



# KL-91 Series PFA/PTFE Pressure Transmitter

## Features

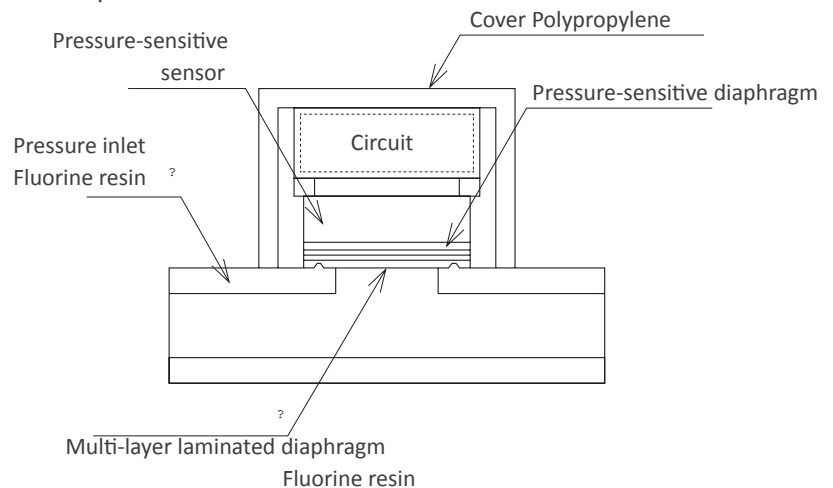
- +/- 1 % full-scale accuracy
- All PFA/PTFE wetted part construction and PTFE coating on Alumina Sensor
- No o-ring seals or fill fluids
- Choice of end fitting: Flare, Pillar, 20S or Tube

## Description

The KL-91 is a pressure transducer suitable for use in monitoring pressure of various high-purity fluids. The superior design provides for minimal “dead volume” which reduces the potential for contamination of the measured fluid. The KL-91 is available in two construction type: inline or insertion. The body construction meets IP-65 requirements and EMC resistant the level of CE.

## Operation

The o-ring free design minimizes the generation of containment and the elution of metal, which makes it suitable for pressure monitoring in the semiconductor industry. All wetted parts are made of fluoro-polymers (PFA, PTFE). The sensor is IP-65 rated to meet the application requirement for semiconductor’s wet environments.



## Applications

- High-purity DI water, and CMP slurry
- Filtration condition monitoring
- General pressure monitoring

