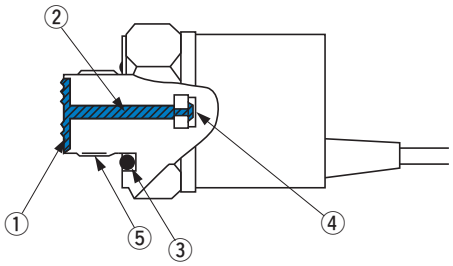
PRESSURE SWITCHES

PS8



INTERNAL STRUCTURE
PS8



	Part name	Material
①	Stainless steel diaphragm	SUS 316L
②	Sealed liquid	Silicone oil
③	“O” ring(P18)	Fluoro-rubber
④	Sensor chip	Silicone
⑤	Fitting	SUS 316

FEATURES

- Solidstate pressure switch with no mechanical moving parts
- High corrosion resistance by double diaphragm structure
- Two pressure setting points
- Wide pressure medium compatibility

MODEL NUMBER DESIGNATION

P S 8 - 1 0 2 G

Series name

Rated pressure range
102 : 0 ~ 98.1 kPa {0 ~ 1 kgf/cm²}
352 : 0 ~ 343 kPa {0 ~ 3.5 kgf/cm²}
103 : 0 ~ 981 kPa {0 ~ 10 kgf/cm²}

Pressure reference
G : Gauge
V : Gauge (Vacuum)

LIST OF MODEL NUMBERS

Pressure reference	Gauge			
Pressure port \ kPa {kgf/cm²} Rated pressure range	0 ~ 98.1 {0 ~ 1}	0 ~ 343 {0 ~ 3.5}	0 ~ 981 {0 ~ 10}	0 ~ 98.1 {0 ~ 1}
G 3/8(PF 3/8)	PS8-102G	PS8-352G	PS8-103G	PS8-102V

❊ Verify the above model numbers when placing orders.

PS8
PRESSURE SWITCHES

■ STANDARD SPECIFICATIONS

● Unless otherwise specified, the specs are defined at an ambient temperature of 25 ± 5 °C and excitation voltage of 12 V DC.

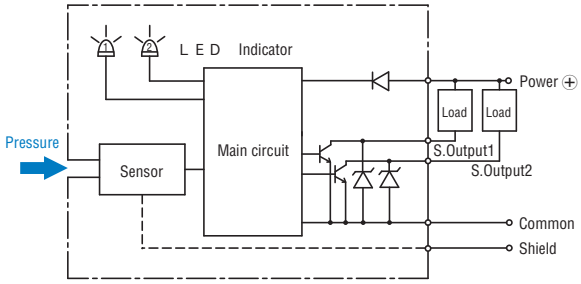
Item / Model number			PS8			
			102G	102V	352G	103G
General specifications	Pressure reference		Gauge			
	Rated pressure range	kPa {kgf/cm²}	98.1 {1}	– 98.1 {–1}	343 {3.5}	981 {10}
	Maximum pressure	kPa {kgf/cm²}	196 {2}		686 {7}	1961 {20}
	Break-down pressure	kPa {kgf/cm²}	294 {3}		1030 {10.5}	2941 {30}
	Operating temp. range	°C	– 20 ~ 70			
	Compensated temp. range	°C	0 ~ 50			
	Operating humidity	%RH	35 ~ 85 (No condensation)			
	Storage temp.	°C	– 20 ~ 70 (Atmospheric pressure humidity 65 %RH maximum)			
	Pressure medium		Corrosive gases/liquids compatible with SUS 316L or SUS 316			
	Insulation resistanca	MΩ minimum	100 (500 V DC)			
	Dielectric strength		500 V AC, 60 s (Leakage current 1mA maximum)			
	Sealed liquid		Silicone oil			
	Pressure port		G 3/8 (PF 3/8) ※			
	Net weight	g	Approx. 120			
電源 Power	Supply voltage	V DC	12 ~ 24 ± 10 %			
	Ripple content	maximum	10 % (P-P) maximum			
	Consumption current	maximum	20 mA			
Switch output	No. of output		2			
	Output interface		NPN open collector output			
	Setting method		Adjustable by VR			
	Adjustable range		10 ~ 100 % of rated pressure			
	Display		Red LED (lighted when output is ON.)			
	Accuracy 0 ~ 50 °C (Reference temp.: 25 °C)	% F.S.	± 3			
	Hysteresis	% F.S. maximum	2			
	Switching capacity		30 V DC 80 mA maximum			
	Residual voltage	V maximum	0.8			
	Response	ms	Approx. 2			

※ : An “O” ring is supplied as accessory. (P18).

