

## ***TF-M/E-G1/2***

- Pt 100 (RTD) temperature probe
- Continuous temperature acquisition
- Probe length up to 1 m
- Housing material brass or stainless steel

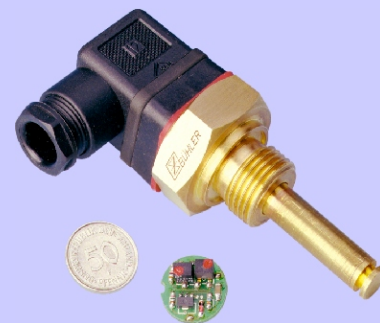
TF-M-G1/2



## ***MK2-G1/2/EK2-G1/2***

- Analog output 4-20 mA
- Continuous temperature acquisition
- Most lengths of cable connections between sensor and control unit
- Probe length up to 1 m
- Housing material brass or stainless steel

MK2-G1/2



Temperature probe Pt 100 with spring

## ***TF-M-VAL***

### ***Temperature probe Pt 100 (RTD) with spring***

- Pt 100 (RTD) temperature probe
- Continuous temperature acquisition
- Integrated spring for a variable probe length



## Technical data

## Temperature probe TF with Pt 100

**Type design**  
 material probe  
 max. operating pressure  
 connector  
 operating temperature  
 lengths

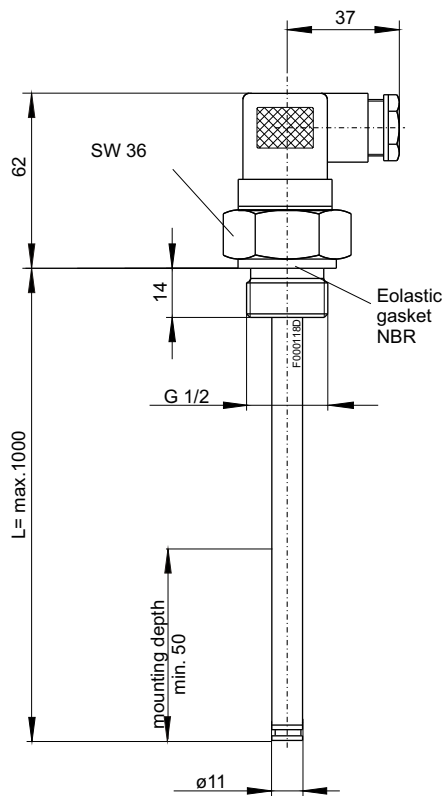
<b>TF-M-G1/2</b>	<b>MS</b>	<b>TF-E-G1/2</b>	<b>VA</b>
brass	brass	1.4571	10 bar
5 bar	G1/2		
-40 °C to +100 °C			
280, 370, 500 (standard)			
variable up to max. 1000			

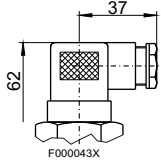
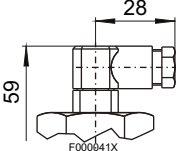
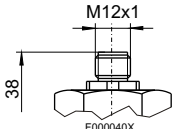

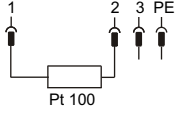
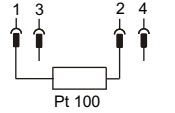
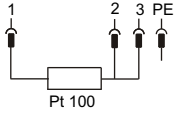
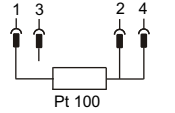
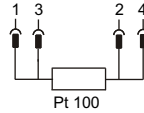
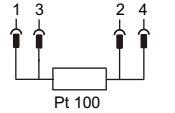
### Temperature sensor

sensor element Pt 100 class, B DIN EN 60751  
 tolerance ±0,8 °C  
 sensor wiring 2, 3 or 4 lead

### Basic values of the measuring resistors Pt 100

°C	Ohm
0	100,00
10	103,90
20	107,79
30	111,67
40	115,54
50	119,40
60	123,24
70	127,07
80	130,89
90	134,70
100	138,50



Connector*	M3 3 pol. + PE (DIN EN 175301-803) IP 65 PG 11	GS4 4 pol. IP 65 PG 7	M12 (base) 4 pol. IP 67**
protection class cable connection			
*other connectors on request			**with casted connector head 
Standard pin assignment			
2 - lead			
3 - lead			
4 - lead			

