

Datasheet

Subject to technical alteration
Issue date: 06.10.2014



Application

For pressure detection in liquid mediums for air conditioning, heating and water application. Suitable for plants with refrigerant.

Types Available

DLMx/V G1/4	Pressure range 0...x* bar Out 0-10V
DLMx/V G1/2	Pressure range 0...x* bar Out 0-10V
DLMx/A G1/4	Pressure range 0...x* bar Out 4-20mA
DLMx/A G1/2	Pressure range 0...x* bar Out 4-20mA
DLMx/A 7/16-20UNFF Schrader	Pressure range 0...x* bar Out 4-20mA

*Different measuring ranges available

Security Advice – Caution



The installation and assembly of electrical equipment must be performed by a skilled electrician.

The device should only be used for the appropriate application. Unauthorised conversions or alteration are prohibited! The modules must not be used in relation with equipment that threatens, directly or indirectly, human health or life or with applications that can result in danger for people, animals or assets. Before connecting devices, the installation must be isolated from the power source!

For devices with controlling units (signal transducers, transmitters, etc.), it is important to make sure that the signal receiving device (actuators, generators, etc.) does not accept damaging or threatening conditions, that may arise from false signals during installation / configuration of the control unit. If necessary, disconnect the signal receiver from any source of power.

The following procedure must be carried out:

1. Disconnect the device from power.
2. Ensure the device is secured against reconnection.
3. Verify the device is not powered.
4. Prior to reconnection, ensure that the enclosure is securely closed.

Please verify and consult:

- Laws, standards and regulations.
- The current condition of the device at the time of installation, to ensure safe installation.
- The devices technical data and installation manual.



Notes on Disposal

As a component of large-scale fixed installation, Thermokon products are intended to be used permanently as part of a building or a structure at a pre-defined and dedicated location. The Waste Electrical and Electronic Act (WEEE) is not applicable. However, the product may contain valuable materials that should not be recycled rather than disposed as domestic waste. Please note the relevant regulations for local disposal.

Technical Data

Measuring element:	P >= 1 bar: strain gauge on stainless steel membrane P <1 bar: strain gauges on SiO ₂
Pressure type:	Relative pressure
Overload range:	double nominal pressure
Bursting pressure:	triple nominal pressure
Pressure connector:	G1/4" or G1/2" or Schrader
Accuracy:	typ. 0,5% FS @25°C
Temperature dependency: (in the range -20°C...+85°C)	Total error <= 0,5%FS + ((T-25 °C)*0,015%FS)/°C Example: Total error@65°C <= 0,5%FS+ (65 °C*0,015%FS/10°C) <= 1,1%
Total errors at maximum temperatures:	-40°C: <= 2%FS +105°C: <= 2%FS
Ambient temperature:	-40 ... +105°C
Media temperature:	-40 ... +125°C
Electrical connection:	MVS plug according to DIN EN175301-803 / Type A
Housing and parts in contact with the measuring medium:	P >= 1 bar: stainless steel 1.4301 P <1 bar: stainless steel 1.4301, Ceramic
Sealing material:	FKM fluororubber, Silicone-free
Protection:	IP65 according to EN60529
Weight:	approx. 90g

DLMx/A

Operating voltage:	15..24 V=
Power consumption:	max 0,5 W
Output:	4..20 mA, max. load (U _b -12V)/ 20 mA

DLMx/V

Operating voltage:	15..24 V= / 24 V~(+/-10%)
Power consumption:	typ. 0,15 W / 0,3 VA
Output:	0..10 V, load min. 5k Ohm

Mounting Advice

- For connecting the device, the process lines have to be unpressurized.
- Consider the suitability of the device for the medium to be measured.
- Consider maximum pressures.

Commissioning

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.

Terminal Connection Plan

Typ 0-10V:

1: Out 0-10V

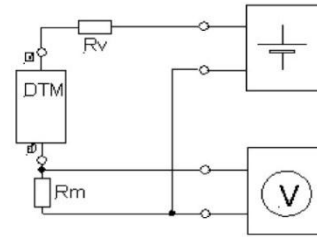
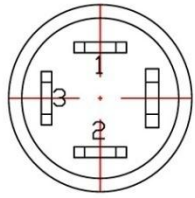
2: GND

3: Uv: 15-24V=/24V~

Typ 4-20mA:

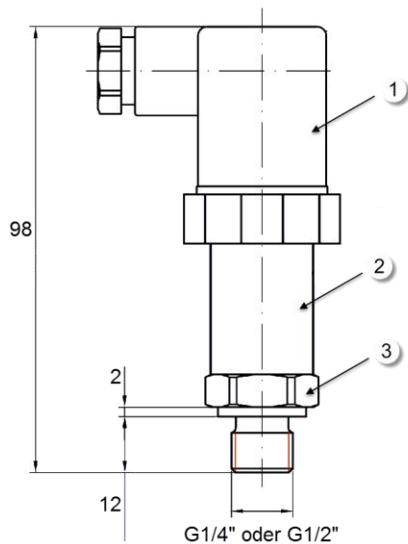
2: Out 4-20 mA

3: Uv: 15-24V=

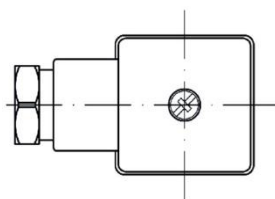
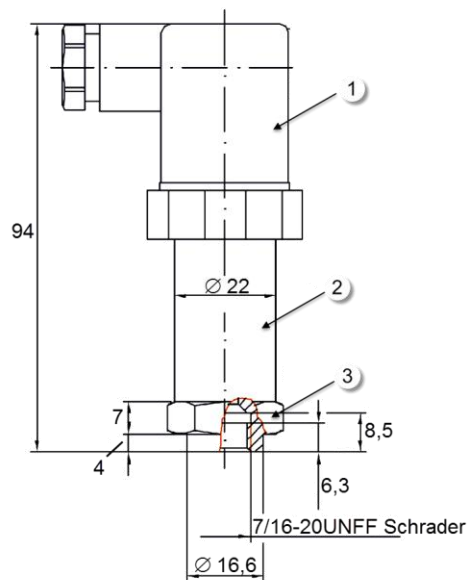


Dimensions (mm)

DLMx/x G1/4 / DLMx/x G1/4



DLMx/A 7/16-20UNFF Schrader



- 1 MVS n. DIN EN175301-803 / Type A
- 2 Enclosure
- 3 Pressure clip SW 22