Technical Information

Honeywell

ST 3000 Smart Transmitter
3-A Sanitary Remote Seal Models
Specification
34-ST-03-26 August 2011

Function

Honeywell's ST 3000 Transmitters with Remote Diaphragm Seals are available in 3-A Sanitary models for use in applications involving sanitary service.

The transmitter's electronics housing is available in Stainless Steel or Aluminum with baked vinyl enamel finish. Standard fill fluids are DC® 200 Silicone Oil and CTFE (Chlorotrifluoroethylene). Neobee™ M20 fill fluid is optional.

Models		
STR12D	0 to 400 inH_2O	0 to 1,000 mbar
STR13D	0 to 100 psid	0 to 7 bard
STR14A	0 to 500 psia	0 to 35 bara
STR14G	0 to 500 psig	0 to 35 barg
STR17G	0 to 600 psig	0 to 41 barg
STR93D	0 to 100 psid	0 to 7 bard
STR94G	0 to 500 psig	0 to 35 barg

Advanced Diagnostics

ST 3000 is now available for both HART® 6 and Foundation™ Fieldbus with advanced diagnostics that minimize unplanned plant outages, minimize maintenance costs and by providing the industry's most reliable transmitter.

- Provide advanced warning of possible failure events and avoid costly shutdowns.
- Three levels of failure reporting
- Comprehensive list of on-board diagnostics (Ref. ST 3000 User manual with HART® 6, 34-ST-25-17 Rev: June 09 and Foundation™ Fieldbus option manual 34-ST-25-15 Rev: June 09)

Sanitary Seal Model	Reference Specification Number
STR12D	34-ST-03-64
STR13D	34-ST-03-64
STR14A	34-ST-03-64
STR14G	34-ST-03-64
STR17G	34-ST-03-64
STR93D	34-ST-03-57
STR94G	34-ST-03-57

Mounting

3-A Sanitary Remote Seal Models with Gauge, Absolute, or Differential (Figure 1)

Pressure Transmitters—Models STR12D, STR13D, STR14A, STR14G, STR17G, STR93D, and STR94G

These models are designed to mount to a process with a sanitary clamp. The Tri-Clover Tri-Clamp Sanitary Seal **(Figure 2)** is available in 2-, 2-1/2-, 3-, and 4-inch sizes. Optional Cherry-Burrell “I” Line, APC Clamp, and Bevel Seat Sanitary Seals may be available.

Check the reference specifications for capillary length restrictions and typical transmitter and seal dimensions. The Sanitary Seal is 316 Stainless Steel.
CAUTION: The Maximum Allowable Working Pressure (MAWP) for pressure transmitters with sanitary clamp connections is the MAWP of the transmitter or the MAWP of the sanitary seal (if selected) or the MAWP of the sanitary clamp, which ever is **lowest.**

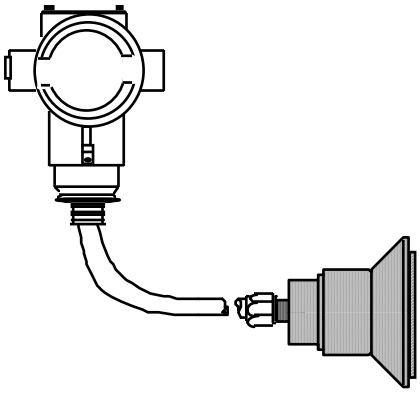


Figure 1 — STRXXG Gauge Pressure Transmitter with sanitary quick connect remote seal.

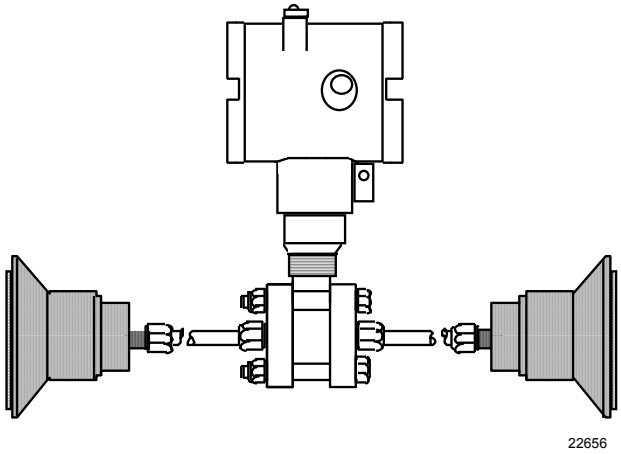
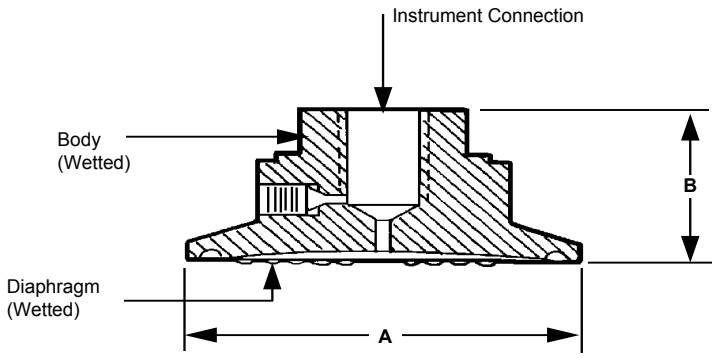


Figure 2 — Differential Pressure Transmitter with Sanitary Quick-Connect Remote Seals.

Reference Dimensions



Reference Dimensions

Seal Size Inches (Millimeters)	Diaphragm Diameter Inches (Millimeters)	Dimension - Inches (Millimeters)	
		A	B
2 (50)	1.9 (48)	2.5 (63)	1.2 (30)
2.5 (63)	2.4 (61)	3.0 (76)	1.2 (30)
3 (76)	2.9 (73)	3.6 (91)	1.2 (30)
4 (101)	4.1 (104)	4.7 (119)	1.0 (25)

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Figure 3

—Typical Tri-Clover Tri-Clamp™ Seal design and reference dimensions. Note: Sanitary remote seals used on Honeywell ST pressure transmitters have separate 3-A authorization from the seal manufacturer

Certifications

	Type of Protection	Comm. Option	Field Parameters	Temp. Codes
FM Approvals[SM]	**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 = 93ºC
	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 = 93ºC
		4-20 mA /	Vmax = 30V Imax = 225mA Ci = 4.2nF Li = * Pi =1.2W	T4 Ta = 93ºC
	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 (Not FISCO)	Vmax = 32V Imax = 120mA Ci = 4.2nF Li = 0 Pi =0.84W	T4 Ta = 40ºC T3 Ta = 93ºC
		Fieldbus – Entity (Not FISCO)	Vmax = 24V Imax = 250mA Ci = 4.2nF Li = 0 Pi =1.2W	T4 Ta = 40ºC T3 Ta = 93ºC
		FISCO	Vmax = 17.5V Imax = 380mA Ci = 4.2nF Li = 0 Pi =5.32W	T4 Ta = 40ºC T3 Ta = 93ºC
	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 = 93ºC
		4-20 mA / HART	Vmax = 30V Imax = 225mA Ci = 4.2nF Li = * Pi =1.2W	T4 Ta = 93ºC
	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 (Not FNICO)	Vmax = 32V Imax = 120mA Ci = 4.2nF Li = 0 Pi =0.84W	T4 Ta = 40ºC T3 Ta = 93ºC
		Fieldbus – Entity (Not FNICO)	Vmax = 24V Imax = 250mA Ci = 4.2nF Li = 0 Pi =1.2W	T4 Ta = 40ºC T3 Ta = 93ºC
		FNICO	Vmax = 32V Ci = 4.2nF Li = 0	T4 Ta = 40ºC T3 Ta = 93ºC

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

FM Approvals[SM] is a service mark of FM Global

	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 = 93ºC
	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 = 93ºC
		4-20 mA / HART	Vmax = 42V Imax = 225mA Ci = 4.2nF Li = * Pi =1.2W	T4 Ta = 93ºC
		Fieldbus – Entity (Not FISCO)	Vmax = 24V Imax = 250mA Ci = 4.2nF Li = 0 Pi =1.2W	T4 Ta = 40ºC T3 Ta = 93ºC
	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 = 93ºC
		4-20 mA / HART	Vmax = 30V Imax = 225mA Ci = 4.2nF Li = * Pi =1.2W	T4 Ta = 93ºC
		Fieldbus – Entity (Not FNICO)	Vmax = 24V Imax = 250mA Ci = 4.2nF Li = 0 Pi =1.2W	T4 Ta = 40ºC T3 Ta = 93ºC
	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 93ºC T6 Ta = –50 to 78ºC
	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 93ºC T5 Ta = –50 to 85ºC T6 Ta = –50 to 70ºC
		4-20 mA / HART	Ui = 30V Ii = 100mA Ci = 4.2nF Li = * Pi =1.2W	T4 Ta = –50 to 93ºC T5 Ta = –50 to 63ºC T6 Ta = –50 to 48ºC
		Fieldbus (Not FISCO)	Ui = 24V Ii = 250mA Ci = 4.2nF Li = 0 Pi =1.2W	T3 Ta = –50 to 93ºC T4 Ta = –50 to 40ºC

