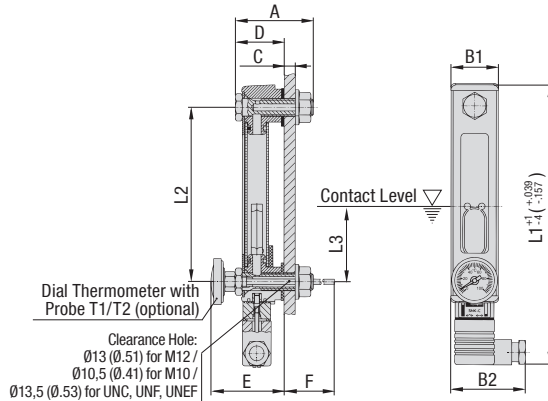
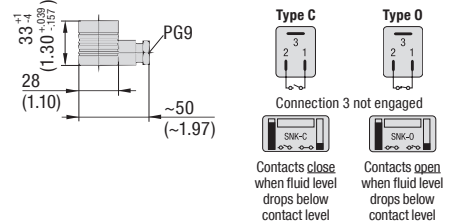


## Level Gauge Type SNK



## Connection Details and Electrical Functions

**Types C and O: Industrial standard connector (contact gap: 11 mm / .43in), similar to DIN EN 175301-803-B / ISO 6952**



**Types CD and OD: Five-pin circular connector M12, A-coded, according to IEC 61076-2-101**

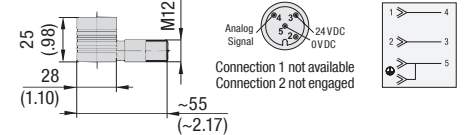


Table shows dimension L1 for the version with industrial standard connector (types C and O) only. Maximum admissible tolerance for the bolt center spacing (dimension L2) according to DIN ISO 2768-f: ±0.20mm / .008in for all nominal sizes.

## Characteristics

Visual / electrical fluid level indication in hydraulic reservoirs with maximum tank pressures not exceeding 2 bar / 29 PSI

### Nominal Sizes and Designs

- 6 nominal sizes from 127 mm / 5.00 in to 381 mm / 15.00 in
- Display either undivided (SNK-127 ... 176) or subdivided by strut(s) into 2 (SNK-254) or 3 sections (SNK-305 and SNK-381)

### Media Compatibility

- Suitable for use with mineral and petroleum based hydraulic fluids (HL and HLP)

### Materials

- Housing made of Aluminium, black powder-coated
- Sight tube and plugs made of Polyamide (PA)
- Float made of Polyamide (PA)
- Sealings made of FKM (Viton®)

For the individual components of the level gauge (sight glass, housing, sealings, bolts), alternative materials for improved UV or chemical resistance, low-temperature applications down to -50°C / -58 °F and use with special media (such as bio-degradable fluids, diesel oils, gasolines) are available on request.

### Electrical Specifications

- Magnetic float activates switch when fluid level drops below contact level within 60 mm / 2.36 in of lower banjo bolt
- Available as a break contact (normally closed) or make contact (normally open)
- Either equipped with industrial standard connector (types C / O) or five-pin circular connector M12 (types CD / OD)
- Direction of the electrical contact box (right / left) can be chosen when assembling the electrical contacts (types C / D) or is right by default (types CD / OD)
- Contact ratings: max. 10W (types C / CD) or 5W (types O / OD)
- Switching voltage: max. 50VAC/DC
- Switching current: max. 0,25 A

### Technical Data

- IP 65 protection rating: Dust tight and protected against water jets (IP 67 on request)
- Operating temperature range: -30°C ... +80°C / -22°F ... +176°F
- Recommended tightening torque: 8N·m / 5.9ft·lb
- Minimum lateral distance to other magnetic components and cables: 10 mm / .39 in

### Accessories / Options

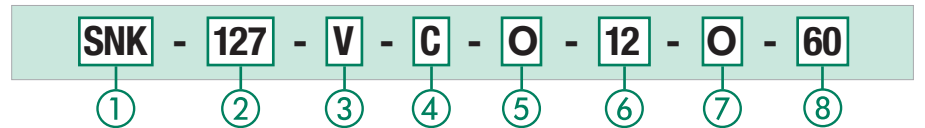
- Dial thermometers with probe and a Celsius or a dual Celsius / Fahrenheit scale with a temperature display range of up to +100°C / +200°F
  - Thermo Switches
  - Temperature Sensors
  - Deutsch Adaptor Cable
- Please see pages 18 / 19 / 20 for details.

Dimensional drawings: All dimensions in mm (in).

