Sontay®
Four Elms Road - Edenbridge
Kent - TN8 6AB - UK

# PL-520
## Static Pressure Sensors

Issue Number 7.1
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### Features and Benefits

- Suitable for water, steam (with PL-HS) or air
- Compact rugged construction
- Welded without sealing parts
- Very high measurement accuracy
- Excellent thermal characteristic

### Technical Overview

The PL-520 pressure sensor uses thick film technology where the pressure cell is fully welded. This then meets high burst protection demands ad is suitable for a large number of different medias.

### Product Codes

| | | |
|---|---|---|
| *4-20mA Output:* | | |
| **PL-520-1** | Liquid pressure transmitter | 0 to 1 bar |
| **PL-520-1.6** | " " | 0 to 1.6 bar |
| **PL-520-2.5** | " " | 0 to 2.5 bar |
| **PL-520-4** | " " | 0 to 4 bar |
| **PL-520-6** | " " | 0 to 6 bar |
| **PL-520-10** | " " | 0 to 10 bar |
| **PL-520-16** | " " | 0 to 16 bar |
| **PL-520-25** | " " | 0 to 25 bar |
| **PL-520-40** | " " | 0 to 40 bar |
| *0-10Vdc Output:* | | |
| **PL-520-1-V** | Liquid pressure transmitter | 0 to 1 bar |
| **PL-520-1.6-V** | " " | 0 to 1.6 bar |
| **PL-520-2.5-V** | " " | 0 to 2.5 bar |
| **PL-520-4-V** | " " | 0 to 4 bar |
| **PL-520-6-V** | " " | 0 to 6 bar |
| **PL-520-10-V** | " " | 0 to 10 bar |
| **PL-520-16-V** | " " | 0 to 16 bar |
| **PL-520-25-V** | " " | 0 to 25 bar |
| **PL-520-40-V** | " " | 0 to 40 bar |

Accessories

| | |
|---|---|
| **PL-HS** | Pressure transmitter heat sink |
| **PL-520-CAL** | Calibration certificate |

### Specification

| | |
|---|---|
| Output: | |
| PL-520-x | 4-20mA (2-wire loop powered) |
| PL-520-x-V | 0-10Vdc |
| Supply voltage: | |
| 4-20mA | 7-33Vdc |
| 0-10Vdc | 12-33Vdc or 24Vac ±15% |
| Current consumption: | |
| 4-20mA | <23mA |
| 0-10vdc | <7mA |
| Electrical connections | DIN EN175301-803-A |
| Accuracy* @ 25°C, 45% RH 24Vdc supply: | |
| Characteristic line | ±0.3 % fs |
| Resolution | 0.1% fs |
| Thermal characteristic | ±0.02 % |
| Long term stability | ±0.25 % fs max. |
| Response time | <2 m/s. 1 m/s. Typ. |
| Load cycle | <100Hz |
| Overload: | |
| ≤6 bar | 5 x fs |
| > 6 bar | 3 x fs (max. 1500 bar) |
| Rupture: | |
| ≤6 bar | 10 x fs |
| >6 bar | 6 x fs (max. 2500 bar) |
| Materials in contact with the medium | S/S 1.4404/AISI 316L |
| Temperature: | |
| Media | -40 to +135°C |
| Ambient | -30 to +85°C |
| Storage | -50 to +100°C |
| Dimensions | 88 x 36mm dia. |
| Pressure connection | ½" BSP male |
| Protection | IP65 |
| Conformity | WRAS, EMC, CE & UKCA Marked |
| Country of origin | Switzerland |

* For PL-520-1 & PL-520-1.6 accuracy, fs = 2.5 bar

**WEEE Directive:**

At the end of the products useful life please dispose as per the local regulations.
Do not dispose of with normal household waste.
Do not burn.

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## Installation

1. Fix the transmitter to the pipe using a ½" BSP female connection, and a gate valve

2. You should avoid mounting the transmitter where it will be subjected to mechanical vibration.

3. The sensor can be mounted in any orientation if the temperature is between -40 to 135°C.

4. Remove the DIN connector and expose the electrical terminals feed cable through the cable gland and connected as required. Re-fit connector to transmitter and tighten screw.

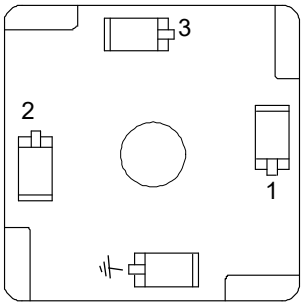
5. When opening the gate valve it is important to do this slowly to avoid pressure spikes that can damage the transmitter,

**PL-520-x (4-20mA):**

- Terminal 1 7 - 33Vdc
- Terminal 2 4-20mA signal

**PL-520-x-V (0-10Vdc):**

- Terminal 1 12 - 33Vdc or 24Vac ±15%
- Terminal 2 0-10Vdc signal
- Terminal 3 0V (Ground)



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