

TA Link



Sensors

Differential pressure sensor –
0-10 V / 4-20 mA

Engineering
GREAT Solutions

TA Link

The crucial connection between the hydronic system and the building management system (BMS), TA Link provides an accurate measurement of the differential pressure. With data you know you can rely on, troubleshooting is quicker and system analysis is made more cost-effective. TA Link also boosts your system's safety thanks to its ability to signal an alarm in the event of incorrect flow rates.

Key features

- > **Self-sealing measuring points**
Enables TA Link to be fitted snugly onto the balancing valve's measuring port in just a few seconds.
- > **Measuring**
Rapid measurement of differential pressure, enabling quicker troubleshooting.



Technical description

Application:

Heating and cooling systems

Function:

Measuring

Range:

0-5.8 psi or 0-14.5 psi

Pressure class:

PN 25

Max. differential pressure:

29 psi or 72.5 psi

Temperature:

Max. working temperature: 176°F

Min. working temperature: 5°F

Output signal:

0-10 V or 4-20 mA

Accuracy:

<±0.145 psi

Power supply:

18-33 VDC or 24 VAC +15/-10 % (0-10 V)

11-33 VDC (4-20 mA)

Response time:

< 5 ms

Protection class:

IP 65

Material:

Sensor housing of stainless steel
X8CrNiS18-9 (No 1.4305 EN 10 088-3).

Ceramic membrane.

EPDM seal.

Valve characteristics

The valve characteristics of IMI TA valves are available in the software TA Select, for calculation of flow/differential pressure measurement. It is also available on calculation disc and catalogue leaflet.

TA Select and catalogue leaflet can be downloaded from www.imi-hydraulic.com.

Electrical connection

0-10 V

Electrical connection is by means of a 3.28 ft long 3-core cable. Core colours are as follows:

White: System neutral

Brown: 18-33 VDC or 24 VAC +15/-10% power supply. Current consumption, 5 mA.

Green: 0-10 V output signal, proportional to the differential pressure. Load: not less than 10 k Ω .

4-20 mA

Electrical connection is by means of a 3.28 ft long 2-core cable. Core colours are as follows:

Brown: 11-33 VDC power supply.

Green: 4-20 mA output signal, proportional to the differential pressure. Load: not more than 650 Ω (at 24 VDC).

Connection to measurement points

Safety valve

The safety valve must be in position **B** when connecting and disconnecting the unit.

Note: This opens the valve between P1 and P2. When measuring, the safety valve must be in position **A** to bring the sensor into operation.

Pressure connections

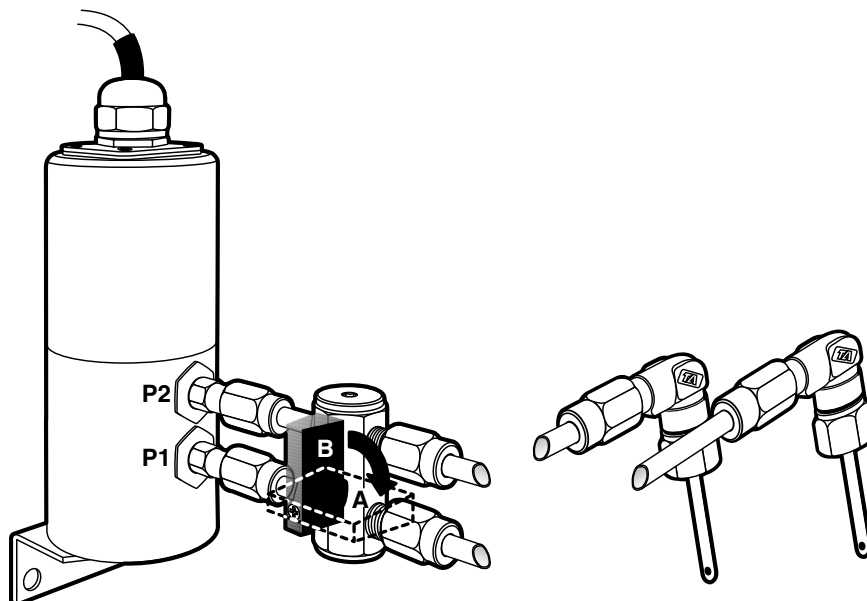
Connect the *red connection* (P1) to the higher pressure (i.e. upstream of the balancing valve). Connect the *blue connection* (P2) to the lower pressure (i.e. downstream of the balancing valve). The connections have compression couplings for 6 mm (O.D.) copper pipe. (Pipe is not included).

Calibration

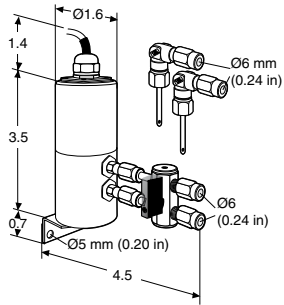
The sensor has been calibrated when supplied.

Venting

The sensor must be vented in order to ensure correct measurement accuracy. When venting, the safety valve must be in position **B**. Continue the venting until the pipes to and from the sensor is filled with water.

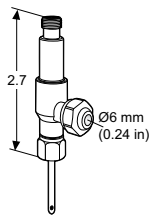


Articles



Range	Article No
0-10 V	
0-5.8 psi	52 010-004
0-14.5 psi	52 010-010
4-20 mA	
0-14.5 psi	52 110-010

Accessories

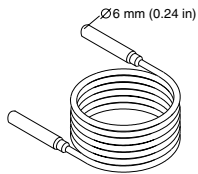


Measuring point, two-way

For connection of 6 mm (0.24 in) capillary pipe while permitting simultaneous use of our measuring or balancing instruments.

Article No

52 179-100



Capillary pipe

L [in]

39.4

Article No

52 010-901