

# Comparison Pump

## Pneumatic version on a base plate

### Pressure range -1 / +60 bar

PH 60-P

#### Application

The comparison pump model PH 60-P is a pressure generator and used for comparative measurements. It is suitable for testing and adjusting pressure measuring devices of all kinds.

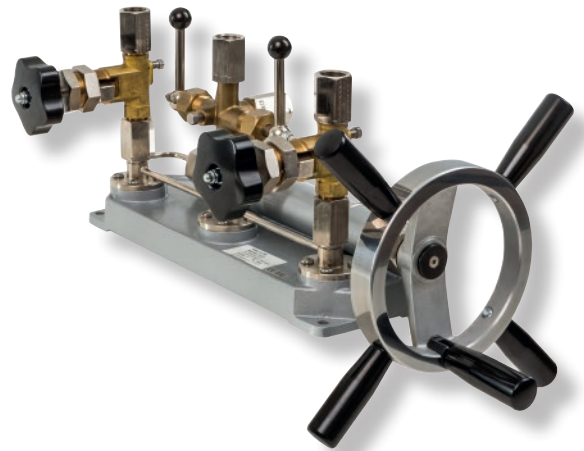
The model is applicable for pressure ranges from -1 to +60 bar. For testing, only gaseous, non-aggressive media shall be used.

Gauge pressure from -0.5 bar up to +4 bar can be generated with the installed spindle pump (ambient air). An external compressed air supply and vacuum generation (vacuum pump) is required for higher pressure and vacuum ranges respectively.

The test item is compared to a pressure measuring device with higher accuracy (e.g. Overview 2000 Test Gauges, Overview 10000 Calibration Technology).

Comparison pumps on a base plate are small, lightweight, handy and can be mounted easily on a workbench or applied mobile on site.

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#### Standard Version

##### Construction Type

Plate version

##### Medium

Dry, clean, non-corrosive gas

##### Pressure Ranges

$p_{\min}$ (operating volume $\leq 0.1$ litre)	-0.5 bar (without external vacuum supply)
$p_{\max}$ (operating volume $\leq 0.1$ litre)	4 bar (without external pressure supply)
Required admission pressure	-1 / +60 bar (for higher pressure ranges)

##### Connection

2 connections male G  $\frac{1}{2}$  LH, each with 2 clamping sleeves on G  $\frac{1}{2}$  right or M20x1.5 right, incl. double sealing

##### Connection for External Compressed Air Supply and Vacuum Pump

2 nipples and union nuts according to DIN 16 284 for connections 7 and 8

##### Base Plate

All parts mounted on aluminum, grey enamelled, 4 mounting orifices  $\varnothing 8.5$  mm (0.33")

##### Piston and Spindle

Stainless steel

##### Cylinder

Brass, grey enamelled

##### Weight

Approx. 7 kg (15.43 lb)

##### Temperature Range

10 °C to 50 °C (50 °F to 122 °F)

#### Special Versions and Options

##### Special Version for Oxygen (O<sub>2</sub>)

Wetted parts: free of grease and oil  
Cylinder: blue enamelled

##### Connections

Stop valve 5 or 6 according to DIN 16 271 (with additional test connection for simultaneous testing of pressure gauge and pressure transmitter)

#### Scope of Delivery

The delivery includes – in addition to the comparison pump:

- 1 operating instruction
- 2 special gaskets for connections, with 2 encased O-rings (mounted)
- 4 O-rings as spare parts
- 2 clamping sleeves G  $\frac{1}{2}$  (mounted)
- 2 clamping sleeves M20x1.5
- 2 nipples and union nuts according to DIN 16 284 for connections 7 and 8 (mounted)

#### Ordering Information

Please specify in your order:

**Basic model** PH 60-P  
**Options** see above

**Example:** PH 60-P  
PH 60-P-O<sub>2</sub>



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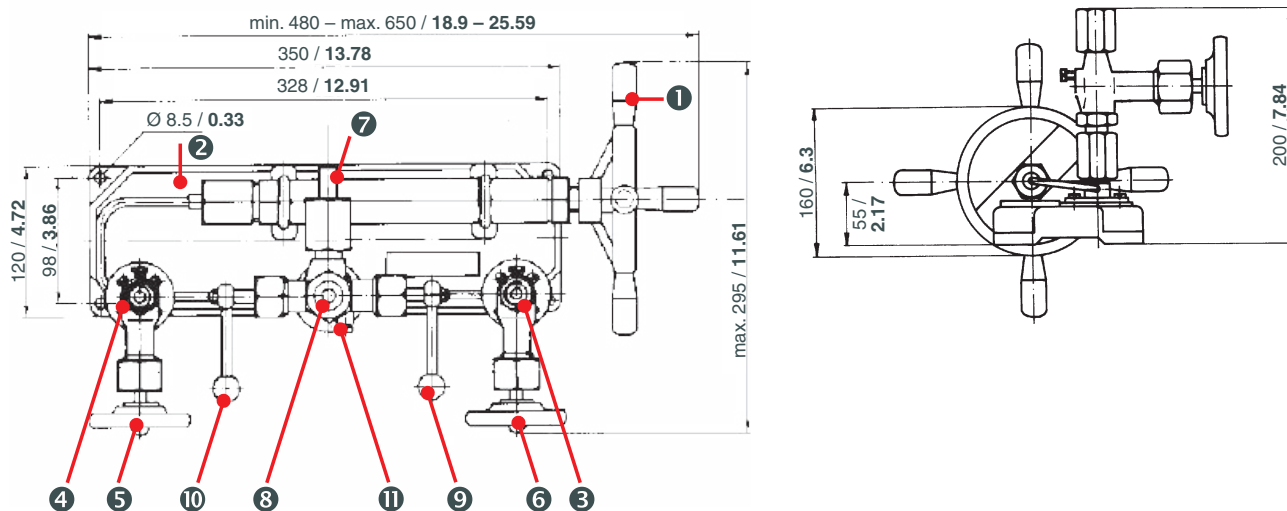
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## Schematic Drawing and Dimensional Data (in mm/inches)



- ① Pump system (piston with spindle – turnable via handwheel – for pressure and vacuum generation and for fine adjustment, cylinder serving as pressure chamber)
- ② Base plate
- ③ Connection for test item
- ④ Connection for reference device
- ⑤ Stop valve with clamping sleeve for reference device
- ⑥ Stop valve with clamping sleeve for test item
- ⑦ External vacuum and pressure connection
- ⑧ System ventilation with connection options for a hose or a tube
- ⑪ Double stop valve
  - Valve ⑨ for connection ⑧
  - Valve ⑩ for connection ⑦