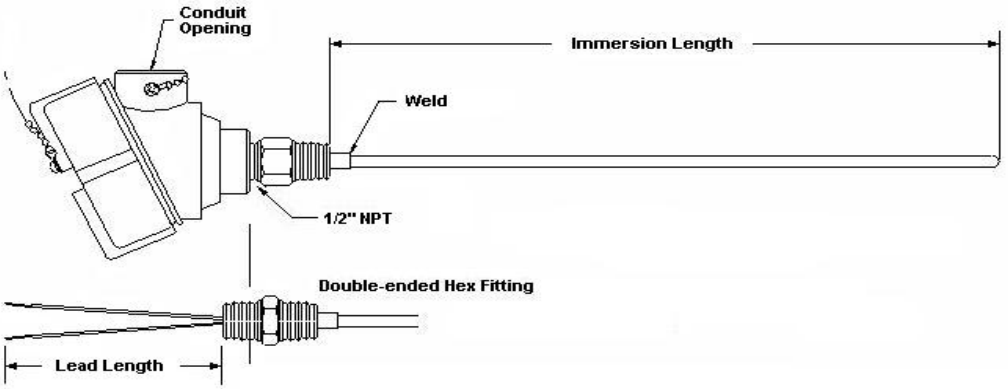
STT 3000 Temperature Probe Assemblies
Series STT820 - Rigid Probe Assembly

Model Selection Guide

Model Selection Guide
34-44-16U-08 Issue 1

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, Options
STT820	- ___	- __'__	- ____	- _______	- __	- ___'___

Key Number	Selection	Availability
Rigid Probe Assembly	STT820	●

Transmitter options:

STT170 SERIES

STT250 SERIES

STT350 SERIES

TABLE I - Transmitter Selection	Selection	Availability: STT17 1	STT17 3	STT17 H	STT17 F	STT25 M	STT25 D	STT25 H	STT25 T	STT35 0	STT35 F
No transmitter, no housing	000	●	●	●	●	●	●	●	●	●	●
No transmitter, head mount housing with terminal block only	0TB	●	●	●	●	●	●	●	●	●	●
Wired to STT171 (Analog)	171	●									
Wired to STT173 (Analog)	173		●								
Wired to STT17H (HART)	17H			●							
Wired to STT17F (Fieldbus)	17F				●						
Wired to STT25M (Analog)	25M					●					
Wired to STT25D (DE)	25D						●				
Wired to STT25H (HART)	25H							●			
Wired to STT25T (HART)	25T								●		
Wired to STT350 (Analog/DE)	350									●	
Wired to STT35F (Fieldbus)	35F										●

NOTE: Transmitters have additional certifications as Intrinsically Safe, Non-incendive and Non-sparking. See transmitter specifications for details.

