



# GP-M250

Main Unit, Positive-pressure Type, 25 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-M250	
Rated pressure		0 to +3626 PSI (0 to +25 MPa)	
Possible display range		-363 to +3989 PSI (-2.50 to +27.50 MPa)	
Zero-cut pressure value		±0.5% of F.S.	
Burst pressure		14504 PSI (100 MPa)	
Display resolution	kPa	None	
	MPa	0.01	
	PSI	1	
	bar	0.1	
	kgf/cm <sup>2</sup>		
Fluid type		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 <b>50°F</b>	
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 <b>-4°F to +212°F</b> (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) 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		50 MPa (500 bar)
	Ambient temperature		-20 to +80 °C <b>-4 to 176 °F</b> (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
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:  $R = 622 \Omega$

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

GP-M

Technical drawing of the GP-M pump assembly, showing front, side, and detail views with dimensions and labels.

**Front View Dimensions:**

- Overall width:  $\phi 34.2$
- Top section width: 17.1
- Bottom section width: 15.4
- Bottom section depth: 2.6

**Side View Dimensions:**

- Overall height: 86.7
- Top section height: 27.5
- Bottom section height: 29.2
- Mounting flange diameter:  $\phi 12$ , P=1.0
- Mounting flange thickness: 1.6
- Mounting flange depth: 44.3

**Detail View Dimensions:**

- Overall diameter:  $\phi 30$
- Inner diameter:  $\phi 7$ , Depth: 2.9
- Overall height: 27

**O Ring Set:**

- Outer diameter:  $\phi 15$
- Inner diameter:  $\phi 12.8$
- Thickness: 1.9
- Material: FKM(O Ring), PTFE(Back-up Ring)