

ST 3000 Smart Pressure Transmitter Series 100 Absolute Pressure Models Specifications

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Introduction

In 1983, Honeywell introduced the first Smart Pressure Transmitter—the ST 3000®. In 1989, Honeywell launched the first all digital, bi-directional protocol for smart field devices. Today, its ST 3000 Series 100 Absolute Pressure Transmitters continue to bring proven “smart” technology to a wide spectrum of measurement applications. Honeywell absolute pressure transmitters are used in applications in which high accuracy in the vacuum range of pressure is needed to include low-pressure measurement in vacuum distillation columns, where energy savings are directly proportional to the vacuum in the column. Honeywell transmitters can be used in a wide spectrum of hazardous environments in perfect safety to provide proven, repeatable pressure measurements.



Series 100 Absolute Pressure Transmitters feature field-proven piezoresistive sensor technology

Models		
STA122/STA12L	0 to 780 mmHgA	0 to 1,040 mbarA
STA140/STA14L	0 to 500 psia	0 to 35 barA

All ST 3000 transmitters can be ordered to provide one of the following output communication options.

Communications options
4-20 mA
Honeywell Digitally Enhanced (DE)
HART® (versions 5.x or 6.x)
FOUNDATION™ Fieldbus

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FOUNDATION™ Fieldbus

When digitally integrated with Honeywell's Experion® Process Knowledge System or other TDC/TPS systems, ST 3000 instruments provides local measurement accuracy to the system level without adding typical A/D and D/A converter inaccuracies as well as providing advantages from the many other on-board advanced diagnostic features. Honeywell's high-performance ST 3000 S100 transmitters lead the industry in:

- Accuracy
- Stability
- Reliability
- Rangeability
- Warranty

ST 3000 Lifetime™ Transmitter Benefits
Total Accuracy = $\pm 0.0375\%$
Stability = $\pm 0.01\%$ per year
Reliability = 470 years MTBF
Rangeability = 400 to 1
Lifetime Warranty = 15 years

The devices provide comprehensive self-diagnostics to help users maintain high uptime, meet regulatory requirements, and attain high quality standards. S100 transmitters are ideal for critical applications, such as custody transfer of natural gas and energy and material balances, where accuracy and stability are important.

Description

The ST 3000 transmitter can replace any 4 to 20 mA output transmitter in use today and operates over a standard two-wire system.

The measuring means is a piezoresistive sensor, which actually contains three sensors in one. It uses a differential pressure sensor, a temperature sensor and a static pressure sensor in delivering the most comprehensive compensated output signal available today.

Microprocessor-based electronics provide higher span-turndown ratio, improved temperature and pressure compensation, and improved accuracy.

The transmitter's meter body and electronics housing resist shock, vibration, corrosion, and moisture. The electronics housing contains a compartment for the single-board electronics, which is isolated from an integral junction box. The single-board electronics is replaceable and interchangeable with any other ST 3000 Series 100 or Series 900 model transmitters.

Configuration Tools

Like other Honeywell transmitters, the ST 3000 features two-way communication and configuration capability between the operator and the transmitter through several Honeywell field-rated portable configuration devices, including the Smart Field Communicator (SFC) and the Multiple Communication Configurator (MC ToolKit). While both are made for in-field use, the MC Toolkit also can be ordered for use in intrinsically safe, Class I, Div. 1 environments.

The SCT 3000 Smartline® Configuration Toolkit provides an easy way to configure instruments using a personal computer as the configuration interface. The toolkit enables configuration of devices before shipping or prior to field installation. The SCT 3000 can operate in the off-line mode to pre-configure an unlimited number of devices. This database can then be loaded down-line during instrument commissioning.

Features

- Choice of linear or square root output conformity is a simple configuration selection.
- Direct digital integration with Experion PKS and other control systems provides local measurement accuracy to the system level without adding typical A/D and D/A converter inaccuracies.
- Unique piezoresistive sensor automatically compensates input for real-world temperature and static pressure variations.

- Added “smart” features include configuring lower and upper range values, simulating accurate analog output, and selecting preprogrammed engineering units for display.
- Smart transmitter capabilities with local or remote interfacing means significant manpower efficiency improvements in commissioning, start-up, and ongoing maintenance functions.
- ST 3000 transmitters feature full Dual-Seal certification based on ANSI/NFPA 70-202 and ANSI/ISA 12.27.01 requirements without the use of additional seal protection elements.
- ST 3000 transmitters are available fully compliant to SIL 2/3 requirements as a standard option.

Operating Conditions – All Models

Parameter	Reference Condition		Rated Condition		Operative Limits		Transportation and Storage	
	°C	°F	°C	°F	°C	°F	°C	°F
Ambient Temperature	25±1	77±2	-40 to 85	-40 to 185	-40 to 93	-40 to 200	-55 to 125	-67 to 257
Meter Body Temperature								
STA122/STA12L	25±1	77±2	See Figure 2		See Figure 2		-55 to 125	-67 to 257
STA140/STA14L	25±1	77±2	-40 to 80	-40 to 176	-40 to 80	-40 to 176	-55 to 125	-67 to 257
Humidity %RH	10 to 55		0 to 100		0 to 100		0 to 100	
Vacuum Region - Minimum Pressure	See Figure 2. Operate within specifications above 25 mmHgA (33 mbarA). Short term exposure (2 hours at 70°C/158°F) to full vacuum will not result in damage.							
STA122/STA12L STA140/STA14L								
Supply Voltage, Current, and Load Resistance	Voltage Range: 10.8 to 42.4 Vdc at terminals Current Range: 3.0 to 21.8 mA Load Resistance: 0 to 1440 ohms (as shown in Figure 3)							
Maximum Allowable Working Pressure (MAWP) (ST 3000 products are rated to Maximum Allowable Working Pressure)	STA922/STA92L = 780 mmHgA, 1040 mbarA STA940/STA94L = 500 psia, 34.47 barA Units can withstand overpressure of 1.5X MAWP without damage.							