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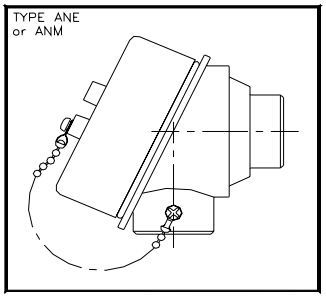
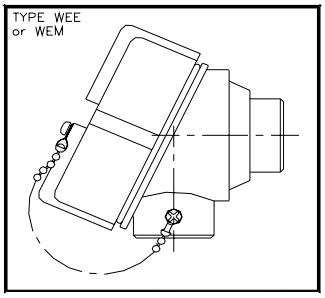
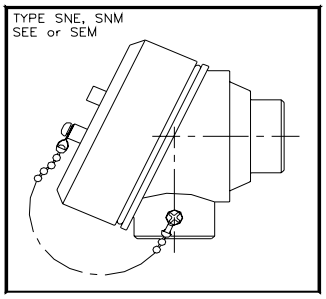
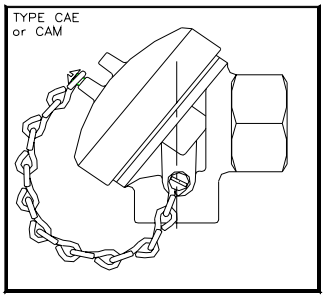
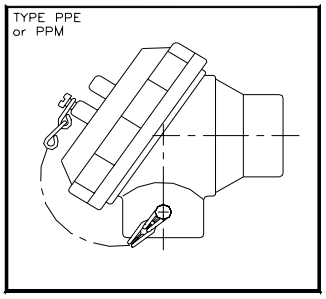
TABLE II - STT Options		Selection	STT17 1	STT17 3	STT17 H	STT17 F	STT25 M	STT25 D	STT25 H	STT25 T	STT35 0	STT35 F	
No options		00	•	•	•	•	•	•	•	•	•	•	
Configur-ation	Transmitter Configuration (See 13:STT-OE pages for choices)	TC	•	•	•	•	•	•	•	•	•	•	
Customer Tagging	316 SS Wired-on Customer I.D. Tag (4 lines, 28 chars.)	TG	e	e	e	e	e	e	e	e	e	e	
	316 SS Wired-on Customer I.D. Tag (blank)	TB	e	e	e	e	e	e	e	e	e	e	
Owners Manual (Transmitter)	STT35F English Language Version	EF										•	
	STT350 English Language Version	EN									•		
	STT350 French Language Version	FR									•		
	STT350 Spanish Language Version	SP									•		
	STT250 English Language Version	EM					•	•	•	•			
	STT250 French Language Version	FM					•	•	•	•			
	STT250 Spanish Language Version	SM					•	•	•	•			
	STT250 Chinese Language Version	CM					•	•	•	•			
	STT171 Version; English, French, German Language	M1	•										
	STT173 Version; English, French, German Language	M3		•									
	STT17H Version; English, French, German Language	MH			•								
	STT17F Version; English, French, German Language	MF				•							
Mounting Arrangement	Carbon Steel angle Mounting Bracket for 2" Pipe	MB	d	d	d	d	d	d	d	d	d	d	b
	Stainless Steel angle Mounting Bracket for 2" Pipe	SB	d	d	d	d	d	d	d	d	d	d	
	Carbon Steel Flat Mounting Bracket for 2" Pipe	FB	d	d	d	d	d	d	d	d	d	d	
	Spring Loading Mounting set	LB	w	w	w	w	w	w	w	w			
	DIN Rail Mounting via Clip (to Top Hat or "G" Rail)	DB	h	h	h	h	h	h	h	h	h	h	
316 SS Conduit Adaptor for Wiring Entry	1/2" NPT to M20 x 1.5 (EEx d IIC approved) - 1 Adaptor	A1	j	j	j	j	j	j	j	j	j	j	b
	1/2" NPT to M20 x 1.5 (Qty. 2) (EEx d IIC approved) -2 Adaptors	A2	j	j	j	j	j	j	j	j	j	j	
	1/2" NPT to 3/4" NPT - 1 Adaptor	A3	j	j	j	j	j	j	j	j	j	j	
Lightning Protection	Externally Mountable to Field Mount Housing	EL	d	d	d	d	d	d	d	d	d	d	b
	Internal Surge/ Lightning Protection	SL	d	d	d	d	d	d	d	d	d	d	
Warranty	Additional Transmitter Warranty - 1 year	W1	•	•	•	•	•	•	•	•	•	•	b
	Additional Transmitter Warranty - 2 years	W2	•	•	•	•	•	•	•	•	•	•	
	Additional Transmitter Warranty - 3 years	W3	•	•	•	•	•	•	•	•	•	•	
	Lifetime Warranty - 15 years	WL									x	x	
Optional Certificate	Factory Transmitter Configuration/ Calibration Certificate	CD	•	•	•		•	•	•	•	•	•	
	SIL + Config./ Calibration Certificate	CS							f				
	Certificate of Conformance/ Origin	CC	•	•	•	•	•	•	•	•	•	•	
	SIL + Conformance/ Origin Certificate	CO							f				
	Certificate of Origin (F0195)	CF	•	•	•	•	•	•	•	•	•	•	











