

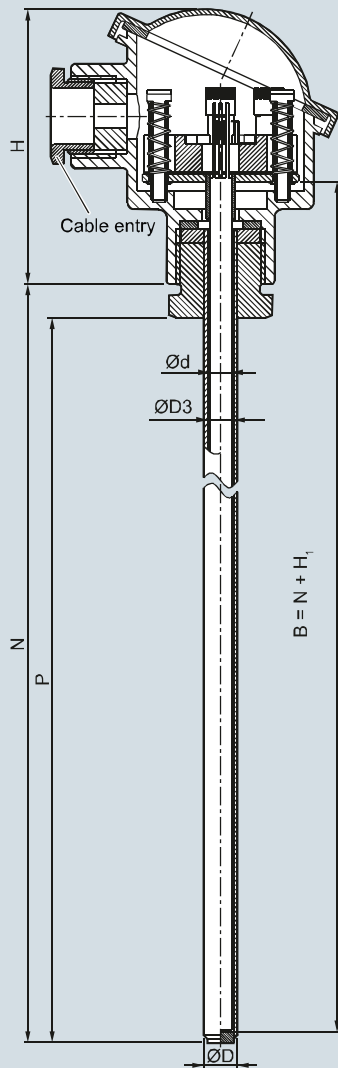
Temperature Measurement

SITRANS TS500

Type 2, tubular version
without process connection

Dimensional drawings

2



- B Measuring insert length
- Ød Measuring insert outer diameter (6 (0.24))
- ØD Process connection outer diameter
- ØD3 Thermowell internal diameter
- H Head height
- H₁ Typ Axx> 41 (1.61)
Typ Bxx> 26 (1.02)
- N Nominal length
- P Space for process connection

SITRANS TS500, temperature sensors for vessels and pipings, tubular version for minimal to medium stress, without process connection, without extension, plug-in or use with moveable compression fittings, dimensions in mm (inch)

Temperature Measurement SITRANS TS500

Type 2, tubular version
without process connection

2

Selection and Ordering data	Article No.	Ord. Code
SITRANS TS500 Pipe version for minimal to medium stress, as per thermowell DIN 43722, Type 2, without process connection, without extension, plug-in or use with moveable compression fittings	7MC751-	
Material, in contact with media 316Ti (1.4571) 316L (1.4404) Special version, enter thermowell material in plain text	1 2 8	
Process connection Without process connection (for compression fitting) N=U	0 N	
Thermowell form 2; 9 mm (0.35 inch) 2; 12 mm (0.47 inch) Special version, enter thermowell form in plain text	A B Z	K 1 Y
Insertion length U (=N), Standard 160 mm (6.3 inch) 250 mm (9.84 inch) 400 mm (15.75 inch)	0 4 1 2 2 2	
Insertion length U (=N), customer-specific enter customer specific length with Y44, see Order Codes on page 2/127 80 ... 100 mm (3.15 ... 3.94 inch) Standard: 100 mm (3.94 inch) 101 ... 120 mm (3.98 ... 4.72 inch) Standard: 120 mm (4.72 inch) 121 ... 140 mm (4.76 ... 5.51 inch) Standard: 140 mm (5.51 inch) 141 ... 160 mm (5.55 ... 6.30 inch) Standard: 160 mm (6.3 inch) 161 ... 180 mm (6.34 ... 7.09 inch) Standard: 180 mm (7.09) 181 ... 200 mm (7.13 ... 7.87 inch) Standard: 200 mm (7.87 inch) 201 ... 220 mm (7.91 ... 8.66 inch) Standard: 220 mm (8.66 inch) 221 ... 240 mm (8.7 ... 9.45 inch) Standard: 225 mm (8.86 inch) 241 ... 260 mm (9.48 ... 10.24 inch) Standard: 250 mm (9.84 inch) 261 ... 280 mm (10.28 ... 11.02 inch) Standard: 280 mm (11.02 inch) 281 ... 300 mm (11.02 ... 11.81 inch) Standard: 285 mm (11.22 inch) 301 ... 320 mm (11.85 ... 12.6 inch) Standard: 315 mm (12.4 inch) 321 ... 340 mm (12.64 ... 13.39 inch) Standard: 340 mm (13.39 inch) 341 ... 360 mm (13.43 ... 14.17 inch) Standard: 360 mm (14.17 inch) 361 ... 380 mm (14.21 ... 14.96 inch) Standard: 380 mm (14.96 inch) 381 ... 400 mm (15 ... 15.75 inch) Standard: 400 mm (15.75 inch) 401 ... 420 mm (15.79 ... 16.54 inch) Standard: 420 mm (16.54 inch) 421 ... 440 mm (16.57 ... 17.32 inch) Standard: 440 mm (17.32 inch) 441 ... 460 mm (17.36 ... 18.11 inch) Standard: 460 mm (18.11 inch) 461 ... 480 mm (18.15 ... 18.90 inch) Standard: 465 mm (18.30 inch) 481 ... 500 mm (18.94 ... 19.68 inch) Standard: 500 mm (19.68 inch) 501 ... 550 mm (19.72 ... 21.65 inch) Standard: 510 mm (20.08 inch) 551 ... 600 mm (21.69 ... 23.62 inch) Standard: 600 mm (23.62 inch) 601 ... 650 mm (23.66 ... 25.59 inch) Standard: 650 mm (25.59 inch)	0 1 0 2 0 3 0 4 0 5 0 6 0 7 1 1 1 2 1 3 1 4 1 5 1 6 2 0 2 1 2 2 2 3 2 4 2 5 2 6 2 7 3 1 3 2 3 3	

Selection and Ordering data	Article No.	Ord. Code
SITRANS TS500 Pipe version for minimal to medium stress, as per thermowell DIN 43722, Type 2, without process connection, without extension, plug-in or use with moveable compression fittings	7MC751-	
651 ... 700 (25.63 ... 27.56 inch) Standard: 700 mm (27.56 inch)	3 4	
701 ... 750 (27.6 ... 29.53 inch) Standard: 750 mm (29.53 inch)	3 5	
751 ... 800 (29.57 ... 31.50 inch) Standard: 800 mm (31.50 inch)	3 6	
801 ... 850 (31.5 ... 33.47 inch) Standard: 850 mm (33.47 inch)	3 7	
851 ... 900 (33.5 ... 35.43 inch) Standard: 900 mm (35.43 inch)	4 1	
901 ... 950 (35.47 ... 37.4 inch) Standard: 950 (37.4 inch)	4 2	
951 ... 1 000 (37.44 ... 39.37 inch) Standard: 1 000 mm (39.37 inch)	4 3	
1001 ... 1 100 (39.4 ... 43.30 inch) Standard: 1 100 (43.30 inch)	4 4	
1 101 ... 1 200 (43.35 ... 47.24 inch) Standard: 1 200 mm (47.24 inch)	4 5	
1 201 ... 1 300 (47.28 ... 51.18 inch) Standard: 1 300 mm (51.18 inch)	4 6	
1 301 ... 1 400 (51.22 ... 55.11 inch) Standard: 1400 mm (55.11 inch)	4 7	
1 401 ... 1 500 (55.15 ... 59.05 inch) Standard: 1 500 mm (59.05 inch)	5 1	
Insertion U (=N), Special length Special length 1 501 ... 6 000 (59.05 ... 236.22 inch)	8 8	
Extension X Standard length for Type 2 as per DIN 43722 (without extension N=U)	0	

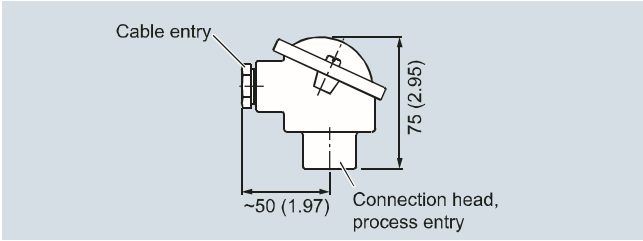
Additional configurations on page after next page!

You find ordering examples on page 2/107!

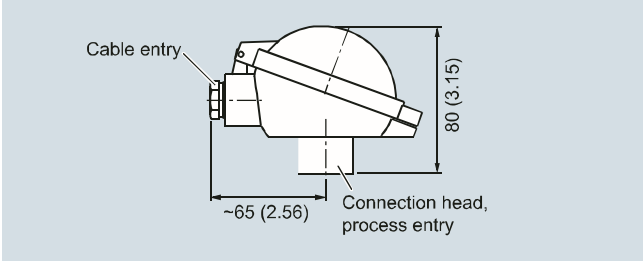
Temperature Measurement SITRANS TS500

Type 2, tubular version without process connection

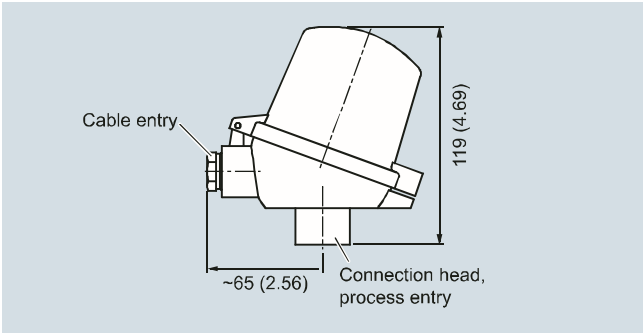
2



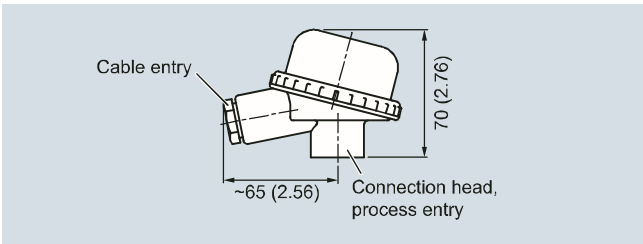
Connection head, aluminum, Type BA0, dimensions in mm (inch)



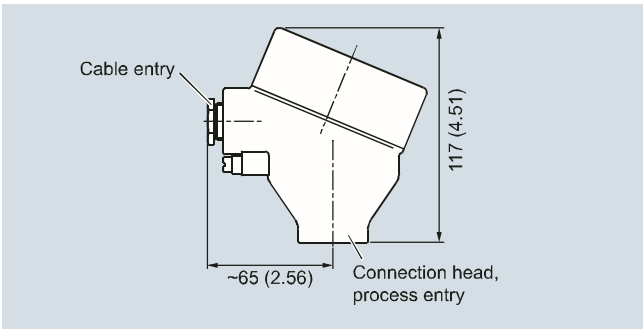
Connection head, aluminum, Type BB0, dimensions in mm (inch)



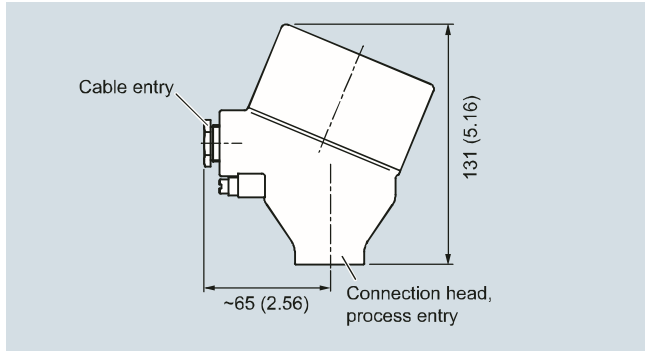
Connection head, aluminum, Type BC0, plastic, type BP0, dimensions in mm (inch)



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 display and glass lid, aluminum, Type AH0, stainless steel, Type AV0, dimensions in mm (inch)

Temperature Measurement

SITRANS TS500

Type 2, tubular version
without process connection

2

Selection and Ordering data	Article No.	Ord. Code
SITRANS TS500 Tubular version for minimal to medium stress, as per thermowell DIN 43722, Type 2, without process connection, without extension, plug-in or use with moveable compression fittings	7MC751-	
Head Aluminum head, BA0, flange cover, Standard		A
Aluminum head, BB0, low hinged cover, screw connection		B
Aluminum head, BC0, high hinged cover, screw connection		C
Aluminum head, AG0, screw cover, suitable for suitable for Ex d		G
Aluminum head, AH0, screw cover, suitable for Ex d, display (not for Ex i)		H
Plastic head, BM0, screw cover		M
Plastic head, BP0, high hinged cover, screw connection		P
Stainless steel head, AU0, screw cover, suitable for Ex d		U
Stainless steel head, AV0, screw cover, suitable for Ex d, display (not for Ex i)		V
Special version of connection head		Z
Sensor Pt100, basis, -50 ... +400 °C (-58 ... +752 °F)		A
Pt100, vibration-resistant, -50 ... +400 °C (-58 ... +752 °F)		B
Pt100, expanded range, -196 ... +600 °C (-321 ... +1 112 °F)		C
Thermocouple Type K, -40 ... +1 000 °C (-40 ... +1 832 °F)		K
Thermocouple Type J, -40 ... +750 °C (-40 ... +1 382 °F)		J
Thermocouple Type N, -40 ... +1 000 °C (-40 ... +1 832 °F)		N
Sensor number/Accuracy Single, basic accuracy (Class 2/Class B)		1
Single, increased accuracy (Class 1/Class A)		2
Single, highest accuracy (Class AA)		3
Double, basic accuracy (Class 2/Class B)		5
Double, increased accuracy (Class 1/Class A)		6
Double, highest accuracy (Class AA)		7
Special version of sensor type, number and accuracy - to be specified		Z0 Q1 Y

Selection and Ordering data	Order code
Further designs Add "-Z" to Article No. and specify Order Code.	
Enter thermowell material in plain text	G1Y
Enter thermowell form in plain text	K1Y
Insertion length customer-specific Select range, enter desired length in plain text (No entry = standard length)	Y44
Head Enter connection head in plain text	P1Y
Sensor number/Accuracy Enter connection head in plain text	Q1Y

Selection and Ordering data	Order code
Options Add "-Z" to Article No. and add options, separate extensions with "+".	
Built-in head transmitter SITRANS TH100, 4 ... 20 mA, Pt100	T10
SITRANS TH100 Ex i (ATEX), 4 ... 20 mA, Pt100	T11
SITRANS TH200, 4 ... 20 mA, Universal	T20
SITRANS TH200 Ex (ATEX), 4 ... 20 mA, Universal	T21
SITRANS TH300, HART, Universal	T30
SITRANS TH300 Ex (ATEX), HART, Universal	T31
SITRANS TH400 PA, Universal	T40
SITRANS TH400 PA Ex, Universal	T41
SITRANS TH400 FF, Universal	T45
SITRANS TH400 FF Ex, Universal	T46
Explosion protection Intrinsic safety "ia", "ic"	E01
Flameproof enclosure "d"; Dust protection by enclosures "t" only in combination with connection heads code AG0, AH0, AU0, AV0, without cable gland	E03
Non sparking "n"	E04
Certificates and approvals EN10204-3.1 Inspection certificate for materials coming into contact with media	C12
EN10204-3.1 Inspection certificate for hydrostatic pressure test	C31
EN10204-3.1 Inspection certificate for helium leak test	C32
EN10204-3.1 Inspection certificate for surface tear test	C33
EN10204-3.1 Inspection certificate: visual, measurement and functional inspection	C34
NACE Standard MR-01-75 compliance	C50
ISO 9001 grease-free (cleaned for e.g. oxygen applications)	C51
Designation, calibration Stainless steel TAG plate , enter lettering in plain text	Y15
Plant calibration per 1 point, enter temperature in plain text	Y33
Transmitter options Transmitter, enter complete setting in plain text (Y01:+/-NNNN ... +/-NNNN C,F)	Y01
Enter measuring point (max. 8 characters) in plain text	Y17
Transmitter, enter measuring point description (max. 16 characters) in plain text	Y23
Transmitter, enter measuring point text (max. 32 characters) in plain text	Y24
Transmitter, enter bus address in plain text	Y25
Transmitter, fail-safe value 3.6 mA (instead of 22.8 mA)	U36
Transmitter with a SIL 2 conformity	C20
Transmitter with a SIL 2/3 conformity	C23
Transmitter test protocol (5 points)	C11
Further options Connection form, flying leads (for the direct transmitter assembly, delivery without screws and springs)	G01
M12 plug (in combination with 1x Pt100 and/or transmitter , Non-Ex)	G12
Harting plug Han 7 D (Non Ex)	G13
Connection head with 1/2" NPT thread without cable gland	G20
Plastic cable gland	G21
with spring lock for heads BB0 and BC0	A01
with outer earth screw for heads AG0, AH0, AU0 and AV0	A02
with inner earth screw for heads BC0, AG0, AH0, AU0 and AV0	A03
Compression fitting G1/2", enclosed	A31
Compression fitting NPT1/2", enclosed	A32
Option not found? Specify special version in plain text	Y99

You find ordering examples on page 2/107!

Temperature Measurement

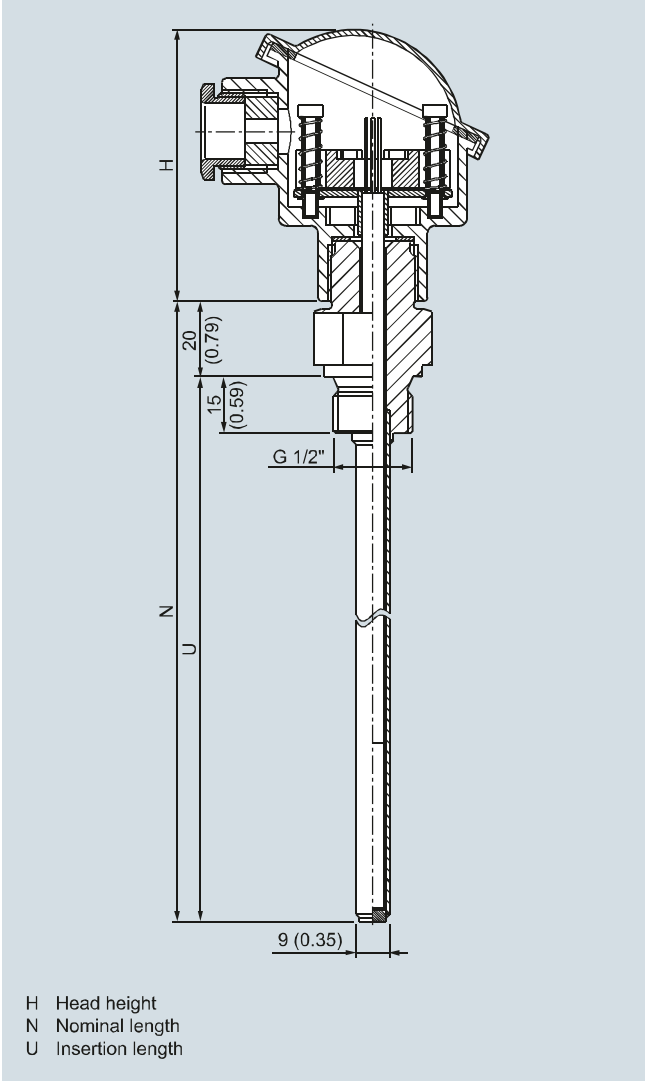
SITRANS TS500

Type 2N, tubular version with screw socket

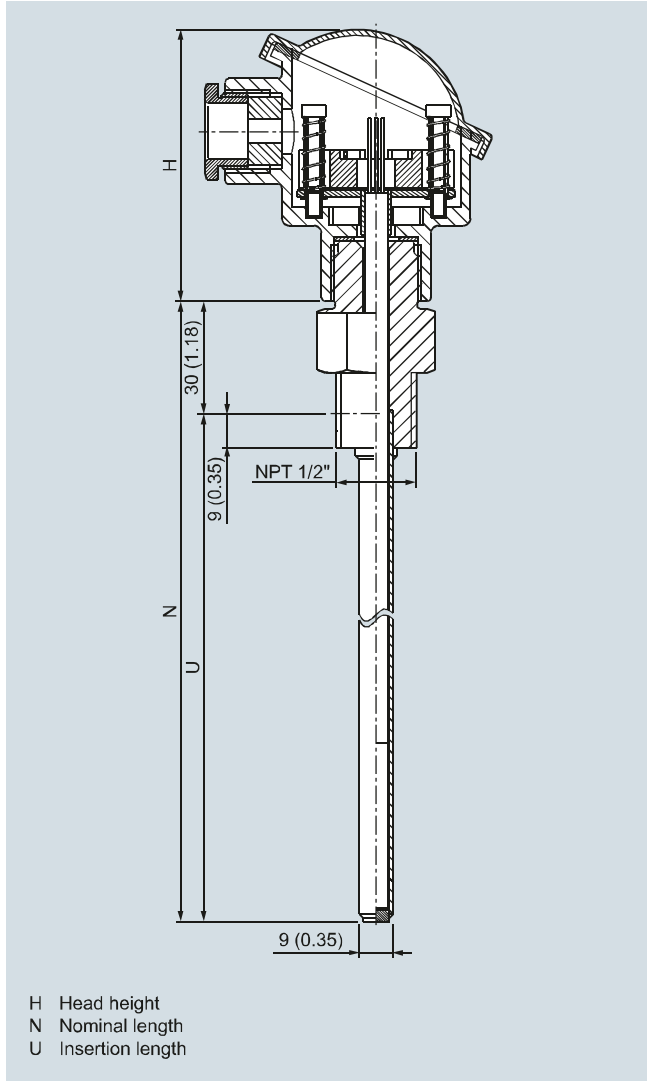
Dimensional drawings

SITRANS TS500, temperature sensors for vessels and pipelines, tubular version for minimal to medium stress, thermowell Type 2N similar to DIN 43722, screwed in, without extension.

