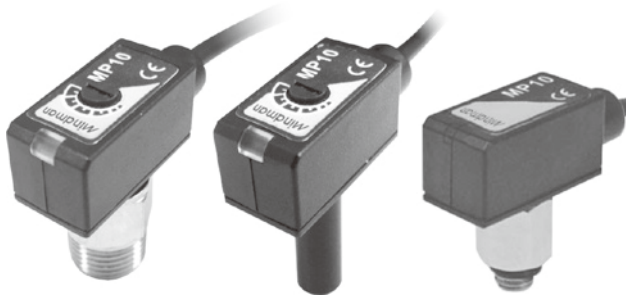


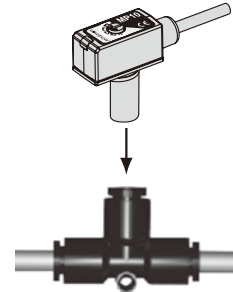
MP10 series

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.



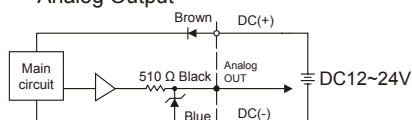
Specification

Model	MP10C	MP10L	MP10V	MP10R	MP10P	MP10V	MP10P
Output method	01					02 / 04	
Type	Analog					Switch	
Setting pressure range	-100~100 kPa	0~100 kPa	0~ -101.3 kPa	-101~500 kPa	0~1.0 MPa	0~ -101.3 kPa	0~0.6 MPa
Withstand pressure	0.2 MPa			1.5 MPa		0.6 MPa	1.5 MPa
Fluid	Filtered air, Non-corrosive / Non-flammable gas						
Power supply voltage	12 to 24V DC (5% ripple voltage)					10.8 to 30V DC (include 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	≤±2% F.S. of detected pressure (25°C) at temp. Range of 0~50°C					≤±3% F.S. of detected pressure (25°C) at temp. Range of 0~50°C	
Ambient temp. range	Operation: 0 ~ 50°C, storage: -20 ~70°C (No condensation or freezing)					Operation: 0 ~ 60°C, storage: -20 ~70°C (No condensation or freezing)	
Ambient humidity range	Operation / Storage: 35~85% RH (No condensation)						
Vibration	Total amplitude 1.5mm or 10G, 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	ø4mm. ø6mm, 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), ø2.6mm						
Weight	Approx. 50 g (with 3 meter lead wire)						

Circuit wiring diagram

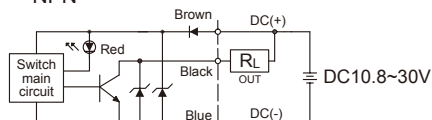
MP10□-01-□-□

Analog Output



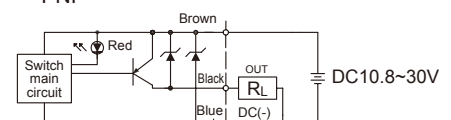
MP10□-02-□-□

NPN



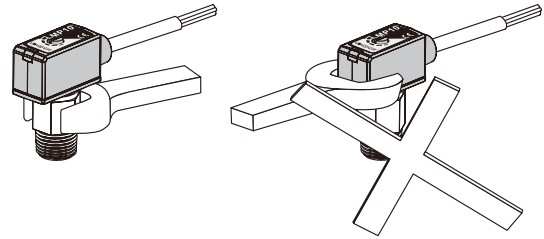
MP10□-04-□-□

PNP



Installation precautions

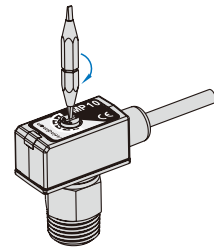
- When mounting, always use the wrench on the metallic area near the pressure port. Never apply a wrench to the plastic body, it will damage the sensor.
- Over tightening may cause damages to the port thread, mounting bracket and pressure sensor. Under tightening may result loosen or leakage.
- Apply 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

MP10P – 01 – R4 – □

MODEL	PRESSURE RANGE	OUTPUT METHOD
	C: Compound (-100~100 kPa)	01: Analog output (1~5V)
	R: Compound (-101~500 kPa)	
	L: Low (0~100 kPa)	
	V: Vacuum (0~ -101.3 kPa)	
	P: Positive (0~1.0 MPa)	02: NPN output 04: PNP output
	V: Vacuum (0~ -101.3 kPa)	
	P: Positive (0~0.6 MPa)	

PRESSURE PORT (*)

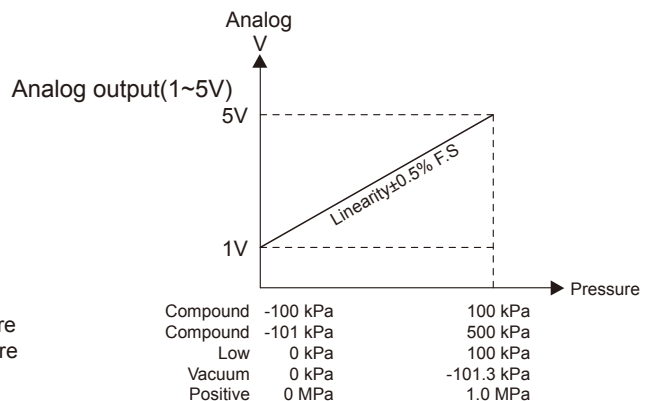
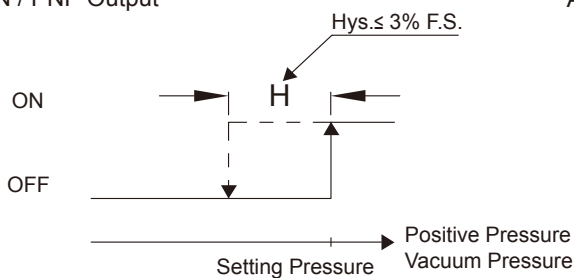
CABLE LENGTH / CONNECTOR
Blank: With 3 meter cable
C: With M8, 3 Pin male connector