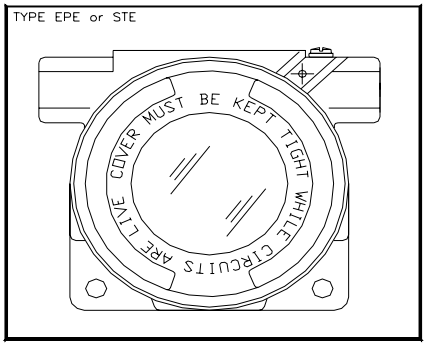


TABLE III - Housing and Meters		Selection	Availability STT17 1	STT17 3	STT17 H	STT17 F	STT25 M	STT25 D	STT25 H	STT25 T	STT35 0	STT35 F
No housing		000_	●	●	●	●	●	●	●	●	e	e
Head-mount Housings	**Conduit Entry**											
General purpose aluminum	1/2" NPT	ANE_	●	●	●	●	●	●	●	●		
General purpose aluminum	3/4" NPT	ANF _	●	●	●	●	●	●	●	●	g	g
General purpose aluminum	M20	ANM_	●	●	●	●	●	●	●	●		
Explosion proof aluminum	1/2" NPT	WEE_	●	●	●	●	●	●	●	●		
Explosion proof aluminum	3/4" NPT	WEF _	●	●	●	●	●	●	●	●	g	g
Explosion proof aluminum	M20	WEM_	●	●	●	●	●	●	●	●		
General purpose stainless steel	1/2" NPT	SNE_	●	●	●	●	●	●	●	●		
General purpose stainless steel	3/4" NPT	SNF _	●	●	●	●	●	●	●	●	g	g
General purpose stainless steel	M20	SNM_	●	●	●	●	●	●	●	●		
Explosion proof stainless steel	1/2" NPT	SEE_	●	●	●	●	●	●	●	●		
Explosion proof stainless steel	3/4" NPT	SEF _	●	●	●	●	●	●	●	●	g	g
Explosion proof stainless steel	M20	SEM_	●	●	●	●	●	●	●	●		
Cast Iron	1/2" NPT	CAE_	●	●	●	●	●	●	●	●		
Cast Iron	3/4" NPT	CAF _	●	●	●	●	●	●	●	●	g	g
Cast Iron	M20	CAM_	●	●	●	●	●	●	●	●		
Polypropylene	1/2" NPT	PPE_	●	●	●	●	●	●	●	●		
Polypropylene	3/4" NPT	PPF _	●	●	●	●	●	●	●	●	g	g
Polypropylene	M20	PPM_	●	●	●	●	●	●	●	●		
Field-mount Honeywell Housings												
Aluminum explosion proof with Beige Epoxy Coating	1/2" NPT	EPE_	●	●	●	●	●	●	●	●	●	●
Explosion-Proof 316 Stainless Steel	1/2" NPT	STE_	●	●	●	●	●	●	●	●	●	●
Integral Meter												
No Integral Meter Supplied		___0	●	●	●	●	●	●	●	●	●	●
Analog Meter for Field Mount Housing		___M					i	i	i	i	i	
E.U. Meter for Field Mount Housing		___E	o	o	o				o	o		
Smart Meter for Field Mount Housing		___S					s	s			s	
Fieldbus Meter for Field Mount Housing		___F										u

