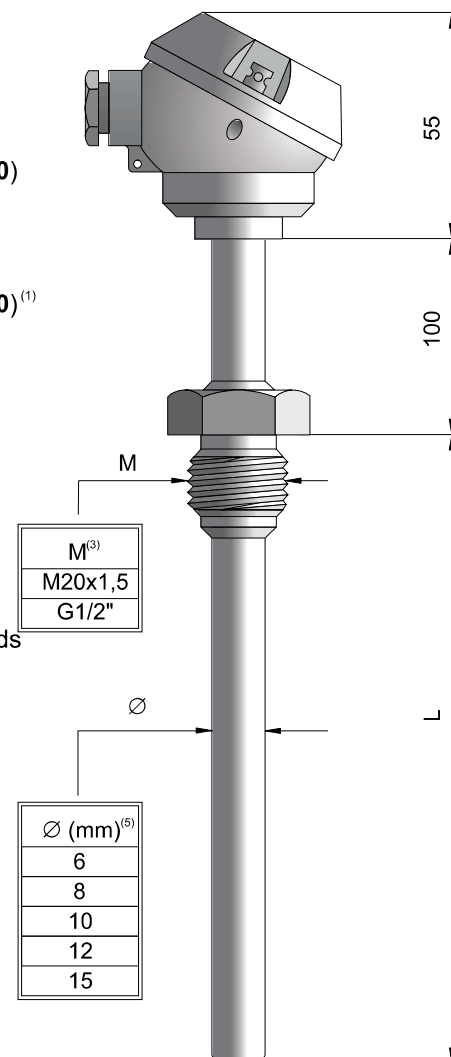


# TEMPERATURE SENSOR

type **CT411, 412, 413, 414, 415**  
type **CT421, 422, 423, 424, 425**

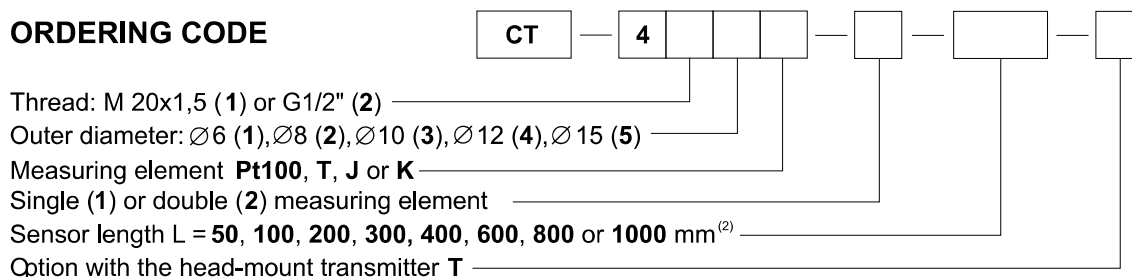
## SPECIFICATION

Temperature range	-40°C...+550°C	<b>(Pt100)</b>
	-40°C...+400°C	<b>(T)</b>
	-40°C...+600°C	<b>(J)</b>
	-40°C...+900°C	<b>(K)</b>
Measuring element	platinum resistor	<b>(Pt100)<sup>(1)</sup></b>
	thermocouple Cu-CuNi	<b>(T)</b>
	thermocouple Fe-CuNi	<b>(J)</b>
	thermocouple NiCr-NiAl	<b>(K)</b>
Class of processing element	2	<b>(B)<sup>(1)</sup></b>
Conductor material	wire Cu/Ni	(for Pt100)
Assembly	2, 3 or 4 wires	(for Pt100)
Measuring junction	insulated	<sup>(1)</sup>
Sheath material	steel 1.4541	
Roughness of sheath surface	$R_a < 0,8 \mu\text{m}$	<sup>(2)</sup>
Maximum operating pressure	see the Sheath Operating Loads information	
Connection head type	MA or B	<sup>(4)</sup>
Head operating temperature	-40°C...+100°C	
Fitting	welded stationary with thread M20x1,5 or G1/2"	<sup>(3)</sup>
Additional accessories	thermowell for welding	
	temperature transmitter	
	compensation cable	



<sup>(1)</sup> Pt500, Pt1000, Ni100, Ni1000 on demand  
<sup>(2)</sup> Other parameters according to customer requirements  
<sup>(3)</sup> Other inch and metric threads on demand  
<sup>(4)</sup> Connection head with protection class IP65 or acid resistant on demand  
<sup>(5)</sup> Protection tube of outer diameter  $\varnothing 9$  and  $\varnothing 11$ mm on demand

## ORDERING CODE



**Example for order** CT-411K-1-400 sensor with single thermocouple NiCr-NiAl (K), with connection head type MA of outer diameter  $\varnothing = 6$ mm and length L=400mm with welded stationary fitting with thread M20x1,5. CT-411K-1-400-T; TCH-2140-K sensor with connection head type B, option with the head-mount transmitter type TCH-2140-K