

# Hydraulic hand test pump

## Models CPP700-H and CPP1000-H

WIKA data sheet CT 91.07



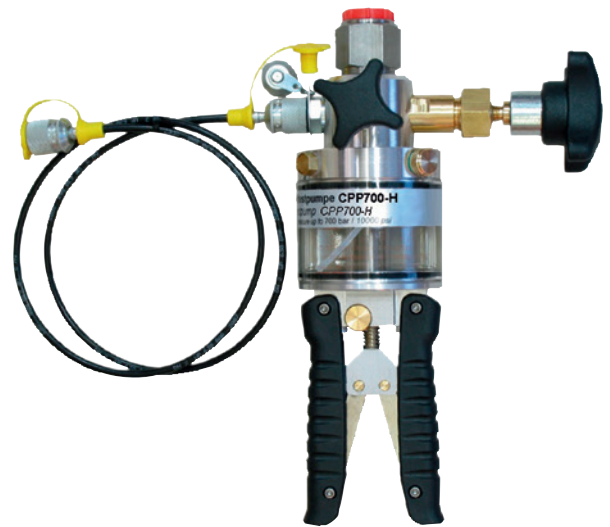
for further approvals  
see page 2

### 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
- Hydraulic pressure generation up to 700 bar (10,000 psi) or 1,000 bar (14,500 psi)

### Special features

- Ergonomic handling
- Precise setting through the fine adjustment valve
- Compact dimensions
- Low weight



Hand test pump model CPP700-H

## Description

### Application areas

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 point. The model CPP700-H and CPP1000-H hand test pumps have been specifically developed for test pressure generation on site.

### Easy operation

By connecting the test item and a sufficiently accurate reference pressure measuring instrument to the 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 under test can be carried out.

### Easy handling

The CPP700-H and CPP1000-H hand test pumps, despite their very compact dimensions, enable simple and accurate pressure generation of up to a max. of 700 bar (10,000 psi) or 1,000 bar (14,500 psi) respectively, with an integrated switching from system pressure to high-pressure generation. For the precise setting for accurate comparative testing, the pump features a fine adjustment valve. As a pressure transmission medium, either hydraulic oil or clean water, free of calcium carbonate, should be used.

The reference instrument is screwed directly to the top of the pump, and the test item is connected using a connecting hose with a G ¼ female thread, included in delivery. The CPP700-H is delivered with a Minimesse® 1620 test item hose system as standard.

## Specifications Hand test pump

	Model CPP700-H	Model CPP1000-H
<b>Pressure range</b>	0 ... 700 bar (0 ... 10,000 psi)	0 ... 1,000 bar (0 ... 14,500 psi)
<b>Pressure transmission medium</b>	Hydraulic fluid based on mineral oil or single distilled water <sup>1)</sup> (Water-based hydraulic fluids are not suitable)	
<b>Fluid reservoir</b>	200 cm <sup>3</sup>	
<b>Pressure connections</b>		
For reference measuring instrument	G ½ female thread, freely rotating. The connection can be disconnected using an Allen key. Then a G ¾ female thread is available.	
For test item	G ¼ female at test connection hose, length 1 m (3.28 ft), Minimes <sup>®</sup> 1620 system	G ¼ female, freely rotating at test connection hose, length 1 m (3.28 ft)
<b>Fine adjustment</b>	Fine adjustment valve / volume adjustment	
<b>Material</b>	anodised aluminium, brass, stainless steel, ABS	
<b>Sealings</b>	FKM and NBR (standard)	
<b>Dimensions (L x W x H)</b>	280 x 170 x 120 mm (11.0 x 6.7 x 4.7 in)	
<b>Weight</b>	1.9 kg (4.2 lbs)	

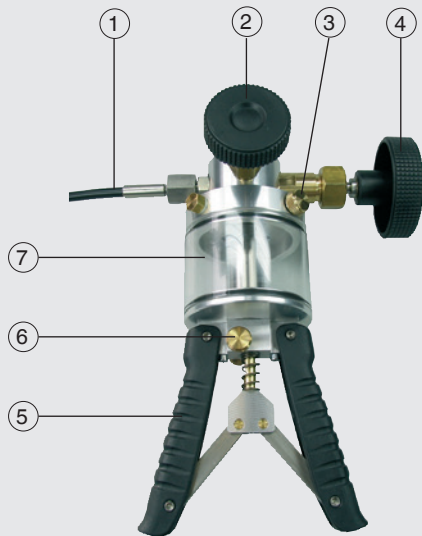
1) Other pressure transmission media on request.