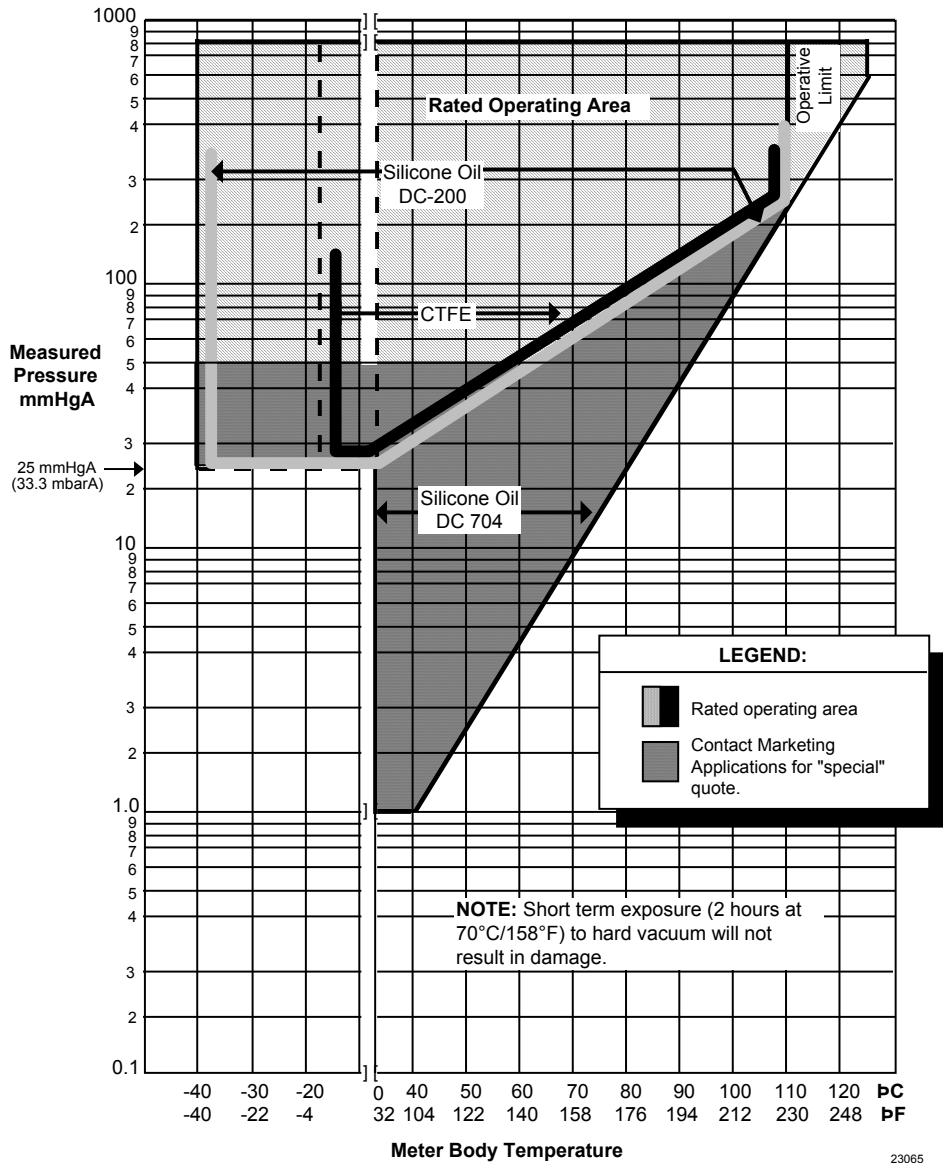


Figure 2 - Measured pressure versus meter body temperature chart for model STA122/STA12L

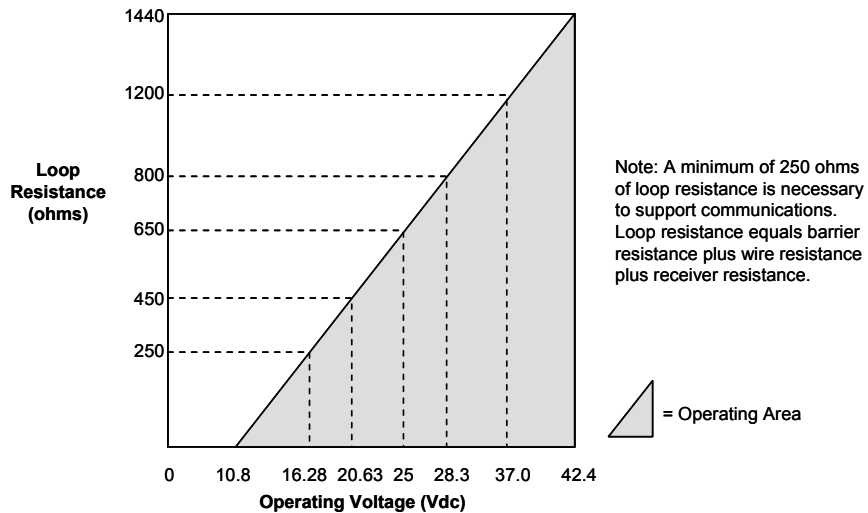


Figure 3 - Supply voltage and loop resistance chart

Performance Under Rated Conditions* - Model STA122 (0 to 780 mmHgA)

Parameter		Description
Upper Range Limit	mmHgA mbarA	780 (0°C/32°F is standard reference temperature for mmHg range.) 1040
Minimum Span	mmHgA mbarA	50 67
Turndown Ratio		15 to 1
Zero Suppression		No limit except minimum span within 0 (absolute zero) to +100% URL.
Accuracy (Reference – Includes combined effects of linearity, hysteresis, and repeatability) <ul style="list-style-type: none"> Accuracy includes residual error after averaging successive readings. For FOUNDATION™ Fieldbus use Digital Mode specifications. For HART® use Analog Mode specifications. 		<p>In Analog Mode: ±0.075% of calibrated span or upper range value (URV), whichever is greater, terminal based. For URV below reference point (90 mmHgA), accuracy equals: $\pm 0.025 + 0.05 \left(\frac{90 \text{ mmHgA}}{\text{span mmHgA}} \right)$ or $\pm 0.025 + 0.05 \left(\frac{120 \text{ mbarA}}{\text{span mbarA}} \right)$ in % of span</p> <p>In Digital Mode: ±0.0625% of calibrated span or upper range value (URV), whichever is greater, terminal based. For URV below reference point (90 mmHgA), accuracy equals: $\pm 0.0125 + 0.05 \left(\frac{90 \text{ mmHgA}}{\text{span mmHgA}} \right)$ or $\pm 0.0125 + 0.05 \left(\frac{120 \text{ mbarA}}{\text{span mbarA}} \right)$ in % of span</p>
Zero Temperature Effect per 28°C (50°F)		<p>In Analog Mode: ±0.1125% of calibrated span. For URV below reference point (300 mmHgA), effect equals: $\pm 0.0125 + 0.10 \left(\frac{300 \text{ mmHgA}}{\text{span mmHgA}} \right)$ or $\pm 0.0125 + 0.10 \left(\frac{400 \text{ mbarA}}{\text{span mbarA}} \right)$ in % of span</p> <p>In Digital Mode: ±0.10% of calibrated span. For URV below reference point (180 mmHgA), effect equals: $\pm 0.10 \left(\frac{300 \text{ mmHgA}}{\text{span mmHgA}} \right)$ or $\pm 0.10 \left(\frac{400 \text{ mbarA}}{\text{span mbarA}} \right)$ in % of span</p>
Combined Zero and Span Temperature Effect per 28°C (50°F)		<p>In Analog Mode: ±0.175% of calibrated span. For URV below reference point (300 mmHgA), effect equals: $\pm 0.075 + 0.10 \left(\frac{300 \text{ mmHgA}}{\text{span mmHgA}} \right)$ or $\pm 0.075 + 0.10 \left(\frac{400 \text{ mbarA}}{\text{span mbarA}} \right)$ in % of span</p> <p>In Digital Mode: ±0.15% of calibrated span. For URV below reference point (180 mmHgA), effect equals: $\pm 0.05 + 0.10 \left(\frac{300 \text{ mmHgA}}{\text{span mmHgA}} \right)$ or $\pm 0.05 + 0.10 \left(\frac{400 \text{ mbarA}}{\text{span mbarA}} \right)$ in % of span</p>

* Performance specifications are based on reference conditions of 25°C (77°F), 10 to 55% RH, and 316L Stainless Steel barrier diaphragm.

