

KL 1

Terminal Box

Aluminium



Product characteristics

- ▶ aluminium die cast case
- ▶ for connecting 2-wire submersible transmitters
- ▶ integrated pressure balance item
- ▶ 2 signal lines

Optional versions

- ▶ overvoltage protection with nominal discharge current of 10 kA
- ▶ Pt 100 temperature sensor for submersible pressure transmitters with built in Pt 100 sensor

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

It offers integrated atmospheric pressure compensation. Optionally 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, therefore a cable without ventilation tube can be used on the supply side.

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



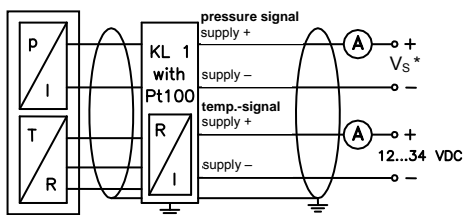
General specifications	
Number of signal lines	2-wire (4 ... 20 mA)
Housing	aluminium die cast case, grey powder-coating
Ingress protection	IP 66
Cable entries	cable gland M16x1.5 Polyamide, seals NBR, IP 68, diameter range: standard 5 ... 10 mm others on request
Atmospheric pressure compensation	pressure balance item 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

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

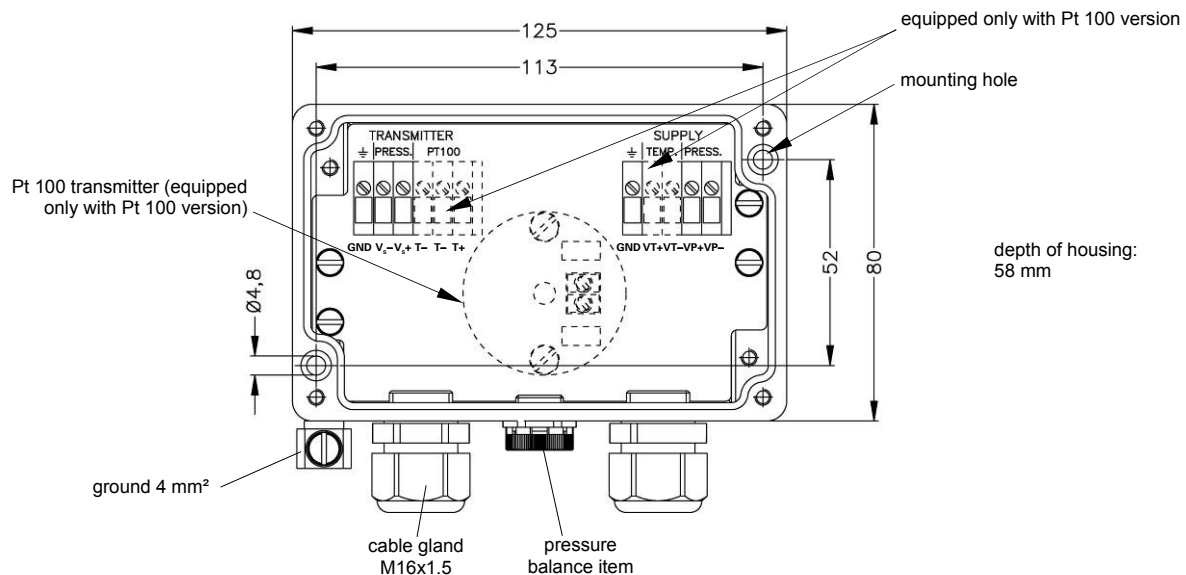
Wiring diagram



The ground wires of all components have to be connected!

* The supply V_S has to be chosen according to needs of the used transmitter.

Dimensions (in mm)



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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

consult

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

