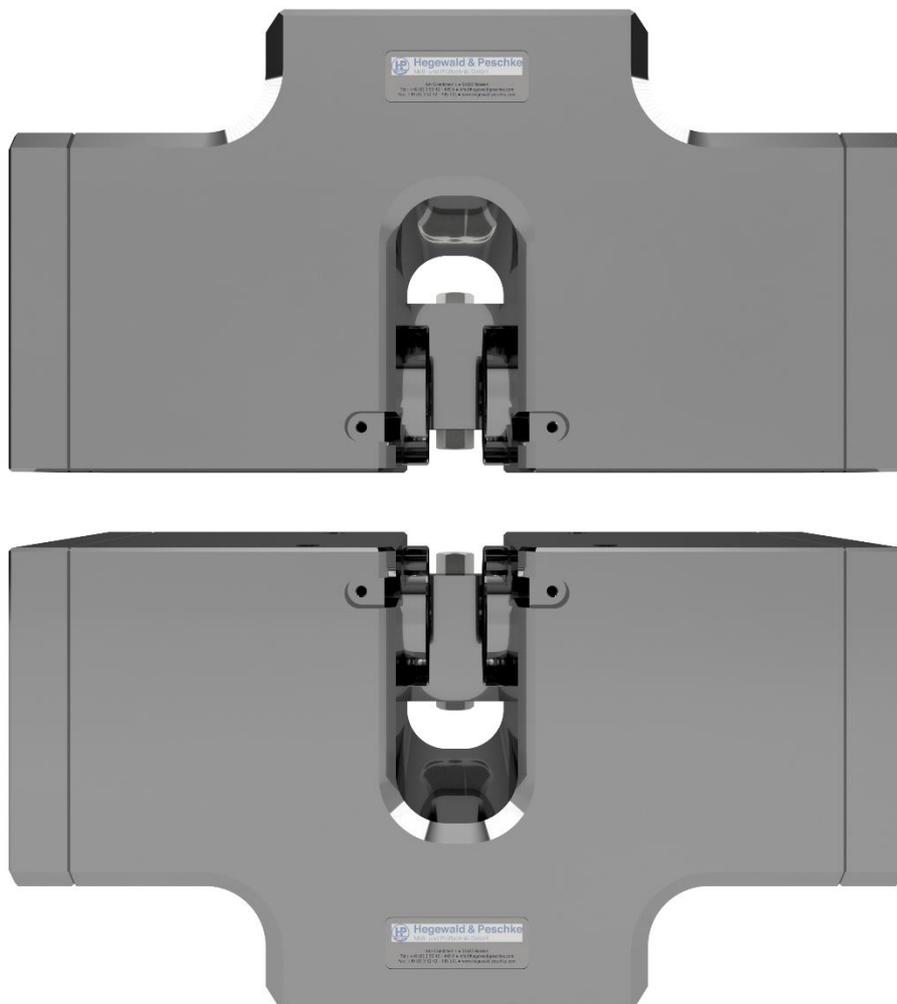




Product information

Hydraulic grips

symmetrical or one-sided closing with clamping counter bearing
100 kN and 250 kN



Field of application:

Hydraulic grips are mainly used for tensile tests where a high clamping force is required. Compression and bending tests can be carried out via optional connections in the base body.

Specimen materials

- Metals, alloys
- Thermo- and duroplastics and fibre-reinforced plastics
- Composite materials
- Wood-based materials
- (Geo-) textiles (on request)

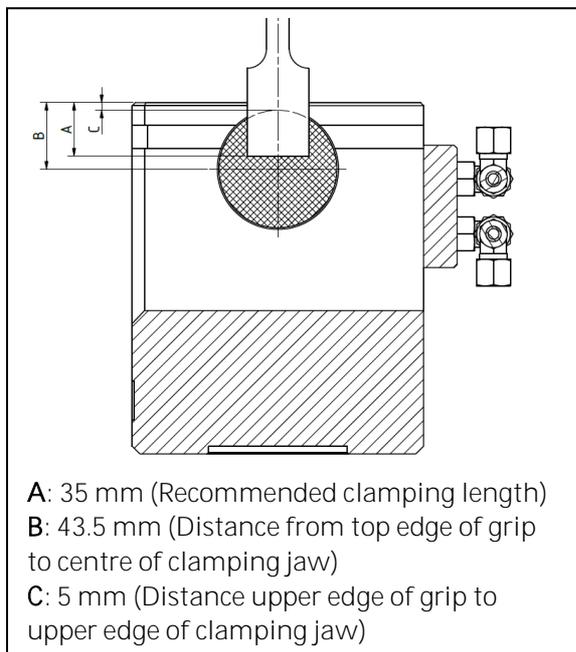
Specimen shapes:

Round and flat specimens, e.g.

