



± 25 kN/100 Nm (5.6 kip/0.6 kip-in) Axial/Torsional Hydraulic Grips

Catalog Number 8260 C

Features

- Rated capacity: ±25 kN/100 Nm (5.6 kip/ 0.6 kip-in)
- Side-entry design with full access for easy specimen insertion from the side
- Interchangeable jaw faces suitable for gripping different types of materials
- Suitable for a wide range of specimen thickness without the need to change jaw faces
- Jaw faces for flat and round specimen geometries
- Optional adjustable specimen stops on flat faces provide accurate specimen centering
- Suitable for tension, compression and torsion testing up to full reverse-stress dynamic rating
- Operated from a load frame mounted hydraulic grip manifold or via a stand-alone grip controller
- Temperature range: +4 °C to +65 °C (+39 °F to +149 °F)

Description

The Instron® 25 kN/ 100 Nm axial/ torsional hydraulic wedge action grips may be used in static or dynamic materials testing applications, interchangeable wedge-shape grip faces accommodating either flat or round specimens.

The grips maintain a constant gripping force on the specimen regardless of the test forces acting upon it, as long as there is hydraulic pressure to the grips.

Principle of Operation

Each grip functions independently of the other, an external hydraulic supply providing pressure to both open and close the grips.

When gripping pressure is applied the relative vertical position of the specimen/ jaw faces remains unchanged to prevent specimen load generation during the gripping process.

Once the grip faces contact the specimen the hydraulic pressure produces a vertical force on the grip head. The grip force will remain constant as the design automatically compensates for specimen thickness changes.

Accuracy

- Type of loading: Static or dynamic, reverse stress.
- Specimen material: Metallics, plastics, composites.
- Specimen geometries: Round section (not buttonhead) or flat specimens with or without shoulder tab.



▲ Axial/ torsional hydraulic grips

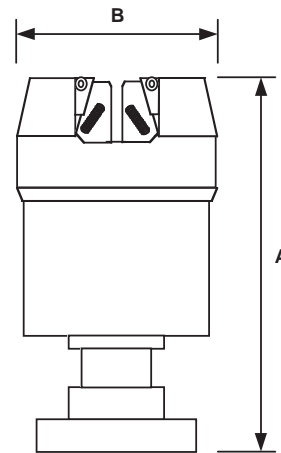
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Axial/Torsional Hydraulic Grips

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Specifications

Catalog Number	8260 C
Dynamic Load Capacity	±25 kN/ 100 Nm (5.6 kip/ 0.6 kip-in)
Static Load Capacity	±25 kN/ 100 Nm (5.6 kip/ 0.6 kip-in)
Hydraulic Pressure Range	0 to 204 bar (0 to 3000 psi)
Overall Height - A	235 mm (9.25 in)
Overall Diameter - B	130 mm (5.12 in)
Attachment	Via mounting flange - mounting holes six equi-spaced M8 on 75 mm PCD
Construction	Machined steel with an electroless nickel finish
Weight (Per Grip)	14.6 kg (57.3 lb)
Temperature Range	+4 °C to +65 °C (+39 °F to +150 °F)
Operating Principle	Double acting piston, wedge
Gripping Force	Adjustable 2 kN to 35 kN (0.5 kip to 8 kip)



▲ Grip dimensions

Accessories

Catalog Number	Description
2718-111	207 bar (3000 psi) hydraulic grip controller and manifold. Suitable for use on 8801, 8802, 8803, 8804 and 8871, 8872, 8874. Includes hoses for connection to the grips and to the systems hydraulic supply. Not suitable for use with furnaces or temperature chambers.
2718-211, 2718-212, 2718-311, 2718-312	Free-standing electric pump and grip controls for use with servoelectric load frames. Operating voltage

Jaw Faces

Catalog Number	Specimen Thickness	Jaw Face Type	Surface Profile	Clamping Area (W x H)
2703-801	0 mm to 6.4 mm (0 in to 0.25 in)	Flat	Serrated, diamond, 0.6 mm pitch	25 mm x 38mm (1.0 in x 1.5 in)
2703-802	6.4 mm to 12.7 mm (0.25 in to 0.50 in)	Flat	Serrated, diamond, 0.6 mm pitch	25 mm x 38mm (1.0 in x 1.5 in)
2703-803	3 mm to 8 mm diameter (0.1 in to 0.3 in)	Vee	Serrated, sharktooth, 1 mm pitch	38 mm (1.5 in) gripping length
2703-804	8 mm to 12 mm diameter (0.3 in to 0.5 in)	Vee	Serrated, sharktooth, 1 mm pitch	38 mm (1.5 in) gripping length
2703-805	0 mm to 6.4 mm (0 in to 0.25 in)	Flat	Carbide-coated	25 mm x 38 mm (1.0 in x 1.5 in)
2703-806	6.4 mm to 12.7 mm (0.25 in to 0.50 in)	Flat	Carbide-coated	25 mm x 38 mm (1.0 in x 1.5 in)

Scope of supply: One set of four jaw faces

Note:

Jaw faces are for use with side entry wedge grips 8260 C



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