

Bimetal temperature switch TSM / TSE



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

The TSM/TSE series of switches have bi metal contacts with a range of different settings and contact functions. Either one or two contacts are inserted into a housing made of brass (TSM) or stainless steel (TSE).

Please note that for applications with temperature settings close to ambient temperatures the hysteresis of the TSM/TSE might not allow the contact to reset. In such cases we recommend using our Thermotronic LC1.

The TSM/TSE can be fitted with DIN or M12 connector terminals.

- **Rugged design**
- **Electrical insert easy to remove**
- **DIN or optional M12 connector**
- **Elastomer seal fitted as standard**
- **DIN connector allows adjustment of cable orientation in 90 ° steps**

technical data

types TSM-1 / TSE-1 = with one temperature contact
TSM-2 / TSE-2 = with two temperature contacts

switch bimetal trip
switching function NC or NO*
switch over temperature 50 to 80 °C
length of probe L max. = 1000 mm

	TSM	TSE
probe material	brass	1.4571
max. operating pressure	5 bar	10 bar
max. operating temperature	-40 °C to +80 °C	

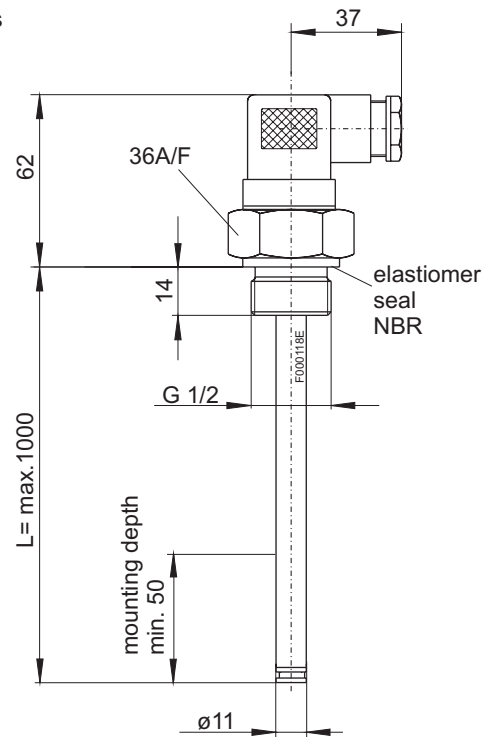
temperature contact

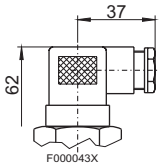
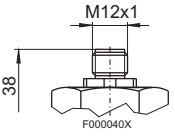
max. operating voltage 230 V
max. current 2,5 A
max. contact rating 100 VA
hysteresis 18 K ± 5 K (TMÖ-50 to TMÖ-80)
35 K ± 5 K (TMS-60)
40 K ± 5 K (TMS-70)

		NC*	Art.-Nr.	NO*	Art.-Nr.
switch point	50°C	TMÖ-50	1846299	-	-
	60°C	TMÖ-60	1846099	TMS-60	1848099
	70°C	TMÖ-70	1847099	TMS-70	1849099
	80°C	TMÖ-80	1847299	-	-

other settings upon request

* NC=normally closed / NO=normally open, all figures at **rising temperature**



connector	M3 3 pol. + PE DIN 43650	M12 (socket) 4 pol.
protection class	IP 65	IP 67**
cable gland	PG 11	PG 7**
other connectors upon request		**with plug fixed 
max. current	230 V AC/ DC	24 V DC

order information

part-no. of the basic version, L=variable

with connector	M3	M12 (socket)	length
TSM-1 G1/2	1138199	1140499	L=...mm
TSM-2 G1/2	1138299	1140599	L=...mm
TSE-1 G1/2	1141099	1143099	L=...mm
TSE-2 G1/2	1142099	1144099	L=...mm

order example:

you need: length L= 300 mm, two temperature contacts, first contact NC at 50 °C, second contact NO at 70 °C, connector type M3

you order: part-no. 1138299 temperature switch TSM-2-G1/2-M3, L=300mm, TMÖ50 (1846299) and TMS70 (1849099)