



## SCT603-Exi

- thermoelectric sensor with double protection tube
- temperature range  $-40 \div 1600^{\circ}\text{C}$
- operating temperature of connection heads max.  $150^{\circ}\text{C}$
- thermowell material: 1.4841
- tube made of C610 or C799
- possibility of mounting a 4...20mA temperature transmitter
- mounting by threaded fittings and DN flanges

The thermocouple SCT603-Exi is intended for measuring the temperature of pipelines, tanks and boilers. The sensor is designed to work in difficult conditions (gases, vapors) and high temperatures up to  $1600^{\circ}\text{C}$ . The sensor consists of an aluminum connection head, a steel transition cover and a ceramic cover. The sensor is made with a replaceable measuring insert, which makes it possible to regenerate the element without having to dismantle the entire cover.

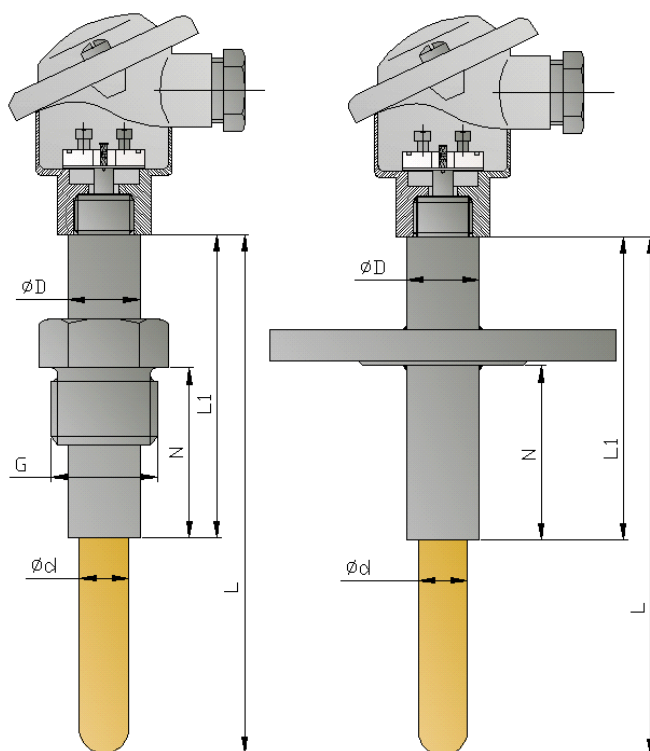
### Application areas

- temperature measurement in thermal processing: furnaces, boilers, furnaces,
- industrial installations

### TECHNICAL DATA

Sensing element	J, K, N, R, S, B, E, T thermocouple (single, double)
Measuring range	depending on thermocouple and material: $-40 \div 1600^{\circ}\text{C}$
Connection head	B, NA or other, operating temperature $-40 \div 150^{\circ}\text{C}$
Class	1 or 2
Ceramic sheath	material: C610 (60% $\text{Al}_2\text{O}_3$ ) or C799 (99,7% $\text{Al}_2\text{O}_3$ ) any nominal length (acc. to order) diameter d: $6 \div 26$ mm (typical 6, 8, 10, 12, 15, 20, 24 mm)
Transitional sheath	material: heat-resistant steel 1.4841 diameter: 15 or 22 mm (standard)
Process connection	G1 or flange
ATEX approval	II 1G Ex ia IIC T6-T1 Ga; II 1D Ex ia IIIC T85°C÷450°C Da

