

## ST 3000 Smart Transmitter Gage Pressure (GP) & Absolute Pressure (AP) Series 100

## Model Selection Guide



### Instructions

- Select the desired Key Number. The arrow to the right marks the selection available.
- Make one selection from each Table (I, II and IV) using the column below the proper arrow.
- Select as many Table III options as desired plus a required communications option selection.
- A (●) denotes unrestricted availability. A letter denotes restricted availability.
- Restrictions follow Table IV.

Key Number      I      II      III (Optional)      IV  
 [ ] - [ ] - [0000] - [ ] + [X X X X]

### KEY NUMBER

	Design	Span	Selection	Availability							
Gage Pressure	Single Head	0-5 to 0-500 psi / 0-0.34 to 0-35 bar	STG140			↓					
		0-30 to 0-3,000 psi / 0-2.1 to 0-210 bar	STG170			↓					
		0-60 to 0-6,000 psi / 0-4.1 to 0-420 bar	STG180				↓				
	In-Line	0-5 to 0-500 psi / 0-0.34 to 0-35 bar	STG14L					↓			
		0-30 to 0-3,000 psi / 0-2.1 to 0-210 bar	STG17L						↓		
		0-60 to 0-6,000 psi / 0-4.1 to 0-420 bar	STG18L							↓	
Absolute Pressure	Single Head	0-50 to 0-780 mm HgA / 0-67 to 0-1,040 mbarA	STA122	↓							
		0-5 to 0-500 psi/0-0.34 to 0-35 bar absolute	STA140		↓						
		0-50 to 0-780 mm HgA / 0-67 to 0-1,040 mbarA	STA12L								↓
	In-Line	0-5 to 0-500 psia / 0-0.34 to 0-35 barA	STA14L						↓		
		0-30 to 0-3,000 psia / 0-2.1 to 0-210 barA	STA17L							↓	

**Important Note:** Base STG and STA models no longer include a default communications option. All units now require the selection of a communication option from Table III (AN, DE, HC, H6 or FF).

TABLE I - METER BODY

	Wetted Process Heads / Bonnet	Vent/Drain Valves	Barrier Diaphragms	Selection										
Materials of Construction	Carbon Steel <sup>1</sup>	-	316L SS	A __	●	●	●	●	●					
	Carbon Steel <sup>1</sup>	-	Hastelloy® C-276 <sup>3</sup>	B __	●	●	●	●	●					
	Carbon Steel <sup>1</sup>	-	Monel 400® <sup>4</sup>	C __	19	19	19	19						
	316 SS <sup>5</sup>	-	316L SS	E __	●	●	●	●	●					
	316 SS <sup>5</sup>	-	316L SS	E __						●	●	●	●	
	316 SS <sup>5</sup>	-	Hastelloy® C-276 <sup>3</sup>	F __	●	●	●	●	●					
	316 SS <sup>5</sup>	-	Hastelloy® C-276 <sup>3</sup>	F __						●	●	●	●	
	316 SS <sup>5</sup>	-	Monel 400® <sup>4</sup>	G __	19	19	19	19						
	Hastelloy® C-276 <sup>3,6</sup>	-	Hastelloy® C-276 <sup>3</sup>	J __	●	●	●	●	●					
	Monel 400® <sup>7</sup>	-	Monel 400® <sup>4</sup>	L __	19	19	19	19						
Fill Fluid	Silicone DC®200 <sup>8</sup>			_ 1 _	●	●	●	●	●	●	●	●	●	●
	CTFE (Halocarbon 6.3)			_ 2 _		●	●	●	●	●	●	●	●	
	CTFE (MO-10)			_ 4 _	●									●
Process Connection Configuration	9/16" - 18 Aminco			_ _ A			●	●	●	●	●	●	●	●
	1/2 NPT (female)			_ _ G	●	●	●	●	●	●	●	●	●	●
	1/2 NPT (male)			_ _ H						●	●	●	●	●
	DIN 19213			_ _ D						●	●	●	●	●

<sup>1</sup> Carbon Steel heads are zinc-plated and not recommended for water service due to hydrogen migration. For that service, use 316 stainless steel Wetted Process Heads.

