

2713 SERIES SELF-TIGHTENING ROLLER GRIPS

Catalog Number 2713-002, 004

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 the 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

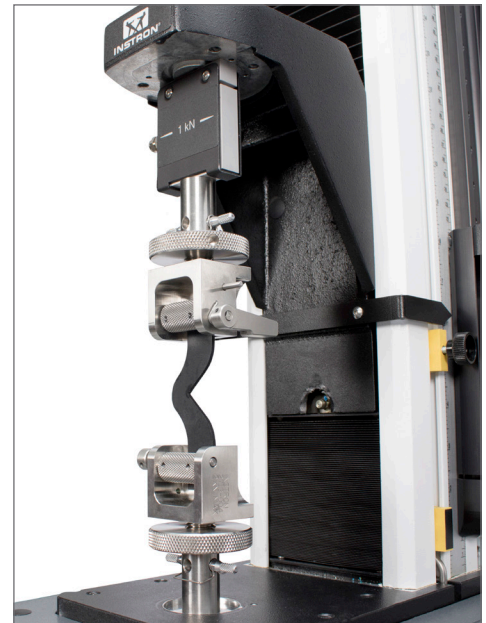
- Rated capacity for 2713-004: 2 kN (200 kgf, 450 lbf)
- Rated capacity for 2713-002: 5 kN (500 kgf, 1,125 lbf)
- Fast action for rapid specimen insertion to increase testing throughput
- Positive, non-slip gripping action for accurate results
- Ideal for testing elastomers, flexible plastics, and thin films
- Rugged design for minimum maintenance
- Designed for use in ambient and non-ambient testing conditions
- Eccentric roller type clamping action
- Clamping force increases with applied force
- Temperature range: -70 °C to 315 °C (-94 °F to 600 °F)

APPLICATION RANGE

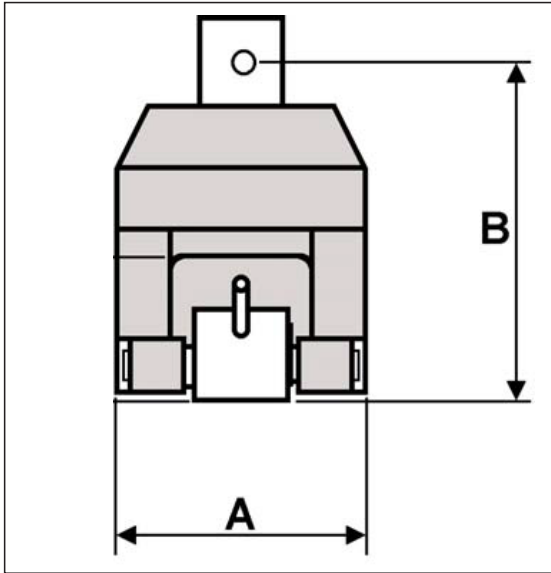
- Type of loading: Tension (Not suitable for through-zero / reverse stress or fatigue testing)
- Specimen material: Thin sheets, films, flexible plastic, and elastomers
- Specimen shapes: Flat specimen with or without shoulder tab ends



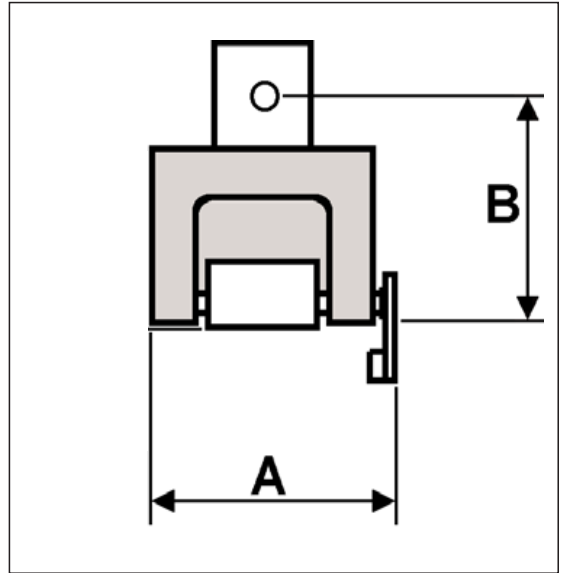
2713-002 Self-Tightening Roller Grip



2713-004 Self-Tightening Roller Grip



2713-002 Self-Tightening Roller Grip



2713-004 Self-Tightening Roller Grip

SPECIFICATIONS

| Catalog Number | Capacity | | | Width (A) | | Effective Length (B) | | Specimen Thickness | | Upper Fitting | Lower Fitting | Temperature Range | | Weight | | Roller Diameter (Serrated) | | Maximum Specimen Width | |
|----------------|----------|-----|-------|-----------|-----|----------------------|-----|--------------------|---------|-----------------------------|-----------------------------|-------------------|------------|--------|-----|----------------------------|-----|------------------------|-----|
| | kN | kgf | lbf | mm | in | mm | in | mm | in | | | °C | °F | kg | lb | mm | in | mm | in |
| 2713-002 | 5 | 500 | 1,125 | 65 | 2.5 | 102 | 4 | 0 - 8 | 0 - 0.3 | 1/2 in clevis pin (Type Dm) | 1/2 in clevis pin (Type Dm) | -70 to 315 | -94 to 600 | 1.8 | 4 | 32 | 1.2 | 28 | 1.1 |
| 2713-004 | 2 | 200 | 450 | 42 | 1.6 | 65 | 2.6 | 0 - 4 | 0 - 0.2 | 6 mm clevis pin (Type Om) | 6 mm clevis pin (Type Om) | -70 to 315 | -94 to 600 | 0.28 | 0.6 | 16 | 0.6 | 28 | 1.1 |

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)

www.instron.com



Worldwide Headquarters
825 University Ave, Norwood, MA 02062-2643, USA
Tel: +1 800 564 8378 or +1 781 575 5000

European Headquarters
Coronation Road, High Wycombe, Bucks HP12 3SY, UK
Tel: +44 1494 464646