## Measurement Specifications

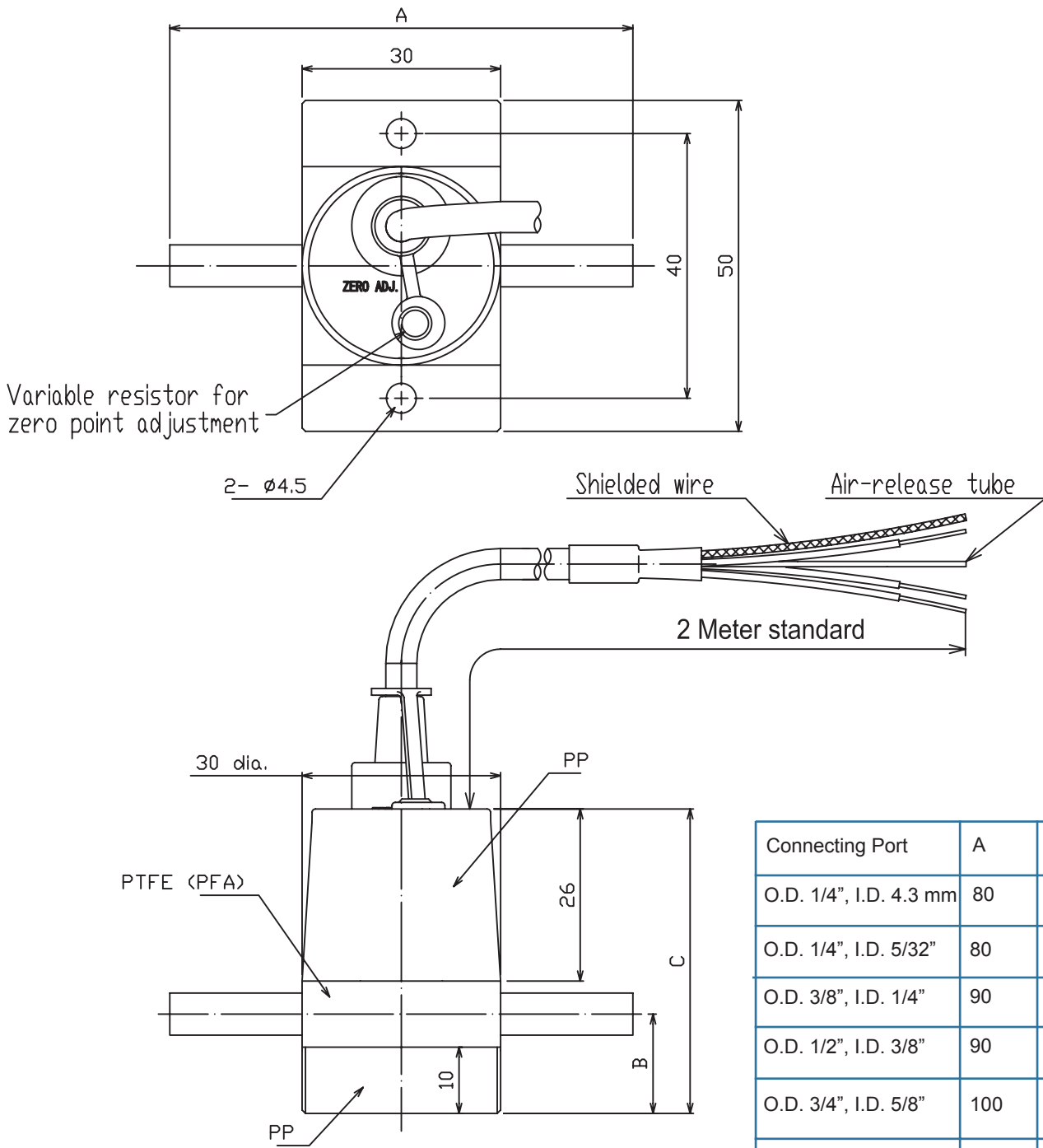
Material of wetted parts	PFA / PTFE
Material of non-wetted parts	Polypropylene
Pressure Range	-15 to 80 psi
Allowable maximum pressure	120 psi
Temperature coefficient	+/- 0.05 % F.S. / deg. C
Power and supply current	24 VDC* $\pm$ 10% ( 2 wire system ) 10 ~ 24 VDC ( 3 wire system )
Analog output	2 wire: 4 ~ 20 mA DC ( Load Resistance: 500 $\Omega$ max. at 24 VDC ) 3 wire: 1 ~ 5 VDC , 0 ~ 10 VDC ( Load Resistance: 10 k $\Omega$ min. )
Accuracy	$\pm$ 1% F.S.
Connection sizes	1/4" , 3/8" , 1/2" , 3/4" , 1"
Operating temperature range	10 to 80°C
Operating humidity range	25 to 80% RH ( no condensation inside sensor )
Protection	IP-65
Cable length	2 m
Weight	180 g ( with cable )

