

±3 kN, ±25 Nm Mechanical Fatigue-Rated Wedge Action Grips | 2742-206

Designed to suit ElectroPuls™ test instruments, the 2742-206 mechanical wedge action grips are suitable for tension, compression, torsion, and reverse-stress 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 and Benefits

- Dynamic Linear Capacity: ±3 kN (±674 lbf)
- Dynamic Torque Capacity: Up to ±25 Nm (±221 lbs.in)
- Modular flange mounting design is directly compatible for use on all new E3000 and E10000 variants
- Optimized range of operation when used in a 3119-605 chamber with 3117-080 pullrod kit
- Suitable for linear and torsion, including full reverse-stress dynamic testing
- Open-fronted design for quick and easy specimen insertion from the side
- Self-tightening wedge design eliminates slippage and prevents specimen loading
- Interchangeable jaw faces for gripping different materials and specimen sizes
- Tool-less and easy grip operation
- Additional gripping force can be achieved using a tommy bar or wrench
- Secure operation due to built-in adjusters that ensure there is no rotary backlash

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: -70 to +350 °C (-94 to +662 °F)

Principle of Operation

The bearing-assisted wedge action on the grips allows for easy and tool-less tightening of the grips. Where it may be necessary, this can also be done using a tommy bar or wrench. In both cases this adjustment is done without altering the vertical position of the faces in relation to the specimen. This Instron® design of a moving grip body, not jaw face, makes it possible to pre-select the exact point at which the specimen is gripped, with a consistent gauge length and with no compressive force being applied, which may cause specimen buckling. The open front design allows for quick and easy changing of the jaw faces. The jaw faces are serrated for optimum gripping performance and the serrations are designed to minimize damage to the specimen surface. Pullrods are also available to use for temperature testing.



Specifications

Catalog Number	2742-206	
Maximum Force Capacity	kN	± 3
	lbf	± 674
Maximum Torque Capacity	Nm	± 25
	lbf.in	± 221
Grip Mass	Kg	3.5
	lbs	7.27

Compatible Accessories

Catalog Number	Description
3119-605	Environmental Chamber
3117-080	ElectroPuls™ Pullrod Kit

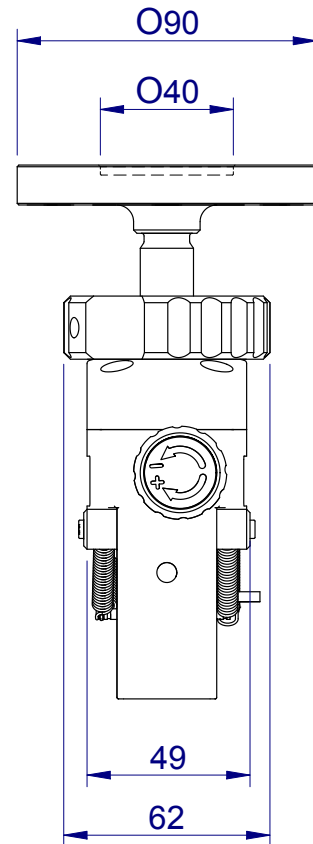
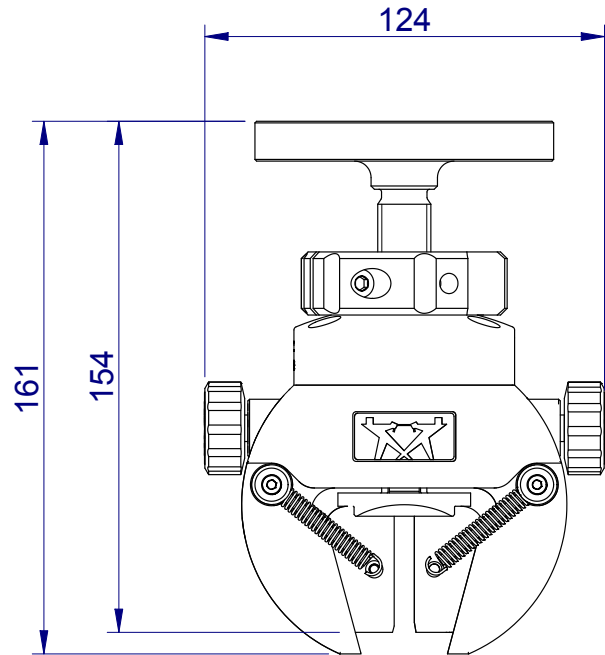
Jaw Faces

Catalog Number	Specimen Type	Specimen Size	Clamping Area (w × h)
2703-801	mm Flat	0 to 6.3	26 × 38
2703-802	mm Flat	6.3 to 12.7	26 × 38
2703-803	mm Round	Ø 3 to 7.8	26 × 38
2703-804	mm Round	Ø 7.1 to 12	26 × 38
2703-807	mm Round	Ø 12 to 18	26 × 38

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



Flat Serrated Jaw Faces



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