

Druck PV 620 IS Series

Pressure Stations

The Druck PV 620 IS Series Pressure Stations are ATEX approved for stand-alone use in hazardous areas. These high performance pressure-generating stations can replace conventional hand pumps and gas bottles to provide greater efficiency, ease of use and improve safety. When combined with a reference instrument, such as the DPI 104, they can be used as gauge comparators and pressure calibrators.

The PV 62X series of pressure stations have been designed for use with the DPI 620 advanced multifunction calibrator and PM 620 interchangeable pressure modules to provide a multi-parameter calibration system with unique pressure generation and measurement capabilities.

The PV 621 has a conventional hand pump, volume adjuster and pressure/vacuum selector, but will generate pressure with half the effort of conventional systems.

The PV 622 100 bar (1500 psi) pneumatic station represents a five-fold increase in capability and solves the transportation and health & safety issues of using gas bottles and regulators as a pressure source in field locations. It features an innovative dual stage system incorporating a hand pump to generate pressure and a screw press to intensify the pressure.



The PV 623 solves many of the problems associated with hydraulic pressure generation by generating pressure to 1000 bar (15000 psi) without the need for system priming and by providing a stable pressure within 1 minute.

Features

- ATEX approved for hazardous areas
- Advanced pressure generation
 - PV 621 IS 95% vacuum to 20 bar (300 psi) pneumatic
 - PV 622 IS 95% vacuum to 100 bar (1500 psi) pneumatic
 - PV 623 IS 0 to 1000 bar (15000 psi) hydraulic
- Replacement for hand pumps and gas bottles
- Test gauge comparator
- Quick-fit pressure connection system requires no tools or sealing tape



Technical Specifications

PV 621, 622 and 623 Specification

Maximum pressure	PV 621 20 bar (300 psi) pneumatic PV 622 100 bar (1500 psi) pneumatic PV 623 1000 bar (15000 psi) hydraulic
Pressure media	PV 621 and PV 622 non-corrosive gases, PV 623 de-mineralized water or mineral oil (ISO viscosity grade < 22)
Operating temperature	-10° to 50°C (14° to 122°F) For water +4 to +50°C (39 to 122°F)
Storage temperature	-20 to 70°C (-4 to 158°F) (must be empty of water)
Shock and vibration	BS EN 61010:2001; Def stan 66-31, 8.4 cat III
Pressure safety	Pressure equipment directive class SEP
Size and weight	450 mm x 280 mm x 235 mm, PV 621 2.65 kg, PV 622 3.30 kg, PV 623 3.75 kg
Equipment category group	Ex II 2 G
Hazardous location	c IIC T6 X (-10°C ≤ Ta ≤ +50°C)
Pressure connection	interchangeable G1/8 female and 1/8 NPT female adaptors

PV 620 Series Accessories

Pressure relief valves

When fitted to the PV 62X pressure station protects the device under test from over pressure.

Part number	For use with	Factory setting		Adjustable range	
		bar	psi	bar	psi
Pneumatic					
IO620-PRV-P1	PV 621 PV622	1	15	0.2 to 1	3 to 15
IO620-PRV-P2	PV 621 PV622	5	100	3 to 7	45 to 100
IO620-PRV-P3	PV 621 PV622	30	435	15 to 30	220 to 435
IO620-PRV-P4	PV622	60	870	30 to 60	435 to 870
IO620-PRV-P5	PV622	100	1500	60 to 100	870 to 1500
IO620-PRV-P6	PV622	3	45	1.4 to 3	20 to 45
IO620-PRV-P7	PV622	12	175	6.1 to 12	90 to 175
IO620-PRV-P8	PV622	18	260	12.1 to 18	175 to 260
Hydraulic					
IO620-PRV-H1	PV6223	50	725	10 to 50	145 to 725
IO620-PRV-H2	PV6223	200	3000	50 to 200	725 to 2900
IO620-PRV-H3	PV6223	400	6000	200 to 400	2900 to 5800
IO620-PRV-H4	PV6223	700	10000	300 to 700	4350 to 10000
IO620-PRV-H5	PV6223	1000	15000	600 to 1000	8700 to 15000

Pressure station carrying case (P/N IO620-CASE-3-IS)

An anti-static fabric carrying case with shoulder strap and large pocket for accessories.

Pressure adaptor set

A set of test point adaptors to connect the PV 62X "quick-fit" tool-less pressure port to the device under test.

P/N IO620-BSP: G1/4, G3/8 and G1/2 female, G1/8 and G1/4 Male

P/N IO620-NPT: 1/4", 3/8", and 1/2" female, 1/8" and 1/4" male

P/N IO620-MET: 14 mm and 20 mm female

Comparator adaptor (P/N IO620-COMP)

The adaptor connects to the PV 62X pressure port and provides two outlet ports; one for a reference instrument and the other for the device under test. Compatible with the test point adaptors supplied with the PV 62X, the adaptors sets and the extension hoses.

Blanking plug (P/N IO620-BLANK)

Allows the PV 62X to be used as a pressure generator independently of the DPI 620 and PM 620 by blanking the PV 62X pressure module port.

Associated products

DPI 104-IS Druck Digital Test Gauge

- ATEX, IECEx, cETL (Canada)
- 0.05% full scale (FS) accuracy
- Pressure ranges to 1400 bar (20000 psi)
- % pressure indication and additional bar graph for quick visual reference
- Pressure switch test



DPI 620 Advanced Modular

The PV 62X series is the first ATEX approved module of the Druck DPI 620 advanced modular calibration system. The DPI 620 multifunction calibrator and PM 620 pressure modules will be available with ATEX approval towards the end of 2009.

For more information please refer to the DPI 620 series datasheet.

Please note the PV 62X series pressure stations may require a change to the ATEX information label attached to the product before they can be used with the DPI 620 and PM 620.

Ordering Information

Please order the following model numbers and the part numbers of accessories as separate line items.

PV 621 IS Pneumatic pressure station 20 bar (30 psi)

PV 622 IS Pneumatic pressure station 100 bar (1,500 psi)

PV 623 IS Hydraulic pressure station 1000 bar (15,000 psi)

The pressure stations are supplied with G1/8 female and 1/8 NPT female adaptors, carry strap, quick reference guide and a CD user manual. In addition the PV 623 includes a fill bottle for hydraulic fluid.

