

Comparison Pumps

Case Version

Pressure Ranges 0 ... 600 and 0 ... 1000 bar

Models **PS 600-G**
PS 1000-G

This Data sheet contains all important features with detailed information on applications, specifications and operation of comparison pumps models PS 600-G und PS 1000-G.

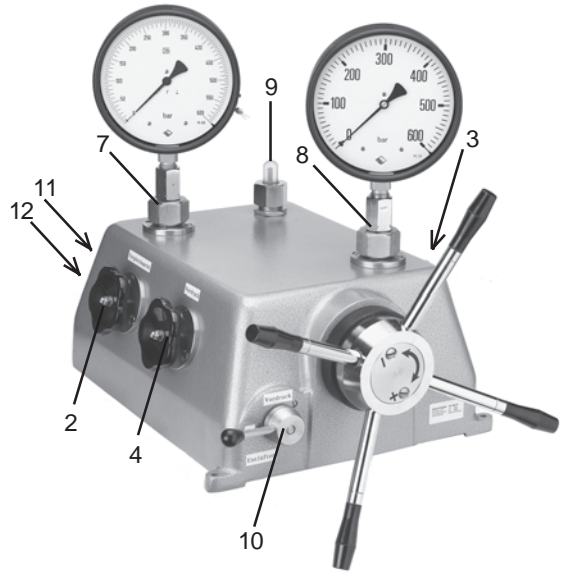
APPLICATION

Comparison Pumps Models PS 600-G and PS 1000-G are suitable to test and calibrate pressure gauges 0 ... 600 respectively 0 ... 1000 bar. The test media must be acid-free, thin oil.

The screw press serves to build up the pressure.

The gauge to be tested is compared with a pressure gauge of higher accuracy (see Test Gauges, general information leaflet 2000).

Comparison pumps in a case are more suitable for continuous operation, e.g. in test shops, than the ones built up on a plate. They have in addition built in filters, to avoid contamination of the pump pipe system.



PS 600-G
PS 1000-G

Models

- Pressure Ranges: PS 600-G: 0-600 bar
PS 1000-G: 0-1000 bar
- External compressed air up to max. 10 bar recommended for easier filling of the system
- Connection for pressure gauges: each connection with 2 union nuts M 20 x 1,5 and ½" BSP
- Connections for external compressed air: plug connection (Prestolock) for PA Pipe 4 x 1, with adapter for N 6 x 1
- All components set up in a grey enameled aluminum cast case
3 mounting holes Ø 8,5 mm
- Media: acid-free, thin oil
- Case dimensions
350 x 550 x 270 mm (W x D x H)
- Mass: appr. 26 kg

OPTIONS

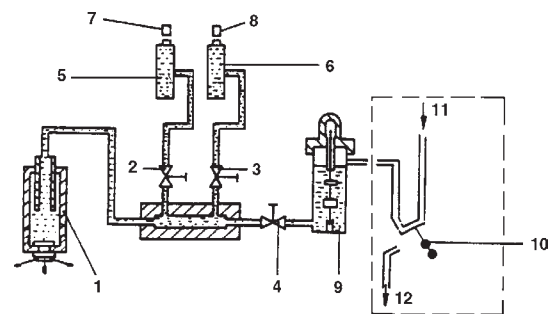
- Pipe N 4 x 1 for Prestolock
- Adapter from pipe 4 x 1 to ¼" NPT male

PS 600-G-O₂
PS 1000-G-O₂

Special Configuration for oxygen service

- as above, but for oxygen service, wetted parts free of oil and grease
- Media: distilled water
- Piston: SS

DIAGRAM



- 1 screw press with handle bars
- 2 stop valve „Vergleichsgerät“ („test gauge“)
- 3 stop valve „Prüfling“ („gauge to be tested“)
- 4 valve „Vordruck“ („external compressed air“)
- 5 filter
- 6 filter
- 7 connection „Vergleichsgerät“ („test gauge“)
- 8 connection „Prüfling“ („gauge to be tested“)
- 9 reservoir
- 10 change over valve for external air pressure „Vordruck“, „Zu“, „Entlüften“ („air pressure“, „closed“, „ventilate“)
- 11 „Eingang Vordruck“ („inlet air pressure“)
- 12 „Entlüftung Vordruck“ („ventilate air pressure“)



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OPERATION

CONNECTION OF AIR PRESSURE

The air pressure connection is made alternatively by a PA-pipe N 4 x 1 or with an adapter for N 6 x 1 (Prestolock).