2



Connection type "G", dimensions in mm (inch)



Connection type "NPT", dimensions in mm (inch)

Temperature Measurement SITRANS TS500

Type 2N, tubular version
with screw socket

2

Selection and Ordering data	Article No.	Ord. Code
SITRANS TS500 Tubular thermowell, minimal to medium stress, Type 2N similar to DIN 43722, screwed in, without extension, for maximum process temperatures of 100 °C	7MC751-	
Material, in contact with media 316Ti (1.4571) 316L (1.4404) Special version	1 2 8	
Process connection G ½" (½"BSPF) ½" NPT Special version	1 C 1 J 9 X	H 1 Y
Thermowell form 2N, 9 mm (0.35 inch) Special version	A Z	K 1 Y
Standard insertion length 100 mm (3.97 inch) 160 mm (6.30 inch) 230 mm (9.06 inch) 360 mm (14.17 inch) 510 mm (20.08 inch)	0 1 0 4 1 0 2 0 3 1	
Customer-specific insertion length enter customer specific length with Y44, see page 2/131 Order Codes 80 ... 100 mm (3.15 ... 3.94 inch) Standard: 100 mm (3.94 inch) 101 ... 120 mm (3.98 ... 4.72 inch) Standard: 120 mm (4.72 inch) 121 ... 140 mm (4.76 ... 5.51 inch) Standard: 140 mm (5.51 inch) 141 ... 160 mm (5.55 ... 6.30 inch) Standard: 160 mm (6.30 inch) 161 ... 180 mm (6.34 ... 7.09 inch) Standard: 180 mm (7.09 inch) 181 ... 200 mm (7.13 ... 7.87 inch) Standard: 200 mm (7.87 inch) 201 ... 220 mm (7.91 ... 8.66 inch) Standard: 220 mm (8.66 inch) 221...240 mm (8.70 ... 9.45 inch) Standard: 230 mm (9.06 inch) 241...260 mm (9.49 ... 10.24 inch) Standard: 250 mm (9.84 inch) 261...280 mm (10.28 ... 11.02 inch) Standard: 280 mm (11.02 inch) 281...300 mm (11.06 ... 11.81 inch) Standard: 285 mm (11.22 inch) 301...320 mm (11.85 ... 13.00 inch) Standard: 315 mm (12.40 inch) 321...340 mm (12.64 ... 13.39 inch) Standard: 340 mm (13.39 inch) 341...360 mm (13.43 ... 14.17 inch) Standard: 360 mm (14.17 inch) 361...380 mm (14.21 ... 14.96 inch) Standard: 380 mm (14.96 inch) 381...400 mm (14.99 ... 15.75 inch) Standard: 400 mm (15.75 inch) 401...420 mm (15.79 ... 16.54 inch) Standard: 420 mm (16.54 inch) 421...440 mm (16.57 ... 17.32 inch) Standard: 440 mm (17.32 inch) 441...460 mm (17.36 ... 18.11 inch) Standard: 460 mm (18.11 inch) 461...480 mm (18.15 ... 18.90 inch) Standard: 465 mm (18.30 inch) 481...500 mm (18.94 ... 19.69 inch) Standard: 500 mm (19.69 inch)	0 1 0 2 0 3 0 4 0 5 0 6 0 7 1 0 1 2 1 3 1 4 1 5 1 6 2 0 2 1 2 2 2 3 2 4 2 5 2 6 2 7	

Selection and Ordering data	Article No.	Ord. Code
SITRANS TS500 Tubular thermowell, minimal to medium stress, Type 2N similar to DIN 43722, screwed in, without extension, for maximum process temperatures of 100 °C	7MC751-	
501...550 mm (19.72 ... 21.65 inch) Standard: 510 mm (20.08 inch)	3 1	
551...600 mm (21.69 ... 23.62 inch) Standard: 600 mm (23.62 inch)	3 2	
601...650 mm (23.66 ... 25.59 inch) Standard: 650 mm (25.59 inch)	3 3	
651...700 mm (25.63 ... 27.56 inch) Standard: 700 mm (27.56 inch)	3 4	
701...750 mm (27.60 ... 29.53 inch) Standard: 750 mm (29.53 inch)	3 5	
751...800 mm (29.57 ... 31.50 inch) Standard: 800 mm (31.50 inch)	3 6	
801...850 mm (31.54 ... 33.46 inch) Standard: 850 mm (33.46 inch)	3 7	
851...900 mm (33.50 ... 35.43 inch) Standard: 900 mm (35.43 inch)	4 1	
901...950 mm (35.47 ... 37.40 inch) Standard: 950 mm (37.40 inch)	4 2	
951...1 000 mm (37.44 ... 39.37 inch) Standard: 1 000 mm (39.37 inch)	4 3	
1 001...1 100 mm (39.41 ... 43.31 inch) Standard: 1 100 mm (43.31 inch)	4 4	
1 101...1 200 mm (43.35 ... 47.24 inch) Standard: 1 200 mm (47.24 inch)	4 5	
1 201...1 300 mm (47.28 ... 51.18 inch) Standard: 1 300 mm (51.18 inch)	4 6	
1 301...1 400 mm (51.22 ... 55.12 inch) Standard: 1 400 mm (55.12 inch)	4 7	
1 401...1 500 mm (55.16 ... 59.05 inch) Standard: 1 500 mm (59.05 inch)	5 1	
Insertion length for special length 1 501 ... 6 000 mm (59.09 ... 236.22 inch)	8 8	
Extension X without neck tube, (not adjustable)	0	

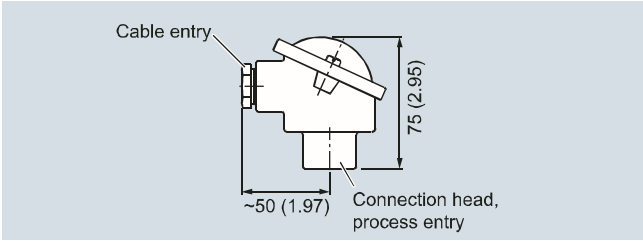
Additional configurations on page after next page!

You find ordering examples on page 2/107!

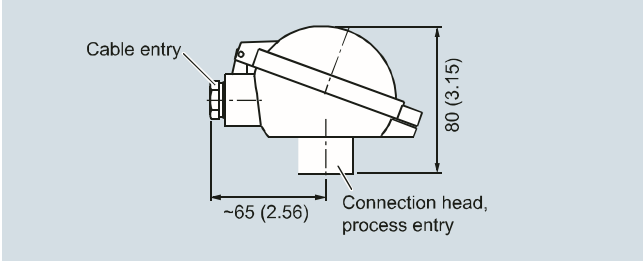
Temperature Measurement SITRANS TS500

Type 2N, tubular version with screw socket

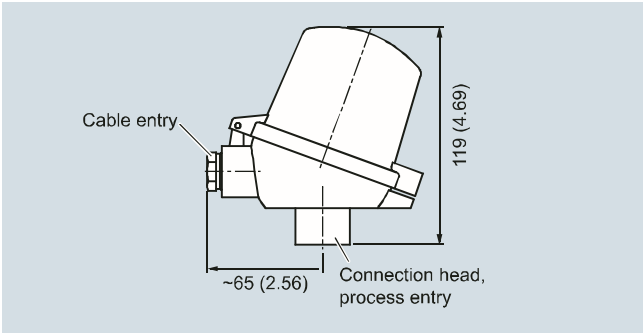
2



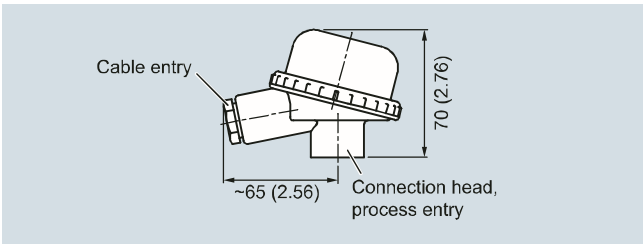
Connection head, aluminum, Type BA0, dimensions in mm (inch)



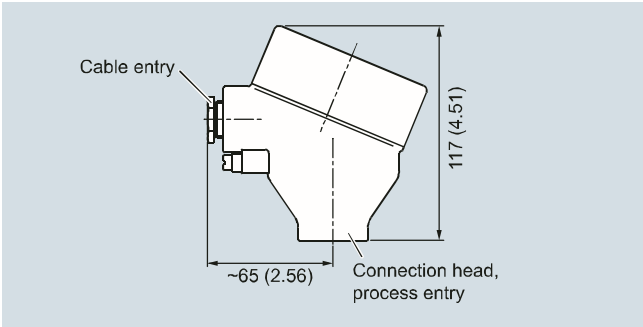
Connection head, aluminum, Type BB0, dimensions in mm (inch)



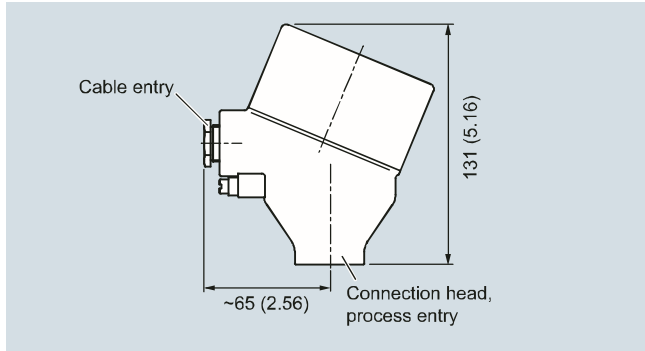
Connection head, aluminum, Type BC0, plastic, type BP0, dimensions in mm (inch)



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 display and glass lid, aluminum, Type AH0, stainless steel, Type AV0, dimensions in mm (inch)

Temperature Measurement

SITRANS TS500

Type 2N, tubular version
with screw socket

2

Selection and Ordering data	Article No.	Ord. Code	Selection and Ordering data	Order code
SITRANS TS500 Tubular thermowell, minimal to medium stress, Type 2N similar to DIN 43722, screwed in, without extension, for maximum process temperatures of 100 °C	7MC751-		Options Add "-Z" to Article No. and add options, separate extensions with "+".	
Head Without connection head Aluminum head, BA0, flange cover, Standard Aluminum head, BB0, low hinged cover, screw connection Aluminum head, BC0, high hinged cover, screw connection Aluminum head, AG0, screw cover, suitable for Ex d Aluminum head, AH0, screw cover, suitable for Ex d, display (not for Ex i) Plastic head, BM0, screw cover Plastic head, BP0 high hinged cover, screw connection Stainless steel head, AU0, screw cover, suitable for Ex d Stainless steel head, AV0, screw cover, suitable for Ex d, display (not for Ex i) Special version of connection head		N A B C G H M P U V Z	Built-in head transmitter SITRANS TH100, 4 ... 20 mA, Pt100 SITRANS TH100 Ex i (ATEX), 4 ... 20 mA, Pt100 SITRANS TH100 Ex i (FM), 4 ... 20 mA, Pt100 SITRANS TH200, 4 ... 20 mA, Universal SITRANS TH200 Ex (ATEX), 4 ... 20 mA, Universal SITRANS TH200 Ex (FM), 4 ... 20 mA, Universal SITRANS TH300, HART, Universal SITRANS TH300 Ex (ATEX), HART, Universal SITRANS TH300 Ex (FM), HART, Universal SITRANS TH400 PA, Universal SITRANS TH400 PA Ex, Universal SITRANS TH400 FF, Universal SITRANS TH400 FF Ex, Universal	T10 T11 T13 T20 T21 T23 T30 T31 T33 T40 T41 T45 T46
Sensor Pt100, basis, -50 ... +400 °C (-58 ... +752 °F) Pt100, vibration-resistant, -50 ... +400 °C (-58 ... +752 °F) Pt100, expanded range, -196 ... +600 °C (-321 ... +1 112 °F) Thermocouple Type K, -40 ... +1 000 °C (-40 ... +1 832 °F) Thermocouple Type J, -40 ... +750 °C (-40 ... +1 382 °F) Thermocouple Type N, -40 ... +1 000 °C (-40 ... +1 832 °F)		P 1 Y A B C K J N	Explosion protection Intrinsic safety "ia", "ic" Flameproof enclosure "d"; Dust protection by enclosures "t" only in combination with connection heads code AG0, AH0, AU0, AV0, without cable gland Non sparking "n"	E01 E03 E04
Sensor number/Accuracy Single, basic accuracy (Class 2/Class B) Single, increased accuracy (Class 1/Class A) Single, highest accuracy (Class AA) Double, basic accuracy (Class 2/Class B) Double, increased accuracy (Class 1/Class A) Double, highest accuracy (Class AA) Specify special version in plain text		1 2 3 5 6 7 Z0 Q1 Y	Certificates and approvals EN10204-3.1 Inspection certificate for materials coming into contact with media EN10204-3.1 Inspection certificate for hydrostatic pressure test EN10204-3.1 Inspection certificate for helium leak test EN10204-3.1 Inspection certificate for surface tear test EN10204-3.1 Inspection certificate: visual, measurement and functional inspection NACE Standard MR-01-75 compliance ISO 9001 grease-free (cleaned for e.g. oxygen applications)	C12 C31 C32 C33 C34 C50 C51
Selection and Ordering data		Order code	Designation, calibration Stainless steel TAG plate , enter lettering in plain text Plant calibration per 1 point, enter temperature in plain text	Y15 Y33
Further designs Add "-Z" to Article No. and specify Order Code.			Transmitter options Transmitter, enter complete setting in plain text (Y01:+/-NNNN ... +/-NNNN C,F) Enter measuring point (max. 8 characters) in plain text Transmitter, enter measuring point description (max. 16 characters) in plain text Transmitter, enter measuring point text (max. 32 characters) in plain text Transmitter, enter bus address in plain text Transmitter, fail-safe value 3.6 mA (instead of 22.8 mA) Transmitter with a SIL 2 conformity Transmitter with a SIL 2/3 conformity Transmitter test protocol (5 points)	Y01 Y17 Y23 Y24 Y25 U36 C20 C23 C11
Enter thermowell material in plain text	G1Y		Further options Connection form, flying leads (for the direct transmitter assembly, delivery without screws and springs) M12 plug (in combination with 1x Pt100 and/or transmitter , Non-Ex) Harting plug Han 7 D (Non Ex) Connection head with ½" NPT thread without cable gland Plastic cable gland with spring lock for heads BB0 and BC0 with outer earth screw for heads AG0, AH0, AU0 and AV0 with inner earth screw for heads BC0, AG0, AH0, AU0 and AV0	G01 G12 G13 G20 G21 A01 A02 A03
Enter process connection in plain text	H1Y		Option not found? Specify special version in plain text	Y99
Enter thermowell form in plain text	K1Y			
Head Enter connection head in plain text	P1Y			
Sensor number/Accuracy Enter connection head in plain text	Q1Y			
Insertion length customer-specific Select range, enter desired length in plain text (No entry = standard length)	Y44			

You find ordering examples on page 2/107!

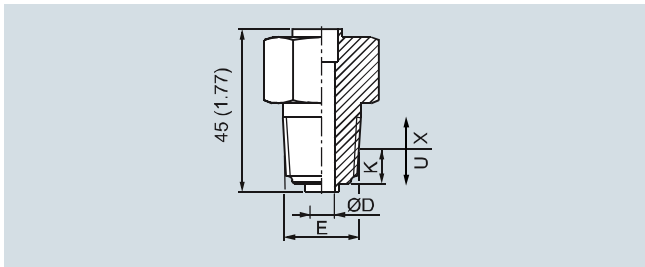
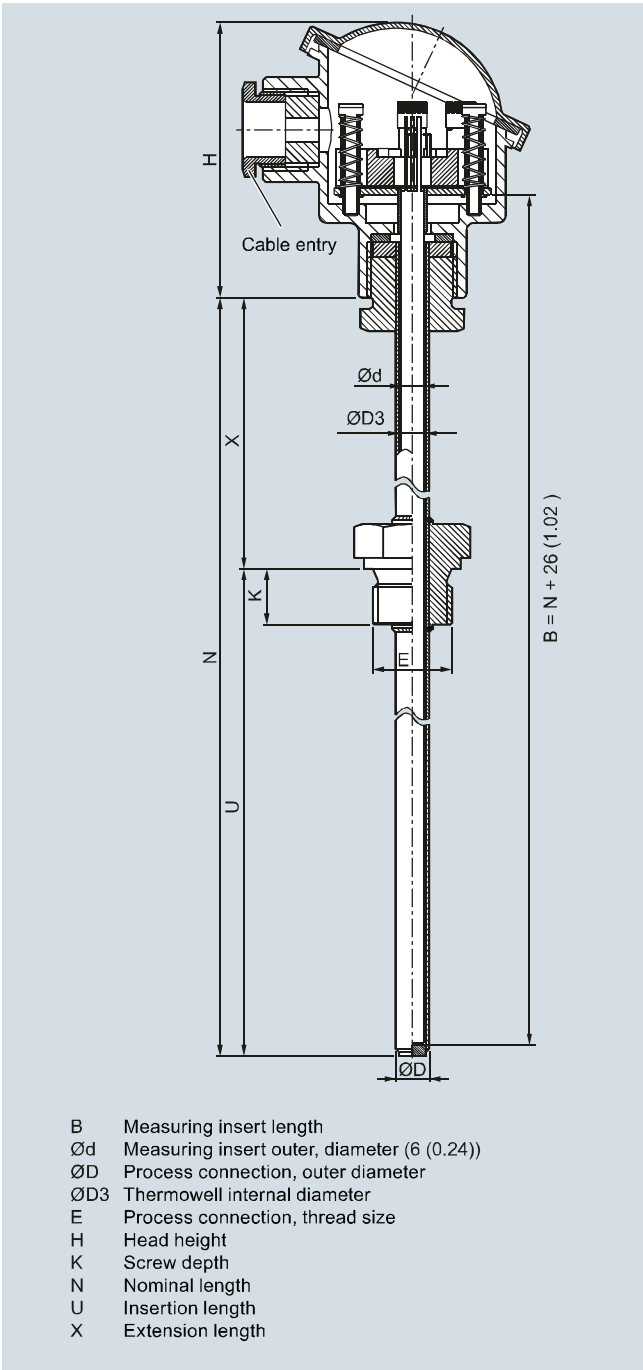
Temperature Measurement

