

# Cord & Cable Reels

## Reel Construction

### Five Basic Parts:

**Base/Stand:** Supports and mounts the reel

**Spring Motor:** Motor which rotates the spool

**Spool:** Composed of a Drum and two Flanges

**Slip Ring:** Transfers power from a stationary source to rotating source

**Roller Guide:** Guides the cable during payout and rewind

### Definition of Terms:

**Active Length:** The difference between the minimum and maximum payout of cable

**Safety Wrap:** Cable that stays on the reel at maximum payout (Usually 2 complete wraps)

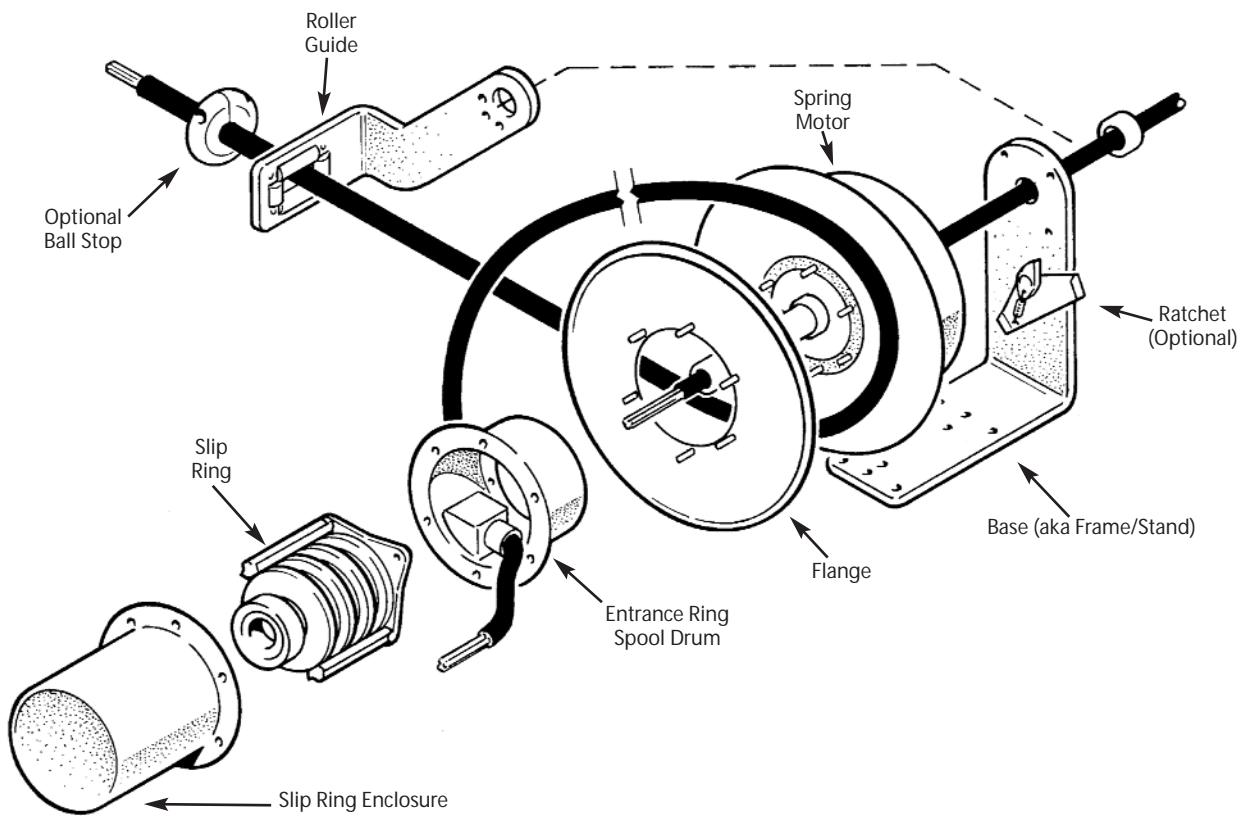
**Sag Factor:** The effect of gravity on actual travel length during stretch applications (6% - 10%)