Performance Under Rated Conditions* - Model STA12L (0 to 780 mmHgA)

Parameter	Description
Upper Range Limit mmHgA mbarA	780 (0°C/32°F is standard reference temperature for mmHg range.) 1040
Minimum Span mmHgA mbarA	50 67
Turndown Ratio	15 to 1
Zero Suppression	No limit except minimum span within 0 (absolute zero) to +100% URL.
Accuracy (Reference – Includes combined effects of linearity, hysteresis, and repeatability) • Accuracy includes residual error after averaging successive readings. • For FOUNDATION™ Fieldbus use Digital Mode specifications. • For HART® use Analog Mode specifications.	In Analog Mode: ±0.075% of calibrated span or upper range value (URV), whichever is greater, terminal based. For URV below reference point (90 mmHgA), accuracy equals: $\pm 0.025 + 0.05 \left(\frac{90 \text{ mmHgA}}{\text{span mmHgA}} \right)$ or $\pm 0.025 + 0.05 \left(\frac{120 \text{ mbarA}}{\text{span mbarA}} \right)$ in % of span In Digital Mode: ±0.0625% of calibrated span or upper range value (URV), whichever is greater, terminal based. For URV below reference point (90 mmHgA), accuracy equals: $\pm 0.0125 + 0.05 \left(\frac{90 \text{ mmHgA}}{\text{span mmHgA}} \right)$ or $\pm 0.0125 + 0.05 \left(\frac{120 \text{ mbarA}}{\text{span mbarA}} \right)$ in % of span
Zero Temperature Effect per 28°C (50°F)	In Analog Mode: ±0.1625 of calibrated span. For URV below reference point (300 mmHgA), effect equals: $\pm 0.0125 + 0.15 \left(\frac{300 \text{ mmHgA}}{\text{span mmHgA}} \right)$ or $\pm 0.0125 + 0.15 \left(\frac{400 \text{ mbarA}}{\text{span mbarA}} \right)$ in % of span In Digital Mode: ±0.15% of calibrated span. For URV below reference point (180 mmHgA), effect equals: $\pm 0.15 \left(\frac{300 \text{ mmHgA}}{\text{span mmHgA}} \right)$ or $\pm 0.15 \left(\frac{400 \text{ mbarA}}{\text{span mbarA}} \right)$ in % of span
Combined Zero and Span Temperature Effect per 28°C (50°F)	In Analog Mode: ±0.25% of calibrated span. For URV below reference point (180 mmHgA), effect equals: $\pm 0.1 + 0.15 \left(\frac{300 \text{ mmHgA}}{\text{span mmHgA}} \right)$ or $\pm 0.1 + 0.15 \left(\frac{400 \text{ mbarA}}{\text{span mbarA}} \right)$ in % of span In Digital Mode: ±0.2125% of calibrated span. For URV below reference point (300 mmHgA), effect equals: $\pm 0.075 + 0.15 \left(\frac{300 \text{ mmHgA}}{\text{span mmHgA}} \right)$ or $\pm 0.075 + 0.15 \left(\frac{400 \text{ mbarA}}{\text{span mbarA}} \right)$ in % of span

* Performance specifications are based on reference conditions of 25°C (77°F), 10 to 55% RH, and 316L Stainless Steel barrier diaphragm.

Performance Under Rated Conditions* - Model STA140/STA14L (0 to 500 psia)

Parameter	Description
Upper Range Limit psia barA	500 35
Minimum Span psia barA	5 0.35
Turndown Ratio	100 to 1
Zero Suppression	No limit except minimum span within 0 (absolute zero) to +100% URL.
Accuracy (Reference – Includes combined effects of linearity, hysteresis, and repeatability) <ul style="list-style-type: none"> • Accuracy includes residual error after averaging successive readings. • For FOUNDATION™ Fieldbus use Digital Mode specifications. • For HART® use Analog Mode specifications. 	<p>In Analog Mode: ±0.075% of calibrated span or upper range value (URV), whichever is greater, terminal based. For URV calibrated below reference point (20 psia), accuracy equals: $\pm 0.025 + 0.05 \left(\frac{20 \text{ psia}}{\text{span psia}} \right)$ or $\pm 0.025 + 0.05 \left(\frac{1.4 \text{ barA}}{\text{span barA}} \right)$ in % of span</p> <p>In Digital Mode: ±0.0625% of calibrated span or upper range value (URV), whichever is greater, terminal based. For URV calibrated below reference point (20 psia), accuracy equals: $\pm 0.0125 + 0.05 \left(\frac{20 \text{ psia}}{\text{span psia}} \right)$ or $\pm 0.0125 + 0.05 \left(\frac{1.4 \text{ barA}}{\text{span barA}} \right)$ in % of span</p>
Zero Temperature Effect per 28°C (50°F)	<p>In Analog Mode: ±0.0625% of calibrated span. For URV below reference point (50 psia), effect equals: $\pm 0.0125 + 0.05 \left(\frac{\text{Ref. span}^{**}}{\text{span psia}} \right)$ or $\pm 0.0125 + 0.05 \left(\frac{\text{Ref. span}^{**}}{\text{span barA}} \right)$ in % of span</p> <p>In Digital Mode: ±0.05% of calibrated span. For URV below reference point (50 psia), effect equals: $\pm 0.05 \left(\frac{\text{Ref. span}^{**}}{\text{span psia}} \right)$ or $\pm 0.05 \left(\frac{\text{Ref. span}^{**}}{\text{span barA}} \right)$ in % of span</p>
Combined Zero and Span Temperature Effect per 28°C (50°F)	<p>In Analog Mode: ±0.10% of calibrated span. For URV below reference point (50 psia), effect equals: $\pm 0.05 + 0.05 \left(\frac{\text{Ref. span}^{**}}{\text{span psia}} \right)$ or $\pm 0.05 + 0.05 \left(\frac{\text{Ref. span}^{**}}{\text{span barA}} \right)$ in % of span</p> <p>In Digital Mode: ±0.075% of calibrated span. For URV below reference point (50 psia), effect equals: $\pm 0.025 + 0.05 \left(\frac{\text{Ref. span}^{**}}{\text{span psia}} \right)$ or $\pm 0.025 + 0.05 \left(\frac{\text{Ref. span}^{**}}{\text{span barA}} \right)$ in % of span</p>

* Performance specifications are based on reference conditions of 25°C (77°F), 10 to 55% RH, and 316L Stainless Steel barrier diaphragm.

** Reference span Model STA140: 50 PSIA/ 3.5 barA, Model STA14L: 75 PSIA/ 5.25 barA

Performance Under Rated Conditions – All Models

Parameter	Description
Output (two-wire)	Analog : 4 to 20 mA (Normal signal range is ≥ 3.8 mA and ≤ 20.5 mA.) Digital communications : Honeywell DE mode, FOUNDATION™ Fieldbus or HART® protocol (selectable versions 5.x or 6.x available).
Supply Voltage Effect	0.005% span per volt.
Damping Time Constant	Adjustable from 0 to 32 seconds digital damping.
NAMUR NE 43 Compliance (Option “NE”)	Transmitter failure information is generated when the measuring information is invalid or no longer present. Failure information is transmitted as a current signal but outside the normal 4-20 mA measurement signal level. Transmitter failure values are: ≤ 3.6 mA and ≥ 21.0 mA. The normal signal range is ≥ 3.8 mA and ≤ 20.5 mA.
SIL 2/3 Compliance (Option “SL”)	SIL certified to IEC 61508 for non-redundant use in SIL 2 related Safety Systems (single use) and for redundant (multiple) use in SIL 3 Safety Systems through TÜV Nord Sys Tec GmbH & Co. KG under the following standards: IEC61508-1: 1998; IEC 61508-2: 2000; IEC61508-3: 1998.
Lightning Protection Option (Option “LP”)	Leakage Current: 10 microamps max. @ 42.4 VDC, 93°C Impulse Rating: 10/20 μ sec. 5,000 Amps (50 strikes) 10,000 Amps (20 strikes) (rise/decay) 10/1,000 μ sec. 250 Amps (1,000 strikes) 500 Amps (400 strikes)

