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Измерители температуры TSM-G1/2 Buhler

Bi-metal-Temperature switch

TSM-G1/2

TSM-G1/2, TSE-G1/2

- G1/2” thread connection
- Up to 2 temperature switching points
- Probe length up to 1 m

TSK-G3/4

TSK-G3/4

- G3/4” thread connection
- Up to 2 temperature switching points
- Probe length up to 1 m
- Low hysteresis

TSA

TSA

- G1/2” thread connection
- 1 x temperature switching point
- Fixed length 29 mm for e. g. cable installation

Technical data TSM / TSE

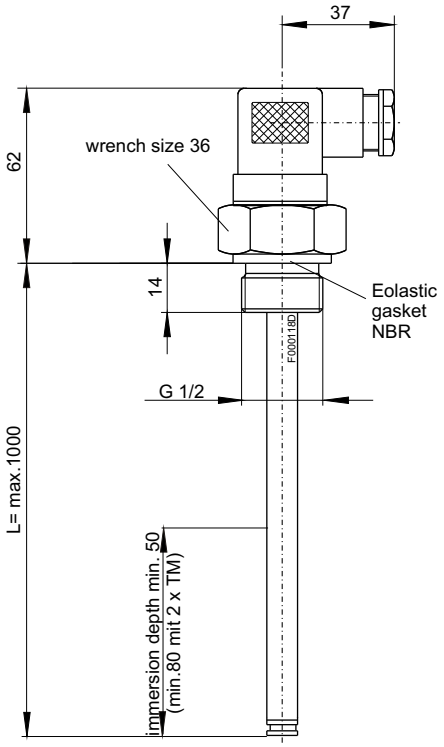
Type	TSM-G1/2	TSE-G1/2
Design	**MS**	**VA**
material probe	brass	1.4571
max. operating pressure	5 bar	10 bar
connection	G1/2	G1/2
operating temperature	-40 °C to +80 °C	
lengths	280, 370, 500 (standard)	
	variable up to max. 1000 mm	

Temperature contact	**TMxx**
switch element	bi-metal
# contacts	1 or 2
max. voltage	230 V
max. current	2 **A**
max. contact load	100 VA

Function	**NC**	**NO***
switching point °C	50 / 60 / 70 / 80	50 / 60 / 70 / 80
switching point tolerance	± 5 K	± 5 K
max. hysteresis	18 K ± 5 K	26 / 35 / 40 / 45 K ± 5 K

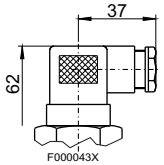
other temperatures on request

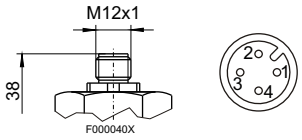
* NC = normally closed / NO = normally open at **low temperature**



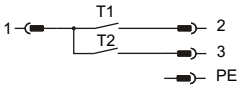
Connector* **M3** (DIN EN 175301-803)
3 pol. + PE
max. voltage 230 V AC/DC
protection class IP 65
cable connection PG 11
*other connectors on request

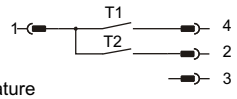
M12 (base)
4 pol.
30 V DC
IP 67**
**with casted connector head





Standard pin assignment





T1 = lower temperature / T2 =higher temperature

Product code for Temperature switch TSM / TSE

□ □ □ **G1/2** □ □ □ □

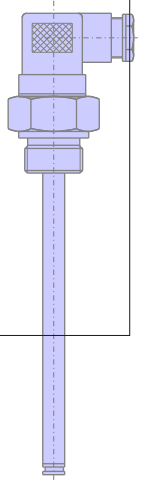
TSM for design MS
TSE for design VA

 # temperature contacts
1 or 2

Design
MS
VA

Connector
M3
M12

Length (max. 1000 mm)
280
370
500
Variable (please quote)



T2 (2nd Temperature contact)

NC	NO	
TM50NC	TM50NO	=50 °C
TM60NC	TM60NO	=60 °C
TM70NC	TM70NO	=70 °C
TM80NC	TM80NO	=80 °C

T1 (1st Temperature contact)

NC	NO	
TM50NC	TM50NO	=50 °C
TM60NC	TM60NO	=60 °C
TM70NC	TM70NO	=70 °C
TM80NC	TM80NO	=80 °C

Example for order
You need: Temperature switch brass design, connection G1/2, length L= 300 mm, connector M3
2 x temperature contact: 1st contact 50 °C NC (open), 2nd contact 70 °C NO (closed),
You order: TSM-2-M3 / 300 -TM50NC-TM70NO

Technical data TSK

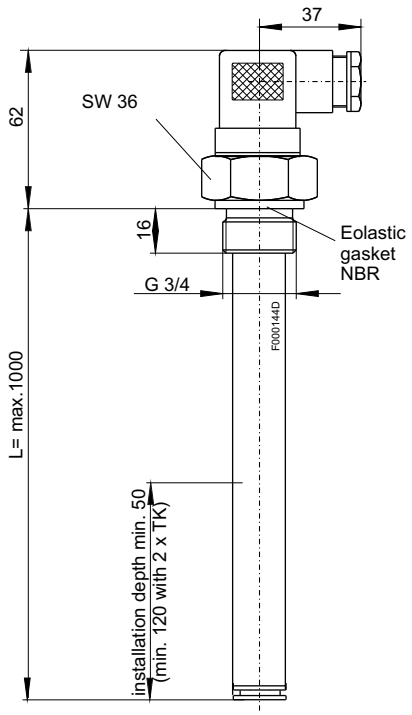
Type	**TSK-G3/4**	
design	**MS**	**VA**
material probe	brass	1.4571
max. operating pressure	1 bar	5 bar
connection	G3/4	G3/4
operating temperature	-40 °C to +80 °C	
lengths	280, 370, 500 (standard)	
	variable up to max 1000	

