

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.

- ▶ aluminium die cast case
- ▶ ingress protection IP 66
- ▶ atmospheric pressure compensation with PTFE filter
- ▶ 2 signal lines
- ▶ optionally:
 - overvoltage protection with nominal discharge current of 10 kA
 - Pt 100 temperature sensor for submersible pressure transmitters with built-in Pt 100 sensor

Characteristics

CE

KL 1
Terminal Box

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 ²
Weight	approx. 550 g

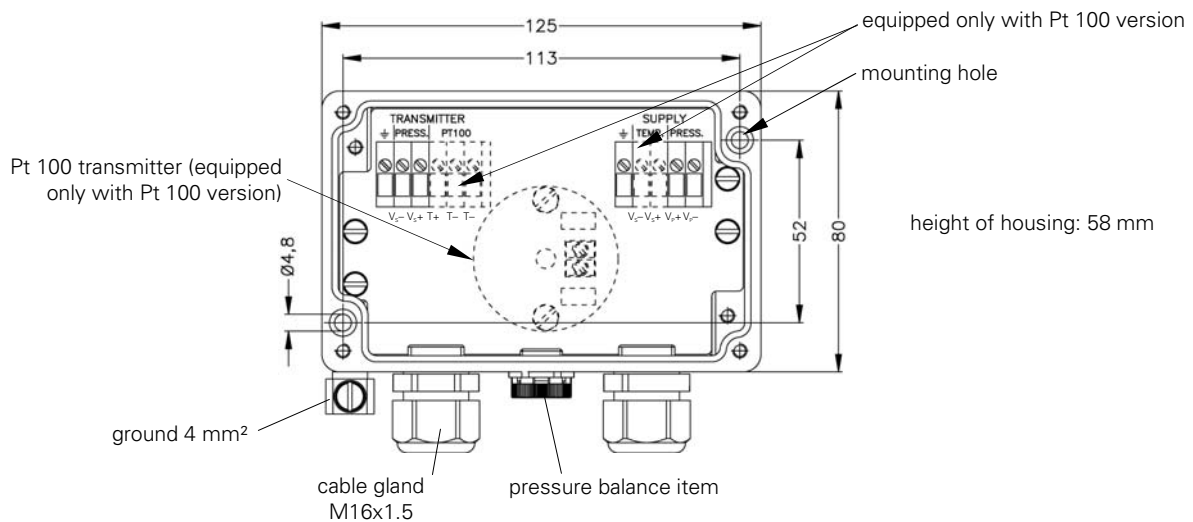
Optional overvoltage protection

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

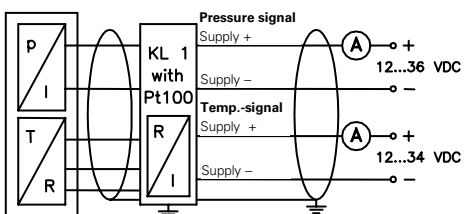
Optional Pt 100 temperature sensor ¹

Temperature range	standard: 0 ... 70 °C option: T _{min} ... T _{max} 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 _S = 12 ... 34 V _{DC}
Accuracy	< 0.15 %
Linearity	< 0.1 %
Thermal effects	< 0.01 % / K

Dimensions



Wiring diagram



The ground wires of all components have to be connected!

¹ only necessary if the submersible transmitter is equipped with a Pt 100 temperature sensor

Ordering code KL 1

KL 1 - ZB.601 -

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Version						
standard	1	0	0	.	.	.
over voltage protection	1	0	1	.	.	.
thermo element Pt 100	1	T	0	.	.	.
thermo element Pt 100 and over voltage protection ¹	1	T	1	.	.	.
Special version						
standard				0	0	0
customer				9	9	9

on request

¹ only necessary if the submersible transmitter is equipped with a Pt 100 temperature sensor