

Bimetal temperature switch TSK-Atex



Fluidcontrol



Since the viscosity of oil changes based on the temperature, operating temperatures must be monitored. Depending on the requirements, monitoring by means of indicating the minimum temperature to warning points and ending with shut down, will suffice. The warning or shut-off points are implemented using a bimetallic switch and in the process, hysteresis can also be used as a reset point.

The TSK-Atex series consists of simple electrical equipment. In the case of intrinsically safe connections as per EN 60079-14, the TSK-Atex can be used in Zone 1 (group IIC, device category 2G) explosive areas; this also applies to the inner zone of the tank. The temperature switches are classified as temperature class T4.

The temperature switch was designed to allow removing the electrical inner workings without having to remove the switching tube from the tank. This is convenient if the temperature switch is installed laterally inside oil.

ATEX applications: Zone 1 (cat. 2G), simple electrical equipment according to EN 60079-11

Simple, robust design

Electrical inner part, easy to remove

Optionally DIN connector or M12 base connector

Outlet direction adjustable in 90° steps

Elastic sealing ring



Technical Data TSK-Atex

Probe material:	Brass		
Probe length L max.:	1000 mm		
Max. operating pressure:	1 bar		
Medium temperature:	max. +80 °C		
Ambient temperature:	-20 to +80 °C		
Versions:	TSK-1 = with one temperature contact TSK-2 = with two temperature contacts		
Switch element:	Bimetal		
Switching function:	NC = NC contact/NO = NO contact		
Switching temperature:	45 to 80 °C (also see chart)		
Temperature contacts			
Switch-back difference:	10 K ± 5 K		
Switching point:		NC*	NO*
	45 °C	TKÖ-45	TKS-45
	55 °C	TKÖ-55	TKS-55
	65 °C	TKÖ-65	TKS-65
	75 °C	TKÖ-75	TKS-75

Other temperatures available upon request

*NC = NC contact/NO = NO contact All data for rising temperature

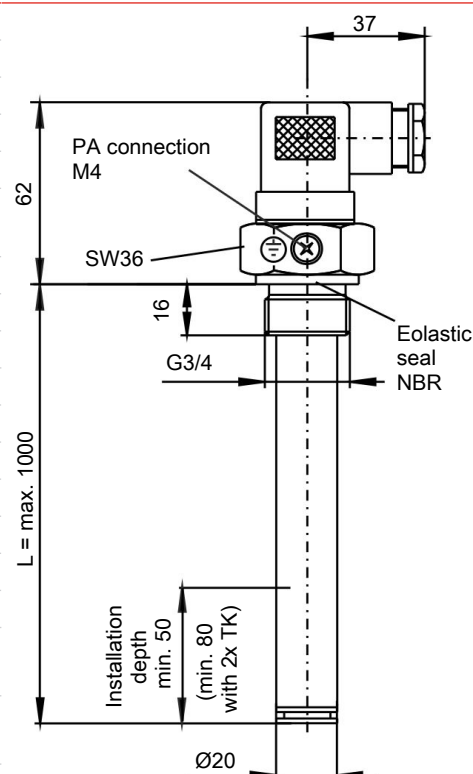
Accessories

Connection cable M12x1 (5-pin) 3.0 m long, item no.: 9144050018

The device is suitable for use in ATEX category II 2 G Ex ib IIC T4.

The temperature switches may only be operated on intrinsically safe circuits!

Dimensions

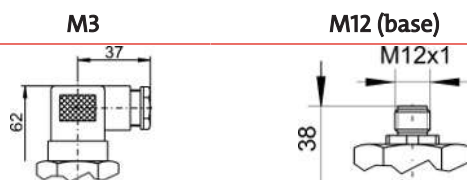


Temperature contacts

P_i	100 mW
U_i	30 V
I_i	50 mA
$L_i; C_i$	Negligible

Connector

Dimensions:



Number of pins:	3-pin + PE	4-pin+PE
DIN EN:	175301-803	
IP rating:	IP65	IP 67**
Cable fitting:	PG 11	PG 7**

**with IP67 cable box screwed on

Other connectors available on request

Model key TSK-Atex

TSK - XX - XX - G3/4 - XX / XX - XX - XX - ATEX					
Number of temperature contacts 1 or 2					T2 (2nd temperature contact) NC contact NO contact TK40NC TK40NO = 40 °C TK50NC TK50NO = 50 °C TK60NC TK60NO = 60 °C TK70NC TK70NO = 70 °C TK80NC TK80NO = 80 °C
Version MS Brass					T1 (1st temperature contact) NC contact NO contact TK40NC TK40NO = 40 °C TK50NC TK50NO = 50 °C TK60NC TK60NO = 60 °C TK70NC TK70NO = 70 °C TK80NC TK80NO = 80 °C
Plug connection M3 M12					
Length (max. 1000 mm) 280 370 500 variable (please specify)					

Ordering example

You require: Length L= 300 mm, 2 temperature contacts, 1st contact NC at 50 °C, 2nd contact NO at 70 °C, M3 plug

Order: TSK-MS-G3/4-M3/300-TK50NC-TK70NO-ATEX