

# 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

## Description

Hand test pumps serve as pressure generators 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 test item 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 comparison test. The reference instrument is screwed directly to the top of the pump, and the test item is connected using a connection hose with a G ¼ female thread, included in delivery.


## Specifications

Basic information	
<b>Pressure range</b>	
Pressure generation	0 ... 35 bar [0 ... 500 psi]
Vacuum generation	-950 ... 0 bar [-28 inHg ... 0 psi]
<b>Pressure transmission medium</b>	Ambient air
<b>Pressure connections</b>	
For reference pressure measuring instrument	G ½, female thread, swivel union nut with seal
For test item	G ¼, female thread, swivel union nut with seal on the production hose connection
<b>Volume per stroke</b>	Approx. 11 cm <sup>3</sup>
<b>Setting of the test pressure</b>	Fine adjustment valve

Hand test pump	
<b>Overpressure protection</b>	Adjustable via knurled nut
<b>Material</b>	<ul style="list-style-type: none"> <li>■ Brass, chrome-plated</li> <li>■ Anodised aluminium</li> <li>■ High-strength plastic</li> </ul>
<b>Dimensions (L x W x H)</b>	250 x 122 x 103 mm [9.84 x 4.80 x 4.06 in]
<b>Weight</b>	510 g [1.125 lbs]

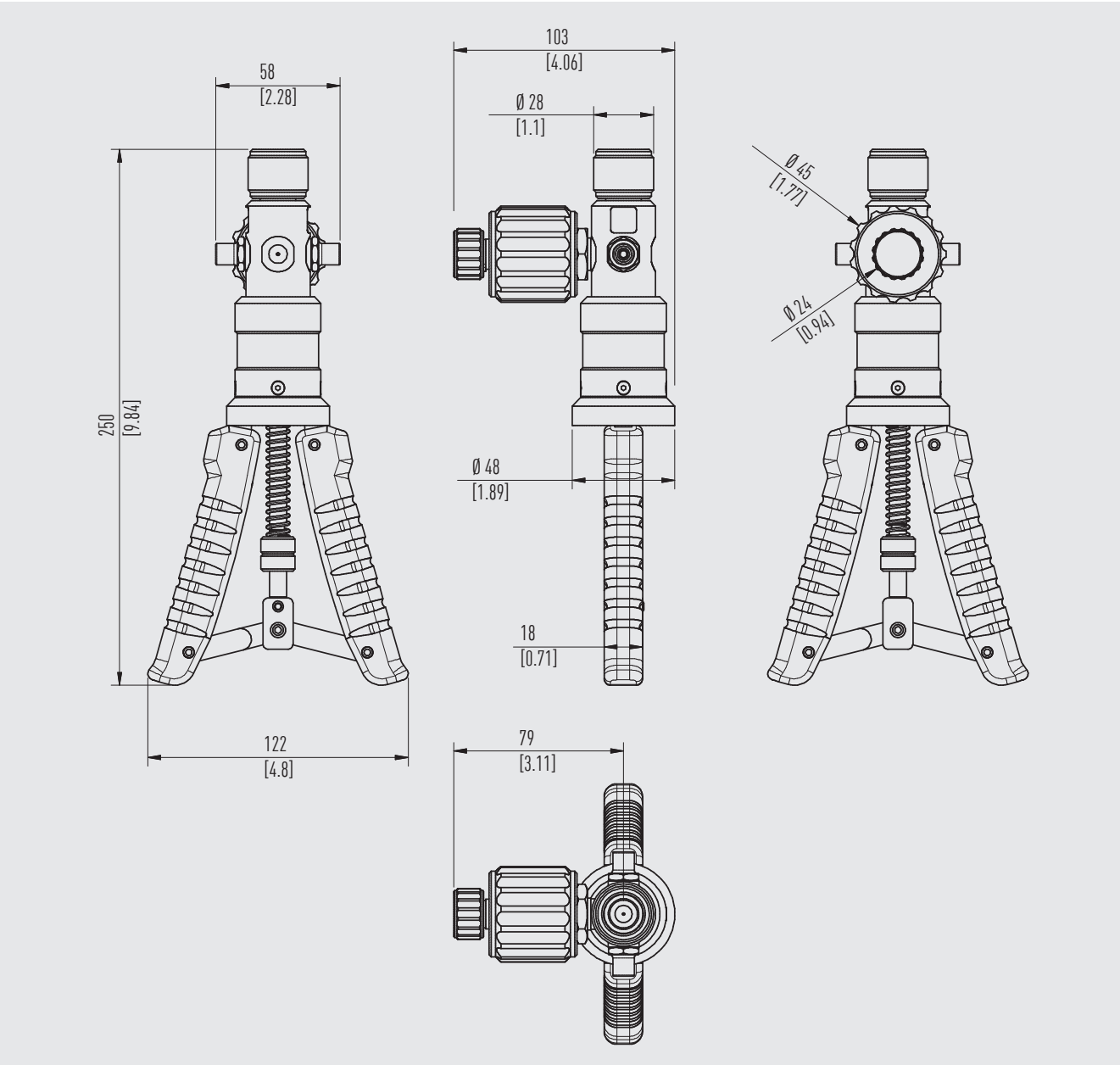
Operating conditions	
<b>Temperature of use / Operating temperature</b>	18 ... 28 °C [64 ... 82 °F]
<b>Ambient temperature range</b>	-10 ... +50 °C [14 ... 122 °F]
<b>Storage temperature range</b>	-10 ... +50 °C [14 ... 122 °F]
<b>Permissible media</b>	Ambient air

