



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

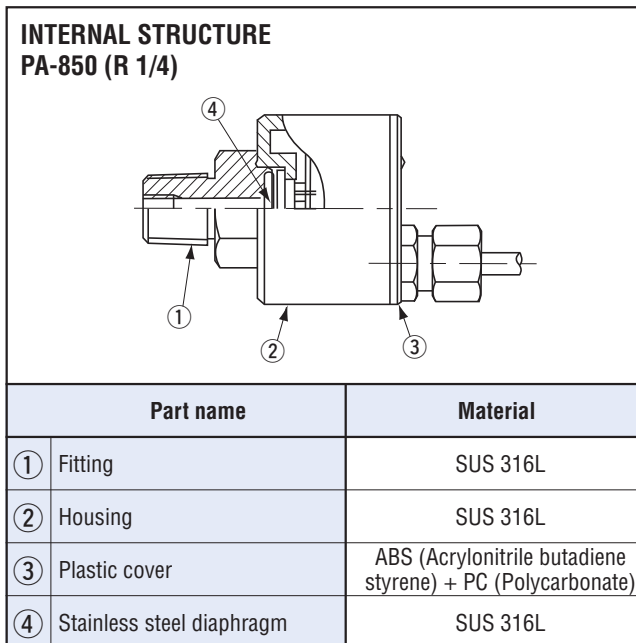
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



PRESSURE TRANSDUCERS WITH AMP.

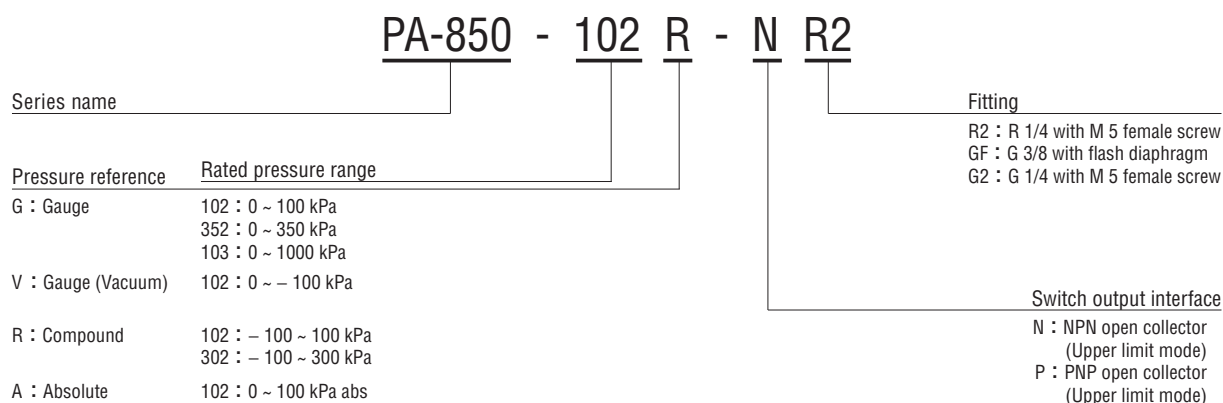
PA-850



FEATURES

- High corrosion resistance and drip-proof construction
Pressure port attachment made of SUS 316L
Proven IP-65 grade gauge body (IP-65 in accordance with IEC)
- Standard product provides both a switch output (hysteresis adjustable) and an analog output
- Absolute pressure type and compound pressure type which can control negative to positive pressure with only a single pressure gauge are all in line
- Three standard types of joint are provided
R2 : R 1/4 (M 5 female screw)
GF : G 3/8 with flash diaphragm
G2 : G 1/4 (M 5 female screw)

MODEL NUMBER DESIGNATION



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

PA-850

PRESSURE TRANSDUCERS WITH AMP.

