

# Expansion thermometer Safety temperature controller Model SW15

WIKA data sheet TV 28.04



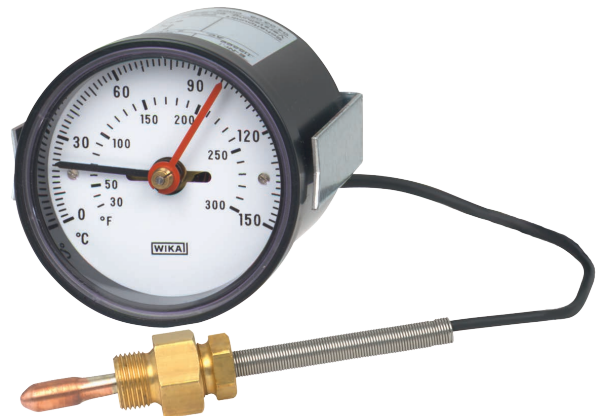
for further approvals  
see page 5

## 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 controller in one instrument
- Monitoring of measuring line breakages



Safety temperature controller, model SW15

## Description

The safety temperature controller model SW15 is used for monitoring faults of a plant.

When a fixed switch point is reached, the micro switch triggers a switching operation. This action is carried out by means of a switching disc that is arranged at the pointer shaft.

Another switching operation is triggered after a measuring line breakage. As soon as the plant runs reliably again, the instrument switches back to the initial state.

## 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

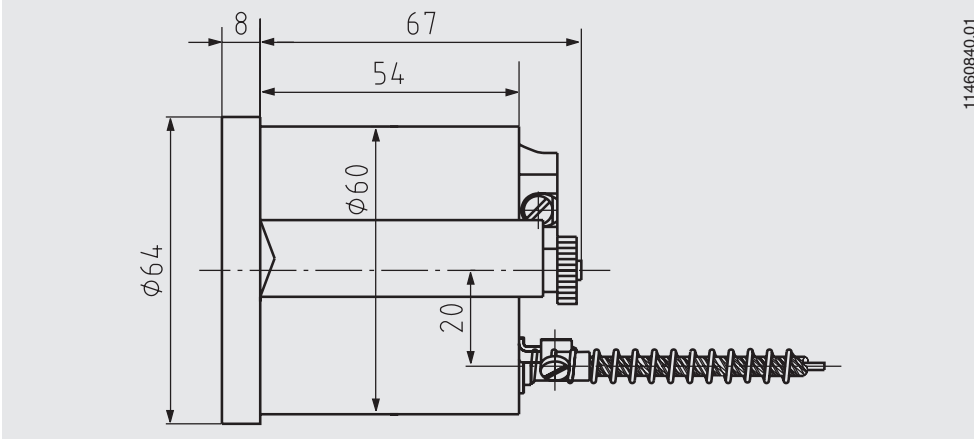
### Permissible temperature sensors

Temperature sensor Model	Ø in mm	Material	Stem Model	Material	Operating media							
					Water		Oil		Air		unpressured T = 350 °C	unpressured T = 400 °C
					p = 16 bar T = 150 °C	p = 32 bar T = 350 °C	p = 16 bar T = 200 °C	p = 32 bar T = 350 °C	p = 16 bar T = 200 °C	p = 32 bar T = 350 °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	