## Approvals

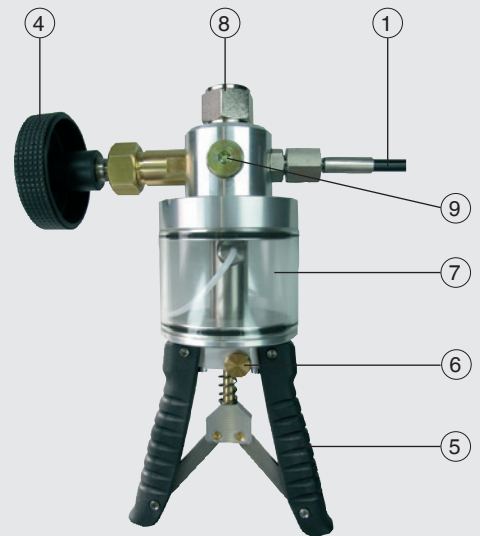
Logo	Description	Country
	<b>EAC</b> ■ Pressure equipment directive ■ Machinery directive	Eurasian Economic Community
-	<b>MTSCHS</b> Permission for commissioning	Kazakhstan

Approvals and certificates, see website

Front view



Rear view



- ① Test item connection hose  
CPP700-H: Minimes® system with a G 1/4 female pressure gauge connector  
CPP1000-H: G 1/4 female
- ② Pressure relief valve
- ③ Plug screw for fluid reservoir
- ④ Fine adjustment valve (volume adjustment)

- ⑤ Pump handles
- ⑥ Toggle control, system and high-pressure generation
- ⑦ Fluid reservoir
- ⑧ Connection G 1/2 female, freely rotating for reference instruments
- ⑨ Blind plug, **do not open!**

## Recommended reference pressure measuring instruments

### ■ Precision digital pressure gauge model CPG1500

**Measuring ranges** up to 1,000 bar (15,000 psi)

**Accuracy** 0.05 % of span

For further specifications see data sheet CT 10.51



### ■ Hand-held pressure indicator model CPH6200

**Measuring ranges** up to 1,000 bar (14,500 psi)

**Accuracy** 0.2 % of span

For further specifications see data sheet CT 11.01



■ **Hand-held pressure indicator model CPH6300**

**Measuring ranges** up to 1,000 bar (14,500 psi)

**Accuracy** 0.2 % of span

For further specifications see data sheet CT 12.01



■ **Precision hand-held pressure indicator model CPH6400**

**Measuring ranges** up to 6,000 bar (85,000 psi)

**Accuracy** up to 0.025 % of span

For further specifications see data sheet CT 14.01



■ **ProcessCalibrator model CPH6000**

**Measuring ranges** up to 8,000 bar (115,000 psi)

**Accuracy** up to 0.025 % of span

For further specifications see data sheet CT 15.01



## Calibration software

WIKA-CAL calibration software for creating calibration certificates or logger protocols

For specifications see data sheet CT 95.10



## Calibration case

**Consisting of:**

- Plastic service case with foam insert
- Precision digital pressure gauge model CPG1500
- Hydraulic hand test pump model CPP700-H



## Scope of delivery

### CPP700-H

- Hand test pump, model CPP700-H, oil/water
- Minimess® test item hose, length 1 m (3.28 ft)
- Bulkhead connector, G ¼ female
- Operating instructions

### CPP1000-H

- Hand test pump, model CPP1000-H, oil/water
- High-pressure test item hose, length 1 m (3.28 ft)
- Connection, G ¼ female
- Operating instructions

## Accessories

### Adapter set

- Adapter and sealing set, "BSP" for test item hose, G ¼ male to G ⅛, G ⅜ and G ½ female
- Adapter and sealing set, "metric" for test item hose, G ¼ male to M 12 x 1.5, M 20 x 1.5 and Minimess®
- Adapter and sealing set, "NPT" for test item hose, G ¼ male to ⅛ NPT, ¼ NPT, ⅜ NPT and ½ NPT female

### Case

- Plastic case, incl. foam insert with free spaces for model CPP700-H or CPP1000-H; dimensions (W x H x D): 440 x 370 x 140 mm (17.3 x 14.6 x 5.5 in)

### Pressure transmission medium

- Special oil for CPP1000 and CPP1600 test pump series in plastic case, contents 1 litre
- Hydraulic fluid based on VG22 mineral oil in plastic bottle, content 1 litre

### Other

- Connection adapter, G ¼ male to G ½ female, material: stainless steel
- Sealing and maintenance set for model CPP700-H or CPP1000-H
- Spare hose for model CPP700-H or CPP1000-H, length 1 m (3.28 ft)

## Ordering information

CPP700-H / Package / Adapter set / Case / Special oil / Accessories / Additional ordering information

CPP1000-H / Package / Adapter set / Case / Special oil / Accessories / Additional ordering information

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