

±10 kN ±100 Nm LINEAR-TORSION MECHANICAL WEDGE-ACTION GRIPS

2742-316

Designed to suit the ElectroPuls™ E10000 Linear-Torsion, the 2742-316 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.

FEATURES

- Fatigue-rated capacity: ±10 kN (linear), ±100 Nm (torsion)
- Suitable for both linear and torsion tension and compression testing, including full reverse-stress dynamic tests
- Open-fronted design for quick and easy specimen insertion
- Interchangeable jaw faces for gripping different materials and specimen sizes
- Requires no attachment kits when mounting to ElectroPuls E10000 Linear-Torsion

APPLICATION RANGE

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

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



SPECIFICATIONS

2742-316 Linear-Torsion Mechanical Wedge-Action Grips

Catalogue Number	2742-316
Maximum Capacity	±10 kN (Linear) ±100 Nm (torsion)
A	144 mm (5.7 in)
B	118.5 mm (4.67 in) maximum
C	104 mm (4.1 in)
Grip Mass	5.4 kg (11.9 lbs) each
Mechanical Interface	6 x M8 threaded holes on 75 mm PCD
Operating Temperature	-70 to +350°C (-94 to 662°F)

Notes: Grip catalogue number provides two grips

3117-080 Linear-Torsion Pullrods

Catalogue Number	3117-080
Maximum Capacity	±10 kN (Linear) ±100 Nm (torsion)
Grip Separation (D)	8 - 86 mm (0.3 - 3.4 in)
Grip Separation (E)	53 - 119 mm (2.1 - 4.7 in)
Mechanical Interface	3 x M8 threaded holes on 75 mm PCD
Operating Temperature	-70 to +350°C (-94 to 662°F)

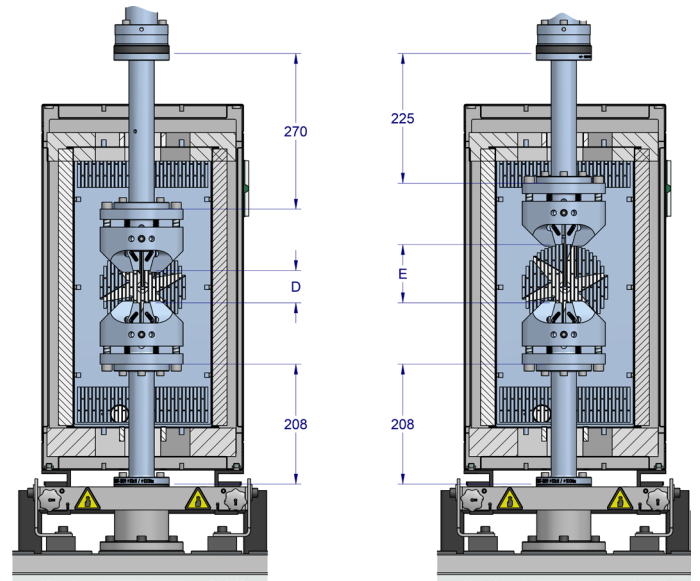
ACCESSORIES

3117-080	Flange Mounted Pullrods
3119-605	Environmental Chamber

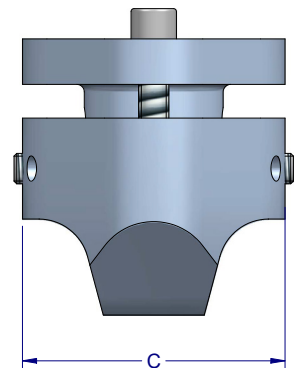
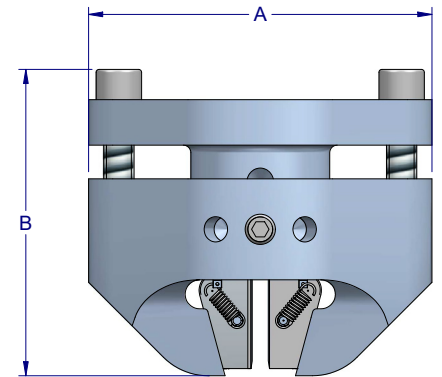
JAW FACES

Catalog Number	Specimen Thickness Type	Specimen Thickness		Clamping Area	
		mm	in	width (mm)	height (mm)
2703-801	Flat	0 to 6.3	0 to 0.25	25	38
2703-802	Flat	6.3 to 12.7	0.25 to 0.50	25	38
2703-803	Vee	∅ 3.0 to 7.8	0.12 to 0.31	25	38
2703-804	Vee	∅ 7.1 to 12.7	0.28 to 0.50	25	38
2703-807	Vee	∅ 12.4 to 18.0	0.49 to 0.71	25	38

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°



3117-080 Pullrods in 3119-605 Environmental Chamber



Grip Dimensions

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