

±20 kN ±130 Nm LINEAR-TORSION MECHANICAL WEDGE ACTION GRIPS

2742-406

Designed to suit ElectroPuls® E20000 Linear-Torsion, the 2742-406 mechanical wedge-action grips are suitable for tension, compression, reverse-stress, and torsion testing on a wide range of specimens and materials. The grips are mechanically operated and the open-fronted design provides easy specimen insertion, positioning, and clamping.

PRINCIPLE OF OPERATION

The single-acting wedge action principle of these grips is designed to clamp a specimen without applying a compressive load, which could cause a specimen to buckle.

The retracting movement of the grip bodies helps to reduce compressive loads that are normally caused when clamping specimens.

The open front design permits quick and easy changing of specimens and jaw faces. Jaw faces optimize gripping performance whilst the serrated faces are designed to minimize damage to the specimen surface.

APPLICATION RANGE

- Type of loading: Linear and Torsion tension, compression or reverse-stress testing
- Specimen material: Metallics, plastics, composites
- Specimen geometries: Flat or round specimens
- Temperature range: -70 to +350 °C (-94 to 662 °F)



±20 kN (4496 lbf) linear-torsion
mechanical wedge action grips

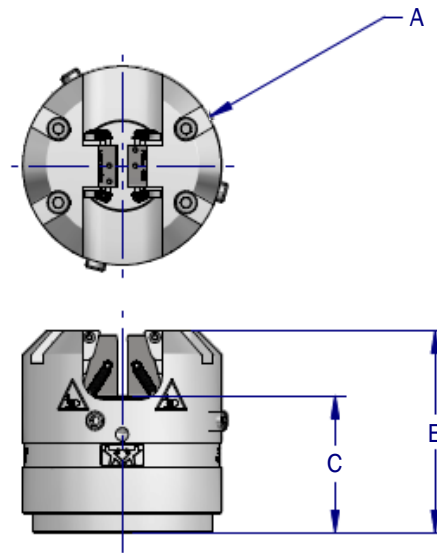
FEATURES

- Dynamic Linear Capacity: ±20 kN (±4496 lbf)
- Dynamic Torque Capacity: Up to ±130 Nm (±1150 lbf.in)
- Suitable for linear and torsion, including full reverse-stress dynamic testing
- Open-fronted design for quick and easy specimen insertion from the front
- Interchangeable jaw faces for gripping different materials and specimen geometries and sizes
- Requires no attachment kits when mounting to ElectroPuls E20000 systems

SPECIFICATIONS

Maximum Force Capacity	kN	±20
	lbf	±4500
Maximum Torque Capacity	Nm	±130
	lbf.in	±1060
Grip Mass	kg	8.8
	lbs	19.4
A	mm	125
	in	4.9
B	mm	127
	in	5.0
C	mm	86
	in	3.4
Operating Temperature	°C	-70 to +350
	°F	-94 to +662
Mechanical Interface	12 x M8 threaded holes on 75 mm PCD	

Scope of supply: Grip catalogue number provides two grips



Grip Dimensions

ACCESSORIES

3117-082	Flange Mounted Pullrods
3119-605	Environmental Chamber

JAW FACES

Catalog Number	Specimen Type	Specimen Thickness		Clamping Area (W x H)
		mm	in	
2703-801	Flat	0 to 6.3	0 to 0.25	25 mm x 38 mm (1.0 in x 1.5 in)
2703-802	Flat	6.3 to 12.7	0.25 to 0.50	25 mm x 38 mm (1.0 in x 1.5 in)
2703-803	Round	Ø 3.0 to 7.8	0.12 to 0.31	25 mm x 38 mm (1.0 in x 1.5 in)
2703-804	Round	Ø 7.1 to 12.7	0.28 to 0.50	25 mm x 38 mm (1.0 in x 1.5 in)
2703-807	Round	Ø 12.4 to 18.0	0.49 to 0.71	25 mm x 38 mm (1.0 in x 1.5 in)

- Notes: 1. Jaw face catalogue number provides four faces
 2. Jaw faces are hardened to 48 to 52 Rc, unless otherwise specified
 3. All faces are diamond serrated 45°

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