Pneumatic hand test pump Model CPP10-H

WIKA data sheet CT 91.10

Applications

- Simple test pressure generation on-site, in the laboratory or in the workshop
- Supply of small positive or negative pressures
- Specifically for testing, adjustment and calibration of low-pressure measuring instruments in the areas of: heating, ventilation and air-conditioning technology, cleanroom engineering, medical engineering and filtration and dust removal technology

Special features

- Pneumatic pressure generation from -0.85 ... +10 bar [-25 inHg ... +145 psi]
- Switchable pressure/vacuum generation
- Precise adjustment through the fine adjustment valve
- Simple and ergonomic handling
- Compact dimensions and low weight



Pneumatic hand test pump model CPP10-H

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 a instrument to be tested and a sufficiently accurate reference measuring instrument are connects 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 under test can be carried out. In order to approach the measuring points exactly, the hand test pump features a fine adjustment valve. The CPP10-H is a pneumatic hand test pump for low-pressure ranges up to 10 bar [145 psi], with switching to vacuum generation down to -0.85 bar [-25 inHg]. The maximum pressure or vacuum achievable is dependent upon the connected test volume.

Through the smooth pressure generation and the integrated fine adjustment valve, very small positive or negative pressures in the mbar range can be set safely and precisely.

Via a T-connector with a hose connection, the test item and the reference measuring instrument can be easily connected.

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Data sheets showing similar products and accessories: Hand test pumps; model CPP30; see data sheet CT 91.06 Hand spindle pumps; CPP series; see data sheet CT 91.05 Hand-held pressure indicator; model CPH6200; see data sheet CT 11.01 Pressure calibrator; model CPH6000; see data sheet CT 15.01

Specifications

| Basic information | | | | |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------|--|--|--|
| Pressure range | | | | |
| Pressure generation | 0 10 bar [0 145 psi] | | | |
| Vacuum generation | -0.85 0 bar [-25 inHg 0 psi] | | | |
| Pressure transmission medium | Ambient air | | | |
| Pressure connections | | | | |
| Connector for T-connector | G 1/8, female thread, at the pump body | | | |
| T-connector | For the connection of hose connection adapter G $1\!\!/_{\!\! 8},$ male thread, to 4 mm quick connector | | | |
| For reference pressure measuring instrument | G $\frac{1}{2}$, female thread, to G $\frac{1}{2}$, female thread | | | |
| For test item | G $\frac{1}{2}$, female thread, to G $\frac{1}{4}$, female thread | | | |
| Volume per stroke | Approx. 0.038 cm ³ | | | |
| Setting of the test pressure | Fine adjustment valve | | | |

| Hand test pump | | | |
|------------------------|------------------------------------------------------------------------------------------|--|--|
| Material | | | |
| Connection adapters | Brass, nickel-plated | | |
| Sealings | Anodised aluminium Brass ABS NBR 70 Shore | | |
| Dimensions (L x W x H) | | | |
| Without T-connector | 170 x 100 x 55 mm [6.69 x 3.94 x 2.17 in] | | |
| With T-connector | 170 x 125 x 55 mm [6.69 x 4.92 x 2.17 in] | | |
| Weight | | | |
| Without T-connector | 675 g [1.49 lbs] | | |
| With T-connector | 709 g [1.56 lbs] | | |

| Operating conditions | | |
|-------------------------------------------|------------------------|--|
| Usage temperature / 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] | |
| Permissible media | Ambient air | |

Dimensions in mm [in]





- (1) Fine adjustment valve
- (2) Pressure relief valve
- (3) Pump body
- 4 Push rod for pressure/vacuum generation
- (5) Connection hose; length 0.5 m [1.64 ft]
- (6) Pressure adapters for reference pressure measuring instrument and test item (can be freely selected)
- (8) T-connector, 2 x G 1/8, female thread, to G 1/8, male thread
- (9) Switching valve pressure/vacuum generation

| 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 | | |
| | Pressure calibrator model CPH6000 Measuring ranges: -1 6,000 bar [-14.5 87,000 psi] Accuracy: down to 0.025 % FS → For further specifications, see data sheet CT 15.01 | | |

Calibration software



WIKA-Cal calibration software For creating calibration certificates or logger protocols Only in combination with a reference pressure measuring instrument

 \rightarrow For further specifications, see data sheet CT 95.10

| Calibration case | |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| - | Consisting of: Plastic service case with foam insert Pneumatic hand test pump model CPP10-H For standard accessories, see scope of delivery |

Accessories

| | | 0 | rder code |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------|----|-----------|
| Description | | | CPP-A-E- |
| | Plastic case Incl. foam insert with free spaces for model CPP10-H Dimensions (W x H x D): 350 x 265 x 85 mm [13.78 x 10.53 x 3.35 in] | | -0- |
| | Hose connection adapters G ¼, male thread, to 4 mm hose connection | | -1- |
| | T-connector 2 x G 1/8, female thread, to G 1/8, male thread Material: Brass | | -2- |
| | Connection adapters G 1/8, female thread, to G 1/2, female thread Material: Stainless steel | | -3- |
| | G 1/8, female thread, to G 1/4, female thread Material: Stainless steel | | -4- |
| | G ½, female thread, to ½ NPT, female thread Material: Stainless steel | | -6- |
| | G 1/8, female thread, to 1/4 NPT, female thread Material: Stainless steel | | -7- |
| | Spare hose Length 0.5 m [1.64 ft] Material: Polyurethane TPE-U (PU) | | -5- |
| | | | |
| | 1. Order code: CPP-A- 2. Option: | E- | ↓ [] |

Scope of delivery

- Pneumatic hand test pump model CPP10-H
- T-connector
- 4 x hose connection adapters
- 2 x connection hoses; each 0.5 m long [1.64 ft]
- Selectable connection adapter (G ¹/₂, G ¹/₄, ¹/₂ NPT or ¹/₄ NPT)
- PTFE sealing tape

Ordering information

CPP10-H / Standard connection adapter / Additional connection adapter / Case / Further approvals / Additional ordering information

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