\* 24 VDC  $\pm$ 10% power supply required for 0 to 10 VDC / 4-20 mA outputs

# Dimensional and Cut-Away Drawings

## In-line Design

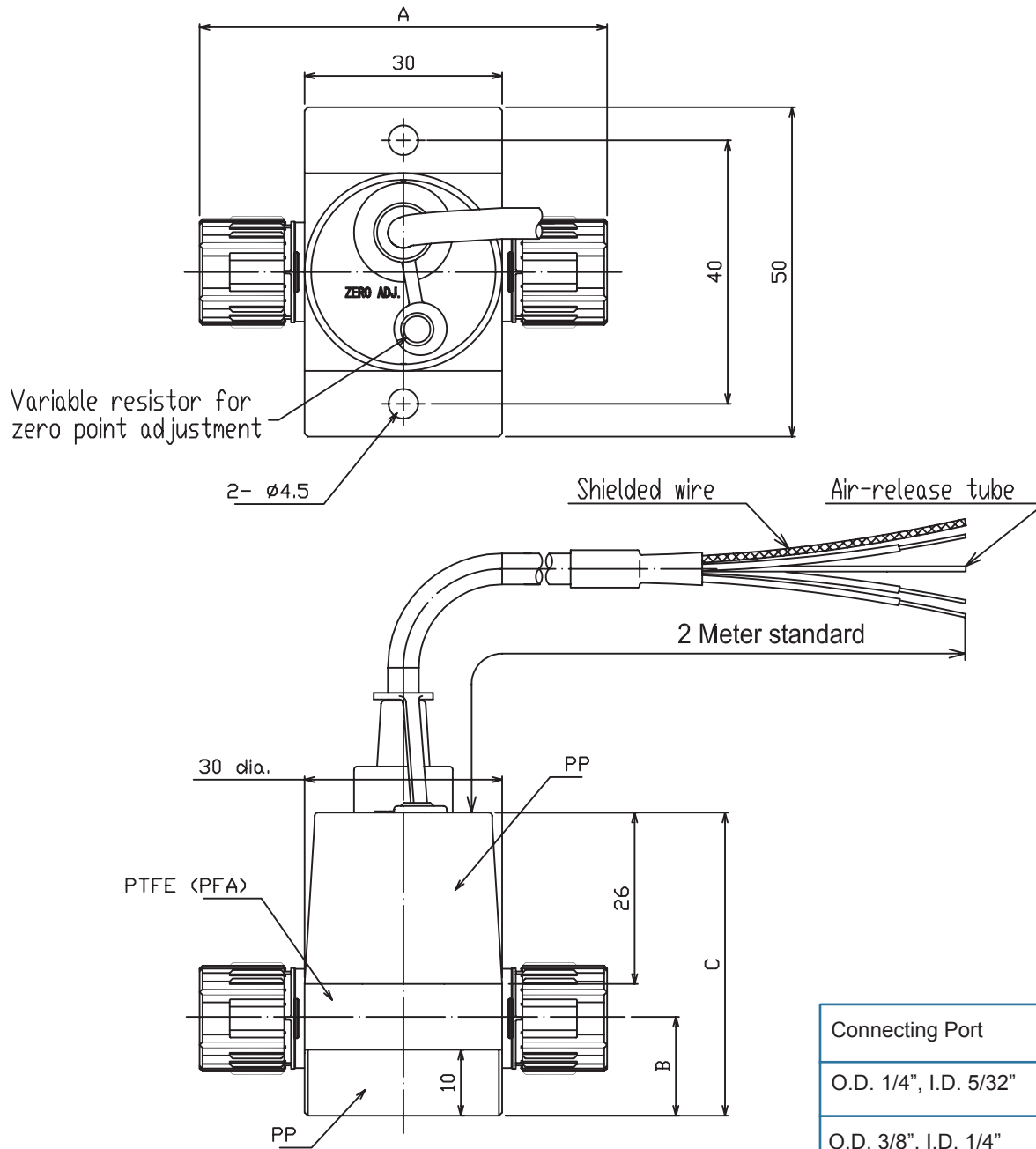
[ Tube stub version ]



Connecting Port	A	B	C
O.D. 1/4", I.D. 4.3 mm	80	15	46
O.D. 1/4", I.D. 5/32"	80	15	46
O.D. 3/8", I.D. 1/4"	90	17.5	51
O.D. 1/2", I.D. 3/8"	90	17.5	51
O.D. 3/4", I.D. 5/8"	100	22.5	61
O.D. 1", I.D. 7/8"	1102	56	6