SITRANS TS500

Type 2G, tubular version
with screw socket and extension

Dimensional drawings

2



Tapered process connection, dimensions in mm (inch)

SITRANS TS500, temperature sensors for vessels and pipelines, tubular version for minimal to minimum to medium stress, thermowell as per DIN 43722, Type 2G, screwed in, with extension, dimensions in mm (inch)

Temperature Measurement

SITRANS TS500

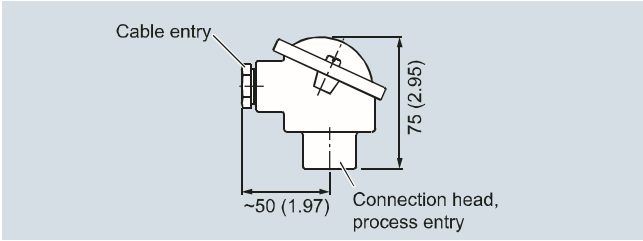
Type 2G, tubular version
with screw socket and extension

Selection and Ordering data	Article No.	Ord. Code	Selection and Ordering data	Article No.	Ord. Code
SITRANS TS500	7MC751-		SITRANS TS500	7MC751-	
Tubular thermowell, minimal to medium stress, thermowell as per DIN 43722, Type 2G, screwed in, with extension	-	-	Tubular thermowell, minimal to medium stress, thermowell as per DIN 43722, Type 2G, screwed in, with extension	-	-
Material, in contact with media					
316Ti (1.4571)	1		501...550 mm (19.72 ... 21.65 inch) Standard: 510 mm (20.08 inch)	3 1	
316L (1.4404)	2		551...600 mm (21.69 ... 23.62 inch) Standard: 600 mm (23.62 inch)	3 2	
Special version	8		601...650 mm (23.66 ... 25.59 inch) Standard: 650 mm (25.59 inch)	3 3	
Process connection			651...700 mm (25.63 ... 27.56 inch) Standard: 700 mm (27.56 inch)	3 4	
Cylindrical: G $\frac{1}{2}$ " ($\frac{1}{2}$ " BSPF)	1 C		701...750 mm (27.60 ... 29.53 inch) Standard: 750 mm (29.53 inch)	3 5	
Cylindrical: G1" (1" BSPF)	1 E		751...800 mm (29.57 ... 31.50 inch) Standard: 800 mm (31.50 inch)	3 6	
Tapered: NPT $\frac{1}{2}$ "	1 J	H 1 Y	801...850 mm (31.54 ... 33.46 inch) Standard: 850 mm (33.46 inch)	3 7	
Special version	9 X		851...900 mm (33.50 ... 35.43 inch) Standard: 900 mm (35.43 inch)	4 1	
Thermowell form			901...950 mm (35.47 ... 37.40 inch) Standard: 950 mm (37.40 inch)	4 2	
2G, 9 mm (0.35 inch)	A		951...1 000 mm (37.44 ... 39.37 inch) Standard: 1 000 mm (39.37 inch)	4 3	
2G, 12 mm (0.47 inch)	B	K 1 Y	Insertion length U special length	8 0	
Special version	Z		Special length 1 500 ... 6 000 (59.05 ... 236.22 inch)		
Insertion length U standard			Extension X		
160 mm (6.30 inch)	0 4		Standard length for Type 2G DIN 43772 (X=129 mm (5.08 inch))	1	
250 mm (9.84 inch)	1 2		Extension length X - customer specific		
400 mm (15.75 inch)	2 2		enter customer specific length with Y45, see page 2/135 Order Codes		
Insertion length U customer-specific			45 ...150 mm (1.77 ... 5.91 inch)	9	N 1 D
enter customer specific length with Y44, see page 2/135 Order Codes			Standard: 150 mm (5.91 inch)		
80 ... 100 mm (3.15 ... 3.94 inch)	0 1		151 ... 300 mm (5.95 ... 11.81 inch)	9	N 2 D
Standard: 100 mm (3.94 inch)			Standard: 300 mm (11.81 inch)		
101 ... 120 mm (3.98 ... 4.72 inch)	0 2		301 ... 450 mm (11.85 ... 17.72 inch)	9	N 3 D
Standard: 120 mm (4.72 inch)			Standard: 450 mm (17.72 inch)		
121 ... 140 mm (4.76 ... 5.51 inch)	0 3		Enter form and length in plain text	9	N 9 Y
Standard: 140 mm (5.51 inch)					
141 ... 160 mm (5.55 ... 6.30 inch)	0 4		Additional configurations on page after next page!		
Standard: 160 mm (6.30 inch)			You find ordering examples on page 2/107!		
161 ... 180 mm (6.34 ... 7.09 inch)	0 5				
Standard: 180 mm (7.09 inch)					
181 ... 200 mm (7.13 ... 7.87 inch)	0 6				
Standard: 200 mm (7.87 inch)					
201 ... 220 mm (7.91 ... 8.66 inch)	0 7				
Standard: 220 mm (8.66 inch)					
221 ...240 mm (8.70 ... 9.45 inch)	1 1				
Standard: 225 mm (8.86 inch)					
241...260 mm (9.49 ... 10.24 inch)	1 2				
Standard: 250 mm (9.84 inch)					
261...280 mm (10.28 ...11.02 inch)	1 3				
Standard: 280 mm (11.02 inch)					
281...300 mm (11.06 ... 11.81 inch)	1 4				
Standard: 285 mm 11.22 inch)					
301...320 mm (11.85 ... 13.00 inch)	1 5				
Standard: 315 mm (12.40 inch)					
321...340 mm (12.64 ... 13.39 inch)	1 6				
Standard: 340 mm (13.39 inch)					
341...360 mm (13.43 ... 14.17 inch)	2 0				
Standard: 360 mm (14.17 inch)					
361...380 mm (14.21 ... 14.96 inch)	2 1				
Standard: 380 mm (14.96 inch)					
381...400 mm (14.99 ... 15.75 inch)	2 2				
Standard: 400 mm (15.75 inch)					
401...420 mm (15.79 ... 16.54 inch)	2 3				
Standard: 420 mm (16.54 inch)					
421...440 mm (16.57 ... 17.32 inch)	2 4				
Standard: 440 mm (17.32 inch)					
441...460 mm (17.36 ... 18.11 inch)	2 5				
Standard: 460 mm (18.11 inch)					
461...480 mm (18.15 ... 18.90 inch)	2 6				
Standard: 465 mm (18.30 inch)					
481...500 mm (18.94 ... 19.69 inch)	2 7				
Standard: 500 mm (19.69 inch)					

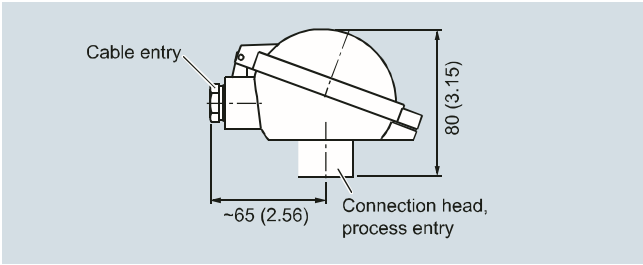
Temperature Measurement SITRANS TS500

Type 2G, tubular version with screw socket and extension

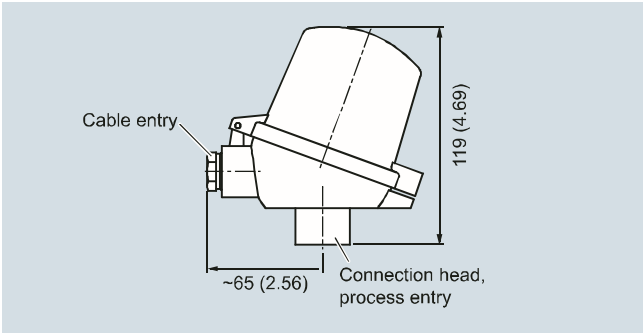
2



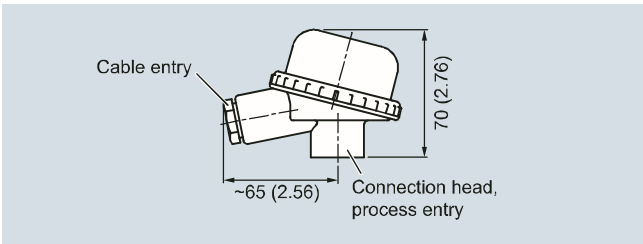
Connection head, aluminum, Type BA0, dimensions in mm (inch)



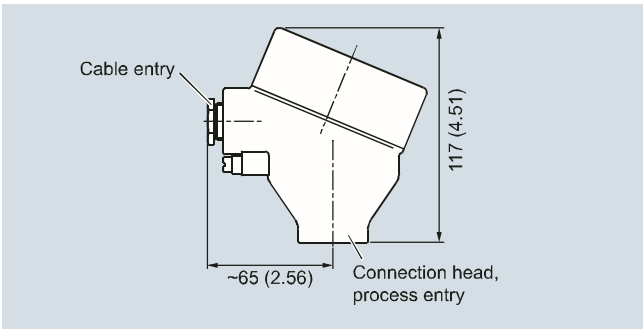
Connection head, aluminum, Type BB0, dimensions in mm (inch)



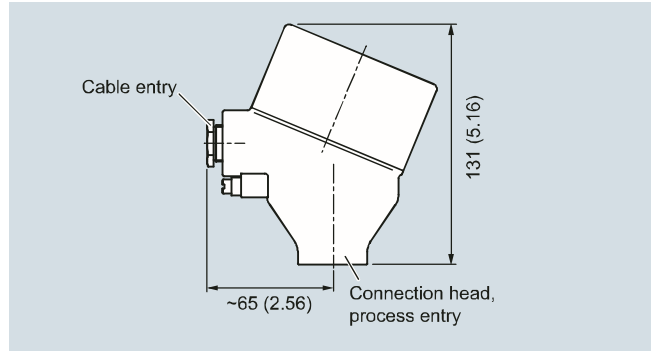
Connection head, aluminum, Type BC0, plastic, type BP0, dimensions in mm (inch)



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 display and glass lid, aluminum, Type AH0, stainless steel, Type AV0, dimensions in mm (inch)

Temperature Measurement

SITRANS TS500

Type 2G, tubular version
with screw socket and extension

2

Selection and Ordering data	Article No.	Ord. Code
SITRANS TS500	7MC751-	
Tubular thermowell, minimal to medium stress, thermowell as per DIN 43722, Type 2G, screwed in, with extension	- - - - -	- - - - -
Head		
Aluminum head, BA0, flange cover, Standard		A
Aluminum head, BB0, low hinged cover, screw connection		B
Aluminum head, BC0, high hinged cover, screw connection		C
Aluminum head, AG0, screw cover, suitable for Ex d		G
Aluminum head, AH0, screw cover, suitable for Ex d, display (not for Ex i)		H
Plastic head, BM0, screw cover		M
Plastic head, BP0high hinged cover, screw connection		P
Stainless steel head, AU0, screw cover, suitable for Ex d		U
Stainless steel head, AV0, screw cover, suitable for Ex d, display (not for Ex i)		V
Special version of connection head		Z
Sensor		
Pt100, Basis, -50 ... +400 °C (-58 ... +752 °F)		A
Pt100, vibration resistant, -50 ... +400 °C (-58 ... +752 °F)		B
Pt100, expanded range, -196 ... +600 °C (-321 ... +1 112 °F)		C
Thermocouple Type K, -40 ... +1 000 °C (-40 ... +1 832 °F)		K
Thermocouple Type J, -40 ... +750 °C (-40 ... +1 382 °F)		J
Thermocouple Type N, -40 ... +1 000 °C (-40 ... +1 832 °F)		N
Sensor number/Accuracy		
Single, basic accuracy (Class 2/Class B)		1
Single, increased accuracy (Class 1/Class A)		2
Single, highest accuracy (Class AA)		3
Double, basic accuracy (Class 2/Class B)		5
Double, increased accuracy (Class 1/Class A)		6
Double, highest accuracy (Class AA)		7
Special version of sensor type, number and accuracy - to be specified		Z0 Q1 Y

Selection and Ordering data	Order Code
Further designs	
Add "-Z" to Article No. and specify Order Code.	
Enter thermowell material in plain text	G1Y
Enter process connection in plain text	H1Y
Enter thermowell form in plain text	K1Y
Insertion length customer-specific Select range, enter desired length in plain text (No entry = standard length)	Y44
Extension X length customer-specific Select range, enter desired length in plain text (No entry = standard length)	Y45
Special version of extension Special version of extension, enter form and length in plain text	N9Y
Head Enter connection head in plain text	P1Y
Sensor number/Accuracy Enter connection head in plain text	Q1Y

Selection and Ordering data	Order Code
Options	
Add "-Z" to Article No. and add options, separate extensions with "+".	
Built-in head transmitter	
SITRANS TH100, 4 ... 20 mA, Pt100	T10
SITRANS TH100 Ex i (ATEX), 4 ... 20 mA, Pt100	T11
SITRANS TH100 Ex i (FM), 4 ... 20 mA, Pt100	T13
SITRANS TH200, 4 ... 20 mA, Universal	T20
SITRANS TH200 Ex (ATEX), 4 ... 20 mA, Universal	T21
SITRANS TH300, HART, Universal	T30
SITRANS TH300 Ex (ATEX), HART, Universal	T31
SITRANS TH400 PA, Universal	T40
SITRANS TH400 PA Ex, Universal	T41
SITRANS TH400 FF, Universal	T45
SITRANS TH400 FF Ex, Universal	T46
Explosion protection	
Intrinsic safety "ia", "ic"	E01
Flameproof enclosure "d"; Dust protection by enclosures "t" only in combination with connection heads code AG0, AH0, AU0, AV0, without cable gland	E03
Non sparking "n"	E04
Certificates and approvals	
EN10204-3.1 Inspection certificate for materials coming into contact with media	C12
EN10204-3.1 Inspection certificate for hydrostatic pressure test	C31
EN10204-3.1 Inspection certificate for helium leak test	C32
EN10204-3.1 Inspection certificate for surface tear test	C33
EN10204-3.1 Inspection certificate: visual, measurement and functional inspection	C34
NACE Standard MR-01-75 compliance	C50
ISO 9001 grease-free (cleaned for e.g. oxygen applications)	C51
Designation, calibration	
Stainless steel TAG plate, enter lettering in plain text	Y15
Plant calibration per 1 point, enter temperature in plain text	Y33
Transmitter options	
Transmitter, enter complete setting in plain text (Y01:+/-NNNN ... +/-NNNN C,F)	Y01
Enter measuring point (max. 8 characters) in plain text	Y17
Transmitter, enter measuring point description (max. 16 characters) in plain text	Y23
Transmitter, enter measuring point text (max. 32 characters) in plain text	Y24
Transmitter, enter bus address in plain text	Y25
Transmitter, fail-safe value 3.6 mA (instead of 22.8 mA)	U36
Transmitter with a SIL 2 conformity	C20
Transmitter with a SIL 2/3 conformity	C23
Transmitter test protocol (5 points)	C11
Further options	
Connection form, flying leads (for the direct transmitter assembly, delivery without screws and springs)	G01
M12 plug (in combination with 1x Pt100 and/or transmitter, Non-Ex)	G12
Harting plug Han 7 D (Non Ex)	G13
Connection head with ½" NPT thread without cable gland	G20
Plastic cable gland	G21
with spring lock for heads BB0 and BC0	A01
with outer earth screw for heads AG0, AH0, AU0 and AV0	A02
with inner earth screw for heads BC0, AG0, AH0, AU0 and AV0	A03
Option not found?	
Specify special version in plain text	Y99

You find ordering examples on page 2/107!

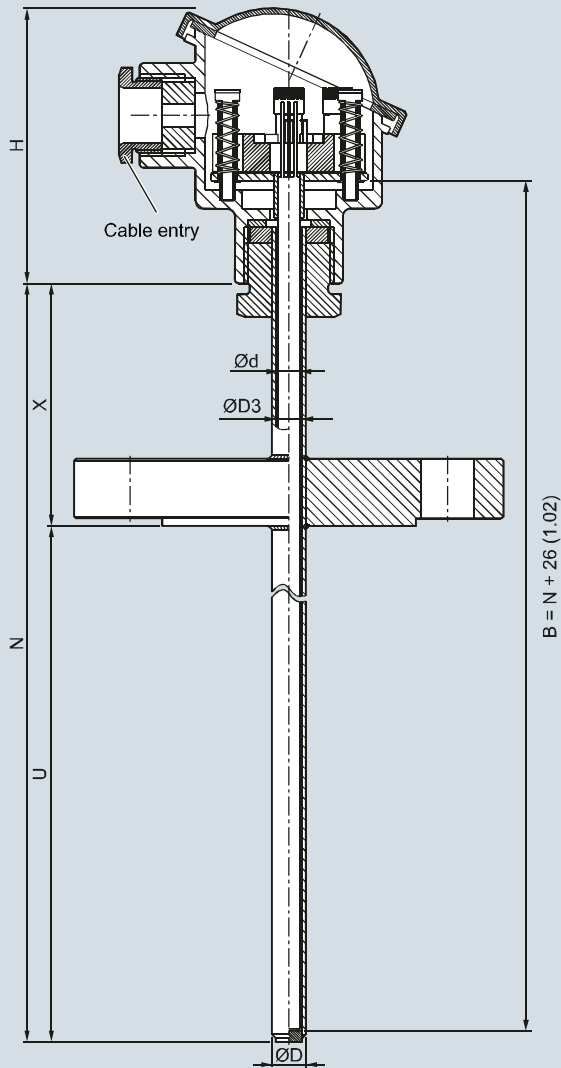
Temperature Measurement

SITRANS TS500

Type 2F, tubular version
with flange and extension

Dimensional drawings

2



- B Measuring insert length
- Ød Measuring insert outer diameter (6 (0.24))
- ØD Process connection outer diameter
- ØD3 Thermowell internal diameter
- H Head height
- N Nominal length
- U Insertion length
- X Extension length

SITRANS TS500, temperature sensors for vessels and pipelines, tubular version for minimal to minimum to medium stress, thermowell as per DIN 43722, Type2F, with flange, with extension, dimensions in mm (inch)

