

5 kN U-Form Pneumatic Vice Grip, single actuator, QC fitting

Mec83 (single-actuator) – aluminium

A highly versatile pneumatic grip for use in applications where material is sensitive to damage or slippage when clamped and the tensile force is significant.

- The Mec83 features an adjustable screw-driven rod allowing symmetrical and asymmetrical specimens to be positioned whilst the single-actuator applies the clamping force on the jaws.
- The standard rods allow a jaw opening of 0-10 mm. Additional rods are supplied which, when fitted, allow jaw openings of 10-20 mm and 20-30 mm. This is useful for thicker specimens which do not reduce in thickness by more than 10 mm when pulled.

Adjustment of pneumatic pressure ensures a constant and reproducible clamping force is achieved to avoid 'jaw break' or slippage of specimens. Typically 7 bar pressure provides 3.5 kN clamping force on the specimen.

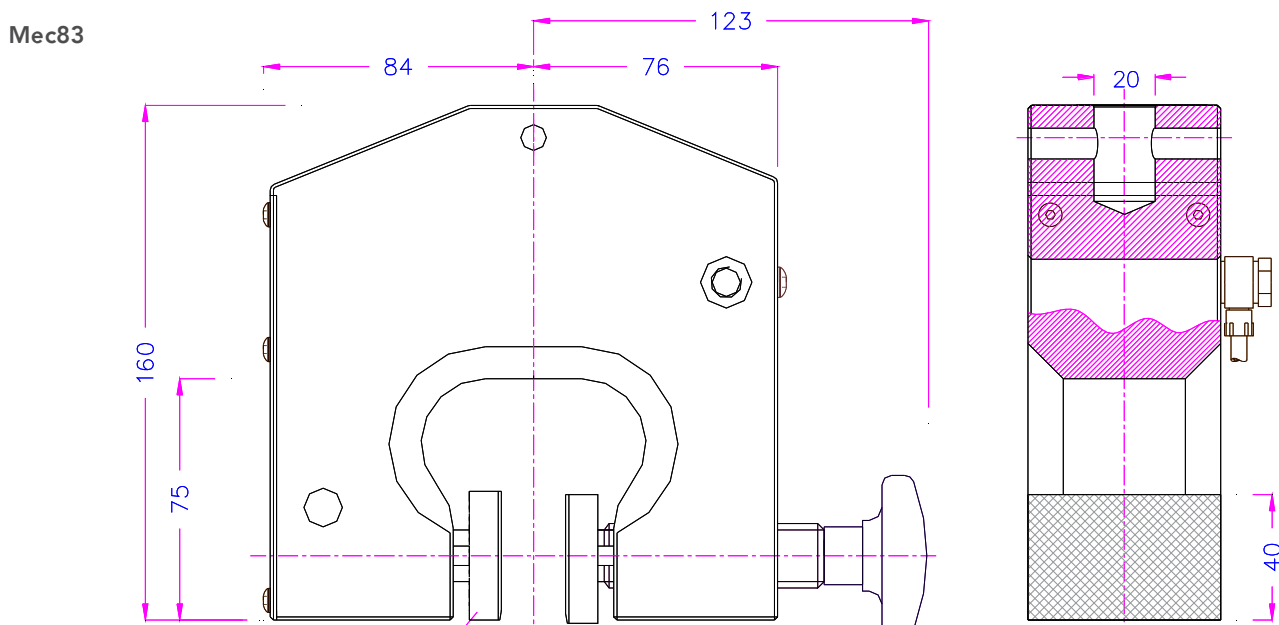
The 'U-Form' cut into the aluminium body of these Pneumatic Vice Grips creates the space for an operator to have specimen material below the jaws thereby facilitating loading and removal. An extensive collection of interchangeable, high-performance jaws with differing profiles provide excellent holding characteristics when tensile testing a variety of plastic, metal and textile materials.



Mec83 shown fitted with a half-set of Mec83 pyramid jaws'

Scope of delivery: 1 pair of grips supplied fitted with bore-hole to allow connection to QC-20 fixing post.

Item No:	Mec83	
Rated capacity:	3.5 kN / 7 bar	max. 16 bar
Opening (depending on jaws):	0-10 mm standard	10-20 mm and 20-30 mm when fitted with alternative rods (also supplied)
Weight each grip(without jaws):	3.2 kg	
Pneumatic connection:	1/8" – fits to tubes supplied with foot pedals (eg Mec205-1)	



Note: Foot pedals (see below) and jaws (see table below) must be ordered separately.

Jaws for Mec83: Scope of delivery 0.5 set = 2 jaws (left & right).