Physical and Approval Bodies

Parameter	Description
Barrier Diaphragm Material	STA122/STA140: 316L SS, Hastelloy® C-276, Monel STA12L/STA14L: 316L SS, Hastelloy®
Process Head Material	STA122/STA140: : 316 SS, Carbon Steel (Zinc-plated), Monel, Hastelloy® C-276 STA12L/STA14L: 316 SS
Head Gaskets	Viton is standard. Teflon is optional but not recommended for leak-proof service under full vacuum. Graphite is also optional – see MSG.
Meter Body Bolting	Carbon Steel (Zinc plated, standard) or A286 SS (NACE) bolts and 302/304 SS (NACE) nuts for heads.
Mounting Bracket	Carbon Steel (Zinc-plated) or Stainless Steel angle bracket or Carbon Steel flat bracket available.
Fill Fluid	Silicone DC 200 oil or CTFE (Chlorotrifluoroethylene) Note that DC 704 is available – Please contact Product Marketing.
Electronic Housing	Epoxy-Polyester hybrid paint. Low Copper-Aluminum. Meets NEMA 4X (watertight) and NEMA 7 (explosion proof). Stainless steel optional.
Process Connections	STA122/STA140: 1/2-inch FNPT, 9/16-18 Aminco, DIN. STA12L/STA14L: 1/2-inch F-NPT, 9/16-18 Aminco, DIN, 1/2 inch MNPT.
Wiring	Accepts up to 16 AWG (1.5 mm diameter).
Mounting	Can be mounted in virtually any position using the standard mounting bracket. Bracket is designed to mount on 2-inch (50 mm) vertical or horizontal pipe. See Figures 4 and 4a.
Dimensions	See Figures 5, 5a
Net Weight	Single Head Meter Body: 7.0 pounds (3.2 Kg) In-line Meter Body: 3.8 pounds (3.2 Kg)

Certifications

	Type of Protection	Comm. Option	Field Parameters	Temp. Codes
FM ApprovalsSM	Explosionproof: Class I, Division 1, Groups A, B, C, D locations Dust Ignition Proof: Class II, III, Division 1, Groups E, F, G locations, Enclosure Type 4X	All	All	T5 Ta = 93°C
	Intrinsically Safe: Class I, II, III, Division 1, Groups A, B, C, D, E, F, G locations, Enclosure Type 4X	4-20 mA / DE	Vmax = 42.4V Imax = 225mA Ci = 4.2nF Li = * Pi = 1.2W	T4 Ta = 93°C
		4-20 mA / HART	Vmax = 30V Imax = 225mA Ci = 4.2nF Li = * Pi = 1.2W	T4 Ta = 93°C
	Intrinsically Safe: Class I, II, III, Division 1, Groups A, B, C, D, E, F, G locations; Class 1, Zone 0, AEx ia Group IIC, Enclosure Type 4X / IP 66/67	Fieldbus – Entity	Vmax = 32V Imax = 120mA Ci = 4.2nF Li = 0 Pi = 0.84W	T4 Ta = 40°C T3 Ta = 93°C
		Fieldbus – Entity	Vmax = 24V Imax = 250mA Ci = 4.2nF Li = 0 Pi = 1.2W	T4 Ta = 40°C T3 Ta = 93°C
		FISCO	Vmax = 17.5V Imax = 380mA Ci = 4.2nF Li = 0 Pi = 5.32W	T4 Ta = 40°C T3 Ta = 93°C
	Nonincendive: Class I, Division 2, Groups A, B, C, D locations, Enclosure Type 4X	4-20 mA / DE	Vmax = 42.4V Imax = 225mA Ci = 4.2nF Li = * Pi = 1.2W	T4 Ta = 93°C
		4-20 mA / HART	Vmax = 30V Imax = 225mA Ci = 4.2nF Li = * Pi = 1.2W	T4 Ta = 93°C
	Nonincendive: Class I, Division 2, Groups A, B, C, D; Suitable for: Class II, Division 2, Groups F&G; Class III, Division 2; Class I, Zone 2, Group IIC, Enclosure Type 4X / IP 66/67	Fieldbus – Entity	Vmax = 32V Imax = 120mA Ci = 4.2nF Li = 0 Pi = 0.84W	T4 Ta = 40°C T3 Ta = 93°C
		Fieldbus – Entity	Vmax = 24V Imax = 250mA Ci = 4.2nF Li = 0 Pi = 1.2W	T4 Ta = 40°C T3 Ta = 93°C
		FNICO	Vmax = 32V Ci = 4.2nF Li = 0	T4 Ta = 40°C T3 Ta = 93°C

* Li = 0 except Li = 150µH when Option ME, Analog Meter, is selected.







	Type of Protection	Comm. Option	Field Parameters	Temp. Codes	
Canadian Standards Association (CSA)	Explosion Proof: Class I, Division 1, Groups B, C, D locations Dust Ignition Proof: Class II, III, Division 1, Groups E, F, G locations, Enclosure Type 4X	All	All	T4 Ta = 93°C	
	Intrinsically Safe: Class I, II, III, Division 1, Groups A, B, C, D, E, F, G locations, Enclosure Type 4X	4-20 mA / DE	Vmax = 42V Imax = 225mA Ci = 4.2nF Li = * Pi = 1.2W	T4 Ta = 93°C	
		4-20 mA / HART	Vmax = 42V Imax = 225mA Ci = 4.2nF Li = * Pi = 1.2W	T4 Ta = 93°C	
		Fieldbus – Entity	Vmax = 24V Imax = 250mA Ci = 4.2nF Li = 0 Pi = 1.2W	T4 Ta = 40°C T3 Ta = 93°C	
	Nonincendive: Class I, Division 2, Groups A, B, C, D locations, Enclosure Type 4X	4-20 mA / DE	Vmax = 42.4V Imax = 225mA Ci = 4.2nF Li = * Pi = 1.2W	T4 Ta = 93°C	
		4-20 mA / HART	Vmax = 30V Imax = 225mA Ci = 4.2nF Li = * Pi = 1.2W	T4 Ta = 93°C	
		Fieldbus – Entity	Vmax = 24V Imax = 250mA Ci = 4.2nF Li = 0 Pi = 1.2W	T4 Ta = 40°C T3 Ta = 93°C	
	Canadian Registration Number (CRN):	All ST 3000 models except STG19L, STG99L, STG170 and STG180 have been registered in all provinces and territories in Canada and are marked CRN: 0F8914.5C.			

	Type of Protection	Comm. Option	Field Parameters	Temp. Codes
IECEX International Electrotechnical Commission (LCIE)	Flameproof, Zone 1: Ex d IIC, Enclosure IP 66/67	All	All	T5 Ta = -50 to 93°C T6 Ta = -50 to 78°C
	Intrinsically Safe, Zone 0/1: Ex ia IIC, Enclosure IP 66/67	4-20 mA / DE	Ui = 30V Ii = 100mA Ci = 4.2nF Li = * Pi = 1.2W	T4 Ta = -50 to 93°C T5 Ta = -50 to 85°C T6 Ta = -50 to 70°C
		4-20 mA / HART	Ui = 30V Ii = 100mA Ci = 4.2nF Li = * Pi = 1.2W	T4 Ta = -50 to 93°C T5 Ta = -50 to 63°C T6 Ta = -50 to 48°C
		Fieldbus	Ui = 24V Ii = 250mA Ci = 4.2nF Li = 0 Pi = 1.2W	T3 Ta = -50 to 93°C T4 Ta = -50 to 40°C

* Li = 0 except Li = 150µH when Option ME, Analog Meter, is selected.