Temperature Measurement

SITRANS TS500

Type 2F, tubular version
with flange and extension

2

Selection and Ordering data	Article No.	Ord. Code	Selection and Ordering data	Article No.	Ord. Code
SITRANS TS500 Tubular thermowell, minimal to medium stress, thermowell as per DIN 43722, Type 2F, with flange, with extension	7MC751-		SITRANS TS500 Tubular thermowell, minimal to medium stress, thermowell as per DIN 43722, Type 2F, with flange, with extension	7MC751-	
Material, in contact with media 316Ti (1.4571)	1		501...550 mm (19.72 ... 21.65 inch) Standard: 510 mm (20.08 inch)	3 1	
316L (1.4404)	2		551...600 mm (21.69 ... 23.62 inch) Standard: 600 mm (23.62 inch)	3 2	
Special version	8		601...650 mm (23.66 ... 25.59 inch) Standard: 650 mm (25.59 inch)	3 3	
Process connection Flange EN, DN25PN40 B1	2 A		651...700 mm (25.63 ... 27.56 inch) Standard: 700 mm (27.56 inch)	3 4	
Flange ASME, 1"RF150	2 E		701...750 mm (27.60 ... 29.53 inch) Standard: 750 mm (29.53 inch)	3 5	
Flange ASME, 1.5"RF150	2 G		751...800 mm (29.57 ... 31.50 inch) Standard: 800 mm (31.50 inch)	3 6	
Flange ASME, 1.5"RF300	2 H	H 1 Y	801...850 mm (31.54 ... 33.46 inch) Standard: 850 mm (33.46 inch)	3 7	
Special version	9 X		851...900 mm (33.50 ... 35.43 inch) Standard: 900 mm (35.43 inch)	4 1	
Thermowell form 2F, 9 mm (0.35 inch)	A		901...950 mm (35.47 ... 37.40 inch) Standard: 950 mm (37.40 inch)	4 2	
2F, 12 mm (0.47 inch)	B	K 1 Y	951...1 000 mm (37.44 ... 39.37 inch) Standard: 1 000 mm (39.37 inch)	4 3	
Special version	Z		Insertion length U special length Special length 1 500 ... 6 000 (59.05 ... 236.22 inch)	8 0	
Insertion U standard 225 mm (8.86 inch)	1 1		Extension X Standard length for Type 2F DIN 43772 (X=64 mm (2.52 inch))	1	
315 mm (12.40 inch)	1 5		Extension length X - customer specific enter customer specific length with Y45, see page 2/139 Order codes		
465 mm (18.31 inch)	2 6		45 ... 150 mm (1.77 ... 5.91 inch) Standard: 150 mm (5.91 inch)	9	N 1 D
Insertion length U customer-specific enter customer specific length with Y44, see page 2/139 Order codes			151 ... 300 mm (5.95 ... 11.81 inch) Standard: 300 mm (11.81 inch)	9	N 2 D
80 ... 100 mm (3.15 ... 3.94 inch) Standard: 100 mm (3.94 inch)	0 1		301 ... 450 mm (11.85 ... 17.72 inch) Standard: 450 mm (17.72 inch)	9	N 3 D
101 ... 120 mm (3.98 ... 4.72 inch) Standard: 120 mm (4.72 inch)	0 2		Enter form and length in plain text	9	N 9 Y
121 ... 140 mm (4.76 ... 5.51 inch) Standard: 140 mm (5.51 inch)	0 3				
141 ... 160 mm (5.55 ... 6.30 inch) Standard: 160 mm (6.30 inch)	0 4				
161 ... 180 mm (6.34 ... 7.09 inch) Standard: 180 mm (7.09 inch)	0 5				
181 ... 200 mm (7.13 ... 7.87 inch) Standard: 200 mm (7.87 inch)	0 6				
201 ... 220 mm (7.91 ... 8.66 inch) Standard: 220 mm (8.66 inch)	0 7				
221...240 mm (8.70 ... 9.45 inch) Standard: 225 mm (8.86 inch)	1 1				
241...260 mm (9.49 ... 10.24 inch) Standard: 250 mm (9.84 inch)	1 2				
261...280 mm (10.28 ... 11.02 inch) Standard: 280 mm (11.02 inch)	1 3				
281...300 mm (11.06 ... 11.81 inch) Standard: 285 mm 11.22 inch)	1 4				
301...320 mm (11.85 ... 13.00 inch) Standard: 315 mm (12.40 inch)	1 5				
321...340 mm (12.64 ... 13.39 inch) Standard: 340 mm (13.39 inch)	1 6				
341...360 mm (13.43 ... 14.17 inch) Standard: 360 mm (14.17 inch)	2 0				
361...380 mm (14.21 ... 14.96 inch) Standard: 380 mm (14.96 inch)	2 1				
381...400 mm (14.99 ... 15.75 inch) Standard: 400 mm (15.75 inch)	2 2				
401...420 mm (15.79 ... 16.54 inch) Standard: 420 mm (16.54 inch)	2 3				
421...440 mm (16.57 ... 17.32 inch) Standard: 440 mm (17.32 inch)	2 4				
441...460 mm (17.36 ... 18.11 inch) Standard: 460 mm (18.11 inch)	2 5				
461...480 mm (18.15 ... 18.90 inch) Standard: 465 mm (18.30 inch)	2 6				
481...500 mm (18.94 ... 19.69 inch) Standard: 500 mm (19.69 inch)	2 7				

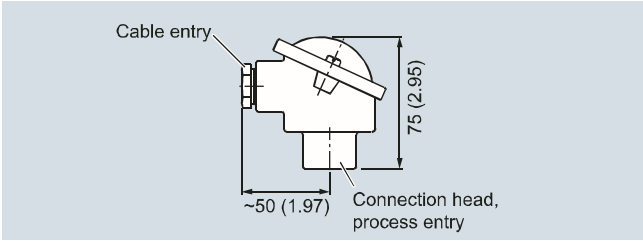
Additional configurations on page after next page!

You find ordering examples on page 2/107!

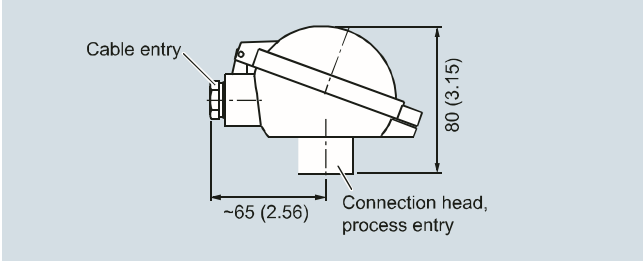
Temperature Measurement SITRANS TS500

Type 2F, tubular version with flange and extension

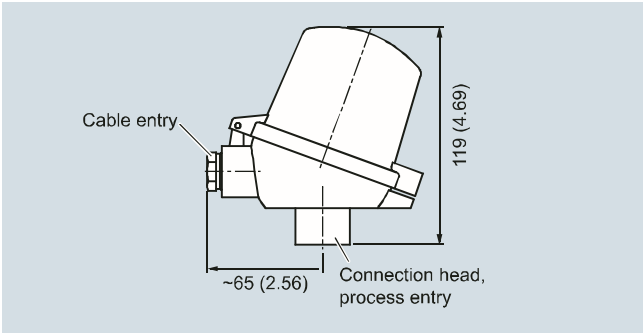
2



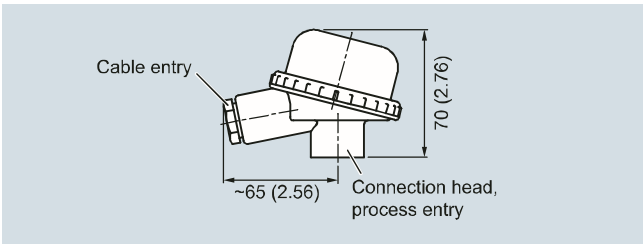
Connection head, aluminum, Type BA0, dimensions in mm (inch)



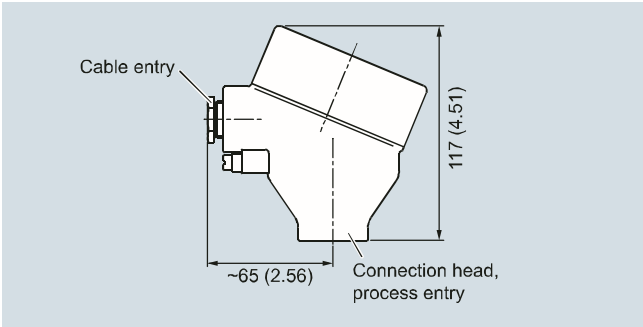
Connection head, aluminum, Type BB0, dimensions in mm (inch)



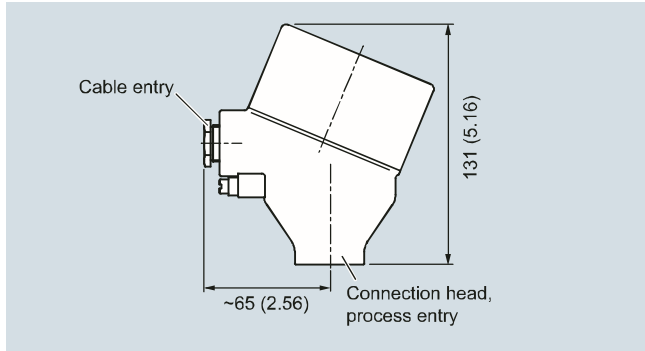
Connection head, aluminum, Type BC0, plastic, type BP0, dimensions in mm (inch)



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 display and glass lid, aluminum, Type AH0, stainless steel, Type AV0, dimensions in mm (inch)

Temperature Measurement

SITRANS TS500

Type 2F, tubular version
with flange and extension

2

Selection and Ordering data	Article No.	Ord. Code
SITRANS TS500	7MC751-	
Tubular thermowell, minimal to medium stress, thermowell as per DIN 43722, Type 2F, with flange, with extension	- - - - -	
Head		
Aluminum head, BA0, flange cover, Standard		A
Aluminum head, BB0, low hinged cover, screw connection		B
Aluminum head, BC0, high hinged cover, screw connection		C
Aluminum head, AG0, screw cover, suitable for Ex d		G
Aluminum head, AH0, screw cover, suitable for Ex d, display (not for Ex i)		H
Plastic head, BMO, screw cover		M
Plastic head, BP0, high hinged cover, screw connection		P
Stainless steel head, AU0, screw cover, suitable for Ex d		U
Stainless steel head, AV0, screw cover, suitable for Ex d, display (not for Ex i)		V
Special version of connection head		Z
Sensor		
Pt100, Basis, -50 ... +400 °C (-58 ... +752 °F)		A
Pt100, vibration resistant, -50 ... +400 °C (-58 ... +752 °F)		B
Pt100, expanded range, -196 ... +600 °C (-321 ... +1 112 °F)		C
Thermocouple Type K, -40 ... +1 000 °C (-40 ... +1 832 °F)		K
Thermocouple Type J, -40 ... +750 °C (-40 ... +1 382 °F)		J
Thermocouple Type N, -40 ... +1 000 °C (-40 ... +1 832 °F)		N
Sensor number/Accuracy		
Single, basic accuracy (Class 2/Class B)		1
Single, increased accuracy (Class 1/Class A)		2
Single, highest accuracy (Class AA)		3
Double, basic accuracy (Class 2/Class B)		5
Double, increased accuracy (Class 1/Class A)		6
Double, highest accuracy (Class AA)		7
Special version of sensor type, number and accuracy - to be specified		Z0 Q1 Y

Selection and Ordering data	Order code
Further designs	
Add "-Z" to Article No. and specify Order Code.	
Enter thermowell material in plain text	G1Y
Enter process connection in plain text	H1Y
Enter thermowell form in plain text	K1Y
Extension X length customer-specific Select range, enter desired length in plain text (No entry = standard length)	Y45
Special version of extension Special version of extension, enter form and length in plain text	N9Y
Head Enter connection head in plain text	P1Y
Sensor number/Accuracy Enter connection head in plain text	Q1Y
Insertion length customer-specific Select range, enter desired length in plain text (No entry = standard length)	Y44

Selection and Ordering data	Order code
Options Add "-Z" to Article No. and add options, separate extensions with "+" .	
Built-in head transmitter	
SITRANS TH100, 4 ... 20 mA, Pt100	T10
SITRANS TH100 Ex i (ATEX), 4 ... 20 mA, Pt100	T11
SITRANS TH100 Ex i (FM), 4 ... 20 mA, Pt100	T13
SITRANS TH200, 4 ... 20 mA, Universal	T20
SITRANS TH200 Ex (ATEX), 4 ... 20 mA, Universal	T21
SITRANS TH300, HART, Universal	T30
SITRANS TH300 Ex (ATEX), HART, Universal	T31
SITRANS TH400 PA, Universal	T40
SITRANS TH400 PA Ex, Universal	T41
SITRANS TH400 FF, Universal	T45
SITRANS TH400a0 FF Ex, Universal	T46
Explosion protection	
Intrinsic safety "ia", "ic"	E01
Flameproof enclosure "d"; Dust protection by enclosures "t" only in combination with connection heads code AG0, AH0, AU0, AV0, without cable gland	E03
Non sparking "n"	E04
Certificates and approvals	
EN10204-3.1 Inspection certificate for materials coming into contact with media	C12
EN10204-3.1 Inspection certificate for hydrostatic pressure test	C31
EN10204-3.1 Inspection certificate for helium leak test	C32
EN10204-3.1 Inspection certificate for surface tear test	C33
EN10204-3.1 Inspection certificate: visual, measurement and functional inspection	C34
NACE Standard MR-01-75 compliance	C50
ISO 9001 grease-free (cleaned for e.g. oxygen applications)	C51
Designation, calibration	
Stainless steel TAG plate, enter lettering in plain text	Y15
Plant calibration per 1 point, enter temperature in plain text	Y33
Transmitter options	
Transmitter, enter complete setting in plain text (Y01: +/-NNNN ... +/-NNNN C,F)	Y01
Enter measuring point (max. 8 characters) in plain text	Y17
Transmitter, enter measuring point description (max. 16 characters) in plain text	Y23
Transmitter, enter measuring point text (max. 32 characters) in plain text	Y24
Transmitter, enter bus address in plain text	Y25
Transmitter, fail-safe value 3.6 mA (instead of 22.8 mA)	U36
Transmitter with a SIL 2 conformity	C20
Transmitter with a SIL 2/3 conformity	C23
Transmitter test protocol (5 points)	C11
Further options	
Connection form, flying leads (for the direct transmitter assembly, delivery without screws and springs)	G01
M12 plug (in combination with 1x Pt100 and/or transmitter, Non-Ex)	G12
Harting plug Han 7 D (Non Ex)	G13
Connection head with 1/2" NPT thread without cable gland	G20
Plastic cable gland	G21
with spring lock for heads BB0 and BC0	A01
with outer earth screw for heads AG0, AH0, AU0 and AV0	A02
with inner earth screw for heads BC0, AG0, AH0, AU0 and AV0	A03
Option not found? Specify special version in plain text	Y99

You find ordering examples on page 2/107!

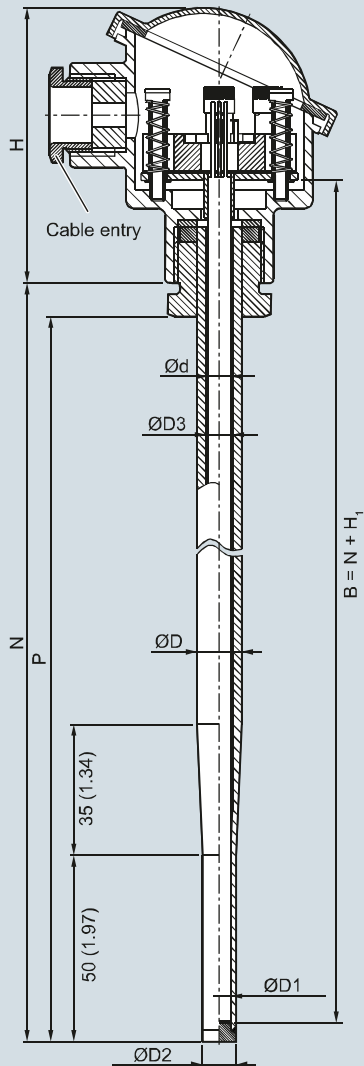
Temperature Measurement

SITRANS TS500

Type 3, tubular quick
without process connection

Dimensional drawings

2



- B Measuring insert length
- Ød Measuring insert outer diameter (6 (0.24))
- ØD Process connection outer diameter
- ØD1 Tip internal diameter
- ØD2 Tip outer diameter
- ØD3 Thermowell diameter
- H Head height
- H₁ Typ Axx > 41 (1.61)
Typ Bxx > 26 (1.02)
- N Nominal length
- P Space for process connection

SITRANS TS500, temperature sensors for vessel and pipings, tubular version for minimum to medium stress, without process connection, without extension, plug-in or use with moveable compression fitting, dimension in mm (inch)

Temperature Measurement

SITRANS TS500

Type 3, tubular quick
without process connection

2

Selection and Ordering data	Article No.	Ord. Code
SITRANS TS500	7MC751-	
Tubular version for minimal to medium stress, thermowell per DIN 43722, Type 3, without process connection, improved response time, plug-in or use with moveable compression fittings	-	
Material, in contact with media		
316Ti (1.4571)	1	
316L (1.4404)	2	
Special version, enter thermowell material in plain text	8	
Process connection		
Without process connection (for compression joints) N=U	0 N	
Special version	9 X	H 1 Y
Thermowell form		
3, 12/9 mm (0.47/0.35 inch)	K	
Special version, enter thermowell form in plain text	Z	K 1 Y
Insertion length U (=N), Standard		
160 mm (6.3 inch)		0 4
220 mm (8.66 inch)		0 7
280 mm (11.02 inch)		1 3
Insertion length U (=N), customer-specific		
enter customer specific length with Y44, see page 2/143 Order Codes		
80 ... 100 mm (3.15 ... 3.94 inch)		0 1
Standard: 100 mm (3.94 inch)		
101 ... 120 mm (3.98 ... 4.72 inch)		0 2
Standard: 120 mm (4.72 inch)		
121 ... 140 mm (4.76 ... 5.51 inch)		0 3
Standard: 140 mm (5.51 inch)		
141 ... 160 mm (5.55 ... 6.30 inch)		0 4
Standard: 160 mm (6.3 inch)		
161 ... 180 mm (6.34 ... 7.09 inch)		0 5
Standard: 180 mm (7.09 inch)		
181 ... 200 mm (7.13 ... 7.87 inch)		0 6
Standard: 200 mm (7.87 inch)		
201 ... 220 mm (7.91 ... 8.66 inch)		0 7
Standard: 220 mm (8.66 inch)		
221 ... 240 mm (8.7 ... 9.45 inch)		1 1
Standard: 225 mm (8.86 inch)		
241 ... 260 mm (9.48 ... 10.24 inch)		1 2
Standard: 250 mm (9.84 inch)		
261 ... 280 mm (10.28 ... 11.02 inch)		1 3
Standard: 280 mm (11.02 inch)		
281 ... 300 mm (11.02 ... 11.81 inch)		1 4
Standard: 285 mm (11.22 inch)		
301 ... 320 mm (11.85 ... 12.6 inch)		1 5
Standard: 315 mm (12.4 inch)		
321 ... 340 mm (12.64 ... 13.39 inch)		1 6
Standard: 340 mm (13.39 inch)		
341 ... 360 mm (13.43 ... 14.17 inch)		2 0
Standard: 360 mm (14.17 inch)		
361 ... 380 mm (14.21 ... 14.96 inch)		2 1
Standard: 380 mm (14.96 inch)		

Selection and Ordering data	Article No.	Ord. Code
SITRANS TS500	7MC751-	
Tubular version for minimal to medium stress, thermowell per DIN 43722, Type 3, without process connection, improved response time, plug-in or use with moveable compression fittings	-	
381 ... 400 (15 ... 15.75 inch)		2 2
Standard: 400 mm (15.75 inch)		
401 ... 420 (15.79 ... 16.54 inch)		2 3
Standard: 420 mm (16.54 inch)		
421 ... 440 (16.57 ... 17.32 inch)		2 4
Standard: 440 mm (17.32 inch)		
441 ... 460 (17.36 ... 18.11 inch)		2 5
Standard: 460 mm (18.11 inch)		
461 ... 480 (18.15 ... 18.90 inch)		2 6
Standard: 465 mm (18.30 inch)		
481 ... 500 (18.94 ... 19.68 inch)		2 7
Standard: 500 mm (19.68 inch)		
501 ... 550 (19.72 ... 21.65 inch)		3 1
Standard: 510 mm (20.08 inch)		
551 ... 600 (21.69 ... 23.62 inch)		3 2
Standard: 600 mm (23.62 inch)		
601 ... 650 (23.66 ... 25.59 inch)		3 3
Standard: 650 mm (25.59 inch)		
651 ... 700 (25.63 ... 27.56 inch)		3 4
Standard: 700 mm (27.56 inch)		
701 ... 750 (27.6 ... 29.53 inch)		3 5
Standard: 750 mm (29.53 inch)		
751 ... 800 (29.57 ... 31.50 inch)		3 6
Standard: 800 mm (31.50 inch)		
Extension		
Standard length for Type 2 as per DIN 43722 (without extension N=U)		0

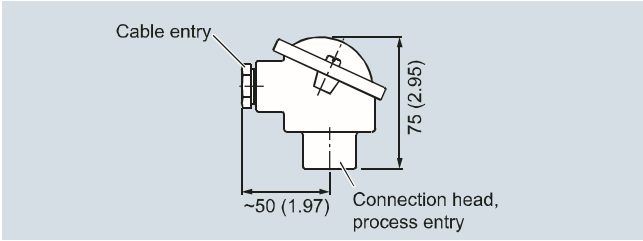
Additional configurations on page after next page!

