

Expansion thermometer Safety temperature limiter Model SB15

WIKA data sheet TV 28.03



for further approvals
see page 5

Applications

- Temperature monitoring for water, oil and gas
- Compressors
- Steam generators
- Temperature controlling and limiting device for heat generation plants

Special features

- High switching reliability
- Temperature display and safety limiter in one instrument
- Switch-off after measuring line breakage



Safety temperature limiter, model SB15

Description

In the event of any faults, the safety temperature limiter model SB15 puts the system into a safe operating condition.

The shifting disk, which is arranged on the pointer shaft, actuates the switching operation at the micro switch when reaching the non-adjustable switch point or in case of measuring line breakage and locks the current status.

A reset is possible with a tool only after a temperature decrease by approx. 3 % of the scale range, if there is no measuring line breakage.

Standard version

Nominal size in mm

60, 72 x 72

Indication accuracy

Class 2 per DIN EN 13190

Scale range

0 ... 400 °C

Permissible temperature

Ambient: -40 ... +60 °C

Dial

Aluminium, white, black lettering

Measuring principle

Bourdon tube system

Contact

Micro switch

Contact design

1 fixed changeover switch

Switch rating

5 A, AC 250 V

Electrical connection

0.8 x 6.3 mm blade terminal or terminal connection

Case

Plastic, black

Mounting option

Panel mounting with mounting bracket

Ingress protection

Case IP 53, terminals IP 00

Capillary

Plastic coated max. +120 °C

Copper braided max. +350 °C

Stainless steel max. +400 °C

Length of the measuring line

Max. 5 m

Measuring line outlet

Lower back mount

Options

- Other nominal sizes NS 80, 100, 96 x 96
- Case sheet steel
- Panel mounting flange
- Protection cap IP 51 or IP 54
- Switch rating 10 A at AC 250 V
- Other connection designs

Special designs

Temperature controlling and limiting device for heat generation plants

Design tested in accordance with DIN EN 14597 and pressure equipment directive 97/23/EC/VdTÜV

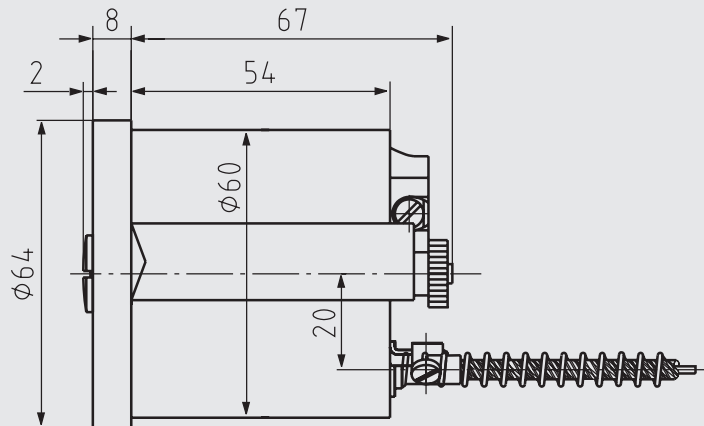
Permissible temperature sensors

Temperature sensor Model	Ø in mm	Material	Stem Model	Material	Operating media					
					Water	Oil	Air		unpressured	unpressured
					p = 16 bar T = 150 °C	p = 32 bar T = 350 °C	p = 16 bar T = 200 °C	p = 32 bar T = 350 °C	T = 350 °C	T = 400 °C
SF91	6	Brass	-	-	x					
SF91	6	Brass	SH16	Brass	x					
SF91	6	Brass	SH16	1.4571	x		x		x	
SF91	8	Brass	-	-	x		x		x	
SF91	8	Brass	SH16	Brass	x		x		x	
SF91	8	Brass	SH16	1.4571	x	x	x	x	x	
SF91	10	Brass	-	-	x		x		x	
SF91	6	1.4571	-	-	x	x	x	x	x	x
SF91	6	1.4571	SH16	1.4571	x	x	x	x	x	x
SF91	8	1.4571	-	-	x	x	x	x	x	x
SF91	8	1.4571	SH16	1.4571	x	x	x	x	x	x
SF91	10	1.4571	-	-	x	x	x	x	x	x