<sup>3</sup> Hastelloy® C-276 or UNS N10276

<sup>4</sup> Monel 400® or UNS N04400

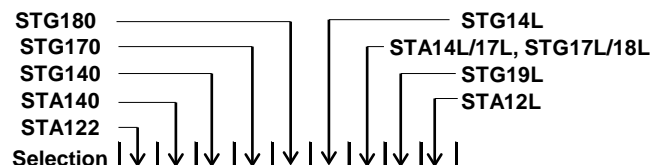
<sup>5</sup> Supplied as 316 SS or as Grade CF8M, the casting equivalent of 316 SS.

<sup>6</sup> Supplied as indicated or as Grade CW12MW, the casting equivalent of Hastelloy® C-276

<sup>7</sup> Supplied as indicated or as Grade M30C, the casting equivalent of Monel 400®

<sup>8</sup> Use DC®704 option when the STA122 or STA12L will be operating below 50mm HgA, see Fig. 2 in Specification 34-ST-03-65.

\* STG1\_L has 316L SS process interface.



No Selection

No Selection	00000	.	.	.	.	.	.	.	.	.
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**Communication Options** *(Must choose a communications option)*

Analog only ( <i>can be configured using appropriate Honeywell DE tool</i> )	AN	●	●	●	●	●	●	●	●	●
DE Protocol communications	DE	●	●	●	●	●	●	●	●	●
HART® 6.x Protocol Compatible Electronics	H6	●	●	●	●	●	●	●	●	●
FUNDATION™ Fieldbus Communications	FF	r	r	r	r	r	r	r	r	r

Analog Meter (0-100 Even 0-10 Square Root)

Smart Meter	SM	●	●	●	●	●	●	●	●
Custom Configuration of Smart Meter	CI	e	e	e	e	e	e	e	e
Local Zero & Span	ZS			m	m	m	m	m	
Local Zero	LZ			x	x	x	x	x	

*No housing conduit plugs come standard with the ST 3000.*

For certain approval codes, you **must** select a certified conduit plug from below and it will come packaged in the box with your transmitter.

316 SS <sup>5</sup> Electronics Housing - <i>(with M20 Conduit Connections)</i>	SH	n	n	n	n	n	n	n	n	n
316 SS <sup>5</sup> Electronics Housing - <i>(with M20 to 1/2 NPT 316 SS Conduit Adapter for use with FM and CSA Approval codes)</i>	A3	i	i	i	i	i	i	i	i	i
1/2 NPT to M20 316 SS Conduit Adaptor <i>(Certified ATEX, CSA &amp; IECEx)</i>	A1	n	n	n	n	n	n	n	n	n
1/2 NPT to 3/4 NPT 316 SS Conduit Adaptor <i>(Certified ATEX, CSA &amp; IECEx)</i>	A2	●	●	●	●	●	●	●	●	●
M20 Male to 1/2 NPT Female 316 SS Conduit Adaptor <i>(Certified ATEX, CSA &amp; IECEx)</i>	A4	●	●	●	●	●	●	●	●	●
1/2 NPT Zinc-plated Certified Conduit Plug <i>(ATEX, CSA &amp; IECEx)</i>	A5	●	●	●	●	●	●	●	●	●
1/2 NPT 316 SS Certified Conduit Plug <i>(ATEX, CSA &amp; IECEx)</i>	A6	●	●	●	●	●	●	●	●	●
M20 316 SS Certified Conduit Plug <i>(ATEX, CSA &amp; IECEx)</i>	A7	●	●	●	●	●	●	●	●	●
1/2 NPT Non-certified Conduit plug <i>(Zinc-plated carbon steel, general use)</i>	A8	●	●	●	●	●	●	●	●	●
NAMUR Failsafe Software	NE	15	15	15	15	15	15	15	15	15
SIL 2 - TÜV Certified transmitter <i>(requires HC/H6 and WP options)</i>	SL	p	p	p	p	p	p	p	p	p
Lightning Protection	LP	●	●	●	●	●	●	●	●	●
Custom Calibration and I.D. in Memory	CC	●	●	●	●	●	●	●	●	●
Transmitter Configuration - <i>(non-Fieldbus)</i>	TC	15	15	15	15	15	15	15	15	15
Transmitter Configuration - <i>(Fieldbus)</i>	FC	21	21	21	21	21	21	21	21	21
Write Protection <i>(Delivered in "ON" position)</i>	WP	●	●	●	●	●	●	●	●	●
Write Protection <i>(Delivered in "OFF" position)</i>	WX	g	g	g	g	g	g	g	g	g
Stainless Steel Customer Wired-On Tag <i>(4 lines, 26 characters per line, customer supplied information)</i>	TG	●	●	●	●	●	●	●	●	●
Stainless Steel Customer Wired-On Tag <i>(blank)</i>	TB	●	●	●	●	●	●	●	●	●
High Accuracy	HA			d			d			