You find ordering examples on page 2/107!

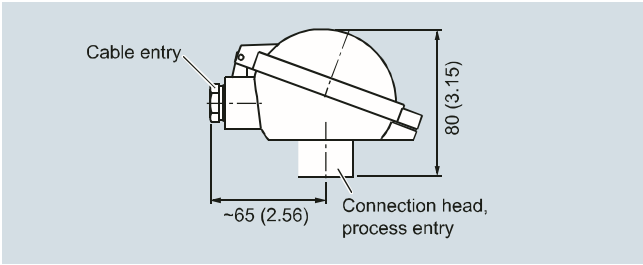
Temperature Measurement SITRANS TS500

Type 3, tubular quick without process connection

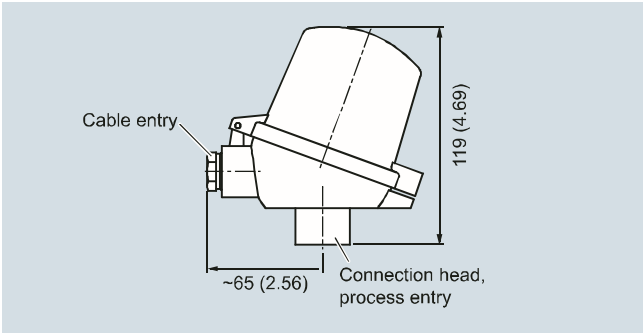
2



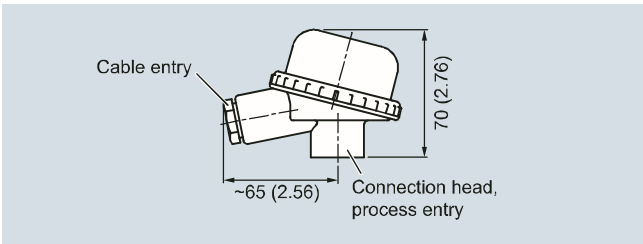
Connection head, aluminum, Type BA0, dimensions in mm (inch)



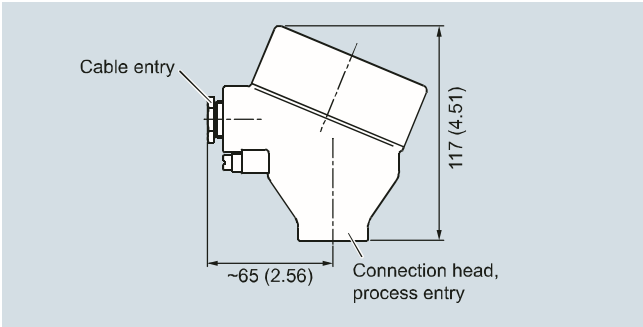
Connection head, aluminum, Type BB0, dimensions in mm (inch)



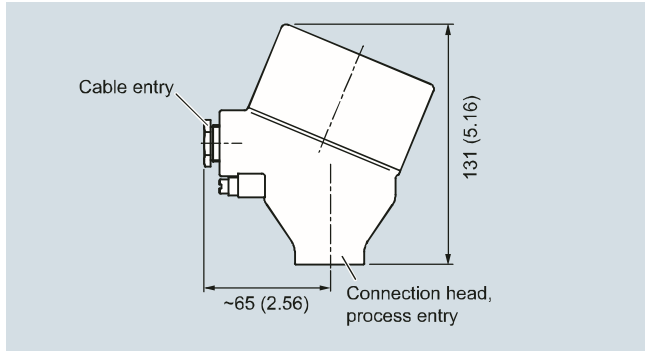
Connection head, aluminum, Type BC0, plastic, type BP0, dimensions in mm (inch)



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 display and glass lid, aluminum, Type AH0, stainless steel, Type AV0, dimensions in mm (inch)

Temperature Measurement

SITRANS TS500

Type 3, tubular quick
without process connection

2

Selection and Ordering data	Article No.	Ord. Code
SITRANS TS500	7MC751-	
Tubular version for minimal to medium stress, thermowell as per DIN 43722, Type 3, without process connection, improved response time, plug-in or use with moveable compression fittings	- - - - -	- - - - -
Head		
Aluminum head, BA0, flange cover, Standard		A
Aluminum head, BB0, low hinged cover, screw connection		B
Aluminum head, BC0, high hinged cover, screw connection		C
Aluminum head, AG0, screw cover, suitable for Ex d		G
Aluminum head, AH0, screw cover, suitable for Ex d, display (not for Ex i)		H
Plastic head, BM0, screw cover		M
Plastic head, BP0 high hinged cover, screw connection		P
Stainless steel head, AU0, screw cover, Ex d		U
Stainless steel head, AV0, screw cover, suitable for Ex d, display (not for Ex i)		V
Special version of connection head		Z
Sensor		
Pt100, basis, -50 ... +400 °C (-58 ... +752 °F)		A
Pt100, vibration-resistant, -50 ... +400 °C (-58 ... +752 °F)		B
Pt100, expanded range, -196 ... +600 °C (-321 ... +1112 °F)		C
Thermocouple Type J, only class 2, -40 ... +750 °C (-40 ... +1 382 °F)		J
Thermocouple Type K, -40 ... +1 000 °C (-40 ... +1 832 °F)		K
Thermocouple Type N, -40 ... +1 000 °C (-40 ... +1 832 °F)		N
Sensor number/Accuracy		
Single, basic accuracy (Class 2/Class B)		1
Single, increased accuracy (Class 1/Class A)		2
Single, highest accuracy (Class AA)		3
Double, basic accuracy (Class 2/Class B)		5
Double, increased accuracy (Class 1/Class A)		6
Double, highest accuracy (Class AA)		7
Special version for sensor and accuracy - to be specified		Z 0
		P 1 Y
		Q 1 Y

Selection and Ordering data	Order code
Further designs	
Add "-Z" to Article No. and specify Order Code.	
Enter thermowell material in plain text	G1Y
Enter process connection in plain text	H1Y
Enter thermowell form in plain text	K1Y
Insertion length customer-specific Select range, enter desired length in plain text (No entry = standard length)	Y44
Head Enter connection head in plain text	P1Y
Sensor number/Accuracy Enter connection head in plain text	Q1Y

Selection and Ordering data	Order code
Options	
Add "-Z" to Article No. and add options, separate extensions with "+" .	
Built-in head transmitter	
SITRANS TH100, 4 ... 20 mA, Pt100	T10
SITRANS TH100 Ex i (ATEX), 4 ... 20 mA, Pt100	T11
SITRANS TH100 Ex i (FM), 4 ... 20 mA, Pt100	T13
SITRANS TH200, 4 ... 20 mA, Universal	T20
SITRANS TH200 Ex (ATEX), 4 ... 20 mA, Universal	T21
SITRANS TH200 Ex (FM), 4 ... 20 mA, Universal	T23
SITRANS TH300, HART, Universal	T30
SITRANS TH300 Ex (ATEX), HART, Universal	T31
SITRANS TH300 Ex (FM), HART, Universal	T33
SITRANS TH400 PA, Universal	T40
SITRANS TH400 PA Ex, Universal	T41
SITRANS TH400 FF, Universal	T45
SITRANS TH400 FF Ex, Universal	T46
Explosion protection	
Intrinsic safety "ia", "ic"	E01
Flameproof enclosure "d"; Dust protection by enclosures "t" only in combination with connection heads code AG0, AH0, AU0, AV0, without cable gland	E03
Non sparking "n"	E04
Certificates and approvals	
EN10204-3.1 Inspection certificate for materials coming into contact with media	C12
EN10204-3.1 Inspection certificate for hydrostatic pressure test	C31
EN10204-3.1 Inspection certificate for helium leak test	C32
EN10204-3.1 Inspection certificate for surface tear test	C33
EN10204-3.1 Inspection certificate: visual, measurement and functional inspection	C34
NACE Standard MR-01-75 compliance	C50
ISO 9001 grease-free (cleaned for e.g. oxygen applications)	C51
Designation, calibration	
Stainless steel TAG plate, enter lettering in plain text	Y15
Plant calibration per 1 point, enter temperature in plain text	Y33
Transmitter options	
Transmitter, enter complete setting in plain text (Y01:+/-NNNN ... +/-NNNN C.F)	Y01
Enter measuring point (max. 8 characters) in plain text	Y17
Transmitter, enter measuring point description (max. 16 characters) in plain text	Y23
Transmitter, enter measuring point text (max. 32 characters) in plain text	Y24
Transmitter, enter bus address in plain text	Y25
Transmitter, fail-safe value 3.6 mA (instead of 22.8 mA)	U36
Transmitter with a SIL 2 conformity	C20
Transmitter with a SIL 2/3 conformity	C23
Transmitter test protocol (5 points)	C11
Further options	
Connection form, flying leads (for the direct transmitter assembly, delivery without screws and springs)	G01
M12 plug (in combination with 1x Pt100 and/or transmitter, Non-Ex)	G12
Harting plug Han 7 D (Non Ex)	G13
Connection head with 1/2" NPT thread without cable gland	G20
Plastic cable gland	G21
with spring lock for heads BB0 and BC0	A01
with outer earth screw for heads AG0, AH0, AU0 and AV0	A02
with inner earth screw for heads BC0, AG0, AH0, AU0 and AV0	A03
Compression joint G1/2", enclosed	A31
Compression joint NPT1/2", enclosed	A32
Option not found?	
Specify special version in plain text	Y99

You find ordering examples on page 2/107!

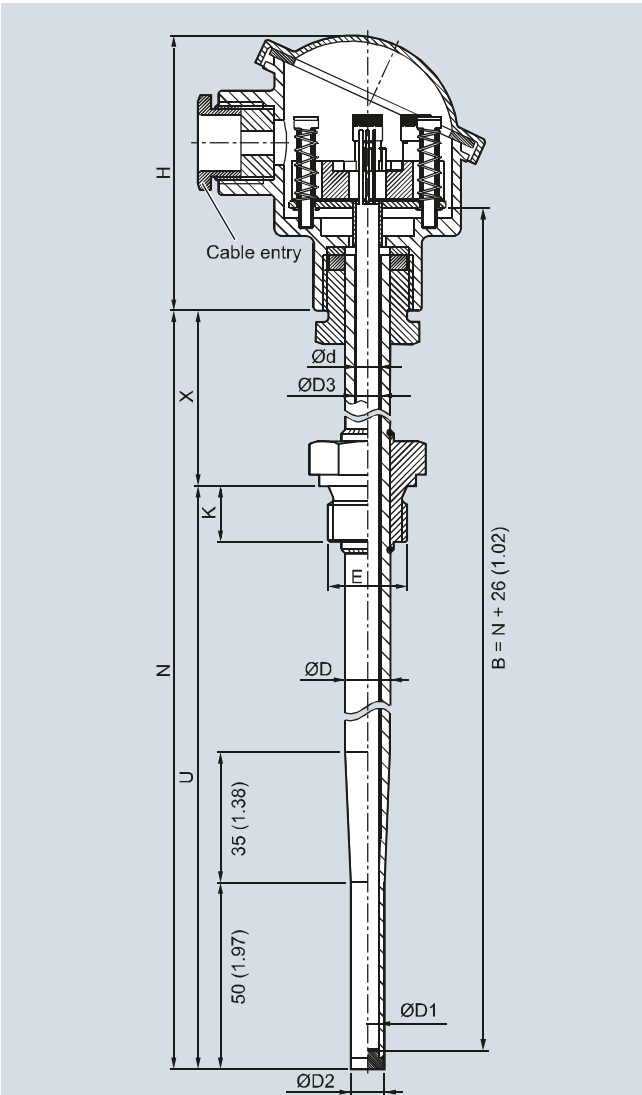
Temperature Measurement

SITRANS TS500

Type 3G, tubular quick with screw socket and extension

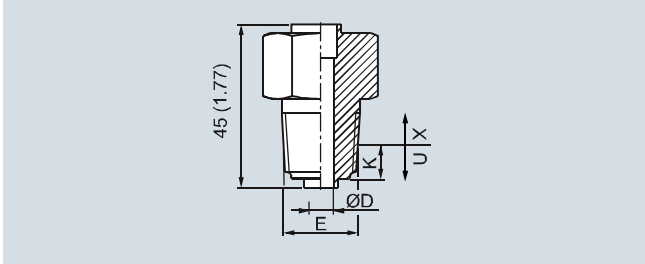
Dimensional drawings

2



- B Measuring insert length
- Ød Measuring insert outer diameter (6 (0.24))
- ØD Process connection outer diameter
- ØD1 Tip internal diameter
- ØD2 Tip outer diameter
- ØD3 Thermowell internal diameter
- E Process connection, thread size
- H Head height
- K Screw depth
- N Nominal length
- U Insertion length
- X Extension length

SITRANS TS500, temperature sensors for vessels and pipelines, tubular version for minimal to minimum to medium stress, thermowell as per DIN 43722, Type 3G, screwed in, with extension, dimensions in mm (inch)



Tapered process connection, dimensions in mm (inch)

Temperature Measurement

SITRANS TS500

Type 3G, tubular quick
with screw socket and extension

Selection and Ordering data	Article No.	Ord. Code
SITRANS TS500	7MC751-	
Tubular thermowell, minimal to medium stress, thermowell as per DIN 43722, Type 3G, screwed in, with extension	-	-
Material, in contact with media		
316Ti (1.4571)	1	
316L (1.4404)	2	
Special version	8	
Process connection		
Cylindrical: G½" inch (½" BSPF)	1 C	
Cylindrical: G1" inch (1" BSPF)	1 E	
Tapered: NPT½"	1 J	
Special version	9 X	H 1 Y
Thermowell form		
3G, 12/9 mm (0.47/0.35 inch)		K
Special version		Z
Insertion length U standard		
160 mm (6.30 inch)		0 4
220 mm (8.66 inch)		0 7
280 mm (11.02 inch)		1 3
Insertion length U customer-specific		
enter customer specific length with Y44, see page 2/147 Order Codes		
80 ... 100 mm (3.15 ... 3.94 inch)		0 1
Standard: 100 mm (3.94 inch)		
101 ... 120 mm (3.98 ... 4.72 inch)		0 2
Standard: 120 mm (4.72 inch)		
121 ... 140 mm (4.76 ... 5.51 inch)		0 3
Standard: 140 mm (5.51 inch)		
141 ... 160 mm (5.55 ... 6.30 inch)		0 4
Standard: 160 mm (6.30 inch)		
161 ... 180 mm (6.34 ... 7.09 inch)		0 5
Standard: 180 mm (7.09 inch)		
181 ... 200 mm (7.13 ... 7.87 inch)		0 6
Standard: 200 mm (7.87 inch)		
201 ... 220 mm (7.91 ... 8.66 inch)		0 7
Standard: 220 mm (8.66 inch)		
221 ... 240 mm (8.70 ... 9.45 inch)		1 1
Standard: 225 mm (8.86 inch)		
241 ... 260 mm (9.49 ... 10.24 inch)		1 2
Standard: 250 mm (9.84 inch)		
261 ... 280 mm (10.28 ... 11.02 inch)		1 3
Standard: 280 mm (11.02 inch)		
281 ... 300 mm (11.06 ... 11.81 inch)		1 4
Standard: 285 mm (11.22 inch)		
301 ... 320 mm (11.85 ... 13.00 inch)		1 5
Standard: 315 mm (12.40 inch)		
321 ... 340 mm (12.64 ... 13.39 inch)		1 6
Standard: 340 mm (13.39 inch)		
341 ... 360 mm (13.43 ... 14.17 inch)		2 0
Standard: 360 mm (14.17 inch)		
361 ... 380 mm (14.21 ... 14.96 inch)		2 1
Standard: 380 mm (14.96 inch)		
381 ... 400 mm (14.99 ... 15.75 inch)		2 2
Standard: 400 mm (15.75 inch)		
401 ... 420 mm (15.79 ... 16.54 inch)		2 3
Standard: 420 mm (16.54 inch)		
421 ... 440 mm (16.57 ... 17.32 inch)		2 4
Standard: 440 mm (17.32 inch)		
441 ... 460 mm (17.36 ... 18.11 inch)		2 5
Standard: 460 mm (18.11 inch)		
461 ... 480 mm (18.15 ... 18.90 inch)		2 6
Standard: 465 mm (18.30 inch)		
481 ... 500 mm (18.94 ... 19.69 inch)		2 7
Standard: 500 mm (19.69 inch)		

Selection and Ordering data	Article No.	Ord. Code
SITRANS TS500	7MC751-	
Tubular thermowell, minimal to medium stress, thermowell as per DIN 43722, Type 3G, screwed in, with extension	-	-
Insertion length U special length		
Special length 1 500 ... 6 000 mm (59.05 ... 236.22 inch)	8 0	
Extension X		
Standard length for Type 2G DIN 43772 (X=131 mm (5.08 inch))		1
Extension length - customer specific		
enter customer specific length with Y45, see page 2/147 Order Codes		
45 ... 150 mm (1.77 ... 5.91 inch)		9
Standard: 150 mm (5.91 inch)		
151 ... 300 mm (5.95 ... 11.81 inch)		9
Standard: 300 mm (11.81 inch)		

Additional configurations on page after next page!

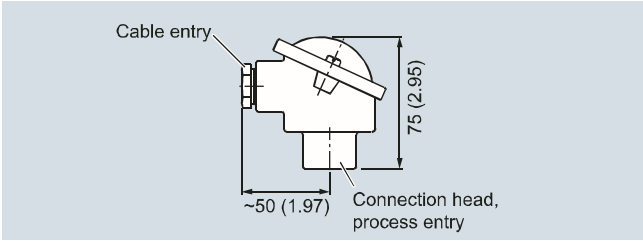
You find ordering examples on page 2/107!

