

Pneumatic hand test pump

To 35 bar [500 psi]

Model CPP30

WIKA data sheet CT 91.06

Applications

- Simple test pressure generation on-site, in the laboratory or in the workshop
- For the testing, adjustment and calibration of all types of pressure measuring instruments
- Supply of small positive or negative pressures

Special features

- Pneumatic pressure generation from -0.95 ... +35 bar [-28 inHg ... +500 psi]
- Switchable pressure/vacuum generation
- Precise adjustment through the fine adjustment valve
- Ergonomic handling
- Compact dimensions and low weight



Pneumatic hand test pump, model CPP30

Configurator



Description

Hand test pumps serve for pressure generation for the testing, adjustment and calibration of mechanical and electronic pressure measuring instruments through comparative measurements. These pressure tests can take place in the laboratory or workshop, or on-site at the measuring location.

If one connects the device under test and a sufficiently accurate reference pressure measuring instrument to the hand test pump, on actuating the pump, the same pressure will act on both measuring instruments. By comparison of the two measured values at any given pressure value, a check of the accuracy and/or adjustment of the pressure measuring instrument to be tested can be carried out. In order to approach the measuring points exactly, the hand test pump features a fine adjustment valve.

The model CPP30 hand test pump, despite its very compact dimensions, enables a simple and accurate test pressure generation of up to 35 bar [500 psi], with a switchover to vacuum generation to -950 mbar [-28 inHg]. The maximum pressure or vacuum achievable is dependent upon the connected test volume.

The pump has a fine adjustment valve for precise adjustment, so as to ensure an accurate comparative test. The reference instrument is screwed directly to the top of the pump, and the device under test is connected using a connection hose with a G 1/4 female thread, included in the scope of delivery.

Specifications

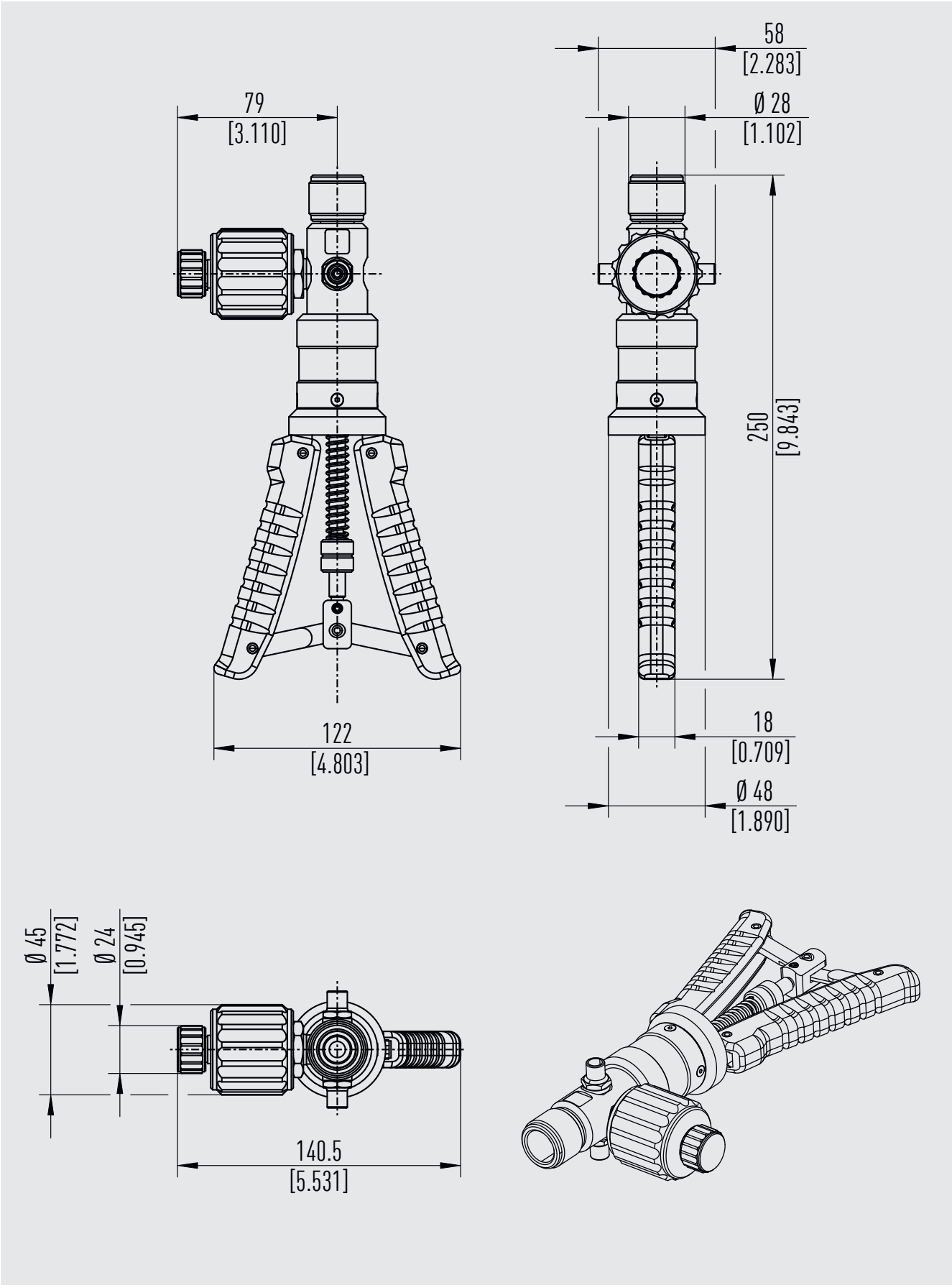
Basic information	
Pressure range	
Pressure generation	0 ... 35 bar [0 ... 500 psi]
Vacuum generation	-0,95 ... 0 bar [-28 inHg ... 0 psi]
Setting of the test pressure	Via fine adjustment valve Via pressure relief valve Via pump handles
Pressure transmission medium	Ambient air
Pump volume per stroke	Approx. 11 cm ³
Case	
Material (non-wetted)	■ Brass, chrome-plated ■ Anodised aluminium ■ High-strength plastic
Weight	510 g [1.125 lb]

