

# TM63

Nöding

Messtechnik



## Datasheet Digital Contact Thermometer TM63

### PERFORMANCE FEATURES

- 3 digit LED display
- Recording min./max. temperature
- Measuring ranges from -20...200°C
- Contact output DC PNP, max. 200 mA
- Analog output: 4...20 mA, 3-wires  
0...10 V, 3-wires  
0... 20 mA, 3-wires

Model TM63 features a large, bright display. The digital thermometer can still be easily read from a distance and therefore allows for a quick assessment of the process temperature. An analog output and a switch output widen the range of applications. The process connections are made of high-quality stainless steel 1.4404 and are therefore suitable for almost all media. All wetted components are food safe, making the unit ideal for use in beverage and process water applications.

### AREAS OF APPLICATION

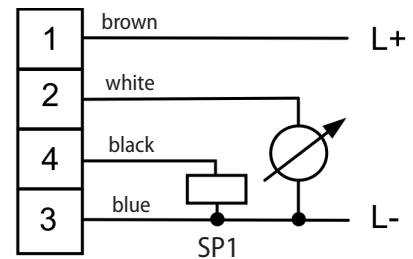
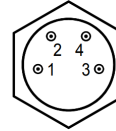
- Industrial water applications
- Beverage industry
- Gaseous media
- Hygiene applications
- Abrasive media
- Aggressive media

## TECHNICAL DATA

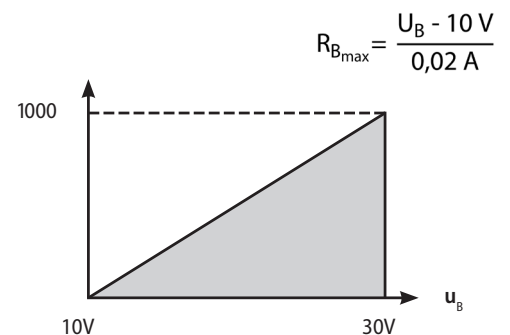
Measuring range	
Temperature range	See table „Measuring ranges“ others on request
Output	
Analog output	4...20 mA, 3-wires 0...10 V, 3-wires 0...20 mA, 3-wires
Contact output	DC PNP, max. 200 mA
Power supply	
20 mA output	10...30 V DC
10 V output	16...30 V DC
Signal characteristics	
Accuracy	$\leq \pm 0,3 \% \text{ FS @ } 25^\circ\text{C} + 0,3^\circ\text{C}$ Pt1000 Kl.B: $+ 0,005^\circ\text{C} \times t$
Long term stability	$\leq \pm 0,2 \% \text{ FS/Year}$
Response time	200 ms - andere Werte auf Anfrage
Switch-on time	< 1 s
Temperature coefficient	
PT1000B	$\leq \pm 0,02 \% \text{ FS/Kelvin}$
Temperature ranges	
Medium temperature	-50...200 °C
Surrounding temperature	-25...80 °C
Storage temperature	-40...85 °C
Electrical protections	
Short-circuit resistance	Permanent
Reverse polarity protection	Protection against reverse polarity, but no function
Electromagnetic compatibility	Interference emissions and immunity acc. to EN 61326
Wetted materials	
Process connection	Stainless steel 1.4404
Surroundings	
Protection type	IP 67
Exemplary weight	
TM63-A-11-305-00 (figure p. 1)	Approx. 300 g

## ELECTRICAL CONNECTION

Connector M8x1 4-pole



## LOAD



## MEASURING RANGES

Measuring ranges	Code
0...50 °C	1
0...60 °C	2
0...80 °C	3
0...100 °C	4
0...120 °C	5
0...150 °C	6
0...160 °C	7
0...200 °C	8
-20...50 °C	A
-20...60 °C	B
-20...80 °C	C
-20...100 °C	D
-20...120 °C	E
-20...150 °C	F
-20...160 °C	G
-20...200 °C	H
0,0...50,0 °C	J
0,0...60,0 °C	K
0,0...80,0 °C	L
0,0...100,0 °C	M
-20,0...50,0 °C	N
-20,0...60,0 °C	O
-20,0...80,0 °C	P
-20,0...100,0 °C	Q

