# SCHNEIDER MESSTECHNIK



# PV212

## Druck Hydraulic Hand Pump

The PV212 is a high-quality hand pump designed to quickly and easily generate hydraulic pressures. The construction materials make it compatible with most fluid media and an optional seal kit can be supplied for many applications. The built-in vernier provides excellent control and is easy to adjust even at high pressures.

The dual stage pump includes a selector valve which increases the priming speed and greatly reduces the effort required to generate high pressures. An optional pressure relief valve can be supplied to provide protection to connected instruments (Included in 104 and 104S Test Kits).



- Pressures to 700 bar (10,000 psi) or 1,000 bar (15,000 psi)
- Compatible with mineral oil or distilled water
- Quick priming and pressure generation
- Hydraulic pressure sources for pressures up to 1,000 bar (15,000 psi)
- 100 CC transparent reservoir which can be filled during operation.
- Vernier adjust for fine control
- Optional pressure release valves, offers
  outstanding control for decreasing pressures

#### Druck.com

Tel.: 03303 / 50 40 66 Fax.: 03303 / 50 40 68



### **PV212 Specifications**

(See Page 4 for Ordering Information)

#### General

#### **Pressure Ranges**

- PV212-22: 0 to 700 bar (0 to 10,000 psi)
- PV212-23: 0 to 1000 bar (0 to 15,000 psi)

#### **Materials**

Series 300 stainless steel, brass, nickel plated brass, Polyester, Nitrile, polyurethane and PTFE

#### Fluid Media

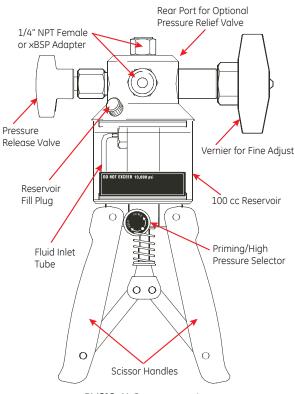
Mineral oil, distilled water

#### Dimensions (L x W x D)

23 cm x 16 cm x 7 cm (9 in. x 6.25 in. x 2.75 in.)

#### Weight

Approximately 1.6 kg (3.5 lb).



PV212-X Components

### **PV212 Accessories Specifications**

# HK212 High Pressure Hose Kit Specifications

The HK212 are high quality pressure hose kits designed to operate with the PV212. The standard stainless steel/ nylon construction is suitable for use with oil or water.

- Self-sealing fittings-finger tight connections
- Low volumetric expansion—negligible pressure drop
- Heavy duty construction

#### **Working Pressure**

1000 bar (15,000 psi)

#### **Minimum Burst Pressure**

2500 bar (36,200 psi)

#### **Pressure Connections**

- B:BSP
- N : NPT

#### **Minimum Bend Radius**

5.7 cm (2.25 in.)

#### **Working Temperature**

-30°C to 80°C (-22°F to 176°F)

#### Construction

Nylon, stainless steel, brass, PTFE, nitrile

#### **Outer Diameter**

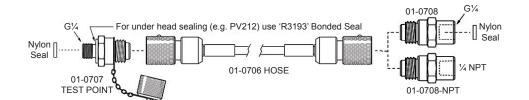
6.4 mm (0.25 in.)

#### Bore

3.3 mm (0.13 in.)

#### Fluid Media

Mineral oil and distilled water



# PRV212 Adjustable Pressure Relief Valve Specifications

The PRV212 is a pressure relief valve designed for use with the PV212 Series of hydraulic hand pumps to provide overpressure protection to instruments under test. The PRV212 mounts directly on to the PV212 and is supplied in factory preset configurations which can be user adjusted.