* 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 93ºC T6 Ta = –50 to 78ºC
	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 93ºC T5 Ta = –50 to 85ºC T6 Ta = –50 to 70ºC
		4-20 mA / HART	Ui = 30V Ii = 100mA Ci = 4.2nF Li = * Pi =1.2W	T4 Ta = –50 to 93ºC T5 Ta = –50 to 63ºC T6 Ta = –50 to 48ºC
		Fieldbus (Not FISCO)	Ui = 24V Ii = 250mA Ci = 4.2nF Li = 0 Pi =1.2W	T3 Ta = –50 to 93ºC T4 Ta = –50 to 40ºC
	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 93ºC T5 Ta = –50 to 85ºC T6 Ta = –50 to 70ºC
		4-20 mA / HART	Ui = 30V Ii = 100mA Ci = 4.2nF Li = * Pi =1.2W	T4 Ta = –50 to 93ºC T5 Ta = –50 to 63ºC T6 Ta = –50 to 48ºC
		Fieldbus (Not FISCO)	Ui = 24V Ii = 250mA Ci = 4.2nF Li = 0 Pi =1.2W	T3 Ta = –50 to 93ºC T4 Ta = –50 to 40ºC

* 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 0:** Ⓔx II 1 D, Ex tD Enclosure IP 66/67	All	All	A20 IP6X T95ºC Ta = 93ºC or T80ºC Ta = 78ºC
	Flameproof, Zone 1: Ⓔx II 2 GD, Ex d IIC, Ex tD Enclosure IP 66/67	All	All	T5 Ta = –50 to +93ºC T6 Ta = –50 to +78ºC, A21 IP6X T95ºC Ta = 93ºC or T80ºC Ta = 78ºC
	Intrinsically Safe, Zone 0/1: Ⓔx II 1 G, 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 93ºC T5 Ta = –50 to 85ºC T6 Ta = –50 to 70ºC
		4-20 mA / HART	Ui = 30V Ii = 100mA Ci = 4.2nF Li = * Pi =1.2W	T4 Ta = –50 to 93ºC T5 Ta = –50 to 63ºC T6 Ta = –50 to 48ºC
		Fieldbus (Not FISCO)	Ui = 24V Ii = 250mA Ci = 4.2nF Li = 0 Pi =1.2W	T3 Ta = –50 to 93ºC T4 Ta = –50 to 40ºC
	Non-Sparking, Zone 2: Ⓔx II 3 G,Ex nA IIC (Honeywell), Enclosure IP 66/67	4-20 mA / DE	Ui = 30V Ii = 100mA Ci = 4.2nF Li = * Pi =1.2W	T4 Ta = –50 to 93ºC T5 Ta = –50 to 85ºC T6 Ta = –50 to 70ºC
		4-20 mA / HART	Ui = 30V Ii = 100mA Ci = 4.2nF Li = * Pi =1.2W	T4 Ta = –50 to 93ºC T5 Ta = –50 to 63ºC T6 Ta = –50 to 48ºC
		Fieldbus (Not FNICO)	Ui = 24V Ii = 250mA Ci = 4.2nF Li = 0 Pi =1.2W	T3 Ta = –50 to 93ºC T4 Ta = –50 to 40ºC
	Multiple Marking: **Flameproof, Zone 1:** Ⓔx II 2 G, Ex d IIC **Intrinsically Safe, Zone 0/1:** Ⓔx II 1 G, Ex ia IIC **Non-Sparking, Zone 2:** Ⓔx 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 [√] 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 93ºC T5 Ta = –50 to 85ºC T6 Ta = –50 to 70ºC
		4-20 mA / HART	Ui = 30V Ii = 100mA Ci = 4.2nF Li = * Pi =1.2W	T4 Ta = –50 to 93ºC T5 Ta = –50 to 63ºC T6 Ta = –50 to 48ºC
		Fieldbus (Not FISCO/FNICO)	Ui = 24V Ii = 250mA Ci = 4.2nF Li = 0 Pi =1.2W	T3 Ta = –50 to 93ºC T4 Ta = –50 to 40ºC

* 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 93ºC T6 Ta = –50 to 78ºC
	Intrinsically Safe, Zone 0/1: BR-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 93ºC T5 Ta = –50 to 85ºC T6 Ta = –50 to 70ºC
		4-20 mA / HART	Ui = 30V Ii = 100mA Ci = 4.2nF Li = * Pi =1.2W	T4 Ta = –50 to 93ºC T5 Ta = –50 to 63ºC T6 Ta = –50 to 48ºC
		Fieldbus (Not FISCO)	Ui = 24V Ii = 250mA Ci = 4.2nF Li = 0 Pi =1.2W	T3 Ta = –50 to 93ºC T4 Ta = –50 to 40ºC

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

ST 3000 Pressure Transmitter Marine Certificate (MT Option)	This certificate defines the certifications covered for the ST 3000 Pressure Transmitter family of products, including the SMV 3000 Smart Multivariable Transmitter. It represents the compilation of the five certificates Honeywell currently has covering the certification of these products into marine applications. For ST 3000 Smart Pressure Transmitter and SMV 3000 Smart Multivarible Transmitter
	American Bureau of Shipping (ABS) - 2009 Steel Vessel Rules 1-1-4/3.7, 4-6-2/5.15, 4-8-3/13 & 13.5, 4-8-4/27.5.1, 4-9-7/13. Certificate number: 04-HS417416-PDA
	Bureau Veritas (BV) - Product Code: 389:1H. Certificate number: 12660/B0 BV
	Det Norske Veritas (DNV) - Location Classes: Temperature D, Humidity B, Vibration A, EMC B, Enclosure C. For salt spray exposure; enclosure of 316 SST or 2-part epoxy protection with 316 SST bolts to be applied. Certificate number: A-11476
	Korean Register of Shipping (KR) - Certificate number: LOX17743-AE001
	Lloyd's Register (LR) - Certificate number: 02/60001(E1) & (E2)

European Pressure Equipment Directive (PED) (97/23/EC)	The ST 3000 Smart Pressure Transmitters are in conformity with the essential requirements of the Pressure Equipment Directive. 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. 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.
	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. 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.
CE Mark	***Electro Magnetic Compatibility (EMC) (2004/108/EC)*** All Models: EN 50081-1: 1992; EN 50082-2:1995; EN 61326-1:1997 + A1, A2, and A3 – Industrial Locations
Dual Seal Certification	Dual Seal Certification based on ANSI/NFPA 70-202 and ANSI/ISA 12.27.01 requirements without the use of additional seal protection elements.
Recommended Frequency of Calibration	Honeywell recommends verifying the calibration of these devices once every four years.
Approved Manufacturing Locations	Honeywell Process Solutions - York, PA USA Honeywell (Tianjin) Limited – Tianjin, P.R. China Honeywell Automation India Ltd. – Pune 411013 India

Options

- **Mounting Bracket (Options MB, MX, SB, SX, FB)**
  The 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
- **Lightning Protection (Option LP)**
  A terminal block is available with circuitry that protects the transmitter from transient surges induced by nearby lightning strikes.
- **NAMUR NE43 Compliance (Option NE)**
  This option provides software the 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 ≥ 20.8 mA.
- **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.

Sales and Service
For application assistance, current specifications, pricing, or name of the nearest Authorized Distributor, contact one of the offices below.

