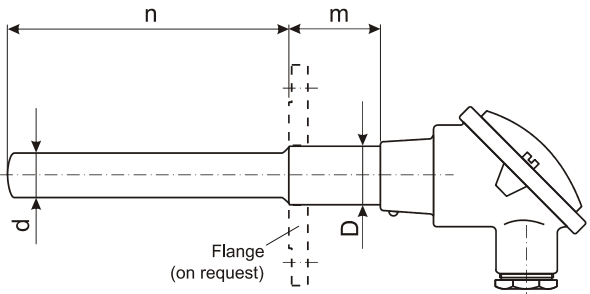
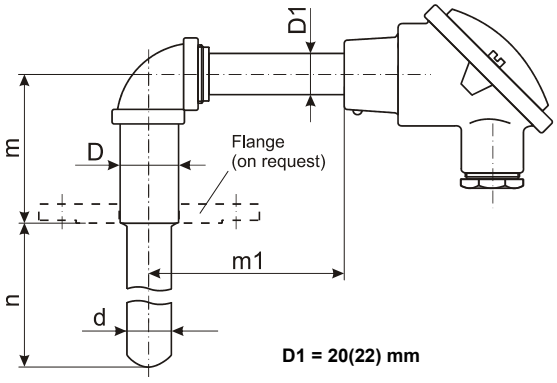


(MI) T/C PROBE WITH PROTECTION HEAD AND CERAMIC PROTECTION TUBE		TSZx							DIMENSIONS	
- FOR IN-HEAD TRANSMITTER **		TSOZx	SENSITIVE ELEMENT	TEMPERATURE RANGE	WIRE [mm] / MI [mm]	TUBE MATERIAL			d [mm]	D [mm]
Holding tube - stainless steel (see Appendix - Sheath materials) Protection tube - ceramic (see Accessories - Protection tubes) Head - aluminum, stainless steel, iron, or plastic (see Appendix - Protection heads)										
Regular Design										
1 x K; 1 x N 2 x K, 2 x N	T13	0...1000 °C	1.0	C1(2), C6	10	16				
	T6	0...1200 °C	1.5	C1(2)	15	22				
				C6, C7	16, 19	22, 24				
				C5	17	24				
	T6	0...1200 °C	3.0	C1(2)	24	32				
				C4, C7, C8	22, 28	30, 36				
C5				23	30					
1 x S; 1 x R 2 x S, 2 x R	T21	0...1300 °C	0.35	C1(2)	10, 15, 24	16, 22, 32				
				C4	22	30				
				C5	17, 23	24, 30				
				C6	10, 16, 19, 25	16, 22, 24, 32				
	T5	0...1500 °C	0.35, 0.5	C1(2)	10, 15, 24	16, 22, 32				
				C5	17, 23	24, 30				
				C6	10, 16, 19, 25	16, 22, 24, 32				
	T14	0...1600 °C	0.5	C2	10, 15, 24	16, 22, 32				
				C6	10, 16, 19, 25	16, 22, 24, 32				
	1 x B; 2 x B	T14	0...1600 °C	0.35	C2	10, 15, 24	16, 22, 32			
1 x B; 2 x B	T15	0...1700 °C	0.5	C6	10, 16, 19, 25	16, 22, 24, 32				
				C3	10, 15, 24	16, 22, 32				
					C6*	10, 16, 19, 25	16, 22, 24, 32			
MI Design										
1 x K; 1 x N 2 x K, 2 x N	T16	0...1100 °C	3, 4.5	C1(2), C6	10	16				
	T16	0...1100 °C (Inconel 600)	3, 4.5, 6, 8	C1(2)	15	22				
				C6, C7	16, 19	22, 24				
				C5	17, 23	24, 30				
	T6	0...1200 °C (Microbell®)	3, 4.5, 6, 8, 10	C1(2)	24	32				
				C4, C7, C8	22, 28	30, 36				
C6				25, 32	32, 40					
1 x S, 2 x S	T16	0...1100 °C (Inconel 600)	3, 4.5, 6	C1(2), C6	10	16				
				C1(2)	15	22				
				C6, C7	16, 19	22, 24				
				C5	17, 23	24, 30				

