GLEASON REEL
CABLE GUIDE ASSEMBLIES
**Cable Guides - FOR CHANGES OF DIRECTION**

When designing a cable guiding system allow sufficient distance between any direction changes. The recommended distance should be a minimum of 20X the cable O.D. and even longer for speeds greater than 300 fpm. Implementing this design will extend cable life by giving the cables “memory” an opportunity to shed torsion before making another change in direction. All “S” type directional changes and alternate plane changes should be avoided. These situations induce undue forces and stress on the conductors especially at higher travel speeds.

**Roller Guides**

The radiused roller guide consists of multiple rollers mounted in a housing designed for uni-directional or bi-directional cable payout and retrieval. Because the individual rollers move independently of one another torsion build-up in the cable is reduced significantly as compared to large diameter single rollers or drums.

![Diagram of a roller guide](image)

The typical cable guide construction consists of an opposed pair of steel plates with rollers mounted in an arc designed to match the recommended minimum bend radius for the cable size specified for the particular application.

![Diagram of cable guide construction](image)

This cutaway of a two-way cable guide shows multiple rollers mounted in an arc plus the pendulum mounted rollers used to actuate the over/under tension switches

**Overtension and Undertension Protection**

Gleason offers optional cable guiding systems that include provision for both overtension and undertension protection systems. Even a short exposure to overtension caused by a mechanical failure or accidents can render a cable inoperable due to permanent conductor deformation. Conversely, undertension protection is desirable to ensure that excessive cable cannot free spool from the reel and sustain damage. This protection is particularly important for long-lift cable reels. All overtension protection devices should be set above the maximum continuous safe working tension of the cable and adjusted to suit the specific application.
G1 ROLLER GUIDE ASSEMBLY
TWO WAY PAYOUT

G1 ROLLER GUIDE ASSEMBLY
ONE WAY PAYOUT
Since 1911 Gleason Reel Corp. has been in the business of CABLE MANAGEMENT. Our products are designed to convey and protect valuable cables and hoses that power and control moving machines of all types. They improve productivity and safety on the job by moving cables and hoses away from hazardous locations on machinery or the shop floor into a controlled environment. Whether you choose Reels for efficient storage and payout from virtually any angle, Festoon Systems for overhead applications or PowerTrak® for protection on machinery in motion, your cables and/or hoses will last longer and provide better service with a cable management system from Gleason Reel Corp. …

…The Cable & Hose Management Company.

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