

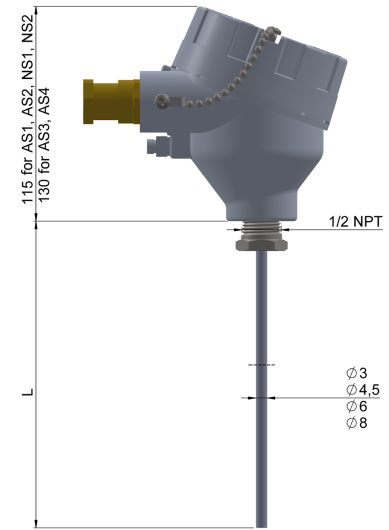
Flameproof temperature sensors with replaceable measuring inserts

**TOPI-Exd, TTJI-Exd, TTKI-Exd**



**Technical description**

Measuring range*** / sensing element		
(-200 ÷ 650) °C	<b>Pt100</b>	class B
(-40 ÷ 700) °C	<b>J</b>	class 2
(-40 ÷ 1200) °C	<b>K</b>	class 2
Measuring insert – p. 193		
– 3-, 4-wire connection (for Pt100)		
– 3-wire connection (for 2xPt100)		
– insert length: L+42 mm		
Thermowell		
– material: mineral insulated 1.4541 for J; 1.4571 for Pt100; 2.4816 for K		
– diameter [mm]: ø3; ø4,5; ø6; ø8 for J, K - ø3, ø6 for RTD		
– length L <sub>min.</sub> : 100 mm		
Connection head – p. 219		
– aluminium XD-AD (AS1 - one cable gland, AS2 - two cable glands)		
– with display		
XD-ADwin (AS3 - one cable gland, AS4 - two cable glands)		
– stainless steel		
XD-SD (NS1 - one cable gland, NS2 - two cable glands)		
– cable gland: ATEX II 2 GD; ATEX I M2; IP 66+68		
cable diameter: 3+14,3 mm (standard 6,1+11,7)		
Construction version		
– Exd acc. to ATEX		
– WE Type-Examination Certificate: <b>KDB 08ATEX135</b>		
⊕ II 2 GD Ex d IIC T6; Ex t IIIC T85 °C IP66		
Options		
– Pt500, Pt1000, T, N		
– Pt100: class A (-50 ÷ 400) °C, class AA (0 ÷ 150) °C;		
TC: class 1		
Additional accessories		
– temperature transmitters – p. 225+241		
– local display LPI-02 (connection head AS3 or AS4) – p. 221		
– threaded fitting UG-8		



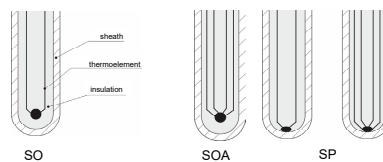
Resistors tolerance acc. to PN-EN 60751

Class	Wire wound resistor	
	Range [°C]	Tolerance [°C]
<b>AA</b>	(-50+250)	±(0,1+0,0017· t )
<b>A</b>	(-100+450)	±(0,15+0,002· t )
<b>B</b>	(-196+600)	±(0,3+0,005· t )

Tolerance for thermocouples class acc. to. PN-EN 60584

Thermocouple	Class 1		Class 2	
	Range [°C]	Tolerance [°C]	Range [°C]	Tolerance [°C]
<b>J</b> Fe-CuNi	(-40+375) (375+750)	±1,5 ±0,004  t	(-40+333) (333+750)	±2,5 ±0,0075  t
<b>K, Na</b> NiCr-NiAl	(-40+375) (375+1000)	±1,5 ±0,004  t	from (-40+333) (333+1200)	±2,5 ±0,0075  t

Types of measuring hot junction



**Ordering code**

Temperature sensor	...	T	...	I-Exd	...	...	...	...	...	...	...	...	...	...	...
Single		<b>no sign</b>													
Double		<b>2</b>													
Single With transmitter		<b>AP</b>													
Resistor Pt				<b>OP</b>											
Thermocouple Fe-CuNi; NiCr-NiAl				<b>TJ; TK</b>											
Thermocouple Cu-CuNi; NiCrSi-NiSi				<b>TT; TN</b>											
Type of aluminium connection head				<b>AS1, AS2, AS3, AS4</b>											
Type of stainless steel connection head				<b>NS1, NS2</b>											
Insert length L [mm]							<b>2000*</b>								
Insert diameter [mm]								<b>6*</b>							
Type** and resistor class									<b>aA, aB*</b>						
Thermocouple class										<b>1, 2</b>					
Measuring circuit for RTD											<b>3, 4</b>				
Hot junction type for TC											<b>SO, SP, SOA, SOB</b>				
Type of transmitter												<b>TxBlock*</b>			
Setting of transmitter temperature													<b>(0 ÷ 100) °C*</b>		
Cable diameter for cable gland: a (3,2 mm+8,7 mm), b: standard (6,1 mm+11,7 mm), c (6,5 mm+14 mm)															<b>a, b, c</b>

\* or others acc. to requirements  
 \*\* a=1 for Pt100, a=5 for Pt500, a=10 for Pt1000  
 \*\*\* max. temperature depend of mineral insulated diameter, description for W...-Exd (p. 193)

**Ordering example**

**TOPI-Exd-AS1-500-6-1B-3-a**