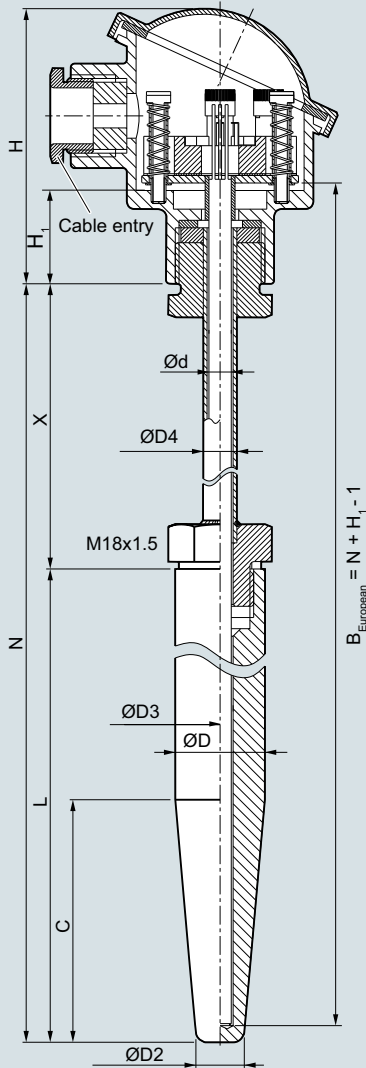


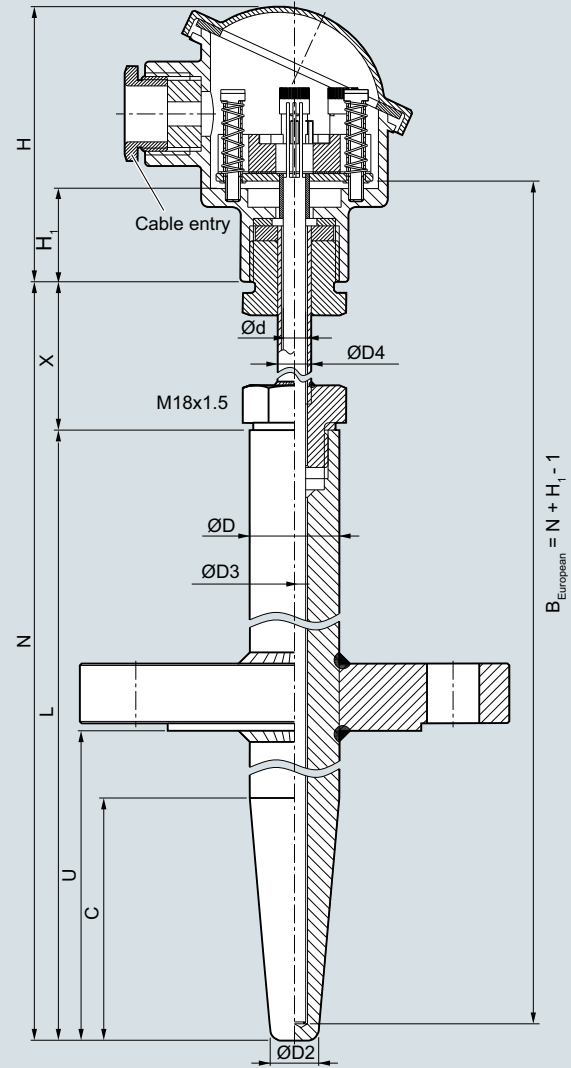
Dimensional drawings

SITRANS TS500, temperature sensors for vessels and pipelines, barstock version for medium to extreme stress, thermowell as per DIN 43722.



