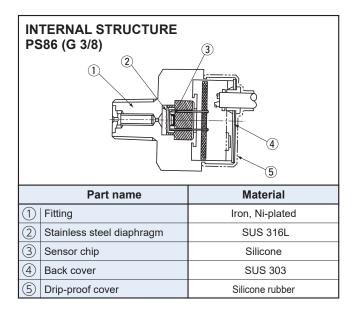
# **PRESSURE SWITCHES**

# **PS86**

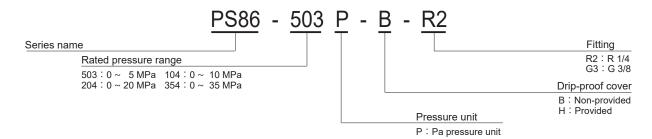


#### **■ FEATURES**

- Solidstate pressure switch with no mechanical moving parts
- Isolated output via a photo-coupler
- Switching pressure adjustable and hysteresis band adjustable
- Resistant against surge pressure
- SUS 316L welded stainless steel diaphragm



#### MODEL NUMBER DESIGNATION



**X Please refer to the LIST OF MODEL NUMBERS when placing orders.** 

# LIST OF MODEL NUMBERS

Pressure medium	Fitting	Pressure reference		Gauge				
		Drip-proof cover	MPa Rated pressure range	0 ~ 5	0 ~ 10	0 ~ 20	0 ~ 35	
	R2 (R 1/4)	Non-provided		PS86-503P-B-R2	PS86-104P-B-R2	PS86-204P-B-R2	PS86-354P-B-R2	
Hydraulic oil		Provided		PS86-503P-H-R2	PS86-104P-H-R2	PS86-204P-H-R2	PS86-354P-H-R2	
	G3 (G 3/8)	Non-provided		PS86-503P-B-G3	PS86-104P-B-G3	PS86-204P-B-G3	PS86-354P-B-G3	
		Pro	vided	PS86-503P-H-G3	PS86-104P-H-G3	PS86-204P-H-G3	PS86-354P-H-G3	

#### STANDARD SPECIFICATIONS

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

	Mada	al manage and	PS86				
	Item \ Mode	lodel number	503P	104P	204P	354P	
	Pressure reference		Gauge ※ 1				
	Rated pressure range MPa		5	10	20	35	
	Maximum pressure MPa		10	20	40	52.5	
	Operating temp. range °C		− 10 ~ 75				
ડા	Compensated temp. range °C		0 ~ 50				
ation	Operating humidity %RH		$35 \sim 85 \hspace{0.1cm}  ext{(No condensation)}$				
cific	Storage temp. °C		− 20 ∼ 90 (Atmospheric pressure, humidity 65 %RH maximum)				
General specifications	Pressure medium ※ 2		Hydraulic oil				
ဗ	Insulation resistance	MΩ minimum	100 (500 VDC)				
	Dielectric strength		350 VAC, 60 s(Leakage current 0.5 mA maximum)				
	Pressure port		R 1/4、G 3/8				
	Net weight	g	Approx. 170				
	Protection grade		Without drip-proof cover: IP54, With drip-proof cover: IP65				

<sup>\* 1</sup> The transducer measures gauge pressure using an absolute pressure sensing element.\* 2 Hydraulic oil is used as a measurement medium at the time of delivery inspection.

<sup>\*</sup> Verify the above model numbers when placing orders.

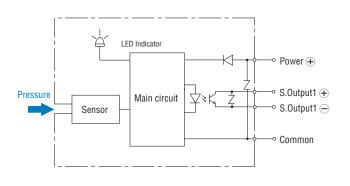
	lto-m	Marial management	PS86				
Item		Model number	503P	104P	204P	354P	
Power	Supply voltage		12 ~ 24 V ± 10 %				
Po	Consumption curr	rent maximum	15 mA				
	No. of outputs		1				
	Output interface		Open collector output which insulated a photo-coupler				
	Setting method		Adjustable by VR				
t n	Adjustable range		$5\sim 105~\%$ of rated pressure range				
outp	Display		Red LED ON				
Switch output	Accuracy 0~50 °C(Reference te	emp.: 25 °C) %F.S.	± 3				
Š	Hysteresis %F.S.		Approx. 1 $\sim$ 10 % of setting range				
	Switching capacity		35 VDC 100 mA				
	Residual voltage	V maximum	1.2				
	Response	ms	Approx. 20				

## **■ ENVIRONMENTAL CHARACTERISTICS**

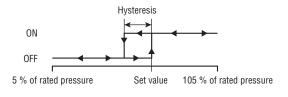
Test item	Test conditions (At 25 ± 5 °C)	Permissible change	
Vibration			
Shock	490 m/s², 3 directions for 3 times each	Switch output setting: ± 3 %F.S. maximum	
Pressure cycling	Rated pressure range 10 <sup>6</sup> cycles		
Moisture resistance	40 °C, 90 ~ 95 %RH, 240 hrs.		

# ■ INTERNAL ELECTRICAL SCHEMATICS

# **■ SWITCH OUTPUT SCHEMATICS**



# ● PS86- \* \* \* P



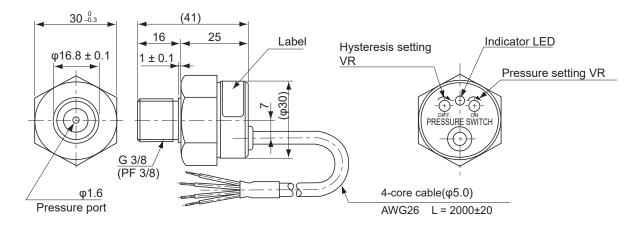
Adjustable hysteresis

# **RESSURE SWITCHES**

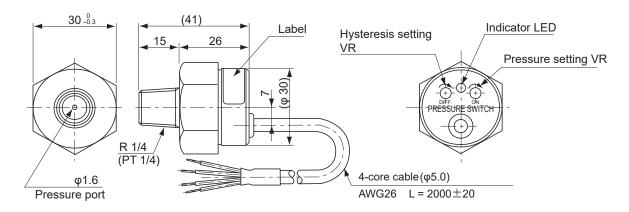
#### **OUTLINE DIMENSIONS**

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

### Configurations of joint G3 (G 3/8) type

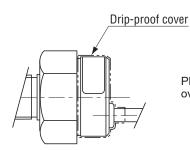


### Configurations of joint R2 (R 1/4) type



#### Drip-proof cover type

Connection	
Power ⊕	
Power ⊖	
Output ⊕	
Output ⊖	



Please make sure that the drip-proof cover is properly placed over the main body and the cable.