



GP-M025  
Main Unit, Positive-pressure Type, 2.5 MPa



\*Please note that accessories depicted in the image are for illustrative purposes only and may not be included with the product.

Specifications

|                             |                           |                |  |  |  |
|-----------------------------|---------------------------|----------------|--|--|--|
| Model                       |                           |                | GP-M025  |  |  |
| Rated pressure              |                           |                | -14.5 to +362.6 PSI<br>(-0.1 to +2.5 MPa)  |  |  |
| Possible display range      |                           |                | -52.2 to +400.3 PSI<br>(-0.360 to +2.760 MPa)  |  |  |
| Zero-cut pressure value     |                           |                | ±0.5% of F.S.  |  |  |
| Burst pressure              |                           |                | 5075 PSI (35 MPa)  |  |  |
| Display resolution          | kPa                       |                | 1  |  |  |
|                             | MPa                       |                | 0.001  |  |  |
|                             | PSI                       |                | 0.1  |  |  |
|                             | bar                       |                | 0.01   |  |  |
|                             | kgf/cm²                   |                |  |  |  |
| Fluid type                  |                           |                | Gas or liquid that will not corrode the liquid contact part  |  |  |
| Type of pressure            |                           |                | Gage pressure  |  |  |
| Precision                   |                           |                | ±1.0% of F.S. or less*1  |  |  |
| Repeatability               |                           |                | ±0.3% of F.S. or less*2  |  |  |
| Temperature characteristics |                           |                | ±0.6% of F.S./10°C 50°F  |  |  |
| Connection port             |                           |                | G3/4 (Changes to the R male 1/8, R male 1/4, R male 3/8, G female 1/4, NPT male 1/8, and NPT male 1/4 option adapters are available.)                |  |  |
| Box rotation angle          |                           |                | Maximum 330°   |  |  |
| Medium temperature          |                           |                | -20 to +100°C -4°F to +212°F (no freezing/condensation)*3  |  |  |
| Power voltage               |                           |                | 10-30 VDC, Ripple (P-P): 10% max, Class 2 or LPS   |  |  |
| Current consumption         |                           |                | 50 mA or less (when 24 V: 32 mA or less, when 12 V: 48 mA or less. Not including load)*4   |  |  |
| Display method              |                           |                | 4 column, digital LED, red/Vertical inversion display possible   |  |  |
| Operation display light     |                           |                | Operation indicator (output 1) (orange), Operation indicator (output 2) (orange)   |  |  |
| Hysteresis                  |                           |                | During hysteresis mode: variable (Difference between switch-on point and switch-off point is hysteresis)<br>During window mode: fixed (0.5% of F.S.) |  |  |
| Response                    | Control output            |                | Selectable from 3 to 5000 ms   |  |  |
|                             | Analog output             |                | As above + 2 ms (90% response)   |  |  |
| Output                      | Output 1 control output   |                | NPN/PNP open collector (Selectable), Max. 250 mA (30 V max)  |  |  |
|                             | Output 2 replacement type | Control output | Main unit residual voltage 1 V max, N.O./N.C. selectable   |  |  |
|                             |                           | Analog output  | 4-20 mA, maximum load resistance 500 Ω (When the electric voltage is more than 20 V)*5   |  |  |
| Environmental resistance    | Enclosure rating          |                | IP67   |  |  |
|                             | Pressure resistance       |                | 10 MPa (100 bar)   |  |  |
|                             | Ambient temperature       |                | -20 to +80 °C -4 to 176 °F (No freezing and no condensation)   |  |  |

|                     |                      |  |
|---------------------|----------------------|--|
|                     | Relative humidity    | 35 to 85 % RH (No condensation)  |
|                     | Vibration resistance | IEC60068-2-6 20 G (10 to 2000 Hz, 2 hours each in the X, Y, and Z axis)                                    |
|                     | Shock resistance     | IEC60068-2-27 50G (11 ms, 3 times for each of X, Y and Z direction)  |
| Material properties | Wetted part          | Pressure port: SUSXM7, Diaphragm pressure port: Al <sub>2</sub> O <sub>3</sub> (Alumina), O ring: FKM      |
|                     | Other parts          | Housing metal portion: SUS304, SUS303, Housing plastic portion: PPSU, Air hole: PTFE, nickel-plated brass. |
| Applicable cable    |                      | M12 connector 4 pin  |
| Weight              |                      | Approx. 150 g  |

\*1 This is the value when considering linearity + hysteresis + repeatability in a stable environment of 23°C 73°F.

\*2 The repeatability, based on consistent conditions, is the variation in the value that will be displayed.

\*3 When the temperature of the piping exceeds 80°C 176°F, do not connect the cable.

\*4 Consumption current including output is 0.6 A and under.

\*5 The maximum load resistance R will be the values below in response to the electric voltage E. When 10-23V:  $R = \{38 \times (E-10) + 128\} \Omega$  When 23-30V: R = 622  $\Omega$

Dimensions

\* Download CAD file or product manual for larger image/text and more detail.

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