2

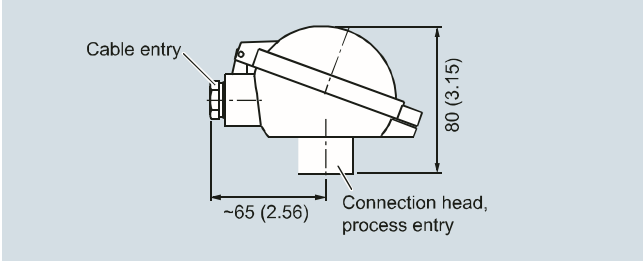
Temperature Measurement SITRANS TS500

Type 3G, tubular quick with screw socket and extension

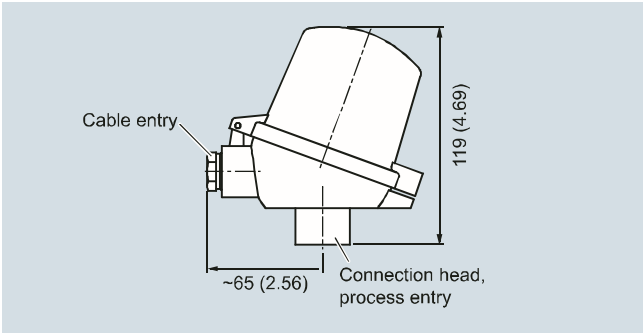
2



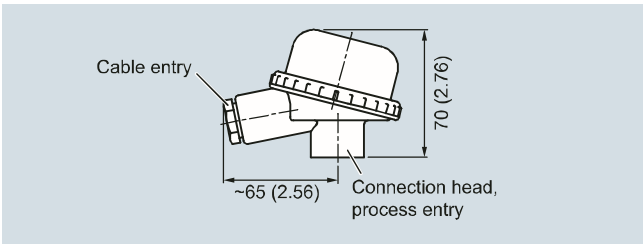
Connection head, aluminum, Type BA0, dimensions in mm (inch)



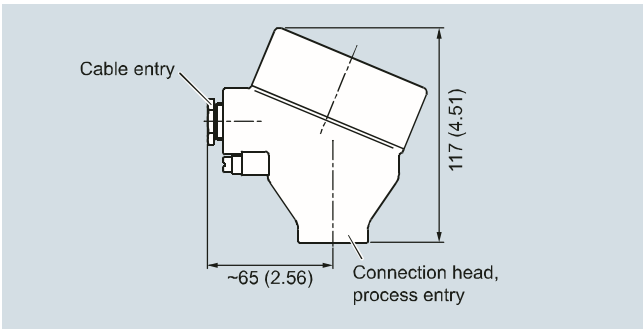
Connection head, aluminum, Type BB0, dimensions in mm (inch)



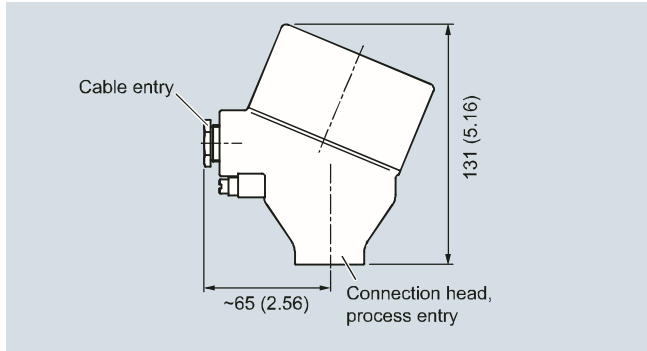
Connection head, aluminum, Type BC0, plastic, type BP0, dimensions in mm (inch)



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 display and glass lid, aluminum, Type AH0, stainless steel, Type AV0, dimensions in mm (inch)

Temperature Measurement

SITRANS TS500

Type 3G, tubular quick
with screw socket and extension

2

Selection and Ordering data	Article No.	Ord. Code
SITRANS TS500	7MC751-	
Tubular thermowell, minimal to medium stress, thermowell as per DIN 43722, Type 3G, screwed in, with extension	- - - - -	- - - - -
Head		
Aluminum head, BA0, flange cover, Standard		A
Aluminum head, BB0, low hinged cover, screw connection		B
Aluminum head, BC0, high hinged cover, screw connection		C
Aluminum head, AG0, screw cover, suitable for Ex d		G
Aluminum head, AH0, screw cover, suitable for Ex d, display (not for Ex i)		H
Plastic head, BM0, screw cover		M
Plastic head, BP0high hinged cover, screw connection		P
Stainless steel head, AU0, screw cover, Ex d		U
Stainless steel head, screw cover, Ex d, display (not for Ex i)		V
Special version of connection head		Z
Sensor		
Pt100, basis, -50 ... +400 °C (-58 ... +752 °F)		A
Pt100, vibration resistant, -50 ... +400 °C (-58 ... +752 °F)		B
Pt100, expanded range, -196 ... +600 °C (-321 ... 1112 °F)		C
Thermocouple Type J, only class 2, -40 ... +750 °C (-40 ... +1 382 °F)		J
Thermocouple Type K, -40 ... +1 000 °C (-40 ... +1 832 °F)		K
Thermocouple Type N, -40 ... + 000 °C (-40 ... +1 832 °F)		N
Sensor number/Accuracy		
Single, basic accuracy (Class 2/Class B)		1
Single, increased accuracy (Class 1/Class A)		2
Single, highest accuracy (Class AA)		3
Double, basic accuracy (Class 2/Class B)		5
Double, increased accuracy (Class 1/Class A)		6
Double, highest accuracy (Class AA)		7
Special version for sensor and accuracy - to be specified		Z 0 Q 1 Y

Selection and Ordering data	Order code
Further designs	
Add "-Z" to Article No. and specify Order Code.	
Enter thermowell material in plain text	G1Y
Enter process connection in plain text	H1Y
Enter thermowell form in plain text	K1Y
Insertion length customer-specific Select range, enter desired length in plain text (No entry = standard length)	Y44
Extension length customer-specific Select range, enter desired length in plain text (No entry = standard length)	Y45
Special version of extension Special version of extension, enter form and length in plain text	N9Y
Head Enter connection head in plain text	P1Y
Sensor number/Accuracy Enter connection head in plain text	Q1Y

Selection and Ordering data	Order code
Options Add "-Z" to Article No. and add options, separate extensions with "+".	
Built-in head transmitter	
SITRANS TH100, 4 ... 20 mA, Pt100	T10
SITRANS TH100 Ex i (ATEX), 4 ... 20 mA, Pt100	T11
SITRANS TH100 Ex i (FM), 4 ... 20 mA, Pt100	T13
SITRANS TH200, 4 ... 20 mA, Universal	T20
SITRANS TH200 Ex (ATEX), 4 ... 20 mA, Universal	T21
SITRANS TH200 Ex (FM), 4 ... 20 mA, Universal	T23
SITRANS TH300, HART, Universal	T30
SITRANS TH300 Ex (ATEX), HART, Universal	T31
SITRANS TH300 Ex (FM), HART, Universal	T33
SITRANS TH400 PA, Universal	T40
SITRANS TH400 PA Ex, Universal	T41
SITRANS TH400 FF, Universal	T45
SITRANS TH400 FF Ex, Universal	T46
Explosion protection	
Intrinsic safety "ia", "ic"	E01
Flameproof enclosure "d"; Dust protection by enclosures "t" only in combination with connection heads code AG0, AH0, AU0, AV0, without cable gland	E03
Non sparking "n"	E04
Certificates and approvals	
EN10204-3.1 Inspeciton certificate for materials coming into contact with media	C12
EN10204-3.1 Inspection certificate for hydrostatic pressure test	C31
EN10204-3.1 Inspection certificate for helium leak test	C32
EN10204-3.1 Inspection certificate for surface tear test	C33
EN10204-3.1 Inspection certificate: visual, measurement and functional inspection	C34
NACE Standard MR-01-75 compliance	C50
ISO 9001 grease-free (cleaned for e.g. oxygen applications)	C51
Designation, calibration	
Stainless steel TAG plate , enter lettering in plain text	Y15
Plant calibration per 1 point, enter temperature in plain text	Y33
Transmitter options	
Transmitter, enter complete setting in plain text (Y01:+/-NNNN ... +/-NNNN C,F)	Y01
Enter measuring point (max. 8 characters) in plain text	Y17
Transmitter, enter measuring point description (max. 16 characters) in plain text	Y23
Transmitter, enter measuring point text (max. 32 characters) in plain text	Y24
Transmitter, enter bus address in plain text	Y25
Transmitter, fail-safe value 3.6 mA (instead of 22.8 mA)	U36
Transmitter with a SIL 2 conformity	C20
Transmitter with a SIL 2/3 conformity	C23
Transmitter test protocol (5 points)	C11
Further options	
Connection form, flying leads (for the direct transmitter assembly, delivery without screws and springs)	G01
M12 plug (in combination with 1x Pt100 and/or transmitter , Non-Ex)	G12
Harting plug Han 7 D (Non Ex)	G13
Connection head with ½" NPT thread without cable gland	G20
Plastic cable gland	G21
with spring lock for heads BB0 and BC0	A01
with outer earth screw for heads AG0, AH0, AU0 and AV0	A02
with inner earth screw for heads BC0, AG0, AH0, AU0 and AV0	A03
Option not found? Specify special version in plain text	Y99

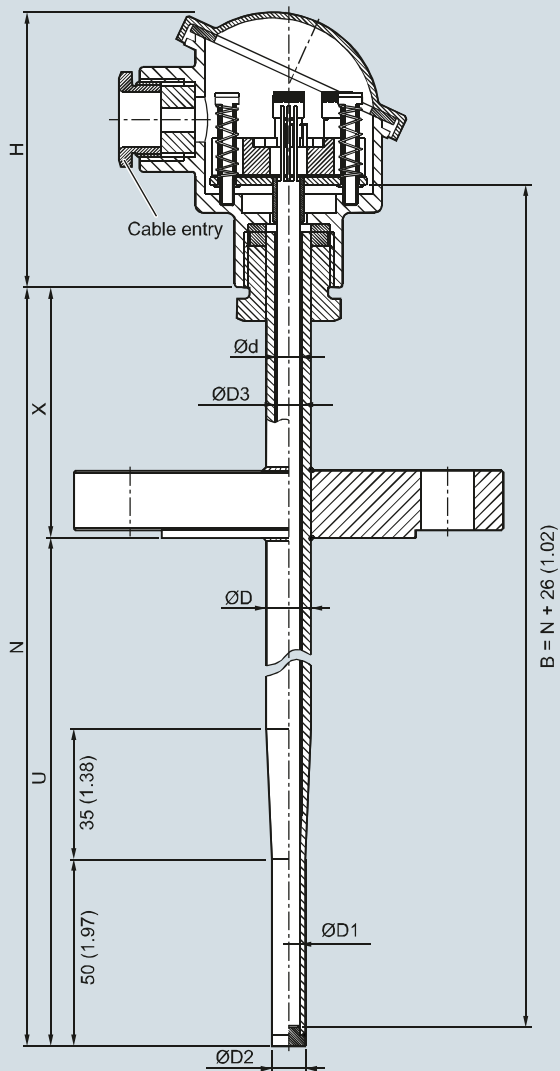
You find ordering examples on page 2/107!

Temperature Measurement

SITRANS TS500

Type 3F, tubular quick
with flange and extension

Dimensional drawings



- B Measuring insert length
- $\varnothing d$ Measuring insert outer diameter (6 (0.24))
- $\varnothing D$ Process connection outer diameter
- $\varnothing D1$ Tip internal diameter
- $\varnothing D2$ Tip outer diameter
- $\varnothing D3$ Thermowell internal diameter
- H Head height
- N Nominal length
- U Insertion length
- X Extension length

SITRANS TS500, temperature sensors for vessels and pipelines, tubular version for minimal to minimum to medium stress, thermowell as per DIN 43722, Type 3F, with flange, with extension, dimensions in mm (inch)

Temperature Measurement

SITRANS TS500

Type 3F, tubular quick
with flange and extension

Selection and Ordering data	Article No.	Ord. Code
SITRANS TS500 Tubular thermowell, minimal to medium stress, thermowell as per DIN 43722, Type 3F, with flange, with extension	7MC751-	
Material, in contact with media 316Ti (1.4571)	1	
316L (1.4404)	2	
Special version	8	
Process connection Flange EN; DN25PN40 B1	2 A	
Flange ASME; 1"RF150	2 E	
Flange ASME; 1.5"RF150	2 G	
Flange ASME; 1.5"RF300	2 H	
Special version	9 X	H 1 Y
Thermowell form 3F; 12/9 mm (0.47/0.35 inch)	K	
Special version	Z	K 1 Y
Insertion length U standard 225 mm (8.86 inch)	11	
285 mm (11.22 inch)	14	
345 mm (13.58 inch)	17	
Insertion length U customer-specific enter customer specific length with Y44, see page 2/151 Order Codes		
80 ... 100 mm (3.15 ... 3.94 inch) Standard: 100 mm (3.94 inch)	01	
101 ... 120 mm (3.98 ... 4.72 inch) Standard: 120 mm (4.72 inch)	02	
121 ... 140 mm (4.76 ... 5.51 inch) Standard: 140 mm (5.51 inch)	03	
141 ... 160 mm (5.55 ... 6.30 inch) Standard: 160 mm (6.3 inch)	04	
161 ... 180 mm (6.34 ... 7.09 inch) Standard: 180 mm (7.09)	05	
181 ... 200 mm (7.13 ... 7.87 inch) Standard: 200 mm (7.87 inch)	06	
201 ... 220 mm (7.91 ... 8.66 inch) Standard: 220 mm (8.66 inch)	07	
221 ... 240 mm (8.7 ... 9.45 inch) Standard: 225 mm (8.86 inch)	11	
241 ... 260 mm (9.48 ... 10.24 inch) Standard: 250 mm (9.84 inch)	12	
261 ... 280 mm (10.28 ... 11.02 inch) Standard: 280 mm (11.02 inch)	13	
281 ... 300 mm (11.02 ... 11.81 inch) Standard: 285 mm (11.22 inch)	14	
301 ... 320 mm (11.85 ... 12.6 inch) Standard: 315 mm (12.4 inch)	15	
321 ... 340 mm (12.64 ... 13.39 inch) Standard: 340 mm (13.39 inch)	16	
341 ... 360 mm (13.43 ... 14.17 inch) Standard: 345 mm (13.58 inch)	17	
361 ... 380 mm (14.21 ... 14.96 inch) Standard: 380 mm (14.96 inch)	21	
381 ... 400 mm (15 ... 15.75 inch) Standard: 400 mm (15.75 inch)	22	
401 ... 420 mm (15.79 ... 16.54 inch) Standard: 420 mm (16.54 inch)	23	
421 ... 440 mm (16.57 ... 17.32 inch) Standard: 440 mm (17.32 inch)	24	
441 ... 460 mm (17.36 ... 18.11 inch) Standard: 460 mm (18.11 inch)	25	
461 ... 480 mm (18.15 ... 18.90 inch) Standard: 465 mm (18.30 inch)	26	
481 ... 500 mm (18.94 ... 19.68 inch) Standard: 500 mm (19.68 inch)	27	

Selection and Ordering data	Article No.	Ord. Code
SITRANS TS500 Tubular thermowell, minimal to medium stress, thermowell as per DIN 43722, Type 3F, with flange, with extension	7MC751-	
Insertion length U special length Special length 1 500 ... 6 000 (59.05 ... 236.22 inch)	8 0	
Extension Standard length for Type 2G DIN 43772 (X=66 mm (2.60 inch))	1	
Extension length - customer specific enter customer specific length with Y45, see page 2/151 Order Codes		
45 ... 150 mm (1.77 ... 5.91 inch) Standard: 150 mm (5.91 inch)	9	N 1 D
151 ... 300 mm (5.95 ... 11.81 inch) Standard: 300 mm (11.81 inch)	9	N 2 D

Additional configurations on page after next page!

You find ordering examples on page 2/107!

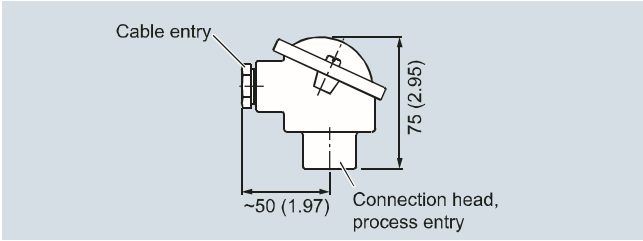
2

Temperature Measurement

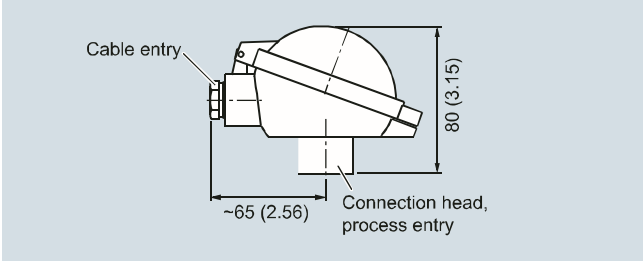
SITRANS TS500

Type 3F, tubular quick with flange and extension

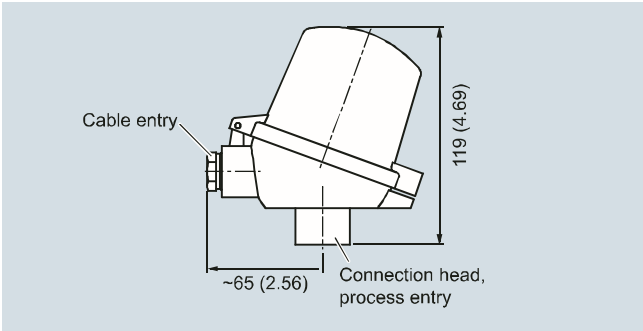
2



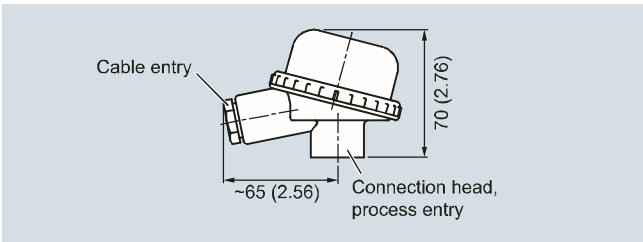
Connection head, aluminum, Type BA0, dimensions in mm (inch)



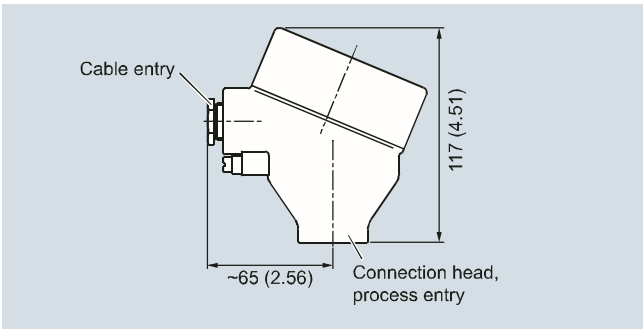
Connection head, aluminum, Type BB0, dimensions in mm (inch)



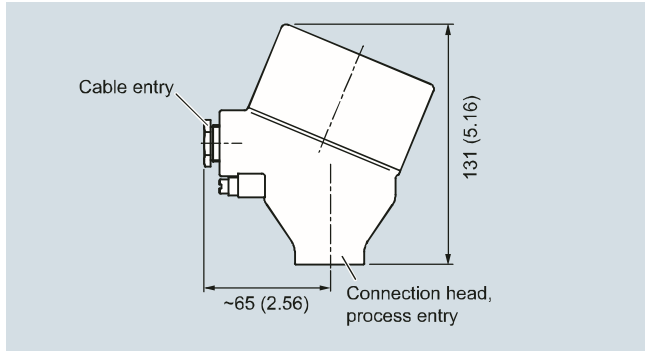
Connection head, aluminum, Type BC0, plastic, type BP0, dimensions in mm (inch)



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 display and glass lid, aluminum, Type AH0, stainless steel, Type AV0, dimensions in mm (inch)

Temperature Measurement

SITRANS TS500

Type 3F, tubular quick
with flange and extension

2

Selection and Ordering data	Article No.	Ord. Code
SITRANS TS500	7MC751-	
Tubular thermowell, minimal to medium stress, thermowell as per DIN 43722, Type 3F, with flange, with extension	- - - - -	- - - - -
Head		
Aluminum head, BA0, flange cover, Standard		A
Aluminum head, BB0, low hinged cover, screw connection		B
Aluminum head, BC0, high hinged cover, screw connection		C
Aluminum head, AG0, screw cover, suitable for Ex d		G
Aluminum head, AH0, screw cover, suitable for Ex d, display (not for Ex i)		H
Plastic head, BM0, screw cover		M
Plastic head, BP0high hinged cover, screw connection		P
Stainless steel head, AU0, screw cover, Ex d		U
Stainless steel head, screw cover, Ex d, display (not for Ex i)		V
Special version of connection head		Z
		P 1 Y
Sensor		
Pt100, basis, -50 ... +400 °C (-58 ... +752 °F)		A
Pt100, vibration resistant, -50 ... +400 °C (-58 ... +752 °F)		B
Pt100, expanded range, -196 ... +600 °C (-321 ... +1112 °F)		C
Thermocouple Type J, only class 2, -40 ... +750 °C (-40 ... +1 382 °F)		J
Thermocouple Type K, -40 ... +1 000 °C (-40 ... +1 832 °F)		K
Thermocouple Type N, -40 ... +1 000 °C (-40 ... +1 832 °F)		N
Sensor number/Accuracy		
Single, basic accuracy (Class 2/Class B)		1
Single, increased accuracy (Class 1/Class A)		2
Single, highest accuracy (Class AA)		3
Double, basic accuracy (Class 2/Class B)		5
Double, increased accuracy (Class 1/Class A)		6
Double, highest accuracy (Class AA)		7
Special version of sensor type - number and accuracy - to be specified		Z 0 Q 1 Y

