

Pressure Transducers

MSE-3300 Series



The MSE-3300 is a “flow through” pressure transducer suitable for use in monitoring pressure of various high-purity and corrosive/aggressive fluids. The “flow through” design provides for minimal “dead volume” which reduces the potential for contamination of the measured fluid/process. The heart of the MSE-3300 is a uniquely designed all PFA diaphragm/nano-composite ceramic sensor. The product’s “balloon shaped” PFA pressure structure eliminates the need for any o-ring seals, thus insuring the ultimate in purity for your process. The proprietary technique of bonding of this PFA to the ceramic sensor insures accurate and highly reliable operation. The MSE-3300 is available in several ranges and can measure pressure to 150 psig. The product incorporates integral temperature compensating sensor electronics, further enhancing the product’s features and performance.

Features

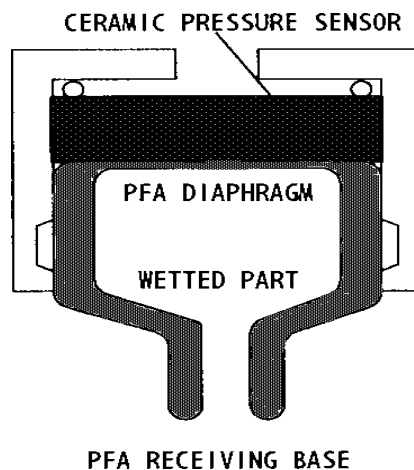
- 1% full-scale accuracy
- Capable of measuring gauge and vacuum pressure
- All PFA wetted part construction
- No o-ring seals or fill fluids
- Flow-through design insures minimal “dead volume”
- Integral temperature compensation circuitry
- Built-in leak indicator
- Choice of end fittings: tube, flare, NPT or Pillar
- CE Compliant

Applications

- High-purity DI water and aggressive chemical monitoring
- Filtration condition monitoring
- General pressure monitoring

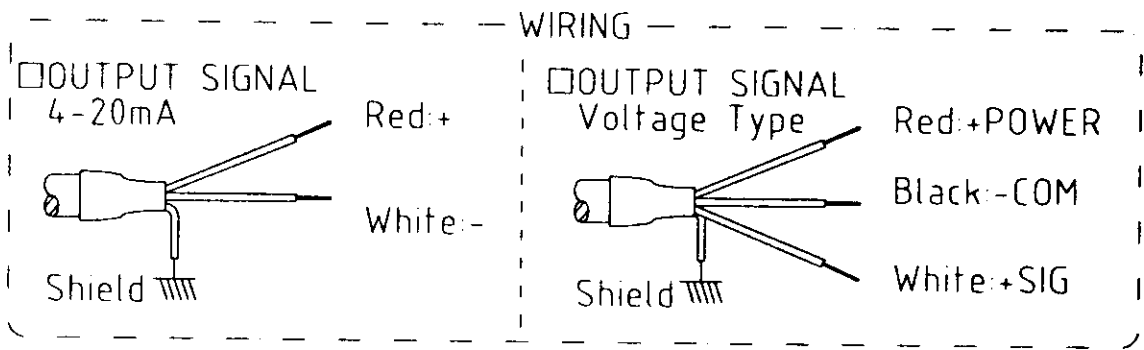
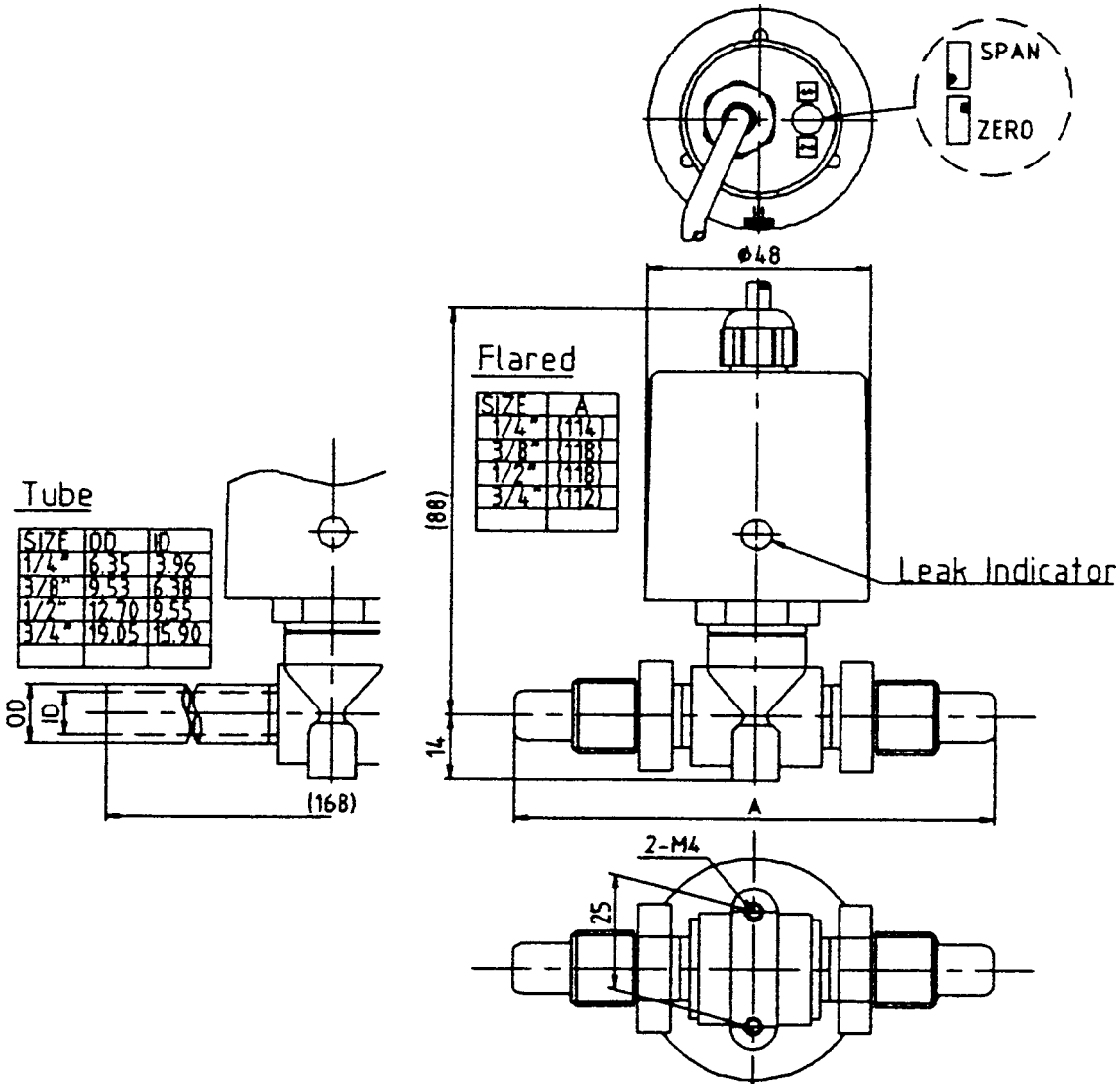
Sensor Construction

