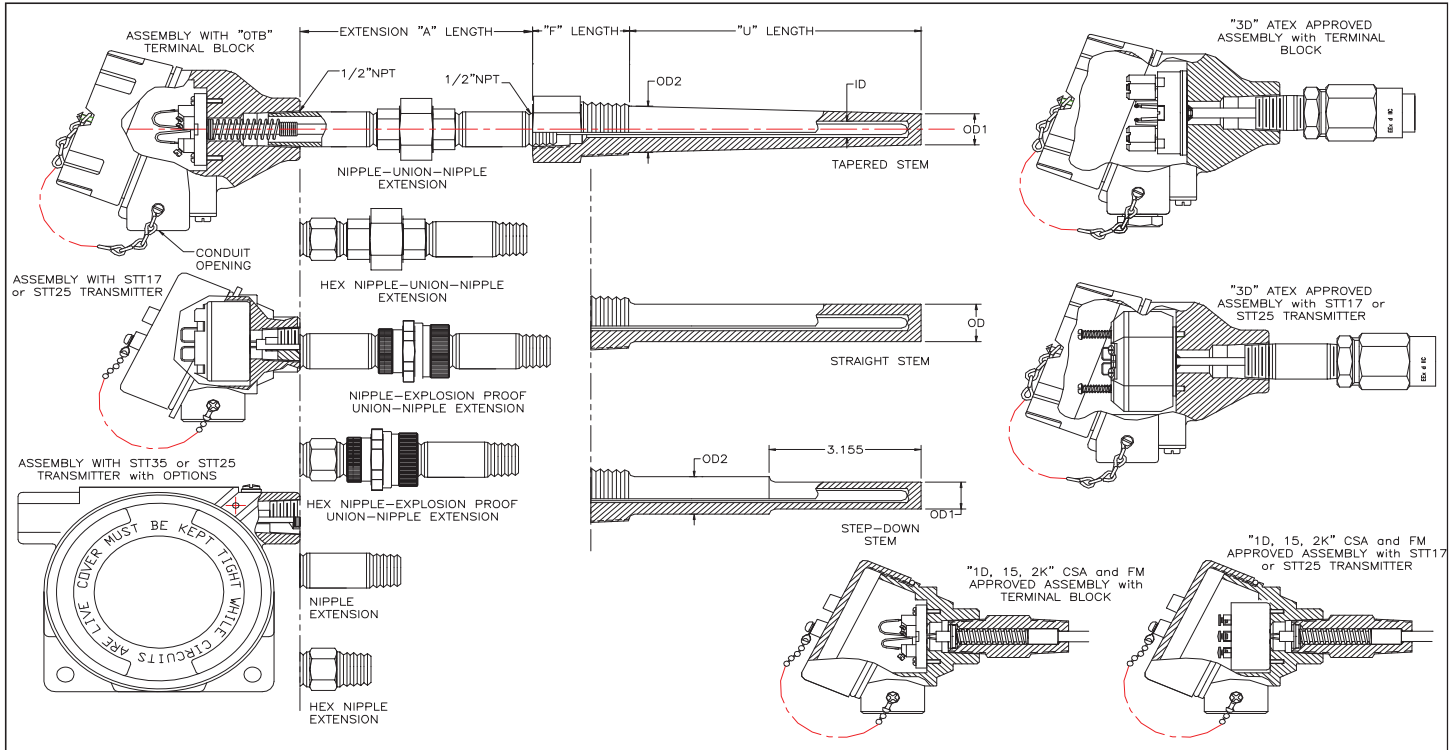


STT 3000 Temperature Probe Assemblies Series STT830 - Threaded & Socket Weld Thermowell Assembly with Transmitter Option

Model Selection Guide

Model Selection Guide
34-44-16-09 Issue 25

Honeywell Proprietary



Instructions

- Choose availability column based on mounting configuration.
- A dot (●) denotes unrestricted availability. A letter denotes restricted availability.
- Blank denotes unavailable - choose alternate. View Restrictions table.
- Select options and approvals from Tables.

Key Number	I	II, Options	III	IV	V	VI
STT830	-	-	-	-	-	-
		VII	VIII, Options			

Ordering Example: STT830-25H-TC-WEE0-H08C-R1U6-A00SR090-00-000 Price: \$ 909.00

Key Number	Selection	Availability
Threaded Bar Stock Thermowell Assembly	STT830	●

