



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





INTERNAL STRUCTURE
PA-858 (R 1/4)

Part name		Material
①	Fitting	SUS 316L
②	Housing	SUS 316L
③	Plastic cover	ABS (Acrylonitrile butadiene styrene) + PC (Polycarbonate)
④	Stainless steel diaphragm	SUS 316L

FEATURES

- High corrosion resistance and drip-proof construction
Pressure port attachment made of SUS 316L
Proven IP65 grade gauge body (IP65 in accordance with IEC)
- 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

PA-858 - 102 R - R2		
Series name		Fitting
Pressure reference	Rated pressure range	R2 : R 1/4 with M 5 female screw GF : G 3/8 with flash diaphragm G2 : G 1/4 with M 5 female screw
G : Gauge	102 : 0 ~ 100 kPa 352 : 0 ~ 350 kPa 103 : 0 ~ 1000 kPa	
V : Gauge (Vacuum)	102 : 0 ~ - 100 kPa	
R : Compound	302 : - 100 ~ 300 kPa	
A : Absolute	102 : 0 ~ 100 kPa abs	

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

PA-858

PRESSURE TRANSDUCERS WITH AMP.

LIST OF MODEL NUMBERS

Pressure reference		Gauge					Absolute
Fitting	Rated pressure range kPa	0 ~ 100	0 ~ 350	0 ~ 1000	0 ~ - 100	- 100 ~ 300	0 ~100
R2 (R 1/4)		PA-858-102G-R2	PA-858-352G-R2	PA-858-103G-R2	PA-858-102V-R2	PA-858-302R-R2	PA-858-102A-R2
GF (G 3/8)		PA-858-102G-GF	PA-858-352G-GF	PA-858-103G-GF	PA-858-102V-GF	PA-858-302R-GF	PA-858-102A-GF
G2 (G 1/4)		PA-858-102G-G2	PA-858-352G-G2	PA-858-103G-G2	PA-858-102V-G2	PA-858-302R-G2	PA-858-102A-G2

※ 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 24 V DC, load resistance of 250 Ω.

Item	Model number	PA-858						
		102G	352G	103G	102V	302R	102A	
General specifications	Pressure reference	Gauge					Absolute	
	Rated pressure range	kPa	100	350	1000	- 100	- 100 ~ 300	100 (abs)
	Maximum pressure	kPa	200	700	2000	200	600	200 (abs)
	Break-down pressure	kPa	300	1050	3000	300	900	300 (abs)
	Operating temp. range	°C	- 20 ~ 70					
	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		500 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					
Power	Supply voltage	V DC	24 ± 10 % (Including ripple percentage)					

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

PA-858

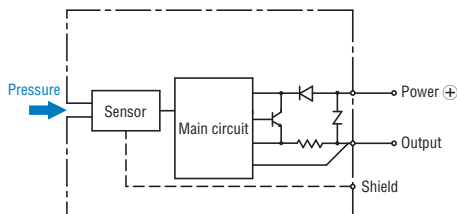
PRESSURE TRANSDUCERS WITH AMP.

Item		Model number	PA-858					
			102G	352G	103G	102V	302R	102A
Analog output	Output current	mA	4 ~ 20 mA					
	Zero current	mA (at 25 °C)	4 ± 0.2			8 ± 0.2		4 ± 0.2
	Span current	mA (at 25 °C)	16 ± 0.2					
	Load resistance		0 ~ 500 Ω					
	Linearity/Hysteresis	%F.S.	± 0.5					
	Thermal error	ZERO %F.S./°C	± 0.06					
		SPAN %F.S./°C	± 0.06					
	Response	ms	Approx. 2					
Gravitational effect (From horizontal position to vertical position)	%F.S.	± 0.3	± 0.1	± 0.05	± 0.3	± 0.1	± 0.3	

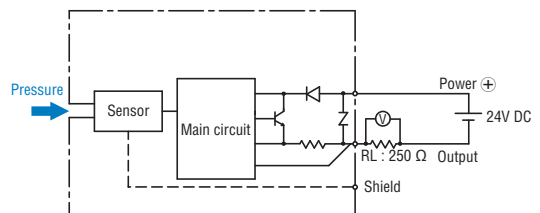
ENVIRONMENTAL CHARACTERISTICS

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	Zero current, Span current: ± 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.	

INTERNAL ELECTRICAL SCHEMATICS



RECOMMENDED EXTERNAL SCHEMATICS



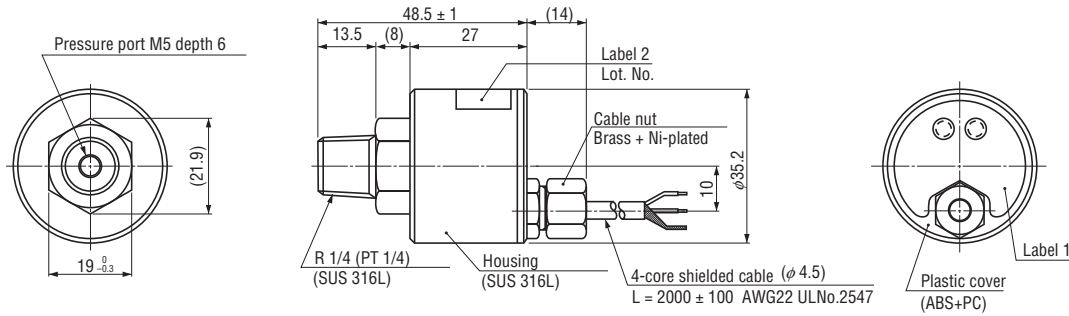
PA-858

PRESSURE TRANSDUCERS WITH AMP.

OUTLINE DIMENSIONS

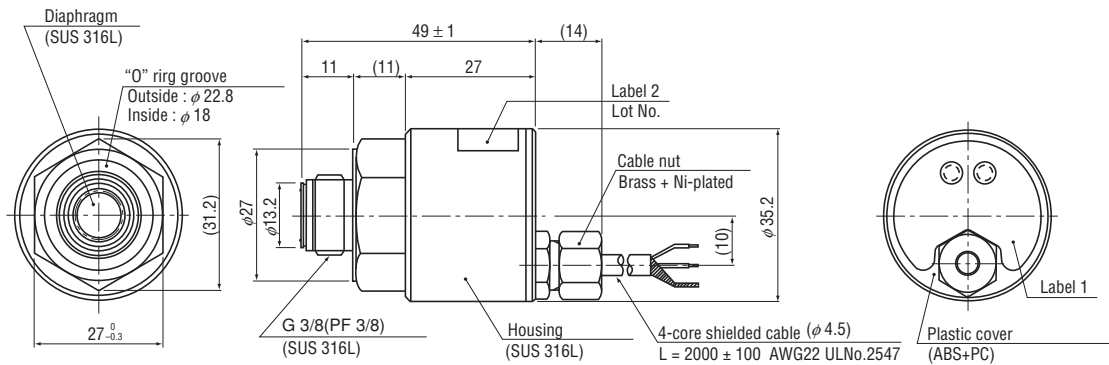
Unless otherwise specified, tolerance : ± 0.5 (Unit: mm)

Configurations of joint R2 (R1/4) type



Wire color	Connection
Brown	Power ⊕
White	Output
Black	N.C.
Blue	N.C.
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

