



Electronic Temperature Sensor

Sensor

with 3-Digit LED Display



measuring
•
monitoring
•
analysing



TDA-...P3M
TDA-...N3M

TDA-...L3M

- Measuring range: -50 ... +125 °C
- Pressure: max. 80 bar
- Accuracy: ±0.5 °C (at -10 ... +85 °C)
- Housing material: stainless steel
- Connections:
G 1/2, G 3/4, 1/2 NPT, 3/4 NPT
or M25x1.5



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KOBOLD Messring GmbH
Nordring 22-24
D-65719 Hofheim/Ts.
☎ +49(0)6192 299-0
Fax +49(0)6192 23398
E-Mail: info.de@kobold.com
Internet: www.kobold.com

Model:
TDA-

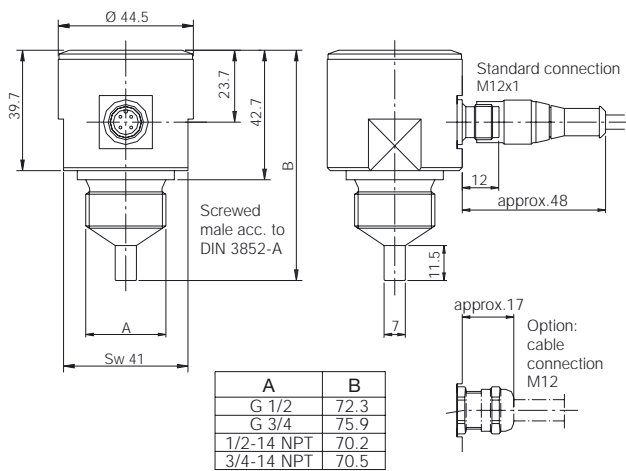


Description

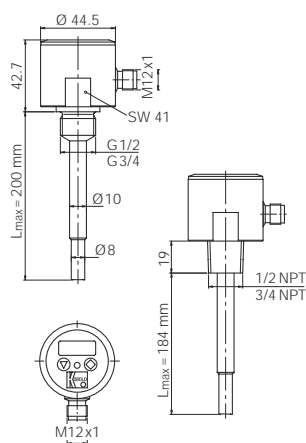
The KOBOLD Model TDA temperature sensor is used for economical measuring and monitoring of temperature. It can be used for any application in which temperatures must be monitored with great accuracy.

The sensor element is a semiconductor that outputs a digital signal to the electronic analyser in 0.5°C steps. The measured values are shown on a 3-place LED display. The analogue output can be adjusted as required within the measuring range.

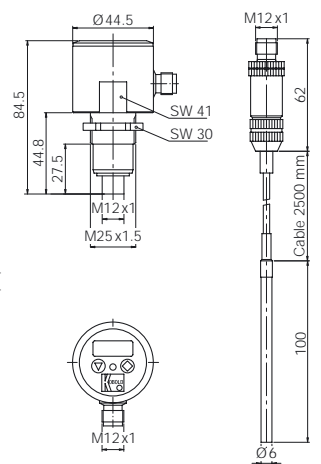
Dimensions: Compact version, short



Compact version, long



Separately mounted version



Technical Details

- Housing cover: stainless steel 1.4305
- Housing: stainless steel 1.4404
- Connections, compact version:**
 - G 1/2 or G 3/4 external thread stainless steel 1.4404
 - Option: 1/2 NPT or 3/4 NPT
- Connection, separately mounted version:**
 - Sensor: 100 mm, 6 mm
 - Cable: 2.5 m PTFE with M12x1 plug connector
- Housing: M25x1.5 with jam nut
- Principle of measurement: semiconductor
- Display: 3-position LED, digit-height: 7 mm
- Resolution: 0.5°C to 100°C, 1°C above 100°C
- Max. temperature of measured medium: -20...+120°C (compact version), 50...+125°C (separately mounted version)
- Max. ambient temp.: -20...+50°C
- Max. pressure: 80 bar
- Power supply: 24 V_{DC} ± 20%
- Power consumption: 40 mA (TDA-...L3M); approx. 70 mA (TDA-...P3M, TDA-...N3M) without switching current output
- Electrical connection: Plug M12x1
- Switching output: Semiconductor; PNP or NPN (factory set), max. 300 mA, short-circuit proof N/O / N/C, window, adjustable
- Contact function: via 2 keys adjustable
- Switch. point adjustment: programmable
- Switching display: 1 (2) LED
- Switching state display: via 2 keys adjustable
- Hysteresis: 0.5...99.5 (separately adjustable) (only TDD-5, TDD-7)
- ON/OFF-switching delay: 0.5 s
- Measuring cycle: ± 0.5°C (between -10...+85°C), ± 2°C (between +85...125°C), ± 2°C (between -50...-10°C)
- Accuracy (sensor): IP 65
- Protection type:

- Applications:** ● Compressors ● Machine construction ● Plant engineering ● Pumps

Order Codes (Example: TDA-15H2 R4 0 L 3M)

Display	Measur. range	Connection	Model	Sensor length	Output	Electr. connection
3-position LED display	-20...+120°C	G 1/2	TDA-15H2 R4	0 = short 1 = 100 mm 2 = 200 mm**	L = 0 (4) -20 mA P = 0 (4) -20 mA, PNP-switch output N = 0 (4) -20 mA, NPN-switch output	3M = M12x1 plug connector
		G 3/4	TDA-15H2 R5			
		1/2 NPT	TDA-15H2 N4			
		3/4 NPT	TDA-15H2 N5			
	-50...+125°C	separately mounted version, smooth sensor	TDA-15H3 D6	1 = 100 mm		

* Please specify cable length when ordering! **Maximum length for NPT screw thread is 184 mm instead of 200 m.