A286 SS (NACE) Bolts and 304 SS (NACE) Nuts for Head

316 SS Bolts and 316 SS Nuts for Process Heads	SS			f	f	f
Modified DIN Process Heads - 316 SS	DN	w	w	w	w	w
Viton® Process Head Gasket ( <i>Teflon® is standard</i> )	VT			z	z	z
Graphite Process Head Gasket	GF	•	•	•		
Teflon® Process Head Gasket ( <i>Viton® is standard</i> )	TF	•	•			

Angle Mounting Bracket - Carbon Steel

Marine Approved Angle Mounting Bracket - Carbon Steel	MX	●	●	●	●	●	●	●	●	●
Angle Mounting Bracket - 304 SS	SB	●	●	●	●	●	●	●	●	●
Marine Approved Angle Mounting Bracket - 304 SS	SX	●	●	●	●	●	●	●	●	●
Flat Mounting Bracket - Carbon Steel	FB	●	●	●	●	●	●	●	●	●

User's Manual Paper Copy (Standard, HC, H6 or FF ships accordingly)

Clean Transmitter for Oxygen or Chlorine Service with Certificate (50039190)	0X	h	h	h	h	h	h	h	h	h
Over-Pressure Leak Test with Certificate (F3392)	TP	•	•	•	•	•	•	•	•	•
Calibration Test Report and Certificate of Conformance (F3399)	F1	•	•	•	•	•	•	•	•	•
Certificate of Conformance (F3391)	F3	•	•	•	•	•	•	•	•	•
Certificate of Origin (F0195)	F5	•	•	•	•	•	•	•	•	•
SIL Certificate (SIL 2/3) (FC33337)	FE	22	22	22	22	22	22	22	22	22
NACE Certificate (Process-Wetted & Non-Process Wetted) (FC33339)	F7	o	o	o	o	o	•	•	•	•
NACE Certificate (Process-Wetted) (FC33338)	FG	•	•	•	•	•	•	•	•	•
Material Traceability Certification per EN 10204 3.1 (FC33341)	FX	•	•	•	•	•	•	•	•	•
Marine Type Approvals (DNV, ABS, BV, KR & LR) (FC33340)	MT	2	2	2	2	2	2	2	2	2

Table III continued next page

<sup>5</sup> Supplied as 316 SS or as Grade CF8M, the casting equivalent of 316 SS.

