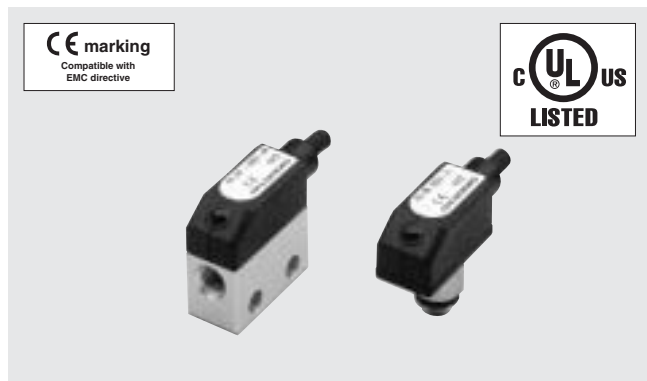


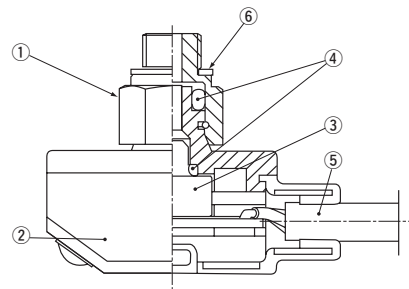
## PRESSURE TRANSDUCERS WITH AMP.

## PA-20



## 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

PA-20-102V-U-3M

Series name

Cable length

Blank : 1.5 m  
3M : 3 m

Rated pressure range

102V : 0 ~ -100 kPa (Gauge - Vacuum)  
302R : -100 ~ 300 kPa (Gauge - Compound)

Pressure port

U : Universal joint (M5 male screw)  
M : 2-M5 female screw

## 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		

### ENVIRONMENTAL CHARACTERISTICS

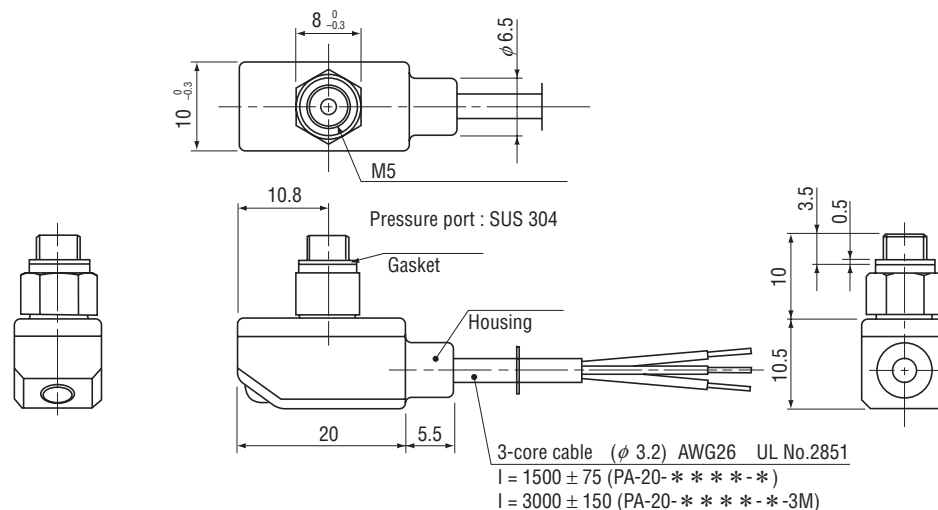
Test item	Test conditions	permissible change
Vibration	10 ~ 55 Hz, 1.5 mm, 3 directions for 2 hours each	Analog output : ± 2 %F.S. maximum after test
Shock	1000 m/s <sup>2</sup> , 3 directions for 3 times each	
Pressure cycling	0 ~ Rated pressure, 10 <sup>6</sup> cycles	
Moisture resistance	40 °C, 90 ~ 95 %RH, 240 h.	
EMC	EMI : EN55011 Group 1, class B (1998) EMS : EN61326-1 (1997), -A1 (1998)	± 5 %F.S. maximum during test

# PA-20 PRESSURE TRANSDUCERS WITH AMP.

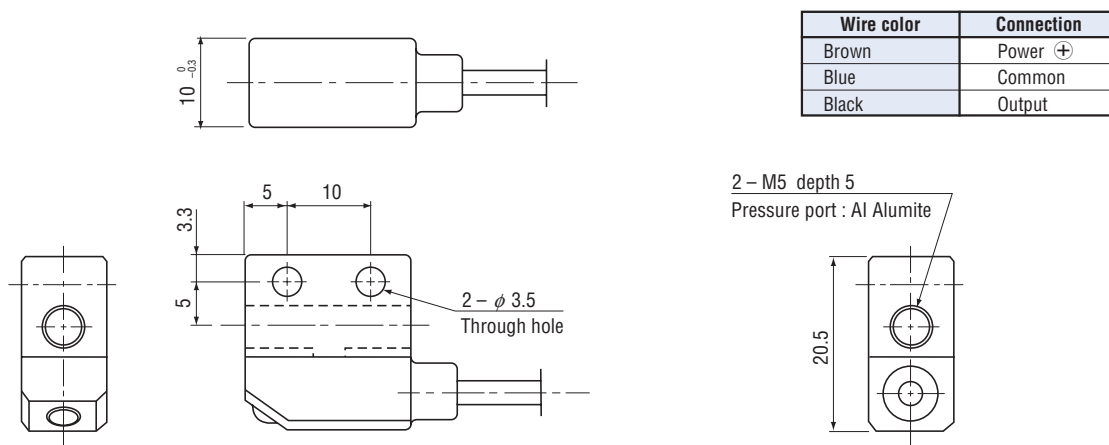
## OUTLINE DIMENSIONS

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

### Universal joint type



### M5 female screw type



## INTERNAL ELECTRICAL SCHEMATICS