## Dimensions

Nominal Size	Dimensions (mm/in)									L1	L2	L3
	A	B1	B2	C (Max.)	D	E	F (with T1)	F (with T2)	F			
SNK-127	56	34,5	~50	8	35,1	51,5	157,5	257,5	205	127	~60	
	2.20	1.36	~1.97	.32	1.26	2.03	6.20	10.14	8.07	5.00	~2.36	
SNK-150	56	34,5	~50	8	35,1	51,5	157,5	257,5	228	150	~60	
	2.20	1.36	~1.97	.32	1.26	2.03	6.20	10.14	8.98	5.91	~2.36	
SNK-176	56	34,5	~50	8	35,1	51,5	157,5	257,5	254	176	~60	
	2.20	1.36	~1.97	.32	1.26	2.03	6.20	10.14	10.00	6.93	~2.36	
SNK-254	56	34,5	~50	8	35,1	51,5	157,5	257,5	332	254	~60	
	2.20	1.36	~1.97	.32	1.26	2.03	6.20	10.14	13.07	10.00	~2.36	
SNK-305	56	34,5	~50	8	35,1	51,5	157,5	257,5	383	305	~60	
	2.20	1.36	~1.97	.32	1.26	2.03	6.20	10.14	15.08	12.00	~2.36	
SNK-381	56	34,5	~50	8	35,1	51,5	157,5	257,5	459	381	~60	
	2.20	1.36	~1.97	.32	1.26	2.03	6.20	10.14	18.07	15	~2.36	

## Order Codes



### 1 Type

Level Gauge with visual / electrical fluid level indication **SNK**

### 2 Nominal Size

SNK-127 (nominal size of 127 mm / 5.00 in) **127**  
 SNK-150 (nominal size of 150 mm / 5.91 in) **150**  
 SNK-176 (nominal size of 176 mm / 6.93 in) **176**  
 SNK-254 (nominal size of 254 mm / 10.00 in) **254**  
 SNK-305 (nominal size of 305 mm / 12.00 in) **305**  
 SNK-381 (nominal size of 381 mm / 15.00 in) **381**  
 Contact STAUFF for alternative nominal sizes and designs.

### 3 Sealing Material

FKM (Viton®) **V**

### 4 Electrical Function

Break contact, opens at contact level (normally closed); Equipped with standard connector **O**  
 Break contact, opens at contact level (normally closed); Equipped with connector M12 **OD**  
 Make contact, closes at contact level (normally open); Equipped with standard connector **C**  
 Make contact, closes at contact level (normally open); Equipped with connector M12 **CD**

### 5 Thermometer Option

Supplied without thermometer (standard option) **O**  
 Dial thermometer with probe (200 mm / 7.87 in) and a Celsius scale up to 100°C **T1C**  
 Dial thermometer with probe (300 mm / 11.81 in) and a Celsius scale up to 100°C **T2C**  
 Dial thermometer with probe (200 mm / 7.87 in) and a dual scale up to 100°C / 200°F **T1CF**  
 Dial thermometer with probe (300 mm / 11.81 in) and a dual scale up to 100°C / 200°F **T2CF**

### 6 Banjo Bolt Size

Metric ISO thread M12 (standard option) **12**  
 Metric ISO thread M10 **10**  
 Unified coarse thread 1/2-13 UNC **U1**  
 Unified fine thread 1/2-20 UNF **U2**  
 Unified extra-fine thread 1/2-28 UNEF **U3**

### 7 Thermo Switch / Temperature Sensor / Anti-Drain Valve Option

Supplied without Thermo Switch / Temperature Sensor / Anti-Drain Valve **-**  
 Thermo Switch TS-SNA/SNK; Break contact (normally closed); Equipped with standard connector **O**  
 Thermo Switch TS-SNA/SNK; Break contact (normally closed); Equipped with connector M12 **OD**  
 Thermo Switch TS-SNA/SNK; Make contact (normally open); Equipped with standard connector **C**  
 Thermo Switch TS-SNA/SNK; Make contact (normally open); Equipped with connector M12 **CD**  
 Temperature Sensor TS-SNA/SNK-PT100; Equipped with connector M12 **PT100**  
 Anti-Drain Valve Set A **DA**  
 Anti-Drain Valve Set B **DB**  
 Thermo Switches / Temperature Sensors only available for banjo bolt size M12. Please see pages 18 to 20 for details.

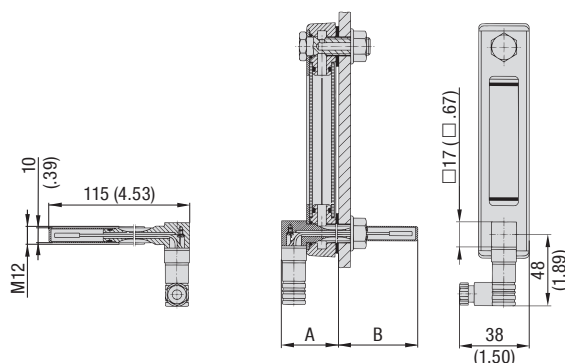
### 8 Switching Temperature

Contact switches at +60°C / +140°F **60**  
 Contact switches at +70°C / +158°F **70**  
 Contact switches at +80°C / +176°F **80**  
 Contact switches at +90°C / +194°F **90**  
 Only to be indicated when using a Thermo Switch.

Options T1C/CF and T2C/CF are not available for banjo bolt size M10 and not to be used in conjunction with Thermo Switches or Temperature Sensors. Please see page 18 for details.

