

TEMPERATURE SWITCH BIMETAL



- NO AUXILIARY POWER
- SWITCH POINT 5...200 °C
- 1 NC CONTACT, 12 VDC 8 A
- ±5 K, OPTION ±3 K
- IP 65



IP65



Stainless Steel

KEY DATA

Property	Value	Property	Value
Action	bimetallic release, no supply	Medium	0 ... +200 °C
Output	1 NC contact, creep action	Ambient	0 ... +85 °C (1)
Contact rating	12 VDC 8 A · 24 VDC 4 A (2)	Switch point	5 ... 200 °C, fixed (3)
Accuracy	±5 K, option ±3 K	System pressure	up to 100 bar (4)
Sheath	Ø 9 × 0.5 mm, stainless steel	Product code	ML

Temperature switch with a bimetallic release that works without auxiliary power — as a limiter for machines and equipment, for example in mobile hydraulics, engines and compressors.

TECHNICAL DATA

INPUT AND OUTPUT

Action	bimetallic release
Medium temperature	0 ... +200 °C
Switch point	5 ... 200 °C, in steps of 1 °C
Setting	fixed in the factory (3)
Contact	1x normally closed
Contact character	creep action, without hysteresis
Contact face	gold plated
Contact rating	12 VDC, 8 A · 24 VDC, 4 A
Switching cycles	5,000 at 100 °C, resistive load (2)
Supply	none — the switch needs none

PERFORMANCE

Accuracy standard	±5 K
Accuracy option	±3 K, on request
Vibration resistance	up to 10 g (4)
Shock resistance	up to 100 g (4)
Vibration protection	housing potted inside
Rating M12 4-pole	250 V, 4 A
Rating M12 5-pole	60 V, 4 A
Rating M12 8-pole	30 V, 2 A
Rating valve plug	250 V, 10 A
Rating MIL 6-pole	600 V, 7.5 A

SUPPLY AND ENVIRONMENT

Supply	none
Ambient	0 ... +85 °C (1)
Medium	0 ... +200 °C
Storage	0 ... +100 °C
Condensation	harmless
System pressure	up to a maximum of 100 bar (4)

MECHANICS

Process connection	3/8" · 1/2" · 3/4" · 1" · 3/8NPT · 1/2NPT · without thread
Sheath	Ø 9 x 0.5 mm, stainless steel
Housing	stainless steel
Adapter piece	PBT GF30, at the electrical connection
Switching contact	silver, gold plated
Fitting, nominal length	50 ... 1000 mm per key
Protection	at least IP 65, connector plugged

(1) The ambient temperature is not the medium temperature: the medium may reach +200 °C, the head only +85 °C.

(2) The contact rating applies for 5,000 switching cycles at 100 °C and resistive load.

(3) The switch point is set in the factory and cannot be changed in the field. It has to be stated with the order, in steps of 1 °C.

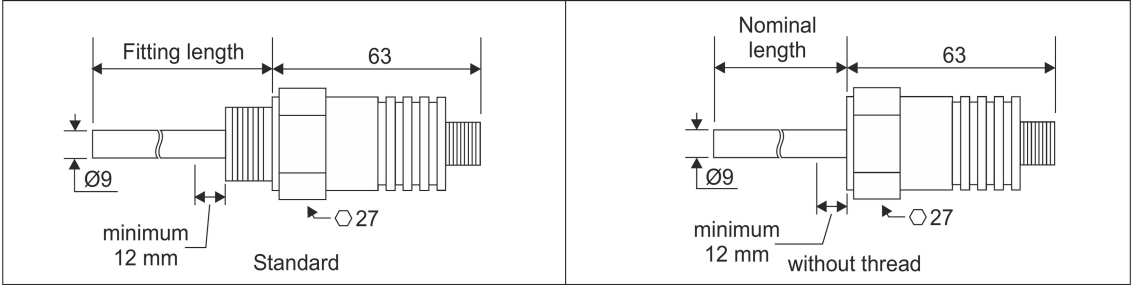
(4) System pressure, vibration and shock resistance depend on medium, temperature, mounting situation and sheath version; the figures named are maxima.

ELECTRICAL CONNECTION

Nine electrical connections are available: M12x1 four-, five- and eight-pole, Deutsch DT04 three- and four-pole, Super Seal 1.5 three-pole, bayonet (DIN) four-pole, valve plug four-pole, MIL six-pole and cable 2 m. The permissible load depends on the connector and is partly smaller than the contact rating: the M12 eight-pole carries only 30 V and 2 A, the M12 five-pole 60 V and 4 A. Whoever wants to switch 8 A checks the connector table.



DIMENSIONS



Dimensions in mm.



CONFORMITY

Protection	at least IP 65 with the connector plugged
Material to the medium	stainless steel

ORDER INFORMATION

Accessories

- The switch works without auxiliary power and its switch point is set in the factory. Only the mating coupling for the chosen connector is needed.

ORDER KEY

Field	Value	Meaning
Product code	ML	stands at the beginning of every order code
Type of contact	0	normally closed
Process connection	0 ... 6	3/8" · 1/2" · 3/4" · 1" · 3/8NPT · 1/2NPT · without thread (dip-in switch)
Electrical connection	0 ... 9	M12 4/5/8-pole · Deutsch DT04 3/4-pole · Super Seal 3-pole · bayonet · valve · cable 2 m · MIL
Accuracy	0 · 1	±5 K · ±3 K on request
Fitting, nominal length	0 ... 7	50 · 100 · 200 · 250 · 400 · 600 · 1000 mm · other, please state
Switch point	0	5 ... 200 °C, to be stated with the order (3)
Other	0	special model

The order code is formed from the product code and the fields of the key.