## Product code for Temperature probe TF

TF-M for design MS TF-E for design VA	<input type="checkbox"/> G1/2 <input type="checkbox"/>	<input type="checkbox"/> PT100 <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Design MS VA	Length (max. 1000 mm) 280 370 500 Variable (please note)			
Connector M3 M12 GS4 only for 4-lead-wiring	Switch form 2L = 2 - lead 3L = 3 - lead 4L = 4 - lead			

### Example for order

You need: Temperature probe brass design, with connector M3, length L= 520 mm, PT 100 in 2-lead circuit, operating pressure 2 bar

You order: Temperature probe TF-M-G1/2-MS-M3-PT100-2L / 520

## Technical data

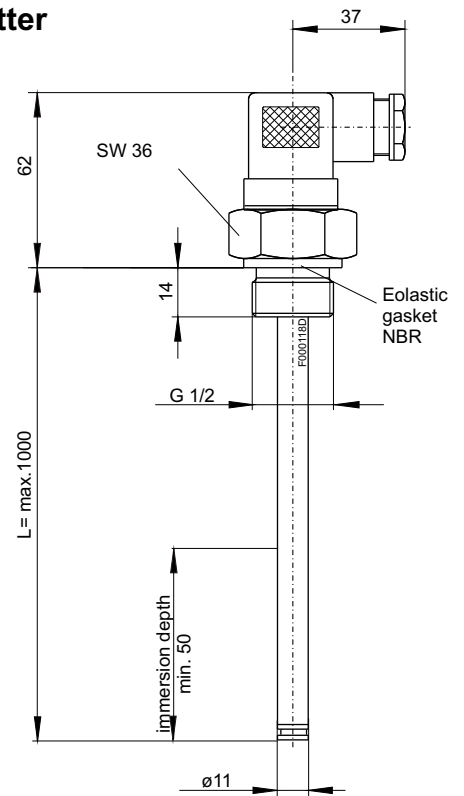
## MK2/ EK2 with temperature transmitter

Type	MK2-G1/2	EK2-G1/2
<b>design</b>	<b>MS</b>	<b>VA</b>
material probe	brass	1.4571
max. operating pressure	5 bar	10 bar
connector	G1/2	G1/2
operating temperature	-20 °C to +100 °C	
lengths	280, 370, 500 (standard) variable up to max. 1000	

### Temperature transmitter

sensor element	Pt 100 class B DIN EN 60751
tolerance Pt 100	±0,8 °C
operating voltage (U <sub>B</sub> )	10 - 30 V DC
measuring range*	0 °C to +100 °C
output*	4 - 20 mA
load Ω max.	(U <sub>B</sub> - 7,5 V) / 0,02 A

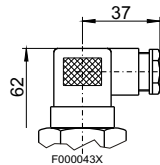
\*other measurement ranges and outputs on request



### Connector\*

	M3
max. voltage	30 V DC
protection class	IP 65
cable connection	PG 11

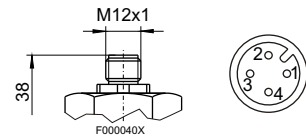
\*other connectors on request



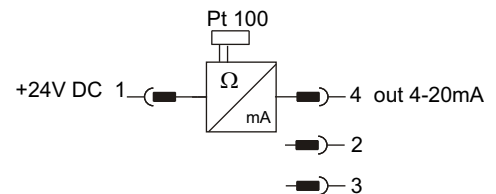
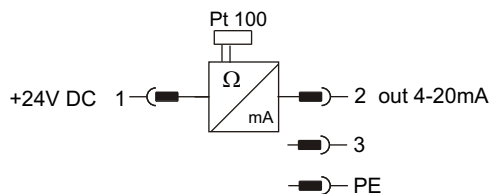
### M12 (base)

