

Product Overview

The AX-LDPT250F Differential Pressure Transmitters uses a piezo-resistive sensor for pressure monitoring of liquids and non aggressive gases. These units are available in a number of different ranges with either a 4-20mA or 0-10V DC output signal. Mechanical connection is via 1/4" BSP parallel female Stainless Steel 316 connectors and Hirschman Plug for electrical connection. The AX-LDPT250F units supports mounting as well.



Products Features

- Complete Stainless Steel 316 Unit
- 1/4" BSP female connection
- 0-10Vdc and 4-20mA variants
- Hirschman Plug for electrical connection

Product Specifications

Range:	0-0.16, 0-0.4, 0-0.6, 0-1, 0-2, 0-4, 0-7, 0-10 and 0-16bar	
Overpressure:	≤2 times FS, Negative pressure not allowed	
Maximum Static:	≤100bar	
Long-term Stability:	±0.5%FS/year (≤ 2bar), ±0.2%FS/year (>2bar)	
Pressure Connection:	1/4" BSP female stainless steel 316	
Electrical Connection:	Angular Connector, Hirschman Plug	
Power Supply:	250F-V Variants	24V AC/DC ±15%
	250F-I Variants	15 - 28V DC
Output:	250F-V Variants	0-10V DC Load Impedance > 10KOhms
	250F-I Variants	4-20mA Load Impedance <450 Ohms @24V DC
Accuracy:	0.25% FS	
Operating Temperature:	-30°C to +80°C	
Dimensions:	58mm(L) x 147.2mm(H)	
Weight:	0.6kg	
Diaphragm:	Stainless Steel 316L	
Pressure port:	Stainless Steel 316L	
Housing:	Stainless Steel 316L	
Protection:	IP65	
Approval:	CE	
Country of origin:	United Kingdom	

Product Order Codes

Current Version	
Part number	Description
AX-LDPT250F-I-160M	LDPT Current Output, 0-160mBar
AX-LDPT250F-I-400M	LDPT Current Output, 0-400mBar
AX-LDPT250F-I-600M	LDPT Current Output, 0-600mBar
AX-LDPT250F-I-1	LDPT Current Output, 0-1Bar
AX-LDPT250F-I-2	LDPT Current Output, 0-2Bar
AX-LDPT250F-I-4	LDPT Current Output, 0-4Bar
AX-LDPT250F-I-7	LDPT Current Output, 0-7Bar
AX-LDPT250F-I-10	LDPT Current Output, 0-10Bar
AX-LDPT250F-I-16	LDPT Current Output, 0-16Bar

Voltage Version	
Part number	Description
AX-LDPT250F-V-160M	LDPT Voltage Output, 0-160mBar
AX-LDPT250F-V-400M	LDPT Voltage Output, 0-400mBar
AX-LDPT250F-V-600M	LDPT Voltage Output, 0-600mBar
AX-LDPT250F-V-1	LDPT Voltage Output, 0-1Bar
AX-LDPT250F-V-2	LDPT Voltage Output, 0-2Bar
AX-LDPT250F-V-4	LDPT Voltage Output, 0-4Bar
AX-LDPT250F-V-7	LDPT Voltage Output, 0-7Bar
AX-LDPT250F-V-10	LDPT Voltage Output, 0-10Bar
AX-LDPT250F-V-16	LDPT Voltage Output, 0-16Bar

Installation

The AX-LDPT250F should be installed by a suitably qualified technician in accordance with prevailing regulations and any guidelines for the equipment to which it is to be connected. It is not suitable for use with mains voltage.

The device should be mounted on a wall or other suitable surface using the bracket provided. Pipework should then be installed to the unit and terminated at ports P1 and P2 using the 1/4" BSP female. It is the responsibility of the installer to ensure that the pipework is suitable for the system pressure.

Maximum line pressure is the balanced (same pressure on each port) pressure that can be applied without damaging the sensor. Proof pressure is the maximum pressure that may be applied without changing the transducer's performance within the specifications. Ensure that the differential pressure transducer range, maximum line pressure and materials are correct for application. As the transducer is a delicate instrument it should not be mounted in a position where it is vulnerable to damage.



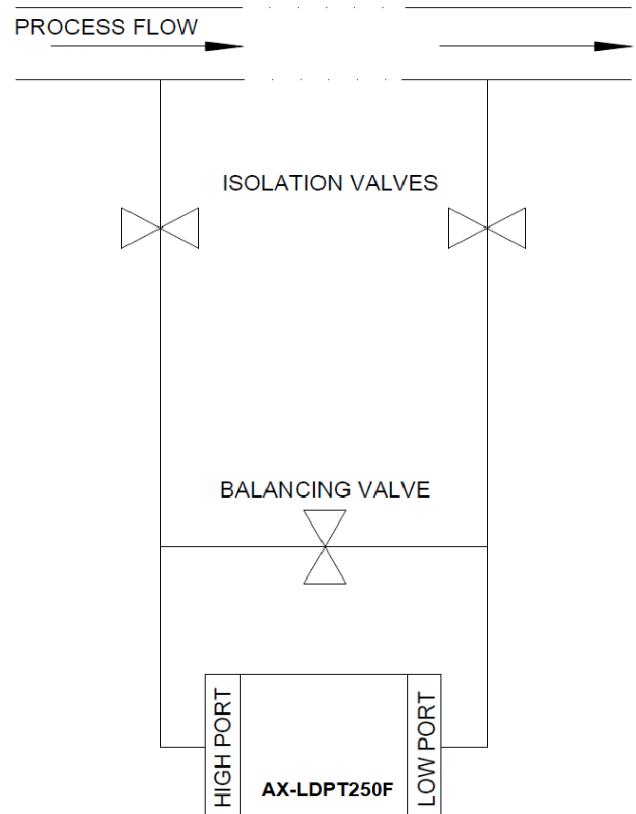
Damages caused to the transmitter due to improper installation or not adhering to the product specifications/ installation instructions will not be covered under warranty.

