# PM 620 Pressure Modules

## Features

- Fully interchangeable with no need for set-up or calibration
- Simple screw fit - hand tight no tools required
- Ranges from 25 mbar to 1000 bar (10 in$H_2O$ to 15000 psi)
- Accuracy from 0.005% FS

The PM 620 is the latest development in digital output sensor technology incorporating a number of key innovations to allow pressure re-ranging of compatible equipment. A simple screw fit makes both the pressure and electrical connections without the need for tools, sealing tape, cables or plugs and digital characterisation allows interchangeability without set-up or calibration.

# MC 620/G Module Carrier

## Features

- 2 independent pressure channels
- Simple to re-range
- Pressure protection

The MC 620/G module carrier attaches to the head of the DPI 620/G to provide two independent pressure measurement channels. These can be fitted with any PM 620 pressure module from 25 mbar to 1000 bar (10 in$H_2O$ to 15000 psi). A simple screw fit means no tools are required and ensures both a high integrity pressure seal and a reliable digital interface. Even the pressure adapters are interchangeable and only require a finger tight fit.

The carrier is designed for pressure safety and will automatically seal if a module is not fitted or if the user attempts to remove it.

| MC 620/G Specification | |
|---|---|
| Maximum pressure | 400 bar (5800 psi) pneumatic<br>1000 bar (15000 psi) hydraulic |
| Pressure media | Compatible with stainless steel and nitrile seals |
| Pressure safety | Pressure equipment directive class SEP |
| Size and weight | 80 mm x 100 mm x 110 mm, 640 g |

## PM 620 Specification

| | |
|---|---|
| Maximum intermittent pressure | 2 x FS |
| Maximum working pressure | 110% FS |
| Sealing | IP 65 (protected against dust and jets of water) |
| Operating temperature | -10 to 50°C (14 to 122°F) |
| Storage temperature | -20 to 70°C (-4 to 158°F) |
| Humidity | 0 to 90% RH non condensing |
| Shock and vibration | BS EN 61010-1:2010; MIL-PRF-28800F for Class II equipment, 1 m Drop Tested |
| EMC | BS EN 61326-1:2006 |
| Electrical safety | BS EN 61010-1:2010 |
| Pressure safety | Pressure equipment directive class SEP |
| Approval | CE marked |
| Size and weight | L. 56 mm, Dia. 44 mm, 106 g maximum |

## Gauge Ranges (referenced to atmosphere)

| | | Media | NLH&R 20°C ±2°C (68°F ± 4°F) 24 hr | NLH&R 0° to 50°C (32° to 122°F) 24 hr | Total uncertainty 0° to 50°C (32° to 122°F) for 1 year |
|---|---|---|---|---|---|
| | | | Gauge | Gauge | Gauge |
| bar | psi | | %FS | %FS | %FS |
| ±0.025 | ±10 in$H_2O$ | 1 | 0.090 | 0.090 | 0.100 |
| ±0.07 | ±1 | 1 | 0.025 | 0.030 | 0.047 |
| ±0.2 | ±3 | 1 | 0.020 | 0.027 | 0.045 |
| ±0.35 | ±5 | 2 | 0.020 | 0.025 | 0.044 |
| ±0.7 | ±10 | 2 | 0.015 | 0.020 | 0.041 |
| ±1 | -14.5 to 15 | 2 | 0.015 | 0.020 | 0.041 |
| -1 to 2 | -14.5 to 30 | 2 | 0.015 | 0.020 | 0.025 |
| -1 to 3.5 | -14.5 to 50 | 2 | 0.010 | 0.020 | 0.025 |
| -1 to 7 | -14.5 to 100 | 2 | 0.010 | 0.020 | 0.025 |
| -1 to 10 | -14.5 to 150 | 2 | 0.005 | 0.020 | 0.025 |
| -1 to 20 | -14.5 to 300 | 2 | 0.005 | 0.020 | 0.025 |
| 0 to 35 | 0 to 500 | 2 | 0.005 | 0.020 | 0.025 |
| 0 to 70 | 0 to 1000 | 2 | 0.005 | 0.020 | 0.025 |
| 0 to 100 | 0 to 1500 | 2 | 0.005 | 0.020 | 0.025 |
| 0 to 135 | 0 to 2000 | 2 | 0.005 | 0.020 | 0.025 |
| 0 to 200 | 0 to 3000 | 2 | 0.005 | 0.020 | 0.025 |

NLH&R Non-linearity, hysteresis and repeatability

❶ Compatible with non-corrosive gas/fluid

❷ Compatible with stainless steel

* The reading can be referenced to ambient air pressure via a software feature of the DPI 620 Genii, allowing the same module to be switched between absolute and sealed gauge measurement

DPI 620 Genii pressure resolution: adjustable 4 to 7 digits. Uncertainty confidence level 95% (K=2)

## Absolute Ranges (referenced to vacuum)

| | | Media | NLH&R 20°C ±2°C (68°F ± 4°F) 24 hr | NLH&R 20°C ±2°C (68°F ± 4°F) 24 hr | NLH&R 0° to 50°C (32° to 122°F) 24 hr | NLH&R 0° to 50°C (32° to 122°F) 24 hr | Total uncertainty 0° to 50°C (32° to 122°F) for 1 year | |
|---|---|---|---|---|---|---|---|---|
| | | | Absolute | *Sealed Gauge | Absolute | *Sealed Gauge | Absolute | *Sealed Gauge |
| bar | psi | | %FS | %FS | %FS | %FS | %FS | %FS |
| 0 to 0.35 | 0 to 5 | 2 | 0.030 | | 0.050 | | 0.080 | |
| 0 to 1.2 | 0 to 35 inHg | 2 | 0.020 | | 0.036 | | 0.070 | |
| 0 to 2 | 0 to 30 | 2 | 0.015 | | 0.036 | | 0.052 | |
| 0 to 3.5 | 0 to 50 | 2 | 0.015 | | 0.036 | | 0.050 | |
| 0 to 7 | 0 to 100 | 2 | 0.015 | | 0.036 | | 0.050 | |
| 0 to 10 | 0 to 150 | 2 | 0.015 | 0.005 | 0.030 | 0.020 | 0.047 | 0.025 |
| 0 to 20 | 0 to 300 | 2 | 0.015 | 0.005 | 0.030 | 0.020 | 0.047 | 0.025 |
| 0 to 35 | 0 to 500 | 2 | 0.015 | 0.005 | 0.030 | 0.020 | 0.047 | 0.025 |
| 0 to 70 | 0 to 1000 | 2 | 0.015 | 0.005 | 0.030 | 0.020 | 0.047 | 0.025 |
| 0 to 100 | 0 to 1500 | 2 | 0.015 | 0.005 | 0.030 | 0.020 | 0.046 | 0.025 |
| 0 to 135 | 0 to 2000 | 2 | 0.015 | 0.005 | 0.030 | 0.020 | 0.046 | 0.025 |
| 0 to 200 | 0 to 3000 | 2 | 0.015 | 0.005 | 0.030 | 0.020 | 0.046 | 0.025 |
| 0 to 350 | 0 to 5000 | 2 | 0.015 | 0.005 | 0.033 | 0.020 | 0.049 | 0.025 |
| 0 to 700 | 0 to 10000 | 2 | 0.015 | 0.005 | 0.033 | 0.020 | 0.049 | 0.025 |
| 0 to 1000 | 0 to 15000 | 2 | 0.015 | 0.005 | 0.033 | 0.020 | 0.049 | 0.025 |