To protect the Comparison Pump from polutions, insert an air control in the air pressure pipe to the Comparison Pump consisting of a pressure regulator and filter (pore diameter 10-20 µm) with separator for oil and water. The pressure must be limited to max. 10 bar with the pressure regulator.

TESTS OF PRESSURE GAUGES WITH EXTERNAL COMPRESSED AIR

All valves are closed.

Before connecting the pressure gauges, open Valves (2+3) and press oil with the srew press up to the sealing edges in connections (7+8), than screw pressure gauges in connections tightly.

To fill the system switch change over valve (10) to "Vordruck" and open valve (4). Than close valve (4) again.

The pressure can be built up now by turning the srew press up to the desired pressure.

The pressure can be released by opening valve (4).

To release the pressure up to "0 bar", you also must release the external air pressure by shifting valve (10) to "Entlüften".

When operating the switch-over valve (10) please pay attention on clear engaging of the lever above the name signs.

REFILLING OF THE OIL RESERVOIR

The pump is supplied filled. If the red float pin in the window of the oil column is no longer visible, oil must be refilled. Use included or re-ordered oil only.

Shift the change-over valve (10) to „Entlüften“, open valve (4) and afterwards shift change-over valve (10) to center position between „Vordruck“ and „Entlüften“.

Remove cap nut and stopper at the oil tank, fill in oil while pressing down float. Shift valve (10) to „Entlüften“. Close the reservoir.

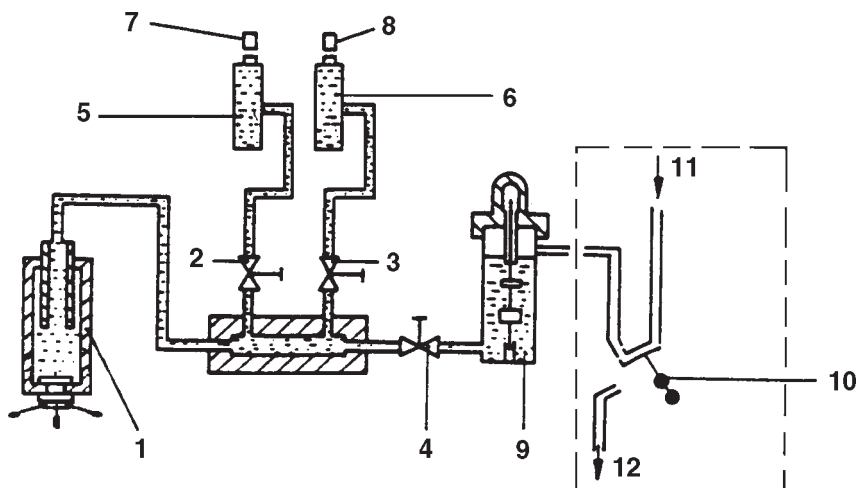
MAINTENANCE

Maintenance is reduced to occasionally greasing after approx. 50 hours with instrument grease (nippel at the bottom).

SCOPE OF SUPPLY

- 1 Instruction manual
- 1 Container with 1L specialoil, for oxygen service 1L distilled water
- 1 union nut M 20 x 1,5 (union nut ½" BSP is assembled)
- 2 special gaskets with 2 O-Rings encased for connections
- 4 O-Rings as spare parts
- 2 adater plugs for N 6 x 1 (air presure connection)

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