

## Liquid Differential Pressure Transmitter

### Product Overview

The AX-LDPT250 Differential Pressure Transmitters are piezo-resistive sensor for pressure monitoring of liquids and non aggressive gases. The units are available in a number of different ranges with either a 4-20mA or 0-10Vdc output signal. Mechanical connection is via 1/4" BSP parallel male Stainless Steel 316 connectors and Hirschman Plug for electrical connection. The AX-LDPT250 units supports mounting as well.



### Products Features

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

### Product Specifications

Range:	160, 400mbar and 1, 2, 4, 7, 10 and 16bar
Proof Pressure:	1.5x FS
Brust Pressure:	3x FS
Pressure Connection:	1/4" BSP male stainless steel 316
Power Supply:	12 to 32Vdc
Output:	4-20mA & 0-10V
Accuracy:	0.25% FS
Repeatability:	0.2% FS/year typical
Operating Temperature:	-30°C to +70°C
Storage Temperature:	-40°C to +85°C
Dimensions:	72.6mm(L) x 130mm(H)
Weight:	0.42kg
Protection:	IP65
Approval:	CE
Country of origin:	United Kingdom

### Product Order Codes

Current Version		Voltage Version	
Part number	Description	Part number	Description
AX-LDPT250-I-160	Current Output, 0-160mBar	AX-LDPT250-V-160	Voltage Output, 0-160mBar
AX-LDPT250-I-400	Current Output, 0-400mBar	AX-LDPT250-V-400	Voltage Output, 0-400mBar
AX-LDPT250-I-1	Current Output, 0-1Bar	AX-LDPT250-V-1	Voltage Output, 0-1Bar
AX-LDPT250-I-2	Current Output, 0-2Bar	AX-LDPT250-V-2	Voltage Output, 0-2Bar
AX-LDPT250-I-4	Current Output, 0-4Bar	AX-LDPT250-V-4	Voltage Output, 0-4Bar
AX-LDPT250-I-7	Current Output, 0-7Bar	AX-LDPT250-V-7	Voltage Output, 0-7Bar
AX-LDPT250-I-10	Current Output, 0-10Bar	AX-LDPT250-V-10	Voltage Output, 0-10Bar
AX-LDPT250-I-16	Current Output, 0-16Bar	AX-LDPT250-V-16	Voltage Output, 0-16Bar

- Add suffix "F" for 1/4g Female connection.
- Other pressure ranges are also available.

### Installation

The AX-LDPT250 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 male. 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.



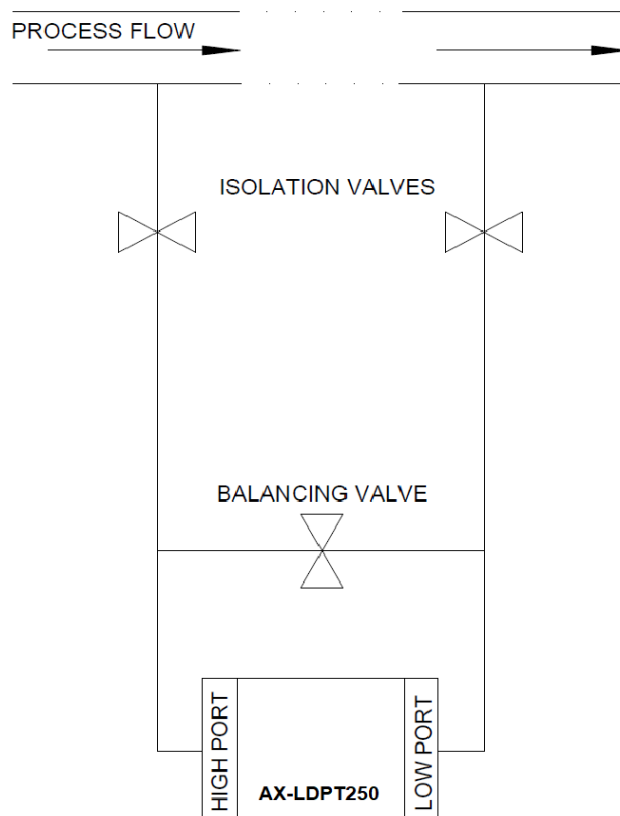
***Damages caused to the transmitter due to improper installation or not adhering to the product specifications/ installation instructions will not be covered under warranty.***