#### **Material**

303 stainless steel

#### **Inlet Connection**

G 1/4" male

#### Seals

Polyurethane, PTFE, nitrile, nylon

#### **Maximum Working Pressure**

1000 bar (15,000 psi)

#### **Dimensions**

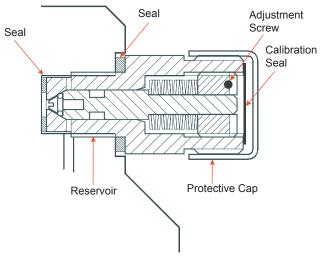
4 cm x 2.2 cm diameter (1.6 in. x .87 in.)

#### Weight

62 g (2.1 oz)

#### Accuracy/Repeatability

±10% nominal setting



PRV212 Schematic

#### **PV212 Adaptor Sets**

#### **PV212-Adaptors1** – (PV212 Set of BSP to BSP Adaptors)

- 1/4" BSP Male x 1/8" BSP Male
- 1/4" BSP Male x 1/8" BSP Female
- 1/4" BSP Male x 3/8" BSP Female
- 1/4" BSP Male x 1/2" BSP Female
- 1/4" BSP Male x 1/4" BSP Male

### **PV212-Adaptors2** - (PV212 Set of BSP to NPT Adaptors)

- 1/4" BSP Male x 1/2" NPT Female
- 1/4" BSP Male x 3/8" NPT Female
- 1/4" BSP Male x 1/8" NPT Female
- 1/4" BSP Male x 1/4" NPT Female
- 1/4" BSP Male x 1/4" BSP Male
- 1/4" BSP Male x 1/4" NPT Male

### **PV212-Adaptors3** - (PV212 Set of NPT to NPT Adaptors)

- 1/42 NPT Male x 1/4" NPT Male
- 1/4" NPT Male x 1/8" NPT Male
- 1/4" NPT Male x 1/8" NPT Female
- 1/4" NPT Male x 3/8" NPT Female
- 1/4" NPT Male x 1/2" NPT Female
- 1/4" NPT Male X 1/4" BSP Female

### Ordering Information

to ordor (/D)/212

| 12 | -22                       | -104S                | -В  | -16A  | (Typical Model Number)  |      |   |
|----|---------------------------|----------------------|---|-------|---|------|---|
| 1  | ¥                         | <b>V</b>             | ¥   | ↓ _   |   |      |   |
|    |                           |                      |   | -235  | (See tables below if "104 or 104S" is selected)   |      |   |
|    |                           |                      |   | -22\$ | (See tables below if "104 or 104S" is selected)   |      |   |
|    |                           |                      |   |       |   | -20S | (See tables below if "104 or 104S" is selected) |
|    |                           |                      |   | -185  | (See tables below if "104 or 104S" is selected)   |      |   |
|    |                           |                      |   | -16G  | (See tables below if "104 or 104S" is selected)   |      |   |
|    |                           |                      |   | -16A  | (See tables below if "104 or 104S" is selected)   |      |   |
|    |                           |                      | -N  | NPT   | (Only mandatory to select one if " TK, 104 or 104S" is selected)  |      |   |
|    |                           |                      | -В  | BSP   | (Only mandatory to select one if " TK, 104 or 104S" is selected)  |      |   |
|    |                           | -TK<br>-104<br>-104S | Pump Test Kit<br>Pump Test Kit<br>Pump Test Kit |       | (Pump supplied in Transit case with relevant adaptor kit and hoses)<br>(Pump supplied in Transit case with relevant adaptor kit, hoses, PRV, and DPI104)<br>(Pump supplied in Transit case with relevant adaptor kit, hoses, PRV, and DPI104S |      |   |
|    |                           |                      |   |       |   |      |   |
|    |                           |                      |   |       |   |      |   |
|    |                           | -P                   | Pump Only                                       |       | (Pump supplied in cardboard box, with basic BSP and NPT adaptors)   |      |   |
|    | -23                       | 1000 bar/15000 psi   |   |       |   |      |   |
|    | -22                       | 700 bar/10000 psi    |   |       |   |      |   |
| 12 | PV212 Hydraulic Hand Pump |                      |   |       |   |      |   |

Other examples may be:

