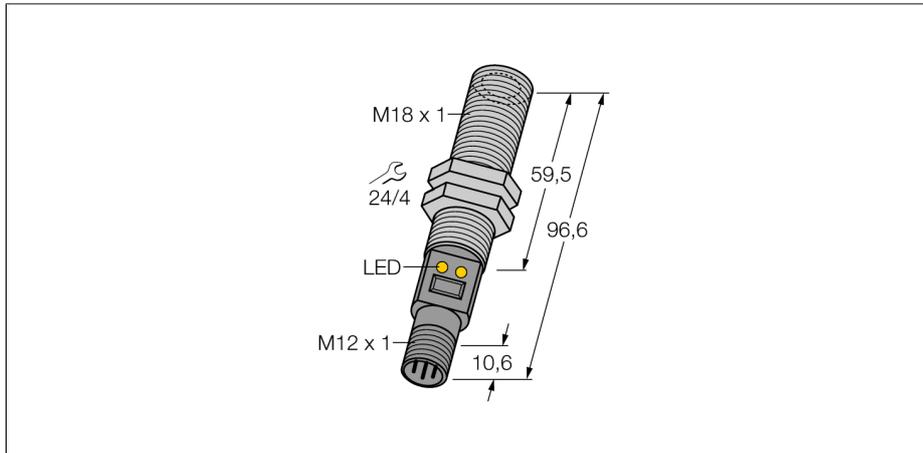
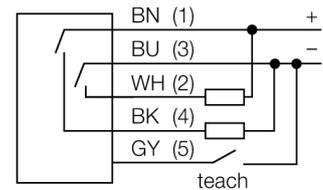


temperature sensors  
infrared sensor  
M18TB14Q



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

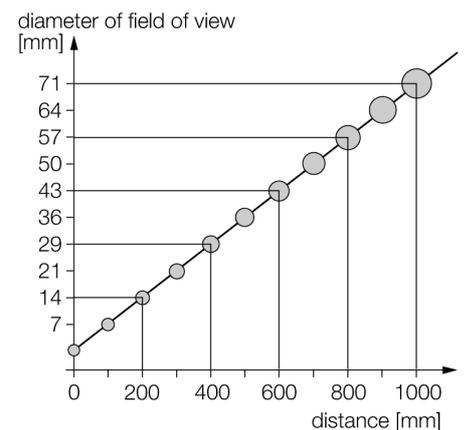
**Wiring diagram**



**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**



<b>Type</b>	M18TB14Q
Ident-No.	3073652
<b>Operating mode</b>	infrared sensor
Ambient temperature	-20...+70 °C
Temperature operating range	≥0...≤300 °C
Switching point accuracy	± 0.5 °C
<b>Operating voltage</b>	10...30VDC
DC rated operational current	≤ 100 mA
No-load current I <sub>0</sub>	≤ 35 mA
Short-circuit protection	yes/ cyclic
Reverse polarity protection	yes
Output function	NO contact, PNP/NPN
Switching frequency	≤ 20 Hz
Readiness delay	≤ 1.5 s
<b>Design</b>	cylindrical/threaded, M18T
Dimensions	96.6 mm
Housing material	Stainless steel, V2A (1.4301)
Lens	semi-metal, Germanium
Connection	connector, M12 x 1
Protection class	IP67
<b>Operating voltage</b>	LED green
Switching state	LED yellow