

PGS series

Handheld pressure test pump



PGS-700/PGS-1000



PGS-40



PGS-7

The PGS pump series are a remarkable new range of hand pumps for generating vacuum, gas and hydraulic pressure from a few mbar up to 1000 bar. The pumps are the ideal tool for applying test pressures to sensors, gauges, pressure switches and any pressure device. They are a low cost solution for field and workshop use and can be supplied with the wide range of digital pressure indicators or for OEM applications.

- calibrate pressure device
- 4 separate models
- range from Vacuum to 1000 bar
- extended kit solutions to suits different needs

The pneumatic pumps allow pressures in excess of 600 psi to be generated with just a few strokes of the pump. By changing the push-in switching valve to vacuum, the pump will generate vacuum down to nearly 96%.

The PGS 700 and PGS 1000 hydraulic test pumps work with a variety of different fluids, including water and oil to easily generate pressures up to 1000 bar (14500 psi). The pump uses a unique "switch" which allows for fast priming or filling of the test system and then switching as needed to a smaller stroke for easier generation at high pressure.

The desired pressure point can be easy tuned by using the vernier control and a precision needle vent valve allows for controlled venting.

All 4 pumps can be supplied as a bare pump or in kit form with a hard transit case, set of adaptors, seals and hose.

SELECTION GUIDE

Features	PGS-7	PGS-40	PGS-700	PGS-1000
Pneumatic pressure capability	•	•		
Vacuum capability	•	•		
Hydraulic capability			•	•
Integral fine control for accurate set point	•	•	•	•
adjustable stroke for over pressure safety		•		
Controlled pressure relief valve	•	•	•	•
Priming operation			•	•
Fluid compatible (not distilled water)			•	•
Scissor action pump		•	•	•

TECHNICAL SPECIFICATION

Parameter	PGS-7-OEM	PGS-40-OEM	PGS-700-OEM	PGS-1000-OEM
Operating pressure range	-850 mbar to 7 bar	-960 mbar to 40 bar	0 to 700 bar	0 to 1000 bar
Pressure media	air	air	liquid	liquid
Fine adjustment resolution	1 mbar	1 mbar	10 to 100 mbar	10 to 100 mbar
Ref port pressure connection	1/8" NPT (F)	3/8" BSP (F)	3/8" BSP (F)	3/8" BSP (F)
Ref port standard adaptor	1/4 BSP (F)	1/2 BSP (F)	3/8" BSP (F)	1/2" BSP (F)
Test point pressure connection	1/4 BSP (F)	1/4 BSP (F)	1/4 BSP (F)	1/4 BSP (F)
Hose extension	2 x 1 meter	1 x 1 meter	option	option
Weight	250 g	510 g	1.6 Kg	1.6 Kg

Specification are based on minimum volume

G10 series

Reference pressure gauge

A range of analogue reference gauges for the PGS pump series. All gauges are dual scale reading bar/psi and fit on the top of the PGS40/700/1000 pump by using the supplied swivel adaptor, hand tight no adaptor or spanner required.



TECHNICAL SPECIFICATION

Over pressure: 30% FS

Connection: 1/2" BSP (M)

Fine graduation

Knife pointer

G10-0060 through G10-1000 -Wetted part: AISI 316 and AISI 316L,

-Case: AISI 304, glass tempered

G10-0000 through G10-0040 -Wetted part: brass, chrome plated

-Case: AISI 304, glass normal

PRESSURE RANGES

Model	Range	Accuracy	Diameter
G10-0000	-1 to 0 bar/-30 to 0 inHG	1% FS	63 mm
G10-0002	0 to 2 bar/0 to 30 psi	1% FS	63 mm
G10-0011	0 to 11 bar/0 to 160 psi	1% FS	63 mm
G10-0025	0 to 25 bar/0 to 365 psi	1% FS	63 mm
G10-0040	0 to 40 bar/0 to 600 psi	1% FS	63 mm
G10-0060	0 to 60 bar/0 to 800 psi	0.6% FS	100 mm
G10-0100	0 to 100 bar/0 to 1400 psi	0.6% FS	100 mm
G10-0160	0 to 160 bar/0 to 2000 psi	0.6% FS	100 mm
G10-0250	0 to 250 bar/0 to 3000 psi	0.6% FS	100 mm
G10-0400	0 to 400 bar/0 to 5000 psi	0.6% FS	100 mm
G10-0600	0 to 600 bar/0 to 8000 psi	1% FS	100 mm
G10-1000	0 to 1000 bar/0 to 15000 psi	1% FS	100 mm