LIST OF MODEL NUMBERS

Fitting	Pressure reference		Gauge						Absolute
	SW output interface	kPa Rated pressure range	0 ~ 100	0 ~ 350	0 ~ 1000	0 ~ - 100	- 100 ~ 100	- 100 ~ 300	0 ~100
R2 (R 1/4)	NPN		PA-850-102G-NR2	PA-850-352G-NR2	PA-850-103G-NR2	PA-850-102V-NR2	PA-850-102R-NR2	PA-850-302R-NR2	PA-850-102A-NR2
	PNP		PA-850-102G-PR2	PA-850-352G-PR2	PA-850-103G-PR2	PA-850-102V-PR2	PA-850-102R-PR2	PA-850-302R-PR2	PA-850-102A-PR2
GF (G 3/8)	NPN		PA-850-102G-NGF	PA-850-352G-NGF	PA-850-103G-NGF	PA-850-102V-NGF	PA-850-102R-NGF	PA-850-302R-NGF	PA-850-102A-NGF
	PNP		PA-850-102G-PGF	PA-850-352G-PGF	PA-850-103G-PGF	PA-850-102V-PGF	PA-850-102R-PGF	PA-850-302R-PGF	PA-850-102A-PGF
G2 (G 1/4)	NPN		PA-850-102G-NG2	PA-850-352G-NG2	PA-850-103G-NG2	PA-850-102V-NG2	PA-850-102R-NG2	PA-850-302R-NG2	PA-850-102A-NG2
	PNP		PA-850-102G-PG2	PA-850-352G-PG2	PA-850-103G-PG2	PA-850-102V-PG2	PA-850-102R-PG2	PA-850-302R-PG2	PA-850-102A-PG2

※Verify the above model numbers when placing orders.

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	PA-850							
		102G	352G	103G	102V	102R	302R	102A	
General specifications	Pressure reference	Gauge						Absolute	
	Rated pressure range	kPa	100	350	1000	- 100	- 100 ~ 100	- 100 ~ 300	100 (abs)
	Maximum pressure	kPa	200	700	2000	200	200	600	200 (abs)
	Break-down pressure	kPa	300	1050	3000	300	300	900	300 (abs)
	Operating temp. range	°C	- 20 ~ 80						
	Compensated temp. range	°C	0 ~ 50						
	Operating humidity	%RH	35 ~ 85 (No condensation)						
	Storage temp.	°C	- 20 ~ 80 (Atmospheric pressure, humidity 65 %RH maximum)						
	Pressure medium		Corrosive gases/liquids compatible with SUS 316L						
	Insulation resistance	MΩ minimum	100 (500 V DC)						
	Dielectric strength		800 V AC, 60 s (Leakage current 1 mA maximum)						
	Sealed liquid		Silicone oil						
	Pressure port		R 1/4、G 3/8 (Flash diaphragm)、G 1/4 ※1						
	Net weight	g	R2 : Approx. 165, GF : Approx. 180, G2 : Approx. 170						
	Protection grade		IP65						

※1 An "O" ring provided. (G 3/8 : P18、G 1/4 : P15)

PA-850

PRESSURE TRANSDUCERS WITH AMP.

Item		Model number	PA-850					
			102G	352G	103G	102V	102R	302R
Power	Supply voltage	V DC	10.8 ~ 30 (Including ripple voltage)					
	Consumption current	maximum	20 mA					
Analog output	Output voltage	V	1 ~ 5					
	Zero voltage	V	1 ± 0.04			3 ± 0.1	2 ± 0.1	1 ± 0.04
	Span voltage	V	4 ± 0.04			4 ± 0.1		4 ± 0.04
	Output current	mA maximum	1 (Load resistance 5 kΩ minimum)					
	Linearity/Hysteresis	%F.S.	± 0.5					
	Thermal error	ZERO %F.S./°C	± 0.06					
		SPAN %F.S./°C	± 0.06					
	Supply voltage effect	V maximum	± 0.02					
	Response	ms	Approx. 2					
	Gravitational effect (From horizontal position to vertical position)	%F.S.	± 0.3	± 0.1	± 0.05	± 0.3		± 0.1
Switch output	No. of outputs	1						
	Output interface	NPN or PNP open collector output						
	Setting method	Adjustable by VR						
	Adjustable range	0 ~ 100 % of rated pressure range						0 ~ 108 % of rated pressure range
	Display	Red LED						
	Accuracy (Reference temp.: 25 °C)	%F.S. ± 3						
	Hysteresis	Approx. 1 ~ 15 % of set value						
	Hysteresis setting method	Adjustable by VR						
	Switching capacity	30 V DC 100 mA						
	Residual voltage	NPN : 0.8 V, PNP : 1.2 V						

