



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!



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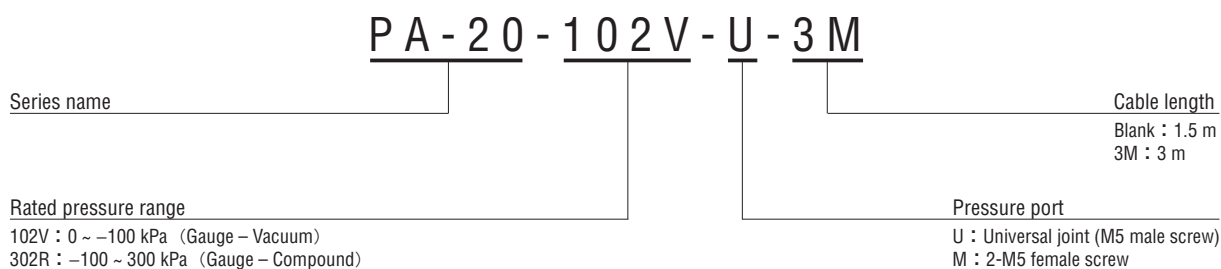
## FEATURES

- Ultra-small size pressure transducer with Amp.
- 2 types of pressure ports are available
- Meet EMC standards

**INTERNAL STRUCTURE (Universal joint)**

Part name	Material
① Pressure Port	SUS 304
② Housing	PC (Polycarbonate)
③ Sensor module	PPS (Polyphenylene sulphide)
④ "O" ring	Fluoro-rubber
⑤ Cable	Vynyl chloride
⑥ Gasket	POM (Polyoxymethylene)

## MODEL NUMBER DESIGNATION



## LIST OF MODEL NUMBERS

Pressure port	Cable length	Rated pressure range [kPa]	
		0 ~ -100	-100 ~ 300
Universal joint	1.5 m	PA-20-102V-U	PA-20-302R-U
	3 m	PA-20-102V-U-3M	PA-20-302R-U-3M
2-M5 female screw	1.5 m	PA-20-102V-M	PA-20-302R-M
	3 m	PA-20-102V-M-3M	PA-20-302R-M-3M

※Verify the above model numbers when placing orders.

# PA-20

## PRESSURE TRANSDUCERS WITH AMP.

### STANDARD SPECIFICATIONS

● Unless otherwise specified, the specs are defined at an ambient temperature of 25±5 °C and excitation voltage of 24 V DC.

Item		Model number	PA-20	
			102V	302R
General specifications	Pressure reference		Gauge	
	Rated pressure range	kPa	0 ~ -100	-100 ~ 300
	Maximum pressure	kPa	200	600
	Operating temp. range	°C	-10 ~ 60	
	Compensated temp. range	°C	0 ~ 50	
	Operating humidity	%RH	35 ~ 85 (No condensation)	
	Storage temp.	°C	-20 ~ 70	
	Pressure medium		Non-corrosive gases	
	Insulation resistance	MΩ minimum	100	
	Dielectric strength		500 V AC, 60 s	
	Net weight (Without cable)	g	Approx. 5 (PA-20- * * * * -U)    Approx. 8 (PA-20- * * * * -M)	
Power	Supply voltage	V DC	10.8 ~ 30 (Including ripple percentage)	
	Consumption current	mA maximum	20	
Analog output	Output voltage	V	1 ~ 5	
	Output current	mA maximum	1 (Load resistance : 5 kΩ minimum)	
	Linearity/Hysteresis	%F.S.	± 0.5	
	Thermal error (Reference temp.: 25 °C)	ZERO %F.S.	± 2	
		SPAN %F.S.	± 2	
Response	ms	Approx.1		