Test connection	
Overpressure protection	Adjustable via knurled nut
Thread size	
For reference pressure measuring instrument	■ G ½, female thread, freely rotating, with seal ■ ¼ NPT, female thread
For device under test	■ G ¼, female thread, freely rotating, with seal on the standard hose connection ■ ¼ NPT, female thread on the standard hose connection

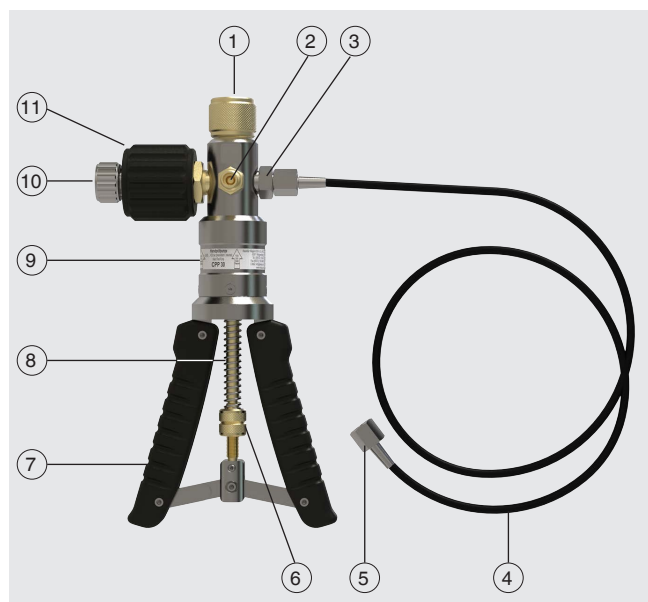
Operating conditions	
Place of use	Laboratory Workshop Directly at the measuring location
Temperature of use / Operating temperature	18 ... 28 °C [64 ... 82 °F]
Ambient temperature range	-10 ... +50 °C [14 ... 122 °F]
Storage temperature range	-10 ... +50 °C [14 ... 122 °F]

→ For approvals and certificates, see website

Dimensions in mm [in]



Construction



- ① Connection for reference pressure measuring instruments, G ½, female thread, freely rotating
- ② Toggle control for pressure/vacuum generation
- ③ Pressure connection for connection hose
- ④ Test hose; length 0.5 m [1.64 ft]
- ⑤ Connection for device under test, G ¼, female thread, freely rotating
- ⑥ Adjustable knurled nut with counter nut, for setting the pump performance
- ⑦ Pump handles
- ⑧ Piston rod with external spring
- ⑨ Pump body
- ⑩ Pressure relief valve
- ⑪ Fine adjustment valve

Recommended calibration equipment

Calibration case



Consisting of:

- Plastic service case with foam insert
- Precision digital pressure gauge model CPG1500
- Pneumatic hand test pump model CPP30

→ For further specifications, see data sheet CT 93.03.



