

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

Connection, electrical

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
- Designs per DIN EN ISO 13485, medical applications on request

Special designs

Temperature controlling and limiting device for heat generation plants

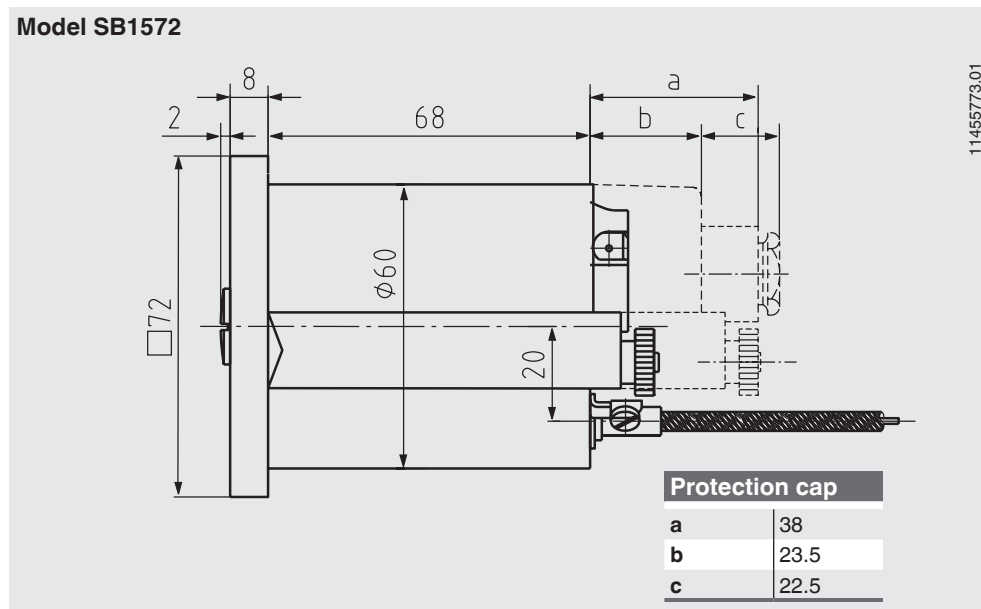
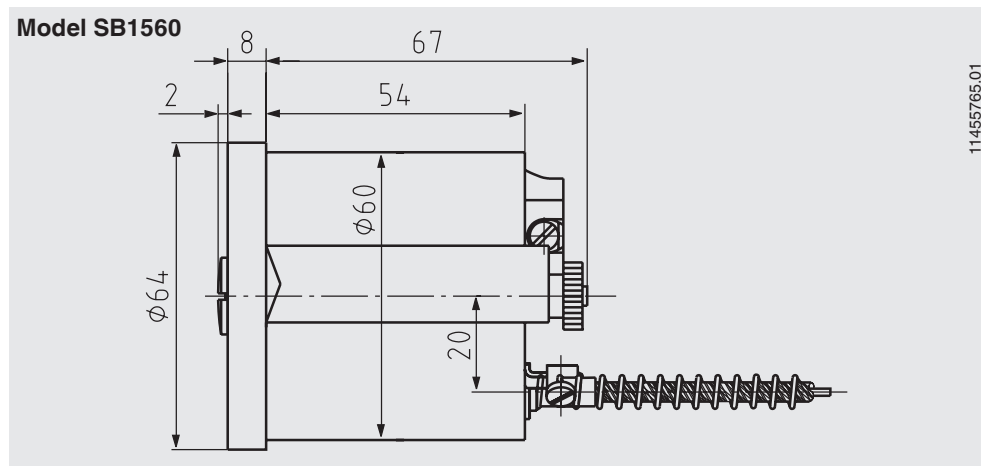
Design tested in accordance with DIN EN 14597 and pressure equipment directive 97/23/EC/VdTÜV

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

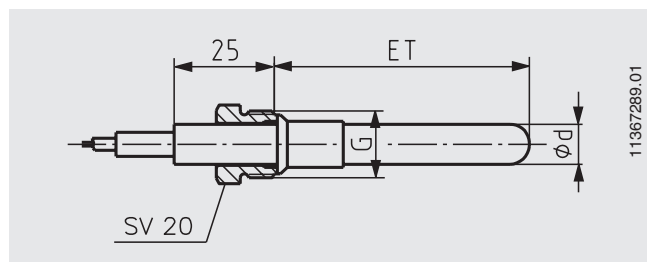
Dimensions in mm

Standard version



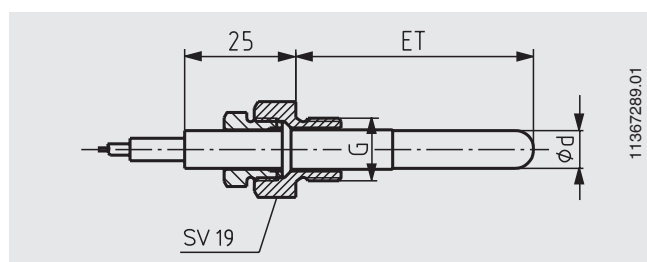
Connection designs

Connection design SF91 / SV20 with sealing cone



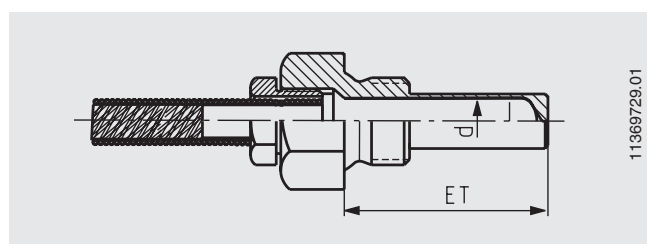
SV20 with M14 x 1.5, M16 x 1.5, M18 x 1.5
G 1/4 B, G 3/8 B, G 1/2 B
Copper alloy, stainless steel 1.4571
Insertion length ET = variable
Stem diameter $d = 6, 8, 10$ mm

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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We reserve the right to make modifications to the specifications and materials.