Selection and Ordering data	Order code
Further designs	
Add "-Z" to Article No. and specify Order Code.	
Enter thermowell material in plain text	G1Y
Enter process connection in plain text	H1Y
Enter thermowell form in plain text	K1Y
Special version of extension Special version of extension, enter form and length in plain text	N9Y
Head Enter connection head in plain text	P1Y
Sensor number/Accuracy Enter connection head in plain text	Q1Y
Insertion length customer-specific Select range, enter desired length in plain text (No entry = standard length)	Y44
Extension length customer-specific Select range, enter desired length in plain text (No entry = standard length)	Y45

Selection and Ordering data	Order code
Options Add "-Z" to Article No. and add options, separate extensions with "+".	
Built-in head transmitter	
SITRANS TH100, 4 ... 20 mA, Pt100	T10
SITRANS TH100 Ex i (ATEX), 4 ... 20 mA, Pt100	T11
SITRANS TH100 Ex i (FM), 4 ... 20 mA, Pt100	T13
SITRANS TH200, 4 ... 20 mA, Universal	T20
SITRANS TH200 Ex (ATEX), 4 ... 20 mA, Universal	T21
SITRANS TH200 Ex (FM), 4 ... 20 mA, Universal	T23
SITRANS TH300, HART, Universal	T30
SITRANS TH300 Ex (ATEX), HART, Universal	T31
SITRANS TH300 Ex (FM), HART, Universal	T33
SITRANS TH400 PA, Universal	T40
SITRANS TH400 PA Ex, Universal	T41
SITRANS TH400 FF, Universal	T45
SITRANS TH400 FF Ex, Universal	T46
Explosion protection	
Intrinsic safety "ia", "ic"	E01
Flameproof enclosure "d"; Dust protection by enclosures "t" only in combination with connection heads code AG0, AH0, AU0, AV0, without cable gland	E03
Non sparking "n"	E04
Certificates and approvals	
EN10204-3.1 Inspection certificate for materials coming into contact with media	C12
EN10204-3.1 Inspection certificate for hydrostatic pressure test	C31
EN10204-3.1 Inspection certificate for helium leak test	C32
EN10204-3.1 Inspection certificate for surface tear test	C33
EN10204-3.1 Inspection certificate: visual, measurement and functional inspection	C34
NACE Standard MR-01-75 compliance	C50
ISO 9001 grease-free (cleaned for e.g. oxygen applications)	C51
Designation, calibration	
Stainless steel TAG plate, enter lettering in plain text	Y15
Plant calibration per 1 point, enter temperature in plain text	Y33
Transmitter options	
Transmitter, enter complete setting in plain text (Y01:+/-NNNN ... +/-NNNN C,F)	Y01
Enter measuring point (max. 8 characters) in plain text	Y17
Transmitter, enter measuring point description (max. 16 characters) in plain text	Y23
Transmitter, enter measuring point text (max. 32 characters) in plain text	Y24
Transmitter, enter bus address in plain text	Y25
Transmitter, fail-safe value 3.6 mA (instead of 22.8 mA)	U36
Transmitter with a SIL 2 conformity	C20
Transmitter with a SIL 2/3 conformity	C23
Transmitter test protocol (5 points)	C11
Further options	
Connection form, flying leads (for the direct transmitter assembly, delivery without screws and springs)	G01
M12 plug (in combination with 1x Pt100 and/or transmitter, Non-Ex)	G12
Harting plug Han 7 D (Non Ex)	G13
Connection head with 1/2" NPT thread without cable gland	G20
Plastic cable gland	G21
with spring lock for heads BB0 and BC0	A01
with outer earth screw for heads AG0, AH0, AU0 and AV0	A02
with inner earth screw for heads BC0, AG0, AH0, AU0 and AV0	A03
Option not found? Specify special version in plain text	Y99

You find ordering examples on page 2/107!

Temperature Measurement

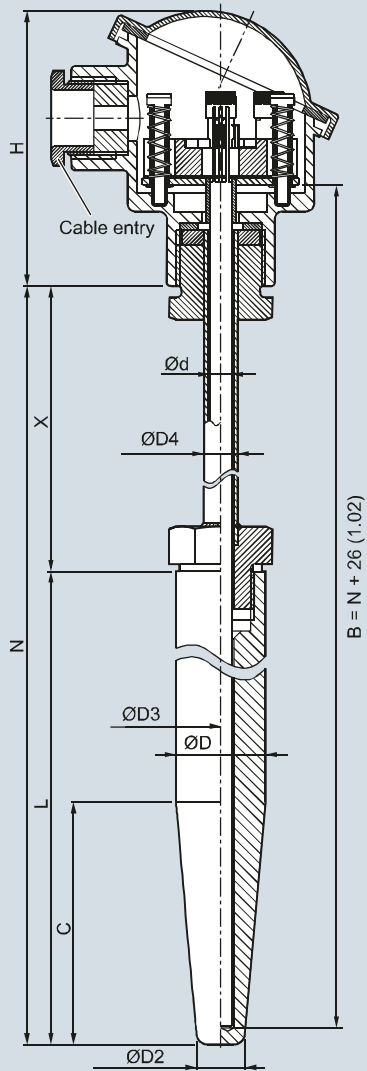
SITRANS TS500

Type 4+4F
barstock thermowell, with extension

Dimensional drawings

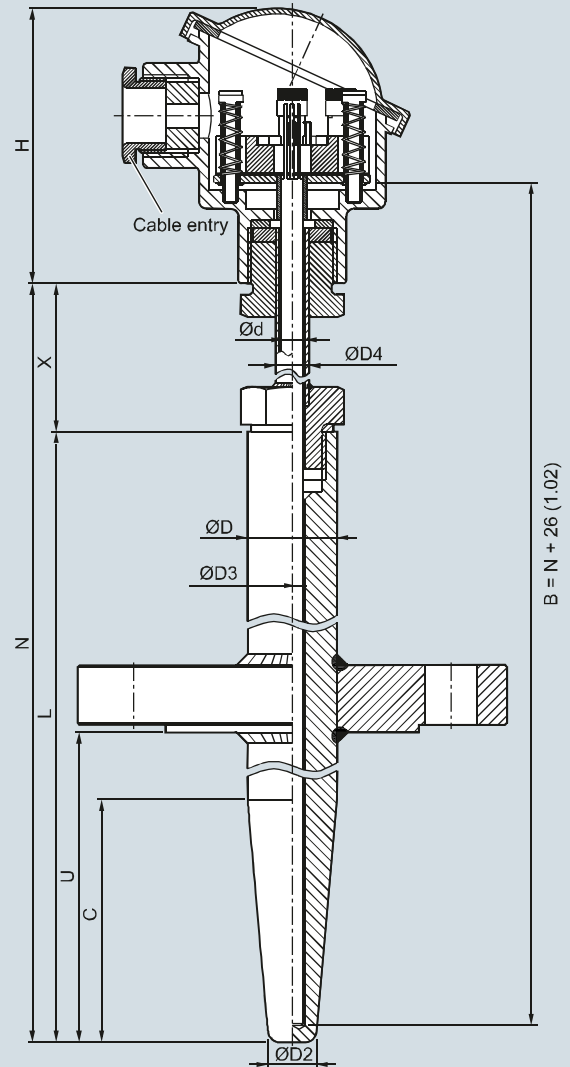
SITRANS TS500, temperature sensors for vessels and pipelines, barstock version for minimal to minimum to medium stress, thermowell as per DIN 43722.

2



- 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
- 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
- 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
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	-	
Material, in contact with media		
316Ti (1.4571)	1	
316L (1.4404)	2	
1.7335 heat resistant, only for versions without flange	3	
1.5415 heat resistant, only for versions without flange	4	
Process connection		
Without (for welding in)	0 N	
Flange DN25 PN40 B1	2 A	
Flange 1"RF150	2 E	
Flange 1"RF300	2 F	
Flange 1.5"RF150	2 G	
Flange 1.5"RF300	2 H	
Special version	9 X	H 1 Y
Thermowell form		
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))		
Specify with Y46 in plain text if protective tube length "L" deviates from standard		
Type 4/4F,	A 0 0	
L=140 (5.51 inch), C= 65 (3.74 inch), Ød=24 (0.95 inch), Ød=6 (0.24 inch)		
Type 4/4F,	B 0 0	
L=200 (7.87 inch), C= 65 (3.74 inch), Ød=24 (0.95 inch), Ød=6 (0.24 inch)		
Type 4/4F,	D 0 0	
L=200 (7.87 inch), C= 125 (4.92 inch), Ød=24 (0.95 inch), Ød=6 (0.24 inch)		
Type 4/4F,	E 0 0	
L=260 (10.24 inch), C= 125 (4.92 inch), Ød=24 (0.95 inch), Ød=6 (0.24 inch)		
Special version	Z 0 0	K 1 Y
Extension X		
as per DIN 43772		
(X=149 mm (5.87 inch))		1
Extension X, customer-specific		
enter customer specific length with Y45, see page 2/155 Order Codes		
45 ...150 mm (1.77 ... 5.91 inch)	9	N 1 D
Standard: 150 mm (5.91 inch)		
151 ... 300 mm (5.95 ... 11.81 inch)	9	N 2 D
Standard: 300 mm (11.81 inch)		
301 ... 450 mm (11.85 ... 17.72 inch)	9	N 3 D
Standard: 450 mm (17.72 inch)		
451 ... 600 mm (17.86 ... 23.62 inch)	9	N 4 D
Standard: 600 mm (23.62 inch)		
601 ... 750 mm (23.66 ... 29.53 inch)	9	N 5 D
Standard: 750 mm (29.53 inch)		
751 ... 900 mm (29.57 ... 45.43 inch)	9	N 6 D
Standard: 900 mm (45.43 inch)		
901 ... 1 050 mm (45.47 ... 41.34 inch)	9	N 7 D
Standard: 1 050 mm (41.34 inch)		

Selection and Ordering data	Article No.	Ord. Code
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	-	
Head		
Aluminum head, BA0, flange cover, Standard		A
Aluminum head, BB0, low hinged cover, screw connection		B
Aluminum head, BC0, high hinged cover, screw connection		C
Aluminum head, AG0, screw cover, suitable for Ex d		G
Aluminum head, AH0, screw cover, suitable for Ex d,		H
display (not for Ex i)		
Plastic head, BM0, screw cover		M
Plastic head, BP0high hinged cover, screw connection		P
Stainless steel head, AU0, screw cover, Ex d		U
Stainless steel head, AV0, screw cover, Ex d, display (not for Ex i)		V
Special version of connection head		Z
		P 1 Y
Sensor		
Pt100, basis, -50 ... +400 °C (-58 ... +752)		A
Pt100, vibration resistant, -50 ... +400 °C (-58 ... +752)		B
Pt100, expanded range, -196 ... 600 °C (-321 ... +1 112)		C
Thermocouple Type K, -40 ... +1 000 °C (-40 ... +1 832)		K
Thermocouple Type J, only class 2, -40 ... +750 °C (-40 ... +1 382)		J
Thermocouple Type N, -40 ... +1 000 °C (-40 ... +1 832)		N
Sensor number/Accuracy		
Single, basic accuracy (Class 2/Class B)		1
Single, increased accuracy (Class 1/Class A)		2
Single, highest accuracy (Class AA)		3
Double, basic accuracy (Class 2/Class B)		5
Double, increased accuracy (Class 1/Class A)		6
Double, highest accuracy (Class AA)		7
Special version of sensor type, number and accuracy - to be specified		Z 0 Q 1 Y

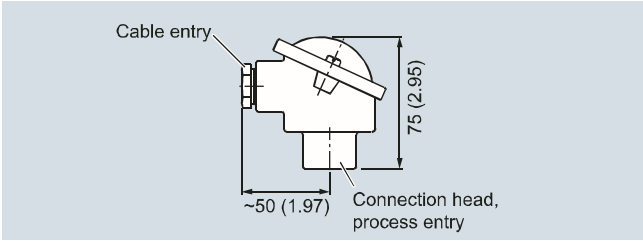
Additional configurations on page after next page!

You find ordering examples on page 2/107!

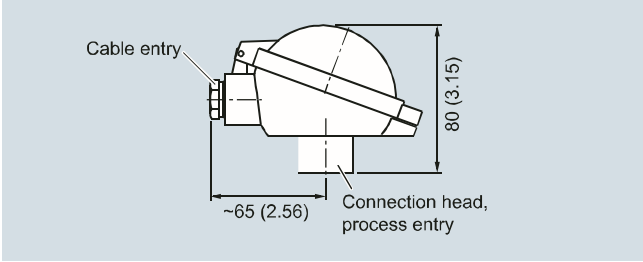
Temperature Measurement SITRANS TS500

Type 4+4F barstock thermowell, with extension

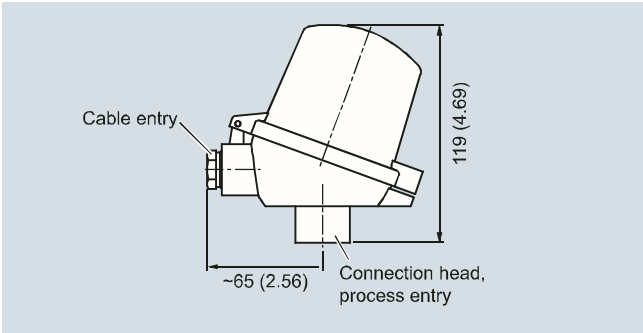
2



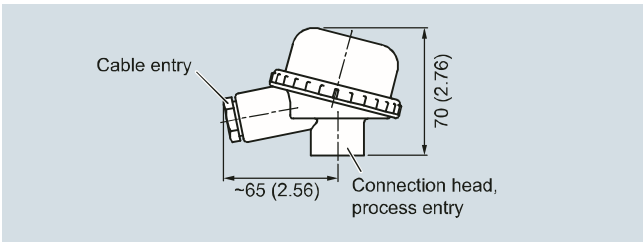
Connection head, aluminum, Type BA0, dimensions in mm (inch)



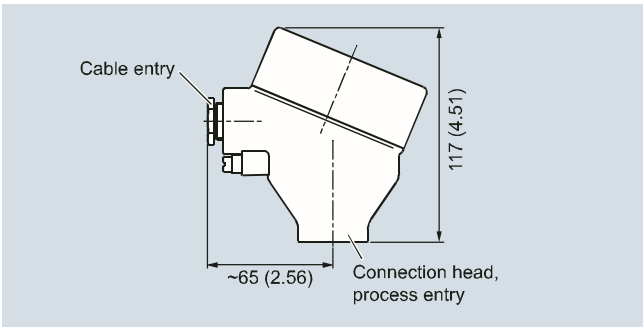
Connection head, aluminum, Type BB0, dimensions in mm (inch)



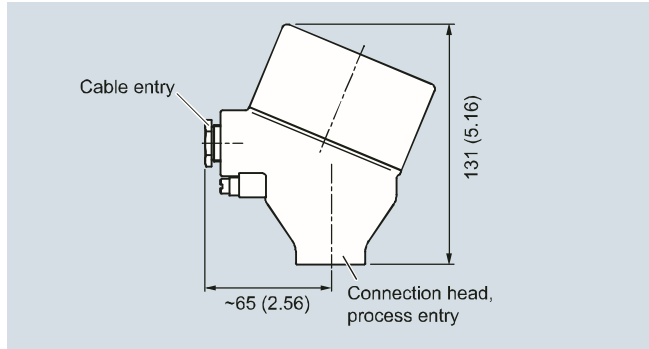
Connection head, aluminum, Type BC0, plastic, type BP0, dimensions in mm (inch)



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 display and glass lid, aluminum, Type AH0, stainless steel, Type AV0, dimensions in mm (inch)

Temperature Measurement

SITRANS TS500

Type 4+4F
barstock thermowell, with extension

2

Selection and Ordering data	Order code
Further designs Add "-Z" to Article No. and specify Order Code.	
Enter thermowell material in plain text	G1Y
Enter process connection in plain text	H1Y
Enter thermowell form in plain text: L, U, C, D, D2, D3 (Y44 and Y46 specifications not relevant here)	K1Y
Insertion length customer-specific 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))	Y44
Extension length customer-specific Select range, enter desired length in plain text (No entry = standard length)	Y45
Thermowell length L customer-specific in plain text	Y46
Special version of extension Enter form and length in plain text	N9Y
Head Enter connection head in plain text	P1Y
Sensor number/Accuracy Enter connection head in plain text	Q1Y
Options Add "-Z" to Article No. and add options, separate extensions with "+".	
Built-in head transmitter SITRANS TH100, 4 ... 20 mA, Pt100 SITRANS TH100 Ex i (ATEX), 4 ... 20 mA, Pt100 SITRANS TH100 Ex i (FM), 4 ... 20 mA, Pt100 SITRANS TH200, 4 ... 20 mA, Universal SITRANS TH200 Ex (ATEX), 4 ... 20 mA, Universal SITRANS TH300, HART, Universal SITRANS TH300 Ex (ATEX), HART, Universal SITRANS TH400 PA, Universal SITRANS TH400 PA Ex, Universal SITRANS TH400 FF, Universal SITRANS TH400 FF Ex, Universal	T10 T11 T13 T20 T21 T30 T31 T33 T41 T45 T46
Explosion protection Intrinsic safety "ia", "ic" Flameproof enclosure "d"; Dust protection by enclosures "t" only in combination with connection heads code AG0, AH0, AU0, AV0, without cable gland Non sparking "n"	E01 E03 E04
Certificates and approvals EN10204-3.1 Inspection certificate for materials coming into contact with media EN10204-3.1 Inspection certificate for hydrostatic pressure test EN10204-3.1 Inspection certificate for helium leak test EN10204-3.1 Inspection certificate for surface tear test EN10204-3.1 Inspection certificate: visual, measurement and functional inspection NACE Standard MR-01-75 compliance ISO 9001 grease-free (cleaned for e.g. oxygen applications)	C12 C31 C32 C33 C34 C50 C51

Selection and Ordering data	Order code
Designation, calibration Stainless steel TAG plate , enter lettering in plain text Plant calibration per 1 point, enter temperature in plain text	Y15 Y33
Transmitter options Transmitter, enter complete setting in plain text (Y01: +/-NNNN ... +/-NNNN C,F) Enter measuring point (max. 8 characters) in plain text Transmitter, enter measuring point description (max. 16 characters) in plain text Transmitter, enter measuring point text (max. 32 characters) in plain text Transmitter, enter bus address in plain text Transmitter, fail-safe value 3.6 mA (instead of 22.8 mA) Transmitter with a SIL 2 conformity Transmitter with a SIL 2/3 conformity Transmitter test protocol (5 points)	Y01 Y17 Y23 Y24 Y25 U36 C20 C23 C11
Further options Connection form, flying leads (for the direct transmitter assembly, delivery without screws and springs) M12 plug (in combination with 1x Pt100 and/or transmitter , Non-Ex) Harting plug Han 7 D (Non Ex) Connection head with ½ NPT thread without cable gland Plastic cable gland with spring lock for heads BB0 and BC0 with outer earth screw for heads AG0, AH0, AU0 and AV0 with inner earth screw for heads BC0, AG0, AH0, AU0 and AV0	G01 G12 G13 G20 G21 A01 A02 A03
Option not found? Specify special version in plain text	Y99

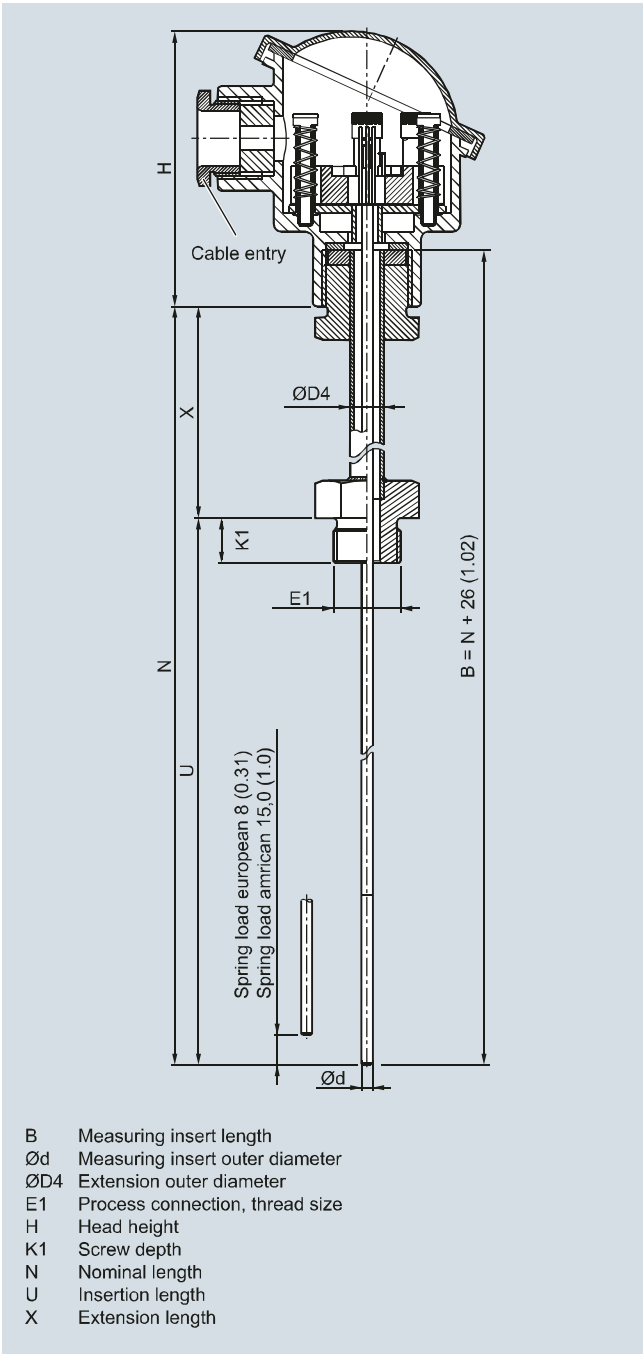
You find ordering examples on page 2/107!

