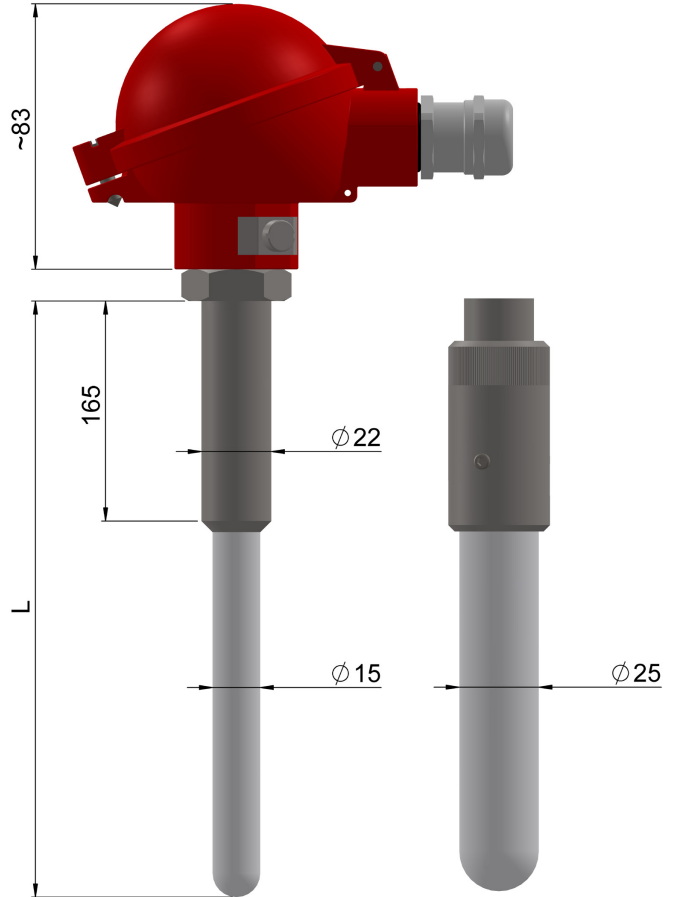


Intrinsically safe high temperature sensors **TTSC-22Exi, TTRC-22Exi, TTBC-22Exi**

Technical description



Measuring range / sensing element		
(0 + 1500) °C	S, R	class 2
(600 + 1600) °C	B	class 3
Thermowell		
– ceramic protection tube material: corundum 799 ϕ 15 mm silicon carbide SiSiC: ϕ 25 mm		
– heat-resistant supporting pipe ϕ 22 mm, 1.4841 (max. temp. 1100 °C)		
– metal-ceramic L [mm]: 500+2000 for 799 500+1300 for SiSiC		
Connection head – p. 219		
– aluminium XE-DANA (S1-standard), XE-DAND(S2), XE-DANAW(W1), XE-DANDW(W2) IP65		
– cable gland ATEX II GD IP65 (for cable 5+10 mm)		
– operating temperature up to 90 °C		
Construction version		
– Exi acc. to ATEX		
– WE Type-Examination Certificate: KDB 07ATEX055		
– II 2G Ex ia IIB T6		
– measuring junction: isolated SO (single), SOB (double)		
– thermocouple wire ϕ 0,5 mm		
– the AP version only with connection heads W1 and W2		
Options		
– thermocouple R, S: class 1, B: class 2		
Additional accessories		
– temperature transmitters with Exi version – p. 225+241		
– compensation cables – p. 197		
– mounting brackets – p. 216		



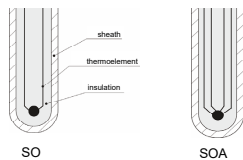
Response time T05/T09

Sensor type	ϕ 11
J, K insulated junction	$\leq 27/\leq 90$
J, K grounded junction	$\leq 6/\leq 15$

Tolerance for thermocouples class acc to. PN-EN 60584

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

Types of measuring hot junction



Ordering code

Temperature sensor	...	TT	...	C-22Exi	-	...	-
Single	no sign											
Double	2											
With transmitter (only single)	AP											
Thermocouple PtRh10-Pt		S										
Thermocouple PtRh13-Pt		R										
Thermocouple PtRh30-PtRh6		B										
Type of head connection (standard S1)			S1, S2, W1, W2									
Sheath length L [mm]				1000*								
Thermowell diameter [mm]:								15				
								25				
Thermocouple class for S, R										1, 2		
Thermocouple class for B										2, 3		
Type of transmitter										FT2211Ex*		
Setting of transmitter temperature											(0 ÷ 1000) °C*	

* or others acc. to requirements

Ordering example

2TTSC-22Exi-S2-1000-15-2 sensor with thermocouple 2xPtRh10-Pt, class 2, corundum protection tube length L=1000 mm, connection head XE-DAND with two cable glands