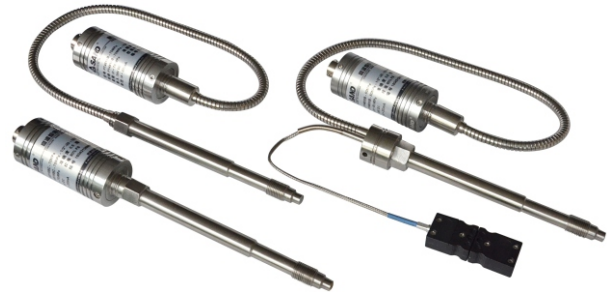


PT4XXX SERIES MELT PRESSURE TRANSDUCER

FEATURES

- ◆ Better than $\pm 0.5\%$ accuracy
- ◆ 3.33mV/V output
- ◆ 0-50 to 0-2000 bar / 0-750 to 0-30000 psi
- ◆ Internal 80% shunt calibration
- ◆ Standard Inconel diaphragm
- ◆ TiN, TiAlN or DCN coating available
- ◆ Applications with process temperature of up to 400°C
- ◆ 1/2-20UNF, M18x1.5, M22x1.5 standard threads; other types available on request



DESCRIPTION

SAND PT4XX6 series pressure transducers are ideal for the measurement of melt pressure in extrusion processes at temperatures up to 400°C. This series are produced with special materials and alloyed elastic diaphragm together with delicate processing and debugging. The main characteristics are high accuracy and small zero and span shifts caused by changes in process temperatures.

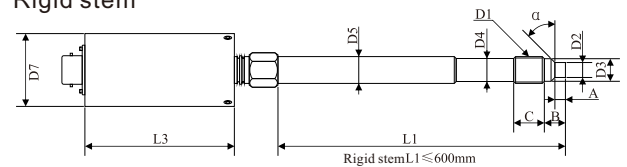
SPECIFICATIONS

Pressure range	0~50 to 2000bar(0~750 to 0~30000psi)
Accuracy	$\pm 0.5\%$ FS
Repeatability	$\pm 0.2\%$ FS
Input excitation	10Vdc recommended, 6-12Vdc
Output signal	3.33mV/V, 3.0mV/V, 2.5mV/V, 2.0mV/V
Maximum diaphragm temperature	662° F (350°C) for rigid stem 752° F (400°C) for flexible
Zero shift due to temperature change	20 psi/100°C 0.15MPa/100°C
Process connection	1/2-20 UNF thread (45° conical seal) M14x1.5, M18x1.5, M22x1.5 etc
Maximum Overload Pressure Rating	1.5 x FS (<1000bar) 1.2 x FS (>1000bar)
Pressure Units	PSI, Bar, MPa or Kg/cm ²
Internal Shunt Calibration	80% FSO \pm 1%FSO
Measurement principle	4-arm bonded foil strain gage Wheatstone bridge
Electrical Connection	6PIN or 8PIN
Max Torque	30Nm(22lbf ft)
Temperature Sensor (optional)	E, J, K, S type or Pt100