- B Measuring insert length
- C Cone length = U_{\min}
- Ød Measuring insert outer diameter (6 (0.24))
- ØD Process connection outer diameter
- ØD2 Tip outer diameter
- ØD3 Thermowell internal diameter
- ØD4 Extension outer diameter
- H Head height
- H₁ Type Axx = 41 (1.61)
Type Bxx = 26 (1.02)
- L Length of thermowell
- N Nominal length
- X Extension length

Thermowell type 4, for welding in, with extension, dimensions in mm (inch)



- B Measuring insert length
- C Cone length = U_{\min}
- Ød Measuring insert outer diameter (6 (0.24))
- ØD Process connection outer diameter
- ØD2 Tip outer diameter
- ØD3 Thermowell internal diameter
- ØD4 Extension outer diameter
- H Head height
- H₁ Type Axx = 41 (1.61)
Type Bxx = 26 (1.02)
- L Length of thermowell
- N Nominal length
- U Insertion length (Standard: $U = L - 70$ (2.76))
- X Extension length

Thermowell type 4F, with flange, with extension, dimensions in mm (inch)

Temperature Measurement

SITRANS TS500

Type 4+4F barstock thermowell, with extension

2

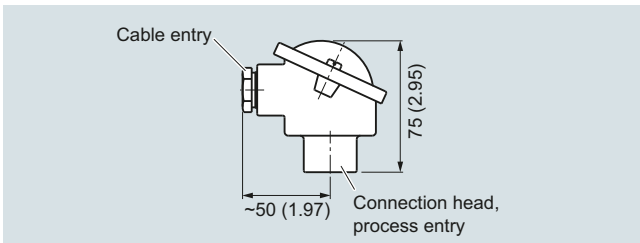
Selection and Ordering data	Article No.	Ord. Code	Selection and Ordering data	Article No.	Ord. Code
SITRANS TS500	7MC752-		SITRANS TS500	7MC752-	
Barstock thermowell for medium to highest stress, thermowell as per DIN 43722, Type 4, for welding in, Type 4F with flange, with extension			Barstock thermowell for medium to highest stress, thermowell as per DIN 43722, Type 4, for welding in, Type 4F with flange, with extension		
Click on the Article No. for the online configuration in the PIA Life Cycle Portal.					
Material, in contact with media			Head		
316Ti (1.4571)	1		Aluminum head, BA0, flange cover, Standard		A
316L (1.4404 or 1.4435)	2		Aluminum head, BB0, low hinged cover, screw connection		B
1.7335 heat resistant, only for versions without flange	3		Aluminum head, BC0, high hinged cover, screw connection		C
1.5415 heat resistant, only for versions without flange	4		Aluminum head, AG0, screw cover, suitable for Ex d ¹⁾		G
			Aluminum head, AH0, screw cover, suitable for Ex d, display ¹⁾		H
Process connection			Plastic head, BM0, screw cover		M
Without (for welding in)	0 N		Plastic head, BP0high hinged cover, screw connection		P
Flange DN25 PN10 ... 40 B1	2 A		Stainless steel head, AU0, screw cover, Ex d ¹⁾		U
Flange 1"RF150	2 E		Stainless steel head, AV0, screw cover, Ex d, display ¹⁾		V
Flange 1"RF300	2 F				
Flange 1.5"RF150	2 G		Sensor²⁾		
Flange 1.5"RF300	2 H		Please note: The accuracy class range can be lower than the measuring range. For more information, see page 2/18		
Thermowell form			Pt100, basis, -50 ... +400 °C (-58 ... +752)		A
For flanged types only: specify with Y44 in plain text if insertion length "U" deviates from standard (U=L-70 mm (2.76 inch)). (Min: U = C; Max: U= L-50 mm (1.97 inch))			Pt100, vibration resistant, -50 ... +400 °C (-58 ... +752)		B
Type 4/4F,		A 0 0	Pt100, expanded range, -196 ... +600 °C (-321 ... +1 112)		C
L=140 mm (5.51 inch), C=65 mm (3.74 inch), ØD=24 mm (0.95 inch), Ød=6 mm (0.24 inch)			Thermocouple Type K, -40 ... +1 000 °C (-40 ... +1 832)		K
Type 4/4F,		B 0 0	Thermocouple Type J, only class 2, -40 ... +750 °C (-40 ... +1 382)		J
L=200 mm (7.87 inch), C=65 mm (3.74 inch), ØD=24 mm (0.95 inch), Ød=6 mm (0.24 inch)			Thermocouple Type N, -40 ... +1 000 °C (-40 ... +1 832)		N
Type 4/4F,		D 0 0			
L=200 mm (7.87 inch), C=125 mm (4.92 inch), ØD=24 mm (0.95 inch), Ød=6 mm (0.24 inch)			Sensor number/Accuracy		
Type 4/4F,		E 0 0	Circuit Pt 100: 1 x 4-wire circuit or 2 x 3-wire circuit, see "Measuring technique: Connection types", page 2/20		
L=260 mm (10.24 inch), C=125 mm (4.92 inch), ØD=24 mm (0.95 inch), Ød=6 mm (0.24 inch)			Single, basic accuracy (Class 2/Class B)		1
Extension X			Single, increased accuracy (Class 1/Class A)		2
as per DIN 43772		1	Single, highest accuracy (Class AA)		3
(X=149 mm (5.87 inch))			Double, basic accuracy (Class 2/Class B)		5
Extension X, customer-specific			Double, increased accuracy (Class 1/Class A)		6
enter customer specific length with Y45, see page 2/94 Order codes			Double, highest accuracy (Class AA)		7
45 ... 150 mm (1.77 ... 5.91 inch)	9	N 1 D			
Initial: 150 mm (5.91 inch)					
151 ... 300 mm (5.95 ... 11.81 inch)	9	N 2 D			
Initial: 300 mm (11.81 inch)					
301 ... 450 mm (11.85 ... 17.72 inch)	9	N 3 D			
Initial: 450 mm (17.72 inch)					
451 ... 600 mm (17.86 ... 23.62 inch)	9	N 4 D			
Initial: 600 mm (23.62 inch)					
601 ... 750 mm (23.66 ... 29.53 inch)	9	N 5 D			
Initial: 750 mm (29.53 inch)					
751 ... 900 mm (29.57 ... 45.43 inch)	9	N 6 D			
Initial: 900 mm (45.43 inch)					
901 ... 1 050 mm (45.47 ... 41.34 inch)	9	N 7 D			
Initial: 1 050 mm (41.34 inch)					