### 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.

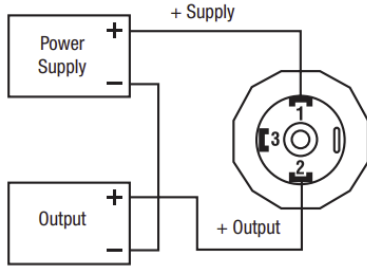
# AX-LDPT250

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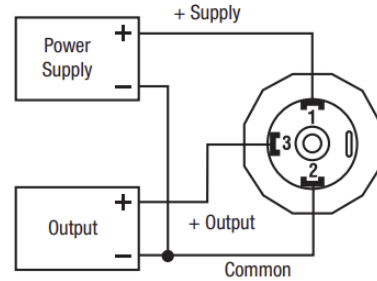


### Electrical Connections

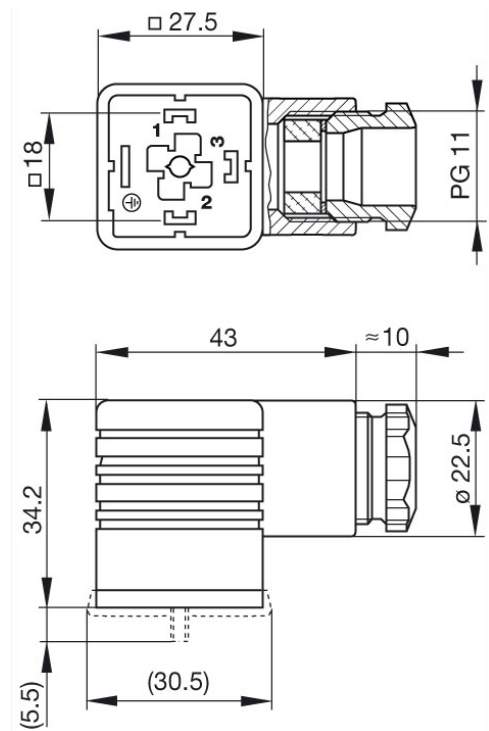
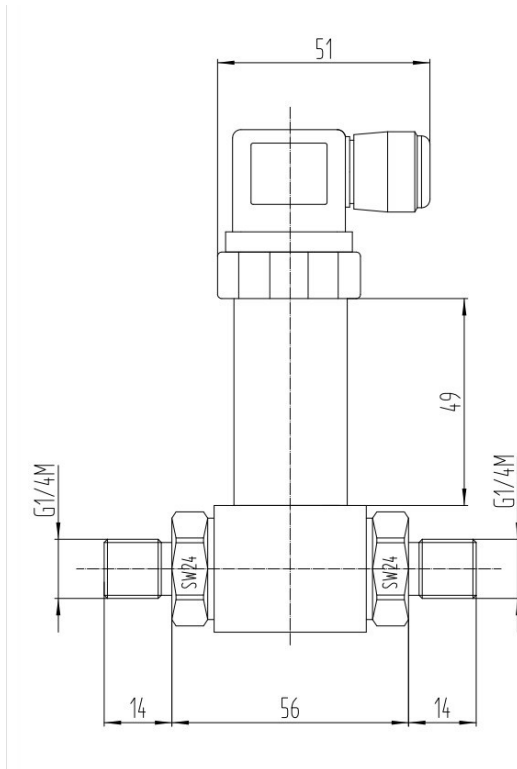
#### 4-20mA Versions:



#### 0-10V Versions:



### Dimensions (not to scale)



### Datasheet Contents

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