





### Area of Application:

Visual / electrical fluid level indication in hydraulic reservoirs

### Characteristics:

- suitable for hydraulic oil HL, HLP, gasoline up to 80°C max, and diesel fuels up to 60°C max
- option available with dial thermometer with probe or thermo switch (Page 6)
- UV-resistant
- available either as a break contact (Type O) or make contact (Type C)

**Please consult our office before you use SNA with other fluids such as biological oils. Special requirement on request.**

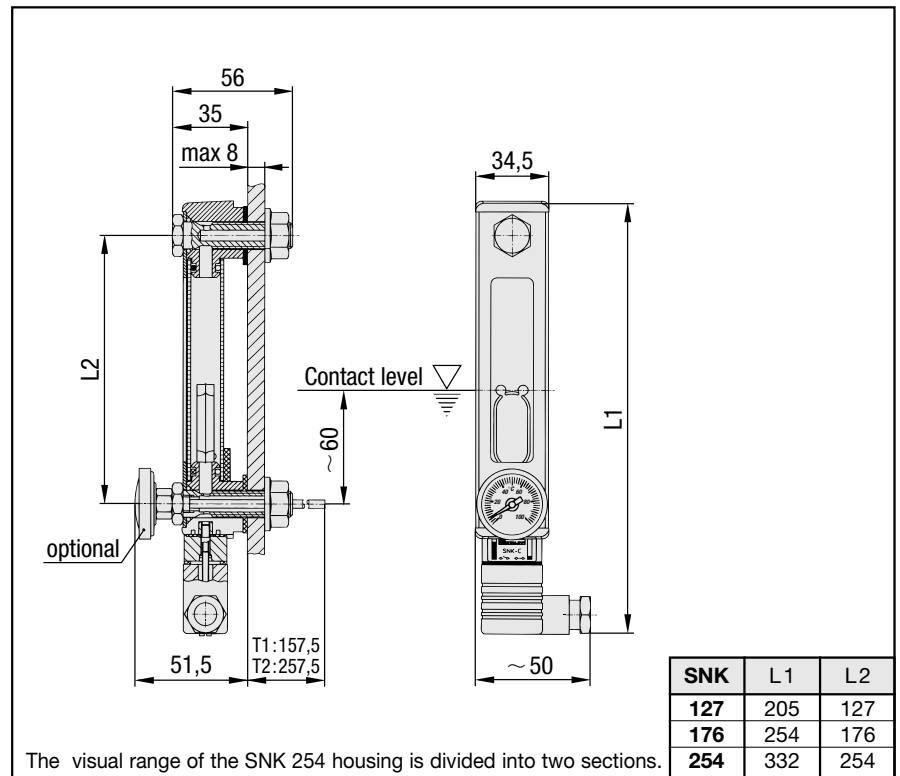
### Technical Data:

Temperature range: -20°C ... +80°C  
 Calibration of dial thermometer with probe:  
 0°C ... +100°C  
 Tank pressure: 1 bar max  
 Recommended tightening torque: 8 Nm  
 Please allow a minimum spacing of 10 mm between other components.

### Materials:

Housing: AL (plastic coated)  
 Plugs, Sight tube: PA  
 Float: PA

### Dimensions



### Electrical Connections and Functions

Contact load:  
 max 10 W (Type C)  
 max 3 W (Type O)  
 Bias-reducing Potential:  
 50 V AC/DC  
 Current on Contact:  
 max 0,50 A (Type C)  
 max 0,25 A (Type O)  
 Electrical switch PG9  
 Protection IP 65  
 Connection 3 is not engaged

Type C

Type O

Type C

Type O

### Ordering Code

When assembling the electrical contacts the orientation of the electrical switch (right or left hand side) can be chosen according to the requirements.

