

These temperature sensors are designed for application in control and regulation systems for the measuring, registration, and signalling of temperature up to 400 °C. The temperature sensor is located in the stem. The sensors head is made of an aluminium material, all metallic parts are made of class DIN 1.4301 stainless steel. These sensors are made in three versions: with a smooth stem (type B43 and MA43), with a stem provided with a screwing (type BS43) and with a smooth stem and extender (type BN43). The version with output signal 4 to 20 mA is available too. In this case the converter temperature current, which is positioned in the sensor head, is not provided with a galvanic separation. The signal there of has a linear dependence on temperature. The operation conditions are met by conventional, chemically non-aggressive environment.

### Basic technical parameters (all types)

Measuring range	-50 to 400 °C	Resistance to compression	PN 20
Resistance (0 °C) type P	100Ω	Current load type P	2.0 mA
type PA	1000Ω	type PA	0.5 mA
type PB	500Ω	type PB	1.0 mA
Accuracy	Class B	Wiring	2 or 3-wirre
Ambient temperature	-30 to 100 °C	Cable gland type	P16
Relative humidity	< 80%	Terminal board type	
Degree of protection	IP 54	Cable recommended cross section	0,35 to 2 mm <sup>2</sup>

Type B43I, BS43I only

Power supply	11 to 35 Vdc	Sensing element break	Iz > 30 mA
Output signal	4 to 20 mA	Sensing element short	Iz ~ 1,5 mA
Measuring error	< 0,6 %	Ambient temperature	-30 to 60 °C
Load resistance	Rz < (Ucc-10)x50 (Ω)		

### Technical description, execution

#### MA43P(PA, PB)-L3

- the sensors are designed for measuring operations in pipelines. As an accessory, a part of the sensor is a stainless steel thermowell fitted with a thread G 1/2: of length L3 mm, which was tested for pressure of 4,0 MPa.

#### B43P(PA,PB)-L3

- the sensors are designed for measuring operations in pipelines. As an accessory, a part of the sensor is a stainless steel thermowell fitted with a thread G 1/2: of length L3 mm, which was tested for pressure of 4,0 MPa

#### BN43P(PA,PB)-L3

- sensors is designed for measuring applications in pipelines. Delivery includes extender with a thread

#### BS43P(PA,PB)-L3

- sensors is designed for measuring applications in pipelines. Stem is provided with a screwing, standard thread G 1/2

#### B43I-L3

- temperature sensors with output 4 to 20 mA, other specification see B43P

#### BS43I-L3

- temperature sensors with output 4 to 20 mA, other specification see BS43P

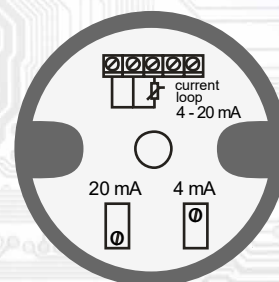
### Standard lengths L2 and L3

L2 (mm)	L3 (mm)
100	210
160	270
220	330
280	390
340	450
400	510

### Measuring ranges

0 to 200 °C
0 to 300 °C
0 to 400 °C
0 to 600 °C
0 to 600 °C

### Wiring diagram



Standard threads in BN43... and BS43... - G 1/2

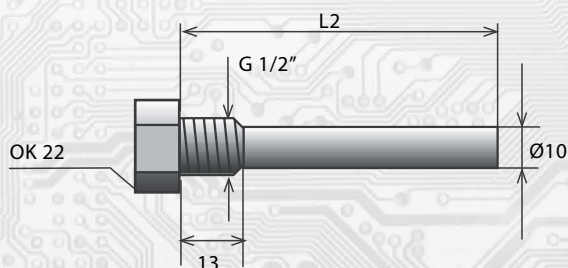
### Method of ordering

State the quantity of pieces and the transducer type in your order.  
An order example: **5 pieces of transducers B43P - 330**

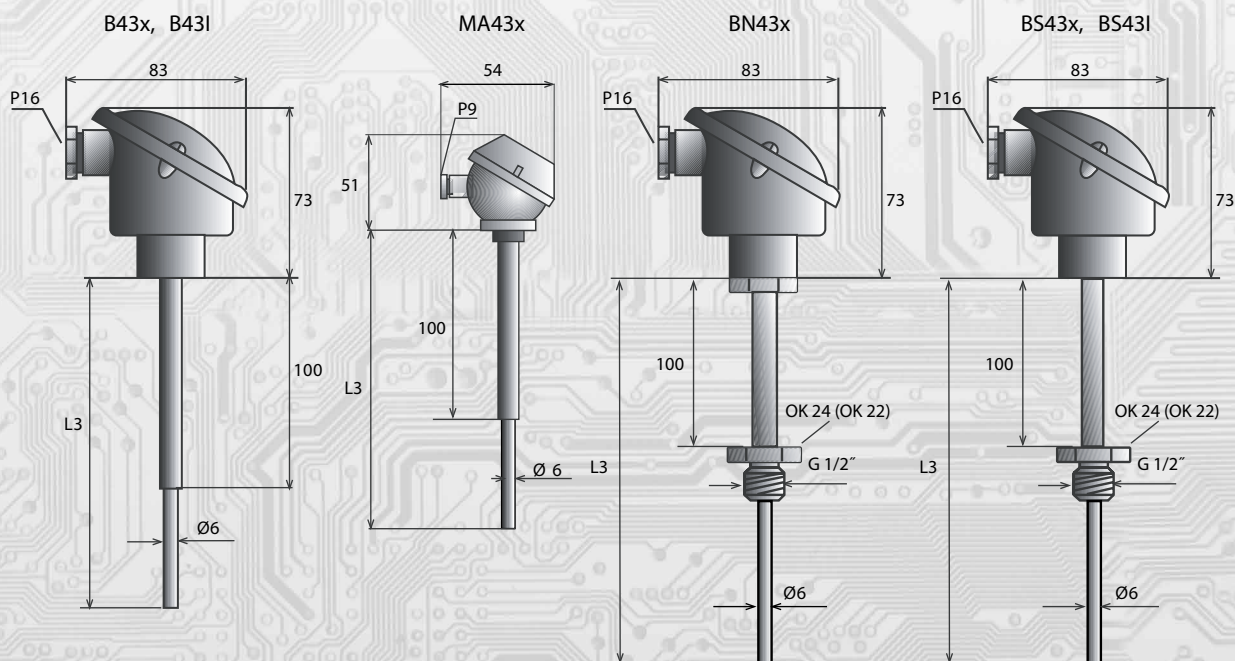
Transducer type  
Well length



### Thermowell



### Dimensions and accessories



### Mounting the sensors

Screw out the small screws and remove the head cover. Then, connect the lead-in cable of the recommended cross section from 0,35 to 1,5 mm<sup>2</sup> and of the outer diameter 5 to 7 mm to the terminal board through the cable gland. Once the small screws are screwed in and the cover is placed back into its position, the mounting is terminated and the sensor is ready for operating.

### Remark:

1) Subject of an order, also non/standard sensor lengths or other well thread types may be delivered, such as M20x1,5.