	Type of Protection	Comm. Option	Field Parameters	Temp. Codes
SAEx (South Africa)	Flameproof, Zone 1: Ex d IIC, Enclosure IP 66/67	All	All	T5 Ta = -50 to 93°C T6 Ta = -50 to 78°C
	Intrinsically Safe, Zone 0/1: Ex ia IIC, Enclosure IP 66/67	4-20 mA / DE	Ui = 30V Ii = 100mA Ci = 4.2nF Li = * Pi = 1.2W	T4 Ta = -50 to 93°C T5 Ta = -50 to 85°C T6 Ta = -50 to 70°C
		4-20 mA / HART	Ui = 30V Ii = 100mA Ci = 4.2nF Li = * Pi = 1.2W	T4 Ta = -50 to 93°C T5 Ta = -50 to 63°C T6 Ta = -50 to 48°C
		Fieldbus	Ui = 24V Ii = 250mA Ci = 4.2nF Li = 0 Pi = 1.2W	T3 Ta = -50 to 93°C T4 Ta = -50 to 40°C
	Multiple Marking: Flameproof, Zone 1: Ex d IIC, Enclosure IP 66/67 Intrinsically Safe, Zone 0/1: Ex ia IIC, Enclosure IP 66/67 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.	4-20 mA / DE	Ui = 30V Ii = 100mA Ci = 4.2nF Li = * Pi = 1.2W	T4 Ta = -50 to 93°C T5 Ta = -50 to 85°C T6 Ta = -50 to 70°C
		4-20 mA / HART	Ui = 30V Ii = 100mA Ci = 4.2nF Li = * Pi = 1.2W	T4 Ta = -50 to 93°C T5 Ta = -50 to 63°C T6 Ta = -50 to 48°C
		Fieldbus	Ui = 24V Ii = 250mA Ci = 4.2nF Li = 0 Pi = 1.2W	T3 Ta = -50 to 93°C T4 Ta = -50 to 40°C

* Li = 0 except Li = 150µH when Option ME, Analog Meter, is selected.

	Type of Protection	Comm. Option	Field Parameters	Temp. Codes
ATEX (LCIE)	Flameproof, Zone 1:  II 2 G , Ex d IIC Enclosure IP 66/67	All	All	T5 Ta = -50 to 93°C T6 Ta = -50 to 78°C
	Intrinsically Safe, Zone 0/1:  II 1 G , Ex ia IIC, Enclosure IP 66/67	4-20 mA / DE	Ui = 30V li = 100mA Ci = 4.2nF Li = * Pi = 1.2W	T4 Ta = -50 to 93°C T5 Ta = -50 to 85°C T6 Ta = -50 to 70°C
		4-20 mA / HART	Ui = 30V li = 100mA Ci = 4.2nF Li = * Pi = 1.2W	T4 Ta = -50 to 93°C T5 Ta = -50 to 63°C T6 Ta = -50 to 48°C
		Fieldbus	Ui = 24V li = 250mA Ci = 4.2nF Li = 0 Pi = 1.2W	T3 Ta = -50 to 93°C T4 Ta = -50 to 40°C
	Non-Sparking, Zone 2:  II 3 G , Ex nA IIC (Honeywell), Enclosure IP 66/67	4-20 mA / DE	Ui = 30V li = 100mA Ci = 4.2nF Li = * Pi = 1.2W	T4 Ta = -50 to 93°C T5 Ta = -50 to 85°C T6 Ta = -50 to 70°C
		4-20 mA / HART	Ui = 30V li = 100mA Ci = 4.2nF Li = * Pi = 1.2W	T4 Ta = -50 to 93°C T5 Ta = -50 to 63°C T6 Ta = -50 to 48°C
		Fieldbus	Ui = 24V li = 250mA Ci = 4.2nF Li = 0 Pi = 1.2W	T3 Ta = -50 to 93°C T4 Ta = -50 to 40°C
	Multiple Marking: Flameproof, Zone 1:  II 2 G , Ex d IIC Intrinsically Safe, Zone 0/1:  II 1 G , Ex ia IIC Non-Sparking, Zone 2:  II 3 G , Ex nA IIC NOTE: The user must determine the type of protection required for installation of the equipment. The user shall then check the box [<input type="checkbox"/>] 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.	4-20 mA / DE	Ui = 30V li = 100mA Ci = 4.2nF Li = * Pi = 1.2W	T4 Ta = -50 to 93°C T5 Ta = -50 to 85°C T6 Ta = -50 to 70°C
		4-20 mA / HART	Ui = 30V li = 100mA Ci = 4.2nF Li = * Pi = 1.2W	T4 Ta = -50 to 93°C T5 Ta = -50 to 63°C T6 Ta = -50 to 48°C
		Fieldbus	Ui = 24V li = 250mA Ci = 4.2nF Li = 0 Pi = 1.2W	T3 Ta = -50 to 93°C T4 Ta = -50 to 40°C

* Li = 0 except Li = 150µH when Option ME, Analog Meter, is selected.

	Type of Protection	Comm. Option	Field Parameters	Temp. Codes
INMETRO (CERTUSP) Brazil	Flameproof, Zone 1: BR-Ex d IIC Enclosure IP 66/67	All	All	T5 Ta = -50 to 93°C T6 Ta = -50 to 78°C
	Intrinsically Safe, Zone 0/1: BR-Ex ia IIC Enclosure IP 66/67	4-20 mA / DE	U _i = 30V I _i = 100mA C _i = 4.2nF L _i = * P _i = 1.2W	T4 Ta = -50 to 93°C T5 Ta = -50 to 85°C T6 Ta = -50 to 70°C
		4-20 mA / HART	U _i = 30V I _i = 100mA C _i = 4.2nF L _i = * P _i = 1.2W	T4 Ta = -50 to 93°C T5 Ta = -50 to 63°C T6 Ta = -50 to 48°C
		Fieldbus	U _i = 24V I _i = 250mA C _i = 4.2nF L _i = 0 P _i = 1.2W	T3 Ta = -50 to 93°C T4 Ta = -50 to 40°C

* L_i = 0 except L_i = 150μH when Option ME, Analog Meter, is selected.