**SNK 127 V - C - T1 - 12 - O60**

<b>Type</b> SNK		<b>Thermo Switch</b> for size M12 only								
<b>Series</b>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>(none)</td> <td>without thermo switch</td> </tr> <tr> <td>O60</td> <td>TS-SNA/SNK-O-60</td> </tr> <tr> <td>O70</td> <td>TS-SNA/SNK-O-70</td> </tr> <tr> <td>O80</td> <td>TS-SNA/SNK-O-80</td> </tr> </table>	(none)	without thermo switch	O60	TS-SNA/SNK-O-60	O70	TS-SNA/SNK-O-70	O80	TS-SNA/SNK-O-80
(none)	without thermo switch									
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O70	TS-SNA/SNK-O-70									
O80	TS-SNA/SNK-O-80									
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>127</td> <td>SNK 127</td> </tr> <tr> <td>176</td> <td>SNK 176</td> </tr> <tr> <td>254</td> <td>SNK 254</td> </tr> </table>	127	SNK 127	176	SNK 176	254	SNK 254				
127	SNK 127									
176	SNK 176									
254	SNK 254									
<b>Seal material</b>		<b>Banjo bolts</b>								
V FPM (standard)		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>12</td> <td>M12 (standard)</td> </tr> <tr> <td>10</td> <td>M10</td> </tr> </table>	12	M12 (standard)	10	M10				
12	M12 (standard)									
10	M10									
<b>Electrical function</b>		<b>Thermometer</b> Dial thermometer with probe T1/T2 for size M12 only								
C Make contact, closes at minimum level (n/o)		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>O</td> <td>without thermometer</td> </tr> <tr> <td>T1</td> <td>Dial thermometer with 200 mm probe</td> </tr> <tr> <td>T2</td> <td>Dial thermometer with 300 mm probe</td> </tr> </table>	O	without thermometer	T1	Dial thermometer with 200 mm probe	T2	Dial thermometer with 300 mm probe		
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O Break contact, opens at minimum level (n/c)										



### Area of Application:

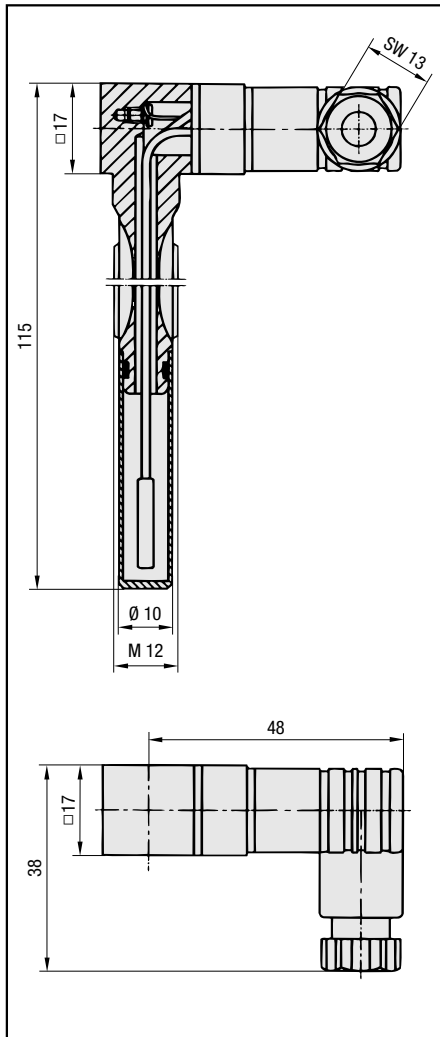
Oil temperature indication in conjunction with STAUFF level gauges SNA and SNK

### Characteristics / Materials:

- available with 60°C, 70°C or 80°C switching temperature
- Activation takes place when the respective switching temperature is exceeded.
- Electrical function: break contact
- Steel parts made out of 1.0718
- Plastic parts made out of glass fibre reinforced polyamide

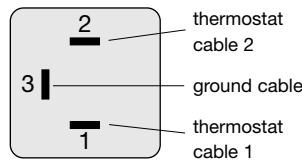
**Thermo switches are available for the standard mounting size M12 only.**

### Dimensions



### Technical Data (Break contact):

Switching temperature: see ordering code  
 Hysteresis: 20° C  
 Switching temperature tolerance: ± 5°C.