Consisting of:

- Plastic service case with foam insert
- Digital pressure gauge model CPG1200
- Pneumatic hand test pump model CPP30

→ For further specifications, see data sheet CT 93.03.

Recommended reference pressure measuring instruments



Precision digital pressure gauge model CPG1500

Measuring ranges: 0 ... 10,000 bar [0 ... 150,000 psi]

Accuracy: down to 0.025 % FS

→ For further specifications, see data sheet CT 10.51.



Digital pressure gauge model CPG1200

Measuring ranges: 0 ... 1,000 bar [0 ... 15,000 psi]

Accuracy: down to 0.25 % FS

→ For further specifications, see data sheet CT 10.20.

Recommended reference pressure measuring instruments



Hand-held pressure indicator model CPH5000

Measuring ranges: 0 ... 1,000 bar [0 ... 14,500 psi]

Accuracy: down to 0.1 % FS

→ For further specifications, see data sheet CT 13.01

Calibration software



WIKA-Cal calibration software

For creating calibration certificates or logger protocols

Only in combination with a reference pressure measuring instrument

→ For further specifications, see data sheet CT 95.10.

Accessories and spare parts

Description ¹⁾		Order code
		CPP-A-2-
	Plastic case Incl. foam insert with recesses for model CPP30 Dimensions (W x H x D): 395 x 295 x 106 mm [15.55 x 11.61 x 4.17 in]	-20-
-	"BSP" adapter set for test hose Consisting of: ■ G 1/4, male thread, to G 1/8, female thread ■ G 1/4, male thread, to G 3/8, female thread ■ G 1/4, male thread, to G 1/2, female thread ■ Various O-rings Material: stainless steel	-21-
-	"Metric" adapter set for test hose Consisting of: ■ G 1/4, male thread, to M12 x 1.5 ■ G 1/4, male thread, to M20 x 1.5 ■ G 1/4, male thread, to MINIMESS® ■ Various O-rings Material: stainless steel	-22-
-	"NPT" adapter set for test hose Consisting of: ■ G 1/4, male thread, to 1/8 NPT, female thread ■ G 1/4, male thread, to 1/4 NPT, female thread ■ G 1/4, male thread, to 3/8 NPT, female thread ■ G 1/4, male thread, to 1/2 NPT, female thread ■ Various O-rings Material: stainless steel	-23-
	Connection adapters G 1/4, male thread, to G 1/2, female thread Material: stainless steel	-24-

Description ¹⁾		Order code
		CPP-A-2-
	Maintenance set Consisting of various O-rings and seals	-25-
	Spare hose Length: 0.5 m [1.64 ft] Complete with G 1/8 connection adapter, male thread, to G 1/4, female thread, freely rotating, with integrated sealing ring Hose: polyurethane TPE-E Connections: stainless steel, 1.0718	-26-
	Length: 1 m [3.28 ft] Complete with G 1/8 connection adapter, male thread, to G 1/4, female thread, freely rotating, with integrated sealing ring Hose: polyurethane TPE-E Connections: stainless steel, 1.0718	-27-
1. Order code: CPP-A-2- 2. Option:		↓ []

1) The figures are an example and may change in design, material composition and representation depending on the state of the art.

Scope of delivery

- Pneumatic hand test pump model CPP30
- Connection hose; length 0.5 m [1.64 ft] incl. G 1/8 connection adapter, male thread, to G 1/4, female thread, freely rotating and integrated sealing ring
- Plastic case
- Betriebsanleitung

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Ordering information

CPP30 / Package / Pressure connection set / Adapter set / Case / Further approvals /
Additional ordering information

Configurator



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The specifications given in this document represent the state of the art at the time of publishing.
We reserve the right to make modifications to the specifications and materials.



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