Installation without valves

In applications involving flow where differences in line pressure between the two connections are always within the range of the transducer there is no need to fit valves.

Installation with valves

In applications where there may be a sudden pressure surge on start-up such as may come from a pump, it is necessary to fit isolating valves on each leg and link the pipes between each valve and the differential pressure transducer by a line with a third valve to use for balancing.



Start-up procedure

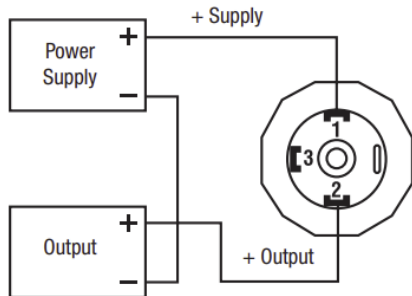
1. Close the balancing valve and both isolation valves.
2. Run the system with all three valves closed until equilibrium is reached.
3. Open the balancing valve between the high and low-pressure connections. It ensures that the differential pressure stays within the limit in applications where the line pressure is higher than the transmitter's maximum working pressure.
4. Open both isolation valves.
5. Close the balancing valve .
6. The differential pressure transducer will then indicate the pressure differential between the two tapping points.

Un-installing the transmitter

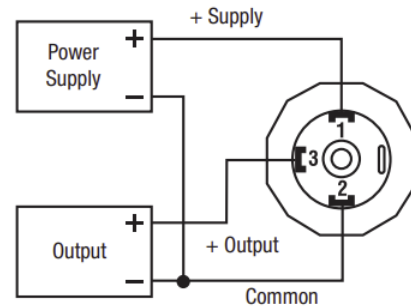
When removing the transmitter from a running system, it is critical to open the balancing valve before closing either of the isolating valves. Failing to do so will cause irreversible damage to the transmitter, especially when the line pressure is more than the transmitter's maximum working pressure.

Electrical Connections

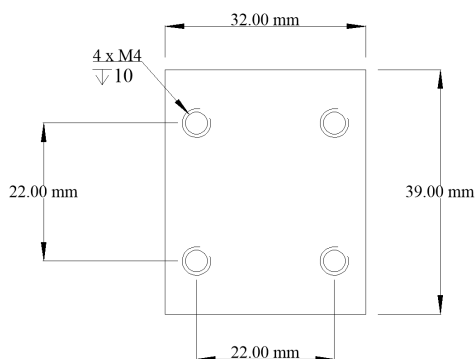
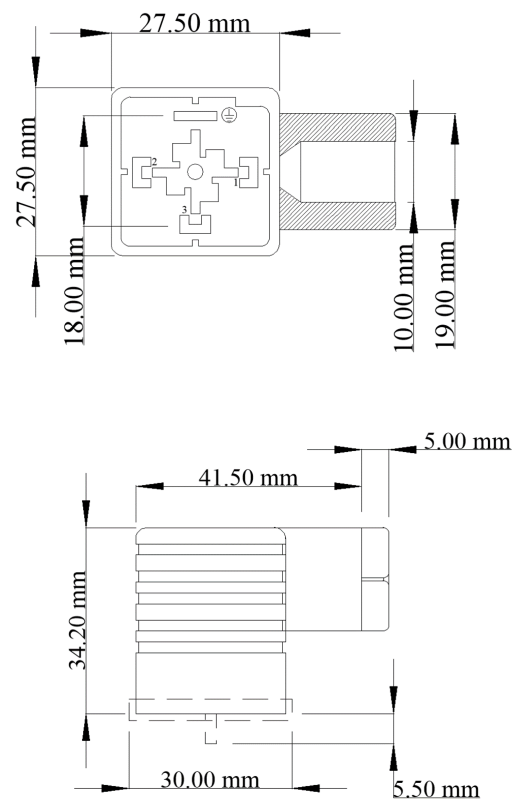
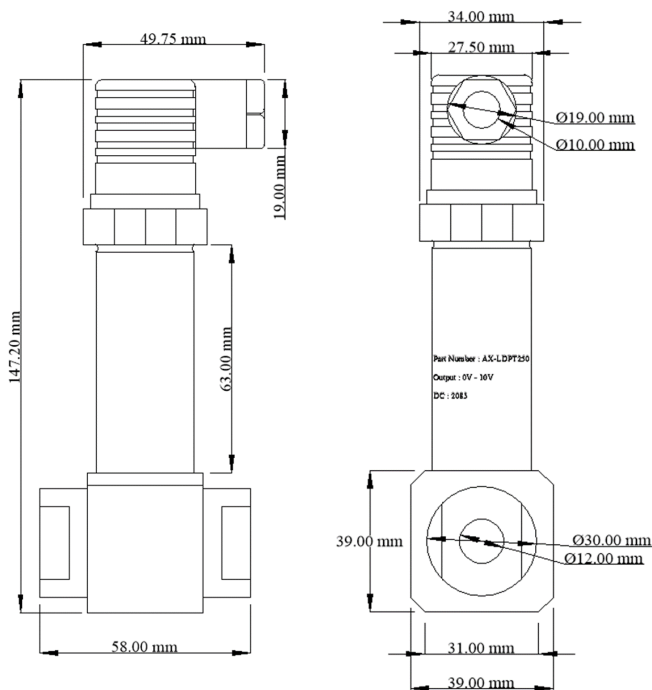
4-20mA Versions:



0-10V Versions:



Dimensions (not to scale)



Datasheet Contents

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