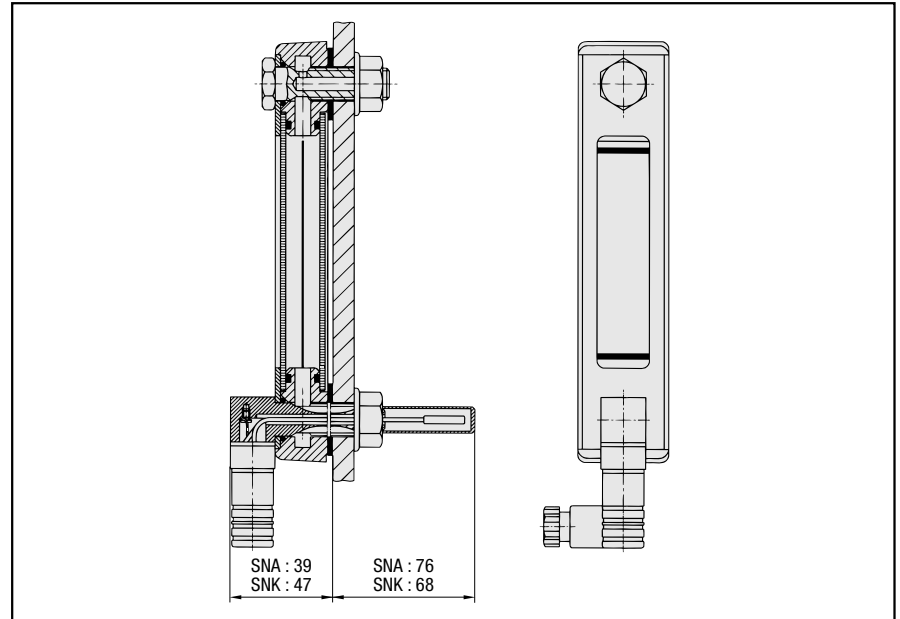
#### Alternating current

- max voltage 250 V
- max current at 10.000 circuits
  - 2,5 A at cos φ = 1,0
  - 1,6 A at cos φ = 0,6
- max current at 100.000 circuits
  - 0,5 A at cos φ = 1,0
  - ≈ 0,25 A at cos φ = 0,6
- min voltage 50 mA

#### Direct current

- max voltage 42 V
- max current at 10.000 circuits 1 A

### Example of application



### Ordering Code and Temperature Range

<b>TS - SNA / SNK - O - 60</b>	
<b>Type</b>	<b>Switching temperature</b>
TS Thermo Switch	60 60°C / 140°F
<b>Series</b>	70 70°C / 158°F
SNA / SNK	80 80°C / 176°F
<b>Electrical function</b>	
O Break Contact (n/c)	

Thermo switches can be ordered both as a single component and in combination with STAUFF level gauges SNA and SNK. See pages 4 and 5.



### Area of Application:

Electrical level and temperature indication

### Characteristics:

- suitable for mineral oil and HFC fluids
- either 1 or 2 level contacts available
- 1 integrated temperature sensor
- standard electrical function:  
 Level contacts: normally closed, opens with falling level  
 Temperature contact: normally closed, opens with rising temperature

**STAUFF Level-Temperature switches SLTS are available with other electrical functions on request.**

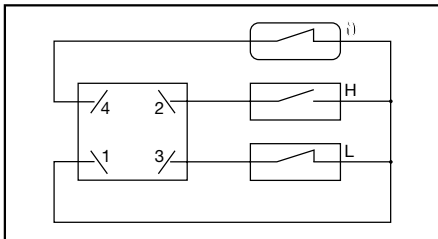
### Technical Data

Stem:	Brass
Float:	NBR
max operating temperature:	80°C
max operating voltage:	48 V
max current (level contact):	0,5 A
max current (temperature contact):	2,0 A
contact load level contact:	10 VA
system of protection:	IP65
Hysteresis:	12°C

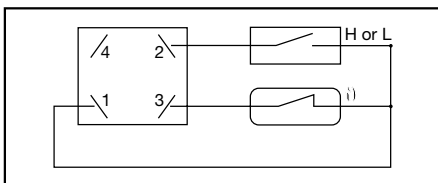
Level contact positions (L, H) are set as given in the chart. They can be adjusted individually lateron.

Please consider a minimum distance of 40 mm between the switching points.

