GP-M010

Main Unit, Positive-pressure Type, 1 MPa

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) Main unit residual voltage 1 V max, N.O./N.C. selectable
	Output 2 replacement type	Control output	
		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_2O_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 x (E-10) + 128} Ω When 23-30V: R = 622 Ω

Dimensions

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