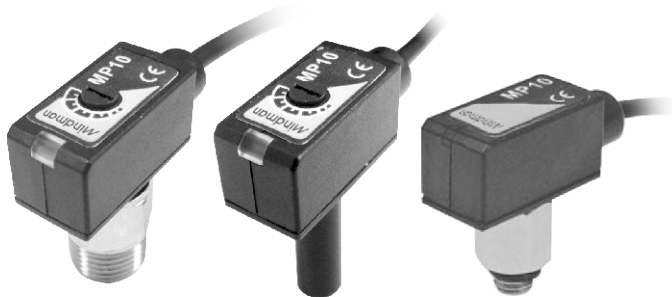


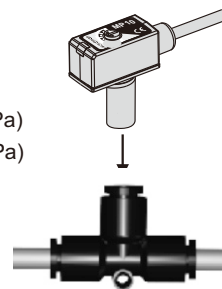
MP10 series

PNEUMATIC PRESSURE SWITCH



Features

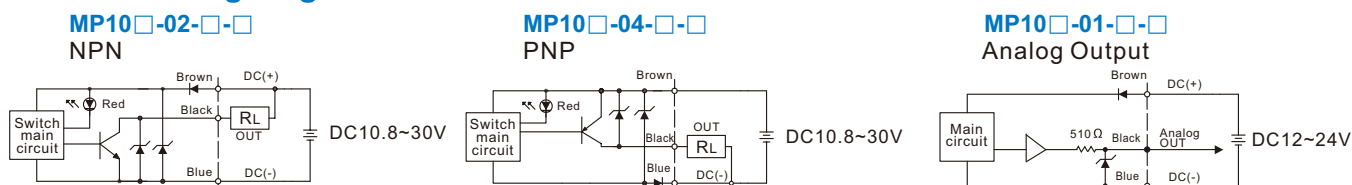
- Simple installation, plug-in port or thread-in fitting.
- Compact size: 26×10×10.4 mm.
- Setting pressure range
 - Switch: Vacuum (0~ -101.3 kPa)
Positive (0~0.6 MPa)
 - Analog: Compound (-100~100 kPa)
Compound (-101~500 kPa)
Low (0~100 kPa)
Vacuum (0~-101.3 kPa)
Positive (0~1.0 MPa)
- Low cost.



Specification

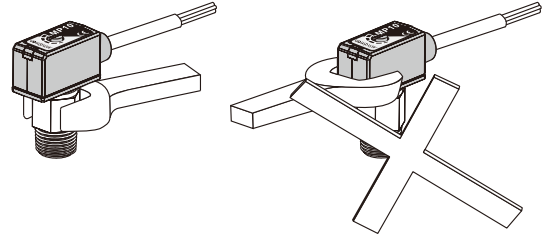
Model	MP10V-02/04	MP10P-02/04	MP10C-01	MP10L-01	MP10V-01	MP10R-01	MP10P-01
Type	Switch			Analog			
Setting pressure range	0~ -101.3 kPa	0~0.6 MPa	-100~100 kPa	0~100 kPa	0~ -101.3 kPa	-101~500 kPa	0~1.0 MPa
Withstand pressure	0.6 MPa	1.5 MPa	0.2 MPa			1.5 MPa	
Fluid	Air, Non-corrosive / Non-flammable gas						
Power supply voltage	10.8 to 30V DC (include ripple voltage)			12 to 24V DC (5% ripple voltage)			
Load current	80mA max.			-			
Internal voltage drop	NPN / 0.8V, PNP / 0.8V			-			
Current consumption	10mA max.						
Analog output	-			1~5V ±1% F.S. / Linearity ±0.5% F.S.			
Sensor type	NPN or PNP			-			
Output short circuit protection	Yes			-			
Setting method	Adjusting by VR			-			
Response time	Approx. 1ms			-			
Repeatability	≤ ±1% F.S.			-			
Hysteresis	3% F.S. max.			-			
Indicator	Red LED turns ON			-			
Enclosure	IP 40						
Temperature characteristic	≤ ±3% F.S. of detected pressure (25°C) at temp. Range of 0~50°C			≤ ±2% F.S. of detected pressure (25°C) at temp. Range of 0~50°C			
Ambient temp. range	Operation: 0 ~ 60°C, storage: -20 ~ 70°C (No condensation or freezing)			Operation: 0 ~ 50°C, storage: -20 ~ 70°C (No condensation or freezing)			
Ambient humidity range	Operation / Storage: 35~85% RH (No condensation)						
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						
Port size	φ4mm. φ6mm, R1/8, NPT1/8, G1/8, M5						
Piping method	Push-in tube or thread-in						
Lead wire	Oil-resistance cable, 3 wires (0.18mm ²), φ2.6mm						
Weight	Approx. 50 g (with 3-meter lead wire)						

