

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 rated pressure range. Do not apply pressure beyond recommended maximum withstand pressure, permanent damage to the pressure gage may occur.
- ③ Do not drop, hit or allow excessive shock. Even if pressure gage 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 gage should avoid power source line and high voltage line. If use in the same circuit, noise may cause malfunction.
- ⑧ Using filter can extend pressure gage's service life.

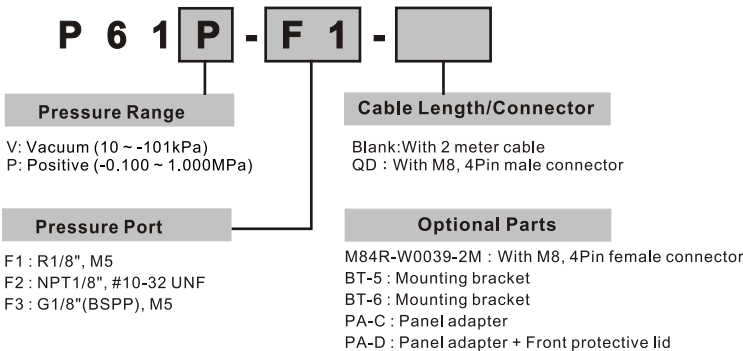
A. SPECIFICATIONS

TYPE		(Vacuum)	(Positive)
		P61V-□	P61P-□
Rated pressure range		0 ~ -101kPa	0.000 ~ 1.000MPa
Display pressure range		10 ~ -101kPa	-0.100 ~ 1.000MPa*1
Withstand pressure		300kPa	1.5MPa
Applicable fluid		Filtered air, incombustible and non-corrosive gases	
Pressure resolution	kPa	1	—
	MPa	—	0.001
	kgf/cm ²	0.01	0.01
	bar	0.01	0.01
	psi	0.1	0.1
Power supply voltage		12 to 28V DC ±10% Ripple (P-P) 10% or less	
Current consumption		10mA	
Sampling rate		2 Hz (2 times/sec.)	
Repeatability		±1% F.S. ±1digit	±0.2% F.S. ±1digit
LCD display		7 segment, 3 ½ digit	
Indicator accuracy		±2% F.S. ±1 digit (ambient temperature: 25 ±3 °C)	
Environment	Enclosure	IP65 *2	
	Ambient temp. range	Operation: 0 ~ 50 °C, storage: -10 ~ 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	50MΩ (at 500V DC, between case and lead wire)	
	Vibration	Total amplitude 1.5mm or 10G, 10Hz-55Hz-10Hz scan for 1 minute, two hours each direction of X, Y and Z	
	Shock	100m/s ² (10G), 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:R1/8", M5; F2:NPT1/8", #10-32 UNF; F3:G1/8"(BSPP), M5	
Lead wire		Oil-resistance cable (0.15mm ²)	
Weight		Approx. 60g (with 2 meter lead wire), Approx. 40g(with M8, 4Pin male connector)	

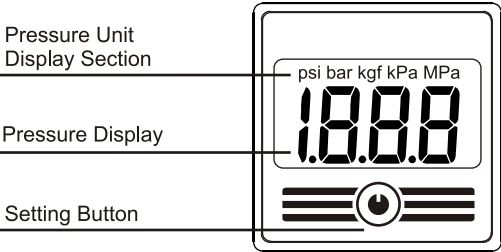
*1. When the pressure is -0.1MPa, LCD displays  MPa.

*2. Air tube must be installed to maintain IP65. (See section E)

