PL-692

Liquid Differential Pressure Sensor

Features:

- Suitable for water, steam (with pigtail) or air
- Robust construction
- 6mm Compression pressure connections

Technical Overview

The PL-692 range of differential pressure transmitters is suitable for use with liquids and non-aggressive gases. With unique ceramic sensing technology for no mechanical aging and creepage.

The sensor and transmitter are housed in a robust stainless steel casing with a 1.5 meter flying lead for electrical connection and sealed for IP65 protection.

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Specification:

Output:		
	PL-692-x	4-20mA (2-wire loop powered)
	PL-6912-x-V	0-10Vdc
Supply voltage:		
	4-20mA	11 to 33Vdc
	0-10Vdc	18 to 33Vdc or 24Vac ±15%
Load @ nominal pressure:		
	4-20mA	$\leq \frac{\text{Supply voltage} - 11V}{0.02A}$ (Ohm)
	0-10Vdc	>10Kohm
Current consumption:		
	4-20mA	<25mA
	0-10vdc	<5mA
Electrical connections		1.5m flying lead
Accuracy (total Linearity, hysteresis & repeatability):		
	±0.5% f/s max.	@ 2 x nominal pressure
	±0.75% f/s max.	@ 3 x nominal pressure
	±1.25% f/s max.	@ 5 x nominal pressure
Response time		<5ms
Overload		See page 3
System pressure:		
	≤ 6 bar	25 bar
	≥ 10 bar	50 bar
Materials in contact with the medium		Cermic / stainless steel 1.4305 EPDM seal
Load cycle		<50Hz
Temperature:		
	Media	-15 to +80°C
	Ambient	-15 to +80°C
Dimensions		130 x 40mm
Pressure connections		6mm Compression
Protection		IP65
CE Conformity:		
		EN 61000-6-2, EN 61000-6-3 EMC, CE Marked
Country of origin		Switzerland

CE

The products referred to in this data sheet meet the requirements of EU Directive 2014/30/EU

Part Codes:

4-20mA Output:

PL-692-0.1	Liquid DP transmitter 0-100 mbar
PL-692-0.2	Liquid DP transmitter 0-200 mbar
PL-692-0.4	Liquid DP transmitter 0-400 mbar
PL-692-1	Liquid DP transmitter 0-1 bar
PL-692-2.5	Liquid DP transmitter 0-2.5 bar
PL-692-4	Liquid DP transmitter 0-4 bar
PL-692-6	Liquid DP transmitter 0-6 bar
PL-692-10	Liquid DP transmitter 0-10 bar
PL-692-16	Liquid DP transmitter 0-16 bar

0-10Vdc Output:

PL-692-0.1-V	Liquid DP transmitter 0-100 mbar
PL-692-0.2-V	Liquid DP transmitter 0-200 mbar
PL-692-0.4-V	Liquid DP transmitter 0-400 mbar
PL-692-1-V	Liquid DP transmitter 0-1 bar
PL-692-2.5-V	Liquid DP transmitter 0-2.5 bar
PL-692-4-V	DP pressure transmitter 0-4 bar
PL-692-6-V	Liquid DP transmitter 0-6 bar
PL-692-10-V	Liquid DP transmitter 0-10 bar
PL-692-16-V	Liquid DP transmitter 0-16 bar

Accessory

PL-692-CAL	Calibration certificate

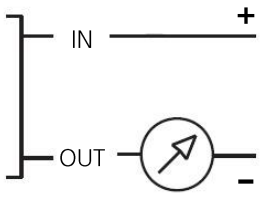
Installation & Connections:

1. Mount the transmitter in a suitable location, connect the pressure points to the system pipe using the 6mm compression connectors on both low and high pressure ports.

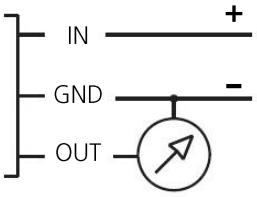
2. The sensor can be mounted in any orientation if the temperature is between -15 to +80°C.

3. Make electrical connections:

PL-692-x (4-20mA):

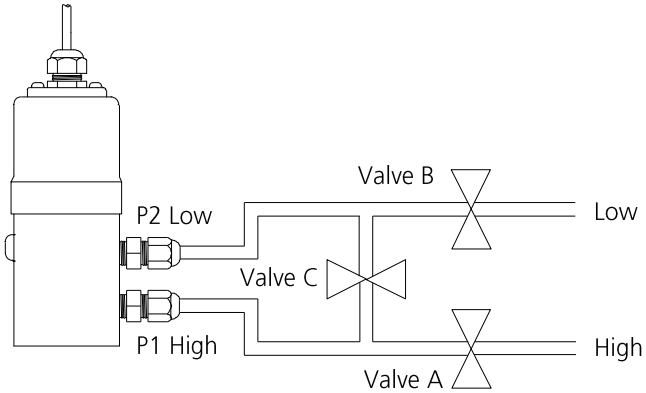


PL-692-x-V (0-10Vdc):



Tech Tip:

For differential pressure measurement at high line pressure, it is recommended that the pressure sensor should be installed with a valve in each line plus a shunt (bypass) valve across the high (P1) and low (P2) pressure ports. This ensures that any potential overload on either P1 or P2 doesn't exceed the maximum permitted.



Valve A = High side valve
Valve B = Low side valve
Valve C = Shunt (bypass) valve

Valve C should be open and valves A & B closed whenever the system is first being wetted or pressurized. Valves A & B should then be opened **slowly** to avoid hammering. Valve C can then be closed and the system is operating.

If the pressure sensor is to be removed from the system, valve C must be opened first, the valve A & B can then be closed.

Overload (bar) 1 side (max)	PL-692-0.1	PL-692-0.2	PL-692-0.4	PL-692-1	PL-692-2.5	PL-692-4	PL-692-6	PL-692-10	PL-692-16
P1 (+)	0.6	1.2	2	5	12	12	12	20	32
P2 (-)	0.6	1.2	2	5	12	12	12	20	32