Circuit wiring diagram



Installation precautions

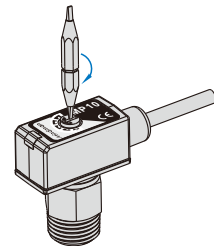
- When mounting, always use the wrench on the metallic area near the pressure port. Never apply a wrench to the plastic body, it will damage the sensor.
- Over tightening may cause damages to the port thread, mounting bracket and pressure sensor. Under tightening may result loosen or leakage.
- Apply pressure and power after installation and make necessary adjustments and inspect any possible signs of leakage to ensure proper installation.



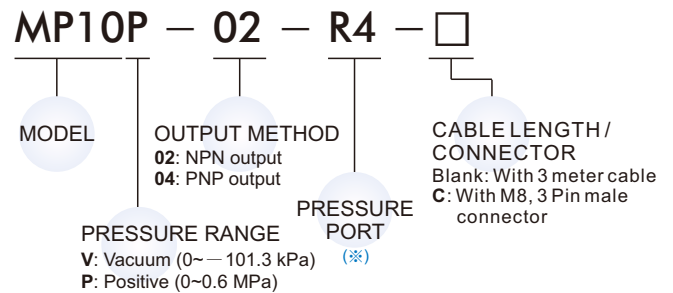
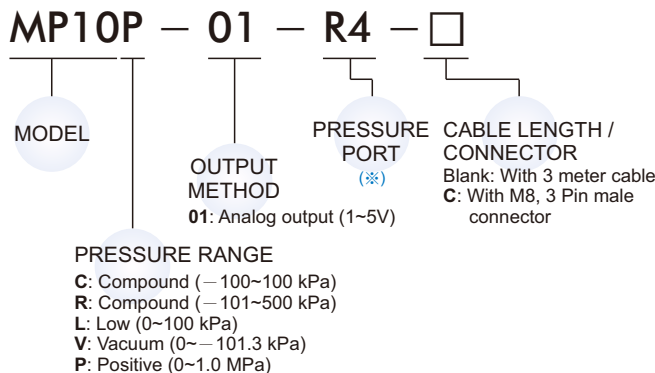
How to set pressure

- Use the pressure setting trimmer to set "ON" pressure. Rotate clockwise to increase pressure setpoint. Rotate counter-clockwise to decrease pressure setpoint.
- Use appropriate size screwdriver for the setting trimmers. Gently turn the screwdriver to make adjustments. To prevent damage to the Pressure setting trimmer, DO NOT force the trimmer when it comes to a stop.

Positive & Vacuum



Order example

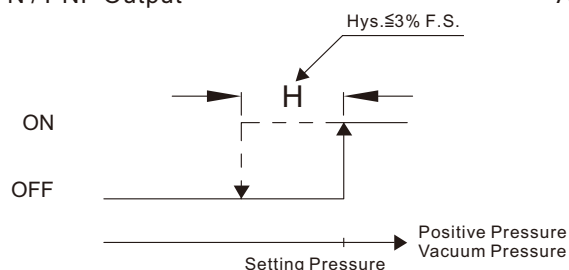


※ PRESSURE PORT

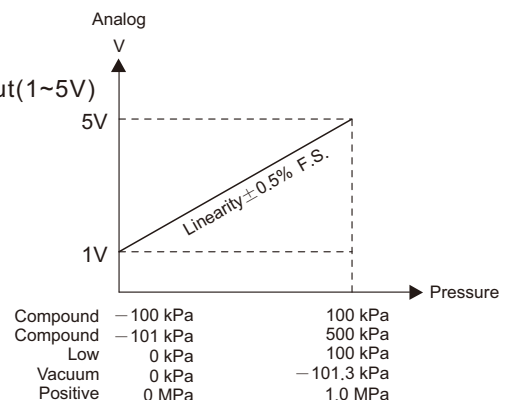
Pressure port	R4	R6	F1 / F2 / F3	M5
Appearance				
Port size	R4: φ4mm	R6: φ6mm	F1: R1/8, M5 F2: NPT1/8, M5 F3: G1/8, M5	M5: M5×0.8