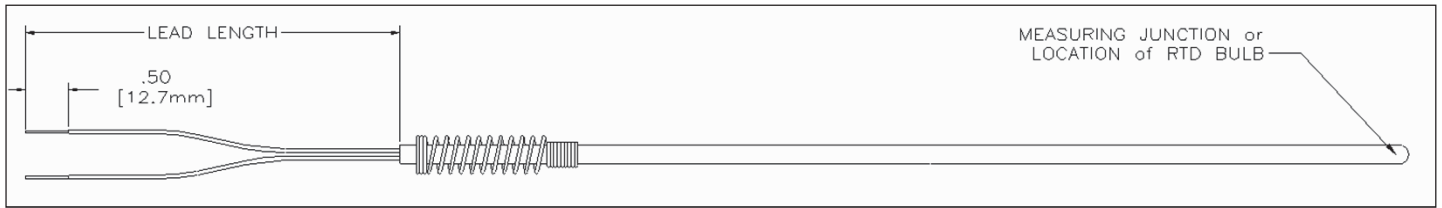



TABLE V - Sensor Type

				Availability													
				Selection	000	0TB	STT17				STT25						
							1	3	H	F	M	D	H	S	T		
Sensor Type	No sensor			00 __	o	o	o	o	o	o	o	o	o	o	o	o	
	Compatible with STT:			17X	25X	35X											
	Thermocouples																
	1 x Type E (IEC)	3, H, F, P	H, M, D, T	0, F	T1 __	•	•	•	•	•	•	•	•	•	•	•	•
	2 x Type E (IEC)	H, F, P	T	0, F	T2 __	•	•	•	•	•	•	•	•	•	•	•	•
	1 x Type J (IEC)	3, H, F, P	H, M, D, T	0, F	T3 __	•	•	•	•	•	•	•	•	•	•	•	•
	2 x Type J (IEC)	H, F, P	T	0, F	T4 __	•	•	•	•	•	•	•	•	•	•	•	•
	1 x Type K (IEC)	3, H, F, P	H, M, D, T	0, F	T5 __	•	•	•	•	•	•	•	•	•	•	•	•
	2 x Type K (IEC)	H, F, P	T	0, F	T6 __	•	•	•	•	•	•	•	•	•	•	•	•
	1 x Type N (IEC)	3, H, F, P	H, M, D	0, F	T7 __	•	•	•	•	•	•	•	•	•	•	•	•
	1 x Type T (IEC)	3, H, F, P	H, M, D, T	0, F	T8 __	•	•	•	•	•	•	•	•	•	•	•	•
	2 x Type T (IEC)	H, F, P	T	0, F	T9 __	•	•	•	•	•	•	•	•	•	•	•	•
	RTD Applications (-58 to +500°F)																
	1 x Pt100 (IEC), 2-wire	1, 3, H, F	H, M, D, T	0, F	R1 __	•	v	v	v	v	v	v	v	v	v	v	v
	1 x Pt100 (IEC), 3-wire	1, 3, H, F	H, M, D, T	0, F	R2 __	•	v	v	v	v	v	v	v	v	v	v	v
	1 x Pt100 (IEC), 4-wire	1, 3, H, F	H, M, D, T	0, F	R3 __	•	v	v	v	v	v	v	v	v	v	v	v
	2 x Pt100 (IEC), 3-wire	H, F	T	0, F	R4 __	•	v	v	v	v	v	v	v	v	v	v	v
	1 x Pt200 (IEC), 3-wire	-	H, M, D	0, F	R5 __	•	v	v	v	v	v	v	v	v	v	v	v
	1 x Pt500 (IEC), 3-wire	-	-	0, F	R6 __	•	v	v	v	v	v	v	v	v	v	v	v
	1 x Pt1000 (IEC), 3-wire	H, F	M	-	R7 __	•	v	v	v	v	v	v	v	v	v	v	v
	RTD Applications (-292 to +932°F)																
	1 x Pt100 (IEC), 2-wire	1, 3, H, F	H, M, D, T	0, F	H1 __	•	•	•	•	•	•	•	•	•	•	•	•
	1 x Pt100 (IEC), 3-wire	1, 3, H, F	H, M, D, T	0, F	H2 __	•	•	•	•	•	•	•	•	•	•	•	•
	1 x Pt100 (IEC), 4-wire	1, 3, H, F	H, M, D, T	0, F	H3 __	•	•	•	•	•	•	•	•	•	•	•	•
	2 x Pt100 (IEC), 3-wire	H, F	T	0, F	H4 __	•	•	•	•	•	•	•	•	•	•	•	•
	1 x Pt200 (IEC), 3-wire	-	H, M, D	0, F	H5 __	•	•	•	•	•	•	•	•	•	•	•	•
	1 x Pt500 (IEC), 3-wire	-	-	0, F	H6 __	•	•	•	•	•	•	•	•	•	•	•	•
	1 x Pt1000 (IEC), 3-wire	H, F	M	-	H7 __	•	•	•	•	•	•	•	•	•	•	•	•
Sensor Grounding	No sensor			__ 0 __	r	r	r	r	r	r	r	r	r	r	r	r	
	Grounded (standard for T/Cs and not applicable for RTDs)			__ G __	s	s	s	s	s	s	s	s	s	s	s	s	
	Ungrounded (standard for RTDs but also applicable for TCs)			__ U __	•	•	•	•	•	•	•	•	•	•	•	•	
Lead Length	Factory Defaults : Table V : 000D - No Lead length																
	Table I: 000,35_ - 9" Lead length			__ _ D	•	•	•	•	•	•	•	•	•	•	•	•	
	Table I : 0TB,17_,25_ - 6" Lead length																

