

Gas-actuated Thermometers NCS 63

Bayonet ring case stainless steel
with indirect limit switch contact assembly (type R)

ARMANO

T08-000-024

Gas-actuated thermometer models

TSCh 63 data sheet 8201
TGeICh 63 data sheet 8211
TFCh 63 data sheet 8221

are also available with a reed contact to indicate whether the value exceeds the upper limit or falls below the lower limit.

Available Limit Switches

indirect (contact-free)
reed contact R

Version

Case versions, stem types and connections correspond to the basic models (see data sheets). Versions with case filling are not available with reed contact.

Reed contact type 201 is a fast special switch, that reliably switches voltages in the millivolt or microampere range and can also be used with relatively high currents.

Switching is activated when the pointer reaches the externally adjustable limit value and the switching function is maintained when the value is exceeded.

Adjustment Range

The reed contact can be set to any measured value between 2 % and 90 % of the scale range. For this, the bayonet ring must be removed.

Switching Function

Clockwise Pointer Motion

switching with rising temperature

R1 making contact
R2 breaking contact

Counterclockwise Pointer Motion

switching with falling temperature

R4 making contact
R5 breaking contact

The contact type must be ordered depending on whether the switching is intended for rising or falling temperatures, as the error caused by the switching hysteresis acts in the opposite direction in each case.

Electrical Connection

1 m connection cable, 2-wire, cable gland with rubber bushing and strain relief on the bottom right-hand side of the case

Electrical Data

Max. Switching Capacity

10 W (for direct voltage)
10 VA (for alternating voltage)

Max. Switching Voltage

< 75 V DC
< 50 V AC

Max. Switching Current

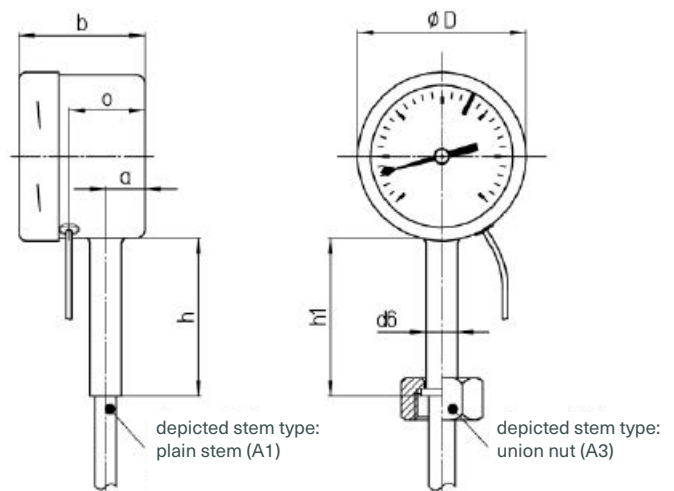
0.5 A for direct or alternating voltage and ohmic load

Switching Hysteresis

Max. 2.5 %

Case Configuration and Dimensional Data

The figure (model TSCh 63) shows the basic design of thermometers NCS 63 with reed contact.



Compared to the basic models, the following dimensional changes or additions result for thermometers with reed contact:

Front-to-back Size

b 48 mm
b1 51.5 mm

Distance from Cable Gland to Case Back

o 30 mm

For other case configurations and dimensions not listed, please refer to the respective basic model (see data sheet).

Ordering Information

When installing limit switches, the order text of the basic device (see data sheet) is supplemented by

Code letter	R reed contact
Code number for the switching function	1 making contact with clockwise pointer motion
	2 breaking contact with clockwise pointer motion
	4 making contact with counterclockwise pointer motion
	5 breaking contact with counterclockwise pointer motion

Example:
TSCh 63, 0 – 100 °C, stem A4, Ø 10 mm, length 100 mm, ET 45 mm, G ½ B, R2

Please Note

For an optimal function of the devices with limit switch, please specify in your order text:

- correct specification of the switching function
- switching temperatures
- switching ranges, which are beyond the adjustment ranges defined by us