## Approvals

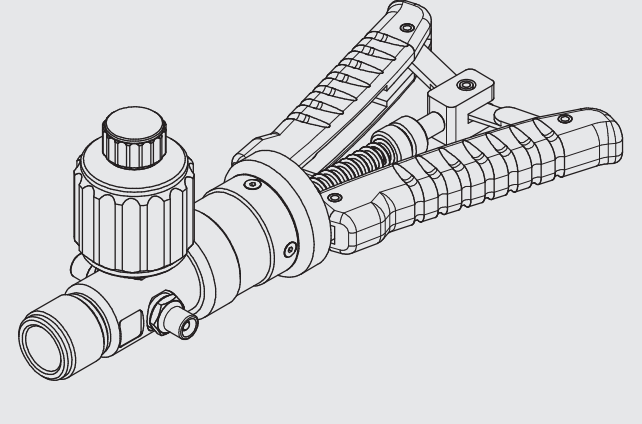
Logo	Description	Region
	<b>EAC</b>	Eurasian Economic Community
	Machinery directive	
-	<b>MChS</b> Permission for commissioning	Kazakhstan

→ For approvals and certificates, see website

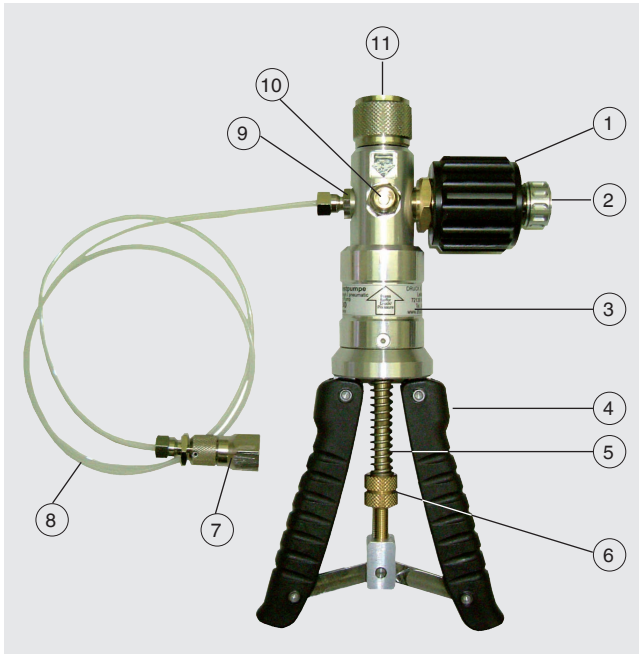
**Dimensions in mm [in]**



**Isometric view**



## Set-up



- ① Fine adjustment valve
- ② Pressure relief valve
- ③ Pump body
- ④ Pump handles
- ⑤ Piston rod with external spring
- ⑥ Adjustable knurled nut for setting the pump performance, with counter nut
- ⑦ Test item connection with G ¼, female thread, freely rotating
- ⑧ Connecting hose; length 0.5 m [1.64 ft]
- ⑨ Pressure connection for connecting hose
- ⑩ Switching valve for pressure/vacuum generation
- ⑪ Reference instrument connection, G ½, female thread, freely rotating

### 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



#### Hand-held pressure indicator model CPH6200

Measuring ranges: 0 ... 1,000 bar [0 ... 14,500 psi]  
Accuracy: down to 0.1 % FS

→ For further specifications, see data sheet CT 11.01



#### Hand-held pressure indicator model CPH6300

Measuring ranges: 0 ... 1,000 bar [0 ... 14,500 psi]  
Accuracy: down to 0.1 % FS

→ For further specifications, see data sheet CT 12.01

## 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




## Calibration case


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### Consisting of:

- Plastic service case with foam insert
- Pneumatic hand test pump model CPP30
- For standard accessories, see scope of delivery

## Accessories

	Description	Order code CPP-A-2-
	<b>Plastic case</b> 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-
-	Adapter set "BSP" for test item hose Consisting of: <ul style="list-style-type: none"> <li>■ G ¼, male thread, to G ⅛, female thread</li> <li>■ G ¼, male thread, to G ⅜, female thread</li> <li>■ G ¼, male thread, to G ½, female thread</li> <li>■ Various O-rings</li> </ul> Material: Stainless steel	-21-
-	Adapter set "metric" for test item hose Consisting of: <ul style="list-style-type: none"> <li>■ G ¼, male thread to M12 x 1.5</li> <li>■ G ¼, male thread to M20 x 1.5</li> <li>■ G ¼, male thread to Minimess®</li> <li>■ Various O-rings</li> </ul> Material: Stainless steel	-22-
-	Adapter set "NPT" for test item hose Consisting of: <ul style="list-style-type: none"> <li>■ G ¼, male thread, to ⅛ NPT, female thread</li> <li>■ G ¼, male thread, to ¼ NPT, female thread</li> <li>■ G ¼, male thread, to ⅜ NPT, female thread</li> <li>■ G ¼, male thread, to ½ NPT, female thread</li> <li>■ Various O-rings</li> </ul> Material: Stainless steel	-23-
	<b>Connection adapters</b> G ¼, male thread, to G ½, female thread Material: Stainless steel	-24-
	<b>Maintenance set</b> Consists of different O-rings and seals	-25-

		Order code
Description		CPP-A-2-
	<b>Spare hose</b> 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-
<b>1. Order code: CPP-A-2-</b> <b>2. Option:</b>		↓ [ ]

## Scope of delivery

- Pneumatic hand test pump model CPP30
- Connecting hose; Length 0.5 m [1.64 ft] including connection adapter G 1/4, female thread, freely rotating
- PTFE sealing tape
- Operating instructions

## Ordering information

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

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