# Dimensional and Cut-Away Drawings

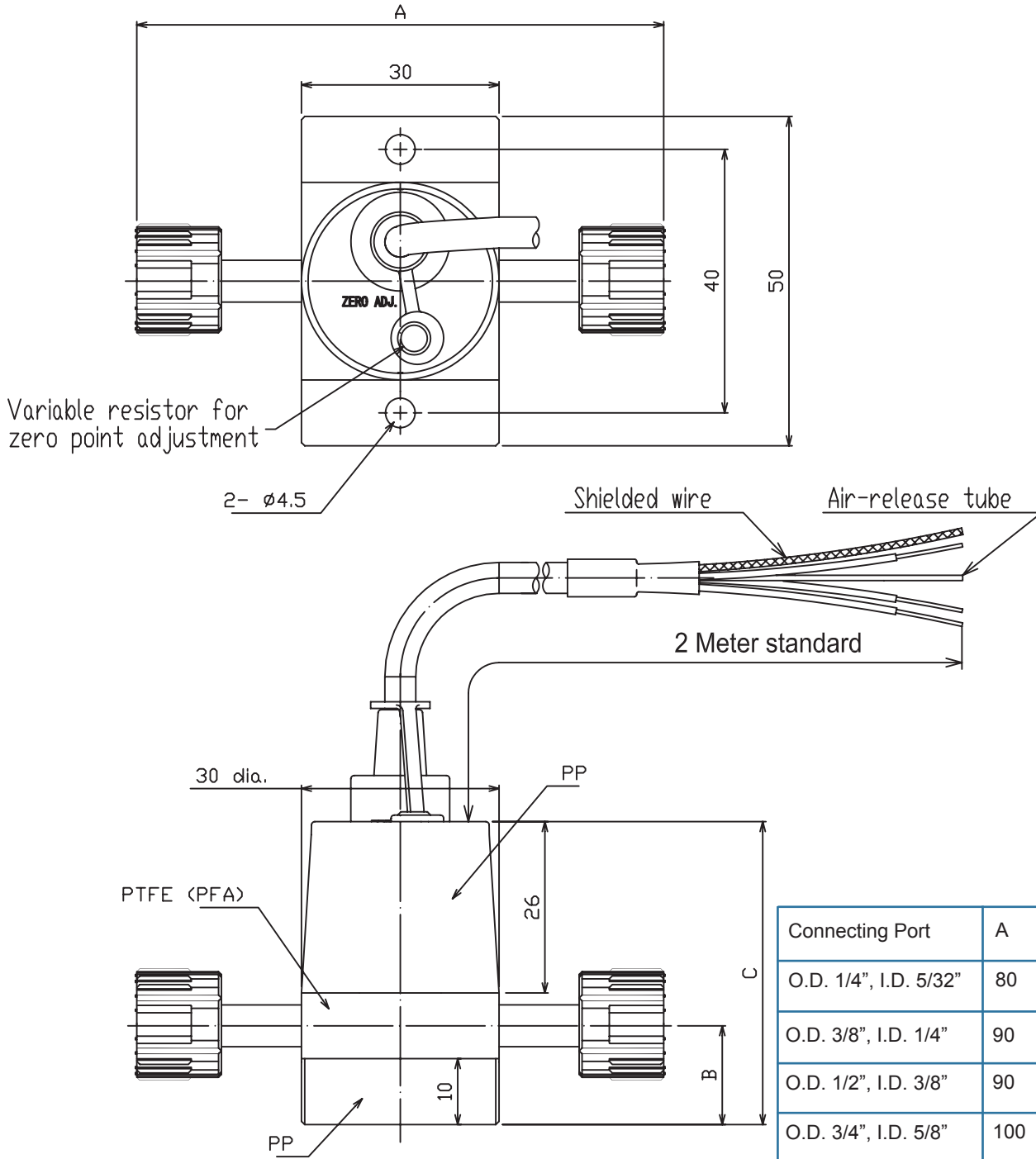
[ Pillar S300 male version ]



Connecting Port	A	B	C
O.D. 1/4", I.D. 5/32"	68	20	56
O.D. 3/8", I.D. 1/4"	80	22.5	61
O.D. 1/2", I.D. 3/8"	88	25	66

# Dimensional and Cut-Away Drawings

[ Pillar S300, nut and sleeve version ]



Connecting Port	A	B	C
O.D. 1/4", I.D. 5/32"	80	15	46
O.D. 3/8", I.D. 1/4"	90	17.5	51
O.D. 1/2", I.D. 3/8"	90	17.5	51
O.D. 3/4", I.D. 5/8"	100	22.5	61
O.D. 1", I.D. 7/8"	110	25	66

## Ordering Information

Model Code								Description
KL-91	-	M		-			-	Pressure Transducer
	-							
		M						
			1					In-line
			2					Single port
Connection Type			0					Flaretek
			1					Tube
			2					Pillar Super 300 ( female )
			3					Pillar Super 300 ( male )*
			4					20S
Size			1					1/4 "
			2					3/8 "
			3					1/2 "
			4					3/4"
			-					
Input / Output			1					24 VDC / 0 to 10 VDC
			2					24 VDC / 4 to 20 mA
			3					12 to 24 VDC / 1 to 5 VDC
			4					12 to 24 VDC / 0 to 5 VDC
								-
Pressure Range						50		0 to 50 psig
						75		0 to 75 psig
						80		0 to 80 psig
						15C		-15 to 15 psig compound

\* For in-line type only