

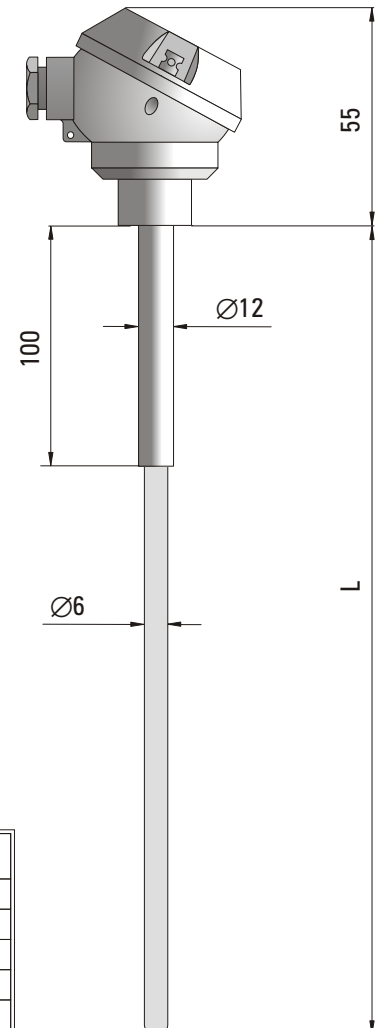
# TEMPERATURE SENSOR

## type 821, 822, 823, 824, 825

### SPECIFICATION

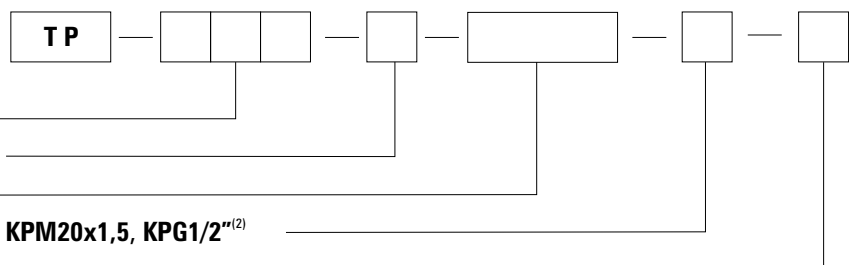
Measuring element	NiCr-NiAl PtRh90/10%-Pt PtRh70/30%-PtRh94/6%	(K) <sup>(1)</sup> (S) (B)
Class of thermocouple	2 <sup>(2)</sup>	
Spacer diameter	Ø12 mm	
Ceramic sheath diameter	Ø6 mm	
Sheath material	ceramic C610 (Al <sub>2</sub> O <sub>3</sub> 60%) ceramic C799 (Al <sub>2</sub> O <sub>3</sub> 99,7%)	
Connection head type	MA or B <sup>(3)</sup>	
Head operating temperature	-40°C... +100°C	
Additional accessories	compression gland type <b>KP</b> temperature transmitter compensation cable	

<sup>(1)</sup> Thermocouple PtRh87/13%-Pt (R) or NiCrSi-NiSi (N) on demand  
<sup>(2)</sup> Other parameters according to customer requirements  
<sup>(3)</sup> Connection head with protection class IP65 or acid resistant on demand



Sensor type	Sheath material	Max. temperature (°C)	Type of thermocouple
<b>TP-821</b>	ceramic C610	1200	NiCr-NiAl
<b>TP-822</b>	ceramic C610	1300	PtRh90/10%-Pt 0,35 mm
<b>TP-823</b>	ceramic C610	1400	PtRh90/10%-Pt 0,50 mm
<b>TP-824</b>	ceramic C799	1500	PtRh90/10%-Pt 0,50 mm
<b>TP-825</b>	ceramic C799	1600	PtRh70/30%-PtRh94/6% 0,50 mm

### ORDERING CODE



Sensor type **821, 822, 823, 824, 825**  
 Single (1) or double (2) measuring element  
 Sensor length L = **300, 500** or **700** mm<sup>(2)</sup>  
 Additional accessories: compression gland type **KPM20x1,5, KPG1/2**<sup>(2)</sup>  
 Option with the head-mount transmitter **T**

**Example for order:** TP-821-1-500 sensor with single thermocouple NiCr-NiAl (K) in ceramic sheath C610 of outer diameter Ø = 6 mm and length L = 500 mm, connection head type MA.  
 TP-821-1-500-T; TCH-2170-K sensor with connection head type B, option with the head-mount transmitter type TCH-2170-K.