Note: only one side of a duplex probe is connected to the transmitter

Table VI - Thermowell (continued)			Availability										
			STT17				STT25						
Insertion Length "U"	Selection		000	0TB	1	3	H	F	M	D	H	S	T
	0 in. (No Thermowell)	----- 00 _		w	w	w	w	w	w	w	w	w	w
1 in.	----- 01 _		•	•	•	•	•	•	•	•	•	•	•
2 in.	----- 02 _		•	•	•	•	•	•	•	•	•	•	•
3 in.	----- 03 _		•	•	•	•	•	•	•	•	•	•	•
4 in.	----- 04 _		•	•	•	•	•	•	•	•	•	•	•
5 in.	----- 05 _		•	•	•	•	•	•	•	•	•	•	•
6 in.	----- 06 _		•	•	•	•	•	•	•	•	•	•	•
7 in.	----- 07 _		•	•	•	•	•	•	•	•	•	•	•
8 in.	----- 08 _		•	•	•	•	•	•	•	•	•	•	•
9 in.	----- 09 _		•	•	•	•	•	•	•	•	•	•	•
10 in.	----- 10 _		•	•	•	•	•	•	•	•	•	•	•
11 in.	----- 11 _		•	•	•	•	•	•	•	•	•	•	•
12 in.	----- 12 _		•	•	•	•	•	•	•	•	•	•	•
13 in.	----- 13 _		•	•	•	•	•	•	•	•	•	•	•
14 in.	----- 14 _		•	•	•	•	•	•	•	•	•	•	•
15 in.	----- 15 _		•	•	•	•	•	•	•	•	•	•	•
16 in.	----- 16 _		•	•	•	•	•	•	•	•	•	•	•
17 in.	----- 17 _		•	•	•	•	•	•	•	•	•	•	•
18 in.	----- 18 _		•	•	•	•	•	•	•	•	•	•	•
19 in.	----- 19 _		•	•	•	•	•	•	•	•	•	•	•
20 in.	----- 20 _		•	•	•	•	•	•	•	•	•	•	•
21 in.	----- 21 _		•	•	•	•	•	•	•	•	•	•	•
22 in.	----- 22 _		•	•	•	•	•	•	•	•	•	•	•
23 in.	----- 23 _		•	•	•	•	•	•	•	•	•	•	•
24 in.	----- 24 _		•	•	•	•	•	•	•	•	•	•	•
Decimal	.00 in. or No sensor	----- 0	•	•	•	•	•	•	•	•	•	•	•
	.25 in.	----- 2	x	x	x	x	x	x	x	x	x	x	x
	.50 in.	----- 5	x	x	x	x	x	x	x	x	x	x	x
	.75 in.	----- 7	x	x	x	x	x	x	x	x	x	x	x

TABLE VII - Safety Approvals

Approval Body	Approval Type	Location or Classification	Selection	Availability										
				000	0TB	1	3	H	F	M	D	H	S	T
None	No approval body certifications included		00	•	•	•	•	•	•	•	•	•	•	
FM	Explosion-Proof	Class I, Div. 1, Groups A**,B,C,D	1D		g	g	g	g	g	g	g	g	g	
	Dust Ignition-Proof	Class II, Div. 1, Groups E,F,G												
Dust Ignition-Proof	Class III, Div. 1 T***													
	Environmental	NEMA 4X****												
	Flameproof	Class I, Zone 1, IIC**, T***	15		g	g	g	g	g	g	g	g	g	
	Environmental	IP66****												
CSA	Explosion-Proof	Class I, Div. 1, Groups B,C,D	2K		g	g	g	g	g	g	g	g	g	
	Dust Ignition-Proof	Class II, Div. 1, Groups E,F,G												
	Dust Ignition-Proof	Class III, Div. 1 T***												
	Flameproof	Ex d IIC, T***												
	Environmental	NEMA 4X/IP66****												
ATEX	Flameproof, zone 1	Flameproof  Ex d IIC T6, Ambient Limits -20 to +60°C	3D		•	•	•	•	•	•	•	•	•	

** Enclosures supplied in stainless steel and enclosures with a window are de-rated to Gas Groups B, C, & D and Zone 1 Group IIB + H₂

*** Temperature Class (T-Codes) is T6 with terminal block or dependant on transmitter.

**** Type 4X and IP66 ratings are dependent upon the enclosure, nipple extension and thermowell materials. IP66 dependent upon enclosure and a thermowell is required.

