Modular Temperature Switch MKTL

Characteristics

- Switching temperature:	5...200 °C
- Output:	1 contact (normally closed)
- Type of contact:	creep action without hysteresis
- Accuracy:	±5 K, Option: ±3 K
- Contact rating:	12 VDC 8 A / 24 VDC 4 A
- Temperature medium:	maximum 200 °C
- Fitting / Nominal length:	27...1000 mm
- Process connection:	several options possible
- Electrical connection:	several options possible
- Material:	stainless steel, PBT GF30
- Protection:	at least IP65

Technical Data

Input		
Temperature medium:	0...200 °C	
Switching temperature:	5...200 °C, in steps of 1 °C (factory fixed)	
Output		
Contact:	Type:	1x normally closed
	Character:	creep action without hysteresis
	Ratings:	12 VDC, 8 A, 5000 cycles (resistive load) 24 VDC, 4 A, 5000 cycles (resistive load)
	Contact area:	gold diffused contact
Action:	bimetallic release	
Accuracy		
Switching temperature:	±5 K (standard) ±3 K (option)	
Supply		
Current, voltage:	without	
Environmental Conditions		
Temperature:	Operation:	0...+85 °C
	Medium:	0...+200 °C
	Storage:	0...+100 °C
Condensation:	uncritically	

Applications

For use as temperature limiter in machines or devices (e. g. switching-off, switch on of cooling) as possible for mobile hydraulics, motors or compressors. Advatage: The switch is self-operated.

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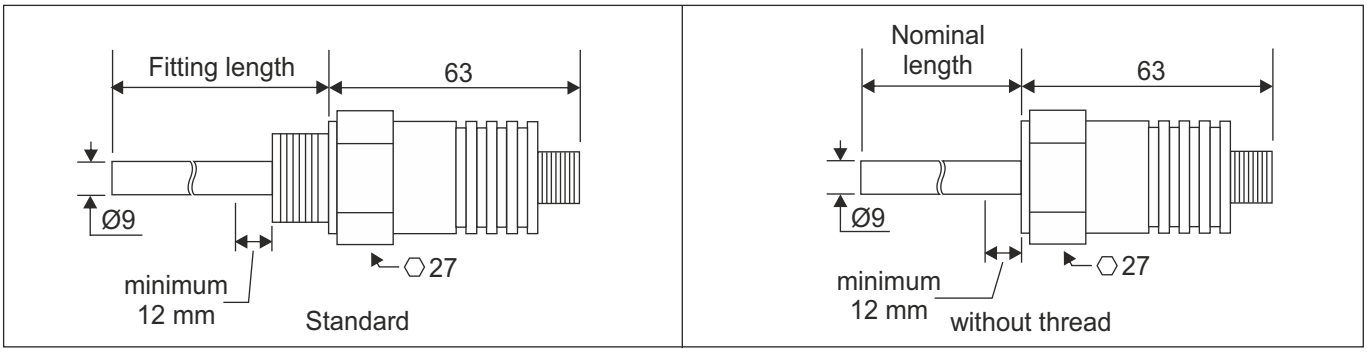
Technical Data (Continued)

Mechanics

Dimensions:	see below	
Process connection:	3/8", 1/2", 3/4", 1", 3/8NPT, 1/2NPT, without thread	
Thermowell:	Ø9x0,5 mm	
Material:	Thermowell:	stainless steel
	Body of enclosure:	stainless steel
	Adapter piece:	PBT GF30 (electrical connection)
	Switching contact:	silver, gold diffused
Vibration protection:	body of enclosure is potted	
Protection:	Enclosure:	at least IP 65 (with plugged electrical connection)
Electrical connection:	see page 3	
System pressure:	up to maximum 100 bar (depending on the medium, temperature, thermowell design)	
Vibration resistance:	up to 10 g (depending on the mounting situation, medium, temperature, insertion length)	
Shock resistance:	up to 100 g (depending on the mounting situation, medium, temperature)	

Dimensions Connection M12 (in mm)



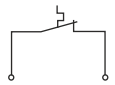
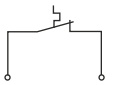
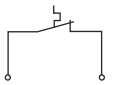
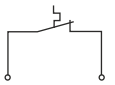
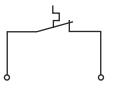
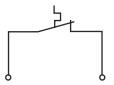
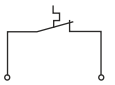
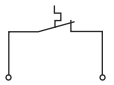
Electrical Connection

M12x1	Super Seal	Deutsch	Deutsch	Bayonet	Valve	MIL	Cable
							
4-pole 5-pole 8-pole	3-pole	3-pole	4-pole	4-pole	4-pole	6-pole	4-pole

Maximum Ratings of Plugs / Cable

M12x1, 4-pole	250 V, 4 A	M12x1, 5-pole	60 V, 4 A
M12x1, 8-pole	30 V, 2 A	Super Seal 1.5, 3-pole	14 A
Deutsch DT04, 3-pole	13 A	Deutsch DT04, 4-pole	13 A
Bayonet DIN, 4-pole	300 V, 5 A	Valve plug type A, 4-pole	250 V, 10 A
MIL, 6-pole	600 V, 7,5 A	Cable, 4-pole	250 V, 6 A

Contact Assignment

M12x1	Super Seal	Deutsch	Deutsch	Bayonet	Valve	MIL	Cable
							
4-pole 5-pole 8-pole	3-pole	3-pole	4-pole	4-pole	4-pole	6-pole	4-pole

Order Code

M	L	X	X	X	X	X	X	-	X	X	X

Type of contact:	Normally closed	0
Process connection:	3/8"	0
	1/2"	1
	3/4"	2
	1"	3
	3/8NPT	4
	1/2NPT	5
	Without thread[2)]	6
Electr. connection:	M12, 4-pole	0
	M12, 5-pole	1
	M12, 8-pole	2
	Deutsch DT04, 3-pole	3
	Deutsch DT04, 4-pole	4
	Super Seal 1.5, 3-pole	5
	Bayonet (DIN), 4-pole	6
	Valve plug, 4-pole	7
	Cable, 2 m	8
	MIL, 6-pole	9
Accuracy:	±5 K	0
	±3 K (on request)	1
Fitting, nominal length:	50 mm	0
	100 mm	1
	200 mm	2
	250 mm	3
	400 mm	4
	600 mm	5
	1000 mm	6
	Other length (please indicate)	7
Switching temperature:	5...200 °C (please specify)[1)]	0
Other:	Special model	0

1) Possible in 1° steps. The switch point is fixed in factory and is not adjustable in the field.

2) Without thread = Dip-in temperature switch