* PRESSURE PORT

Pressure port	R4	R6	F1 / F2 / F3	M5
Appearance				
Port size	R4: $\varnothing 4\text{mm}$	R6: $\varnothing 6\text{mm}$	F1: R1/8", M5x0.8 F2: NPT1/8", M5x0.8 F3: G1/8", M5x0.8	M5: M5x0.8

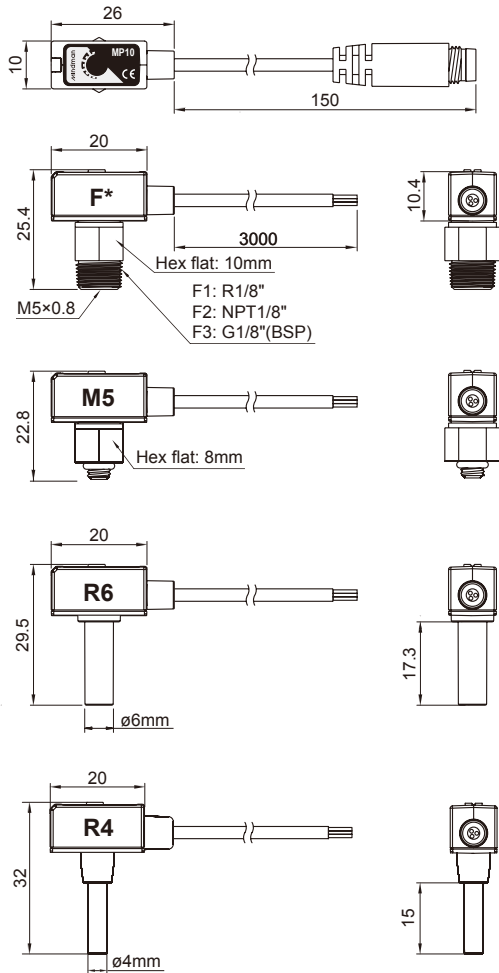
Output type

NPN / PNP Output



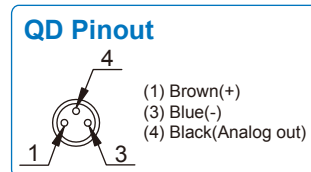
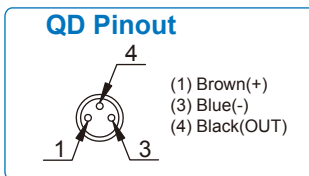
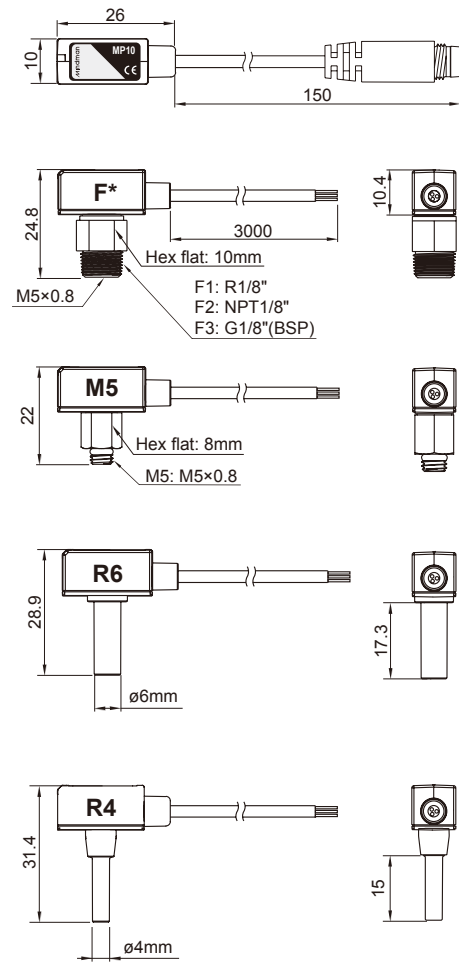
Dimensions

NPN / PNP Output



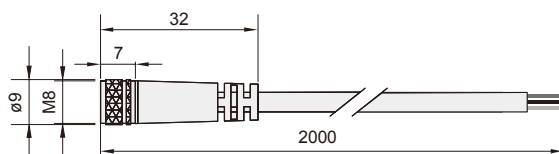
Analog output (1~5V)

Unit: mm



Optional part dimensions

M8 3-Pin female connector
Model: **MP-D2**



Mounting accessories

MP — D2

MODEL

OPTION PARTS

D2: M8 3Pin female connector (M83R-W0114-2M)