Output type

NPN / PNP Output



Analog output(1~5V)



MP10 Dimensions

PNEUMATIC PRESSURE SWITCH

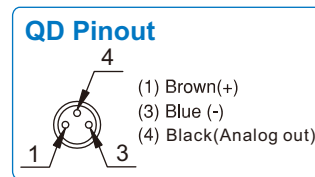
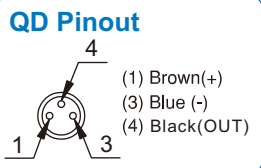
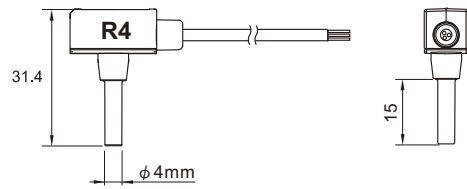
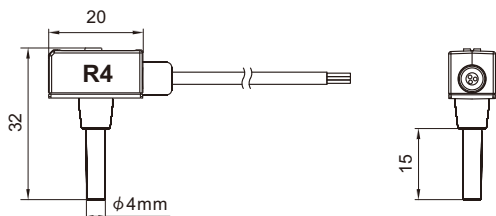
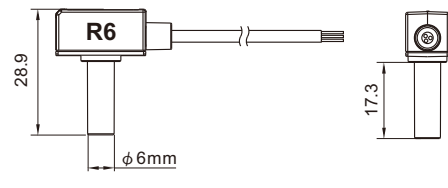
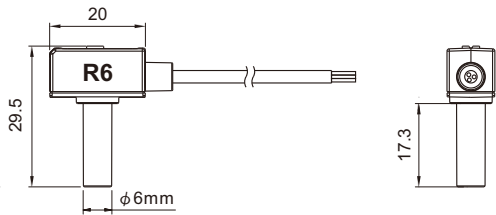
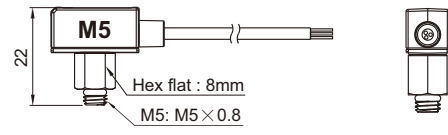
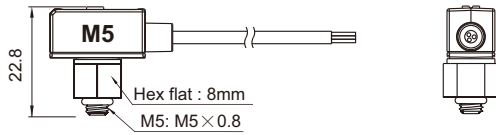
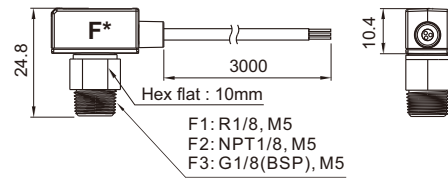
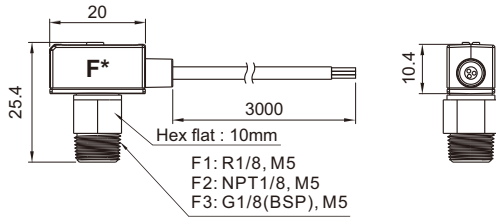
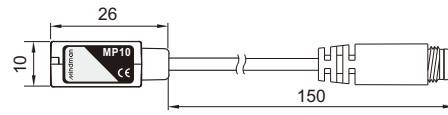
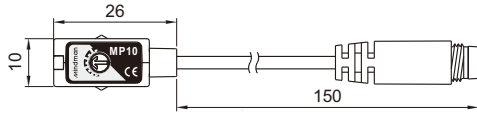


Dimensions

NPN / PNP Output

Analog output(1~5V)

Unit: mm



Optional part dimensions

M8 3-Pin female connector Model: M83R-W0114-2M

