

## 2711 SERIES

### O-Ring Fiber Clamping Grips

This type of grip is designed to hold very small diameter fiber specimens during tension testing. The rubber V-groove provides a gradually increased frictional hold on the specimen and helps reduce grip face pinching and subsequent specimen jaw breaks. Special considerations are built into the design, where the U-shaped bend provides sufficient area for specimen loading.

#### FEATURES AND BENEFIT

- Rated capacity: 0.75 N (0.075 kgf, 0.165 lbf)
- Easy-to-load and unload specimens
- Patented design, uses no moving clamps to hold specimens
- Rubber V-groove reduces specimen jaw breaks
- Small single polymer fibers
- Lightweight for use with lower capacity load cells

#### APPLICATION RANGE

- Type of loading: Tension. Not suitable for through-zero/ reverse stress or fatigue testing.
- Specimen material: Micro fibers
- Specimen shapes: Round

#### PRINCIPLE OF OPERATION

The o-ring clamping mechanism uses a self-tightening approach by wedging the specimen between two rubber rings.

Two threaded knurled wheels, each housing an o-ring can be tightened against each other to further adjust firmness at the groove location.

It is not necessary to tighten the knurled wheels for each specimen. Once the appropriate firmness is set, specimens are simply placed into the groove.

A harder specimen may need more firmness in order to lock on the gripping area, where a softer fiber may require less firmness to slide into the groove area.

The grip body is shaped so that the center line of the loading force passes exactly through the center line of the fiber when the fiber is correctly loaded.



## SPECIFICATIONS

<b>Catalog Number</b>		2711-007
<b>Maximum Capacity</b>	N	0.75
	kgf	0.075
	lbf	0.165

## MECHANICAL CONNECTION

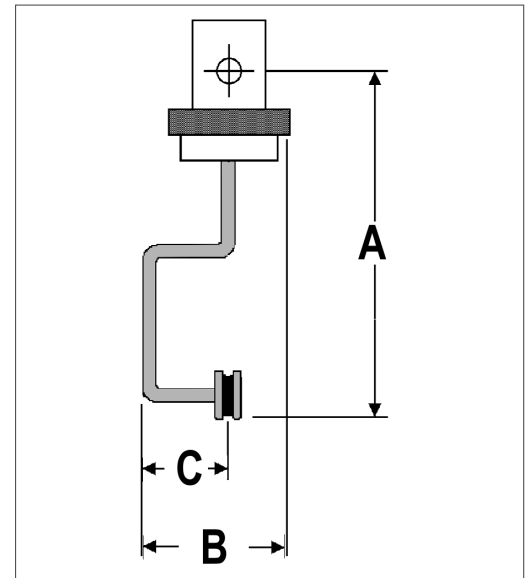
<b>Upper Fitting</b>	mm	6 clevis pin (Type Om)
<b>Lower Fitting</b>	mm	6 clevis pin (Type Om)

## EFFECTIVE LENGTH

<b>Upper Grip (A)</b>	mm	70
	in	2.8
<b>Lower Grip (A)</b>	mm	70
	in	2.8
<b>Maximum Overall Width (B)</b>	mm	32
	in	1.3
<b>Width (C)</b>	mm	21
	in	0.83

## WEIGHT (APPROXIMATELY)

<b>Upper Grip</b>	kg	27
	oz	0.95
<b>Temperature</b>	°C	-10 to +100
	°F	+14 to +212
<b>Specimen Diameter</b>	µm	5 - 25
	in	197 - 984



Grip dimensions



Close up of o-rings

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