The heart of the MSE-3300 is its unique construction. To insure the highest of purity, a patented “balloon” shaped body/diaphragm are manufactured from one contiguous piece of plastic; the exterior of the housing is rigid, while the interior PFA “balloon” is flexible. A ceramic diaphragm is attached to the thin PFA to create a strong non o-ring sensor assembly. A strain gauge element is sintered to the dry side of the ceramic diaphragm, which in turn provides diaphragm deflection information to the integral processing electronics.



MSE-3300 Series

Dimensional Drawing



Note: All dimensions are in millimeters unless stated otherwise

Pressure Transducers

Pressure Transducers

Specifications

Measurement Range	0(-14.7) to 150 psi (Gauge, Compound pressure)	
Maximum Allowable Over Pressure	0 to 50 psig - 110 psig, 0 to 75 psig - 110 psig, 0 to 150 psig - 180 psig	
Accuracy*	+/- 1% F.S (std 25 Deg C)	
Output Signal	4 - 20 mA	1 -5V, 0 - 5V, 0 - 10V
Supply Voltage	DC24V	DC15-24V
Operating Temperature	0 to 80 Deg C / (32 to 176 Deg F)	
Compensated Temperature	15 to 40 Deg C / (59 to 104 Deg F)	
Thermal Effect	+/- 0.5 % FS/Deg C (15 to 40 Deg C)	
Process Connection -- Sizes	1/4", 3/8", 1/2" & 3/4"	
Process Connection -- Types	Tube, Flared, PT, NPT, Super Pillar	
Enclosure Protection	Ip 55 Compatible	
Construction Materials	Diaphragm, Wetted part - PFA, Electrical enclosure - Polypropylene	

* Linearity, Hysteresis, Repeatability

Ordering Information

MSE	-	Model	-	Output	-	Fitting Type	Fitting Size	-	Range	Measure	Pressure
MSE	-	3300	-	420 - 4 - 20mA 005 - 0 - 5 V 105 - 1 - 5 V 010 - 0 - 10V	-	P - Tube F - Flared R - R (PT) N - NPT S - Super Pillar	1 - 1/4" 2 - 3/8" 3 - 1/2" 4 - 3/4" 5 - Others	-	050 - 50 075 - 75 100 - 100 145 - 145	P - PSI K - Kg/sq.cm M - Mpa	G - Gage Pressure C - Compound Pressure