

# Pressure Gauge Test Equipment Comparison Pumps

Models **PH**  
**PS**

## Application

Comparison pumps are suitable to test and calibrate pressure gauges and other pressure instruments with pressure ranges between -1-0 up to 0-2500 bar (also corresponding psi-ranges or others) by comparing the measuring results with those of pressure gauges with higher accuracy (see "Test Gauges", general information leaflet 2000).

## Construction

A piston spindle with handwheel (model -P) resp. with star handle (model -G) serves to build up the pressure and to regulate the test pressure. Model PS 2500 G is additionally equipped with a hand-pump for faster pressure generation.

All our comparison pumps are provided with two stop valves, each delivered with two exchangeable clamping sleeves M20x1.5 and 1/2" BSP, for the pressure gauge connection.

**PH 60-P** is the suitable model for gaseous media (e.g. ambient air or compressed air), and for pressure ranges up to 60 bar. It is additionally provided with a double stop valve for external pressure connection respectively vacuum connection, and for bleeding the system.

## Plate Versions - P

### Model PH 60-P

- Medium gaseous, e.g. ambient air
- Pressure ranges -0.5 up to +4 bar<sup>1)</sup> without external pressure  
-1 up to +60 bar<sup>1)</sup> with external pressure, e.g. compressed air and/or external vacuum
- Instrument connections 2 stop valves, each with 2 clamping sleeves M 20 x 1.5 and 1/2" BSP
- All parts installed on a basic plate from grey enamelled cast aluminum
- Piston and spindle Stainless steel

### Model PH 60-P-O<sub>2</sub>

- As above, but suitable for oxygen service
- Wetted parts free of grease and oil
- Cylinder blue enamelled

### Models PS 60-P

#### PS 600-P

- Medium low viscous oil (acid free) or water
- Pressure ranges **PS 60-P:** 0 up to 60 bar<sup>1)</sup>  
**PS 600-P:** 0 up to 600 bar<sup>1)</sup>
- Instrument connections 2 stop valves, each with 2 clamping sleeves M 20 x 1.5 and 1/2" BSP
- Piston and spindle stainless steel
- All parts installed on a basic plate from grey enamelled cast aluminum

### Models PS 60-P-O<sub>2</sub>

#### PS 600-P-O<sub>2</sub>

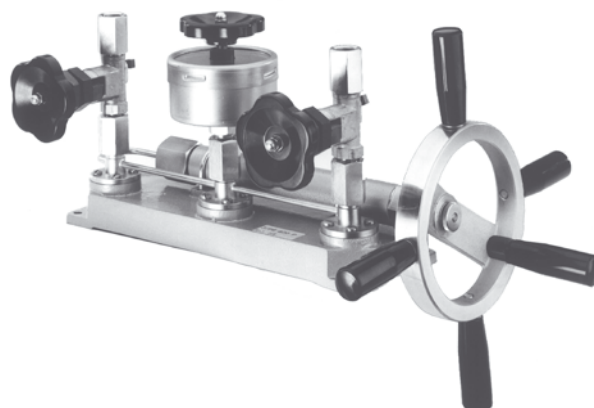
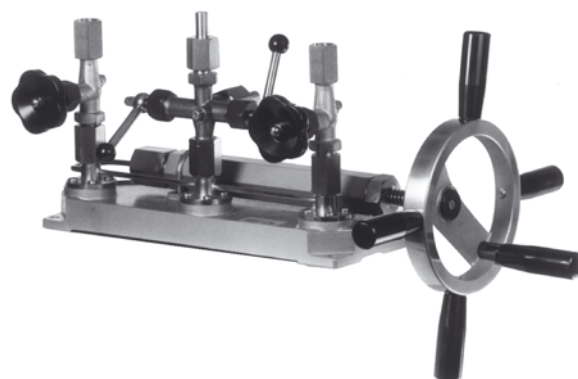
- As above, but suitable for oxygen service
- Wetted parts free of grease and oil
- Medium distilled water
- Cylinder blue enamelled

Our models **PS** are designed for liquid media and available with pressure ranges **60, 600, 1000, and 2500** bar. These versions are equipped with a reservoir for the medium. 1 l special oil, respectively 1 l distilled water for models P..O<sub>2</sub> (see below), belongs to our standard supply.

You can choose between models mounted on a basic plate, code letter **-P** (see below) and models installed into a case, similar to the dead weight testers, code letter **-G**. Version **-P** is not available with pressure ranges 1000 and 2500 bar, and version **-G** not with pressure range 60 bar (compare reverse side).

Comparison pumps in a case, models PS...-G, are better suitable for continuous operations, e. g. in test shops, than those mounted on a plate. The case versions are provided with filters to avoid contamination of the pump pipe system. We recommend to supply external compressed air up to max. 10 bar for a quick and easy filling of the system.

Special versions for testing pressure gauges to be used for oxygen service are available up to pressure range 0-1000 bar (compare below, model code ...-O<sub>2</sub>).



### For all plate versions -P:

**Dimensions of the plate:** 350 x 120 mm (13.78" x 4.72")

**Weight (approx.):** 7 kg (15.4 lb)

<sup>1)</sup> also corresponding psi ranges or other pressure units

(... continued on reverse side)



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## Case Versions – G

### Models PS 600-G PS 1000-G

- Medium low viscous oil (acid free)
- Pressure ranges  
**PS 600-G:** 0 up to 600 bar<sup>1)</sup>  
**PS 1000-G:** 0 up to 1000 bar<sup>1)</sup>
- External compressed air supply recommended for easier filling of the system, but max. up to 10 bar
- Instrument connections 2 stop valves, each with 2 clamping sleeves M 20 x 1.5 and ½" BSP
- All parts set up in a grey enamelled cast aluminum case 350 x 550 x 270 mm (13.78 x 21.65 x 10.63"), with 3 mounting holes Ø 8.5 mm (.33")
- Weight approx. 26 kg (57.30 lb)



### Models PS 600-G-O<sub>2</sub> PS 1000-G-O<sub>2</sub>

- As above, but suitable for oxygen service
- Wetted parts free of grease and oil
- Medium distilled water
- Piston stainless steel

### Model PS 2500-G

- Medium low viscous oil (acid free)
- Pressure ranges 0 up to 2500 bar<sup>1)</sup>
- External compressed air supply recommended for easier filling of the system, but max. up to 10 bar
- Handpump built in; max. pressure by handpump: 1600 bar
- Instrument connections 2 stop valves, each with 2 clamping sleeves M 20 x 1,5 and ½" BSP
- All parts set up in a grey enamelled cast aluminum case 700 x 560 x 310 mm (27.56 x 22.05 x 12.21")
- Weight approx. 45 kg (99.20 lb)



<sup>1)</sup> or corresponding psi-ranges or other pressure units