

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

2742-405

Designed to suit ElectroPuls® E20000 systems, the 2742-405 pneumatic wedge action grips are suitable for tension, compression, torsion and reverse-stress testing on a wide range of specimens and materials.

The grips are pneumatically operated directly from the machine handset and the open-fronted design provides easy specimen insertion, positioning and clamping.

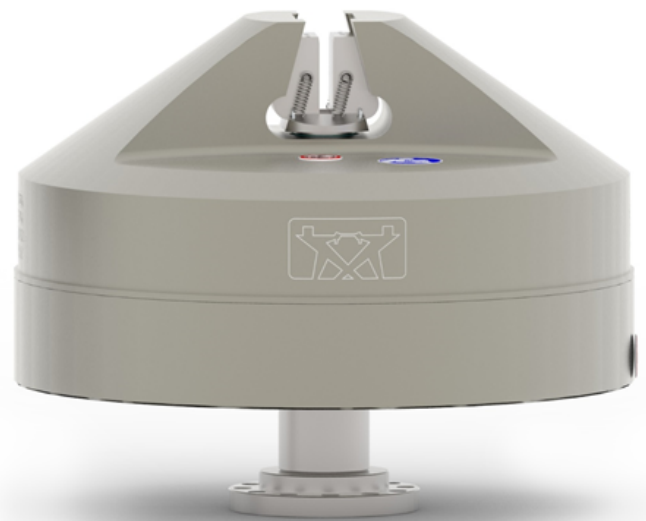
PRINCIPLE OF OPERATION

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

- Types of loading: Tension, compression, torsion or reverse-stress testing
- Specimen geometries: Flat or round specimens
- Specimen material: Metallics, Plastics, Composites, Biomaterials
- Temperature range: Ambient only



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

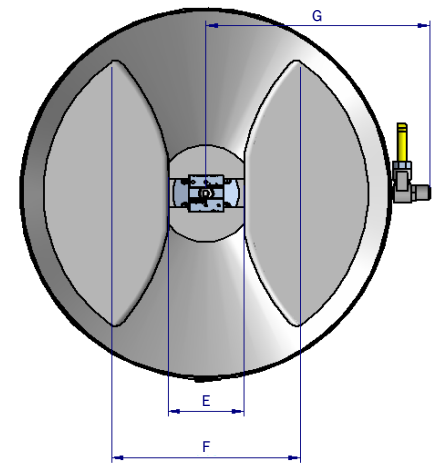
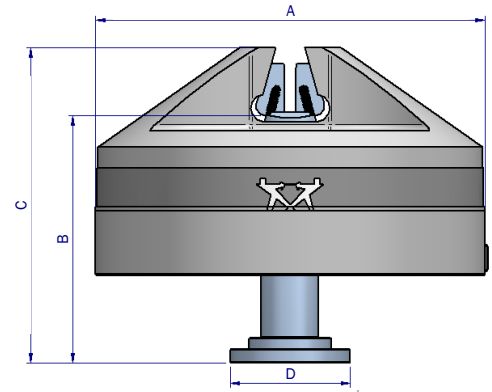
FEATURES

- Dynamic Linear Capacity: ±20 kN (±4496 lbf)
- Dynamic Torque Capacity: Up to ±130 Nm (±1150 lbf.in)
- Independent upper and lower jaw faces opening and closing via the handset
- Enhanced usability thanks to software feedback of grip status
- Enhanced control and repeatability of specimen gripping
- Suitable for linear and torsion, including full reverse-stress dynamic testing
- Open-fronted design for quick and easy specimen insertion from the front
- Self-tightening, moving body wedge design eliminates slippage and prevents specimen loading
- Interchangeable jaw faces for gripping different materials and specimen geometries and sizes
- Secure operation thanks to built-in adjusters that ensure there is no rotary backlash
- Uses standard compressed-air supply
- Requires no attachment kits when mounting to ElectroPuls E20000 systems

SPECIFICATIONS

Maximum Force Capacity	kN	±20
	lbf	4496
Maximum Torque Capacity*	Nm	±130
	lbf.in	±1150
Grip Mass	kg	15
	lbs	33
A	mm	285
	in	11.22
B	mm	180
	in	7.09
C	mm	230
	in	9.06
D	mm	88
	in	3.46
E	mm	58
	in	2.28
F	mm	145
	in	5.71
G	mm	171
	in	6.73
Air Supply Connection		1/8" quick connectors
Mechanical Interface		12 x M8 clearance holes on 75 mm PCD

*Maximum Torque Capacity is dependant on specimen geometry and material

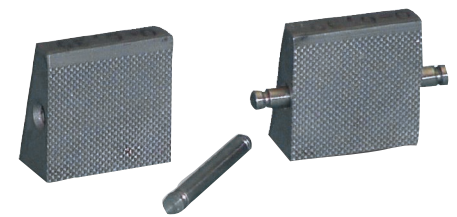


COMPATIBLE ACCESSORIES

Catalog Number	Description
2718-013	Pneumatic Air Kit for ElectroPuls Systems

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	26 mm x 38 mm (1.0 in x 1.5 in)
2703-802	Flat	6.3 to 12.7	0.25 to 0.50	26 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	26 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	26 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	26 mm x 38 mm (1.0 in x 1.5 in)



Flat Serrated Jaw Faces

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

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