



GP-M010
Main Unit, Positive-pressure Type, 1 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-M010	
Rated pressure		-14.5 to +145.0 PSI (-0.1 to +1 MPa)	
Possible display range		-30.5 to +161.0 PSI (-0.210 to +1.110 MPa)	
Zero-cut pressure value		±0.5% of F.S.	
Burst pressure		2175 PSI (15 MPa)	
Display resolution	kPa	1	
	MPa	0.001	
	PSI	0.1	
	bar	0.01	
	kgf/cm ²		
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) 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		4 MPa (40 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 ₂ O ₃ (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 Ω

* 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: $\varnothing 34.2$
- Top section width: 17.1
- Bottom section width: 15.4
- Bottom section height: 2.6

Side View Dimensions:

- Overall height: 86.7
- Top section height: 44.6
- Top section width: 27.5
- Bottom section height: 29.2
- Bottom section width: 1.6
- Bottom section depth: 44.3

Labels and Notes:

- M12 ,P=1.0
- G3/4A
- Effective depth:10

Detail View Dimensions:

- Overall diameter: $\varnothing 30$
- Inner diameter: $\varnothing 11.5$,Depth:1.2
- Overall height: 27

O Ring Section A-A:

- Outer diameter: $\varnothing 22.5$
- Inner diameter: $\varnothing 19.5$
- Section A-A
- Width: 1.5

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