

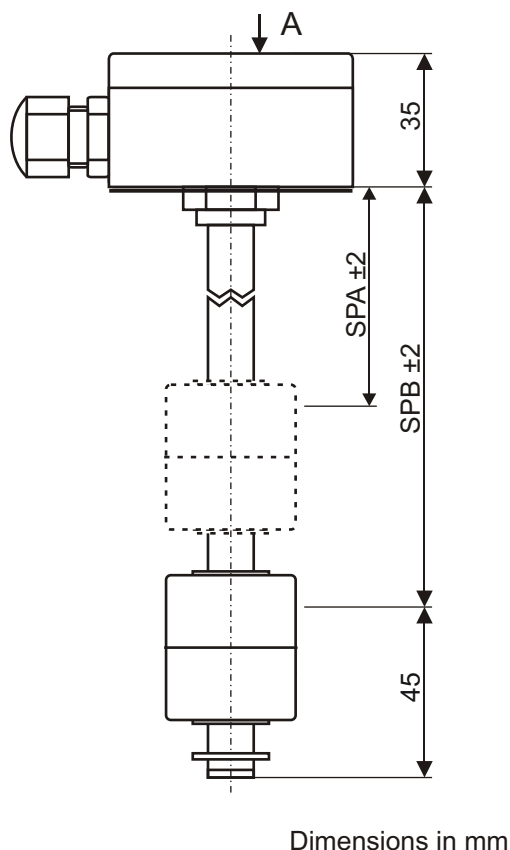
Data sheet

Electronic temperature switch controller with float switch

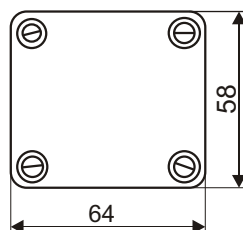
Type: TSEM

Design 1

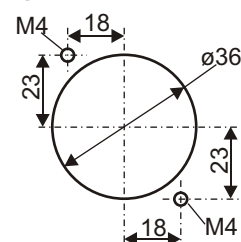
- see pages 2 and 3 for more designs



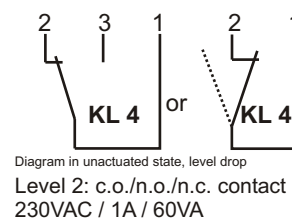
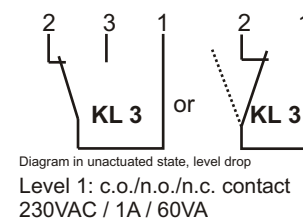
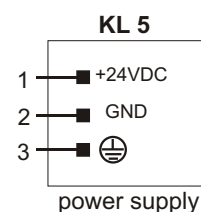
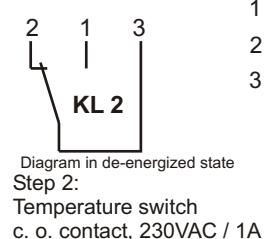
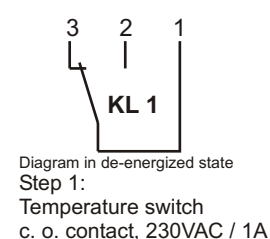
View A



Drilling pattern



Terminal diagram



Order key

Float switch - temperature switch

Design

A - Upper contact
B - Lower contact
C - Additional contact

1 - Closes on level rise
2 - Opens on level rise
3 - Closes on level drop
4 - Opens on level drop
5 - Changeover contact

