







# Instruments & Controls

# DIFFERENTIAL PRESSURE TRANSMITTER for LIQUID DPTL

111.xxx.xxx



### **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 - A for mA output - V for voltage output | Measuring range | Output signal | Accuracy typ. %/FS (temperature: -20 ÷ 85°C) |
|--|-----------------|---------------|--|
| 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 %   |





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**Tecnical data** 

Material contacting the medium 
Ceramic/Stainless steel A203/1 4305

Sealing material EPDM Static pressure maximum 21 bar

Over pressure maximum 6 bar, ranges 1 and 2,5 bar 16 bar, ranges 4 and 6 bar

10 bai, ranges 4 a

Responsetime 10mS

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

Ambient temperature  $-10 \div 50$  °C Temperature of medium  $-10 \div 80$  °C

Storage temperature and moisture -20 ÷ 50 °C / max 85 %RH

weight 510g

Type DPTL xxx A

Supply voltage  $15 \div 24 \text{ Vdc } (\pm 10 \%)$ 

Current consumption max. 20 mA

Output signal 4 ÷ 20 mA, max load 900 ohm / 24 Vdc

Type DPTL xxx V

Supply voltage  $15 \div 24 \text{ Vdc } (\pm 10 \%) \text{ or } 24 \text{ Vac } (\pm 10\%)$  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



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## **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 that 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 without any sharp bends.
- With pulsating pressures on the system, function interferences of the device can be caused. As a protection, the installation of attenuaing element in the pressurized connection line is recommended.





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#### **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 electrical 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**

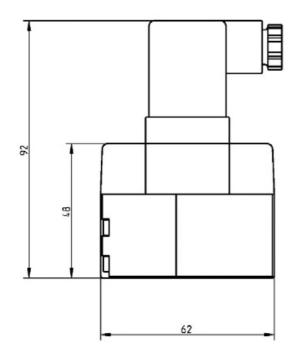
0 ÷ 10 V type

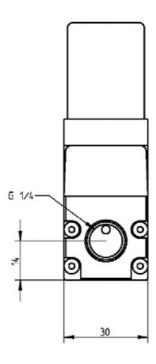
4 ÷ 20 mA Type





#### **Dimensions**





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