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Model Selection Guides are subject to change and are inserted into the specifications as guidance only.
Prior to specifying or ordering a model check for the latest revision Model Selection Guides which are published at:
http://hpsweb.honeywell.com/Cultures/en-US/Products/Instrumentation/ProductModelSelectionGuides/default.htm

Model Selection Guide 34-ST-16-32 for ST 3000 Smart Transmitters (DP, GP & AP) Remote Seals Series 100

Honeywell

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ST 3000 Smart Transmitter (DP, GP & AP) Remote Seals Series 100

Model Selection Guide

Instructions

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

Key Number	I	II	III (Optional)	IV
_ _ _ _ _ _	- _ _ _	- _ _ _ _ _ _ _ _ _ _ _ _	- _ _, _ _	+ X X X X

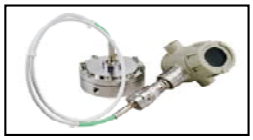
KEY NUMBER

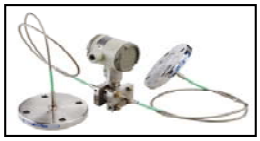
Description	Selection	Availability		
0-4" to 0-400" H_2O / 0-10 to 0-1,000 mbar Body Rating*: 2,500 psi (172 bar) - Compound Characterized	STR12D	↓		
0-1 to 0-100 psi / 0-0.07 to 0-7 bar Body Rating*: 2,500 psi (172 bar)	STR13D	↓		
0-5 to 0-500 psia / 0-0.34 to 0-35 bar A Body Rating*: 500 psia (35 bar A)	STR14A		↓	
0-5 to 0-500 psi / 0-0.34 bar to 0-35 bar Body Rating*: 500 psi (35 bar)	STR14G			↓
0-30 to 0-3,000 psi / 0-2.1 bar to 210 bar Body Rating*: 3,000 psi (210 bar)	STR17G			↓

*** Remote seal system pressure rating is body rating or seal rating, whichever is less.**

Important Note: **Base STR 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		Selection			
Number of Seals	1 Remote Seal (High Side)	1 _ _	●	●	●
	2 Remote Seals	2 _ _	●		
	1 Remote Seal (Low Side)	3 _ _	●		
	Value Added Model (VAM unit)	5 _ _	**8**	**8**	**8**
Fill Fluid (Meter body)	DC®200 Silicone	_ 1 _	●	●	●
	CTFE	_ 2 _	**q**	**q**	**q**
Construction	**Non-Wetted Adapter Head Material**				
In-Line Gauge	316 SS Bonnet	_ _ A			●
	316 SS Bonnet for Close-Couple	_ _ D			**y**
Dual Head DP	316 SS (bolt-on heads)	_ _ A	●		
	316 SS for Close-Couple	_ _ D	**y**		
	316 SS with all-welded meter body	_ _ C	**7**		
Single Head Absolute	316 SS Adapter Head	_ _ A		●	
	316 SS Head for Close-Couple	_ _ D		**y**	


In-Line Gauge


Dual Head DP


All welded

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TABLE II - SEALS

Format for Seal Selection:
Specify 12 characters _ _ _ _ _ _ _ _ _ _ _ _
Common / Required Seal

Note: The first 3 characters are common to all seals. When selecting required seal, you must specify only the 9 selections within the required seal.

					Selection	12D & 13D	14A	14G & 17G
Secondary Fill	No Fill Fluid				0 _ _ _ _ _ _ _ _ _ _	3	3	3
	Silicone (DC®200)				1 _ _ _ _ _ _ _ _ _ _	•	•	•
	CTFE				2 _ _ _ _ _ _ _ _ _ _	•	•	•
	Silicone (DC®704)				3 _ _ _ _ _ _ _ _ _ _	•	•	•
	Neobee® (M20) [2]				4 _ _ _ _ _ _ _ _ _ _	•	•	•
	Sylltherm® 800 [3]				5 _ _ _ _ _ _ _ _ _ _	•	•	•
Connection of Remote Seal to Meter Body	No Capillary, No Nipple				_ 0 _ _ _ _ _ _ _ _ _	3	3	3
	Capillary Length	5 feet	1.5 m	SS Armor	_ A _ _ _ _ _ _ _ _ _	•	•	•
		10 feet	3.0 m		_ B _ _ _ _ _ _ _ _ _	•	•	•
		15 feet	4.5 m		_ C _ _ _ _ _ _ _ _ _	•	•	•
		20 feet	6.1 m		_ D _ _ _ _ _ _ _ _ _	•	•	•
		25 feet	7.5 m		_ E _ _ _ _ _ _ _ _ _	•	•	•
		35 feet	10.7 m		_ F _ _ _ _ _ _ _ _ _	•	•	•
		5 feet	1.5 m	PVC Coated SS Armor	_ G _ _ _ _ _ _ _ _ _	•	•	•
		10 feet	3.0 m		_ H _ _ _ _ _ _ _ _ _	•	•	•
		15 feet	4.5 m		_ J _ _ _ _ _ _ _ _ _	•	•	•
		20 feet	6.1 m		_ K _ _ _ _ _ _ _ _ _	•	•	•
		25 feet	7.5 m		_ L _ _ _ _ _ _ _ _ _	•	•	•
		35 feet	10.7 m		_ M _ _ _ _ _ _ _ _ _	•	•	•
	2 inch long SS nipple close-coupled				_ 2 _ _ _ _ _ _ _ _ _	z	z	z
No Selection					_ _ 0 _ _ _ _ _ _ _ _	•	•	•
No Seal Attached to Core Transmitter					_ _ _ 0 0 0 0 0 0 0 0 0	3	3	3

	Diaphragm Diameter	Flange Size	Flange Pressure Rating [1]		Selection			
Flush Flanged Seal	3.5"	3"	ANSI Class 150		_ _ _ AFA _ _ _ _ _ _	•	•	•
			ANSI Class 300		_ _ _ AFC _ _ _ _ _ _	•	•	•
		80mm	DIN DN80-PN40		_ _ _ AFM _ _ _ _ _ _	•	•	•
	Wetted Material		Diaphragm	Upper Insert	Selection			
			316L SS	316L SS	_ _ _ _ _ _ AA _ _ _ _	•	•	•
			Hastelloy® C-276	316L SS	_ _ _ _ _ _ AB _ _ _ _	•	•	•
			Hastelloy® C-276	Hastelloy® C-276	_ _ _ _ _ _ AC _ _ _ _	•	•	•
			Monel 400®	Monel 400®	_ _ _ _ _ _ AE _ _ _ _	•	•	•
			Tantalum [5]	316L SS	_ _ _ _ _ _ AF _ _ _ _	1	1	1
	Non-Wetted Material (upper)		CS (Nickel Plated)		_ _ _ _ _ _ _ _ 1 _ _ _	•	•	•
			316L SS		_ _ _ _ _ _ _ _ 2 _ _ _	•	•	•
	Seal-Capillary Connection		Center Seal		_ _ _ _ _ _ _ _ _ 1 _ _	•	•	•
			Side Seal		_ _ _ _ _ _ _ _ _ 2 _ _	9	9	9
	Calibration Rings		None		_ _ _ _ _ _ _ _ _ _ A _	•	•	•
			316L SS		_ _ _ _ _ _ _ _ _ _ B _	5	5	5
			Hastelloy® C-276		_ _ _ _ _ _ _ _ _ _ C _	5	5	5
			Monel 400®		_ _ _ _ _ _ _ _ _ _ D _	5	5	5

Table II continued next page

[1] Standard facing 125-250 AARH RF (raised face) serrated surface finish.
[2] Limited vacuum availability.
[3] Minimum static pressure requirement. No vacuum allowed. See Specifications Figure 15.
[5] Tantalum Upper insert has Tantalum wetted parts and 316 SS or CS non-wetted parts
Note: Remote seal system pressure rating is body rating or seal rating, whichever is less.

TABLE II - SEALS (continued)

			Selection	STR12D & 13D	STR14A 14G	STR14A 17G
Flush Flanged Seal 	Flushing Connections and Plugs[4] (Metal plug material will be the same as Cal. ring material if metal plug is chosen - SS Plug for CS Lower)	None	_ _ _ _ _ _ _ _ _ _ 0	•	•	•
		One 1/4" with plastic plug	_ _ _ _ _ _ _ _ _ _ H	6	6	6
		One 1/4" with metal plug	_ _ _ _ _ _ _ _ _ _ J	6	6	6
		Two 1/4" with plastic plugs	_ _ _ _ _ _ _ _ _ _ M	6	6	6
		Two 1/4" with metal plugs	_ _ _ _ _ _ _ _ _ _ N	6	6	6
		One 1/2" with plastic plug	_ _ _ _ _ _ _ _ _ _ P	6	6	6
		One 1/2" with metal plug	_ _ _ _ _ _ _ _ _ _ Q	6	6	6
		Two 1/2" with plastic plugs	_ _ _ _ _ _ _ _ _ _ R	6	6	6
		Two 1/2" with metal plugs	_ _ _ _ _ _ _ _ _ _ S	6	6	6

Table II continued below

TABLE II - SEALS (continued)