¹⁾ Ex d in connection with Order code E03
²⁾ Pt1000 versions are also available. To find these, please switch to Online Configuration in the PIA Life Cycle Portal: www.siemens.com/pia-portal

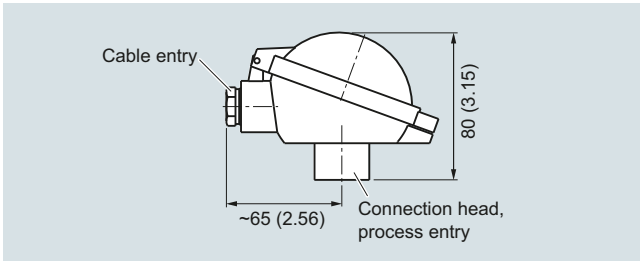
Additional configurations on page after next page!

You find ordering examples on page 2/41!

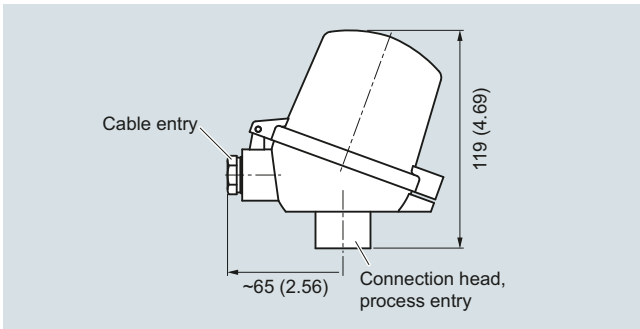
Type 4+4F barstock thermowell, with extension



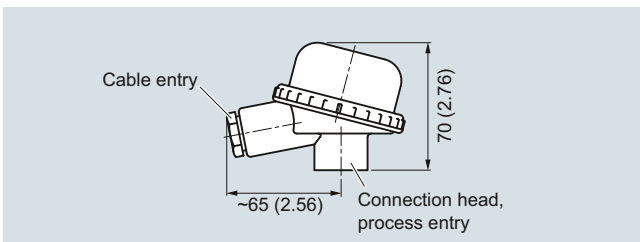
Connection head, aluminum, Type BA0, dimensions in mm (inch)