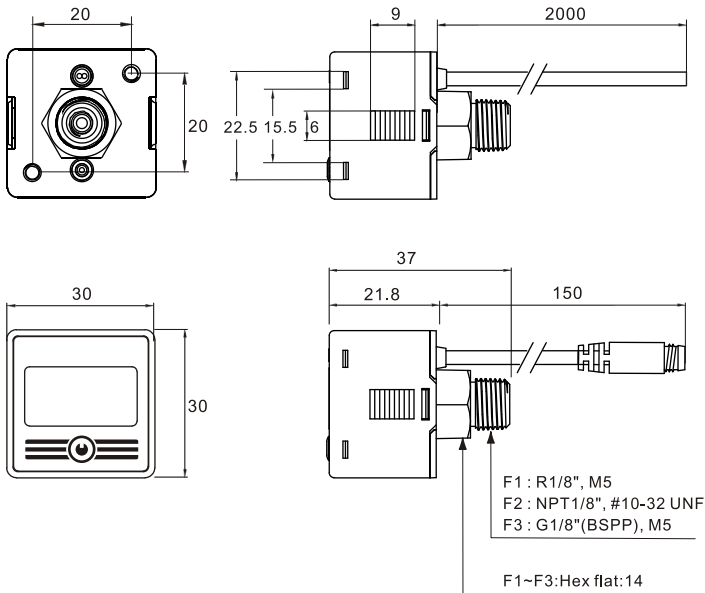
B. ORDERING INFORMATION



C. PANEL DESCRIPTION



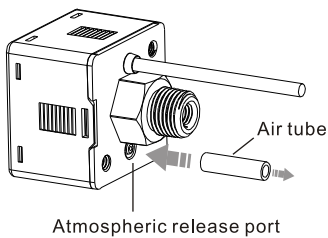
D. DIMENSIONS



Unit:mm

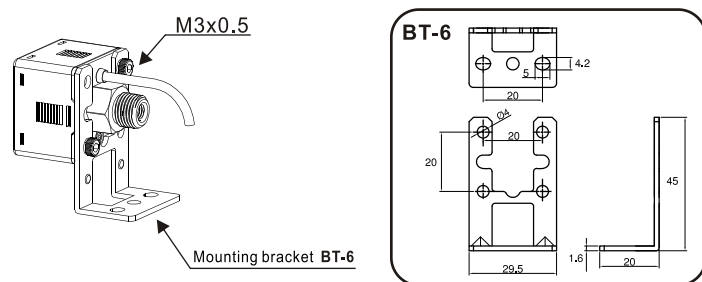
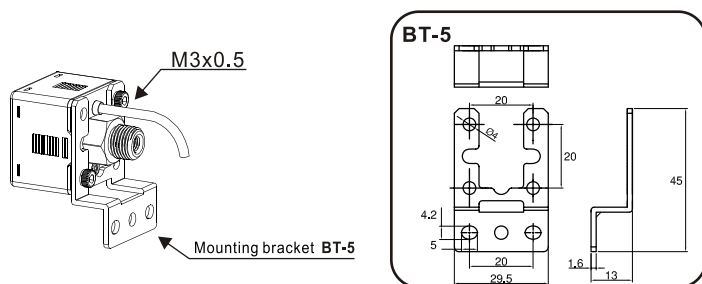
E. DUST AND SPLASH ENVIRONMENT

- To maintain IP65, please insert an air tube (O.D.: 4mm) into atmospheric release port and pipe the other end away from dust / spattering liquid environment.
- Use proper air tube dimension of O.D.: 4mm, I.D.: 2.5mm, and the length is depending on the user's environment.