	Diaphragm Diameter	Flange Size	Flange Pressure Rating [1]	Const. - See Spec. Figure 34-ST-03-64	Construction - See Spec. Figure 34-ST-03-64 Selection	STR12D & 13D	STR14A 14G	STR14A 17G
Flush Flanged Seal with Lower 	2.4"	1"	ANSI 150	22	_ _ _ BCA _ _ _ _ _ _	t	4	•
			ANSI 300	22	_ _ _ BCC _ _ _ _ _ _	t	4	•
		1-1/2"	ANSI 150	22	_ _ _ BGA _ _ _ _ _ _	t	4	•
			ANSI 300	22	_ _ _ BGC _ _ _ _ _ _	t	4	•
		2"	ANSI 150	22	_ _ _ BDA _ _ _ _ _ _	t	4	•
			ANSI 300	22	_ _ _ BDC _ _ _ _ _ _	t	4	•
		3"	ANSI 150	22	_ _ _ BFA _ _ _ _ _ _	t	4	•
			ANSI 300	22	_ _ _ BFC _ _ _ _ _ _	t	4	•
	2.9"	1/2"	ANSI 150	23	_ _ _ CAA _ _ _ _ _ _	•	•	•
		1"	ANSI 150	23	_ _ _ CCA _ _ _ _ _ _	•	•	•
			ANSI 300	23	_ _ _ CCC _ _ _ _ _ _	•	•	•
		1-1/2"	ANSI 150	22	_ _ _ CGA _ _ _ _ _ _	•	•	•
			ANSI 300	22	_ _ _ CGC _ _ _ _ _ _	•	•	•
		2"	ANSI 150	22	_ _ _ CDA _ _ _ _ _ _	•	•	•
			ANSI 300	22	_ _ _ CDC _ _ _ _ _ _	•	•	•
	4.1"	1/2"	ANSI 150	22	_ _ _ DAA _ _ _ _ _ _	•	•	•
		1"	ANSI 150	23	_ _ _ DCA _ _ _ _ _ _	•	•	•
			ANSI 300	23	_ _ _ DCC _ _ _ _ _ _	•	•	•
		1-1/2"	ANSI 150	23	_ _ _ DGA _ _ _ _ _ _	•	•	•
			ANSI 300	23	_ _ _ DGC _ _ _ _ _ _	•	•	•
		2"	ANSI 150	23	_ _ _ DDA _ _ _ _ _ _	•	•	•
			ANSI 300	22	_ _ _ DDC _ _ _ _ _ _	•	•	•
		3"	ANSI 150	22	_ _ _ DFA _ _ _ _ _ _	•	•	•
			ANSI 300	22	_ _ _ DFC _ _ _ _ _ _	•	•	•

Table II continued next page

[1] Standard facing 125-250 AARH RF (raised face) serrated surface finish.
[4] Plastic Plugs are TEMPORARY ONLY to protect threads and MUST be REMOVED before installation
Note: Remote seal system pressure rating is body rating or seal rating, whichever is less.

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TABLE II - SEALS (continued)

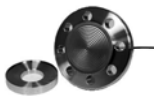
					STR12D & 13D	STR14A 14G & 17G		
		Diaphragm	**Lower**	**Selection**				
	Wetted Material	316L SS	316L SS	_ _ _ _ _ _ BA _ _ _ _	●	●	●
		Hastelloy® C-276	316L SS	_ _ _ _ _ _ BB _ _ _ _	●	●	●
		Hastelloy® C-276	Hastelloy® C-276	_ _ _ _ _ _ BC _ _ _ _	●	●	●
		Monel 400®	Monel 400®	_ _ _ _ _ _ BE _ _ _ _	●	●	●
		Tantalum	316L SS	_ _ _ _ _ _ BF _ _ _ _	**1**	**1**	**1**
		Tantalum	Hastelloy® C-276	_ _ _ _ _ _ BG _ _ _ _	**1**	**1**	**1**
		Tantalum	Tantalum Clad	_ _ _ _ _ _ BH _ _ _ _	**10**	**10**	**10**
		**Upper**	**Upper Insert**	**Selection**			
	Non-Wetted Material (upper, upper insert)	316L SS	316L SS	_ _ _ _ _ _ _ _ 4 _ _ _	●	●	●
		Carbon Steel	316L SS	_ _ _ _ _ _ _ _ 5 _ _ _	●	●	●
Flush Flanged Seal with Lower	Bolts [6]	No Selection		_ _ _ _ _ _ _ _ 0 _ _	●	●	●
	Flushing Connections and Plugs[4] (Metal plug material will be the same as Lower material, if metal plug is chosen - (SS Plug for CS Lower and Tantalum Clad)	None		_ _ _ _ _ _ _ _ _ 0 _	●	●	●
		One 1/4" with plastic plug		_ _ _ _ _ _ _ _ _ H _	●	●	●
		One 1/4" with metal plug		_ _ _ _ _ _ _ _ _ J _	●	●	●
		Two 1/4" with plastic plugs		_ _ _ _ _ _ _ _ _ M _	●	●	●
		Two 1/4" with metal plugs		_ _ _ _ _ _ _ _ _ N _	●	●	●
		One 1/2" with plastic plug		_ _ _ _ _ _ _ _ _ P _	●	●	●
		One 1/2" with metal plug		_ _ _ _ _ _ _ _ _ Q _	●	●	●
		Two 1/2" with plastic plugs		_ _ _ _ _ _ _ _ _ R _	●	●	●
		Two 1/2" with metal plugs		_ _ _ _ _ _ _ _ _ S _	●	●	●
	Gasket	Klinger® C-4401 (non-asbestos)		_ _ _ _ _ _ _ _ _ _ K	**c**	**c**	**c**
		Grafoil®		_ _ _ _ _ _ _ _ _ _ G	●	●	●
		Teflon®		_ _ _ _ _ _ _ _ _ _ T	**c**	**c**	**c**
		Gylon® 3510		_ _ _ _ _ _ _ _ _ _ L	**d**	**d**	**d**

Table II continued below

TABLE II - SEALS (continued)

						STR12D & 13D	STR14A 14G & 17G		
	Diaphragm Diameter	**Flange Size**	**Flange Pressure Rating [1]**		**Selection**			
	2.8"	3" (2.8" OD extension)	ANSI Class 150		_ _ _ EFA _ _ _ _ _ _	●	●	●
			ANSI Class 300		_ _ _ EFC _ _ _ _ _ _	●	●	●
			DIN DN80-PN40		_ _ _ EFM _ _ _ _ _ _	●	●	●
	3.5"	4" (3.70" OD extension	ANSI Class 150		_ _ _ FGA _ _ _ _ _ _	●	●	●
			ANSI Class 300		_ _ _ FGC _ _ _ _ _ _	●	●	●
			DIN DN100-PN40		_ _ _ FGP _ _ _ _ _ _	●	●	●
			Diaphragm	**Ext. Tube**	**Selection**			
Flange Seal with Extended Diaphragm	Wetted Material		316L SS	316L SS	_ _ _ _ _ _ EA _ _ _ _	●	●	●
			Hastelloy® C-276	316L SS	_ _ _ _ _ _ EB _ _ _ _	●	●	●
			Hastelloy® C-276	Hastelloy® C-276	_ _ _ _ _ _ EC _ _ _ _	●	●	●
	Non-Wetted Material (flange)		CS (Nickel Plated)		_ _ _ _ _ _ _ _ 7 _ _ _	●	●	●
			316L SS		_ _ _ _ _ _ _ _ 8 _ _ _	●	●	●
	Bolts		No Selection		_ _ _ _ _ _ _ _ 0 _ _	●	●	●
	Extension Length		2"		_ _ _ _ _ _ _ _ _ 2 _	●	●	●
			4"		_ _ _ _ _ _ _ _ _ 4 _	●	●	●
			6"		_ _ _ _ _ _ _ _ _ 6 _	●	●	●
No Selection	No Selection		No Selection		_ _ _ _ _ _ _ _ _ _ 0	●	●	●

Table II continued next page

[1] Standard facing 125-250 AARH RF (raised face) serrated surface finish.
[4] Plastic Plugs are TEMPORARY ONLY to protect threads and MUST be REMOVED before installation
[6] Bolt material will be same as Upper Material. However, if Table III bolt/nut option is chosen, seal bolt material will be the same.
Note: Remote seal system pressure rating is body rating or seal rating, whichever is less.

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TABLE II - SEALS (continued)

	Diaphragm Diameter	Flange Size	Flange Pressure Rating Dependent on Customer Flange [1]		Selection	STR12D & 13D	STR14A 14G & 17G	
Pancake Seal 	3.5"	3"	ANSI Class 150/300/600		_ _ _ GFA _ _ _ _ _ _	●	●	●
	Wetted Material		**Diaphragm**	**Body**				
			316L SS	316L SS	_ _ _ _ _ _ GA _ _ _ _	●	●	●
			Hastelloy® C-276	316L SS	_ _ _ _ _ _ GB _ _ _ _	●	●	●
			Hastelloy® C-276	Hastelloy® C-276	_ _ _ _ _ _ GC _ _ _ _	●	●	●
			Monel 400®	Monel 400®	_ _ _ _ _ _ GE _ _ _ _	●	●	●
			Tantalum	Tantalum [7]	_ _ _ _ _ _ GG _ _ _ _	1	1	1
	Non-Wetted Material		No Selection		_ _ _ _ _ _ _ _ 0 _ _ _	●	●	●
	Bolts		No Selection		_ _ _ _ _ _ _ _ 0 _ _	●	●	●
	Calibration Rings 		None		_ _ _ _ _ _ _ _ _ A _	●	●	●
			316L SS		_ _ _ _ _ _ _ _ _ B _	5	5	5
			Hastelloy® C-276		_ _ _ _ _ _ _ _ _ C _	5	5	5
			Monel 400®		_ _ _ _ _ _ _ _ _ D _	5	5	5
	Flushing Connections and Plugs[4] (Metal plug material will be the same as Cal. Ring material, if metal plug is chosen - SS Plug for CS Lower)		None		_ _ _ _ _ _ _ _ _ _ 0	●	●	●
			One 1/4" with plastic plug		_ _ _ _ _ _ _ _ _ _ H	6	6	6
			One 1/4" with metal plug		_ _ _ _ _ _ _ _ _ _ J	6	6	6
			Two 1/4" with plastic plugs		_ _ _ _ _ _ _ _ _ _ M	6	6	6
			Two 1/4" with metal plugs		_ _ _ _ _ _ _ _ _ _ N	6	6	6
			One 1/2" with plastic plug		_ _ _ _ _ _ _ _ _ _ P	6	6	6
			One 1/2" with metal plug		_ _ _ _ _ _ _ _ _ _ Q	6	6	6
			Two 1/2" with plastic plugs		_ _ _ _ _ _ _ _ _ _ R	6	6	6
			Two 1/2" with metal plugs		_ _ _ _ _ _ _ _ _ _ S	6	6	6