European Pressure Equipment Directive (PED) (97/23/EC)	<p>The ST 3000 Smart Pressure Transmitters are in conformity with the essential requirements of the Pressure Equipment Directive.</p> <p>Honeywell ST 3000 Smart Pressure Transmitters are designed and manufactured in accordance with the applicable portions of Annex I, Essential Safety Requirements, and sound engineering practices. These transmitters have no pressurized internal volume, or have a pressurized internal volume rated less than 200 bar (2,900 psig), and/or have a maximum volume of less than 0.1 liter (Article 3, 1.1.(a) first indent, Group 1 fluids). Therefore, these transmitters are not subject to the essential requirements of the directive 97/23/EC (PED, Annex I) and shall not have the CE mark applied.</p> <p>For transmitters rated > 200 bar (2,900 psig) < 1,000 bar (14,500 psig) Honeywell maintains a technical file in accordance with Annex III, Module A, (internal production control) when the CE mark is required. Transmitter Attachments: Diaphragm Seals, Process Flanges and Manifolds comply with Sound Engineering Practice.</p>
	<p>NOTE: Pressure transmitters that are part of safety equipment for the protection of piping (systems) or vessel(s) from exceeding allowable pressure limits, (equipment with safety functions in accordance with Pressure Equipment Directive 97/23/EC article 1, 2.1.3), require separate examination.</p> <p>A formal statement from TÜV Industry Service Group of TÜV America, Inc., a division of TÜV Süddeutschland, a Notified Body regarding the Pressure Equipment Directive, can be found at www.honeywell.com. A hard copy may be obtained by contacting a Honeywell representative.</p>
CE Mark	<p>Electro Magnetic Compatibility (EMC) (2004/108/EC)</p> <p>All Models: EN 50081-1: 1992; EN 50082-2:1995; EN 61326-1:1997 + A1, A2, and A3 – Industrial Locations</p>
Approved Manufacturing Locations	<p>Honeywell Process Solutions - York, PA USA Honeywell Process Solutions – Phoenix, AZ USA Honeywell (Tianjin) Limited – Tianjin, P.R. China Honeywell Automation India Ltd. – Pune 411013 India</p>

Foundation™ Fieldbus is a trademark of the Fieldbus Foundation.

HART® is a registered trademark of HART Communications Foundation.

Hastelloy® C-276 is a registered trademark of Haynes International.

Monel 400® is a registered trademark of Special Metals Corporation.

ST 3000® and Experion® are registered trademarks of Honeywell International Inc.

Viton® is a registered trademark of DuPont

Teflon® is a registered trademark of DuPont.

DC® 200 is a registered trademark of Dow Corning.

Mounting

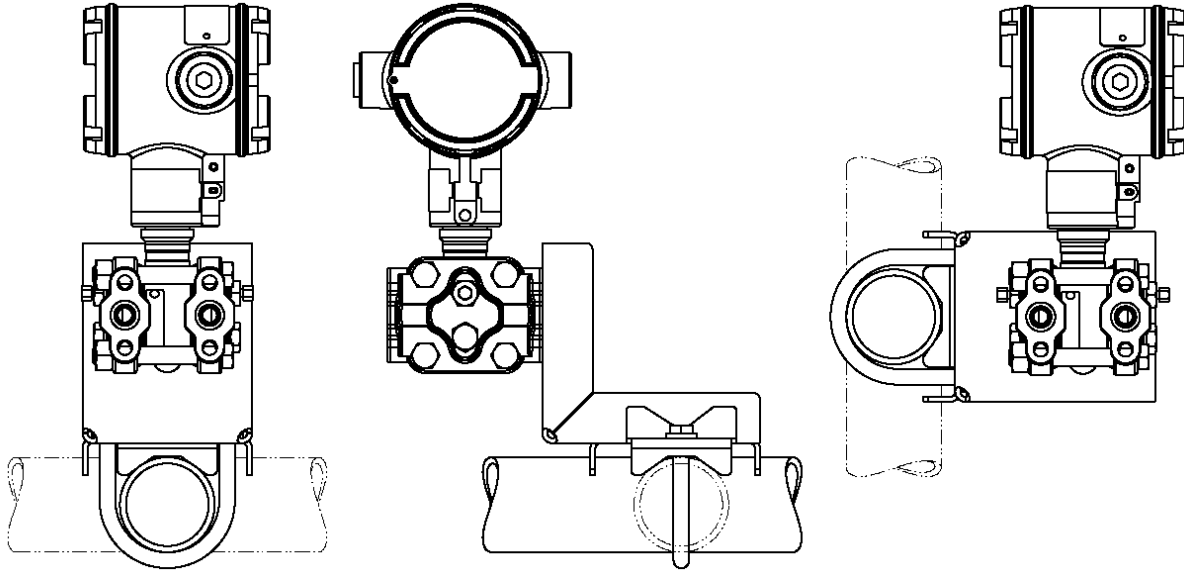


Figure 3 – Examples of typical mounting positions

Reference Dimensions: $\frac{\text{millimeters}}{\text{inches}}$

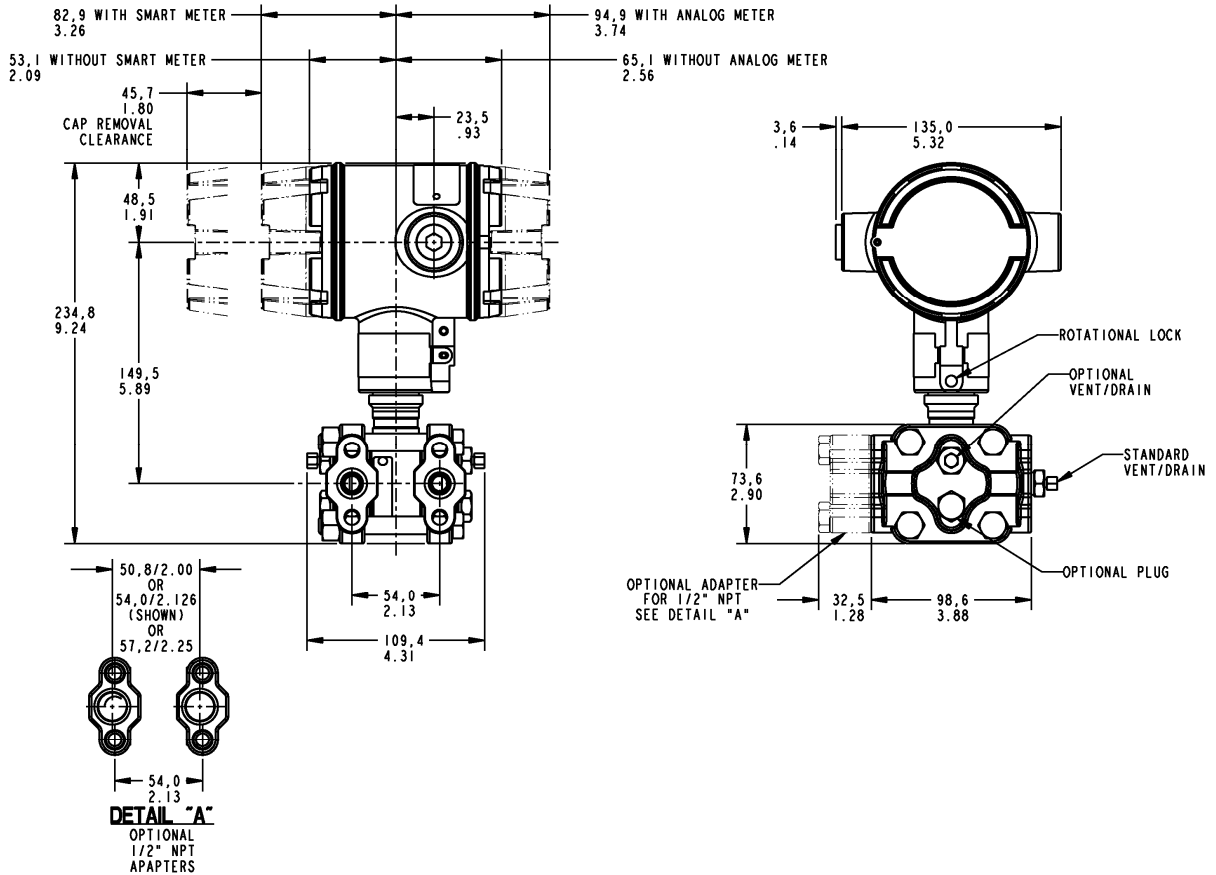


Figure 4 – Typical mounting dimensions of STD110, STD120, STD125, STD130 & STD170 for reference

Options

- **High Accuracy (Option HA)**

Extends applicable S100 models to $\pm 0.025\%$ analog reference accuracy.

