Instructions

8439 ECL

Submersible Pressure Transmitter

Warning: Before installation, commissioning, and operation, ensure that the pressure transmitter is suitable for the application in terms of measuring range, design and environmental conditions. Non-observance can result in serious injury and/or damage to equipment.

Intended use: This instrument converts pressure into an electrical signal.
The instrument has been designed and built solely for the intended use described here and may only be used accordingly. If the equipment is used in a different manner, the protection provided by the equipment may be impaired and Trafag shall not be liable for any claims at all.

Datasheet

ECL 8439

www.trafag.com/H72336

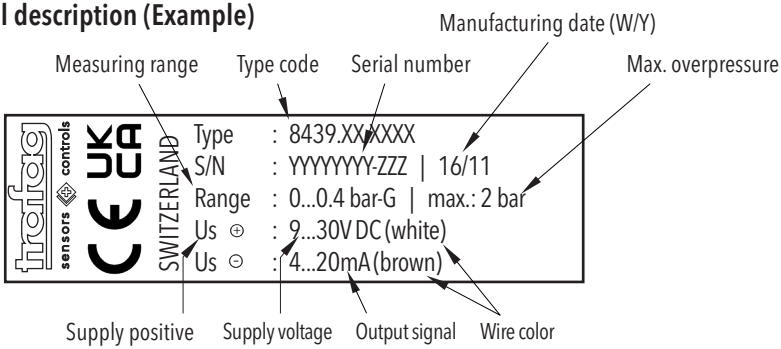
SMI

www.trafag.com/H72618

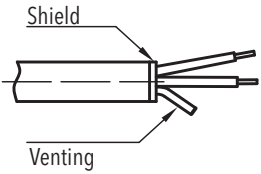
VENTBOX

www.trafag.com/H73662

Type label description (Example)



Electrical connections



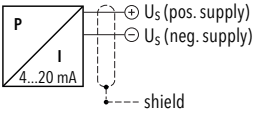
Output	Load resistance	U_{SUPPLY}
4 ... 20 mA	(U_{Supply}-9V)/ 20mA	24 (9 ... 30) VDC

The device is designed to be used in an industrial, electromagnetic environment in accordance with IEC 61326-2-3, IEC 61326-1, IEC 61000-6-2, IEC 61000-6-3.

The shield in the device is not connected.
In applications with conductive media, shield and ground on the cable end side must not be connected.

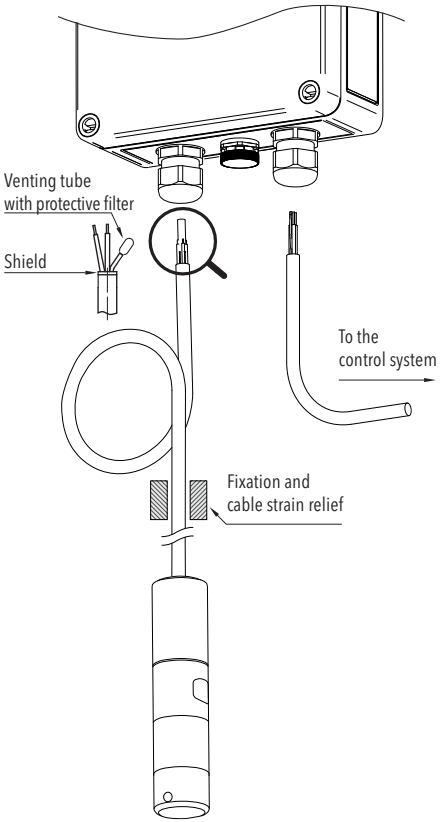
Connection of the measuring equipment

Current output 2-wires



* Shield not connected

Installation



The installation of the level probe requires special attention to the venting tube in the cable which provides the pressure equalisation of the probe with the environment. The cable end has to be installed in an environment of non-condensing humidity.

Connection of the level probe

In general, the cable of the level probe should not be shortened, because otherwise the protective filter on the vent tube will be removed and water and moisture can penetrate. It is recommended to install the cable with a loop at the terminal box so that a siphon is formed in which any liquid can collect.

Furthermore, it is recommended that one or, in the case of longer cables, several strain reliefs are used in the cable installation so that the entire weight of the cable does not rest on just one clamping point. A suitable strain relief clamp is available from Trafag.

Installation with ventilated terminal box for the safe connection of level probes.

The terminal box with integrated ventilation membrane enables the operationally safe connection of level probes. The cable of the level probe with integrated ventilation tube is connected in the terminal box with the standard cable without ventilation tube leading to the control unit. The special ventilation membrane on the terminal box enables reliable pressure equalisation, but prevents the penetration of moisture that could lead to condensation in the level probe.

The cable of the level probe is led through the cable gland into the housing. The cable gland must be tightened in such a way that the cable is securely fastened, but the vent tube in the cable is not squeezed too much.

Cleaning

For cleaning purposes, the black protection cap can be removed.
The transmitter should be cleaned with a detergent, compatible with the transmitter materials as listed in the datasheet.

It is strongly recommended to refrain from any mechanical cleaning of the ceramic membrane as it is very sensitive and can easily be damaged.