

M18TB14Q Temperature sensor – Infrared sensor



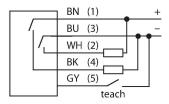
Technical data

Туре	M18TB14Q
ID no.	3073652
Measuring range	0300 °C
Temperature operating range	-4158 °F
Factory setting	-20280 °C
	-4536 °F
Response time	25 ms
Operating voltage	1030 VDC
Short-circuit/reverse polarity protection	yes / Cyclic / yes
Protection type and class	IP67
Output 1	Switching output
Switching output	
Output function	NO contact, PNP/NPN
Switching current	≤ 100 mA
Switching frequency	≤ 20 Hz
Response time typical	< 25 ms
Ambient temperature	-20+70 °C
Storage temperature	-20+70 °C
Housing	
Housing material	Stainless steel, 1.4301 (AISI 304), Grey
Process connection	M18 × 1
Electrical connection	Connectors, M12 × 1
Switching state	LED, Yellow
Included in delivery	2 M18 × 1 metal hexagon nuts

Features

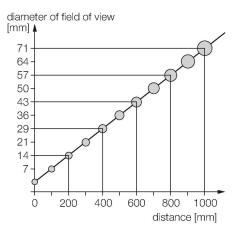
- connection via M12 x 1 connector
- D:S ratio 14:1
- Operating voltage 10...30 VDC
- Switchpoint adjustable via teach-in
- Temperature range 0...300°C

Wiring diagram



Functional principle

Temperature sensors are used in applications where temperatures for control and optimisation of processes must be captured 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 further processed to become an output signal. Here the D:S (distance: spot) ratio is very important because it specifies the diameter of the spot at a defined distance. The sensor is optimally aligned, if the spot is completely covered by the object, whose temperature is to be monitored.





Accessories

