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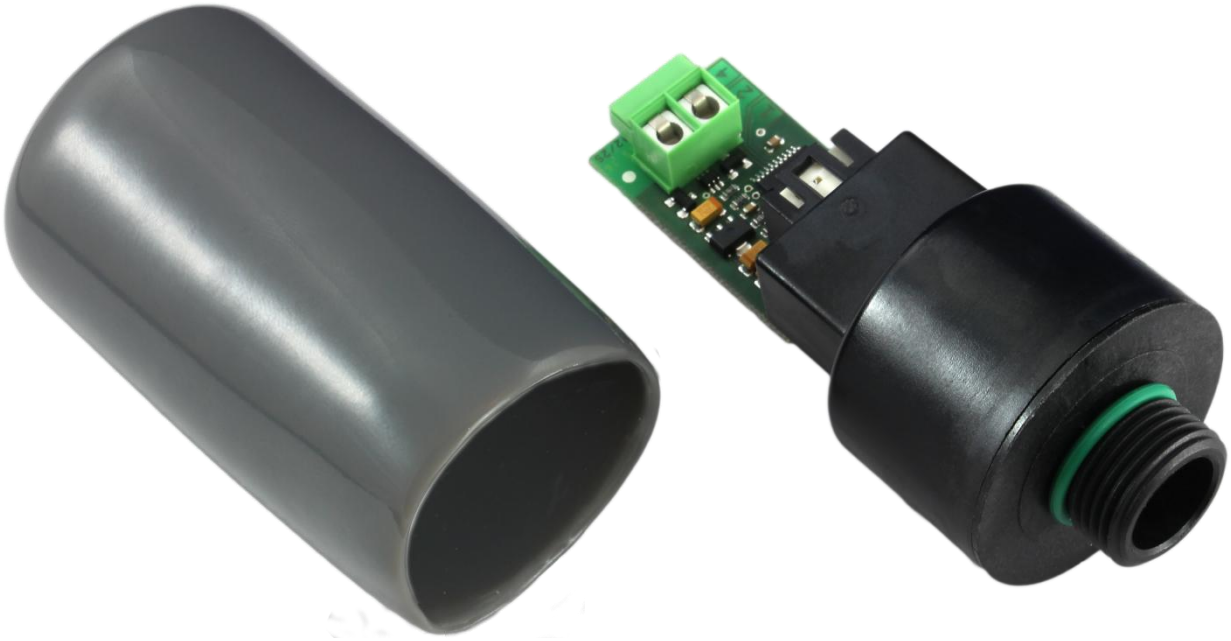
PRS0-6DL

Vers. 1.1 EN

Electronic Pressure Sensor



The pressure sensor PRS0-6DL is used to measure the physical variable, pressure. It is particularly suitable for determination of water pressure conditions in heating and service water circuits. The adapter electronics converts the measurement values into a serial digital signal suitable for the DL bus (data link).

A cap that is pushed onto PCB and sensor is provided to protect the PCB. An opening to feed the cable through is cut out with the knife. The cap must **not** be (heat) shrunk onto the PCB.

The sensor has the following features:

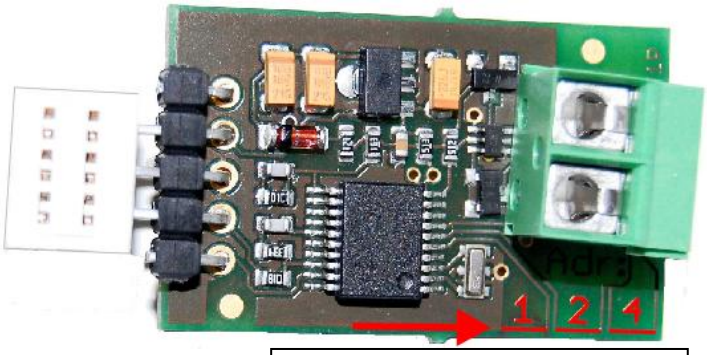
- Measurement of system pressure between 0 and 6 bar
- No moving parts are inserted in the flow channel
- Measurement principle insensitive to medium properties
- Incl. plug-on adapter for connection to the DL bus net

Electrical connection and addressing

The supplied plug-on adapter is put onto the pressure sensor. The plug is unique. The sensor has to be connected to data link (DL-bus) and sensor mass. The connection polarity is unimportant. The polarity of the DL bus connections is interchangeable, hence need not be observed.

The adapter takes its power supply from the DL bus (data link) and returns the corresponding measurement when requested by the controller (**ESR21**, **UVR61-3** and **UVR63H** from version 5.0, **ESR31** and **UVR63**, **UVR1611** from version A3.00 **and** serial number 13286, plus **UVR16x2**).

The request is made up of the **address** of the sensor (adapter PCB) and **index** of the recorded measurement.



Disconnectable conductors

The **address** is specified on the adapter by breaking the conductors which are labelled 1, 2 and 4. These are located on the underside on the outer PCB edge. If none of the conductors are cut, the adapter is assigned address 1 (factory setting). Provided no other sensors are connected to the DL-bus, no change of address is required.

The new address is derived from address 1 (= factory setting) plus the sum of all the cut through values.

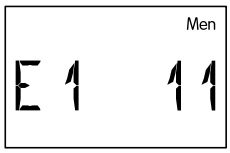
Example: required address 6 = 1 (factory setting) + 1 + 4
= conductors 1 and 4 must be cut.