max. voltage	30 V DC
protection class	IP 67**

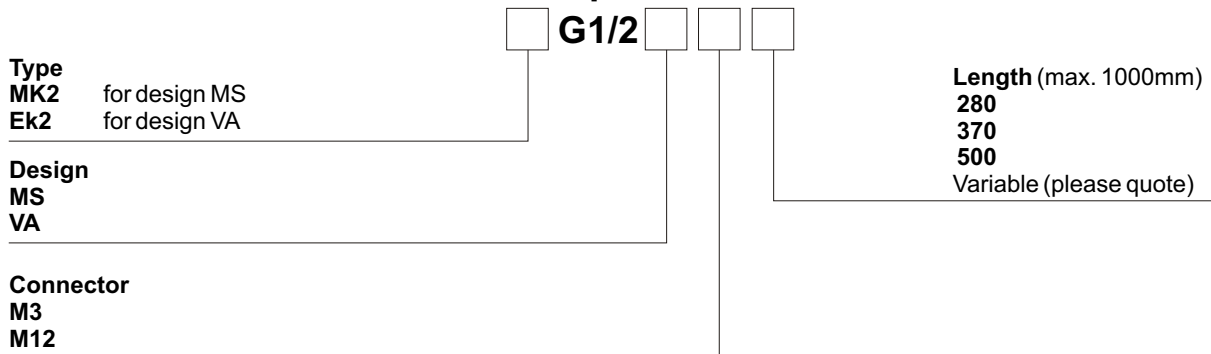
\*\*with casted connector head



### Standard pin assignment



## Product code for temperature transmitter MK2 / EK2



### Example for order

You need: Temperature transmitter brass design, with connector M3, output 0-100 °C = 4-20 mA  
length L= 520 mm, operating pressure 2 bar

You order: Temperature transmitter MK2-G1/2-MS-M3 / 520

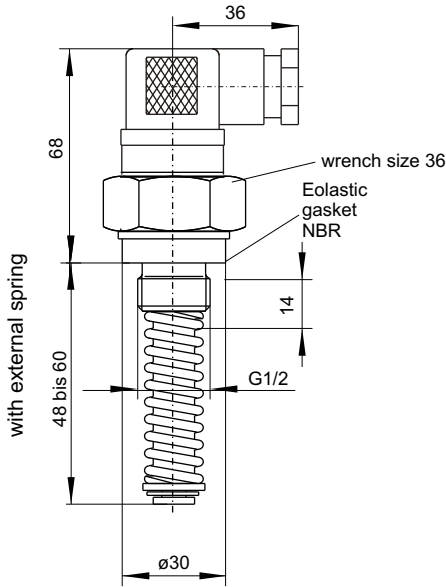
## Technical data

## Temperature probe Pt 100 with spring TF-M-VAL-G1/2

### Design with external spring

length 48 - 60 mm

material probe aluminium anodized / spring steel  
 gasket NBR  
 max. operating pressure 1 bar  
 fitting G1/2  
 fastening torque 25 Nm  
 operating temperature -40 °C to +100 °C

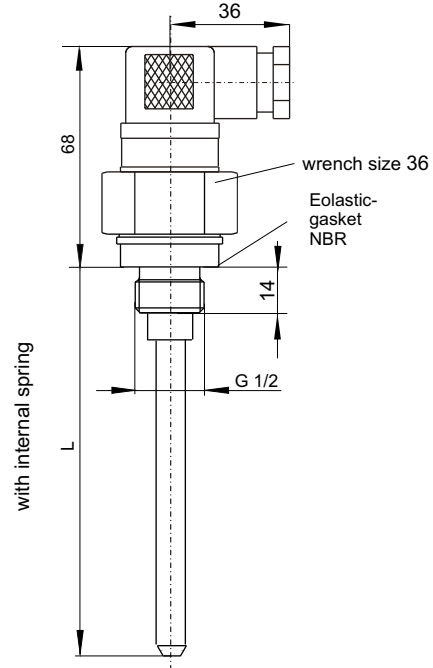


### Design with internal spring

lengths L spring deflection  
 210 206-215 mm  
 330 325-334 mm

material probe brass  
 gasket NBR  
 max. operating pressure 1 bar  
 fitting G1/2

operating temperature -40 °C to +100 °C



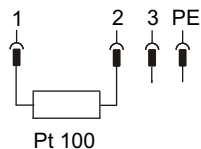
## Temperature sensor

sensor element Pt 100 class B, DIN EN 60 751  
 tolerance  $\pm 0,8^{\circ}\text{C}$   
 switching form 2 - lead  
 basic values see chart on page 2

**Connector\*** M3 3 pol. + PE ( DIN EN 175301-803)  
 protection class IP 65  
 cable connector PG 11

\*on request other connectors

## Standard pin assignment



## Order information

### Temperature probe TF-M-VAL with Pt 100 and spring

Part No.	Length	Type
18 92 599	48-60 mm	TF-M-PT100-VAL-M3/60
18 94 599	206-215 mm	TF-M-PT100-VAL-M3/210
18 95 799	325-334 mm	TF-M-PT100-VAL-M3/330

### Example for order:

You need: Temperature probe with Pt 100 with spring, length 48-60 mm  
 You order: Part No. 18 92 599 temperature probe TF-M-PT100-VAL-M3/60