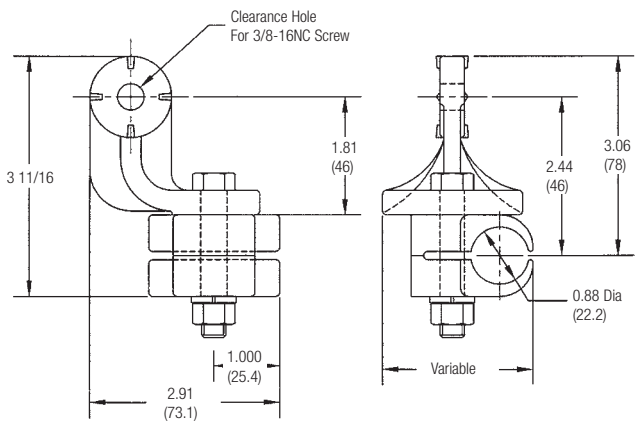
AA Guide Mount Set
(Used on 3” or greater drum widths).



A3A Four Roller Guide



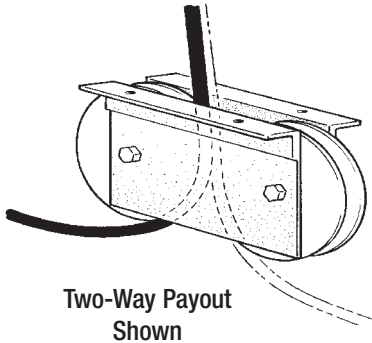
08397Z Cable Guide Support
(Used on 2.5” or less drum widths).



Roller Guides, Type “C”

The rugged “Type C” guide mounts separate from the reel.

- Suitable for all PowerReel® cable reels.
- Features sealed ball bearings
- Comes in standard matte black finish



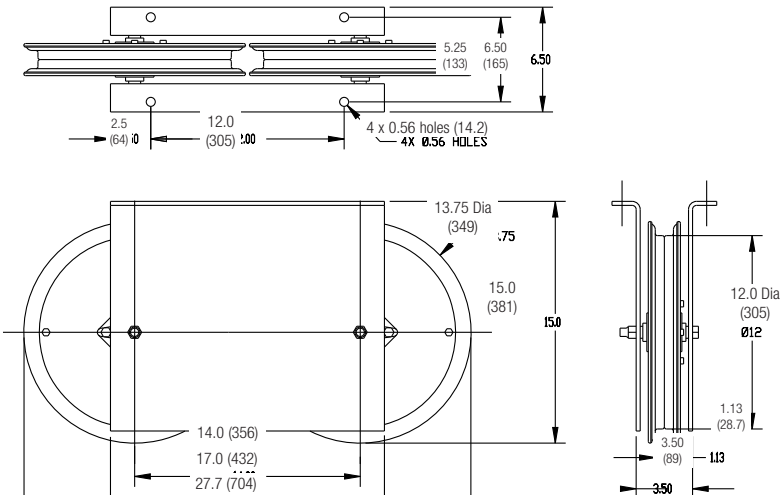
Type “C” Roller Guide (Two-Way Version) is ideal for:

- Cable that pays out in two directions and is terminated at the center of travel
- When a structural member or obstruction would interfere with the normal payout and retraction of the cable

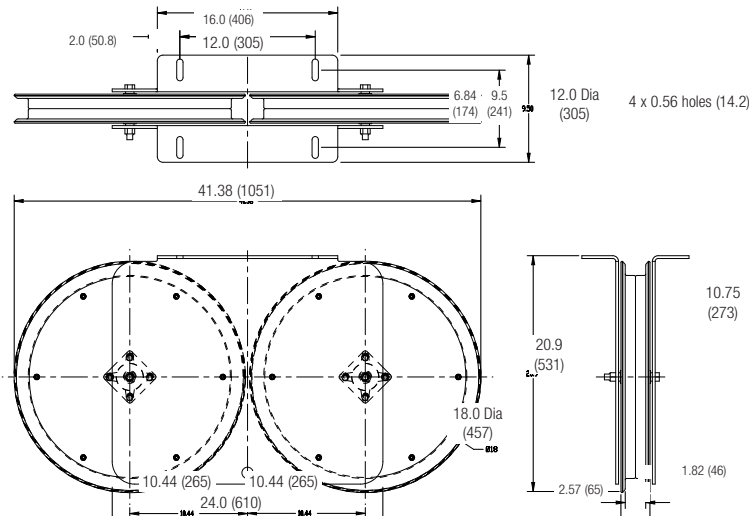
Type	Bend Diameter	Max. Cable O.D.	Part No.
	inches (mm)		
Two-Way Payout	12 (305)	1.0 (25.4)	C12S
Two-Way Payout	18 (457)	1.5 (38.1)	C18S
Two-Way Payout	24 (610)	2.0 (50.8)	C24S
Single Sheave	12 (305)	1.0 (25.4)	CA11397
Single Sheave	18 (457)	1.5 (38.1)	CA11518
Single Sheave	24 (610)	2.0 (50.8)	CA11199

IMPORTANT NOTE: When using roller guides premium cable will be required. See Appendix VII, page 43, and contact the factory for details.

