

Slim Type Pressure Sensor

TPS-9 series



- Space savings · 10mm width

- Easy settings

Use key button to set valve

- Quick response time

Output response time less than 1.5ms

How to order

TPS - **V** - 9 - **M5** - **N** - **C** - **A**

1
 2
 3
 4
 5

① Pressure Range

V	Vacuum (-99.9 ~ 0kPa)
R	Compound (-100 ~ 500kPa)
C	Compound (-99.9 ~ 99.9kPa)

② Port Type

M	M5 (Female)
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③ Output Type

N	NPN open collector
P	PNP open collector

*1 output

④ Electrical Connection

C	Connector
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*Standard

⑤ Analog Output

A	1-5V Voltage output
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Mounting parts (Option)

■ Fittings



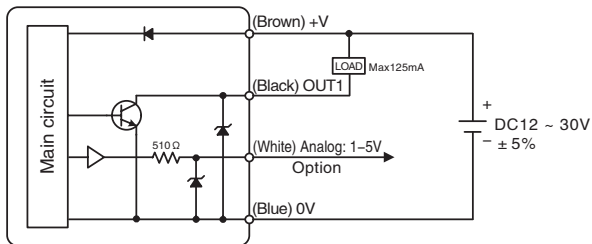
L9A, L9B bracket : MPS-ACCK6

Specifications

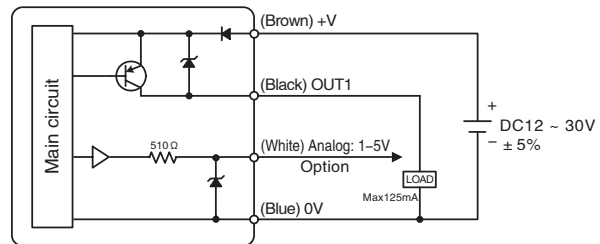
Description	Unit	TPS-V9□-□CA	TPS-C9□-□CA	TPS-R9□-□CA
		Vacuum	Compound	
Fluid		Air (non corrosive, nonflammable gas)		
Diaphragm		Silicone Diaphragm		
Pressure range	kPa	- 99.9 ~ 0	- 99.9 ~ 99.9	- 100 ~ 500
Minimum unit setting	kPa	0.1		1
	kgf/cm ²	-		0.01
	bar	0.001		0.01
	psi	-		0.1
	inHg	0.1		-
	mmHg	1		1
Proof pressure	MPa	0.3		0.8
Operating ambient temperature	°C	0 ~ 50 (without freezing)		
Operating humidity	%	35 ~ 85 RH(without condensation)		
Port type		M5 port/For CONVUM mounting port		
Power supply	V	DC12 ~ 24, ripple (Vp-p) less than 5%		
Power consumption	mA	50		
Switch output		NPN or PNP open collector transistor		
	Current load	mA max.125mA 1 output		
Analog output (Option)	V	Voltage output DC1 ~ 5 (± 0.1) linearity 0.5%F.S.		
Repeatability	%	± 0.2 F.S., less than 1digit		
Temperature characteristic		25°C ± 2% of F.S. or less at range of 0 ~ +50°C		
Response time	ms	less than 1.5		
Display	Digital	3-digit, 7-segment, Red color LED		
	Operation	OUT: Red color LED		
Protection structure		IP40		
Vibration resistance		10 ~ 55Hz, double amplitude 1.5mm 2 hours/each direction XYZ		
Shock resistance	m/s ²	980 (3 times each direction XYZ)		
Connection of power source and output		Maker: JST, model: GHR-05V-S		
Cable Specifications		5 lead wires, 24AWG UL AWM20276, 1000mm		
Mass	g	15(Body only)		

Internal circuit

NPN output (analog output: 1-5V)



PNP output (analog output: 1-5V)



Display

Digital display (RED color LED, 3 digit)
It displays current pressure value.
It also displays settings code and error code.

Output display
Output LED (GREEN color)



Down key
Use for decreasing setting value

Up key
Use for increasing setting value

Setting method

Please check the instruction manuals for details

① Set a setting value



Press up ▲ or down ▼ key. After waiting 1 second, "H-1" and current setting value -80.2 displays.

② Input a setting value

Set a new setting value by pressing up ▲ or down ▼ key.
After waiting 5 seconds without pressing key, "END" displays returns and sensor mode to initial mode.

③ Set a hysteresis range



Keep pressing up ▲ and down ▼ key for 3 seconds.
It displays "----" and current hysteresis -10 displays.
Set a new setting value by pressing up ▲ or down ▼ key.
After waiting 5 seconds without pressing key, "END" displays returns and sensor mode to initial mode.

Other settings

① Security lock (function for locking keys to protect setting values)



• How to lock the display
Keep pressing up ▲ key and press down ▼ key.
The display is lock.



• How to unlock the display
Keep pressing up ▲ key and press down ▼ key.
The display is unlock.

② Zero reset

Keep pressing down ▼ key for 3 seconds.

Dimensions

Unit : mm <inch>

M5 port type

