

# Comparison test pump Model CPP100-M

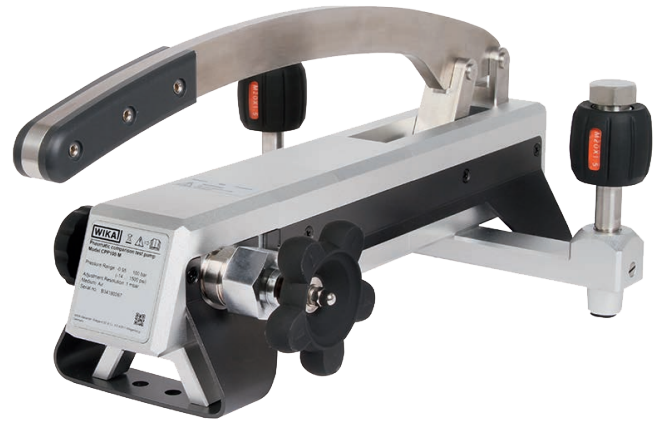
WIKA data sheet CT 91.01

## Applications

- Calibration service companies and service industry
- Calibrations directly on site
- Maintenance and service facilities
- Pressure test

## Special features

- Easy handling
- Generation of pneumatic pressures up to 100 bar (1,500 psi) and vacuum without external pressure supply
- Knurled nut for easy and optimal positioning of the measuring instrument
- Precise setting of the test pressure through a fine adjustment valve



Comparison test pump model CPP100-M

## Description

### Application areas

Comparison 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.

### Easy operation

If one connects the test item and a sufficiently accurate reference 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 test item can be carried out. In order to approach the measuring points exactly, the comparison test pump features a fine adjustment valve.

### Easy handling

With the model CPP100-M comparison test pump it is possible to generate pneumatic test pressures up to 100 bar (1,500 psi), very simply and precisely and without external pressure supply. The comparison test pump can also be used for vacuum generation to -950 mbar (-14 psi). The maximum pressure or vacuum achievable is dependent upon the connected test volume.

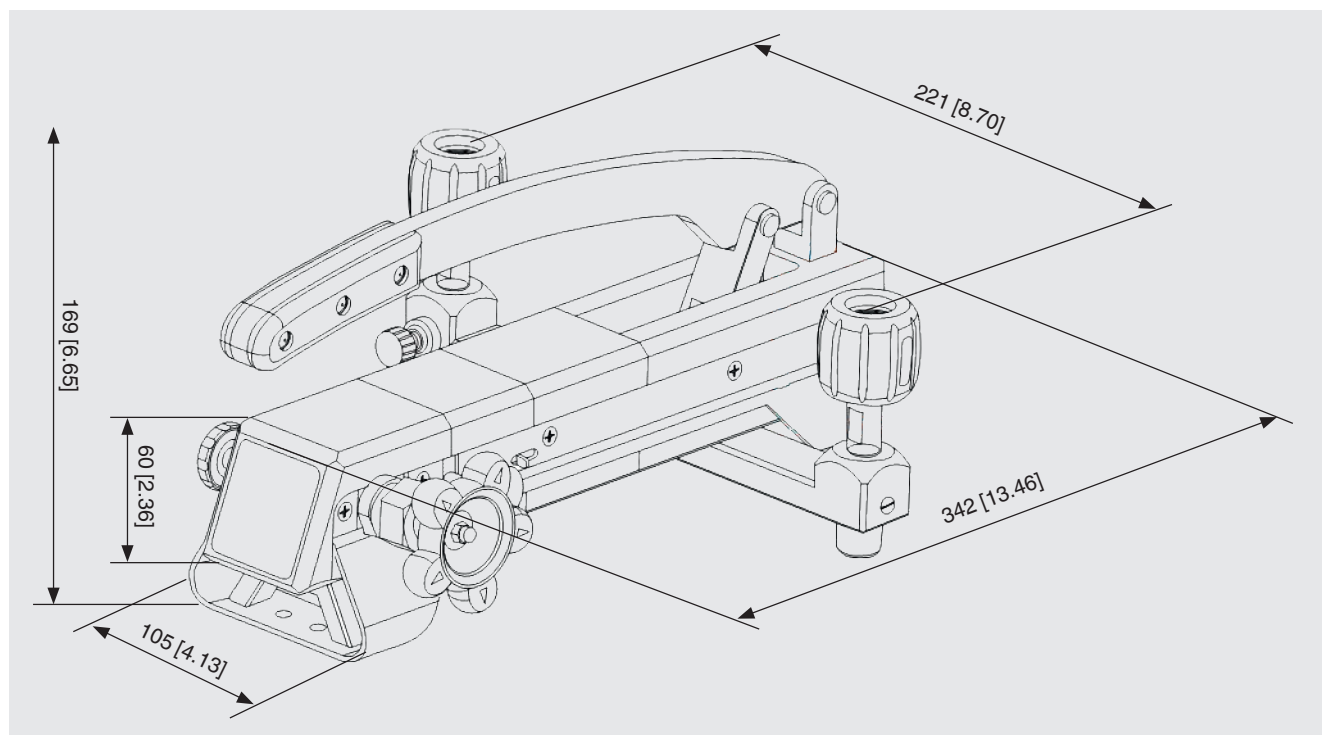
For the precise setting for accurate comparative testing, the pump features a fine adjustment valve. The reference instrument, as well as the instrument to be tested, can be mounted on the test connections at the side. Both test connections feature a freely rotating knurled nut with an M20 x 1.5 female thread. Via the freely rotating knurled nut, the instruments can be aligned. Within the scope of delivery are included two compatible adapters to G ½ female thread and ½ NPT female thread.