ENVIRONMENTAL CHARACTERISTICS

Test item	Test conditions (At 25 ± 5 °C)	Permissible change
Vibration	10 ~ 500 Hz, 1.5 mm maximum/98.1 m/s ² , 3 directions for 2 hours each	Switch output setting and analog output (Zero voltage, Span voltage) : ± 1 %F.S. maximum each
Shock	490 m/s ² 3 directions for 3 times each	
Pressure cycling	10 ⁶ cycles 0 ~ Rated pressure/Rated pressure range	
Moisture resistance	40 °C, 90 ~ 95 %RH, 240 hrs.	

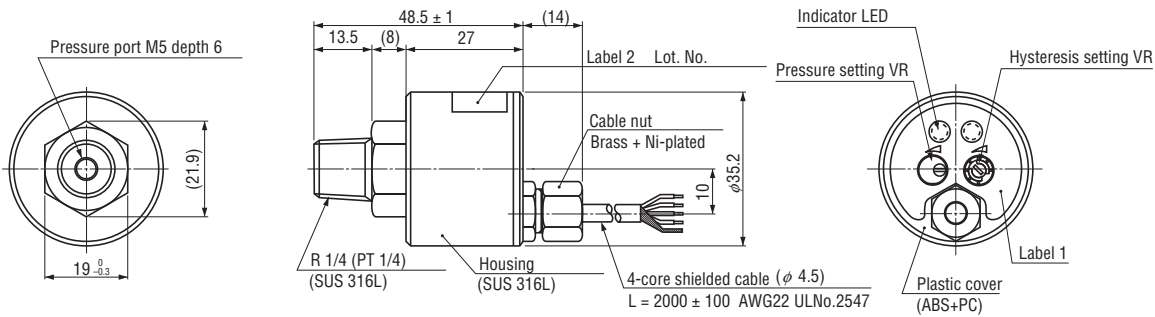
PA-850

PRESSURE TRANSDUCERS WITH AMP.

OUTLINE DIMENSIONS

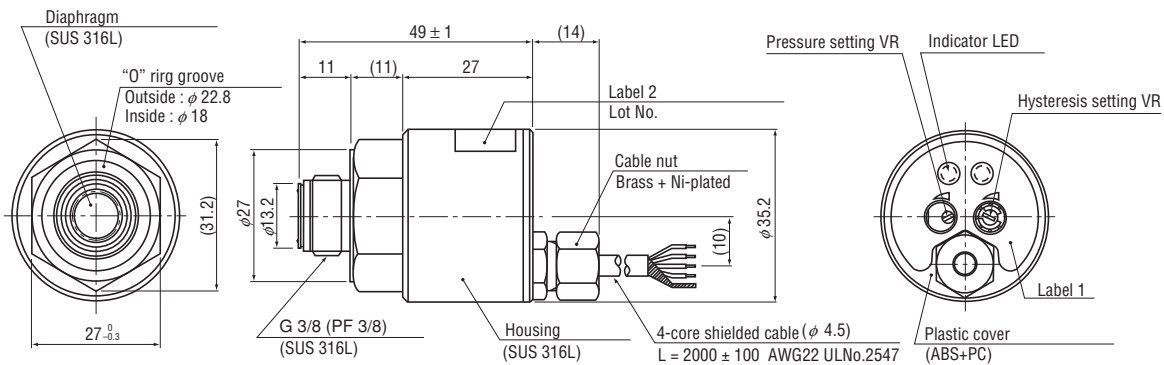
Unless otherwise specified, tolerance : ± 0.5 (Unit: mm)