Table II continued below

TABLE II - SEALS (continued)

	Diaphragm Diameter	Flange Size	Flange Pressure Rating [1]		Selection	STR12D & 13D	STR14A 14G & 17G	
Chemical Tee "Taylor" Wedge 	3.5"	Taylor Wedge 5" O.D.	750 psi		_ _ _ HM0 _ _ _ _ _ _	v		
	Wetted Material		**Diaphragm**	**Body**	**Selection**			
			316L SS	316L SS	_ _ _ _ _ _ HA _ _ _ _	●		
			Hastelloy® C-276	316L SS	_ _ _ _ _ _ HB _ _ _ _	●		
			Hastelloy® C-276	Hastelloy® C-276	_ _ _ _ _ _ HC _ _ _ _	●		
	Non-Wetted Material		No Selection		_ _ _ _ _ _ _ _ 0 _ _ _	●		
	Bolts		No Selection		_ _ _ _ _ _ _ _ 0 _ _	●		
	Styles		No Selection		_ _ _ _ _ _ _ _ _ 0 _	●		
	No Selection		No Selection		_ _ _ _ _ _ _ _ _ _ 0	●		

Table II continued next page

[1] Standard facing 125-250 AARH RF (raised face) serrated surface finish.
[4] Plastic Plugs are TEMPORARY ONLY to protect threads and MUST be REMOVED before installation
[7] Tantalum Body has Tantalum wetted parts and 316 SS non-wetted parts
Note: Remote seal system pressure rating is body rating or seal rating, whichever is less.

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TABLE II - SEALS (continued)

	Diaphragm Diameter	Threaded Process Connection Size (NPT Female)	Pressure Rating: CS Bolts	Pressure Rating: 304 SS Bolts	STR12D & 13D Selection	STR14A 14G & 17G		
 Seal with Threaded Process Connection	2.4"	1/2 NPT	2,500 psi	1,250 psi	_ _ _ JJG _ _ _ _ _ _	t	4	●
		3/4 NPT			_ _ _ JKG _ _ _ _ _ _	t	4	●
		1 NPT			_ _ _ JLG _ _ _ _ _ _	t	4	●
	2.9"	1/2 NPT	2,500 psi	1,250 psi	_ _ _ KJG _ _ _ _ _ _	●	●	●
		3/4 NPT			_ _ _ KKG _ _ _ _ _ _	●	●	●
		1 NPT			_ _ _ KLG _ _ _ _ _ _	●	●	●
	4.1"	1/2 NPT	1,500 psi	750 psi	_ _ _ LJG _ _ _ _ _ _	●	●	●
		3/4 NPT			_ _ _ LKG _ _ _ _ _ _	●	●	●
		1 NPT			_ _ _ LLG _ _ _ _ _ _	●	●	●

	Wetted Material: Diaphragm	Wetted Material: Lower	Selection			
	316L SS	Carbon Steel	_ _ _ _ _ _ JA _ _ _ _	●	●	●
	316L SS	316L SS	_ _ _ _ _ _ JB _ _ _ _	●	●	●
	Hastelloy® C-276	316L SS	_ _ _ _ _ _ JC _ _ _ _	●	●	●
	Hastelloy® C-276	Hastelloy® C-276	_ _ _ _ _ _ JD _ _ _ _	●	●	●
	Monel 400®	Monel 400®	_ _ _ _ _ _ JE _ _ _ _	●	●	●
	Tantalum	316L SS	_ _ _ _ _ _ JF _ _ _ _	1	1	1
	Tantalum	Hastelloy® C-276	_ _ _ _ _ _ JG _ _ _ _	1	1	1

Non-Wetted Material (upper)	CS (Nickel Plated)	_ _ _ _ _ _ _ _ A _ _ _	●	●	●
	Stainless Steel	_ _ _ _ _ _ _ _ C _ _ _	w	w	w
Bolts [8]	Carbon Steel	_ _ _ _ _ _ _ _ _ C _ _	1	1	1
	304 SS	_ _ _ _ _ _ _ _ _ D _ _	●	●	●
Flushing Connections and Plugs[4] (Metal plug material will be the same as Lower material, if metal plug is chosen - (SS Plug for CS Lower and Tantalum Clad)	None	_ _ _ _ _ _ _ _ _ _ 0 _	●	●	●
	One 1/4" with plastic plug	_ _ _ _ _ _ _ _ _ _ H _	●	●	●
	One 1/4" with metal plug	_ _ _ _ _ _ _ _ _ _ J _	●	●	●
	Two 1/4" with plastic plugs	_ _ _ _ _ _ _ _ _ _ M _	●	●	●
	Two 1/4" with metal plugs	_ _ _ _ _ _ _ _ _ _ N _	●	●	●
	One 1/2" with plastic plug	_ _ _ _ _ _ _ _ _ _ P _	11	11	11
	One 1/2" with metal plug	_ _ _ _ _ _ _ _ _ _ Q _	11	11	11
	Two 1/2" with plastic plugs	_ _ _ _ _ _ _ _ _ _ R _	11	11	11
	Two 1/2" with metal plugs	_ _ _ _ _ _ _ _ _ _ S _	11	11	11
Gasket	Klinger® C-4401 (non-asbestos)	_ _ _ _ _ _ _ _ _ _ _ K	c	c	c
	Grafoil®	_ _ _ _ _ _ _ _ _ _ _ G	●	●	●
	Teflon®	_ _ _ _ _ _ _ _ _ _ _ T	c	c	c
	Gylon® 3510	_ _ _ _ _ _ _ _ _ _ _ L	d	d	d

Table II continued next page

[4] Plastic Plugs are TEMPORARY ONLY to protect threads and MUST be REMOVED before installation

[8] If Table III Bolt/Nut option is chosen, Seal bolts will ship as same material, and MAWP may change.

Note: Remote seal system pressure rating is body rating or seal rating, whichever is less.

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TABLE II - SEALS (continued)