Temperature contact	**TKxx**
switch element	bi-metal
quantity contacts	1 or 2
max. voltage	230 V
max. current	2 A
max. contact load	100 VA

Function	**NC / NO***
switching point °C	40 / 50 / 60 / 70 / 80
switching point tolerance	± 3 K
max. hysteresis	10 K ± 5 K

other temperatures on request

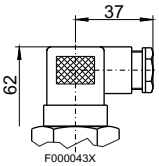
*NC = normally closed / NO = normally open at **low temperature**

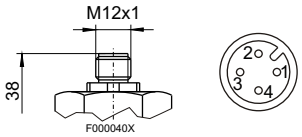


Connector*	**M3**	**M12 (base)**
	3 pol. + PE (DIN EN 175301-803)	4 pol.
max. current	230 V AC/DC	30 V DC
protection class	IP 65	IP 67**
cable connection	PG 11	

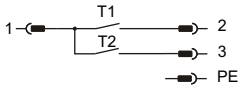
*other connectors on request

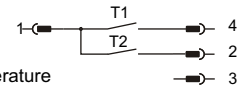
**with casted connector head





Standard pin assignment

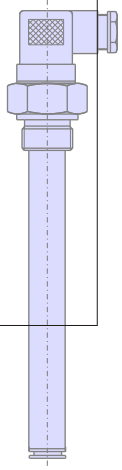




T1 = lower temperature / T2 = higher temperature

Product code for Temperature switch TSK

TSK- ☐ ☐ G3/4 ☐ ☐ ☐ ☐



 # temperature contacts
1 or 2

Design
MS brass
VA stainless steel

Connector
M3
M12

Length (max. 1000mm)
280
370
500
Variable (please specify)

T2 (2nd Temperature contact)

NC	NO	
TK40NC	TK40NO	=40°C
TK50NC	TK50NO	=50°C
TK60NC	TK60NO	=60°C
TK70NC	TK70NO	=70°C
TK80NC	TK80NO	=80°C

T1 (1st Temperature contact)

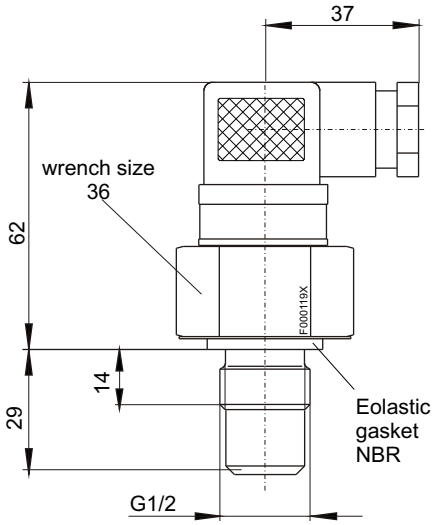
NC	NO	
TK40NC	TK40NO	=40°C
TK50NC	TK50NO	=50°C
TK60NC	TK60NO	=60°C
TK70NC	TK70NO	=70°C
TK80NC	TK80NO	=80°C

Example for order

You need: Temperature switch brass design, connection G3/4, length L= 300 mm, connector M3
2 x temperature contact: 1st contact 50 °C NC (open), 2nd contact 70 °C NO (closed),
You order: TSK-2-M3 / 300 -TK50NC-TK70NO

Technical data

Type	**TSA**
probe length	29 mm
material probe	aluminium anodized
max. operating pressure	15 bar
operating temperature	- 40 °C to + 80 °C



Temperature contacts

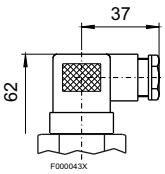
switch element	bi-metal
max. voltage	230 V
max. current	2 A
max. contact load	100 VA
tolerance	± 5 K
switching back difference	15 K ± 3 K

switch function	**NO*/NC***
switching point °C	25 / 40 / 50 / 60 / 70 / 80

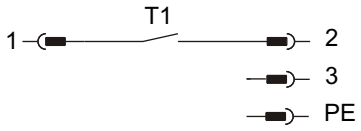
*NC = normally closed / NO = normally open at **low temperature**
other temperatures on request

Connector	**M3** (DIN EN 175301-803)
	3 pol. + PE
protection class	IP 65
max. voltage	230 V AC/DC
cable connection	PG 11

other connectors on request



Standard pin assignment



Order information

Switch function	**NO**	.	**NC**	
Temperature	**Type**	**Part No.**	**Type**	**Part No.**
25 °C / 77 °F	TSA-25-M3	11 39 699	TÖA-25-M3	11 42 899
40 °C / 104 °F	TSA-40-M3	11 39 599	TÖA-40-M3	11 43 299
50 °C / 122 °F	TSA-50-M3	11 38 599	TÖA-50-M3	11 42 199
60 °C / 140 °F	TSA-60-M3	11 38 699	TÖA-60-M3	11 43 399
70 °C / 158 °F	TSA-70M3	11 38 799	TÖA-70-M3	11 40 299
80 °C / 176 °F	TSA-80-M3	11 39 299	TÖA-80-M3	11 40 899

Example for order:
You need: Temperature contact should be at 50 °C NO, connector Type M3
You order: Part No. 1138599 Temperature switch TSA-50-M3

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