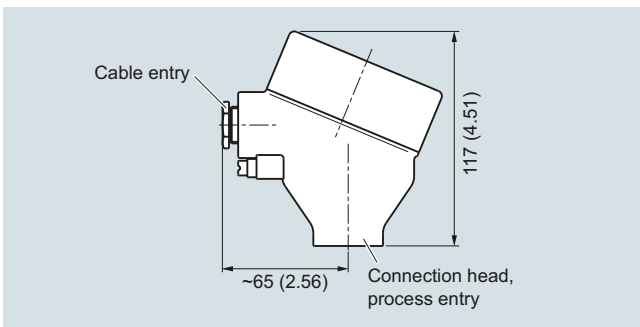
Connection head, aluminum, Type BB0, dimensions in mm (inch)



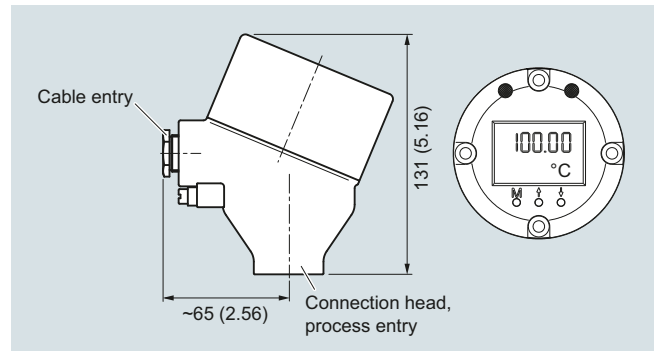
Connection head, aluminum, Type BC0, plastic, type BP0, dimensions in mm (inch)



Connection head, plastic, Type BM0, dimensions in mm (inch)



Connection head, aluminum, Type AG0, stainless steel, Type AU0, dimensions in mm (inch)



Connection head with 4-20 mA display, aluminum, Type AH0, stainless steel, Type AV0, dimensions in mm (inch)