	Diaphragm Diameter	Flange Size	Pressure Rating		Selection	STR12D & 13D	STR14A	14G & 17G
 Sanitary Seal [9]	1.9"	2"	Customer clamp rating or 600 psi, whichever is less		_ _ _ MD0 _ _ _ _ _ _			24
	2.4"	2-1/2"			_ _ _ NE0 _ _ _ _ _ _	25		24
	2.9"	3"			_ _ _ PF0 _ _ _ _ _ _	24	24	24
	4.1"	4"			_ _ _ QG0 _ _ _ _ _ _	24	24	24
	Wetted Material		**Diaphragm**	**Body**	**Selection**			
			316L SS	316L SS	_ _ _ _ _ _ N A _ _ _ _	●	●	●
	Non-Wetted Material		No Selection		_ _ _ _ _ _ _ _ 0 _ _ _	●	●	●
	Bolts		No Selection		_ _ _ _ _ _ _ _ _ 0 _ _	●	●	●
	Styles		Tri-Clover Tri-Clamp®		_ _ _ _ _ _ _ _ _ _ 8 _	●	●	●
	Gasket		No Selection		_ _ _ _ _ _ _ _ _ _ _ 0	●	●	●
 Saddle Seal	**Diaphragm Diameter**	**Size and Bolt Pattern**	**Seal Pressure Rating**		**Selection**			
			C.S. Bolts	**304 SS Bolts**				
	2.4" **8-Bolt** Design	for 3" Pipe ≥ 4" pipe	1,500 psi	1,500 psi	_ _ _ RFK _ _ _ _ _ _	t	4	●
					_ _ _ RGK _ _ _ _ _ _	t	4	●
	2.4" **6-Bolt** Design	for 3" Pipe ≥ 4" pipe	1,250 psi	1,250 psi	_ _ _ RPK _ _ _ _ _ _	t	4	●
					_ _ _ RQK _ _ _ _ _ _	t	4	●
	Wetted Material		**Diaphragm**	**Lower Housing**	**Selection**			
			316L SS	Carbon Steel	_ _ _ _ _ _ RA _ _ _ _	●	●	●
			316L SS	316L SS	_ _ _ _ _ _ RB _ _ _ _	●	●	●
			Hastelloy® C-276	316L SS	_ _ _ _ _ _ RC _ _ _ _	●	●	●
			Hastelloy® C-276	Hastelloy® C-276	_ _ _ _ _ _ RD _ _ _ _	●	●	●
			316L SS	N/A-Body Only [10]	_ _ _ _ _ _ SB _ _ _ _	●	●	●
			Hastelloy® C-276	N/A-Body Only [10]	_ _ _ _ _ _ SC _ _ _ _	●	●	●
	Non-Wetted Material		**Body**	**Bolts [8, 10]**	**Selection**			
			Carbon Steel	Carbon Steel	_ _ _ _ _ _ _ B _ _ _	1	1	1
			316L SS	304 SS	_ _ _ _ _ _ _ C _ _ _	●	●	●
	Bolts		No Selection		_ _ _ _ _ _ _ _ _ 0 _ _	●	●	●
	Styles		No Selection		_ _ _ _ _ _ _ _ _ _ 0 _	●	●	●
	Gasket		Klinger® C-4401 (non-asbestos)		_ _ _ _ _ _ _ _ _ _ _ K	●	●	●
			Grafoil®		_ _ _ _ _ _ _ _ _ _ _ G	●	●	●
			Teflon®		_ _ _ _ _ _ _ _ _ _ _ T	●	●	●
			Gylon® 3510		_ _ _ _ _ _ _ _ _ _ _ L	●	●	●

[8] If Table III Bolt/Nut option is chosen, Seal bolts will ship as same material, and MAWP may change.
[9] All sanitary seals have dairy grade 3A approval.
[10] Bolts are not included with "body only" selection.
Note: Remote seal system pressure rating is body rating or seal rating, whichever is less.

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TABLE III - OPTIONS	Selection	STR12D & 13D	STR14A	14G & 17G	
Communication Options *(Must choose a communications option)*					
Analog only *(can be configured using appropriate Honeywell DE tool)*	AN	●	●	●	b
DE Protocol communications	DE	●	●	●	
HART® 5.x Protocol compatible electronics	HC	●	●	●	
HART® 6.x Protocol compatible electronics	H6	●	●	●	
FOUNDATION™ Fieldbus Communications	FF	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	f	f	f	
Local Zero & Span	ZS	m		m	b
Local Zero	LZ	x		x	
Transmitter Housing & Electronics Options					
*No housing conduit plugs or adaptors 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[5] Electronics Housing - *(with M20 Conduit Connections)*	SH	n	n	n	b
316 SS[5] Electronics Housing - (*with M20 to 1/2 NPT 316 SS Conduit Adapter for use with FM and CSA Approval codes)*	A3	i	i	i	
1/2 NPT Male to M20 Female 316 SS Certified Conduit Adapter (*ATEX, CSA & IECEx)*	A1	●	●	●	
1/2 NPT Male to 3/4 NPT Female 316 SS Certified Conduit Adapter *(ATEX, CSA & IECEx)*	A2	●	●	●	
M20 Male to 1/2 NPT Female 316 SS Certified Conduit Adaptor *(ATEX, CSA & IECEx)*	A4	●	●	●	
1/2 NPT Zinc-plated Certified Conduit Plug *(ATEX, CSA & IECEx)*	A5	●	●	●	
1/2 NPT 316 SS Certified Conduit Plug *(ATEX, CSA & IECEx)*	A6	●	●	●	
M20 316 SS Certified Conduit Plug *(ATEX, CSA & IECEx)*	A7	●	●	●	
1/2 NPT Non-certified Conduit plug *(Zinc-plated carbon steel, general use)*	A8	●	●	●	
NAMUR Failsafe Software	NE	15	15	15	
SIL 2 - TÜV Certified transmitter *(requires HC or H6 and WP options)*	SL	14	14	14	
Lightning Protection	LP	●	●	●	
Custom Calibration and I.D. in Memory	CC	●	●	●	
Transmitter Configuration - *(non-Fieldbus)*	TC	15	15	15	
Transmitter Configuration - *(Fieldbus)*	FC	21	21	21	
Write Protection *(Delivered in the "enabled" position)*	WP	●	●	●	b
Write Protection *(Delivered in the "disabled" position)*	WX	●	●	●	
Stainless Steel Customer Wired-On Tag *(4 lines, 26 characters per line, customer supplied information)*	TG	●	●	●	b
Stainless Steel Customer Wired-On Tag *(blank)*	TB	●	●	●	
Meter Body Options (Seal bolt material depends on Transmitter bolt material)					
A286 SS *(NACE)* Bolts and 304 SS *(NACE)* Nuts for Heads	CR	●	●		b
316 SS Bolts and 316 SS Nuts for Process Heads	SS	●			
B7M Bolts and Nuts for Process Heads	B7	●			
Remote Seal Options					
Gold Plated Seal Diaphragm *(1 Seal)*	G1	j	j	j	b
Gold Plated Seal Diaphragm *(2 Seals)*	G2	j			
Teflon Coated Seal Diaphragm *(1 Seal) - only for anti-sticking*	N1	j	j	j	
Teflon Coated Seal Diaphragms *(2 Seals) - only for anti-sticking*	N2	j			
Transmitter Mounting Bracket Options					
Angle Mounting Bracket - Carbon Steel	MB	●	●	●	b
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	●	●	●	
Services/Certificates/Marine Type Approvals Options					
Users Manual Paper Copy *(Standard, HC/H6 or FF ships accordingly)*	UM	●	●	●	b
Clean Transmitter for Oxygen or Chlorine Service with Certificate (50039190)	0X	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	
NACE Certificate *(Process-Wetted & Non-Process Wetted)* (FC33339)	F7	o	o	●	b
NACE Certificate for all welded meter bodies only (F0198)	F8	16			
NACE Certificate *(Process-Wetted only)* (FC33338)	FG	●	●	●	
Material Traceability Certification per EN 10204 3.1 (FC33341)	FX	●	●	●	
Marine Type Approvals *(DNV, ABS, BV, KR & LR)*	MT	2	2	2	

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

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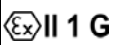
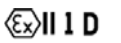
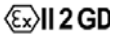
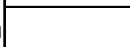
TABLE III - OPTIONS (continued)

		STR12D & 13D	STR14A		
Warranty Options					
Additional Warranty - 1 year	W1	•	•	•	
Additional Warranty - 2 years	W2	•	•	•	
Additional Warranty - 3 years	W3	•	•	•	b
Additional Warranty - 4 years	W4	•	•	•	

Approval Body	Approval Type	Location or Classification	Selection			
No hazardous location approvals			9X	•	•	•
ATEX [10] (LCIE)	Intrinsically Safe, Zone 0		**Ex ia IIC** T4 (Ta = –50°C to +93°C); T5 (Ta = –50°C to +85°C); T6 (Ta = –50°C to +70°C) Enclosure IP 66/67	3S	•	•	•
	Intrinsically Safe, Zone 1		**Ex ia IIC** T4 (Ta = –50°C to +93°C); T5 (Ta = –50°C to +85°C); T6 (Ta = –50°C to +70°C) Enclosure IP 66/67				
	Dust-tight Enclosure Zone 0		**Ex tD A20 IP6X** T95°C (at Ta = 93°C) or T80°C (at Ta = 78°C) Enclosure IP 66/67	33	**26**	**26**	**26**
	Flameproof and Dust-tight Enclosure, Zone 1		**Ex d IIC** T5 (Ta = –40°C to +93°C), T6 (Ta = –40°C to +78°C) Supply 11- 42Vdc **Ex tD A21 IP6X** T95°C (at Ta = 93°C) or T80°C (at Ta = 78°C) Enclosure IP 66/67				
	Non-Sparking, Zone 2		**Ex nA, IIC** T5 (Ta = –40°C to +93°C), T6 (Ta = –40°C to +78°C); Zone 2 Supply < 42Vdc, 23mA **Ex tD A22 IP6X** T95°C (at Ta = 93°C) or T80°C (at Ta = 78°C) (Honeywell). Enclosure IP 66/67	3N			
	Multiple Marking [11] Int. Safe, Zone 0/1 and Dust-tight Enclosure, or Flameproof, Zone 1 and and Dust-tight Enclosure, or Non-Sparking, Zone 2		**Ex ia IIC** T4 (Ta = –50°C to +93°C); T5 (Ta = –50°C to +85°C); T6 (Ta = –50°C to +70°C); Ui = 30V; Ii = 100mA **Ex tD A20 IP6X** T95°C (at Ta = 93°C) or T80°C (at Ta = 78°C)	3C	**26**	**26**	**26**
			**Ex d IIC** T5 (Ta = –40°C to +93°C), T6 (Ta = –40°C to +78°C) Supply 11- 42Vdc **Ex tD A21 IP6X** T95°C (at Ta = 93°C) or T80°C (at Ta = 78°C)				
			Ex nA, IIC T5 (Ta = –40°C to +93°C), T6 (Ta = –40°C to +78°C); Zone 2 Supply < 42Vdc, 23mA **Ex tD A22 IP6X** T95°C (at Ta = 93°C) or T80°C (at Ta = 78°C) (Honeywell) Enclosure IP 66/67				

b

Table III Approvals continued next page

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TABLE III - Approvals Options (continued)