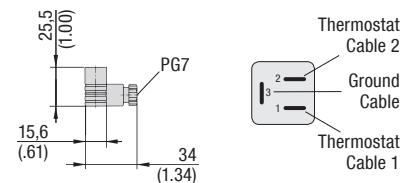


## Thermo Switch Type TS

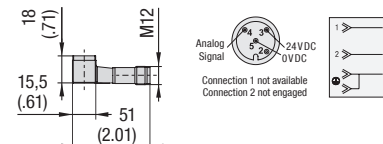


### Connection Details and Electrical Functions

Types C and O: Industrial standard connector (contact gap: 9,4 mm / .37in), similar to DIN EN 175301-803-C / ISO 6952



Types CD and OD: Five-pin circular connector M12, A-coded, according to IEC 61076-2-101



### Characteristics

Fluid temperature measurement in conjunction with STAUFF Level Gauges SNA, SNK and SNKK

#### Installation

- Replaces the lower banjo bolt of the Level Gauge
- Available for bolt size M12 only
- Clearance hole:  $\varnothing 13$  mm /  $\varnothing .51$  in

#### Materials

- Metal parts made of Stainless Steel (1.4305)
- Plastic parts made of glass-fibre reinforced Polyamide (PA)

#### Electrical Specifications (General)

- Thermo switch is activated when the fluid temperature reaches the respective switching temperature
- Available with switching temperatures of  $+60$  °C /  $+140$  °F,  $+70$  °C /  $+158$  °F,  $+80$  °C /  $+176$  °F or  $+90$  °C /  $+194$  °F (with a switching tolerance of  $\pm 5$  °C /  $\pm 9$  °F and a hysteresis of  $35$  °C /  $63$  °F)
- Available as a break contact (normally closed) or make contact (normally open)
- Either equipped with industrial standard connector (types C / O) or five-pin circular connector M12 (types CD / OD)
- Thermo switch can be rotated by  $360^\circ$  to its final direction

### Dimensions

	Dimensions (mm/in)	
	A	B
In conjunction with Level Gauge SNA	39	76
In conjunction with Level Gauge SNK	47	68
In conjunction with Level Gauge SNKK	47	68

#### Electrical Specifications (Alternating Current)

- Maximum voltage: 250 V, 2,5 (1,6) A, 50 Hz
- Maximum current at 2000 operations: 4,0 A at  $\cos \varphi = 4,45 / 250$  V, 135 °C
- Maximum current at 10000 operations: 2,5 A at  $\cos \varphi = 1,00 / 250$  V, 150 °C
- Minimum current: 20 mA

#### Electrical Specifications (Direct Current)

- Maximum voltage: 42 V

#### Accessories / Options

- Deutsch Adaptor Cable
- Please see page 20 for details.

### Order Codes



#### ① Type

Thermo Switch TS for use with Level Gauges SNA, SNK and SNKK **TS-SNA/SNK**

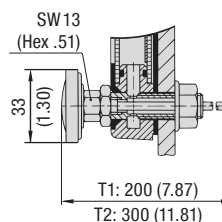
#### ② Electrical Function

- Break contact, opens at switching temperature (normally closed); Equipped with standard connector **O**
- Break contact, opens at switching temperature (normally closed); Equipped with connector M12 **OD**
- Make contact, closes at switching temperature (normally open); Equipped with standard connector **C**
- Make contact, closes at switching temperature (normally open); Equipped with connector M12 **CD**

#### ③ Switching Temperature

- Contact switches at  $+60$  °C /  $+140$  °F **60**
- Contact switches at  $+70$  °C /  $+158$  °F **70**
- Contact switches at  $+80$  °C /  $+176$  °F **80**
- Contact switches at  $+90$  °C /  $+194$  °F **90**

## Dial Thermometer with Probe Types T1/T2



### Characteristics

Visual fluid temperature measurement in conjunction with STAUFF Level Gauges SNA, SNK and SNKK

#### Nominal Sizes and Designs

- Probe lengths of 200 mm / 7.87 in or 300 mm / 11.81 in
- Scale diameter of 33 mm / 1.30 in

Please contact STAUFF for special versions.

#### Scale Options

- Celsius scale of  $0^\circ\text{C} \dots +100^\circ\text{C}$
- Dual Celsius / Fahrenheit scale of up to  $+100^\circ\text{C} / +200^\circ\text{F}$

#### Materials

- Probe made of Stainless Steel V4A (1.4571)

#### Technical Data

- IP 65 protection rating: Dust tight and protected against water jets

#### Installation

- Requires a special banjo bolt (with internal M8 port for the dial thermometer with probe) to replace the lower standard banjo bolt of the Level Gauge
- Use suitable wrench SW 13 (Hex .51) to fasten; turning on the body itself may damage the product

Please note that Dial Thermometers with Probe can only be ordered in conjunction with Level Gauges SNA, SNK and SNKK. Please see page 14 to 17 for details.

Dimensional drawings: All dimensions in mm (in).

