



# KL 1 Terminal Box Aluminium



- ▶ for connecting 2-wire submersible transmitters
- ▶ robust aluminium case
- ▶ integrated pressure balance item

The terminal box KL 1 is intended for the professional electrical connection of 2-wire transmitters.

It offers integrated atmospheric pressure compensation. Optionally equipped with overvoltage protection and Pt 100 temperature sensor for BD SENSORS devices.

The terminal box KL 1 is equipped with a pressure balance item for equalization of atmospheric reference. Caused by this on the supply side a cable without ventilation tube can be used.

Vertical terminal clamps enable easy connection of cables inside. The terminal box has to be mounting via two fastening screws.

Characteristics	<ul style="list-style-type: none"><li>▶ aluminium die cast case</li><li>▶ ingress protection IP 66</li><li>▶ atmospheric pressure compensation with PTFE filter</li><li>▶ 2 signal lines</li><li>▶ optionally:<ul style="list-style-type: none"><li>- overvoltage protection with nominal discharge current of 10 kA</li><li>- Pt 100 temperature sensor for submersible pressure transmitters with built-in Pt 100 sensor</li></ul></li></ul>	KL 1 Terminal Box

# TECHNICAL DATA

## General specifications

Number of signal lines	2-wire (4 ... 20 mA)
Case	aluminium die cast case, grey powder-coating
Ingress protection	IP 66
Cable entries	cable gland M16x1.5 Polyamide, seals NBR, IP 68, diameter range: standard 5 ... 10 mm, others on request
Atmospheric pressure compensation	pressure compensation element with PTFE filter
Terminal clamps	vertical clamps for stranded and solid wires up to 2.5 mm <sup>2</sup>
Weight	approx. 550 g

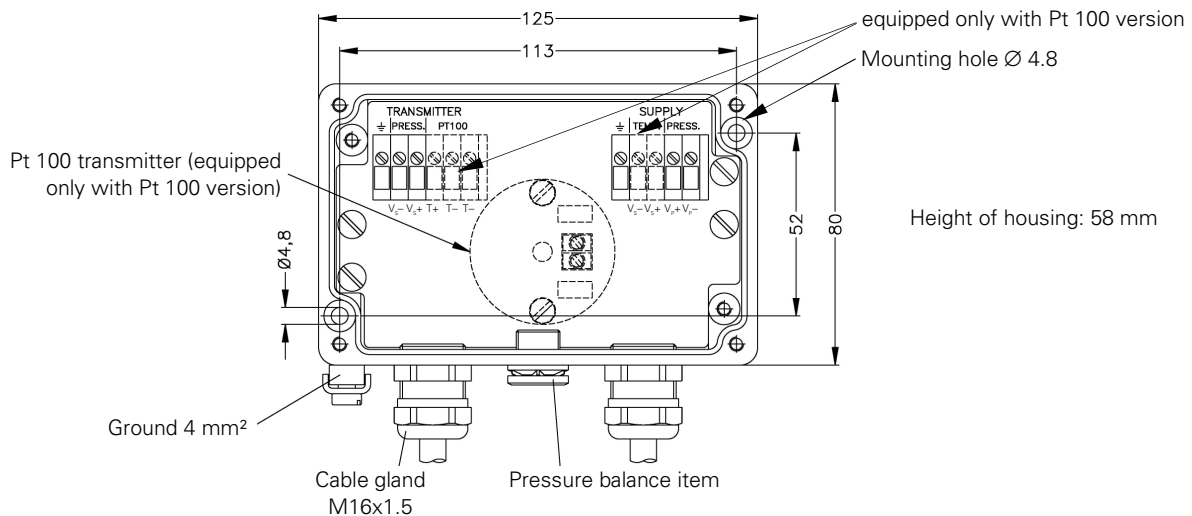
## Optional overvoltage protection

Series resistance	10 Ω for each wire
Nominal discharge current	10 kA (8/20 μs)
Max. rated current	30 mA

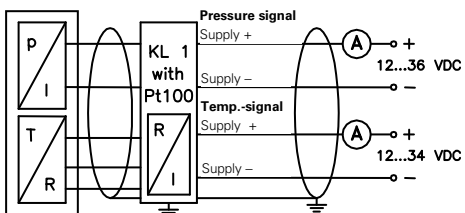
## Optional Pt 100 temperature sensor <sup>1</sup>

Temperature range	standard: 0 ... 70 °C option: T <sub>min</sub> ... T <sub>max</sub> can be in range from -40 °C up to 400 °C
Connection temperature sensor	3-wire
Output signal / Supply	2-wire: 4 ... 20 mA / V <sub>s</sub> = 12 ... 34 V <sub>DC</sub>
Accuracy	< 0.15 %
Linearity	< 0.1 %
Thermal effects	< 0.01 % / K

## Dimensions



## Wiring diagram



The ground wires of all components have to be connected!

<sup>1</sup> only necessary if the submersible transmitter is equipped with a Pt 100 temperature sensor

This data sheet contains product specification, properties are not guaranteed. Subject to change without notice.