Temperature Measurement

SITRANS TS500

Type 4+4F barstock thermowell, with extension

Selection and Ordering data	Order code	Selection and Ordering data	Order code
Further designs		Certificates and approvals	
Add "-Z" to Article No. and specify Order code.		EN 10204-3.1 Inspection certificate for materials coming into contact with media	C12
Insertion length customer-specific	Y44	EN 10204-3.1 Inspection certificate for hydrostatic pressure test	C31
Select range, enter desired length in plain text Insertion length U deviating from standard; (Min: U = C; Max; U= L-50 mm (1.97 inch)), no entry = standard length (U=L-70 mm (2.76 inch))		EN 10204-3.1 Inspection certificate for helium leak test	C32
Extension length customer-specific	Y45	EN 10204-3.1 Inspection certificate for surface tear test	C33
Select range, enter desired length in plain text (No entry = standard length)		EN 10204-3.1 Inspection certificate: visual, measurement and functional inspection	C34
Options		EN 10204-2.1: Declaration of compliance with the order	C35
Add "-Z" to Article No. and add options, separate extensions with "+".		NACE Standard MR-01-75 compliance	C50
Built-in head transmitter		ISO 9001 grease-free (cleaned for e.g. oxygen applications)	C51
Measuring range to be set must be specified with plain text data "Y01".		Designation, calibration	
SITRANS TH100, 4 ... 20 mA, Pt100	T10	Stainless steel TAG plate , enter lettering in plain text	Y15
SITRANS TH100 Ex i (ATEX), 4 ... 20 mA, Pt100	T11	Plant calibration per 1 point, enter temperature in plain text	Y33
SITRANS TH200, 4 ... 20 mA, Universal	T20	Transmitter options	
SITRANS TH200 Ex i (ATEX), 4 ... 20 mA, Universal	T21	Transmitter, enter complete setting in plain text (Y01:+/-NNNN ... +/-NNNN C,F), marking on the device when Order code "Y15" is selected	Y01
SITRANS TH300, HART, Universal	T30	Enter measuring point (max. 8 characters) in plain text	Y17
SITRANS TH300 Ex i (ATEX), HART, Universal	T31	Transmitter, enter measuring point description (max. 16 characters) in plain text	Y23
SITRANS TH400 PA, Universal	T40	Transmitter, enter measuring point text (max. 32 characters) in plain text	Y24
SITRANS TH400 PA Ex i, Universal	T41	Transmitter, enter bus address in plain text	Y25
SITRANS TH400 FF, Universal	T45	Transmitter, fail-safe value 3.6 mA (instead of 22.8 mA)	U36
SITRANS TH400 FF Ex i, Universal	T46	Transmitter with a SIL 2 conformity	C20
Explosion protection		Transmitter with a SIL 2/3 conformity	C23
Without explosion protection requirements (Europe, Australia, New Zealand)	E00	Transmitter test protocol (5 points)	C11
Intrinsic safety "i"/"IS ¹) according to ATEX and IECEx (Europe, Australia, New Zealand)	E01	Further options	
Flameproof enclosure "d"/"XP; dust protection through housing "t"/"DIP ²) according to ATEX and IECEx (Europe, Australia, New Zealand)	E03	Connection form, flying leads (for the direct transmitter assembly, delivery without screws and springs)	G01
Non-sparking "nA"/"NI" according to ATEX and IECEx (Europe, Australia, New Zealand)	E04	Full penetration process connection for 316L/316Ti M12 device plug (in combination with 1x Pt100 and/or transmitter, Non-Ex and intrinsically safe, max. IP65/67)	G02 G12
Without explosion protection requirements (USA, Canada) Basis FM	E10	Han 7D device plug (Non Ex and intrinsically safe, without mating connector max. IP65/67)	G13
Flameproof enclosure "d"/"XP; dust protection through housing "t"/"DIP ²) according to cFMus (USA, Canada); other connections (M,G,R)	E14	Connection head with ½ NPT thread without cable gland, for AU0 and AH0 only IP66	G20
Non-sparking "nA"/"NI" according to cFMus (USA, Canada)	E16	with outer earth screw for heads AG0, AH0, AU0 and AV0	A02
Without explosion protection requirements (USA, Canada), Basis CSA	E17	with inner earth screw for heads BC0, AG0, AH0, AU0 and AV0	A03
Intrinsic safety "i"/"IS ¹) according to cCSAus (USA, Canada)	E18	Option not found?	
Flameproof enclosure "d"/"XP; dust protection through housing "t"/"DIP ²) according to cCSAus (USA); other connections (M, G, R)	E21	Handling number special version	Y99
Non-sparking "nA"/"NI" according to cCSAus (USA, Canada)	E23		
Without explosion protection requirements (China)	E54	1) Please select Ex i version of the optional transmitter.	
Intrinsic safety "i"/"IS ¹) according to NEPSI (China)	E55	2) Only with connection heads code AG0, AH0, AU0, AV0, without cable gland (please select non-Ex version of the optional transmitter).	
Flameproof enclosure "d"; dust protection through housing "t ²) according to NEPSI (China)	E56		
Non-sparking "nA"/"NI" according to NEPSI (China)	E57		
Without explosion protection requirements (EAC)	E80		
Intrinsic safety "i"/"IS ¹) according to EACEx (EAC)	E81		
Flameproof enclosure "d"/"XP; dust protection through housing "t"/"DIP ²) according to EACEx (EAC)	E82		
Non-sparking "nA"/"NI" according to EACEx (EAC)	E83		
Marine approvals			
Det Norske Veritas Germanischer Lloyd (DNV GL)	D01		
Bureau Veritas (BV)	D02		
Lloyd's Register of Shipping (LR)	D04		
American Bureau of Shipping (ABS)	D05		

You find ordering examples on page 2/41. Accessories, see page 2/238.