## Specifications

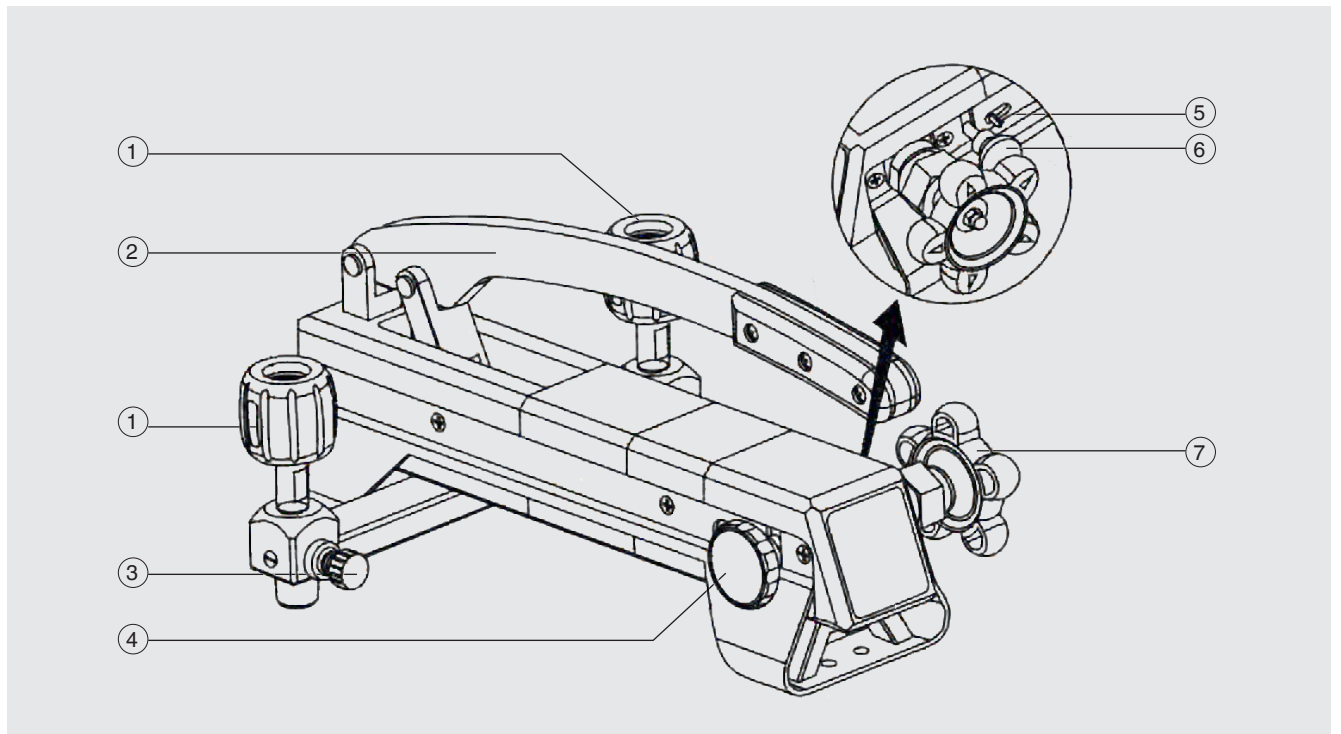
### Model CPP100-M

Comparison test pump, model CPP100-M	
Pressure range	-0.95 ... +100 bar (-14 ... +1,500 psi)
Pressure transmission medium	Air
<b>Pressure connections</b>	
Test connections	2 x M20 x 1.5 female thread, freely rotating with O-ring
Adapters for test connections	2 x M20 x 1.5 male thread to ½ BSP female thread 2 x M20 x 1.5 male thread to ¼ NPT female thread
<b>Fine adjustment</b>	
Resolution	1 mbar
<b>Permissible ambient conditions</b>	
Operating temperature	18 ... 28 °C [64 ... 82 °F]
Material	Aluminium alloy, copper, stainless steel
Dimensions (L x W x H)	approx. 450 x 262 x 170 mm [17.72 x 10.32 x 6.69 in]
Weight	approx 5.5 kg [12.13 lbs]

## Dimensions in mm [in]



## Controls



- ① Connection for test item or reference instrument
- ② Pump handle
- ③ Pressure relief valve
- ④ Shut-off valve
- ⑤ Locking pin for vacuum / overpressure switch
- ⑥ Vacuum / overpressure switch
- ⑦ Fine adjustment valve

## Recommended reference pressure measuring instruments

### Precision digital pressure gauge model CPG1500

**Measuring ranges:** to 10,000 bar (150,000 psi)

**Accuracy:** to 0.025 % of span

For further specifications see data sheet CT 10.51



### Hand-held pressure indicator model CPH6300

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

**Accuracy:** to 0.1 % of span

For further specifications see data sheet CT 12.01



### Precision hand-held pressure indicator model CPH6400

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

**Accuracy:** to 0.025 % of span

For further specifications see data sheet CT 14.01



### ProcessCalibrator model CPH6000

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

**Accuracy:** 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
- Comparison test pump model CPP100-M
- Standard accessories see scope of delivery
- Reference pressure measuring instrument, optionally with one CPG1500 and/or a CPH6300/CPH62x0, with up to three model CPT62x0 reference sensors



## Scope of delivery

- Comparison test pump model CPP100-M
- 2 x M20 x 1.5 male thread blind plugs
- Connection adapters:
  - 2 x M20 x 1.5 male thread to G ½ female thread
  - 2 x M20 x 1.5 male thread to ¼ NPT female thread
- O-ring set consisting of 10 pcs. 14 x 3.1 O-rings
- Operating instructions in German and English language

## Accessories

### Adapters and connections

- Various connection adapters are available on request.

### Storage

- Case for one CPH62x0/CPH6300, three CPT62x0, one CPG1500, one CPP100-M and accessories

### Other

- Sealing and maintenance set

## Ordering information

CPP100-M / Case / Further approvals / Additional ordering information

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