Acronym DPTL
Title Differential Pressure Transmitter for Liquid DPTL
Cod
Brand Tflow®

DESCRIPTION

DPTL

Differential Pressure Transmitter for Liquid DPTL

Applications

For differential pressure detection in liquid mediums of the air-conditioning, heating and water technique.
Also suitable for light aggressive liquids.

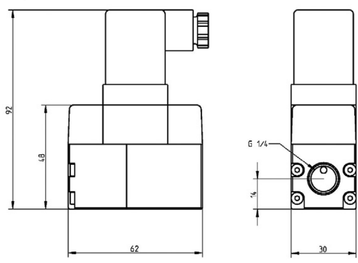
Model summary

Type code	Measuring range	Output signal	Accuracy typ. %/FS *
DPTL-1-V	0 ÷ 1 bar	0 ÷ 10 V	±1 %
DPTL-1-A	0 ÷ 1 bar	4 ÷ 20 mA	±1 %
DPTL-2,5-V	0 ÷ 2,5 bar	0 ÷ 10 V	±1 %
DPTL-2,5-A	0 ÷ 2,5 bar	4 ÷ 20 mA	±1 %
DPTL-4-V	0 ÷ 4 bar	0 ÷ 10 V	±1 %
DPTL-4-A	0 ÷ 4 bar	4 ÷ 20 mA	±1 %
DPTL-6-V	0 ÷ 6 bar	0 ÷ 10 V	±1 %
DPTL-6-A	0 ÷ 6 bar	4 ÷ 20 mA	±1 %

Legenda:
- A for mA output
- V for voltage output
* (temperature: -20 ÷ 85°C)

DIMENSIONS

Width [mm]	
Height [mm]	
Depth [mm]	
Packaging	
Weight [g]	510 g
Outline drawings [mm]	



TECHNICAL DATA

Materials	
Material contacting the medium	Ceramic/Stainless steel A203/1 4305
Sealing material	EPDM
Pressure	
Static pressure maximum	21 bar
Over pressure maximum	6 bar, ranges 1 and 2,5 bar 16 bar, ranges 4 and 6 bar
Responsetime	10mS
Connections	
Electrical connector	Angle plug according to DIN 43650 Construction A
Pressure connectors	Inside thread G1/4"
Installation position	Unrestricted
Enclosure	
Bottom part	Stainless steel 1,4305
Top cover	Aluminium pressure die casting
Protection	IP54 according to to EN60529
Temperature	
Ambient temperature	-10 ÷ 50 °C
Temperature of medium	-10 ÷ 80 °C
Storage temperature and moisture	-20 ÷ 50 °C / max 85 %RH
Type DPTL xxx A	
Supply voltage	15 ÷ 24 Vdc (±10 %)
Current consumption	max. 20 mA
Output signal	4 ÷ 20 mA, max load 900 ohm / 24 Vdc
Type DPTL xxx V	
Supply voltage	15 ÷ 24 Vdc (±10 %) or 24 Vac (±10%)
Power consumption	typ. 0,37 W (Vdc) / 0,9 W (Vac)
Output signal	0 ÷ 10 V, min load 2 kOhm
Norms and standards	
Product safety	EN61010-1 safety requirements for electrical equipment for measurement, control and laboratory use
EMC	EN61326-1 (2006) Electrical equipment for measurement, control and laboratory use EMC requirements EN61326-2-3 Particular requirements- test configuration, operational conditions and performance criteria for transducer with integrated or remote signal conditioning
CE-Conformity	89/336/EEC Electromagnetic compatibility

INSTALLATION

CAUTION!

Security Advice

The installation and assembly of electrical equipment may only be performed by an authorized and skilled electrician.

The modules must not be used in any relation with equipment that supports, directly or indirectly, human healt or life or with applications thet can result in danger for people, animals or real value.

Mounting Advices

• The device is desinged for assembly on smooth walls or mounting plates.
• For connectingn the device, the process lines must be unpressurized.
• The device has to secured against pressure surges by appropriate measures.
• Note the suitability of the device for the medium to be measured.
• The device is designed for pipe mounting
• Note the maximum pressures
• To avoid the occurrence of interfering dead times, the pressure sensing leads shall be as small as possible and shall be layed witho0ut any sharp bends.
• With pulsating pressures on the system, function interferences of the device can be caused. As a protection , the installation of attenuaig element in the pressurized connection line is recommended.

Electrical connection

The devices are constructed for the operation of protective low voltage (SELV). For the electrical connection, the technical data of the corresponding device are valid.

Sensing devices with transducer should in principle be operated in the middle of the measuring range to avoid deviation at the measuring end points. the ambient temperature of the transducer electronics should be kept constant.

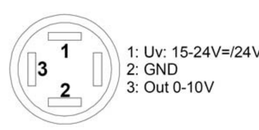
Installation

A prerequisite for the operation I a proper installation of all elecrical supply, control and sensing leads as well as the pressurized connection line.

Before installing the device, the leak tightness of the pressurized connection lines must be inspected. +: Higher pressure -: Lower pessure

Terminal connection

0 ÷ 10 V type



4 ÷ 20 mA Type