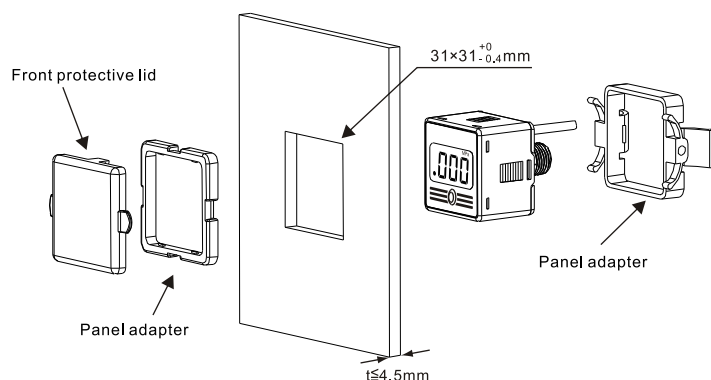


F. OPTIONAL PARTS DIMENSIONS

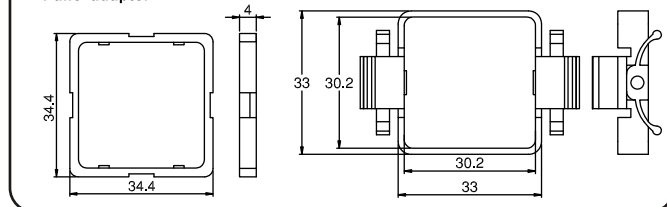
① Mounting bracket



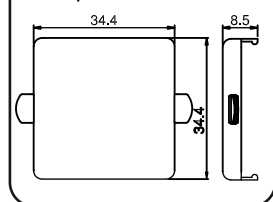
② Panel mount



Panel adapter

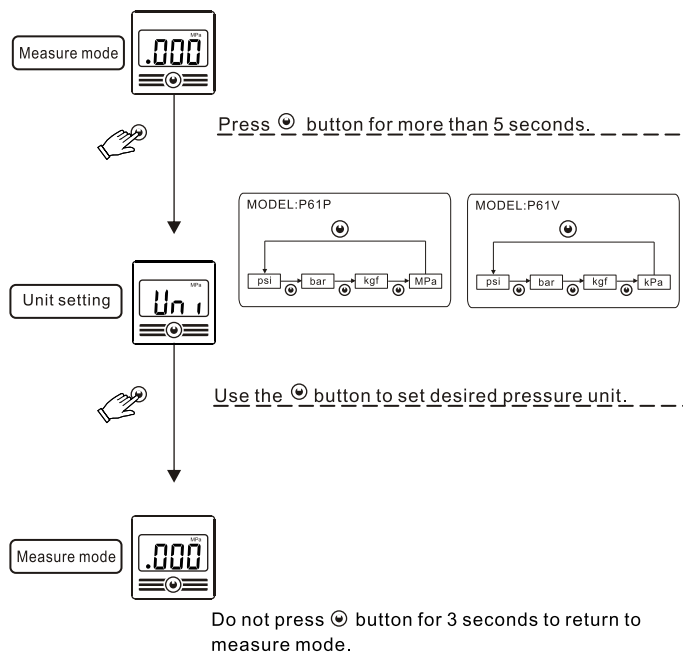


Front protective lid

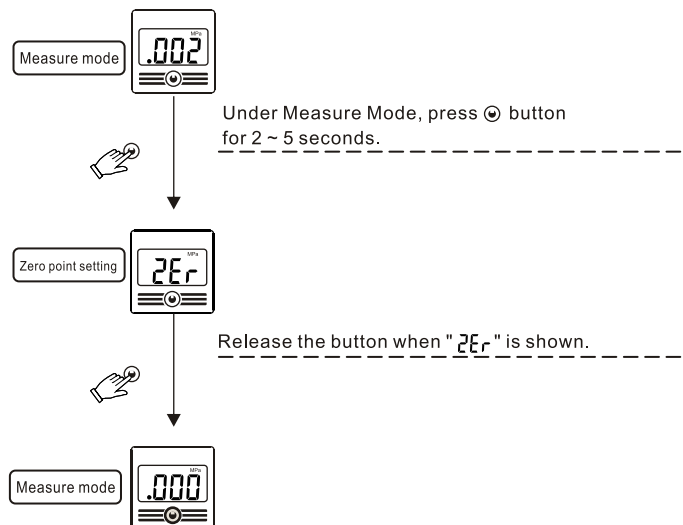


Unit:mm

G. PRESSURE UNIT SETTING MODE



H. ZERO POINT RESET



I. ERROR CODE INSTRUCTION

Error Type	Error code	Error Condition	Troubleshooting
Residual pressure error	Err	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	Supply pressure is exceeds the upper limit of pressure setting.	Adjust the pressure within operating pressure range.
	LLL	Supply pressure is exceeds the lower limit of pressure setting.	

J. PRESSURE UNIT CONVERSION TABLE

From	To	kPa	MPa	kgf/cm ²	psi	bar
1 kPa		1	0.001000	0.010197	0.145038	0.010000
1 MPa		1000	1	10.197	145.038	10
1 kgf/cm ²		98.0665	0.0980665	1	14.2233	0.980665
1 psi		6.895	0.006895	0.07031	1	0.06895
1 bar		100.0000	0.100000	1.01972	14.5038	1