Approval Body	Approval Type	Location or Classification	Selection	STR12D & 13D	STR14A 14G & 17G		
FM Approvals[SM]	Explosion Proof	Class I, Div. 1, Groups A,B,C,D	1C	•	•	•	b
	Dust-Ignitionproof	Class II, III Div. 1, Groups E,F,G					
	Non-Incendive	Class I, Div. 2, Groups A,B,C,D					
	Intrinsically Safe	Class I, II, III, Div. 1, Groups A,B,C,D,E,F,G					
Canadian Standards Association (CSA)	Explosion Proof	Class I, Div. 1, Groups B,C,D	2J	**26**	**26**	**26**	
	Dust-Ignitionproof	Class II, III, Div. 1, Groups E,F,G					
	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 +93ºC), T6 (Ta = -40 to +78ºC)	CA	**26**	**26**	**26**	
	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 [11] 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	•	•	•	

[10] See ATEX installation requirements in the ST 3000 User's Manual

[11] 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**	•	•	•

Ordering Example: STR12D-11A-0A0AFAAA11AH-HC,LP,2J+XXXX

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RESTRICTIONS

Restriction Letter	Available Only With		Not Available With	
	Table	Selection	Table	Selection
b	Select only one option from this group			
c			II	_ _ _ _ _ _ BF _ _ _ _, _ _ _ _ _ _ BG _ _ _ _, _ _ _ _ _ _ JF _ _ _ _, _ _ _ _ _ _ JG _ _ _ _,
d	II	_ _ _ _ _ _ BF _ _ _ _, _ _ _ _ _ _ BG _ _ _ _, _ _ _ _ _ _ BH _ _ _ _, _ _ _ _ _ _ JF _ _ _ _, _ _ _ _ _ _ JG _ _ _ _,		
f	III	SM		
h	I, II	_ 2 _ - 2 _ _ _ _ _ _ _ _ _ _ _		
i	III	1C or 2J		
j			II	_ _ _ _ _ _ AF _ _ _ _ _ _ _ _ _ _ BF _ _ _ _ _ _ _ _ _ _ BG _ _ _ _ _ _ _ _ _ _ BH _ _ _ _ _ _ _ _ _ _ GG _ _ _ _ _ _ _ _ _ _ JF _ _ _ _ _ _ _ _ _ _ JG _ _ _ _
m			III	ME, FF
n			III	1C, 2J
o	III	CR		
q	II	0 _ _ _ _ _ _ _ _ _ _ _, 2 _ _ _ _ _ _ _ _ _ _ _ 4 _ _ _ _ _ _ _ _ _ _ _		
r	III	FISCO/FNICO compliance available only with 1C	III	TC, ME or FISCO/FNICO compliance not available with 3C, 3N, 33, 3S, 2J, CA, Z2, ZD, ZA, 6D & 6S
t			I & II	2 _ _ - _ B _ _ _ _ _ _ _ _ _ _, 2 _ _ - _ C _ _ _ _ _ _ _ _ _ _, 2 _ _ - _ D _ _ _ _ _ _ _ _ _ _, 2 _ _ - _ E _ _ _ _ _ _ _ _ _ _, 2 _ _ - _ F _ _ _ _ _ _ _ _ _ _, 2 _ _ - _ H _ _ _ _ _ _ _ _ _ _, 2 _ _ - _ J _ _ _ _ _ _ _ _ _ _, 2 _ _ - _ K _ _ _ _ _ _ _ _ _ _, 2 _ _ - _ L _ _ _ _ _ _ _ _ _ _, 2 _ _ - _ M _ _ _ _ _ _ _ _ _ _

RESTRICTIONS (continued)

Restriction Letter	Available Only With		Not Available With	
	Table	Selection	Table	Selection
v	I	2 _ _		
w			II	_ _ _ _ _ _ JA _ _ _ _
x	III	FF, SM		
y			I	2
			III	MB, SB, FB
	II	_ 2 _ _ _ _ _ _ _ _ _ _		
z	I	_ _ D		
1			III	F7
2	III	MX, SX	III	FB, MB, SB
3	I	5 _ _		
4	II	**See Figure 23 in Specification** _ A _ _ _ _ _ _ _ _ _ _, _ G _ _ _ _ _ _ _ _ _ _, _ B _ _ _ _ _ _ _ _ _ _, _ H _ _ _ _ _ _ _ _ _ _, _ 2 _ _ _ _ _ _ _ _ _ _,		
5			II	_ _ _ _ _ _ _ _ _ _ 0
6			II	_ _ _ _ _ _ _ _ _ _ A _
7			I	1 _ _, 3 _ _
			III	CR
8			III	CC, G1, G2, N1, N2, 0X, TP, MT, TC, FC, F1
9	II	_ _ _ _ _ _ AA2_ _ _ _ _ _ _ _ _ AB2_ _ _		
10	II	_ _ _ _ _ _ _ _ _ _ 0 _	II III	_ _ _ _ _ _ _ _ _ _ T F7
11			II	_ _ _ _ _ _JJG_ _ _ _ _ _ _ _ _JKG_ _ _ _ _ _ _ _ _JLG_ _ _ _ _ _ _ _ _CAA_ _ _ _ _ _ _ _ _CCA_ _ _ _ _ _ _ _ _CCC_ _ _
14	III	HC or H6 and WP	III	FF
15			III	FF
16	I	_ _ C		
21	III	FF		
22	III	SL		
24	III		I & II	2 _ _ - _ 2 _ _ _ _ _ _ _ _ _ _
25	II	_ A _ _ _ _ _ _ _ _ _ _ , _G _ _ _ _ _ _ _ _ _ _ , _2 _ _ _ _ _ _ _ _ _		
26	III	This approval code requires the selection of a certified conduit plug: A5, A6 or A7		

FM Approvals[SM] is a service mark of FM Global
Hastelloy® is a registered trademark of Haynes International
Monel 400® is a registered trademark of Special Metals Corporation.
HART® is a registered trademark of HART Communication Foundation.
FOUNDATION™ Fieldbus is a registered trademark of Fieldbus Foundation.
Teflon® is a registered trademark of DuPont.
Neobee® is a registered trademark of Stepan Company.
Syltherm® 800 is a Trademark of Dow Corning Corporation
Klinger® C-4401 is a registered trademark of THERMOSEAL, INC
GRAFOIL® is a registered trademarks of GrafTech International Holdings Inc
Gylon® 3510 is registered trademark of Garlock Sealing Technologies
Tri-Clover Tri-Clamp® is a registered trademark of Alfa-Laval
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Model Selection Guides are subject to change and are inserted into the specifications as guidance only.
Prior to specifying or ordering a model check for the latest revision Model Selection Guides which are published at:
http://hpsweb.honeywell.com/Cultures/en-US/Products/Instrumentation/ProductModelSelectionGuides/default.htm

Model Selection Guide 34-ST-16-34 for ST 3000 Smart Transmitters (DP, GP) Remote Seals Series 900

Honeywell

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ST 3000 Smart Transmitter (DP & GP) Remote Seals Series 900

Model Selection Guide

Instructions

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

Key Number		I		II		III (Optional)		IV
_ _ _ _ _ _	-	_ _ _	-	_ _ _ _ _ _ _ _ _ _ _ _	-	_ _, _ _, _ _	+	X X X X

KEY NUMBER

Description	Selection	Avail.	
0-25" to 0-2,700" H_2O / 0-62.2 to 0-7,000 mbar Body Rating*: 750 psi (51.7 bar) Compound Characterized	STR93D	↓	
0-5 to 0-500 psig / 0-0.35 to 0-35 bar Body Rating*: 500 psi (35 bar)	STR94G		↓

*** Remote seal system pressure rating is body rating or seal rating, whichever is less.**

Important Note: **Base STR 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

	Description	Selection		
Number of Seals	1 Remote Seal *(High Side)*	1 _ _	•	•
	2 Remote Seals	2 _ _	•	
	1 Remote Seal *(Low Side)*	3 _ _	•	
	Value Added Model *(VAM unit)*	5 _ _	8	8
Fill Fluid *(Meter Body)*	DC®200 Silicone	_ 1 _	•	•
	CTFE	_ 2 _	q	q
Construction	**Non-Wetted Material**			
In-Line Gauge	316 SS	_ _ A		•
	316 SS for Close-Couple	_ _ D		y
Dual Head DP	316 SS Heads	_ _ A	•	
	316 SS Heads for Close-Couple connection	_ _ D	y	
	316 SS with all-welded meter body	_ _ C	7	

See Specification Sheet 34-ST-03-57 for figures on construction.

