

Mechanical Fatigue-Rated Wedge Action Grips | 2742-102

Designed to suit ElectroPuls™ test instruments, the 2742-102 mechanical wedge action grips are suitable for tension, compression 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

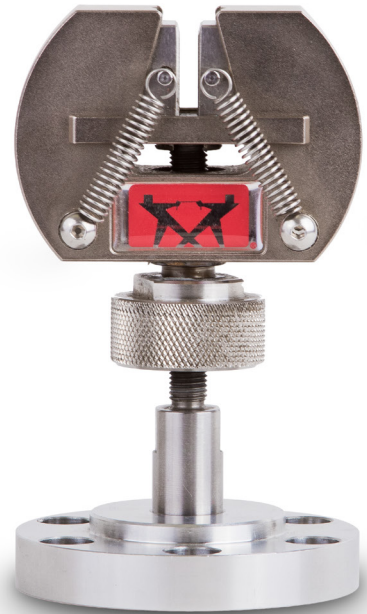
- Rated capacity: ± 1 kN
- Suitable for tension and compression, including full reverse-stress dynamic testing
- Open-fronted design for quick and easy specimen insertion from the side
- Self-tightening wedge design eliminates slippage and prevents specimen loading
- Interchangeable jaw faces for gripping different materials and specimen sizes
- Spanner tightening adjustment, applies additional gripping force when needed

Application Range

- Types of loading: Tension, compression or reverse stress testing
- Specimen geometries: Flat or round specimens
- Specimen material: Metallics, plastics, composites, biomaterials
- Temperature range: -30 to +100 °C (-22 to +212 °F)

Principle of Operation

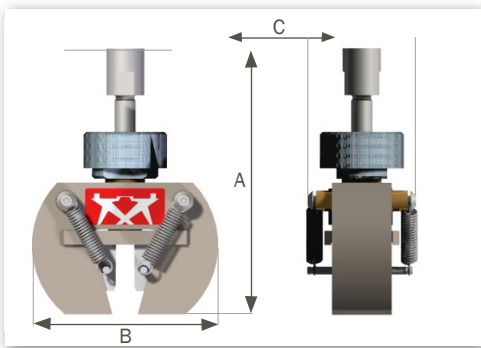
The wedge action principle of the grips allows them to be tightened easily, by hand (or spanner for additional gripping force), onto the specimen without altering the vertical position of the faces in relation to the specimen. This Instron® design of a moving grip body, not jaw face, makes it possible 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. Attachment kits to suit ElectroPuls instruments and other systems are available.



Specifications

Catalog Number	2742-102	
Maximum Capacity	kN	± 1
A	mm	101 Max 89 Min
B	mm	70
C	mm	40.5
Grip Mass	g	260
Internal Thread (For Attachment)		M6 x 1 RH female thread
Operating Temperature	°C	-30 to +100°C
	°F	-22 to +212

Note - Grip catalog number provides two grips



1 kN Mechanical Wedge Grip (2742-102)



1 kN Mechanical Wedge Grips

Adaptors

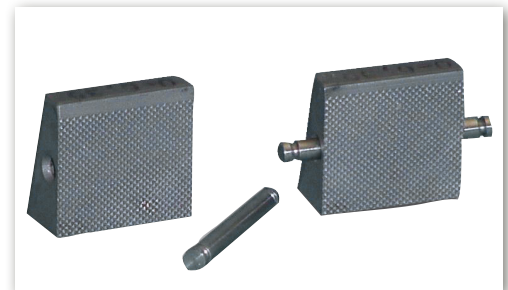
Catalog Number	Description
8000-127	One set (pair) of Fatigue-Rated Adaptors for attaching accessories with M6 RH female thread to system with E1000/E3000 Systems (to Dynacell with M6 or M20 thread)
8000-128	One set (pair) of Fatigue-Rated Adaptors for attaching accessories with M6 RH female thread to system with M20 RH female thread in Dynacell and actuator

Jaw Faces

Catalog Number	Specimen Type	Specimen Size	Clamping Area (w × h)
2703-901	Flat	0 to 6.35	19 × 19
2703-902	Round	Ø 3 to 8	19 × 19
2703-801	Flat	0 to 6.3	26 × 38
2703-802	Flat	6.3 to 12.7	26 × 38
2703-803	Round	Ø 3 to 7.8	26 × 38
2703-804	Round	Ø 7.1 to 12.	26 × 38

For 1kN
For 3kN

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 - 2703-901

www.instron.com



Worldwide Headquarters
825 University Ave, Norwood, MA 02062-2643, USA
Tel: +1 800 564 8378 or +1 781 575 5000

European Headquarters
Coronation Road, High Wycombe, Bucks HP12 3SY, UK
Tel: +44 1494 464646

Instron Industrial Products
900 Liberty Street, Grove City, PA 16127, USA
Tel: +1 724 458 9610