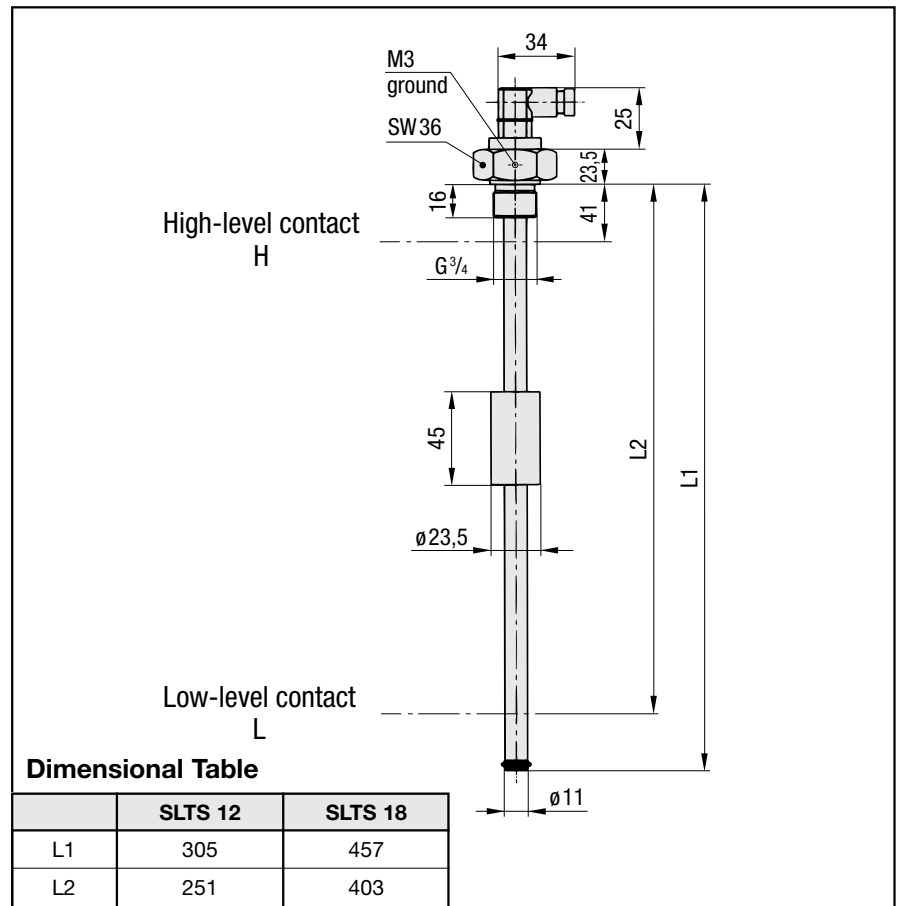
### Wiring Scheme for type 2LH



### Wiring Scheme for type 1L or 1H



### Dimensions



**Dimensional Table**

	SLTS 12	SLTS 18
L1	305	457
L2	251	403

### Ordering Code

**SLTS 12 - 140 - 2LH - B12 - G048**

<p><b>Type</b></p> <table border="1" style="width: 100%;"> <tr> <td><b>SLTS</b></td> <td>Level-temperature switch</td> </tr> </table> <p><b>Stem Length</b></p> <table border="1" style="width: 100%;"> <tr> <td><b>12</b></td> <td>305 mm</td> </tr> <tr> <td><b>18</b></td> <td>457 mm</td> </tr> </table> <p><b>Switching temperature</b></p> <table border="1" style="width: 100%;"> <tr> <td><b>140</b></td> <td>60°C / 140°F</td> </tr> <tr> <td><b>158</b></td> <td>70°C / 158°F</td> </tr> <tr> <td><b>O</b></td> <td>without temperature switch</td> </tr> </table>	<b>SLTS</b>	Level-temperature switch	<b>12</b>	305 mm	<b>18</b>	457 mm	<b>140</b>	60°C / 140°F	<b>158</b>	70°C / 158°F	<b>O</b>	without temperature switch	<p><b>Voltage</b></p> <table border="1" style="width: 100%;"> <tr> <td><b>G048</b></td> <td>48 Volt max (standard)</td> </tr> <tr> <td><b>G115</b></td> <td>115 Volt max (for thread N16 only)</td> </tr> </table> <p><b>Thread</b></p> <table border="1" style="width: 100%;"> <tr> <td><b>B12</b></td> <td>G 3/4 (standard)</td> </tr> <tr> <td><b>N16</b></td> <td>1 NPT (only on request)</td> </tr> </table> <p><b>Number of level switches</b></p> <table border="1" style="width: 100%;"> <tr> <td><b>1</b></td> <td>1 level switch (L, H)*</td> </tr> <tr> <td><b>2</b></td> <td>2 level switch (LH)*</td> </tr> </table> <p><small>* please indicate level position(s): L = low, H = high</small></p>	<b>G048</b>	48 Volt max (standard)	<b>G115</b>	115 Volt max (for thread N16 only)	<b>B12</b>	G 3/4 (standard)	<b>N16</b>	1 NPT (only on request)	<b>1</b>	1 level switch (L, H)*	<b>2</b>	2 level switch (LH)*
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