Climate
Control

IMI TA

TA Link

Sensors

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

Breakthrough
engineering for
a better world

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:
0-40 kPa or 0-100 kPa

Pressure class:
PN 25

Max. differential pressure:
2 bar or 5 bar

Temperature:
Max. working temperature: 80°C
Min. working temperature: -15°C

Output signal:
0-10 V or 4-20 mA

Accurancy:
<±1.0 kPa

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 HySelect, for calculation of flow/differential pressure measurement. It is also available on calculation disc and catalogue leaflet.

HySelect and catalogue leaflet can be downloaded from climatecontrol.imiplc.com.

Electrical connection

0-10 V
Electrical connection is by means of a 1.5 m 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 kΩ.

4-20 mA
Electrical connection is by means of a 1.5 m 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).

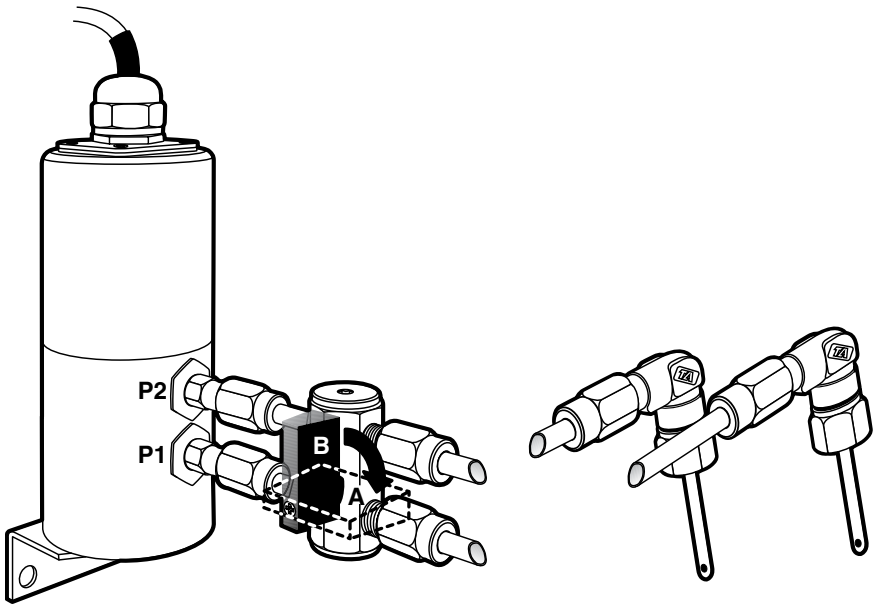
Connection to measurement points

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.

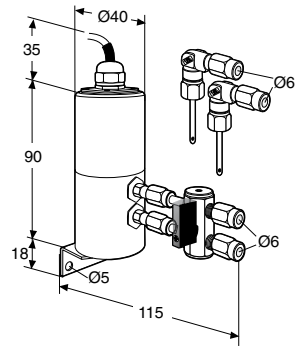
Pressure connections
Connect the **red** connection (P1) to the higher pressure (i.e. upstream of the balancing valve). Connect the **blue** connection (P2) to the lower pressure (i.e. downstream of the balancing valve). The connections have compression couplings for 6 mm (O.D.) copper pipe. (Pipe is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

Calibration
The sensor has been calibrated when supplied.

Venting
The sensor must be vented in order to ensure correct measurement accuaracy. 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.

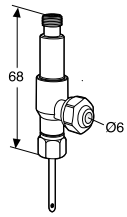


Articles



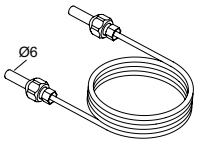
Range	EAN	Article No
0-10 V		
0-40 kPa	7318792750106	52 010-004
0-100 kPa	7318792750205	52 010-010
4-20 mA		
0-100 kPa	7318793746207	52 110-010

Accessories



Measuring point, two-way
For connection of 6 mm copper pipe while permitting simultaneous use of our measuring or balancing instruments.

EAN	Article No
7318792813306	52 179-100



Capillary pipe

L [m]	EAN	Article No
1	7318792750304	52 010-901