- **Angle Mounting Bracket (Options MB, MX, SB, SX, FB)**

The angle mounting bracket is available in either zinc-plated carbon steel or stainless steel and is suitable for horizontal or vertical mounting on a two inch (50 millimeter) pipe, as well as wall mounting. An optional flat mounting bracket is also available in carbon steel for two inch (50 millimeter) pipe mounting. An option also exists for Marine approved mounting brackets used with Marine certification options.

- **Indicating Meter (Options ME and SM)**

Two integral meter options are available. An analog meter (option ME) is available with a dual 0 to 10 square root and 0 to 100% linear scale. The Smart Meter (option SM) provides an LCD display for both analog and digital output and can be configured to display pressure in selected engineering units.

- **HART[®] Output Protocol (Options HC and H6)**

Optional electronic modules for the ST 3000 provide HART Protocol compatibility in either HART 5.x or 6.x formats. Transmitters with a HART Option are compatible with any HART enabled system that provides 5.x or 6.x format support.

- **Foundation[™] Fieldbus Output (Option FF)**

Equips transmitter with FF protocol for use in 31.25 kbit/s FF networks. See document 34-ST-03-72 for additional information on ST 3000 Fieldbus transmitters.

- **SIL2/SIL3 Certification (Option SL)**

This ST 3000 product is available for use with safety systems. With the SL option, we are fully certified to SIL 2 capability for single transmitters and SIL 3 capability for multiple transmitter use through TÜV Nord Sys Tec GmbH & Co. KG. We are in compliance with the following SIL standards:

IEC 61508-1: 1998;

IEC 61508-2: 2000;

IEC 61508-3: 1998

- **NAMUR NE43 Compliance (Option NE)**

This option provides software that meets the NAMUR NE43 requirements for failsafe software. Transmitter failure information is generated when the measuring information is no longer valid.

Transmitter failure values are ≤ 3.6 mA and ≥ 21.0 mA.

The normal ST 3000 ranges are ≤ 3.8 mA and ≥ 20.5 mA.

- **Lightning Protection (Option LP)**

A terminal block is available with circuitry that protects the transmitter from transient surges induced by nearby lightning strikes.

- **Write Protection (Options WP and WX)**

Provides the capability to hardwire write-protect installed transmitter configurations.

- **Stainless Steel Tagging (Option TG)**

Up to 30 characters can be added on the stainless steel nameplate mounted on the transmitter's electronics housing at no extra cost. A stainless steel wired on tag with additional data of up to 4 lines of 28 characters is also available. The number of characters for tagging includes spaces.

- **Transmitter Configuration (Options TC and FC)**

With Option TC, the factory can configure the analog, DE or HART transmitter's linear/square root extraction, damping time, LRV, URV and mode (analog/digital) and enter an ID tag of up to eight characters and scratchpad information as specified.

With Option FC, the Device ID, Transmitter Tag, Unit Level Node Address, Output Mode and Damping Time Constants can be specified.

- **Custom Calibration and ID in Memory (Option CC)**

The factory can calibrate any range within the scope of the transmitter's range and enter an ID tag of up to eight characters in the transmitter's memory.

- **Indicator Configuration (Option CI)**

Provides custom configuration of Smart Meters

- **Lifetime Warranty (Option WL)**

Extends limited 1-year warranty policy to 15 years for ST 3000 S100 pressure transmitters. See Honeywell Terms and Conditions.

Ordering information

Contact your nearest Honeywell sales office, or

In the U.S.:

Honeywell
Field Solutions
2500 West Union Hills.
Phoenix, AZ 85027

In Canada:

The Honeywell Centre
85 Enterprise Blvd., Suite 100
Markham, ONT. L6G 0B5

In Latin America:

Honeywell
1250 West Sam Houston Parkway South
Houston, TX 77042

In Europe and Africa:

Honeywell S. A.
Avenue du Bourget 1
1140 Brussels, Belgium

In Eastern Europe:

Honeywell Praha,
s.r.o. Budejovicka 1
140 21 Prague 4,
Czech Republic

In the Middle East:

Honeywell Middle East Ltd.
Khalifa Street,
Sheikh Faisal Building
Abu Dhabi, U. A. E.

In Asia:

Honeywell Asia Pacific Inc.
Honeywell Building,
17 Changi Business Park Central 1
Singapore 486073
Republic of Singapore

In the Pacific:

Honeywell Pty Ltd.
5 Thomas Holt Drive
North Ryde NSW Australia 2113
(61 2) 9353 7000

In Japan:

Honeywell K.K.
14-6 Shibaura 1-chrome
Minato-ku, Tokyo, Japan 105-0023

Or, visit Honeywell on the World Wide Web at:

<http://www.honeywell.com>

Specifications are subject to change without notice.

Model Selection Guide

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

Model Selection Guide With Price Data



Model Selection Guide
34-ST-16-03 Issue 51

Honeywell Proprietary

Instructions

- Select the desired Key Number. The arrow to the right marks the selection available.
 - Make one selection from each Table I and II using the column below the proper arrow.
 - Select as many Table III options as desired (if no options or approvals are desired, specify 9X).
 - A (●) denotes unrestricted availability. A letter denotes restricted availability.
 - Restrictions follow Table IV.
- | | | | | |
|------------|-----|-------|----------------|------|
| Key Number | I | II | III (Optional) | IV |
| ----- | --- | 00000 | --- -- | XXXX |

KEY NUMBER

	Design	Span	Selection	Availability						
Gage Pressure	Single Head	0-5 to 0-500 psi/0-0.34 to 0-35 bar	STG140	↓						
		0-100 to 0-3,000 psi/0-7 to 0-210 bar	STG170		↓					
		0-100 to 0-6,000 psi/0-7 to 0-420 bar	STG180			↓				
	In-Line	0-5 to 0-500 psi/0-0.34 to 0-35 bar	STG14L					↓		
		0-100 to 0-3,000 psi/0-7 to 0-210 bar	STG17L						↓	
		0-100 to 0-6,000 psi/0-7 to 0-420 bar	STG18L						↓	
		0-200 to 0-10,000 psi/0-14 to 0-690 bar	STG19L						↓	
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		↓					
	In-Line	0-50 to 0-780 mm HgA/0-67 to 0-1,040 mbarA	STA12L						↓	
		0-5 to 0-500 psi/0-0.34 to 0-35 bar absolute	STA14L							↓

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

¹ 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.
³ Hastelloy[®] C-276 or UNS N10276
⁴ Monel 400[®] or UNS N04400
⁵ Supplied as 316 SS or as Grade CF8M, the casting equivalent of 316 SS.
⁶ Supplied as indicated or as Grade CW12MW, the casting equivalent of Hastelloy[®] C-276
⁷ Supplied as indicated or as Grade M30C, the casting equivalent of Monel 400[®]
⁸ If STA122 operating below 50mm HgA, see Figure 2 in Specification 34-ST-03-61 and contact Marketing Applications for a Special Silicone DC[®] 704 quote
 * STG1_L has 316L SS process interface.