The **Index** of the measured value is firmly predefined:

Index:	***Measurement:***	***Sensor type***
1	**Pressure [0,01 bar]**	**Pressure sensor PRS0-6**

ESR21, ESR31, UVR61-3, UVR63, UVR63H: The measured value is imported as “External sensor” (setting in the menu “EXT DL”), whereby address and index are specified.

Example:



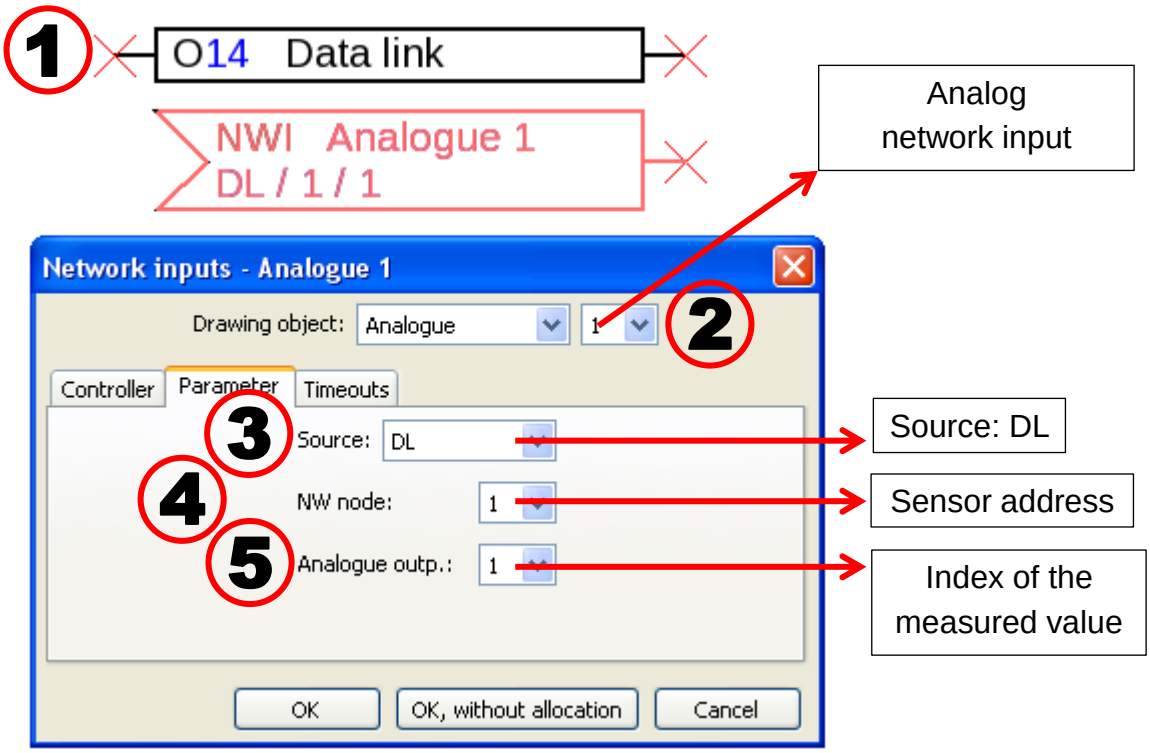
Here, the external sensor **E1** was allocated the sensor value of **address 1** with **index 1**.

UVR16x2: The measured values are parameterised in the menu "**DL bus**“.

UVR1611: The measurements are parameterised as **analog** network inputs:

`NW.Node:`	Sensor address (above example: 1)
`Anal.NW.Outp.:`	Measurement value index (above example: 1)
`Source:`	**`DL`**

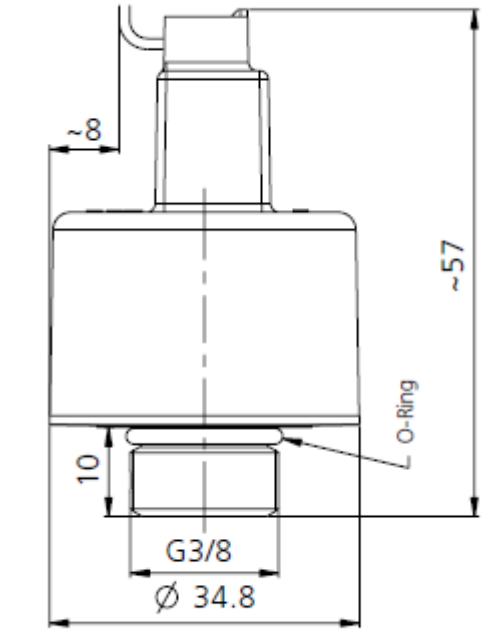
TAPPS2 Programming UVR1611:

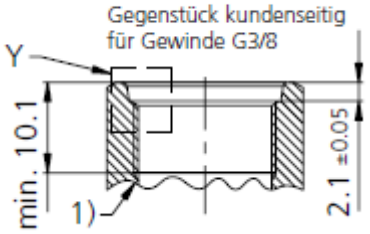


A still unused network input variable must be selected for each new value.

Technical data	
Measurement range	0 to 6 bar
Accuracy	± 2.0 % of the final value
Operating temperature range	2 to 90 °C
Bus load	13%
Burst pressure	12 bar
Connection thread	G 3/8"
Fitting position	Recommendation: Electrical connection top
Material, pressure connection	Fibre-reinforced plastic
Seal material	EPDM

Dimensional drawing:





We reserve the right to make any technical changes