** Environmental ratings per CSA markings on the Head-mount enclosure.

NOTICE: The temperature probe, head-mount housings, extension hardware and thermowell are supplied and certified by Thermo Electric Company, Inc., 60A Commerce Way, Totowa, NJ 07512. The temperature transmitter module is supplied by Honeywell International Inc.

TABLE VIII - Assembly Options	Selection	Availability										
		000	0TB	1	3	H	F	M	D	H	S	T
No options	000	•	•	•	•	•	•	•	•	•	•	•
Internal hydrostatic pressure test of thermowell (2500 PSI Standard)	PT1	t	t	t	t	t	t	t	t	t	t	t
External hydrostatic pressure test of thermowell (2500 PSI Standard) (4)	PT2	n	n	n	n	n	n	n	n	n	n	n
NACE certificate (applies to Well)	HT1	t	t	t	t	t	t	t	t	t	t	t
Clean for oxygen service (ASTM G93-96)	XGN	t	t	t	t	t	t	t	t	t	t	t
Clean for chlorine service (The Chlorine Institute, Inc. Pamphlet 6)	CLN	t	t	t	t	t	t	t	t	t	t	t
Frequency calculation (Murdock, ASME PTC-19.3 TW-2010) (Velocity, pressure and temp. required)	FRQ	t	t	t	t	t	t	t	t	t	t	t
Thermowell material certificate	TMC	t	t	t	t	t	t	t	t	t	t	t
Canadian registration number (CRN)	CRN	t	t	t	t	t	t	t	t	t	t	t
Transmitter with Probe calibration (system) @ 2 points, Single Sensor (specify range)	TC1			j	j	j	j	j	j	j	j	j
Transmitter with Probe calibration (system) @ 2 points, Duplex Sensor	TC2			j	j	j	j	j	j	j	j	j
Probe Calibration Data Certificate (2-point info to be provided)	AP2	m	m	m	m	m	m	m	m	m	m	m
Probe Calibration Data Certificate (3-point info to be provided)	AP3	m	m	m	m	m	m	m	m	m	m	m
Probe Calibration Data Certificate (4-point info to be provided)	AP4	m	m	m	m	m	m	m	m	m	m	m
Upgrade to Special Limits Thermocouple Calibration to ANSI MC96.1 and ASTM E230, Single	SP1	p	p	p	p	p	p	p	p	p	p	p
Upgrade to Special Limits Thermocouple Calibration to ANSI MC96.1 and ASTM E230, Duplex	SP2	q	q	q	q	q	q	q	q	q	q	q
Upgrade to ASTM E1137 Grade A RTD, Single	CL1	l	l	l	l	l	l	l	l	l	l	l
Upgrade to ASTM E1137 Grade A RTD, Duplex	CL2	i	i	i	i	i	i	i	i	i	i	i

(4) external not available on socket welds

RESTRICTIONS

Restriction Letter	Available Only With		Not Available With	
	Table	Selection	Table	Selection
a	VI	000000000000		
b		Make one selection from this group		
c			VII	1D, 2K, 15
d	III	EPE_, STE_		
e			III	000_
f	III		VII	2K
g	IV	X_ , H02S	VI	0_
h	III	000_		
i	V	R4_ , H4_		
j	II	TC	V	00_
k			VII	3D
l	V	R1_ to R3_ , R5_ to R7_ , H1_ to H3_ , H5_ to H7_		
m			V	00_
n			VI	0_ , M_ , N_
o			VII	1D, 2K, 3D, 15
p	V	T1_ , T3_ , T5_ , T7_ , T8_		
q	V	T2_ , T4_ , T6_ , T9_		
r	V	00_		
s			VII	3D
t			V	00_ , R1_ to R7_ , H1_ to H7_
u	VI	0_	VI	0_
v			VII	1D, 15
w	VI	0_		
x	V	00_	VI	0_

Length "U"	VI	N	P	R
1 in.	01	72	72	79
2 in.	02	73	73	81
3 in.	03	73	73	88
4 in.	04	81	81	90
5 in.	05	92	92	102
6 in.	06	96	96	107
7 in.	07	113	113	125
8 in.	08	122	122	135
9 in.	09	131	131	148
10 in.	10	162	162	178
11 in.	11	173	173	192
12 in.	12	186	186	206
13 in.	13	197	197	221

Length "L"	VI	N	P	R
14 in.	14	210	210	231
15 in.	15	246	246	268
16 in.	16	254	254	277
17 in.	17	291	291	315
18 in.	18	306	306	331
19 in.	19	322	322	347
20 in.	20	337	337	365
21 in.	21	376	376	406
22 in.	22	396	396	427
23 in.	23	416	416	448
24 in.	24	437	437	470

Note: To request a quotation or "Other special requests", email ace@honeywell.com