C12S Roller Guide (# CA11397 Has just one 12” sheave)



C18S Roller Guide (# CA11518 has just one 18” sheave)

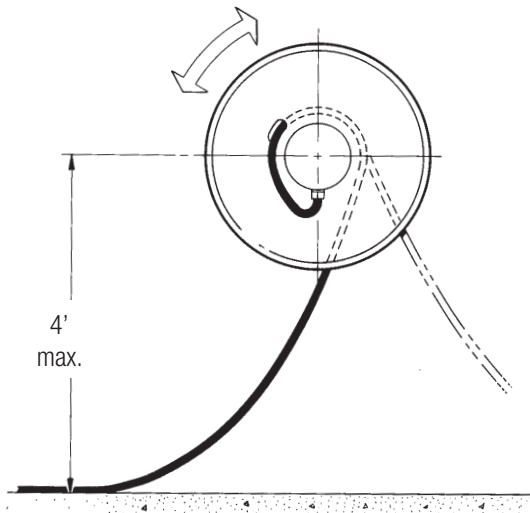


Roller Guide Installation

Configuration A

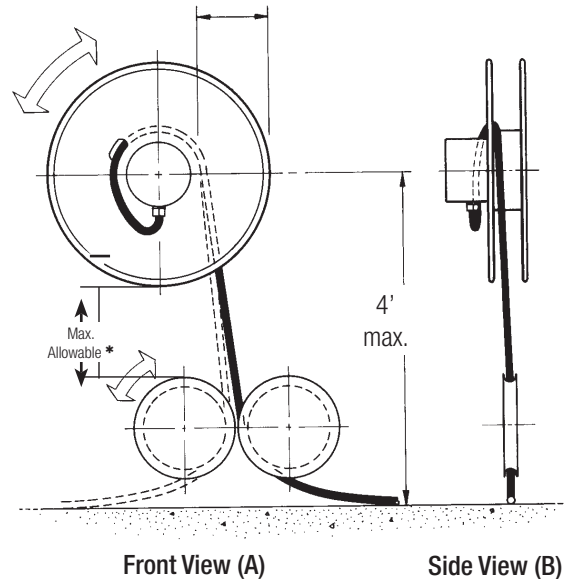
Low lift height to the center line of reel. No obstructions to nominal catenary of cable.

Secondary roller guide is not needed.



Configuration B

There is an obstruction to the normal catenary of the cable between the lift height center line and the lay of the cable. There is also adequate space between reel flange and cable lay for two-way payout roller guide (Part No. C12S, C18S or C24S - page 29)



* Space window available will vary depending on reel and guide mounting position - contact the factory.

Selection of Roller for Configuration B

- 1) Determine the bend diameter required. The bend diameter (sheave diameter) should be no less than 10 times the cable diameter to maximize cable life.
- 2) Select roller guide with required bend diameter (from page 29). Lay out cable reel and roller guide to assure that there is no interference. When in doubt as to which configuration applies, lay out the application using configuration B.
- 3) Specify catalog number of roller guide and note on the order, **"For separate mounting with cable reel part number..."** If the cable reel is not on the same order, refer to the cable reel order or specify the cable that will run on the roller guide.

Mounting for Configuration B

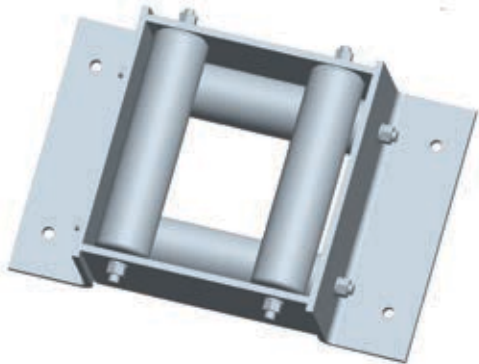
Front View (A): Locate center line of the roller guide on the mean center line of the spool flange to obtain a vertical line payout of cable from the spool to the roller guide when the spool is one half full.

Side View (B): Align the roller guide center line with spool center line.

NOTE: Allow a maximum of 4 feet from spool horizontal center line to the surface supporting the cable.

Custom Roller Guides and Slip Ring Options

Custom Roller Guides



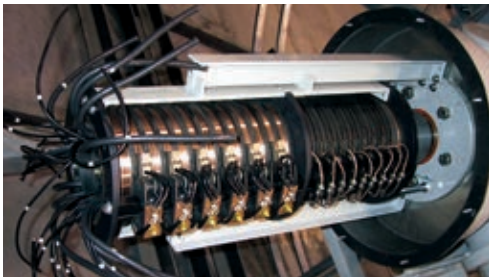
Conductix-Wampfler manufactures a variety of custom roller guides designed for specific applications. These are usually mounted separately from the reel to guide cables through floors, decks, and around obstacles.

The guide at the left is an example of a robust, custom cable guide - Part No. 46976. This unit has a roughly 9" (229 mm) box with a 3.6" (91 mm) square opening between the rollers. It is used to guide a cable through the deck of a crane or similar machine.

Note that the "A3A" guide shown on page 28 can also be remotely mounted and used in a similar manner.

Contact us to discuss your application!

Slip Ring Options



Conductix-Wampfler offers a complete line of standard and custom engineered slip rings for use with a wide variety of industrial machinery. We have over 60 years of experience in slip ring design and can offer many alternate styles of slip rings for custom applications.

For some reeling cable applications, a special slip ring treatment may be required. We can also integrate fiber optic swivels with the basic electric slip ring assembly. We can also incorporate other devices such as rotary cam switches, position encoders, and so forth.

Contact Conductix-Wampfler with your application or problem - we have the solution!



Slip Ring Features

- Precision machined copper alloy rings with copper graphite brushes for power applications.
- Silver-plated rings and silver graphite brushes for low-level signal applications.
- Gold-plated rings and gold contact brushes for low-level signal applications (DMX, ethernet, video, etc.)
- Combination rings for power, control and signal level circuits.
- Single or redundant double brushes.
- A wide range of enclosure styles and bore sizes.