DPL02

Differential Pressure Transmitter for liquid medium

thermokon®
HOME OF SENSOR TECHNOLOGY

Datasheet

Subject to technical alteration
Issue date: 26/01/2026 · A144

»APPLICATION

The differential pressure transmitter detects the differential pressure in liquid media. Typical areas of application include supply and return liquid flows in heating systems as well as the monitoring of filters and compressors. For easy connection we recommend the 5 m connecting cable with plug (see accessories).

»TYPES AVAILABLE

	active 0..10V	active 4..20 mA
Differental Pressure transmitter – 0..1 bar	DPL02 1/V	DPL02 1/A
Differental Pressure transmitter – 0..+2,5 bar	DPL02 2,5/V	DPL02 2,5/A
Differental Pressure transmitter – 0..+4 bar	DPL02 4/V	DPL02 4/A
Differental Pressure transmitter – 0..+6 bar	DPL02 6/V	DPL02 6/A

»SECURITY ADVICE – CAUTION

The installation and assembly of electrical equipment should only be performed by authorized personnel.
The product should only be used for the intended application. Unauthorised modifications are prohibited! The product must not be used in relation with any equipment that in case of a failure may threaten, directly or indirectly, human health or life or result in danger to human beings, animals or assets. Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

Please comply with

- Local laws, health & safety regulations, technical standards and regulations
- Condition of the device at the time of installation, to ensure safe installation
- This data sheet and installation manual

»NOTES ON DISPOSAL

The crossed-out wheelie bin symbol indicates that the product or removable batteries must not be disposed of with household or commercial waste. Within the EU, you are legally obliged to dispose of the product separately and appropriately in accordance with the national laws of your country. Alternatively, please contact your supplier or Thermokon Sensortechnik GmbH. Further information can be found at: www.thermokon.com

»PRODUCT TESTING AND CERTIFICATION

CE

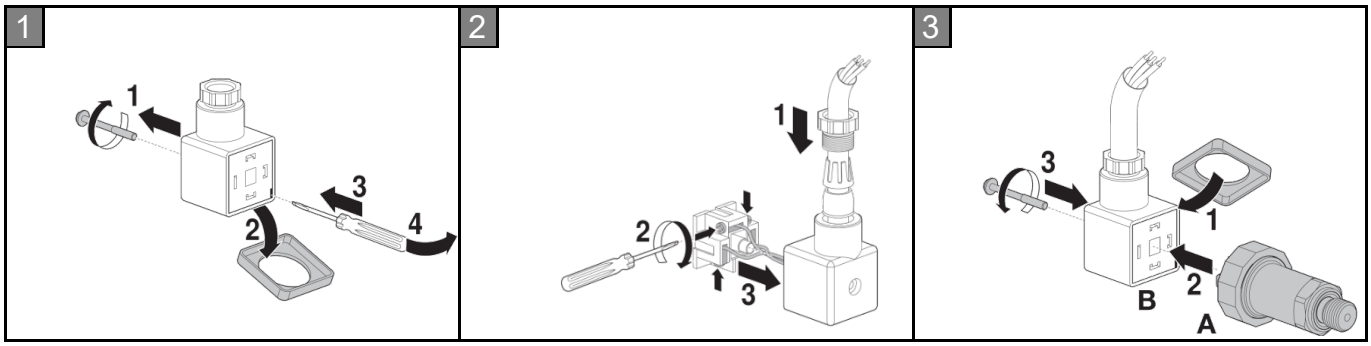
Declaration of conformity
The declaration of conformity of the products are available on our website
https://www.thermokon.de/direct/en-gb/categories/dpl02

»TECHNICAL DATA

Measuring values	differential pressure (static and dynamic)			
Medium	fluids			
Output voltage *(type-dependent)*	**V** 0..10 V, min. load 10 kΩ			
Output Amp *(type-dependent)*	**A** 4..20 mA. max. load 850 Ω			
Power supply *(type-dependent)*	**V** 15..24 V = (±10%) or 24 V ~ (±10%) SELV		**A** 15..24 V = (±10%) SELV	
Power supply *when using with UD-x Display*	**V** 24 V = SELV		**A** 24 V = SELV	
Power consumption *(type-dependent)*	**V** typ. 0,37 W (24 V =) | 0,9 VA (24 V ~)		**A** max. 0,5 W	
Medium temp. range	-30..+80 °C			
Measuring range pressure *(type-dependent)*	**DPL1** 0..+1 bar	**DPL2,5** 0..+2,5 bar	**DPL4** 0..+4 bar	**DPL6** 0..+6 bar
Accuracy pressure **deviation from calibration reference device (calibrator)*	<±1% of measuring range (typ. at -5..+75 °C)			
Max. working overpressure	**DPL1** 2 bar	**DPL2,5** 5 bar	**DPL4** 8 bar	**DPL6** 12 bar
Enclosure	stainless steel V2A			
Media-contacting materials	Housing: Stainless steel Seal: FKM (DIN ISO 1629 / ASTM D 1418)			
Protection	IP65 according to EN60529			
Cable entry	**HS** compression fitting for cable max. Ø=5 mm (5 x 0,12 mm²)			
Connection electrical	**HS** MVS connector according to EN175301-803A		**M12** M12 connector according to IEC 61076-2-101	
Connection mechanical	G 1/4"			
Ambient condition	-30..+80 °C, max. 85% rH short term condensation			
Weight	**HS** 523 g		**M12** 582 g	
Notes	Other measuring ranges please request.			