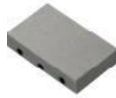
Order any combination of 2 half-sets of jaws to fit into a pair of 'Mec83' grips (upper & lower)

Item number	Jaw Surface	Clamping surface H x W	Jaw opening with rod L40*	Jaw opening with rod L35*	Jaw opening with rod L30*	Weight/ 0.5 pair
Mec83-B	Blank jaws	40 x 60 mm	0 – 10 mm	10 – 20 mm	20 – 30 mm	0.35 kg
Mec83-BG	Rubber-coated jaws	40 x 60 mm	0 – 10 mm	10 – 20 mm	20 – 30 mm	0.36 kg
Mec83-BP	Pyramid jaws	40 x 60 mm	0 – 10 mm	10 – 20 mm	20 – 30 mm	0.33 kg
Mec83-BV4	V-jaws	clamping height 40 mm	4 – 10 mm Ø	14 – 20 mm Ø	24 – 30 mm Ø	0.35 kg
Mec83-BV6	V-jaws	clamping height 40 mm	6 – 10 mm Ø	16 – 20 mm Ø	26 – 30 mm Ø	0.34 kg
Mec83-BW	Wave jaws	40 x 60 mm	0 – 10 mm	10 – 20 mm	20 – 30 mm	0.40 kg
Mec83-BD	Diamond-coated jaws	40 x 60 mm	0 – 10 mm	10 – 20 mm	20 – 30 mm	0.35 kg
Mec83-B100	Blank jaws	40 x 100 mm	0 – 10 mm	10 – 20 mm	20 – 30 mm	0.72 kg
Mec83-BG100	Rubber-coated jaws	40 x 100 mm	0 – 10 mm	10 – 20 mm	20 – 30 mm	0.74 kg
Mec83-BP100	Pyramid jaws	40 x 100 mm	0 – 10 mm	10 – 20 mm	20 – 30 mm	0.69 kg
Mec83-BW100	Wave jaws	40 x 100 mm	0 – 10 mm	10 – 20 mm	20 – 30 mm	0.66 kg
Mec83-BD100	Diamond-coated jaws	40 x 100 mm	0 – 10 mm	10 – 20 mm	20 – 30 mm	0.72 kg
Mec83-BP200	Pyramid jaws	60 x 200 mm	0 – 10 mm	10 – 20 mm	20 – 30 mm	3.00 kg
Mec83-BG200	Rubber-coated jaws	60 x 200 mm	0 – 10 mm	10 – 20 mm	20 – 30 mm	3.06 kg
Mec83-BW200	Wave jaws	60 x 200 mm	0 – 10 mm	10 – 20 mm	20 – 30 mm	3.00 kg

* Rods L30 and L35 for openings 10-20 mm and 20-30 mm are also included

Blank jaws

- Applicable for own further treatments
- Steel blanks without coating



Rubber jaws

- 1 mm rubber coating (NBR)
- Nickel-plated



Pyramid jaws

- Pyramids 1.2x45°
- Hardened steel 58 HRC
- Nickel-plated



V-jaws

- For all kinds of round samples
- Tooth pitch 1 mm (BV5) or 0,8 mm (BV2)
- Hardened steel 58HRC
- Nickel-plated



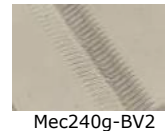
Wave jaws

- For flexible materials
- Wave 5 mm
- Hardened steel 58HRC
- Nickel-plated



Diamond jaws

- Clamping surface coated with synthetic diamonds
- Nickel-plated



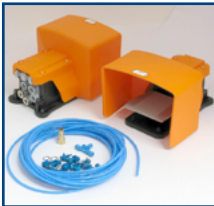
Mec240g-BV2



Mec240g-BV5

BV5 jaws fit well for samples with larger diameters

Accessories



Mec205-1 Foot pedals

Non-locking: The jaws of the grip open by pressing the foot pedal and close after removing the foot from the pedal.
Scope of delivery: 1 pair of foot switches including tubes and fittings.



Mec205-3 Hand switches

With locking function: The jaws of the grip close by pulling the handle and remain closed. The jaws open by pushing the handle back.
Scope of delivery: 1 unit of hand switches including tubes and fittings.



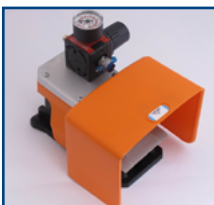
Mec205-2 Foot pedals

With locking function: The jaws of the grip open by pressing the foot pedal and remain opened after removing the foot from the pedal. The jaws close by pressing the pedal one more time. Scope of delivery: 1 pair of foot switches including tubes and fittings.



Mec216 Compressor for laboratories, oil-lubricated

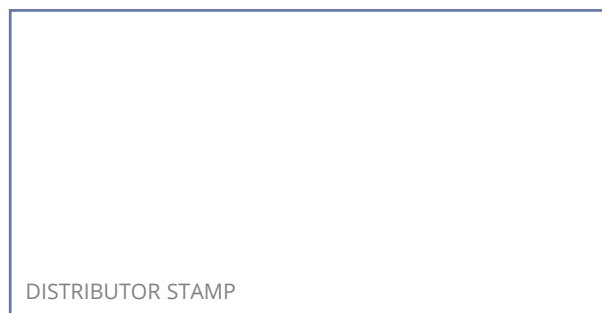
Max pressure 16 bar, 230 V, frequency 50 Hz, noise level: 38 dB (A)/1 m. Displacement 5 l/min, tank size 3.1 l (0.82 gallon)
Dimensions: 382x300x334 mm (D x W x H); weight 24 kg
Different voltages available on request.



Mec205-PR Pressure regulator

Optional for Mec205-1 or Mec205-2 To adjust air pressure: 1-10 bar or 1-16 bar

For more information on QC fittings, refer to datasheet 431-354
Adapters for QC range of grips.



Mecmesin reserves the right to alter equipment specifications without prior notice.
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