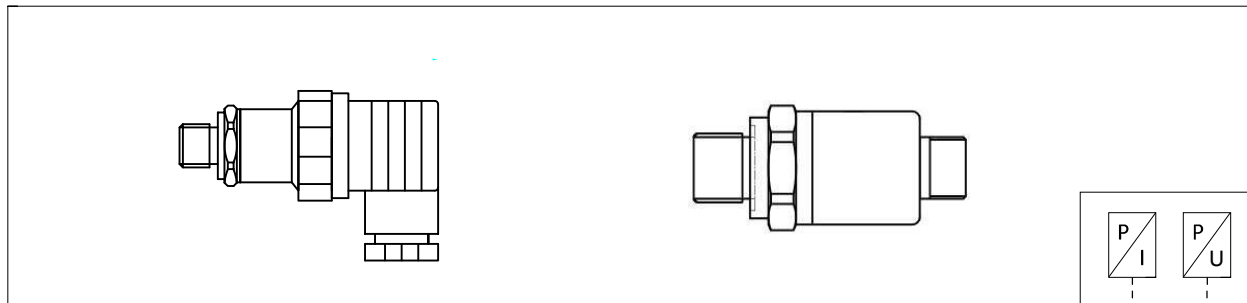


P170 High-precision Pressure Transducer

Stainless steel, compact design, max range 600bar, accuracy 0.25%FS

1. Introduction



P170 series is high-precision pressure transducer with stainless steel cases. P170 series offers a variety of measuring ranges, electrical connections, output signals and mounting threads.

2. How to order

P170	-	400	-	F3	-	A1	-	P2	-	G1	-	W2	-	N	-	10
(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)

(see below the details)

(1)	Product Category			
	P170	P170 series pressure transducer		
(2)	Measuring Pressure Range			
	050	0 - 50 bar	400	0 - 400 bar
	100	0 - 100 bar	500	0 - 500 bar
	200	0 - 200 bar	600	0 - 600 bar
	300	0 - 300 bar		
(3)	Measuring Accuracy			
	F2	± 0.5%FS		
	F3	± 0.25%FS		
(4)	Output Signal (see section 3)			
	V1	0.5 - 4.5 Vdc	A1	4 - 20 mA
	V2	0 - 5 Vdc	S4	RS485 bus
	V3	0 - 10 Vdc	C2	I2C bus
	V4	1 - 5 Vdc	SO	other signals ^{a)}

a) Consult BMEG

(5)	Supply Voltage (see section 3)	
	P2	8 - 32 Vdc
	P3	12 - 32 Vdc (for 0 - 10V output signal only)
(6)	Thread of Mounting Interface	
	G1	G1/4
	N1	NPT1/4 ^{a)}
(7)	Electric Connection (see section 5 & 6)	
	W1	cable
	W2	Hirschmann connector interface
(8)	Special Requests	
	N	standard
	O	special requests (consult BMEG)
(9)	Series No.	
	10	design series No.

3. Output signal & power supply ^{b)}

Voltage Output Signal (3-wire)		Current Output Signal (2-wire)	
output signal	power supply	output signal	power supply
0 - 10 Vdc	12 - 32 Vdc	4 - 20 mA	8 - 32 Vdc
0 - 5 Vdc	8 - 32 Vdc		
1 - 5 Vdc	8 - 32 Vdc		
0.5 - 4.5 Vdc	8 - 32 Vdc		

b) Other types of output signals and power supply available, please consult BMEG.

4. Main technical characteristics

Overload permissible	2 times rated pressure
Pressure type	Gauge pressure
Suitable medium	Gas or liquid which is compatible with stainless steel
Measurement accuracy	$\pm 0.5\%FS$ or $\pm 0.25\%FS$, optional when order
Long-term service stability	$\leq \pm 0.2\%FS/\text{year}$
Fluid temperature	$-40 - +125^{\circ}C$ (consult BMEG for other temperatures)
Zero temperature coefficient	Typical: $\pm 0.02\%FS/^{\circ}C$; Maximum: $\pm 0.05\%FS/^{\circ}C$
Temperature sensitivity coefficient	Typical: $\pm 0.02\%FS/^{\circ}C$; Maximum: $\pm 0.05\%FS/^{\circ}C$
Load (Ω)	Current(2-wire): $\leq [(power\ supply\ voltage - 7.5v)/0.02A]$ Voltage(3-wire): $\geq 10k$
Total current consumption	Current(2-wire): Max signal current=25mA Voltage (3-wire): 5mA
Shock resistance	100g, half sine of final peak serrated ladder type, duration 6 ms
Vibration resistance	$\leq \pm 0.1\%FS(X, Y, Z\ axis, 200Hz/g)$
Insulation resistance	$> 100M\Omega$ (500Vdc excitation)
Response time	$\leq 2ms$
Weight	About 150g without cable
Resolution	Infinitesimal (theoretically), 1/100000(usually)
Protection class	Socket type: IP65; Cable type: IP67; Waterproof type (IP68, consult BMEG)
Electromagnetic Compatibility	EN50081-1; EN50082-2; IEC61000-4-3

5. Electric wiring

Type of connection	2-wire wiring (4-20mA output)	3-wire wiring (voltage output)
W1		
W2		
W3		

6. Mounting dimension

Connection type W2 (Hirschmann connector included for delivery)	Connection type W3 (M12*1 areo connector not included for delivery)