TABLE IV - Sensor Type					Selection	Availability STT17 1	STT17 3	STT17 H	STT17 F	STT25 M	STT25 D	STT25 H	STT25 T	STT35 0	STT35 F
Sensor Type	**No sensor**				00 _ _ _ _ _	•	•	•	•	•	•	•	•	•	•
	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 (-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
	Grounded (standard for T/Cs)				_ _ G _ _ _ _	•	•	•	•	•	•	•	•	•	•
	Ungrounded (standard for RTDs)				_ _ U _ _ _ _	•	•	•	•	•	•	•	•	•	•
Immerson Length "I"	Whole Number	No sensor			_ _ _ 00 _ _	r	r	r	r	r	r	r	r	r	r
		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 _	•	•	•	•	•	•	•	•	•	•
		.50 in.			_ _ _ _ _ 5 _	•	•	•	•	•	•	•	•	•	•
		.75 in.			_ _ _ _ _ 7 _	•	•	•	•	•	•	•	•	•	•
Lead Length	Six inches (6") - Used for Terminal Blocks, STT17x, STT25x				_ _ _ _ _ _ 6	•	•	•	•	•	•	•	•	•	•
	Nine inches (9") - Used for STT35x				_ _ _ _ _ _ 9	•	•	•	•	•	•	•	•	•	•

Note: Hex nipple is 316 Stainless Steel, straight nipple, unions (unless XP) are 304 Stainless steel. XP unions are plated carbon steel

TABLE V - Safety Approvals (Housing & Transmitter)

Approval Body	Approval Type	Location or Classification	Selection	Availability									
				1	3	H	F	M	D	H	T	0	F
None	No approval body certifications included		00	•	•	•	•	•	•	•	•	•	•
FM	Explosion-Proof	Class I, Div. 1,2, Groups B,C,D	1D	a	a	a	a	a	a	a	a	a	a
	Dust Ignition-Proof	Class II, Div. 1,2, Groups E,F,G											
	Outdoor Location	NEMA 4X											
CSA	Explosion-Proof	Class I, Div. 1, Groups B,C,D	2D	a	a	a	a	a	a	a	a	a	a
	Dust Ignition-Proof	Class II, Div. 1, Groups E,F,G											
	Outdoor Location	Enclosure Type 4X											
ATEX	Flameproof, zone 1	EEx d IIC T6 Enclosure rated IP 66/67	3D	a	a	a	a	a	a	a	a	a	a

TABLE VI - Assembly Options	Selection	1	3	H	F	M	D	H	T	0	F
No options	000	•	•	•	•	•	•	•	•	•	•
External hydrostatic pressure test (2500 PSI Standard)	PT2	•	•	•	•	•	•	•	•	•	•
Transmitter with Probe calibration (system) @ 2 points, Single Sensor (specify range)	TC1	m	m	m	m	m	m	m	m	m	m
Transmitter with Probe calibration (system)@ 2 points, Duplex Sensor	TC2	m	m	m	m	m	m	m	m	m	m
Clean for oxygen service (ASTM G93-96)	XGN	•	•	•	•	•	•	•	•	•	•
Clean for chlorine service (The Chlorine Institute, Inc. Pamphlet 6)	CLN	•	•	•	•	•	•	•	•	•	•
Probe Calibration Data Certificate (2-point info to be provided)	AP2	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
Probe Calibration Data Certificate (4-point info to be provided)	AP4	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	•	•	•	•	•	•	•	•	•	•
Upgrade to Special Limits Thermocouple Calibration to ANSI MC96.1 and ASTM E230, Duplex	SP2	•	•	•	•	•	•	•	•	•	•
Upgrade to ASTM E1137 Grade A RTD, Single	CL1	•	•	•	•	•	•	•	•	•	•
Upgrade to ASTM E1137 Grade A RTD, Duplex	CL2	•	•	•	•	•	•	•	•	•	•

RESTRICTIONS

Restriction Letter	Available Only With		Not Available With	
	Table	Selection	Table	Selection
a	Not available - Pending Approval			
d	III	EPE_, STE_		
e			III	000_
f	I	25H		
g			I	350, 35F
h	III	000_		
i	I	25M		
j	III	WEE_, WEF_, WEM_, SEE_, SEF_, SEM_, EPE_, STE_		
m			IV	00 _ _ _ _ _
o	I	171, 173, 17H, 25H, 25T		
r	IV	00 _ _ _ _ _		
s	I	25M, 25D, 350		
u	I	35F		
w			I	350, 35F
x		350, 35F	I	

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