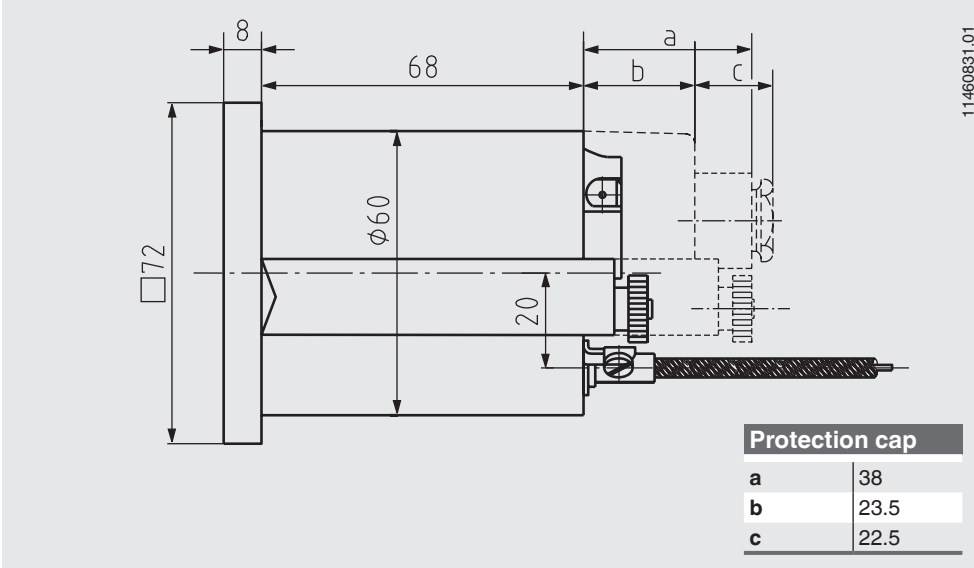
## Dimensions in mm

Standard version

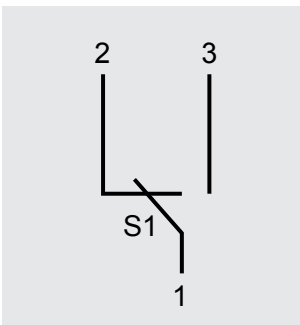
NS 60 (model SW1560)



NS 72 x 72 (model SW1572)

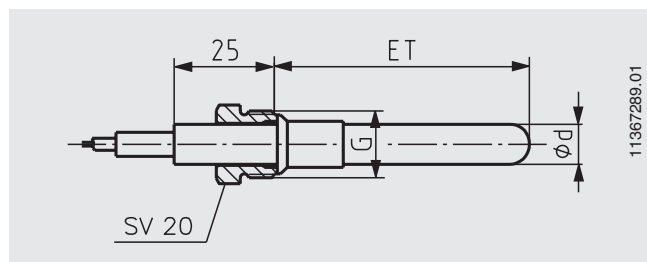


## Pin assignment



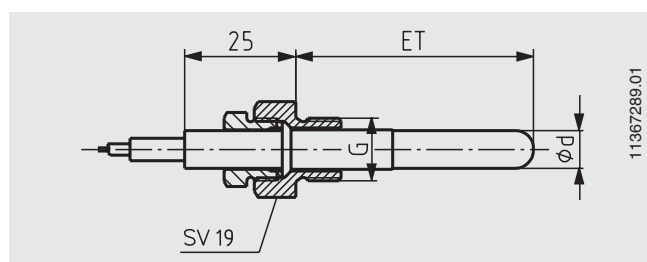
## Connection designs

### Connection design SF91 / SV20 with sealing cone



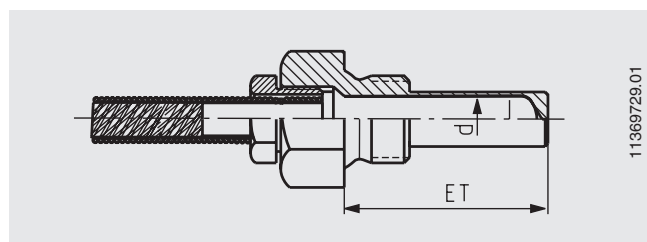
SV20 with M14 x 1.5, M16 x 1.5, M18 x 1.5  
G 1/4 B, G 3/8 B, G 1/2 B  
Copper alloy, stainless steel 1.4571  
Insertion length ET = variable  
Stem diameter  $d = 6, 8, 10$  mm

### 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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