

TSA-Atex Bimetal temperature switch



All fluid containing systems used as hydraulic power packs or for lubrication need to limit the minimum and maximum temperature of the fluid.

This unit is a simple apparatus without own voltage source. In an intrinsically safe installation acc. to EN 60079-14 the temperature switch can be used in hazardous locations zone 1 (group IIC, cat. 2G). That applies also to the zone inside of the reservoir. For standard application the temperature class is T5 at ambient temperatures -20 °C to +80 °C.

The TSA-Atex switches use bimetal contacts with settings ranging 25 °C up to 80 °C installed in anodised aluminium housing. The contacts are normally open (NO) on rising temperature.

Please note that for applications with temperature settings close to ambient temperatures the hysteresis of the TSA might not allow the contact to reset.

- **Atex - range of use: zone 1 (cat. 2G), intrinsically safe acc. to EN 50020**
- **Rugged design**
- **Electrical insert easy to remove**
- **DIN connector allows adjustment of cable orientation in 90 ° steps**
- **Elastomer seal fitted as standard**

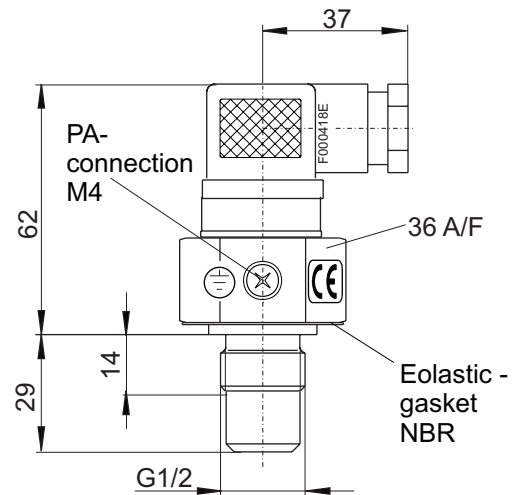
technical data

switch	bimetal trip
switching function	NO = normally open
switch over temperature	25 to 80 °C
length of probe	29 mm
probe material	aluminium anodized
max. operating pressure	15 bar
max. operating temperature	- 40 °C to + 80 °C
ambient temperature	-20 to +80 °C

temperature contact

tolerance	± 5 K
hysteresis	15 K ± 3 K

		Typ*
switch point	25 °C	TSA-25
	40 °C	TSA-40
	50 °C	TSA-50
	60 °C	TSA-60
	70 °C	TSA-70
	80 °C	TSA-80



other settings upon request

*The temperature contacts are all "make contacts" (NO).
All figures are at rising temperature.

supplies

connection plug M12x1 (5-pol.) 3,0 m
part-no.: 9144050018

controllers for temperature sensor-Atex
see data sheet: DE 18 0004

Ex-qualification: **Ex II 2 G EEEx ib IIC T5**
L_i, C_i : negligible ; I_{ma x} : 90mA ; U_{ma x} : 30V (DC)



The temperature switches to be allowed only for intrinsically safe electric circuit !

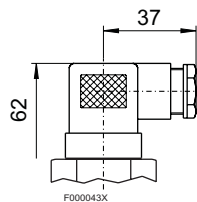
connectors

M3
3 pol. + PE
DIN 43650

protection class
cable gland

IP 65
PG 11

other connectors upon request



order information

part-no.

with connectors	M3
TSA-25-Atex	1139699A
TSA-40-Atex	1139599A
TSA-50-Atex	1138599A
TSA-60-Atex	1138699A
TSA-70-Atex	1138799A
TSA-80-Atex	1139299A

order information:

you need : Temperature switch with make contact at 50 °C, connector type M3

you need : part-no. 1138599A , Temperature switch TSA-50-Atex-M3