PGS-7 Low Pressure Test Kits

Combined vacuum/pneumatic kit for low pressure testing includes:

- PGS-7-OEM pump
- Set of BSP or NPT adaptors (to be specified)
- Set of seals
- T pressure connection and 2 x 1 meter hose with 1/4 BSP F end
- Robust ABS transit case with customised foam and cells



SPECIFICATION

Model	Description
PGS-7-P-BSP	Low pressure test kit, BSP adaptor 1/4" BSP male to 1/8", 3/8" (F) and 1/2" BSP (M)
PGS-7-P-NPT	Low pressure test kit, NPT adaptor 1/4" BSP male to 1/8", 3/8", 1/2" and 1/4" NPT (F)

PGS-40 Pneumatic Test Kits

Combined vacuum/pneumatic kit for pressure testing includes:

- PGS-40-OEM pump
- Set of BSP or NPT adaptors (to be specified)
- Set of seals
- Pressure hose with 1/4" BSP F adaptor (1 meter)
- Robust ABS transit case with customised foam and cells



SPECIFICATION

Model	Description
PGS-40-P-BSP	Pressure test kit, BSP adaptor 1/4" BSP male to 1/8", 3/8" (F) and 1/2" BSP (M)
PGS-40-P-NPT	Pressure test kit, NPT adaptor 1/4" BSP male to 1/8", 3/8", 1/2" and 1/4" NPT (F)

PGS-700/1000 Hydraulic Test Kit

Hydraulic test kit for high pressure testing includes:

- PGS-700-OEM or PGS-1000-OEM pump
- Set of BSP or NPT adaptors
- HTH-1000-1 high pressure hose, 1 meter
- PGS700-A-G14 adaptor for HTH-1000 hose
- Set of seals
- PGS700-TC Robust ABS transit case with customised foam and cells



SPECIFICATION

Model	Description
PGS-700-H-BSP	Pressure test kit, BSP adaptor 1/4" BSP male to 1/8", 3/8" (F) and 1/2" BSP (M)
PGS-700-H-NPT	Pressure test kit, NPT adaptor 1/4" BSP male to 1/8", 3/8", 1/2" and 1/4" NPT (F)
PGS-1000-H-BSP	Pressure test kit, BSP adaptor 1/4" BSP male to 1/8", 3/8" (F) and 1/2" BSP (M)
PGS-1000-H-NPT	Pressure test kit, BSP adaptor 1/4" BSP male to 1/8", 3/8", 1/2" and 1/4" NPT (F)

Ordering Informations

Pump Model

- PGS-7-OEM:** Low pressure pump, -850 mbar to 7 bar
PGS-40-OEM: Medium pressure pump, -960 mbar to 40 bar
PGS-700-OEM: High pressure pump, 0 to 700 bar
PGS-1000-OEM: High pressure pump, 0 to 1000 bar

Pump Kits

- PGS-7-P-BSP:** Low pressure pump kit, BSP adaptors
PGS-7-P-NPT: Low pressure pump kit, NPT adaptors
PGS-40-P-BSP: Medium pressure pump kit, BSP adaptors
PGS-40-P-NPT: Medium pressure pump kit, NPT adaptors
PGS-700-H-BSP: Hydraulic test kit, BSP adaptors
PGS-700-H-NPT: Hydraulic test kit, NPT adaptors
PGS-1000-H-BSP: Hydraulic test Kit, BSP adaptors
PGS-1000-H-NPT: Hydraulic test kit, NPT adaptors

Pressure Gauges

See table for part number

Adaptors

- PGS-BSP adaptor set:** 1/4" BSP (M) to 1/8", 3/8" (F) and 1/2" BSP (M)
PGS-NPT adaptor set: 1/4" BSP (M) to 1/8", 3/8", 1/2" and 1/4" NPT (F)
PGS-A-N14I-G38A: 3/8" BSP (M) to 1/4" NPT (F) adaptor for ref port
PGS-A-G14I-G38A: 3/8" BSP (M) to 1/4" BSP (F) swivel connector for Ref port

Carrying cases

- PGS7-TC:** Robust transit case with customised cells and foam
PGS40-TC: Robust transit case with customised cells and foam
PGS700-TC: Robust transit case with customised cells and foam

High Pressure hose (PGS 700/PGS 1000 only)

- HTH-1000-1:** High pressure hose 1 meter, 1500 bar, 1/4" BSP (F)
HTH-1000-2: High pressure hose 2 meters, 1500 bar, 1/4" BSP (F)
HTH-1000-3: High pressure hose 3 meters, 1500 bar, 1/4" BSP (F)