»MOUNTING ADVICE

- The device is designed for assembly on smooth walls or mounting plates.
- For connecting the device, the process lines must be unpressurized.
- The device has to be secured against pressure surges by appropriate measures.
- Consider the suitability of the device for the medium to be measured.
- The device is designed for pipe mounting.
- Consider 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 attenuating elements in the pressurized connection line is recommended.

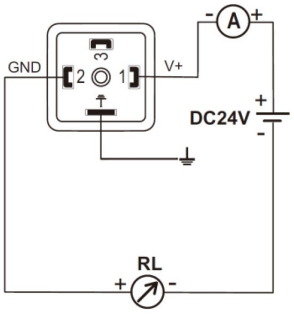


»CONNECTION PLAN

DPL02 HS

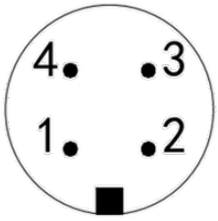
V – active 0..10 V	
1	24 V = / 24 V ~
2	GND
3	Out 0..10 V

A – active 4..20 mA	
1	24 V =
2	GND Out 4..20 mA
3	-



DPL02 M12

V – active 0..10 V	
1	24 V = / 24 V ~
2	Out 0..10 V
3	GND



A – active 4..20 mA	
1	24 V =
2	-
3	GND Out 4..20 mA

»COMMISSIONING

Static system pressure p_max = 200 bar, pressure peaks are to be damped by design measures (capillary).

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

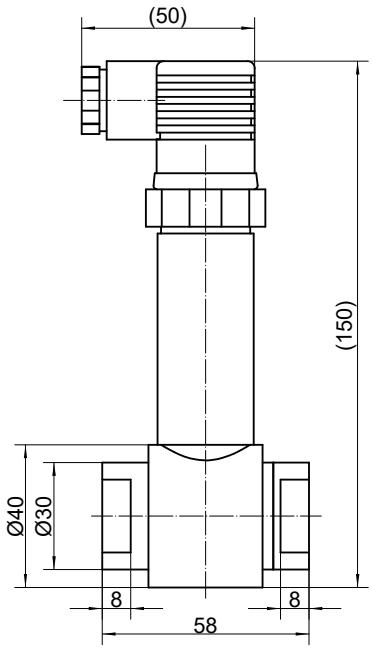
Before installing the device, the leak tightness of the pressurized connection lines must be inspected.

Pressurized sensing leads to be connected:

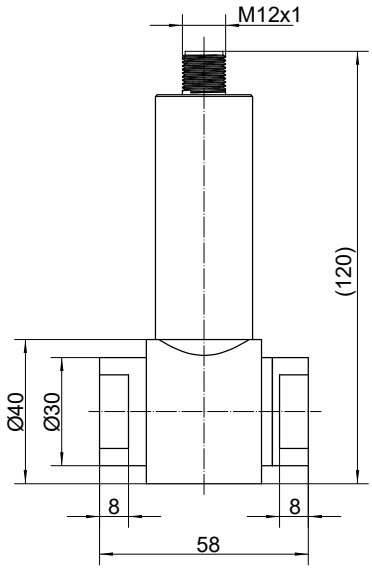
„+“: higher pressure
„-“: lower pressure

»DIMENSIONS (MM)

DPL02 HS



DPL02 M12



»ACCESSORIES (OPTIONAL)

Screw connection set 6mm brass (2 pcs.)	Item-No.: 373401
Screw connection set 6mm stainless steel (2 pcs.)	Item-No.: 373388
Screw connection set 8mm brass (2 pcs.)	Item-No.: 373418
Screw connection set 8mm stainless steel (2 pcs.)	Item-No.: 373395
Connection cable HS 2m	Item-No.: 809047
Connection cable HS 5m	Item-No.: 668309
Connection cable HS 10m	Item-No.: 840590
Connection cable M12 2m	Item-No.: 840606
Connection cable M12 5 m	Item-No.: 840613
Connection cable M12 10 m	Item-No.: 840620
Mounting bracket for DLF02/DPL02	Item-No.: 841375
Display UD-A (for 4..20mA device)	Item-No.: 718189
Display UD-V (for 0..10V device)	Item-No.: 775113
3-Valve Assembly for DPL02 Shut-off and pressure equalization valves	Item-No.: 841368