

2713 Series Self-Tightening Roller Grips

Catalog Number 2713-001



Features

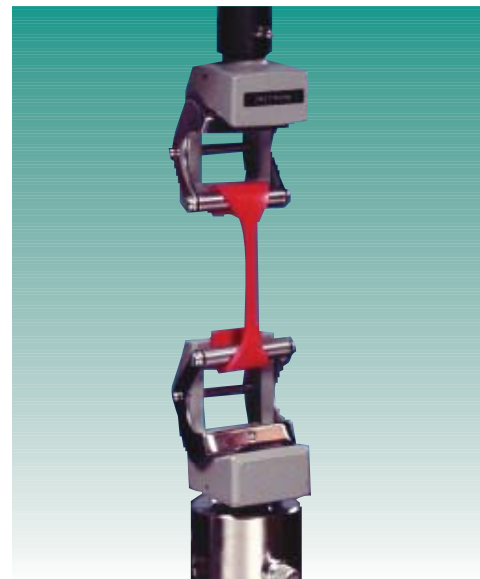
- Rated capacity: 1 kN (100 kgf, 225 lbf)
- Fast action for rapid specimen insertion to increase testing throughput
- Positive, non-slip gripping action for accurate results
- Self-aligning upper grip prevents off-axis loads for consistent test data
- Ideal for testing elastomers, flexible plastics and thin films
- Rugged design for minimum maintenance
- Designed for use in ambient and non-ambient testing conditions
- Temperature range: -20 °C to +150 °C (-4 °F to +300 °F)

Description

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.



▲ Self-tightening roller grip for testing flexible plastic and elastomers

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.

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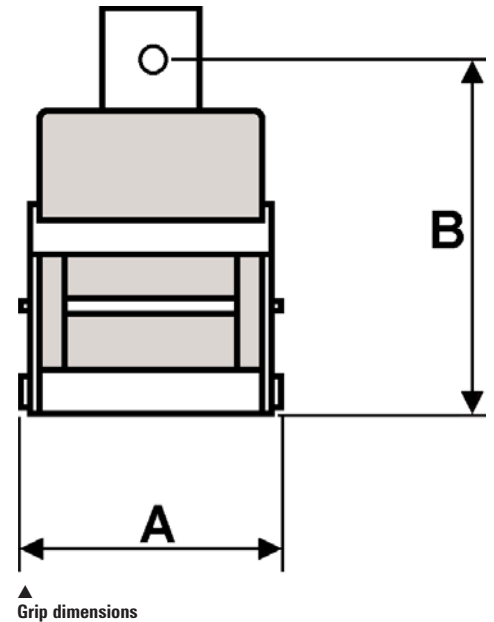
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Specifications

Catalog Number	2713-001
Maximum Capacity	1 kN (100 kgf, 225 lbf)
MECHANICAL CONNECTION	
Upper Fitting	¼ in clevis pin (Type Cm)
Lower Fitting	½ in clevis pin (Type Dm)
Overall Width (A)	53 mm (2 in)
EFFECTIVE LENGTH (B)	
Upper Grip	88 mm (3.5 in)
Lower Grip	102 mm (4 in)
Weight (Upper Grip)	280 g (0.6 lb)
Temperature Range	-20 °C to +150 °C (-4 °F to +300 °F)
Working Principle	Snubbing type clamping action
Gripping Force	Clamping force increases with applied force
ROLLER DIAMETER	
Smooth	10 mm (0.4 in)
Rubber-Coated	12 mm (0.5 in)
Maximum Specimen Width	43 mm (1.7 in)
Maximum Specimen Thickness	3 mm (0.1 in)

Notes:

1. Grip catalog number provides two grips.
2. Upper grip may require mechanical attachment coupling to connect to the load cell or machine base.
3. Upper grip may require a tension coupling for certain applications.
4. Rubber-coated rollers are limited to a temperature range of -20 °C to +115 °C (-4 °F to +239 °F).



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