

TS61 || Temperature Switch

General Description

TS61 temperature switches are used for monitoring and controlling out-of-limit temperature conditions in heating and cooling systems, in pipes, process vessels, and storage vessels. They are particularly suitable for monitoring, control, and protection of compressors, motors, pumps, hydraulic power systems, plastics processing machines, etc.

Important features

- Failsafe, high current switching capacity (resistive and inductive loads)
- Fast response time
- Easy to install
- Instantaneous snap action switching
- Self-resetting
- Set point range: 70 ° - 180 °C in 5K steps
- Switch point accuracy: $\pm 5K$
- Vibration resistant per Germanischer Lloyd specifications; Characteristic Curve 2

Principles of Operation

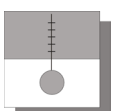
The TS61 has a stainless steel casing, and is vibration proof.

When the process temperature exceeds the set-point value, the switch contacts open to break the electrical load circuit. The switch contacts close automatically when the temperature drops below set point.

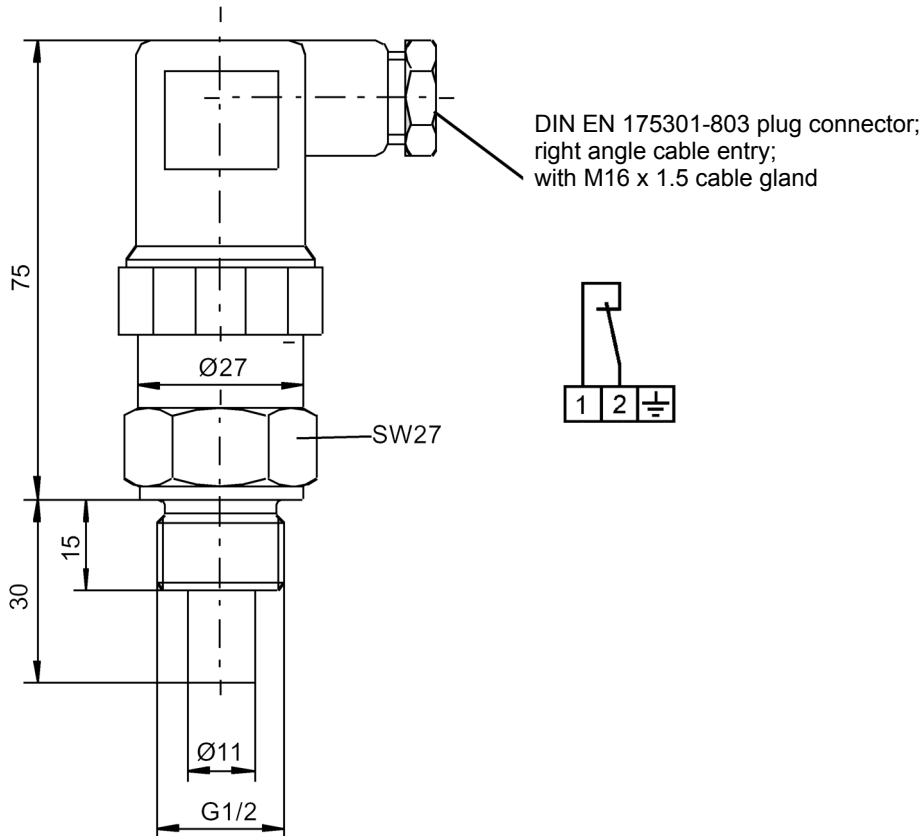


Specifications

Temperature set-point range	70 to 180 °C in 5K steps
Set-point tolerance	$\pm 5K$
Material: media contact	Stainless steel 1.4571
Process connection	Threaded stem: G 1/2 (M)
Switching action	Normally closed contacts, open above set-point, self-resetting
Re-set temperature	40 \pm 15K below set-point temperature (other values on special order)
Max. media temperature	80 °C
Contact ratings	250 V AC; 2.5 A (resistive load), 1.6 A (inductive load)
Switch life expectancy	10,000 operations at maximum load
Switch action	Instantaneous, snap action switching. Response time varies slightly with load current and operating temperature
Contact resistance	< 50 m Ω
Maximum load current	6.3 A
Electrical connection	DIN EN 175301-803 plug connector
Protection class	IP54 per DIN EN 60529
Temperature sensing element	UL and VDE approved bimetal thermostat element



Dimensions (all units in mm unless stated otherwise)



Ordering Code

Temperature Switch **TS61**

		2	9	0	2	H	1			
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Range									
80 °C.....>	3	2							
100 °C.....>	4	0							
120 °C.....>	4	1							
150 °C.....>	5	0							
180 °C.....>	5	2							
Other (upon request).....>	9	9							
Process Connection									
Threaded stem G1/2 (M).....>		2							
Insertion Length									
30 mm.....>			9	0					
Switching Action									
Normally closed; open above set-point; self-resetting.....>					2				
Electrical Connection									
DIN EN 175301-803 plug connector.....>						H			
Voltage Rating									
230 V AC.....>							1		