WEDGE GRIPS

Pneumatic Wedge Grip 10-20 kN

Pneumatic wedge grips with separate control piston for temperature chambers



OVERVIEW

Pneumatically operated wedge grips for temperature chamber testing, with the control piston mounted separately outside the hot zone. The wedges move forward as they close and build a high clamping force that rises in proportion to the tensile load, making the grips suitable for short specimens with low friction such as fiberglass. The series covers 10 to 100 kN pneumatic and 100 to 250 kN hydraulic versions.

KEY FEATURES

- Separate control piston kept outside the chamber
- Clamping force rises in proportion to tensile load
- Suited to short, low-friction specimens such as fiberglass
- Temperature range -70 to +350 °C
- Pneumatic 10 to 100 kN, hydraulic 100 and 250 kN
- Serrated jaws for flat, V-jaws for round specimens

TECHNICAL SPECIFICATIONS

Max. load	10 kN or 20 kN (series up to 250 kN)
Test type	Tensile
Jaw opening	0 – 17 mm (20 kN)
Operation	Pneumatic, separate control piston
Coupling	Female clevis Ø 15.9 mm (5/8 in) or Ø 20 mm pin; others via adapter
Material	Steel, nickel-plated
Temperature range	-70 to +350 °C
Scope of supply	1 pair of grips

AVAILABLE VERSIONS

10 kN pneumatic	Ø 15.9 mm pin coupling
20 kN pneumatic	Opening 0–17 mm, -70 to +350 °C
50 kN pneumatic	Ø 31.8 mm pin coupling
100 kN pneumatic	Preload 31 kN at 7 bar, up to 184 kN clamping, 50 kg
100 kN hydraulic	Ø 40 mm pin coupling, 50 kg
250 kN hydraulic	Ø 60 mm pin coupling, 120 kg

APPLICATIONS

- Fiberglass and composite laminates
- High-temperature metals
- Short and low-friction specimens
- Compression of composites (CLC)

STANDARDS ASTM D6641, ISO 14126

Ordering & customization: Specify capacity, pneumatic or hydraulic operation, chamber temperature range, jaw type and coupling.

Dimensional drawings
See page 2. Certified drawings and 3D models available on request.

Specifications are typical and may vary by configuration; confirm at time of quote. Custom versions, couplings and adapters available on request. Part ref. UGC-WG-140

UGC-WG-140

Pneumatic Wedge Grip 10-20 kN

DIMENSIONAL DRAWINGS

FIG. 1

Force capacity:	20 kN
Jaw opening:	0 – 17 mm
Coupling:	Further couplings on request
Material:	Steel, nicke-plated
Temperature range:	-70...+350°C
Scope of delivery:	1 pair of grips

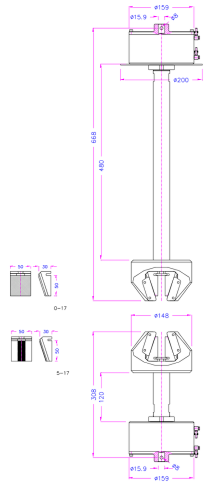


FIG. 2

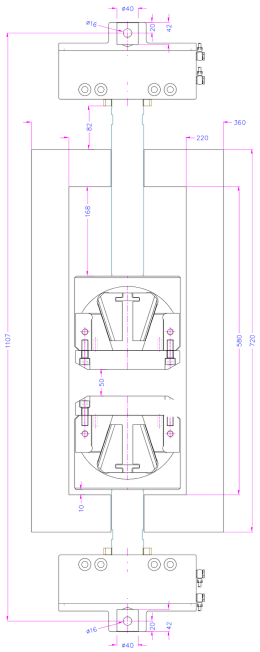


FIG. 3

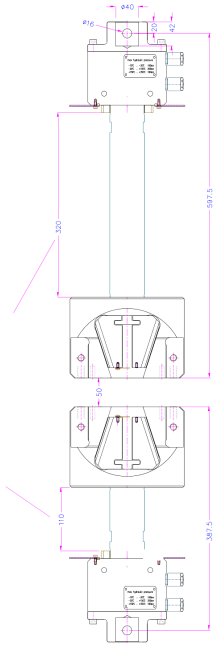
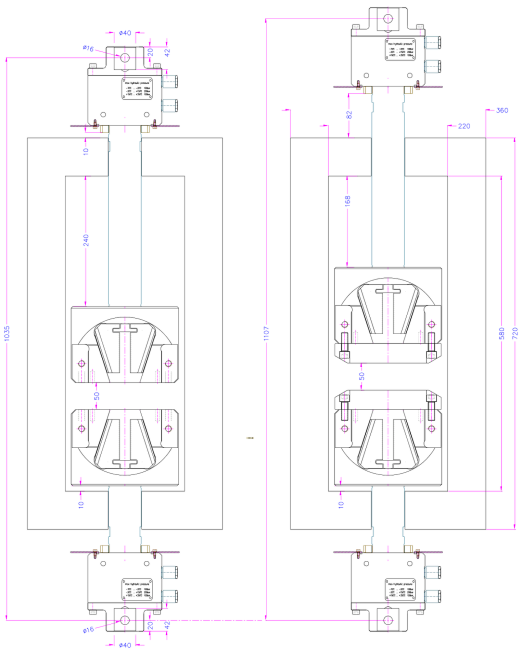


FIG. 4



Dimensions in mm. Drawings are representative of the product family and may show optional versions or accessories; dimensions are for reference only and may change without notice. Certified dimensional drawings and 3D models are available on request.