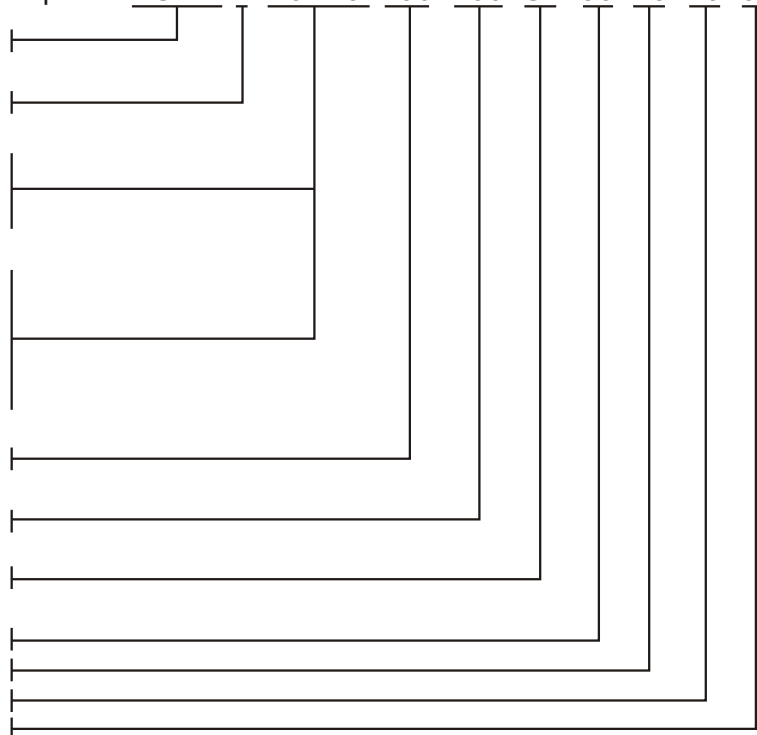
50 - Switching point SPA5 e.g. 50 mm

500 - Switching point SPB5 e.g. 500 mm

Float type

Temp. stage 1: Limiting value
Temp. stage 1: Reset point
Temp. stage 2: Limiting value
Temp. stage 2: Reset point

Example: TSEM-1. A5. B5. 100. 200. S1. 50. 45. 70. 69



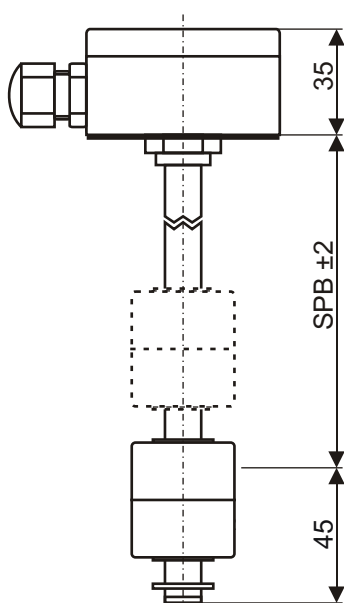
Data sheet

Electronic temperature switch controller with float switch

Type: TSEM

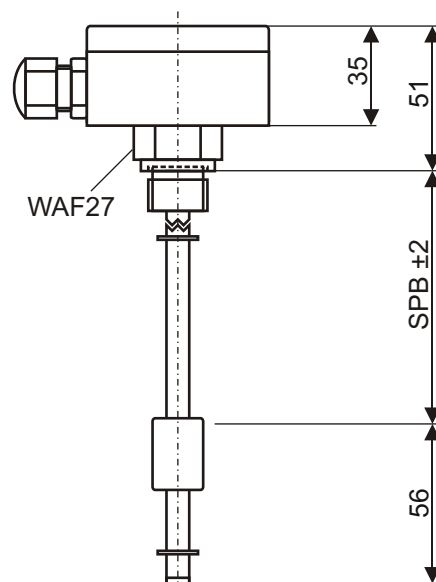
Technical data

Housing:	aluminium housing 64 x 58 x 35mm (wxhxd)
Connection:	see respective design, other connections on demand
Mounting:	see respective design, other mountings on demand
Seal:	material NBR
Tube:	ø12mm or ø8mm, length L±1mm acc. to specification, material brass or stainless steel
Float:	Standard: Ø35x40 mm, material PP, type S1; Ø17.5x32mm, material NBR, type S52
Temperature Switching points:	max. 2 change-over relays
Level Switching points:	Reed contacts: max. 2x n.o. / n.c. or change-over contacts
Switching capacity	
Level:	depending on design 230VAC / 1A / 60VA or 24VDC / 150mA
Temperature:	depending on design 230VAC / 1A or 24VDC / 150mA
Temp. relay switching function:	relay is actuated at temperature T< limit value and yellow LED lights on relay is disconnected at temperature T> limit value or device fault
Temperature setting range:	Step 1: temperature switching point in °C acc. to specification, factory setting Step 2: temperature switching point in °C acc. to specification, factory setting reset temperature in °C according to specification, factory setting
Temperature measuring range:	measuring range -20 °C to 100 °C (Attention! see operating temperature) resolution 0.5 °C measuring accuracy ± 0.5 °C from -20 °C to 110 °C
Supply voltage:	24 VDC ± 15% reverse polarity protected, other supply voltage on request
Operating current:	<120mA
Pressure:	max. 1 bar
Operating temperature:	-20 °C to 80 °C in medium, -20 °C to 70 °C above mounting.
Protection rating:	IP 65
Certificate:	in accordance with CE



Design 1

Mounting via floor of housing 2x M4
 M16x1.5 screwed cable gland
 Tube ø12mm material brass or stainless steel
 Float PP ø35x40mm type S1



Design 2 and 9

Mounting for design 02: thread M20x1.5
 Mounting for design 09: thread 1/2"
 M16x1.5 screwed cable gland
 Tube ø8mm material brass
 Float ø17.5x32mm NBR type S52

Data sheet

Electronic temperature switch controller with float switch

Type: TSEM