Temperature Measurement SITRANS TS500

For the installation of existing protective tubes

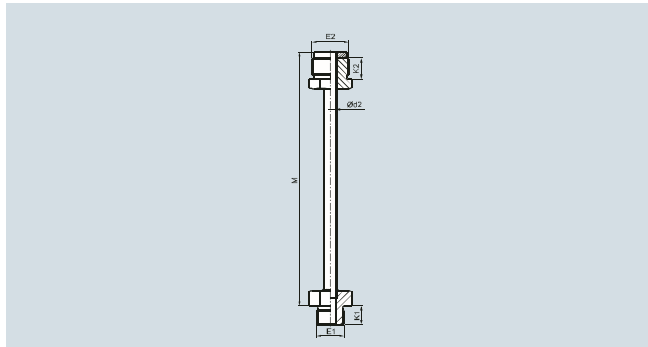
Dimensional drawings

2

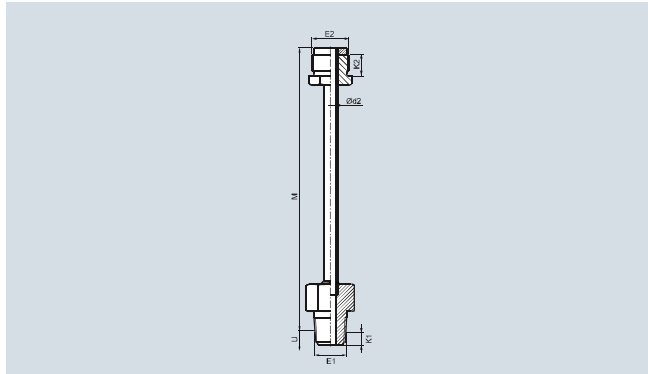


- B Measuring insert length
- Ød Measuring insert outer diameter
- ØD4 Extension outer diameter
- E1 Process connection, thread size
- H Head height
- K1 Screw depth
- N Nominal length
- U Insertion length
- X Extension length

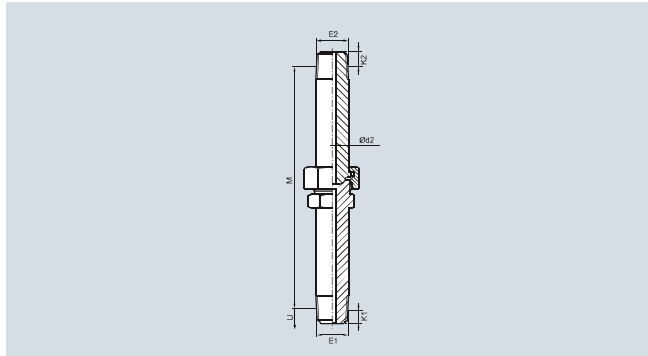
SITRANS TS500, temperature sensors for vessels and pipings, temperature sensors for installation in existing thermowells, suitable for thermowells as per DIN 43772 as well as ASME B40.9-2001 with extension European or American types, dimensions in mm (inch)



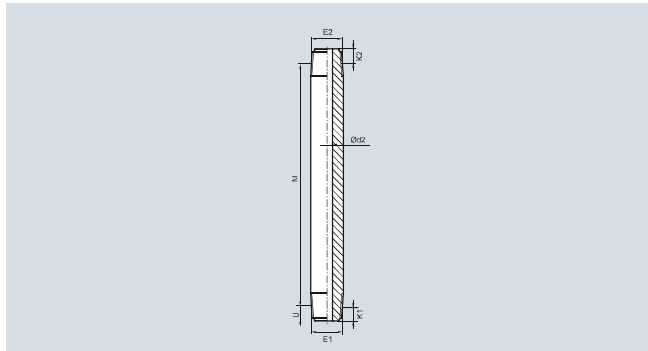
Neck tube (1, 2, 3), adjustable, european, cylindrical, dimensions in mm (inch)



Neck tube NPT (1, 2, 3), adjustable, european, conical, dimensions in mm (inch)



Neck tube NUN, adjustable, conical, european (5), american (8), dimensions in mm (inch)



Neck tube, nipple, non adjustable, conical, european (4), american (6), dimensions in mm (inch)

¹⁾ Numerics 1 ... 8: s. Selection and Ordering data option extension page 2/157

Temperature Measurement

SITRANS TS500

For the installation of existing protective tubes

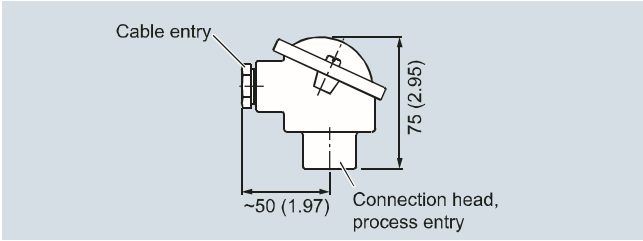
2

Selection and Ordering data	Article No.	Ord. Code	Selection and Ordering data	Article No.	Ord. Code
SITRANS TS500 Temperature sensors for installation in existing thermowells, suitable for thermowells as per DIN 43772 as well as ASME B40.9-2001 with extension European or American types	7MC7500-		SITRANS TS500 Temperature sensors for installation in existing thermowells, suitable for thermowells as per DIN 43772 as well as ASME B40.9-2001 with extension European or American types	7MC7500-	
Model existing thermowells	1		Extension X European type: without extension European type: X=65 (M=80 mm) (3.15 inch) adjustable European type: X=139 mm (5.47 inch) (M=155 mm (6.10 inch)) adjustable (DIN standard length for L=110) European type: X=149 mm (5.87 inch) (M=165 mm (6.50 inch)) adjustable European type: NIP, =150 mm (5.91 inch) not adjustable (NPT $\frac{1}{2}$ "") European type: X=150 mm (5.91 inch) NUN adjustable (NPT $\frac{1}{2}$ "") American type: X=74 mm (2.91 inch) integrated sensor spring, NIP, not adjustable (NPT $\frac{1}{2}$ "") American type: X=150 mm (5.91 inch) integrated sensor spring NUN adjustable (NPT $\frac{1}{2}$ "")	0 1 2 3 4 5 6 8	
Thread type G $\frac{1}{2}$ " (½" BSPF) (not for American type) NPT $\frac{1}{2}$ " M14x1.5 (not for American type) M18x1.5 (not for American type) Special version	C J T U Z	J 1 Y	Extension X, customer-specific enter customer specific length with Y45, see page 2/159 Order Codes 45 ... 150 mm (1.77 ... 5.91 inch) Standard: 150 mm (5.91 inch) 151 ... 300 mm (5.95 ... 11.81 inch) Standard: 300 mm (11.81 inch) 301 ... 450 mm (11.85 ... 17.72 inch) Standard: 450 mm (17.72 inch)	9 9 9	N 1 N 2 N 3
Insertion engh U free length, standard lengths 110 mm (3.97 inch) 140 mm (6.30 inch) 200 mm (9.06 inch) 260 mm 143.17 inch) 410 mm (20.08 inch) 2 ½" + 1/8" 4" + 1/8" 6" + 1/8" 9" + 1/8" 12" + 1/8" 15" + 1/8" 18" + 1/8" 24" + 1/8"	B 1 B 2 C 1 C 2 E 1 A 5 B 5 B 6 C 5 D 5 D 6 E 6 G 5		Model DIN type (M24 adjustable) ANSI-Type spring loaded Nipple 2x NPT not spring loaded N-U-N 2x NPT not spring loaded		D A N U
Insertion U free length, customer-specific enter customer specific length with Y44, see page 2/159 Order Codes 10 ... 100 mm (0.39 ... 3.94 inch) Standard: 100 mm (3.94 inch) 101 ... 200 mm (3.98 ... 7.87 inch) Standard: 200 mm (7.87 inch) 201 ... 300 mm (7.91 ... 11.81 inch) Standard: 300 mm (11.81 inch) 301 ... 400 mm (11.85 ... 15.75 inch) Standard: 400 mm (15.75 inch) 401 ... 500 mm (15.79 ... 19.68 inch) Standard: 500 mm (19.68 inch) 501 ... 600 mm (19.72 ... 23.62 inch) Standard: 600 mm (23.62 inch) 601 ... 800 mm (23.66 ... 31.50 inch) Standard: 800 mm (31.50 inch) 801 ... 1 000 mm (31.54 ... 39.37 inch) Standard: 1 000 mm (39.37 inch)	A 0 B 0 C 0 D 0 E 0 F 0 G 0 H 0		Extension special version Extension special version	9	N 9 Y
Insertion length U free length, special length Special length > 3 000 mm (118.11 inch)	X 0		Additional configurations on page after next page! You find ordering examples on page 2/107!		
Measurement tip diameter 6 mm (0.24 inch) 8 mm (0.31 inch) (with sleeve) 10 mm (0.39 inch) (with sleeve) Special version	6 8 0 9	M 1 Y			

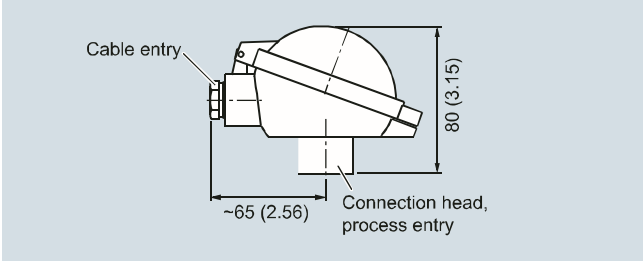
Temperature Measurement SITRANS TS500

For the installation of existing protective tubes

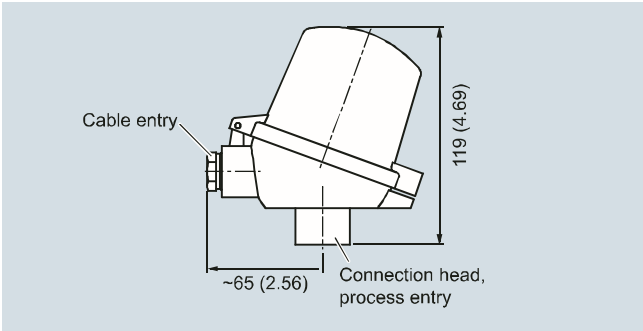
2



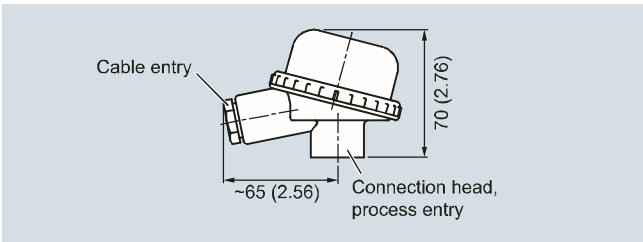
Connection head, aluminum, Type BA0, dimensions in mm (inch)



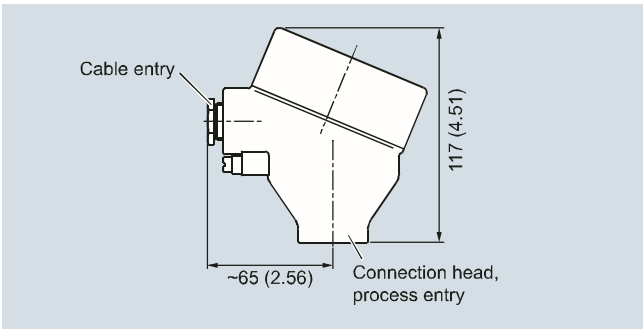
Connection head, aluminum, Type BB0, dimensions in mm (inch)



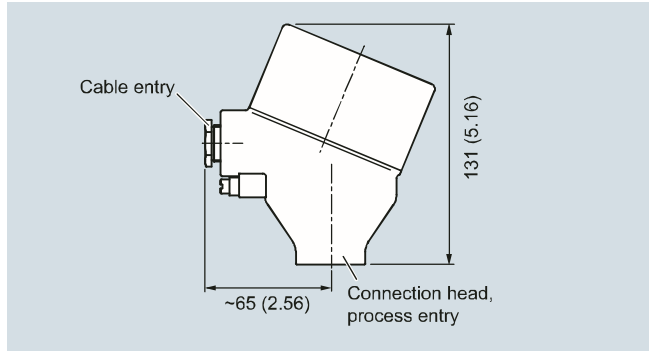
Connection head, aluminum, Type BC0, plastic, type BP0, dimensions in mm (inch)



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 display and glass lid, aluminum, Type AH0, stainless steel, Type AV0, dimensions in mm (inch)

Temperature Measurement

SITRANS TS500

For the installation of existing protective tubes

2

Selection and Ordering data	Article No.	Ord. Code
SITRANS TS500 Temperature sensors for installation in existing thermowells, suitable for thermowells as per DIN 43772 as well as ASME B40.9-2001 with extension European or American types	7MC7500-	
Head without connection head for American type sensors with integrated spring load Aluminum head, BA0, flange cover, Standard Aluminum head, BB0, low hinged cover, screw connection Aluminum head, BC0, high hinged cover, screw connection Aluminum head, AG0, screw cover, suitable for Ex d Aluminum head, AH0, screw cover, suitable for Ex d, display (not for Ex i) Plastic head, BMO, screw cover Plastic head, BP0high hinged cover, screw connection Stainless steel head, AU0, screw cover, Ex d Stainless steel head, AV0, screw cover, Ex d, display (not for Ex i) Special version of connection head		N A B C G H M P U V Z
Sensor Pt100, Basis, -50 ... +400 °C (-58 ... +752 °F) Pt100, vibration resistant, -50 ... +400 °C (-58 ... +752 °F) Pt100, expanded range, -196 ... +600 °C (-321 ... +1112 °F) Thermocouple Type J, only class 2, -40 ... +750 °C (-40 ... +1 382 °F) Thermocouple Type K, -40 ... +1 000 °C (-40 ... +1 832 °F) Thermocouple Type N, -40 ... +1 000 °C (-40 ... +1 832 °F)		A B C J K N
Sensor number/Accuracy Single, basic accuracy (Class 2/Class B) Single, increased accuracy (Class 1/Class A) Single, highest accuracy (Class AA) Double, basic accuracy (Class 2/Class B) Double, increased accuracy (Class 1/Class A) Double, highest accuracy (Class AA) Specify special version in plain text		1 2 3 5 6 7 Z0
		P 1 Y Q 1 Y

Selection and Ordering data	Order code
Further designs Add "-Z" to Article No. and specify Order Code.	
Enter thread type in plain text	J1Y
Enter diameter of measurement in plain text	M1Y
Special version of extension Special version of extension, enter form and length in plain text	N9Y
Head Enter connection head in plain text	P1Y
Sensor number/Accuracy Enter connection head in plain text	Q1Y
Insertion length customer-specific Select range, enter desired length in plain text (No entry = standard length)	Y44
Extension length customer-specific Select range, enter desired length in plain text (No entry = standard length)	Y45

Selection and Ordering data	Order code
Options Add "-Z" to Article No. and add options, separate extensions with "+".	
Built-in head transmitter SITRANS TH100, 4 ... 20 mA, Pt100 SITRANS TH100 Ex i (ATEX), 4 ... 20 mA, Pt100 SITRANS TH100 Ex i (FM), 4 ... 20 mA, Pt100 SITRANS TH200, 4 ... 20 mA, Universal SITRANS TH200 Ex (ATEX), 4 ... 20 mA, Universal SITRANS TH300, HART, Universal SITRANS TH300 Ex (ATEX), HART, Universal SITRANS TH400 PA, Universal SITRANS TH400 PA Ex, Universal SITRANS TH400 FF, Universal SITRANS TH400 FF Ex, Universal	T10 T11 T13 T20 T21 T30 T31 T40 T41 T45 T46
Explosion protection Intrinsic safety "ia", "ic" Flameproof enclosure "d"; Dust protection by enclosures "t" only in combination with connection heads code AG0, AH0, AU0, AV0, without cable gland Non sparking "n"	E01 E03 E04
Certificates and approvals EN10204-3.1 Factory certificate: visual, measurement and functional inspection Factory calibration per 1 point: enter temperature in plain text	C34 Y33
Designation, calibration Stainless steel TAG plate, enter lettering in plain text Plant calibration per 1 point, enter temperature in plain text	Y15 Y33
Transmitter options Transmitter, enter complete setting in plain text (Y01:+/-NNNN ... +/-NNNN C,F) Enter measuring point (max. 8 characters) in plain text Transmitter, enter measuring point description (max. 16 characters) in plain text Transmitter, enter measuring point text (max. 32 characters) in plain text Transmitter, enter bus address in plain text Transmitter, fail-safe value 3.6 mA (instead of 22.8 mA) Transmitter with a SIL 2 conformity Transmitter with a SIL 2/3 conformity Transmitter test protocol (5 points)	Y01 Y17 Y23 Y24 Y25 U36 C20 C23 C11
Further options Connection form, flying leads (for the direct transmitter assembly, delivery without screws and springs) M12 plug (in combination with 1x Pt100 and/or transmitter, Non-Ex) Harting plug Han 7 D (Non Ex) Connection head with 1/2" NPT thread without cable gland Plastic cable gland with spring lock for heads BB0 and BC0 with outer earth screw for heads AG0, AH0, AU0 and AV0 with inner earth screw for heads BC0, AG0, AH0, AU0 and AV0	G01 G12 G13 G20 G21 A01 A02 A03
Option not found? Specify special version in plain text	Y99

You find ordering examples on page 2/107!