

5 kN Split-Drum Grips for Rope

These lower capacity 5 kN (1,100 lbf) split-drum grips are suitable for testing the tensile properties of rope and string with a diameter of 3 mm (0.12 in) or less. The diameter of the drum in the grips is 50 mm (2.0 in) and a spring mechanism is used to apply a clamping force through the split-drum to the specimen during testing.

A grip set includes upper and lower grips, and grip sets come with two grip face choices: integrated parallel-grooved grip faces and embedded file-teeth grip faces.

Relevant Materials

Yarn

Relevant Specimens

Rope, String



Operation

Specimens are inserted by placing them between the split-drum grip faces and then wrapping them around the split drum in a groove. The half of the drum closest to the testing space is fixed and the other half moveable to enable specimen insertion. The clamping force on the specimen can be altered by changing the tension on a spring mechanism. A self-tightening action applies an increasing clamping force on the specimen trapped within the split-drum as tension increases during testing.



Groove around the split drum



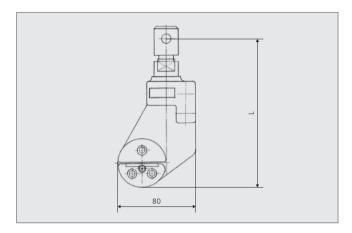
Self-tightening action

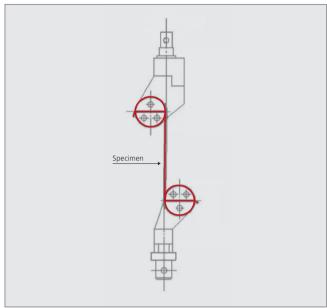


Adjustment screw of gripping force

Specification

				Applicable Specimen Thickness	Drum Diameter	Temperature Range	Grip Size			Upper Grip	Lower Grip
Maximum Grip Capacity			apacity				Width	Length Upper / Lower	Upper Grip Mass	Ø Fitting (Ø pin)	Ø Fitting (Ø pin)
	kN	kgf	lbf	mm (in)	mm (in)	°C (°F)	mm (in)	mm (in)	kg (lb)	mm	mm
	5	500	1,100	0 to 3 (0 to 0.12)	50 (2.0)	-10 to 60 (14 to 140)	80 (3.1)	142 / 139 (5.6 / 5.5)	3.0 (6.6)	16 (6.5)	16 (6.5)





Ordering Information

P/N	Description					
	5 kN Split-Drum Grip Sets for Rope Includes: upper and lower 5 kN split-drum grips					
343-07522-03	5 kN split-drum grip set for rope with integrated parallel-grooved grip faces					
343-07522-04	5 kN split-drum grip set for rope with embedded file-teeth grip faces					



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