Configurations of joint R2 (R1/4) type



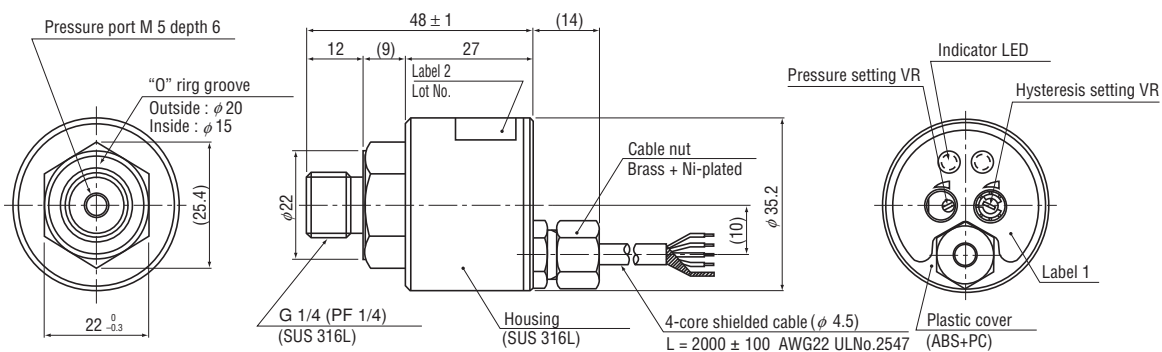
Wire color	Connection
Brown	Power ⊕
White	Analog output
Black	Switch output
Blue	Common
Shield	Fitting

Configurations of joint GF (G 3/8) type



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

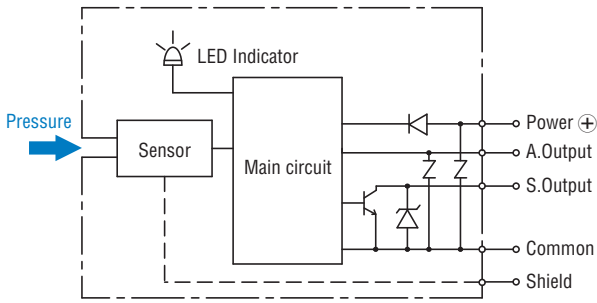
Configurations of joint G2 (G 1/4) type



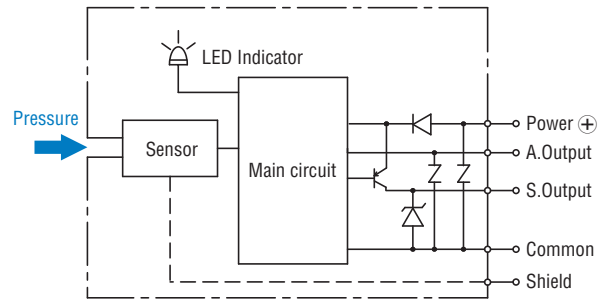
PA-850 PRESSURE TRANSDUCERS WITH AMP.

INTERNAL ELECTRICAL SCHEMATICS

● NPN output



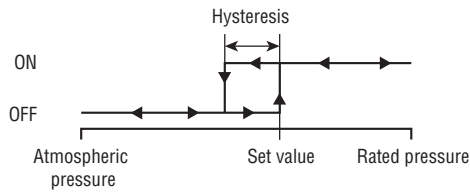
● PNP output



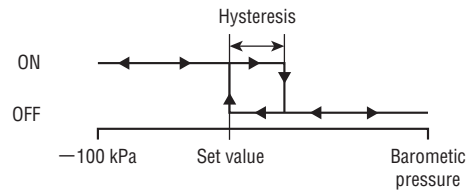
SWITCH OUTPUT SCHEMATICS

Turns on at the set pressure and turns off at the set pressure minus the hysteresis.

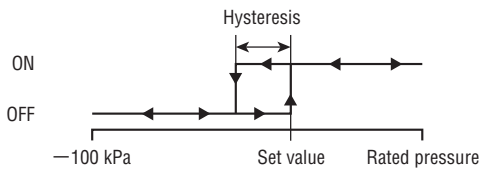
● PA-850-***G



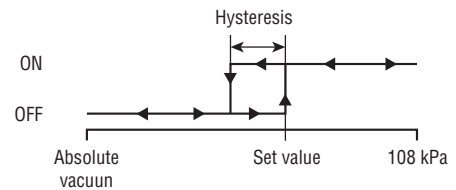
● PA-850-102V



● PA-850-***R



● PA-850-***A



※Adjustable hysteresis