

Cord capstan grips are designed to permit faster, easier testing of twisted or braided cords. These grips are designed to permit predetermination of specimen length, and allow quick, convenient loading.

Principle of Operation

Cord capstan grips provide a superior method for clamping twisted or braided cord during testing. Each grip has a round capstan with a right-hand spiral grooved surface that accommodates specimens up to 3.2 mm (0.125 in) in diameter. The capstan is split axially into two halves, one half being stationary and the other movable. The specimen is wound from the outside of the capstan towards the centre before being passed through the split halves where it is clamped. The groove completes 2.5 turns around the capstan, which allows two full turns for distributing the specimen load and stress concentration. The grips self tighten as load is applied to the specimen.

Smooth capstan surfaces are available separately.

Features

- Rated capacity: 2.5 kN (250 kgf, 500 lbf)
- Fast easy loading
- Minimizes jaw breaks
- Allows predetermination of specimen length

Application Range

- Type of loading: Tensile, static only
- Specimen material: Twisted or braided cord
- Specimen shapes: Cord or strip



Specifications

2715-001

| | | |
|------------------|-----|-----|
| Maximum Capacity | kN | 2.5 |
| | kgf | 250 |
| | lbf | 500 |

Mechanical Connection

| | | |
|-----------------------------------|----------|-----------------------------|
| Upper Fitting | | ½ in clevis pin (Type Dm) |
| Lower Fitting | | ½ in clevis pin (Type Dm) |
| Weight (Upper Grip) | kg lb | 1.2 22 |
| Working Principle | | Self-clamping |
| Maximum Sample Diameter/Thickness | mm in | 3.2 0.125 |
| Minimum Sample Diameter/Thickness | mm in | 0.5 0.02 |
| Operating Temperature Range | °C °F | -73 to +316 -100 to +600 |

Minimum Sample Length at Zero Grip Separate

| | | |
|---------------------------|----------|-----------------------------|
| Cords | mm in | 480 18.9 |
| Tapes | mm in | 500 19.7 |
| Minimum Daylight Required | mm in | 240 9.5 |
| Gripping Surface | | Grooved (Optionally smooth) |
| Length (L) | mm in | 130 5.1 |
| Depth (D) | mm in | 70 2.78 |

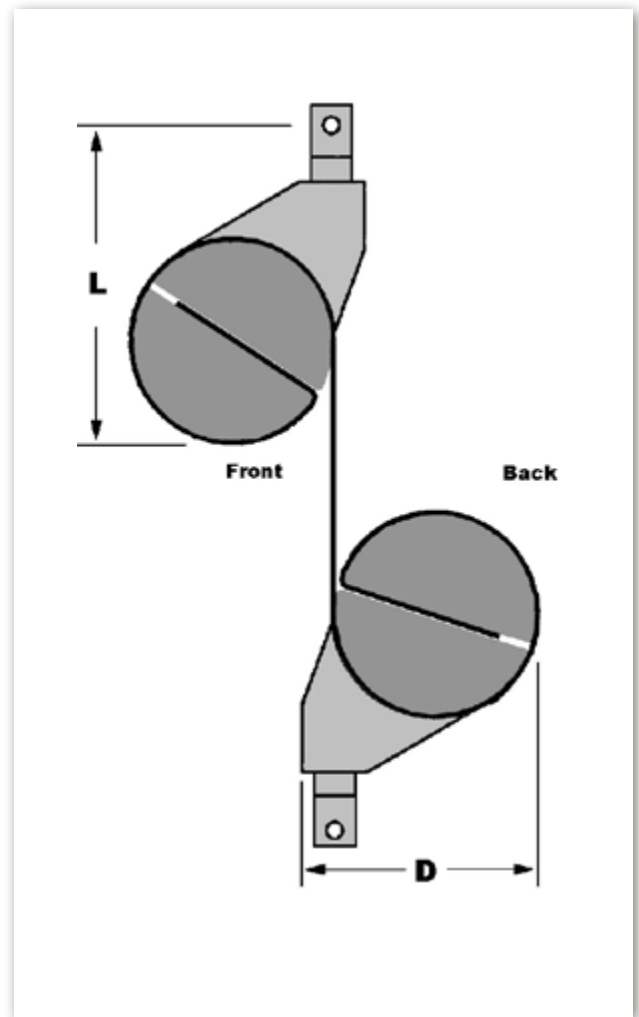
Notes:

1. Grip catalog number provides two grips.
2. Grips may require mechanical attachment coupling to connect to the load cell or machine base.
3. Alternate smooth capstans are available for this grip.

Accessories

2715-002

| | |
|-------------|-----------------------------------------------------------|
| Description | Capstan, smooth. Maximum specimen width is 20 mm (0.8 in) |
|-------------|-----------------------------------------------------------|



Dimensions of cord capstan grips



A selection of interchangeable capstans to meet with a variety of applications

www.instron.com/accessories



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