

# 10 N and 50 N Clip Grips

Clip grips are easy-to-use and applicable for low force tensile testing of materials such as yarn and plastics. Both 10 N (2.2 lbf) and 50 N (11 lbf) clip grips have flat metal grip faces.

The 10 N clip grip kit includes upper and lower grips and upper grip connections compatible with AG-X plus series 5 kN (1,100 lbf) and lower load cells. The lower grips couple directly to the lower joint of the universal tester. When using the 10 N clip grips with AGS-X series and EZ-X series load cells, additional load cell connections are required for the upper grip.

The 50 N clip grip set includes upper and lower grips with flat grip faces. The upper grip connects with load cells through conventional 50 N universal joints.

#### **Relevant Materials**

Yarn, Plastics

#### **Relevant Specimens**

Fibers, Tapes



### **Operation**

Each grip has two levers, one connected to each grip face. By squeezing the levers together, the grip faces open. A specimen is introduced in the center between the grip faces and the levers are slowly released to clamp the specimen. The clamping force can be adjusted by changing the length of a spring that applies tension to the grip face levers.



Clip operation



Adjustment screw of clamping force



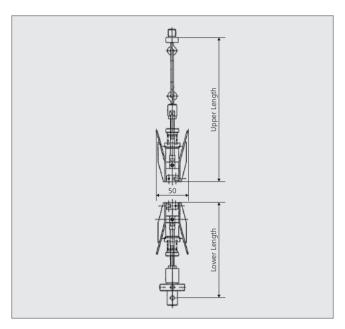
Grip face along with specimen surface

### **Specification**

Maximum Grip Capacity			Applicable Specimen Thickness	Grip Face Size			Grip Size			Upper Grip	Lower Grip
				Width	Length	Temperature Range	Width	Length Upper / Lower Note 1	Upper Grip Mass	Ø Fitting (Ø pin) Note 2	Ø Fitting (Ø pin)
N	kgf	lbf	mm (in)	mm (in)	mm (in)	°C (°F)	mm (in)	mm (in)	kg (lb)	mm	mm
50	5.0	11.0	0 to 3 (0 to 0.12)	10 (0.39)	10 (0.39)	-10 to 60 (14 to 140)	50 (2.0)	135 / 135 (5.3 / 5.3)	0.275 (0.606)	10 (4)	16 (6.5)
10	1.0	2.2	0 to 3 (0 to 0.12)	10 (0.39)	10 (0.39)	-10 to 60 (14 to 140)	50 (2.0)	215 / 115 (8.5 / 4.5)	0.145 (0.320)	M12 screw, 1.5 pitch	16 (6.5)

Note 1: Upper grip length includes the length of the S-shaped universal joint for the 10 N clip grips.

Note 2: The load cell coupling for the 10 N clip grips is applicable to 5 kN or lower AG-X plus load cells. Additional coupling joints are required when these grips are used with AGS-X series and EZ-X series



## **Ordering Information**

P/N	Description						
343-06742-03	<b>50 N Clip Grip Set</b> Includes: upper and lower 50 N clip grips with flat grip faces						
343-07650-02	10 N Clip Grip Set Includes: upper and lower 10 N clip grips with flat grip faces, S-shaped universal joint, and a load cell coupling for AG-X plus series 5 kN and lower capacity load cells						
Accessories							
022-60295-31	Load cell coupling for AGS-X series load cells between 10 N and 100 N capacity and EZ-X series load cells between 10 N and 500 N capacity						
343-38279-05	Load cell coupling for AGS-X series 500 N capacity load cells						



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