**PV212-22-P** (Pump Only) **PV212-22-TK-B** (Pump Kit with BSP Fittings) **PV212-23-104S-B-16A** (Pump Kit with BSP Fittings & DPI104-IS)

| DP1104/DP1104S Pressure Ranges for Fitting B - BSP |                       | DPI104 |
|--|-----------------------|--------|
| Code   | Description           | Code   |
| 16A  | 70 bar absolute       | 16A    |
| 16G  | 70 bar gauge          | 16G    |
| 185  | 200 bar sealed gauge  | 185    |
| 20S  | 350 bar sealed gauge  | 20S    |
| 22S  | 700 bar sealed gauge  | 22S    |
| 23S  | 1000 bar sealed gauge | 235    |
|  |                       |        |

| DPI104/DPI104S Pressure Ranges for Fitting N - NPT |  |  |  |  |
|--|--|--|--|--|
| Description  |  |  |  |  |
| 1000 psi absolute                                  |  |  |  |  |
| 1000 psi gauge                                     |  |  |  |  |
| 3000 psi sealed gauge                              |  |  |  |  |
| 5000 psi sealed gauge                              |  |  |  |  |
| 10000 psi sealed gauge                             |  |  |  |  |
| 15000 psi sealed gauge                             |  |  |  |  |
|  |  |  |  |  |

|     | ESSO | DI | EQ |
|-----|------|----|----|
| 400 | Eggu |    | EÐ |

| (Order all items separately using the below Part Numbers) |                                     |  |  |  |
|---|-------------------------------------|--|--|--|
| Part Number   | Description                         |  |  |  |
| PV212-Adaptors1   | PV212 Set of BSP to BSP Adaptors    |  |  |  |
| PV212-Adaptors2   | PV212 Set of BSP to NPT Adaptors    |  |  |  |
| PV212-Adaptors3   | PV212 set of NPT to NPT Adaptors    |  |  |  |
| PV212-TC  | PV212 Transit Case                  |  |  |  |
| PV212-SK  | PV212 Common Service Kit            |  |  |  |
| HK212-B-1   | High Pressure Hose Kit (1m BSP)     |  |  |  |
| HK212-B-2   | High Pressure Hose Kit (2m BSP)     |  |  |  |
| HK212-N-1   | High Pressure Hose Kit (1m NPT)     |  |  |  |
| HK212-N-2   | High Pressure Hose Kit (2m NPT)     |  |  |  |
| PRV212-1  | Pressure Relief Valve 50 bar        |  |  |  |
| PRV212-2  | Pressure Relief Valve 200 bar       |  |  |  |
| PRV212-3  | Pressure Relief Valve 400 bar       |  |  |  |
| PRV212-4  | Pressure Relief Valve 700 bar       |  |  |  |
| PRV212-5  | Pressure Relief Valve 1000 bar      |  |  |  |
| 1S-PRVSK1   | PRV212 Relief Valve Common Seal Kit |  |  |  |

| <b>Spares</b><br>(Order all items separately using the below Part Numbers) |  |  |  |  |
|--|--|--|--|--|
| Part Number  | Description                              |  |  |  |
| PV212A121M2038-1   | PV212-22 Fine Control Assembly 700 bar   |  |  |  |
| PV212A121M2038-2   | PV212-23 Fine Control Assembly 1000 bar  |  |  |  |
| PV212A121M2038-3   | PV212-22 Handle/Piston Assembly 700 bar  |  |  |  |
| PV212A121M2038-4   | PV212-23 Handle/Piston Assembly 1000 bar |  |  |  |
| PV212A121M2038-5   | PV212 Common Release Valve Assembly      |  |  |  |
| PV212A121M2038-6   | PV212 Pump Labels                        |  |  |  |
| PV212A121M2038-7   | PV212 Blanking Plug Kit                  |  |  |  |
| PV212-SK-FULL  | PV212 Common Seal Kit                    |  |  |  |

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