<sup>8</sup> Viton<sup>®</sup> or Fluorocarbon Elastomer

<sup>9</sup> Teflon<sup>®</sup> or PTFE

STG180  
STG170  
STG140  
STA140  
STA122

STG14L  
STA14L/17L, STG17L/18L  
STG19L  
STA12L

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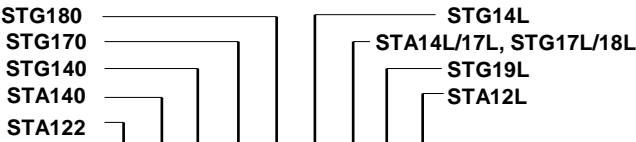


TABLE III - OPTIONS (continued)

Approval Body	Approval Type	Location or Classification	Selection											
Canadian Standards Association (CSA)	Explosion Proof	Class I, Div. 1, Groups B,C,D	2J											
	Dust-Ignitionproof	Class II, III, Div. 1, Groups E,F,G		24	24	24	24	24	24	24	4	24		
	Intrinsically Safe	Class I, II, III, Div. 1, Groups A,B,C,D,E,F,G												
IECEX	Flameproof, Zone 1	Ex d IIC; T5 (Ta = -40 to +93°C), T6 (Ta = -40 to +78°C)	CA	24	24	24	24	24	24	24	24	24		
	Intrinsically Safe, Zone 0/1	Ex ia IIC; T3, T4, T5, T6 See Spec for detailed temperature codes by Communications option												
SAEx (South Africa)	Intrinsically Safe, Zone 0/1	Ex ia IIC T4, T5, T6	Z2	•	•	•	•	•	•	•	•	•		
	Flameproof, Zone 1	EX d IIC T5, T6 Enclosure IP 66/67	ZD	•	•	•	•	•	•	•	•	•		
	Multiple Marking <sup>11</sup> Int. Safe, Zone 0/1, or Flameproof, Zone 1	Ex ia IIC T4, T5, T6 Ex d IIC T5, T6 Enclosure IP 66/67	ZA	•	•	•	•	•	•	•	•	•		
CERTUSP INMETRO (Brazil)	Flameproof, Zone 1	BR- Ex d IIC T5, T6	6D	•	•	•	•	•	•	•	•	•		
	Intrinsically Safe, Zone 0/1	BR- Ex ia IIC; T4, T5, T6 (See CERTUSP certificate for detailed temperature codes by Communications option)	6S	•	•	•	•	•	•	•	•	•		

<sup>10</sup> See ATEX installation requirements in the ST 3000 User's Manual  
<sup>11</sup> The user must determine the type of protection required for installation of the equipment. The user shall then check the box [✓] adjacent to the type of protection used on the equipment certification nameplate. Once a type of protection has been checked on the nameplate, subsequently the equipment shall not be reinstalled using any of the other certification types.

TABLE IV

	Selection													
Factory Identification	X X X X	•	•	•	•	•	•	•	•	•	•	•	•	•

RESTRICTIONS

Restriction Letter	Available Only With		Not Available With	
	Table	Selection	Table	Selection
b	Select only one option from this group			
d	I	A _ _ , E _ _		
e	III	SM		
f			III	2J
g			III	SL
h	I	_ 2 _		
i	III	1C or 2J		
m			III	STA12L, STA14L, ME, FF
n			III	1C, 2J
o	III	CR		
p	III	HC or H6 and WP	III	FF, WX
r	III	FISCO/FNICO compliance available only with 1C	III	TC, ME, or FISCO/FNICO compliance not available 2J, 3C, 3N, 33, 3S, CA, Z2, ZD, ZA, 6D & 6S
w	I	E _ G, F _ G, G _ G		
x	III	FF, SM	Key #	STA12L, STA14L
z			I	B _ _ , F _ _ , J _ _
2	III	MX, SX	III	FB, MB, SB
4	III	This approval code <u>requires</u> the selection of a certified conduit plug: A5, A6 or A7	III	No CRN Number available
15			III	FF
19			III	F7, FG
21	III	FF		
22	III	SL		
24	III	This approval code <u>requires</u> the selection of a certified conduit plug: A5, A6 or A7		

Ordering Example: STG140-A1A-00000-HC,NE,3H+XXXX

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