Dimensions in mm

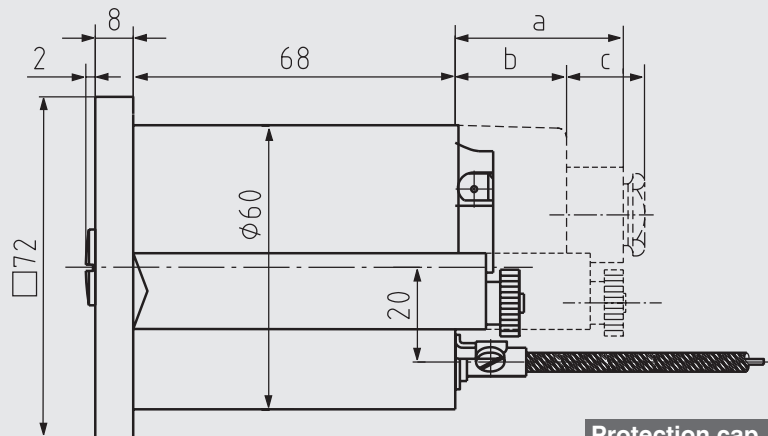
Standard version

NS 60 (model SB1560)



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NS 72 x72 (model SB1572)

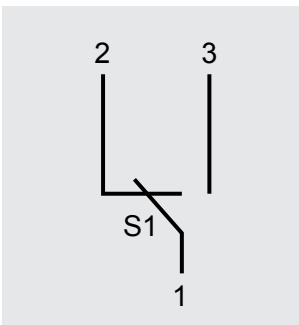


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Protection cap

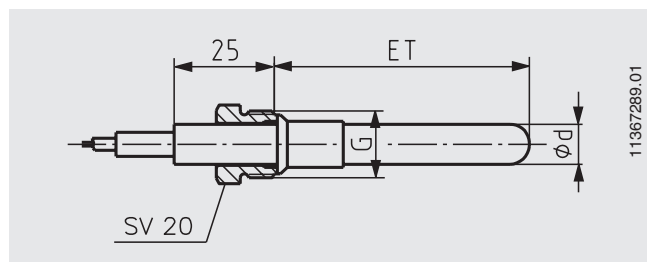
a	38
b	23.5
c	22.5

Pin assignment



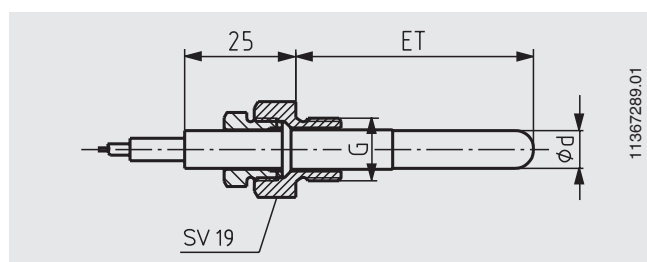
Connection designs

Connection design SF91 / SV20 with sealing cone



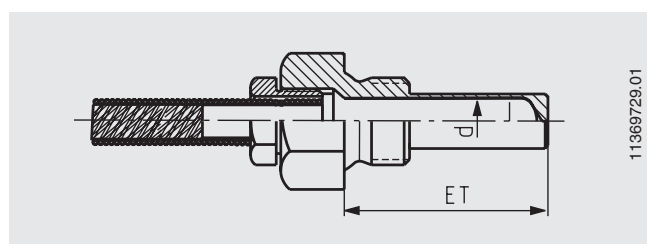
SV20 with M14 x 1.5, M16 x 1.5, M18 x 1.5
G 1/4 B, G 3/8 B, G 1/2 B
Copper alloy, stainless steel 1.4571
Insertion length ET = variable
Stem diameter $d = 6, 8, 10$ mm

Connection design SF91 / SV19 with loose threaded connection



SV19 with M14 x 1.5, M16 x 1.5, M18 x 1.5, M30 x 1.5
G 1/4 B, G 3/8 B, G 1/2 B, G 3/4 B, G 1 B
Copper alloy, stainless steel 1.4571
Insertion length ET = variable
Stem diameter $d = 6, 8, 10$ mm

Connection design SF91 / SH16 with protective sleeve



SH16 with G 3/8 B, G 1/2 B, G 3/4 B
Copper alloy, stainless steel 1.4571
Insertion length ET = variable
Stem diameter $d = 6, 8, 10$ mm

Approvals

- **UL**, safety (e.g. electr. safety, overpressure, ...), USA
- **GOST**, metrology/measurement technology, Russia
- **CRN**, safety (e.g. electr. safety, overpressure, ...), Canada

Certificates

- 2.2 test report per EN 10204 (e.g. state-of-the-art manufacturing, material proof, indication accuracy)
- 3.1 inspection certificate per EN 10204 (e.g. indication accuracy)

Approvals and certificates, see website

Ordering information

Model / Nominal size / Scale range / Contact design / Switching points / Measuring line / Length of the measuring line / Connection design / Options

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