

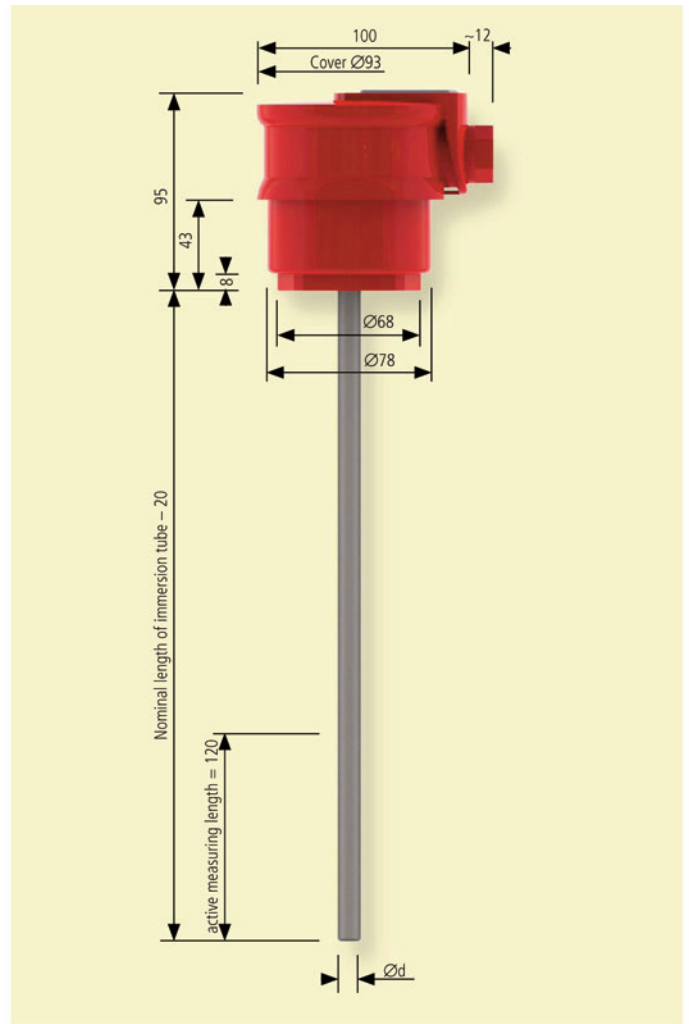
# Rod-Type Temperature Limiter B-STB

The rod-type temperature limiters B-STB offer a low-cost solution for limiting the temperature of a liquid, since the temperature sensor and the limiter electronics are integrated in a single unit. Any change in the liquid temperature causes the fluid in the measuring system (capillary tube) to expand or contract and this moves the switch diaphragm. This, in turn, actuates a normally-closed contact which switches the heater off if the preset limit temperature is exceeded. The limiter can be reset only manually. The desired limit temperature is set in the terminal casing.

Voltages greater than 230 V and/or powers greater than 3.5 kW must be switched with an external power relay.

The limiter is normally equipped with the terminal casing BC (Ø93 mm), made of PP. This has the degree of protection IP 65 (jet-waterproof) to EN 60529.

In the case of extremely high temperatures (liquid temperature >80°C) or if the controller is exposed to strongly oxidant chemicals (such as chrome electrolyte or HNO<sub>3</sub> solutions) the terminal casing BC/L, made of PVDF, should be used.



## Specifications of the Standard Materials

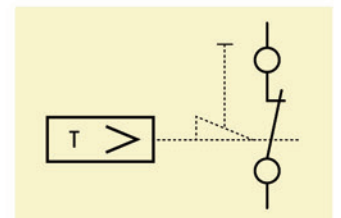
| Immersion-tube material               | Code letter | Ød | Max. operating temp. (°C) |
|---------------------------------------|-------------|----|---------------------------|
| Stainless steel (Material No. 1.4571) | B           | 11 | 100                       |
| Titanium (Material No. 3.7035)        | T           | 11 | 100                       |
| Polypropylene (PP)                    | F           | 16 | 90                        |
| TEFLON-PTFE                           | G           | 12 | 100                       |
| Polyvinyledene fluoride (PVDF)        | L           | 16 | 100                       |

## Technical data of Limiter B-STB

|                                    |                              |
|------------------------------------|------------------------------|
| Setting range                      | 0...150°C                    |
| Contacts                           | 1 NC                         |
| Switched power                     | max. 3.5 kW (15 A / 230 V--) |
| Switching accuracy                 | ± 5 K                        |
| Minimum temperature change         | 2 K / min                    |
| Min. immersion tube nominal length | 200 mm                       |
| Max. immersion tube nominal length | 1000 mm                      |

The mounting can be realized with the aid of the support HB (PP) or HB/L (PVDF), the mounting sleeve EM or the holding sleeve HM. Mounting is also possible with the aid of flanges or threaded nipples. The mounting wrench SB should be used for opening and closing the terminal casing.

Teflon is a trade-mark of DuPont.



Elektrical connection of limiter