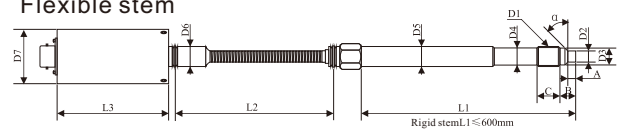
MECHANICAL DIMENSIONS

D1	M12×1.5	M14×1.5	1/2" -20	M18×1.5	M22×1.5	M28×1.5	G3/4"	PF3/8"	1 1/2"-16"	3.25"	3.5"	
D2	φ 7.8	φ 7.8	φ 7.8	φ 9.8	φ 9.8 φ 15.8	φ 17.8	φ 17.8	φ 9.8	φ 23.5	φ 23.5	φ 23.5	
D3	φ 10	φ 11.8	φ 10.5	φ 15.5	φ 19.5	φ 24	φ 24	φ 14	φ 33.5	φ 33	φ 33	
D4	φ 10	φ 12	φ 10.8	φ 16	φ 19.5	φ 25	φ 24	φ 14				
D5	φ 11.7	φ 13.8	φ 12.7	φ 17								
D6	Standard dimension φ17; other dimensions can be customized											
D7	Standard dimension φ38; other dimensions can be customized											
α	Standard angle 45° /90° ; other angle can be customized											
A	5.5	5.5	5.5	6	10	11	11	8	13	13.5	13.5	
B	11	12.5	12	14	16	17	17	12	21	51	61	
C	17	17	17	20	35	28	40	25	37	19	19	
L1	Standard dimension 150mm; other dimensions can be customized											
L2	Standard dimension 470mm; other dimensions can be customized											
L3	Standard dimension 78mm; other dimensions can be customized											
Seal	45° slopes				plain end face				flange installation			

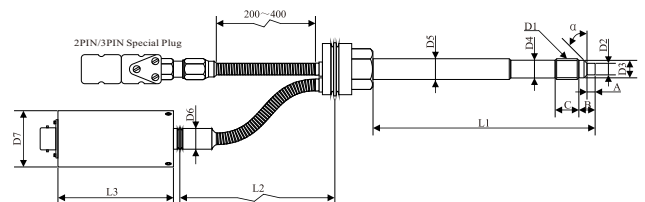
Rigid stem



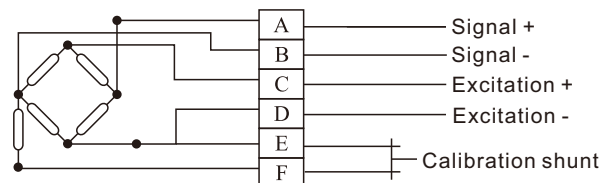
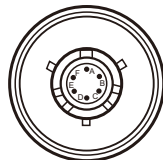
Flexible stem



Flexible stem with thermocouple



ELECTRICAL CONNECTION



ACCESSORIES

Connectors

- 5PIN mating connector
- 6PIN mating connector
- 8PIN mating connector

Extension cables

- 5PIN/6PIN connector with 5m cable
- 5PIN/6PIN connector with 10m cable
- 5PIN/6PIN connector with 15m cable
- 5PIN/6PIN connector with 30m cable

Accessories

- Mounting bracket
- Drill kit (1/2"-20UNF,M18X1.5 etc)
- Cleaning kit(1/2"-20UNF,M18X1.5 etc)
- Thread adaptors

Recommended accessories

- Rupture disk
- Mini deadweight tester
- mV/V to mA or Voltage convertor
- mV/V signal simulator

ORDERING GUIDE

PT 4XXXX-XXX-XXX-XXX/XXX-X-XXX

Version
 51=Rigid stem
 61=Rigid stem+Flexible
 62=Flexible + Temperature

Electrical Connection
 6=6PIN connector
 8=8PIN connector

Coating
 Null=no coating
 C=TiN coating
 T=TiAlN coating
 D=DCN coating

Pressure range			
MPa	BAR	PSI	
		3.5MPa	35B
5MPa	50B	750	750P
10MPa	100B	1500	1M5
20MPa	200B	300	3M
35MPa	350B	5000	5M
50MPa	500B	7500	7M5
70MPa	700B	10000	10M
100MPa	1000B	15000	15M
150MPa	1500B	20000	20M
200MPa	2000B	30000	30M
Other ranges on request			

Process connection
 1/2-20=1/2"-20UNF
 M10=M10X1.0
 M12=M12X1.5
 M14=M14 X 1.5
 M18=M18 X 1.5
 M22=M22X1.5
 PF3/8=PF3/8"
 G3/4=G3/4"
 Other sizes on request

Output Signal
 3.33mV/V
 3.0mV/V
 2.5mV/V
 2.0mV/V

Thermocouple
 Null=No thermocouple
 J=J type
 K=K type
 E=E type
 Pt100=Pt100

Flexible stem length
 None=0
 470=470mm(18")
 760=760mm(30")
 Other size on request

Rigid stem length
 150=150mm(6")
 76=76mm(3")
 100=100mm(4")
 228=228mm(9")
 305=305mm(12")
 Other sizes on request