Effective Date: February 2, 2009

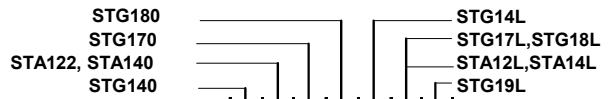


TABLE II

No Selection	00000	•	•	•	•	•	•	•	•
--------------	-------	---	---	---	---	---	---	---	---

TABLE III - OPTIONS

Communication Options <i>(Must choose a communications option)</i>									
Analog only (can be configured using appropriate Honeywell DE tool)	AN	•	•	•	•	•	•	•	•
DE Protocol communications	DE	•	•	•	•	•	•	•	b
HART® 5.x Protocol Compatible Electronics	HC	•	•	•	•	•	•	•	•
HART® 6.x Protocol Compatible Electronics	H6	•	•	•	•	•	•	•	•
FOUNDATION™ Fieldbus Communications	FF	r	r	r	r	r	r	r	•
Indicating Meter Options									
Analog Meter (0-100 Even 0-10 Square Root)	ME	•	•	•	•	•	•	•	b
Smart Meter	SM	•	•	•	•	•	•	•	•
Custom Configuration of Smart Meter	CI	e	e	e	e	e	e	e	•
Local Zero & Span	ZS	m	m	m	m	m	m	m	b
Local Zero	LZ	x	x	x	x	x	x	x	•
Transmitter Housing & Electronics Options									
NAMUR Failsafe Software	NE	15	15	15	15	15	15	15	•
SIL 2 - TÜV Certified transmitter (requires HC/H6 and WP options)	SL	p	p	p	p	p	p	p	•
Lightning Protection	LP	•	•	•	•	•	•	•	•
Custom Calibration and I.D. in Memory	CC	•	•	•	•	•	•	•	•
Transmitter Configuration - (non-Fieldbus)	TC	15	15	15	15	15	15	15	b
Transmitter Configuration - (Fieldbus)	FC	21	21	21	21	21	21	21	•
Write Protection (Delivered in "ON" position)	WP	•	•	•	•	•	•	•	•
Write Protection (Delivered in "OFF" position)	WX	g	g	g	g	g	g	g	b
316 SS ⁵ Electronics Housing - (with M20 Conduit Connections)	SH	n	n	n	n	n	n	n	•
1/2" NPT to M20 316 SS Conduit Adapter (BASEEFA EEx d IIC)	A1	n	n	n	n	n	n	n	•
1/2" NPT to 3/4" NPT 316 SS Conduit Adapter	A2	u	u	u	u	u	u	u	b
316 SS ⁵ Housing with M20 to 1/2" NPT 316 SS Conduit Adapter (use for FM and CSA Approvals)	A3	i	i	i	i	i	i	i	•
Stainless Steel Customer Wired-On Tag (4 lines, 28 characters per line, customer supplied information)	TG	•	•	•	•	•	•	•	•
Stainless Steel Customer Wired-On Tag (blank)	TB	•	•	•	•	•	•	•	•
High Accuracy	HA	d				d			•
End Cap Live Circuit Warning Label in Spanish (only with ATEX 3D)	SP	a	a	a	a	a	a	a	b
End Cap Live Circuit Warning Label in Portuguese (only with ATEX 3D)	PG	a	a	a	a	a	a	a	•
End Cap Live Circuit Warning Label in Italian (only with ATEX 3D)	TL	a	a	a	a	a	a	a	•
End Cap Live Circuit Warning Label in German (only with ATEX 3D)	GE	a	a	a	a	a	a	a	•
Meter Body Options									
A286 SS (NACE) Bolts and 304 SS (NACE) Nuts for Head	CR	•	•	•	•				b
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				•
Viton® Process Head Gasket (Teflon is standard)	VT	z		z	z				b
Graphite Process Head Gasket	GF	•	•						•
Teflon® ⁹ Process Head Gasket (Viton is standard)	TF	•							•
Transmitter Mounting Bracket Options									
Mounting Bracket - Carbon Steel	MB	•	•	•	•	•	•	•	•
Marine Approved Mounting Bracket - Carbon Steel	MX	•	•	•	•	•	•	•	•
Mounting Bracket - 304 SS	SB	•	•	•	•	•	•	•	•
Marine Approved Mounting Bracket - 304 SS	SX	•	•	•	•	•	•	•	•
Flat Mounting Bracket - Carbon Steel	FB	•	•	•	•	•	•	•	•
Services/Certificates/Marine Type Approval Options									
User's Manual Paper Copy (Standard, HC, H6 or FF ships accordingly)	UM	•	•	•	•	•	•	•	•
Clean Transmitter for Oxygen or Chlorine Service with Certificate	OX	h	h	h	h	h	h	h	•
Over-Pressure Leak Test with F3392 Certificate	TP	•	•	•	•	•	•	•	•
Calibration Test Report and Certificate of Conformance (F3399)	F1	•	•	•	•	•	•	•	b
Certificate of Conformance (F3391)	F3	•	•	•	•	•	•	•	•
Certificate of Origin (F0195)	F5	•	•	•	•	•	•	•	•
FMEDA Certificate (SIL 1) (FC33321)	F6	•	•	•	•	•	•	•	•
SIL Certificate (SIL 2/3) (FC33337)	FE	22	22	22	22	22	22	22	b
NACE Certificate (Process-Wetted & Non-Process Wetted) (FC33339)	F7	o	o	o	o	o	o	o	•
NACE Certificate (Process-Wetted) (FC33338)	FG	•	•	•	•	•	•	•	b
Marine Type Approvals (DNV, ABS, BV, KR & LR) (FC33340)	MT	2	2	2	2	2	2	2	•

Table III continued next page

⁵ Supplied as 316 SS or as Grade CF8M, the casting equivalent of 316 SS.

⁸ Viton® or Fluorocarbon Elastomer

⁹ Teflon® or PTFE

RESTRICTIONS

Restriction Letter	Available Only With		Not Available With	
	Table	Selection	Table	Selection
a	III	3D or 3H		
b	Select only one option from this group			
d	I	A __, E __		
e	III	SM		
f			III	2J
g			III	SL
h		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, 00, WX
r			III	TC, ME, CA, 3S
Restriction Letter	Available Only With		Not Available With	
	Table	Selection	Table	Selection
u	III	1C, 2J		
w	I	E _ G, F _ G, G _ G		
x	III	FF, SM		STA12L, STA14L
z			III	B __, F __, J __
2	III	MX, SX	III	FB, MB, SB
3			Key #	STA12L or STA14L
4			III	No CRN Number available
15			III	FF
19			III	F7, FG
21	III	FF		
22	III	SL		

Hastelloy® is a registered trademark of Haynes International

Monel® is a registered trademark of Special Metals Corporation.

HART® is a registered trademark of HART Communication Foundation.

FOUNDATION™ Fieldbus is a trademark of Fieldbus Foundation.

Viton® is a registered trademark of DuPont Performance Elastomers.

Teflon® is a registered trademark of DuPont.

DC® 200 and DC® 704 are registered trademarks of Dow Corning.

For More Information

Learn more about how Honeywell's ST 3000 Smart Pressure Transmitters can increase performance, reduce downtime and decrease configuration costs, visit our website www.honeywell.com/ps or contact your Honeywell account manager.

Automation & Control Solutions

Process Solutions

Honeywell

2500 W. Union Hills Dr.

Phoenix, AZ 85027

Tel: 877.466.3993 or 602.313.6665

www.honeywell.com/ps

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