

For your safety, please read the following before using.

- ① Do not use corrosive or flammable gas or liquid with this product.
- ② Please use within the operating pressure range. Do not apply pressure beyond recommended maximum pressure, permanent damage to the pressure sensor may occur.
- ③ Do not drop, hit or allow excessive shock. Even if switch body appears undamaged, internal components may be broken and can cause malfunction.
- ④ Turn power off before connecting wiring. Wrong wiring or short circuit will damage and / or cause malfunction.
- ⑤ Do not use in environment containing steam or oil vapor.
- ⑥ This product is not explosion-proof rated. Do not use in atmosphere containing flammable or explosive gases.
- ⑦ Wiring for pressure sensor should avoid power source line and high voltage line. If use in the same circuit, noise

SPECIFICATIONS		MP23C-□-□ (Compound)	MP23P-□-□ (Positive)
Display pressure range		-100.0 ~ 100.0 kPa	-0.100 ~ 1.000 MPa
Withstand pressure		300 kPa	1.5 MPa
Fluid		Air, Non-corrosive/Non-Flammable gas	
Power supply voltage		12 to 24V DC ±10%, Ripple (P-P) 10% or less	
Current consumption		≤ 55mA	
7 segment LED display		3 ½ digit LED display (Sampling rate: 5 times/1sec.)	
Indicator accuracy		≤ ±2% F.S. ±1 digit (ambient temperature: 25 ±3°C)	
Environment	Enclosure	IP40	
	Ambient temp. range	Operation: 0 ~ 50°C, Storage: -20 ~ 60°C (No condensation or freezing)	
	Ambient humidity range	Operation/Storage: 35 ~ 85% RH (No condensation)	
	Withstand voltage	1000V AC in 1-min (between case and lead wire)	
	Insulation resistance	50Mohm min. (at 500V DC, between case and lead wire)	
	Vibration	Total amplitude 1.5mm, 10Hz-55Hz-10Hz scan for 1 minute, two hours each direction of X, Y and Z	
	Shock	980m/s ² (100G), 3 times each in direction of X, Y and Z	
Temperature characteristic		≤ ±2% F.S. of detected pressure (25°C) at temp. Range of 0~50°C	
Port size		F1: 1/8"PT; F2: 1/8"NPT; F3: G1/8"	
Lead wire		Oil-resistance cable(0.15mm ²)	
Weight		Approx. 102g (with 2-meter lead wire), Approx. 68g (with M8, 4-pin male connector)	

ORDERING INFORMATION

MP 23 C - F 1 - □

Pressure Range

C : Compound (-100.0~100.0kPa)
P : Positive (-0.100~1.000 Mpa)

Pressure Port

F1 : 1/8" PT
F2 : 1/8" NPT
F3 : G1/8"

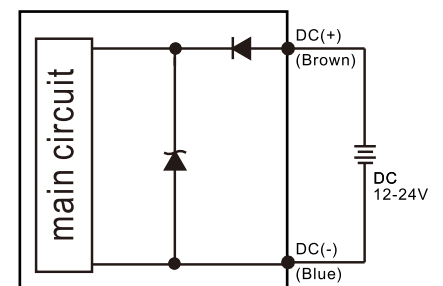
Cable Length/Connector

Blank : With 2-meter cable
QD : With M8, 4-Pin male connector

Optional Parts

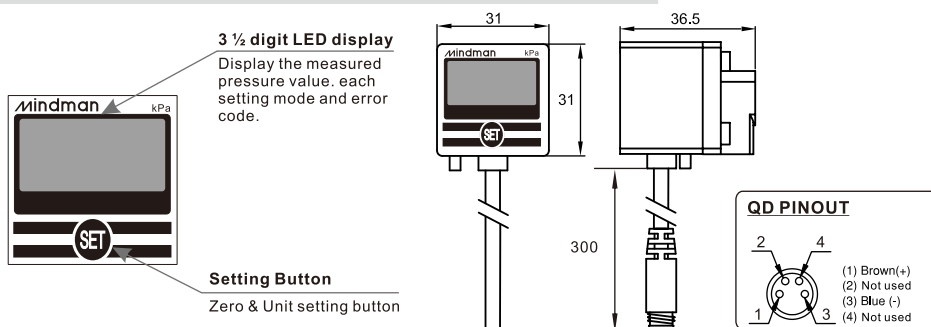
MP-A1: Mountingbracket (BT-1)
MP-A2: Mountingbracket (BT-2)
MP-B1: Paneladapter (PA-A)
MP-C1: Paneladapter+Frontprotective lid (PA-B)
MP-D1: M8,4Pinfemale connector(M84R-W0085-2M)

CIRCUIT WIRING DIAGRAM



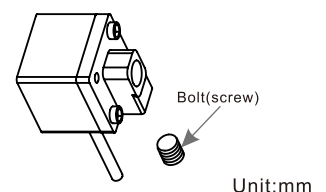
*Pressure display only, no switch output function.

