

DOL 15

DOL 15 is an all-purpose fully electronic temperature sensor.



TYPICAL APPLICATIONS

The electronics of the sensor are embedded in a special plastic, and the sensor is extremely suitable for use in places where robustness is essential.

FUNCTIONAL DESCRIPTION

DOL 15 has a built in voltage amplifier (0.1 V/°C), which enables direct connection to control unit.

The sensing element is protected by a detachable cap, and it has been given a coat enamel to inhibit corrosion.

Through the holes next to the cable entry, zero point and amplification can be adjusted.

The sensing element in DOL 15 is made of a material whose electrical resistance varies with temperature.

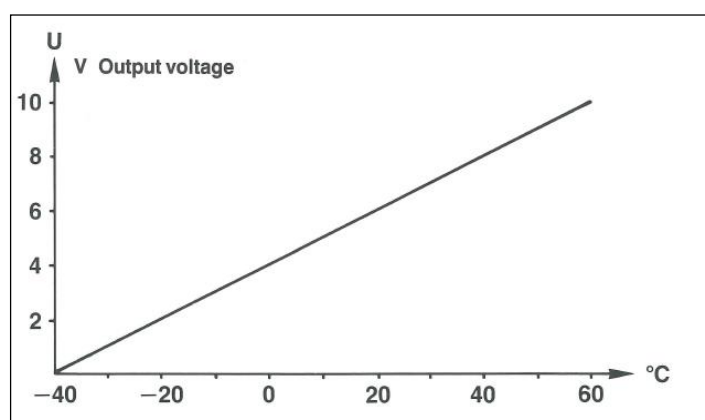
The electronics of DOL 15 measures the resistance and converts it into a corresponding voltage.

The voltage is adjusted by means of the values from the two adjustments, and then it is amplified and led to the signal wire.

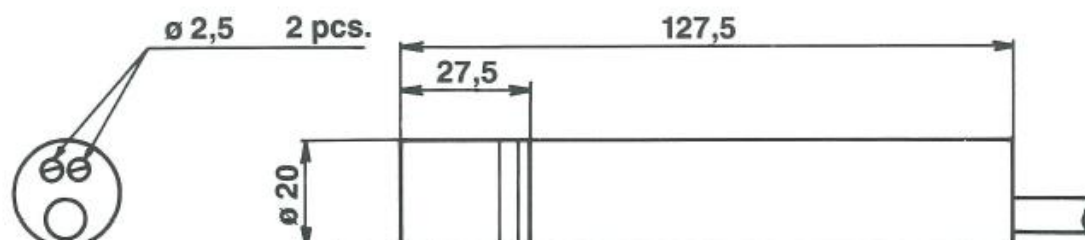
CONNECTION

To facilitate installation of DOL 15 use the enclosed clip or it may simply be suspended in the wire. The supply voltage, which must amount to at least 13 V DC, is connected to the blue and the black wire. If the power source is in excess of 24 V, a dropping resistor must always be introduced.

The sensor output signal is the voltage between the blue and the brown wire. There are no restrictions in the length of the cable to DOL 15, provided that wire of at least 1.5 mm² cross section is used.



DIMENSIONAL SKETCH



TECHNICAL DATA

Measuring range:	-30 °C - + 60 °C
Accuracy	
+10 °C - +40 °C:	± 0.5 °C
- 30 °C - + 60 °C:	± 1 °C
Time constant T ₆₃ :	6 min. at 0.5 m/s air velocity
Supply voltage:	13 V-24 V
Consumption:	13 V: 9 mA 24 V: 10 mA
Output voltage:	4 V DC at 0°C, 0.1 V/°C
Output impedance:	1 Kohm
Ambient temp., operation:	-30°C - + 60°C
Ambient temp., storage:	-30°C - + 70°C
Protection class, electronics unit:	IP54
Length:	127.5 mm
Diameter:	20 mm
Weight incl. cable:	150 g
Cable:	3-core, 1.5 m, ø5.5 mm
Shipping weight:	165 g
Shipping dimensions:	160x60x55 mm
Order no. DOL 15:	140203
Enclosed accessories:	Mounting clip with screws
Optional accessory:	Protection cap, order No. 140290