### DIMENSIONS

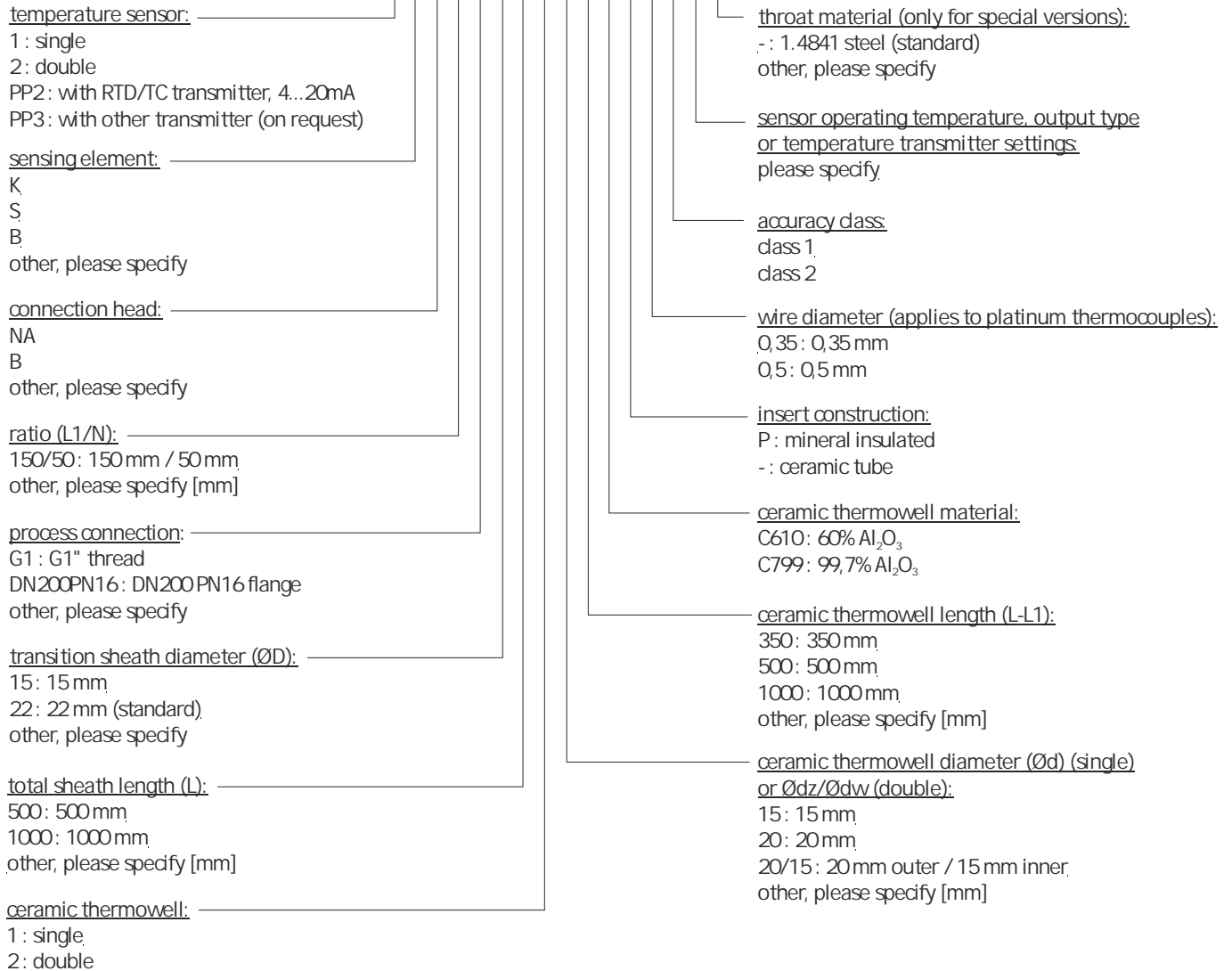


## CERAMIC PROTECTION TUBE - FEATURES

Material	Operation temperature	Advantages	Disadvantages	Application
C610 (60% Al <sub>2</sub> O <sub>3</sub> )	max. 1500°C	gas-tight, average thermal shock resistance, high flame resistance	low resistance to mechanical load, low Al <sub>2</sub> O <sub>3</sub> content	gas-tight furnaces, diffusion furnaces
C799 (99,7% Al <sub>2</sub> O <sub>3</sub> )	max. 1800°C	gas-proof, acid resistant, steam resistant, very high flame resistance	low resistance to mechanical load, low resistance to temperature shock	gas-tight furnaces up to 1800°C (liquid glass tanks), chemical industry, manufacturing of concrete

## ORDERING

SCT603-Exi-X-X-X-X-X-X-X-X-X-X-X-X-X-X-X-X-X



Ordering example:

SCT603-Exi-1-K-B-150/50-G1-22-500-2-20/15-350-C799-2-1200

Single TC intrinsically safe temperature sensor, K thermocouple, 2 tolerance class, B head type, ceramic protection tube made of C799, 20 mm outer, 15 mm inner diameter, 350 mm length, transition sheath diameter 22 mm, total sheath length 500 mm, process connection G1", max. operating temperature 1200°C.