■ ENVIRONMENTAL CHARACTERISTICS

Test item	Test conditions (At 25 ± 5 °C)	Permissible change
Vibration	10 ~ 500 Hz, 1.5 mm maximum/98.1 m/s², 3 directions for 2 hours each	Switch output setting: ± 1 %F.S. maximum
Shock	981 m/s², 3 directions for 3 times each	
Pressure cycling	0 ~ Rated pressure, 10^6 cycles	
Moisture resistance	40 °C, 90 ~ 95 %RH, 240 hrs.	

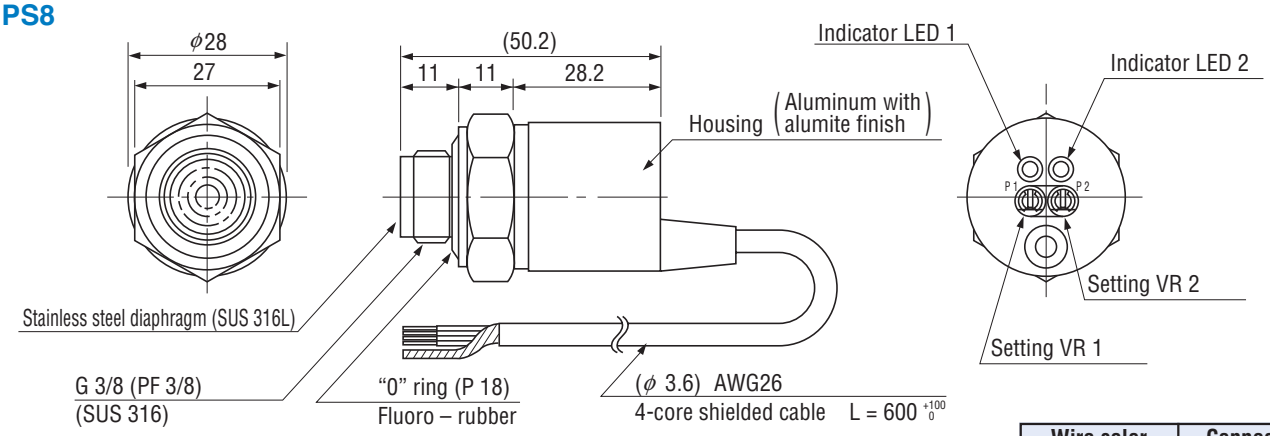
■ INTERNAL ELECTRICAL SCHEMATICS



■ OUTLINE DIMENSIONS

Unless otherwise specified, tolerance : ± 0.5 (Unit: mm)

● PS8

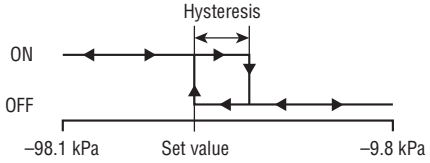


⚠ Extra care should be taken with the diaphragm part. Do not touch the diaphragm directly to avoid damaging the diaphragm.

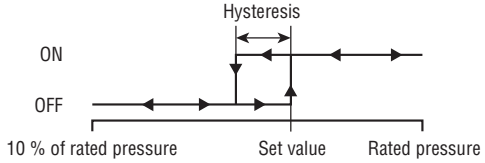
Wire color	Connection
Red	Power ⊕
Green	Output 1
White	Output 2
Black	Common
Shield	Fitting

■ SWITCHING OPERATION

● PS8-102V



● PS8- ＊＊＊ G



※ 2 switches show same performance.