Other measuring ranges on request

## ORDERING CODE

**Type**  
**A** Axial, connection back  
**W** Connection bottom

**Analog output**  
**1** 0...10 V 3-wires  
**2** 0...20 mA 3-wires  
**3** 4...20 mA 3-wires (signal range 3,8...20,5 mA)

**Contact output**  
**1** 1 contact

**Ranges**  
**Measuring ranges see table**  
**9** Non-standard range (on request)

**Process connection and material**  
**3** G 1/2 A, ISO 228-1, male swivel nut, 1.4404  
**G** G 1/2 A, ISO 228-1, union nut, 1.4404

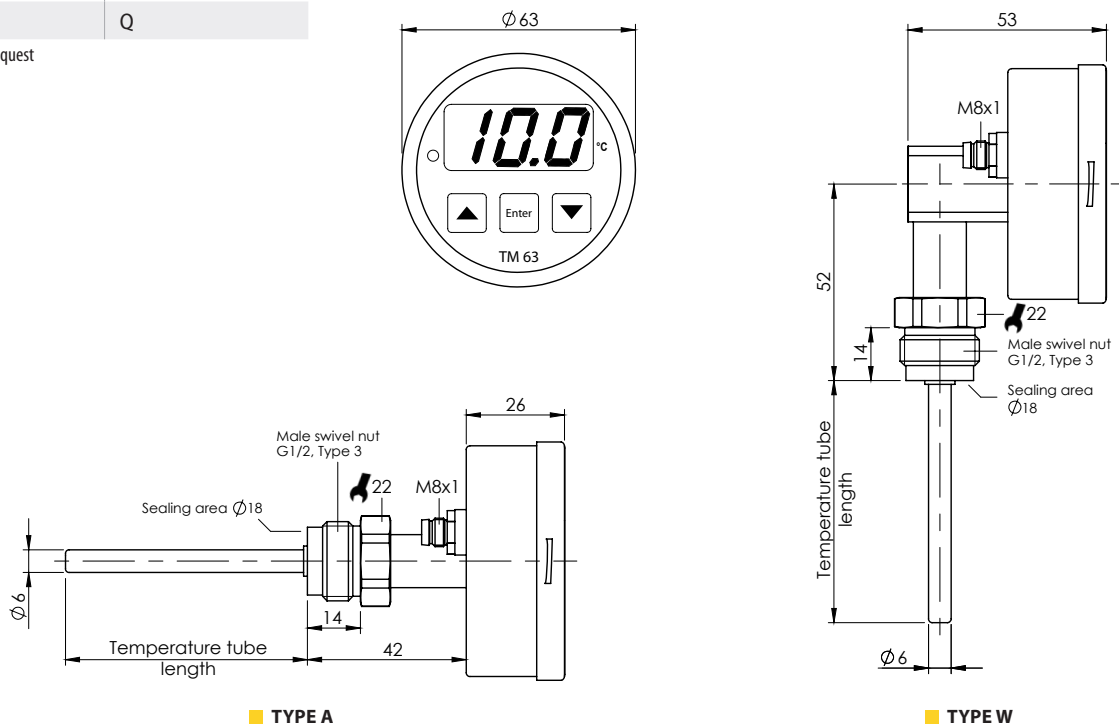
**Temperature tube length**  
**05** 50 mm  
**10** 100 mm others on request  
**16** 160 mm  
**25** 250 mm

**Accuracy class**  
**0** Pt 1000 Kl. B, standard  
**1** Pt 1000 Kl. A

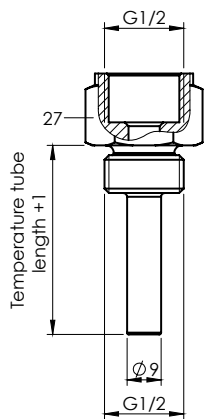
**Options**  
**0** None  
**1** Connector M12x1, 4-pole IP67

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## DIMENSIONS



## ■ ACCESSORIES



■ SH-1-XX

### Protective casing

SH-1-05 Protective casing SH-1-05 Temperature tube length 50 mm

SH-1-10 Protective casing SH-1-05 Temperature tube length 100 mm