Installation and Safe use of Flexcor®
Multiple Strength Pulling Grips

Every Flexcor Pulling grip is listed with an "approximate breaking strength." This value represents the average breaking strength of the grip based on design data obtained from laboratory testing. Strength tests are performed on new and unused grips placed on steel mandrels with straight tensile load applied at a uniform rate. Because of normal manufacturing and testing tolerances, a specific grip may vary from the "approximate breaking strength" by ±20%.

Common Sense Considerations

In actual field use, a grip should never be loaded to the "approximate breaking strength", since this would cause grip failure. For each gripping application, a maximum safe working load must be determined. The ratio of the "approximate breaking strength" to the maximum safe working load is called the safety factor. Once a safety factor has been established for a particular grip application, the maximum safe working load may be determined by dividing "approximate breaking strength" by that safety factor. For example, a safety factor of 5 for a grip with a catalog listed "approximate breaking strength" of 1000 pounds would yield a maximum safe working load of 200 pounds.

Operating Considerations

Because of the great variety of operating conditions, it would be inappropriate to assign a fixed safety factor for all Flexcor applications. The safety factor can vary from 2 to 10 or higher. Among the many considerations are load, speed of pull, acceleration, cable diameter, number of cables in one grip, surface texture of the cables, and condition of the grip. For work of a general nature, a safety factor of 3 to 5 may be adequate. However, where application conditions may be variable or not well-defined, or where risk of abuse is high, or where the risk to personnel or property is high, a greater safety factor must be specified.

It should also be emphasized that the published "approximate breaking strengths" are applicable to new and unused grips. Pulling grips are subject to wear and a corresponding decrease in strength. All grips should be inspected before each use. Grips should always be properly stored, handled, and maintained.

Catalog Number		Approximate Breaking Strength (lbs.)
Swivel Eye	Flexible Eye	
MSPS025	MSP025	6,800
MSPS050	MSP050	10,000
MSPS075	MSP075	14,400
MSPS100	MSP100	24,600
MSPS125	MSP125	30,600
MSPS150	MSP150	30,600
MSPS175	MSP175	48,000
MSPS200	MSP200	48,000
MSPS250	MSP250	48,000
MSPS300	MSP300	48,000
MSPS350	MSP350	48,000

1. Tape the end of the cable to prevent unlaying of conductor strands during insertion into pulling grip.
2. Insert the cable through the grip up to the bend in the aluminum shoulder protectors.
3. The grip mesh should lay flat against the entire length of the cable.
4. As an added measure to insure a safe gripping upon cables, we advise "banding" to the tail ends of the grips. "Banding" is a procedure by which the tail end of the grip is further secured to the cable by means of a Punch-Lok® tool or similar product (offered by other manufacturers). "Banding" is recommended to ensure maximum reliability and to guard against accidental release.
5. The Flexcor swivel is not designed to release torque during tension pulling. Therefore, use of a separate ball bearing swivel is recommended.
6. Do not run grip over bullwheels.

340391 Rev B

Pass & Seymour
Legrand®
P.O. Box 4822, Syracuse, NY 13221