**Lift Height:** The distance between where the cable lays to the center line of spool

**Payout:** Pulling cable out of the reel

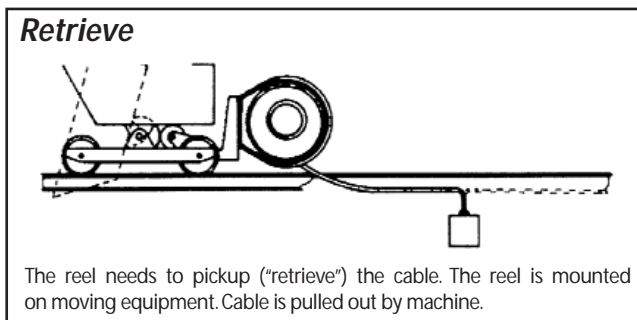
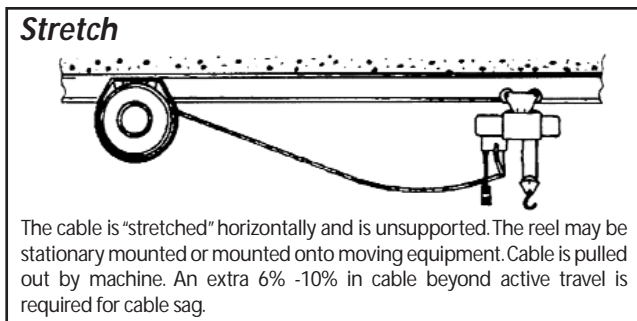
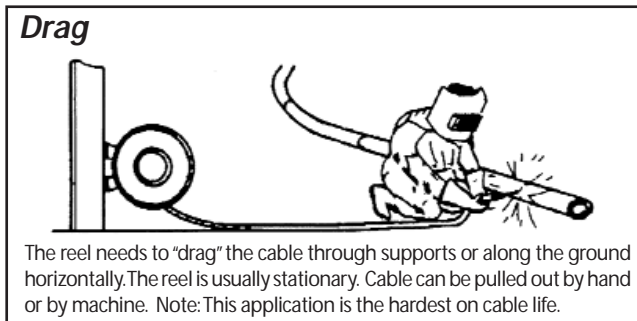
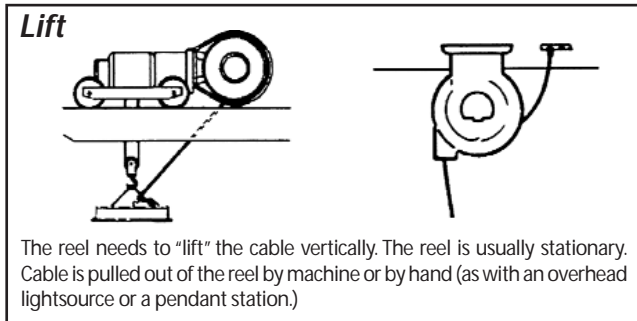
**Retract or Rewind:** Rewinding cable back into the reel

## Components of a Cable Reel



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## Specifying Your Cable Reel



Follow these three steps to make sure you get the best reel for your application needs. Your local representative or the sales team at our factory are glad to help if you need additional assistance.

### Step 1: Mechanical Requirements:

- How will the reel be used? Stretch, Lift, Drag, or Retrieve? (See left for guidance)
- What type of environment will the reel be located in? (Indoors, outdoors, corrosive environment)
- What is the Duty Cycle? (How often will be reel payout and retract?)
- What is the maximum speed of equipment? (Maximum recommended speed is 150 feet per minute)

### Step 2: Electrical Requirements:

- How much amperage is the cable expected to handle?
- At what voltage?
- What will the reel be required to handle: power, control, or communication signals?
- How many total conductors are required? (Please include one conductor for dedicated ground)
- What gauge (AWG) cable is required? The amperage and total number of conductors required will determine the gauge

### Step 3: Cable Length Requirements:

- ADD: Active Length: The difference between the minimum operating payout
- PLUS: Inactive Length: Cable that always stays out of the reel, even at full retraction
- PLUS: Safety Wrap:\* Cable that stays on the reel at maximum payout - See note below for details
- PLUS: Sag Factor - (Stretch Only): Add 10% to Active and Inactive Length total
- Lift Height - (Drag/Retrieve): The distance between where the cable lays up to the spool center line. Max 4'
- Hook up Length: Cable required for termination at both ends - 2-3' Spool End

- \* NOTE:
- Series 4000 = 2'
  - Series 5000 = 2'
  - Series 6000 = 5'
  - Series 7000 = 5'
  - Series 8000 = 3'

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## Quick Index & Application Guide

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Typical Applications						
		Commercial Facilities Dry environments where no rain, spray or other moisture is present such as workshops & auto garages.	Light Industrial Dry environments where no rain, spray or other moisture is present such as workshops & auto garages.	General Industrial Dry environments where subject to frequent use to supply light or power to portable or moving equipment.	Heavy-Duty Industrial Dry or wet areas where rain, spray or other moisture is present. Reel used to supply light or power to portable or moving equipment.	Hazardous Locations Classified per NEC article 500 & where rain, spray or other moisture is present.
Reel Series						
3000 Commercial Duty		•	•			
2900 Light Duty		•				
4000 Industrial Duty			•	•		
5000 Industrial Duty			•	•	•	
6000 Heavy Duty Industrial				•	•	
7000 Heavy Duty Industrial				•	•	
8000 Hazardous Location			•	•		•
1400 Hand Wind		•	•			
SDR Grounding Reels		•	•	•		