PANEL DESCRIPTION / DIMENSIONS



INSTALLATION

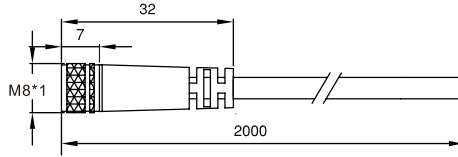
1. This product has two inlet pressure ports, select the one most convenient for installation.
2. Please plug the unused inlet port with supplied port plug. Use seal tape to prevent pressure



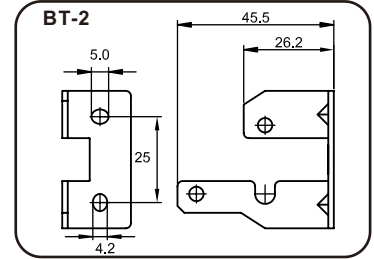
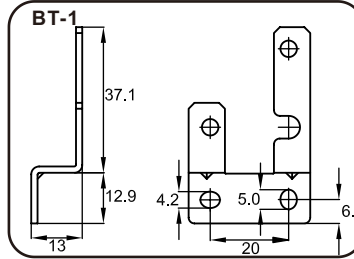
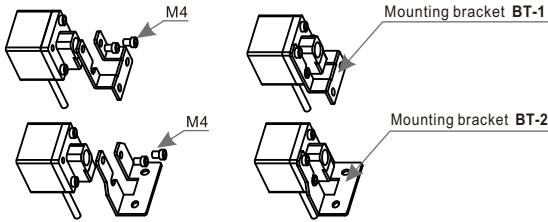
Unit:mm

OPTIONAL PARTS DIMENSIONS

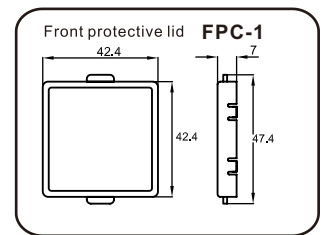
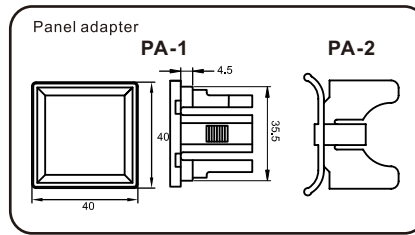
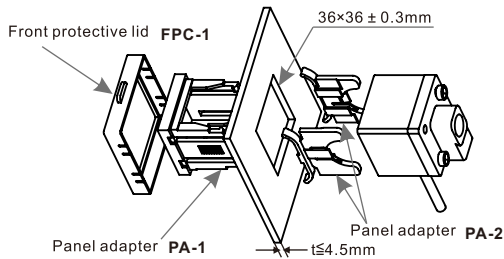
① M8 Female connector model:MP-D1



② Mounting bracket



③ Panel mount adapter + Front protective lid

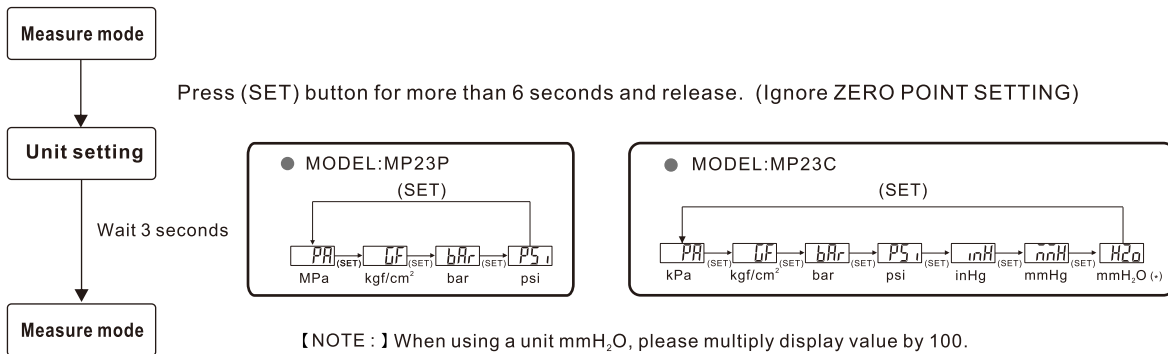


Unit:mm

SETTING STEPS



UNIT SETTING MODE



ZERO POINT SETTING

Under Measure Mode, press (SET) button for 2 ~ 6 second. Release when "00" is showing on display.

ERROR CODE INSTRUCTION

Error Name	Error code	Error instruction	Troubleshooting
Residual pressure error	Er3	During zero reset, ambient pressure is over ±3% F.S.	Change input pressure to ambient pressure and perform zero reset again.
Applied pressure error	HHH	The applied pressure is excess the upper limit of pressure setting.	Adjust the pressure within applied pressure range.
	LLL	The applied pressure is excess the lower limit of pressure setting.	
System error	Er4	Internal data error	Turn power off, and then restart. If error condition remains, please return to factory for inspection.
	Er6	Internal system error	
	Er7	Internal data error	
	Er8	Internal system error	

CHANGE PRESSURE UNIT TAG

When the pressure setting is not kPa or MPa, please remove the pressure unit tag and place the selected tag on the indicated area of the faceplate to assure the pressure unit is not misemployed and that setting error does not

	Pa	kPa	MPa	kgf/cm²	mmHg	psi	bar	inHg	mmH ₂ O
kPa	1	0.001	0.000001	0.00010197	0.00750062	0.000145038	0.00001	0.0002953	0.101968
inHg	1000000	1	0.0010197	7.500616	0.145038	0.010000	0.2953	101.9689	101.9689
bar	1000000	1000	10.197	7500.616	145.038	10	295.2998	101968.9	101968.9
kgf/cm²	98066.5	98.0665	0.0980665	1	735.559	14.2233	0.980665	28.5970	10000.20
psi	133.32	0.13332	0.001333	0.0013595	1	0.019336	0.0013332	0.039370	13.5954
MPa	1	0.001	0.000001	0.00010197	0.00750062	0.000145038	0.00001	0.0002953	0.101968
psi	6895	6.895	0.006895	0.07031	51.7157	1	0.06895	2.036074	703.07
inHg	3386.388	3.386388	0.003388	0.034530	25.40009	0.491141	0.033863	1	345.324
mmH ₂ O	9.80665	0.00980665	0.000098	0.000099	0.0735578	0.001142	0.000098	0.002895	1

[NOTE:] When using a unit mmH₂O, please multiply display value by 100.