- Strip specimens
- Shoulder specimens
- Round rods

Advantages:

- Extremely low minimum clamping length of the specimens



- Easy changing of the jaw inserts
- Flat jaws with specimen depth control stop
- Low overall height in the machine frame
- Robust and low maintenance

- Use of special jaw holders for special specimen dimensions possible
- Time-saving adaptation of compression plates, additional smaller force transducers, tools and testing devices possible without removal of clamping devices via optional plug-in modules
- Available as synchronised version for symmetrical clamping (*Art.-No. 14-122-010 & 14-123-010*) or with one-sided hand wheel for symmetrical and asymmetrical clamping (*art. no. 14-122-000 & 14-123-000*)

Clamping of asymmetrical specimen -

Only with one-sided closing hydraulic grips (*art.-no. 14-122-000 and 14-123-000*)

Due to the switchable synchronisation, the hydraulic grips can be clamped symmetrically and asymmetrically (e.g. testing of shear specimens or slightly curved specimens). The offset can be easily adjusted and is safely maintained even when re-tensioning. This allows one-hand operation even with asymmetrical specimens. It is also ensured that symmetrical and asymmetrical specimens can be axially aligned in the test axis.

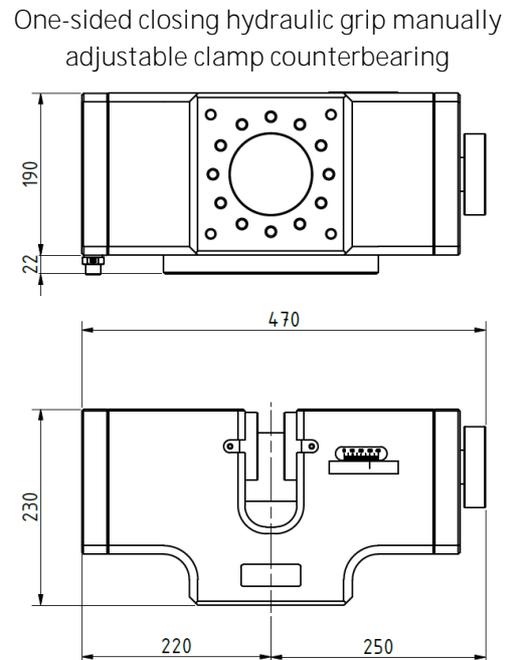
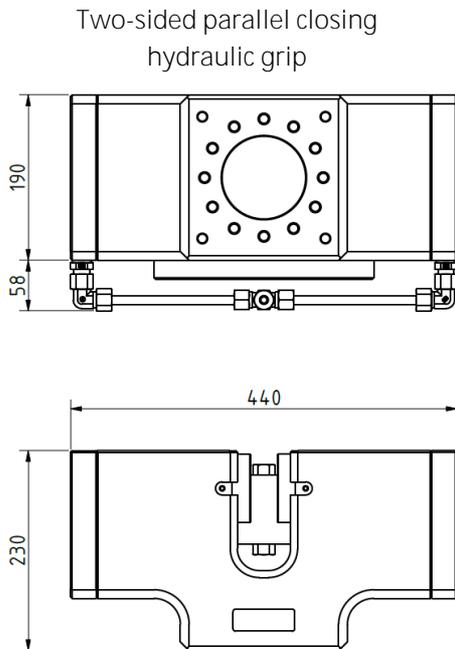




Technical data:

	14-122-0x0	14-123-0x0
Max. load	100 kN	250 kN
Temperature range	Room temperature	
Clamping pressure max./ clamping force max.	500 bar / 375 kN	
Max. symmetrical opening width	flat 60 mm, round Ø 60 mm	
Specimen dimensions	Flat specimens thickness 0 - 60 mm, round specimens 5 - 60 mm	
Recommended clamping length	≥ 35 mm	
Weight per clamp	120 kg	
Connection	LK135-12xM12-IG / series inspekt table 100-250 / inspekt 100-250	
Scope of delivery	1 Pair of hydraulic grips without clamping jaw set	
Required accessories	<ul style="list-style-type: none"> • Clamping jaws for a wide range of specimen shapes and applications (<i>art. no.: 14-123-xxx or 250.xx</i>) • 1 hydraulic power unit (<i>art. no.: 14-038-2x1</i>) • 1 computer control for semi-automatic hydraulic units (<i>art. no.: 14-036-xxx</i>) • Connection adapter 	
Optional accessories	<ul style="list-style-type: none"> • Coupling elements for other test systems or additional load cells as well as specimen clamping aids 	

Dimensions (in mm):

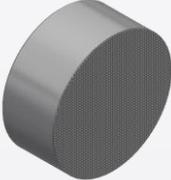
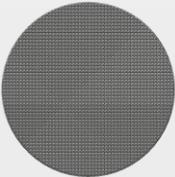
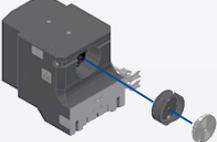


When installing in the test frame, please note that the one-sided hydraulic grip is not symmetrical.



Necessary accessories:

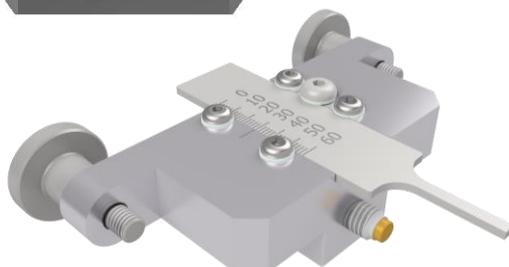
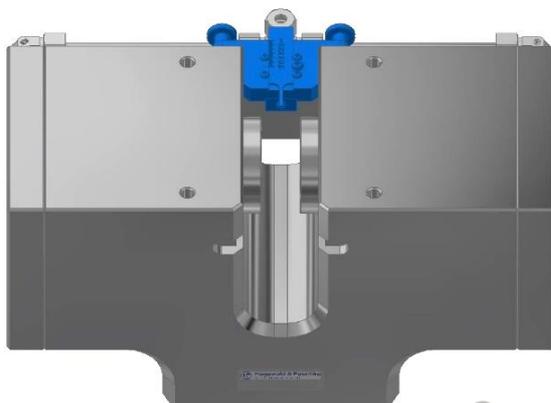
Clamping jaws for different specimen shapes
Two different clamping jaw systems are available for the hydraulic grips. Those are optimised for specific testing requirements:

Compact jaws	Modular system
 <p data-bbox="197 770 419 981">- Large clamping surface - Suitable for large specimen head dimensions and for extremely short specimen</p> 	 <p data-bbox="453 725 754 1003">- Jaw holder and jaw insert separate - Easy handling of different specimen shapes and sizes (changing jaws) - recommended for more than 3 jaw sets - Lower costs for wearing parts or spare parts</p> 

Other accessories (optional):

Specimen depth control stop (14-123-110)

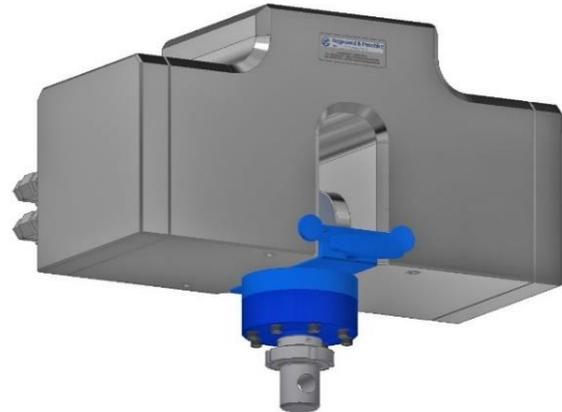
- for precise and fast placement of the specimen during the clamping process



Coupling elements for other clamping devices, load cells, calibration devices or similar

The coupling slides are inserted into a specially provided groove in the clamping device and screwed into place at the front for secure positioning.

Ex. 1: Coupling of an additional load cell:



Ex. 2: Coupling of specimen holder:

