

2713 Series Self-Tightening Roller Grips

Catalog Number 2713-007

The self-tightening grips are primarily designed for the precision testing of elastomeric and other flexible materials exhibiting a large reduction in cross-section area under load. They provide excellent testing accuracy, positive non-slip gripping action and are quick and simple-to-use. The upper grip is counter balanced so that the specimen can be aligned with the load cell to eliminate non-axial forces.

Principle of Operation

The self-tightening grip uses a snubbing type clamping action which increases the holding force as the load increases which prevents the specimen from creeping out of the grip. Specimen insertion is extremely easy and spring pressure of the roller bracket is sufficient to hold the material until a load is imposed. The grips are supplied with smooth snubbing rollers, and hard rubber-covered snubbing rollers for testing of thin films.

Features

- Rated capacity: 1 kN (100 kgf, 225 lbf)
- Fast action for rapid specimen insertion to increase testing throughput
- Positive, non-slip gripping action for accurate results
- Ideal for testing elastomers, flexible plastics, and thin films
- Rugged design for minimum maintenance
- Designed for use in ambient and non-ambient testing conditions
- Temperature range: -70 °C to +150 °C (-94 °F to +302 °F)

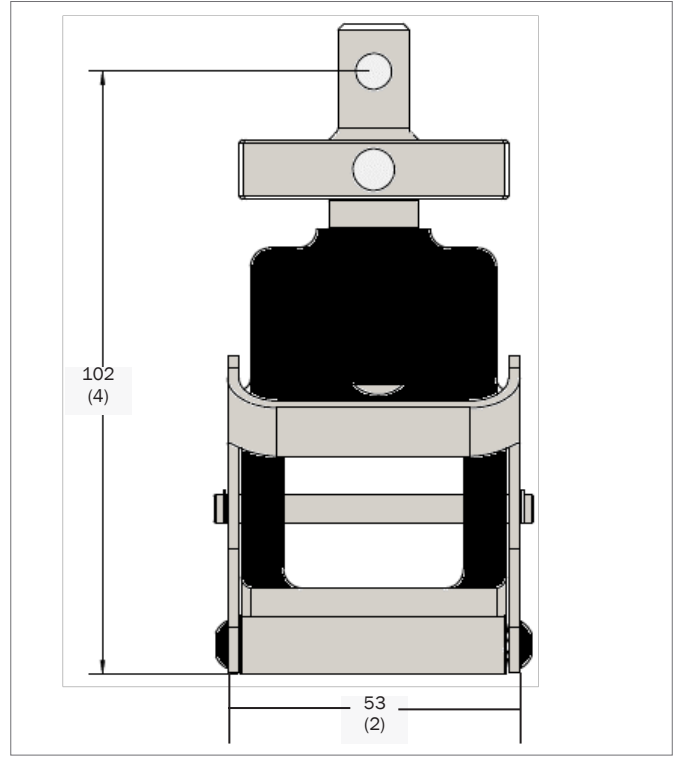
Application Range

- Type of loading: Tension. Not suitable for through zero/reverse stress or fatigue testing
- Specimen material: Thin sheets, films, flexible plastic and elastomers
- Specimen shapes: Flat specimen with or without shoulder tab ends





Rubber Coated Roller



Effective Length

Specification Table

| Catalog Number | Capacity | | | Width (A) | | Upper Fitting | Lower Fitting | Effective Length | | Temperature Range | | Weight | Working Principle | Gripping Force | Roller Diameter (smooth coated/ rubber coated) | | Maximum Specimen Width | | |
|----------------|----------|-----|-----|-----------|----|---------------------------------|---------------------------------|------------------|----|-------------------|----------------|--------|-------------------|------------------------------------|---|----|------------------------|----|-----|
| | kN | kgf | lbf | mm | in | | | mm | in | °C | °F | | | | g | lb | mm | in | mm |
| 2713-007 | 1 | 100 | 225 | 53 | 2 | 6 mm clevis pin (Type Om) | 6 mm clevis pin (Type Om) | 102 | 4 | -70 to +150 | -94 to +302 | 411 | 0.9 | Snubing type clamping action | Clamping force increases with applied force | 10 | 0.4 | 43 | 1.7 |
| | | | | | | | | | | | | | | | | 12 | 0.5 | | |

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. Rubber-coated rollers are limited to a temperature range of -20 °C to +115 °C (-4 °F to +239 °F).

