Zertifiziertes QM-System
DIN EN ISO 9001
Zertifikat-Nr. 01017

Temperature Switches

for liquids

measuring • monitoring • analysing

TWR

- Easy to install
- Mounting position independent
- Material: nickel-plated brass or stainless steel
- Connection: G ¾ male
- Switch point fixed: +30 °C ... 120 °C

T1

KOBOLD companies worldwide:

AUSTRALIA, AUSTRIA, BELGIUM, BULGARIA, CANADA, CHINA, CZECHIA, FRANCE, GERMANY, GREAT BRITAIN, HUNGARY, INDIA, INDONESIA, ITALY, MALAYSIA, MEXICO, NETHERLANDS, PERU, POLAND, REPUBLIC OF KOREA, RUSSIA, SPAIN, SWITZERLAND, THAILAND, TUNISIA, TURKEY, USA, VIETNAM

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Description

The KOBOLD temperature switches work with a bi-metal switch and serve to monitor temperature of liquids in piping and vessels. The instruments are available in brass or stainless steel and are screwed through a G¾ screw-in thread into a screwed socket that is welded onto the line or vessel. The temperature contacts have a fixed switch point in intervals of 5 °C in the range 30 °Cup to 50 °C, and in intervals of 10 °C between 50 °C and 120 °C. They are available as N/C or N/O contacts. Standard electrical connection is made through a plug connector, in which a pilot lamp can be integrated as an additional output state indicator.

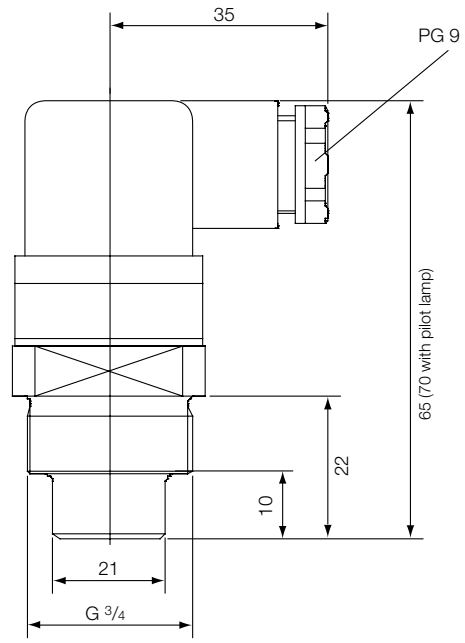
Technical Details

Contact operation:	N/O contact or N/C contact
Electrical connection:	plug connector according to DIN 43 650 optional with pilot lamp
Max. Switch capacity:	250 V_{AC}, 30 V_{DC} (TWR-1...0, TWR-2...0) 250 V_{AC}, 42 V_{DC} (TWR-3...0, TWR-4...0) 24 V_{DC} (TWR-...L) 230 V_{AC} (TWR-...G)
Switching current:	0.1 ... 4 A (TWR-1 ... 0, TWR-2 ... 0) 0.1 ... 1 A (TWR-1 ... L, TWR-2 ... L) 0.1 ... 1 A (TWR-1 ... G, TWR-2 ... G) max. 5 ... 200 mA (TWR-3, TWR-4)
Housing:	brass or stainless steel 1.4301
Connection:	G¾ male
Nominal pressure:	PN 64
Weight:	0.5 kg
Ambient temperature:	-30 ... 125 °C
Switching hysteresis max.:	20 °C
Accuracy:	

Switch points	Model	
	TWR-1/2	TWR-3/4
30 ... 90 °C	± 5 K	± 3 K
100 ... 120 °C	± 7 K	± 4 K

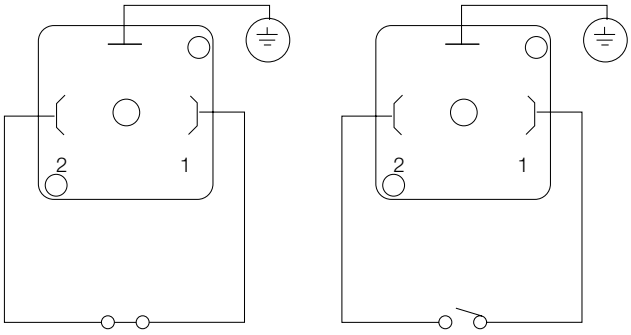
Protection:	IP 65

Dimensions [mm]



Electrical connection

TWR-1... TWR-2...
TWR-3... TWR-4...



Order Details (Example: **TWR-11030 L**)

Switching function (with rising temperature)	Model		Switching range	Pilot lamp
	Brass	Stainless steel		
N/C contact	**TWR-11..**	**TWR-12..**	..**030**.. = 30 °C ..**035**.. = 35 °C ..**040**.. = 40 °C ..**045**.. = 45 °C ..**050**.. = 50 °C ..**060**.. = 60 °C ..**070**.. = 70 °C ..**080**.. = 80 °C ..**090**.. = 90 °C ..**100**.. = 100 °C ..**112**.. = 112 °C ..**118**.. = 118 °C	..**0** = without ..**L** = LED 24 V_{DC} ..**G** = pilot lamp 230 V_{AC}
N/O contact	**TWR-21..**	**TWR-22..**		
N/C contact* (for SPS; intrinsically safe)	**TWR-31..**	**TWR-32..**		..**0** = without
N/O contact* (for SPS; intrinsically safe)	**TWR-41..**	**TWR-42..**		

* Instrinsically safe only without LED and pilot lamp

1/03 - 2021