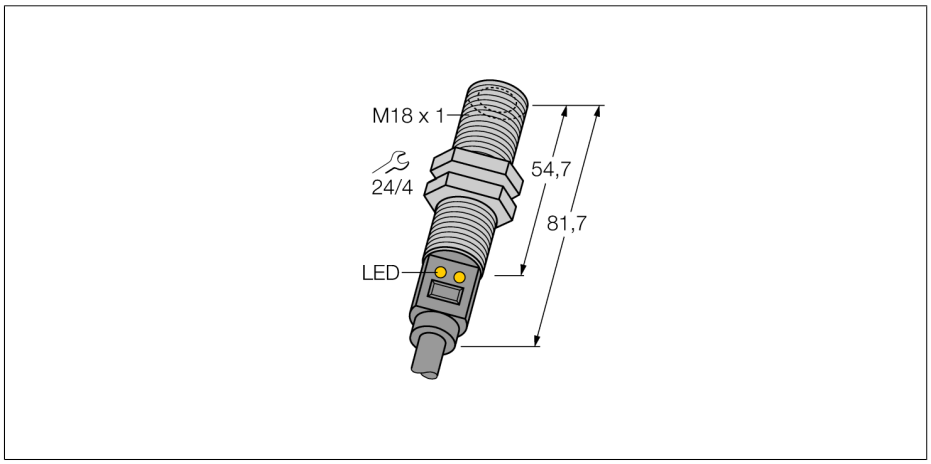
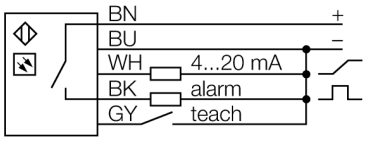
temperature sensors
infrared sensor
M18TIP6E



- **connection via cable, 2 m**
- **D:S ratio 6:1**
- **Operating voltage 12…30 VDC**
- **Measuring range adjustable via teach-in**
- **Analog output 4..20 mA**
- **PNP Alarm output switches at 20 mA**
- **Temperature range 0 … +300 °C**

Type	M18TIP6E
Ident-No.	3081126
Operating mode	infrared sensor
Ambient temperature	-20…+70 °C
Temperature operating range	≥0…≤300 °C
Switching point accuracy	± 0.5 °C
Operating voltage	12…30VDC
Short-circuit protection	yes/ cyclic
Reverse polarity protection	yes
Output function	NO contact, PNP/analog output
Current output	4…20mA
Readiness delay	≤ 1.5 s
Design	cylindrical/threaded, M18T
Dimensions	81.7 mm
Housing material	Stainless steel, V2A (1.4301)
Connection	cable
Cable length	2 m
Cable cross section	5 x 0.5 mm²
Protection class	IP67
Operating voltage	LED green
Switching state	LED yellow

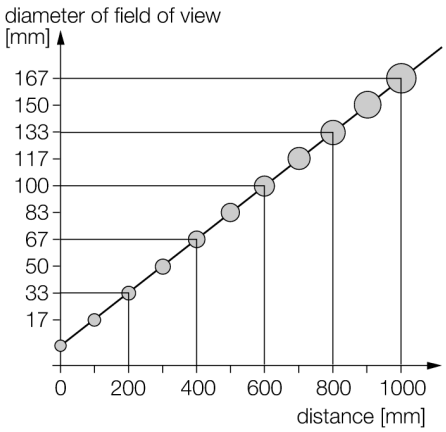
Wiring diagram



Functional principle

Temperature sensors are used everywhere where temperatures for control and optimisation of processes must be detected and monitored. The sensor operates only as a receiver. The thermal radiation of an object within a wave length range of 8 to 14 µm is transformed into an electrical signal via a thermopile and then conditioned as an output signal. The D:S (distance: spot) ratio, which specifies the measuring field diameter at a defined distance, is important in this context. Complete coverage of this field through the target surface, whose temperature is to be monitored, is the optimal configuration.

D:S ratio



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Hans Turck GmbH & Co.KG ● D-45472 Mülheim an der Ruhr ● Witzlebenstraße 7 ● Tel. 0208 4952-0 ● Fax 0208 4952-264 ● more@turck.com ● www.turck.com