STRAIGHT DESIGN (TS(O)Z)



ANGLED DESIGN (TS(O)ZL)



n = 200...n_{max}

n_{max} can be defined from the table below:

n [mm]	d ≤ 16		d ≤ 32
	single	double	any
≤ 400	L - 50	L - 70	L - 100
≤ 800	L - 70	L - 100	L - 100
≤ 1800	L - 100	L - 100	L - 100

where 'L' is the length of the protection tube
(see Accessories - Protection Tubes)

Protection head:
B, MA, MB, G, N, Cx, Dx, Ex (see Appendix - Protection Heads)

Process connection:
- welded or adjustable flange
- w/o mounting appliances

Extension length:
m = 100...1000 mm
m1 = 100...1000 mm

Holding tube / elbow material:
1.4301(M1), 1.4401/1.4404(M9), 1.4541(M2), 1.4571(M3)

MI sheath material:
2.4816(M8), Microbell®(M10)

Accuracy class:
'1' or '2' (see Appendix - T/C Tolerance)

* Please contact COMECO!

** Order transmitter separately!!!

Ordering code TS★(L) - (MI -) G0.G1G2.G3.G4.G5.G6.G7'.G7".G9.G10'.G10".G11 - #1

Code	Feature or option	Code values
★	Base model variant	Z - standard (w/ terminal block), OZ - prepared for in-head transmitter (w/o terminal block)
G0	Protection head	B - type "B", CC - type "CC", CS - type "CS", D - type "D", DH - type "DH", DHW - type "DHW", DW - type "DW", E - type "E", EG - type "EG", EGS - type "EGS" ⁽³⁾ , EGSS - type "EGSS" ⁽³⁾ , EGW - type "EGW", EGWSS - type "EGWSS" ⁽³⁾ , ES - type "ES" ⁽³⁾ , G - type "G", MA - type "MA", MB - type "MB", N - type "N"
G1	Number of thermocouples	1 or 2
G2	Thermocouple <u>Check wire-to-sheath compatibility in the specification table!</u>	regular design B - type "B", K - type "K", N - type "N", R - type "R", S - type "S"
	MI design	K - type "K", N - type "N", S - type "S"
G3	Temperature range	T5 - 0...1500 °C, T6 - 0...1200 °C, T13 - 0...1000 °C, T14 - 0...1600 °C, T15 - 0...1700 °C, T16 - 0...1100 °C, T21 - 0...1300 °C
G4	Diameter 'd' [mm]	single tube 10, 15, 16, 17, 19, 22, 23, 24, 25, 28, 32 (see table overleaf)
	double tube	24/10, 24/15 , etc. (see 'Accessories - Protection Tubes YA' for available combinations!)
G5	Diameter 'D' [mm]	16, 22, 24, 30, 32, 36, 40
G6	Probe length 'n' [mm]	200...1800 (see table overleaf)
G7'	Probe length 'm' [mm]	100...1000
G7"	Probe length 'm1' [mm]	100...1000
G9	Mounting connection	X - no mounting appliances, F - flange (specify!), Z - other connection (specify!)
G10'	Protection tube material	C1 - ceramic Pythagoras 610, C2 - ceramic Oxal 710, C3 - ceramic Alsint 799, C4 - metal-ceramic Ucar®, C5 - silicon carbide, C6 - Hexoloy®, C7 - Syalon, C8 - Silicon nitride
G10"	Holding tube material	M1 - 1.4301, M2 - 1.4541, M3 - 1.4571, M9 - 1.4401 (1.4404)
G11	Accuracy class	1 - '1' ⁽³⁾ , 2 - '2'
#1	Incorporated devices	X - none, T - in-head transmitter ⁽¹⁾ , A - local indicator ⁽²⁾

⁽¹⁾ Only for variant 'OZ'! See transmitter datasheets and order separately!

⁽²⁾ With windowed head only! See indicator datasheets and order separately!

⁽³⁾ Contact COMECO!