### ENVIRONMENTAL CHARACTERISTICS

Test item	Test conditions	permissible change
Vibration	10 ~ 55 Hz, 1.5 mm, 3 directions for 2 hours each	Analog output : ± 2 %F.S. maximum after test
Shock	1000 m/s <sup>2</sup> , 3 directions for 3 times each	
Pressure cycling	0 ~ Rated pressure, 10 <sup>6</sup> cycles	
Moisture resistance	40 °C, 90 ~ 95 %RH, 240 h.	
EMC	EMI : EN55011: 2007, A2 : 2007 Group 1, class B EMS : EN61326-1 : 2006/EN61326-2-3 : 2006 Table 2	Analog output ± 5 %F.S. maximum during test

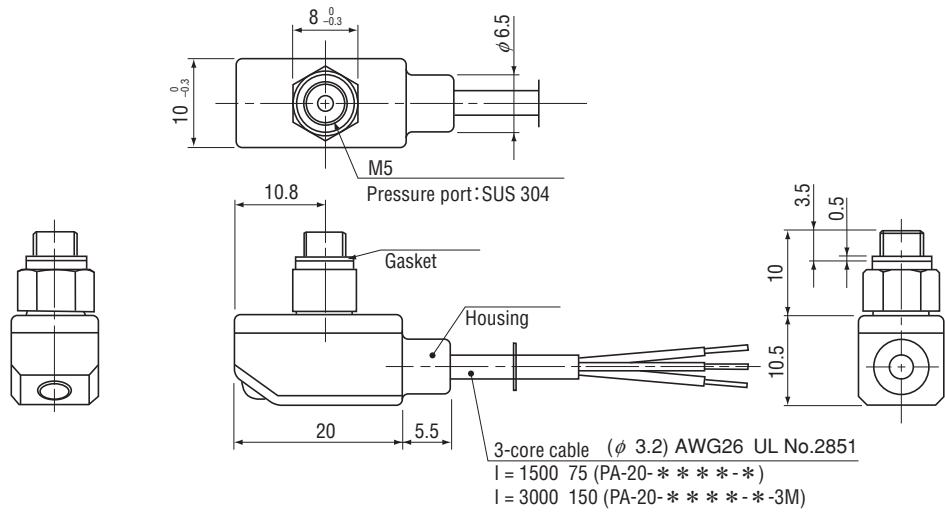
# PA-20

## PRESSURE TRANSDUCERS WITH AMP.

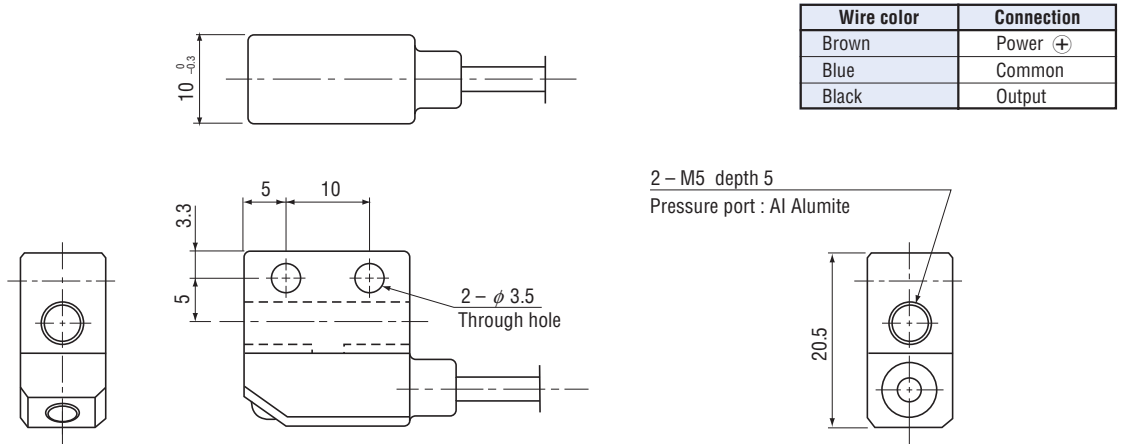
### OUTLINE DIMENSIONS

Unless otherwise specified, tolerance :  $\pm 0.5$  (Unit: mm)

#### ● Universal joint type



#### ● M5 female screw type



### INTERNAL ELECTRICAL SCHEMATICS