In-Line Gauge

Dual Head DP

All Welded

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TABLE II - SEALS

Format for Seal Selection:
Specify 12 characters _ _ _ _ | _ _ _ _ _ _ _ _
Common | Required Seal

Note: The first 3 characters are common to all seals. When selecting required seal, you must specify only the 9 selections within the required seal.

					STR9xx Selection	Availability 3D	Availability 4G
Secondary Fill	No Fill Fluid				0 _ _ _ _ _ _ _ _ _ _ _	3	3
	Silicone DC®200				1 _ _ _ _ _ _ _ _ _ _ _	•	•
	CTFE				2 _ _ _ _ _ _ _ _ _ _ _	•	•
	Silicone DC®704				3 _ _ _ _ _ _ _ _ _ _ _	•	•
	Neobee® M20 [2]				4 _ _ _ _ _ _ _ _ _ _ _	•	•
	Syltherm® 800 [3]				5 _ _ _ _ _ _ _ _ _ _ _	•	•
Connection of Remote Seal to Meter Body	No Capillary, No Nipple				_ 0 _ _ _ _ _ _ _ _ _ _	3	3
	Capillary Length	5 feet	1.5 m	SS Armor	_ A _ _ _ _ _ _ _ _ _ _	•	•
		10 feet	3.0 m		_ B _ _ _ _ _ _ _ _ _ _	•	•
		15 feet	4.5 m		_ C _ _ _ _ _ _ _ _ _ _	•	•
		20 feet	6.1 m		_ D _ _ _ _ _ _ _ _ _ _	•	•
		25 feet	7.5 m		_ E _ _ _ _ _ _ _ _ _ _	•	•
		35 feet	10.7 m		_ F _ _ _ _ _ _ _ _ _ _	•	•
		5 feet	1.5 m	PVC Coated SS Armor	_ G _ _ _ _ _ _ _ _ _ _	•	•
		10 feet	3.0 m		_ H _ _ _ _ _ _ _ _ _ _	•	•
		15 feet	4.5 m		_ J _ _ _ _ _ _ _ _ _ _	•	•
		20 feet	6.1 m		_ K _ _ _ _ _ _ _ _ _ _	•	•
		25 feet	7.5 m		_ L _ _ _ _ _ _ _ _ _ _	•	•
		35 feet	10.7 m		_ M _ _ _ _ _ _ _ _ _ _	•	•
	2 inch long SS nipple close-coupled				_ 2 _ _ _ _ _ _ _ _ _ _	z	z
No Selection					_ _ 0 _ _ _ _ _ _ _ _ _	•	•
No Seal Attached to Core Transmitter					_ _ _ 0 0 0 0 0 0 0 0 0	3	3

	Diaphragm Diameter	Flange Size	Flange Pressure Rating [1]		Selection		
Flush Flanged Seal	3.5"	3"	ANSI Class 150		_ _ _ AFA _ _ _ _ _ _	•	•
			ANSI Class 300		_ _ _ AFC _ _ _ _ _ _	•	•
		80mm	DIN DN80-PN40		_ _ _ AFM _ _ _ _ _ _	•	•
	Wetted Material		Diaphragm	Upper Insert	Selection		
			316L SS	316L SS	_ _ _ _ _ _ AA _ _ _ _	•	•
			Hastelloy® C-276	316L SS	_ _ _ _ _ _ AB _ _ _ _	•	•
			Hastelloy® C-276	Hastelloy® C-276	_ _ _ _ _ _ AC _ _ _ _	•	•
			Monel 400®	Monel 400®	_ _ _ _ _ _ AE _ _ _ _	•	•
			Tantalum [5]	316L SS	_ _ _ _ _ _ AF _ _ _ _	1	1
	Flange Material		CS *(Nickel Plated)*		_ _ _ _ _ _ _ 1 _ _ _	•	•
			316L SS		_ _ _ _ _ _ _ 2 _ _ _	•	•
	Seal-Capillary Connection		Center Seal		_ _ _ _ _ _ _ _ 1 _ _	•	•
			Side Seal		_ _ _ _ _ _ _ _ 2 _ _	9	9
	Calibration Rings 		None		_ _ _ _ _ _ _ _ _ A _	•	•
			316L SS		_ _ _ _ _ _ _ _ _ B _	5	5
			Hastelloy® C-276		_ _ _ _ _ _ _ _ _ C _	5	5
			Monel 400®		_ _ _ _ _ _ _ _ _ D _	5	5

Table II continued next page

[1] Standard facing 125-250 AARH RF (raised face) serrated surface finish.
[2] Limited vacuum availability.
[3] Minimum static pressure requirement. No vacuum allowed. See Specifications Figure 15.
[5] Tantalum Upper insert has Tantalum wetted parts and 316 SS or CS non-wetted parts
Note: Remote seal system pressure rating is body rating or seal rating, whichever is less.

TABLE II - SEALS (continued)

	Description		Selection	Availability STR9xx 3D	4G
Flush Flanged Seal 	Flushing Connections and Plugs[4] *Metal plug material will be the same as Lower material, if metal plug is chosen - (SS Plug for CS Lower and Tantalum Clad)*	None	_ _ _ _ _ _ _ _ _ _ _ 0	•	•
		One 1/4" with plastic plug	_ _ _ _ _ _ _ _ _ _ _ H	6	6
		One 1/4" with metal plug	_ _ _ _ _ _ _ _ _ _ _ J	6	6
		Two 1/4" with plastic plugs	_ _ _ _ _ _ _ _ _ _ _ M	6	6
		Two 1/4" with metal plugs	_ _ _ _ _ _ _ _ _ _ _ N	6	6
		One 1/2" with plastic plug	_ _ _ _ _ _ _ _ _ _ _ P	6	6
		One 1/2" with metal plug	_ _ _ _ _ _ _ _ _ _ _ Q	6	6
		Two 1/2" with plastic plugs	_ _ _ _ _ _ _ _ _ _ _ R	6	6
		Two 1/2" with metal plugs	_ _ _ _ _ _ _ _ _ _ _ S	6	6

Table II continued below

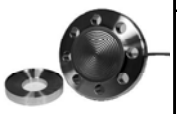
	Diaphragm Diameter	Flange Size	Flange Pressure Rating [1]	Const. - See Spec. Figure 34-ST-03-57	Selection	STR9xx 3D	4G
Flush Flanged Seal with Lower 	2.4"	1"	ANSI 150	22	_ _ _ BCA _ _ _ _ _ _	•	•
			ANSI 300	22	_ _ _ BCC _ _ _ _ _ _	•	•
		1-1/2"	ANSI 150	22	_ _ _ BGA _ _ _ _ _ _	•	•
			ANSI 300	22	_ _ _ BGC _ _ _ _ _ _	•	•
		2"	ANSI 150	22	_ _ _ BDA _ _ _ _ _ _	•	•
			ANSI 300	22	_ _ _ BDC _ _ _ _ _ _	•	•
		3"	ANSI 150	22	_ _ _ BFA _ _ _ _ _ _	•	•
			ANSI 300	22	_ _ _ BFC _ _ _ _ _ _	•	•
	2.9"	1/2"	ANSI 150	23	_ _ _ CAA _ _ _ _ _ _	•	•
		1"	ANSI 150	23	_ _ _ CCA _ _ _ _ _ _	•	•
			ANSI 300	23	_ _ _ CCC _ _ _ _ _ _	•	•
		1-1/2"	ANSI 150	22	_ _ _ CGA _ _ _ _ _ _	•	•
			ANSI 300	22	_ _ _ CGC _ _ _ _ _ _	•	•
		2"	ANSI 150	22	_ _ _ CDA _ _ _ _ _ _	•	•
			ANSI 300	22	_ _ _ CDC _ _ _ _ _ _	•	•
	4.1"	1/2"	ANSI 150	23	_ _ _ DAA _ _ _ _ _ _	•	•
		1"	ANSI 150	23	_ _ _ DCA _ _ _ _ _ _	•	•
			ANSI 300	23	_ _ _ DCC _ _ _ _ _ _	•	•
		1-1/2"	ANSI 150	23	_ _ _ DGA _ _ _ _ _ _	•	•
			ANSI 300	23	_ _ _ DGC _ _ _ _ _ _	•	•
		2"	ANSI 150	23	_ _ _ DDA _ _ _ _ _ _	•	•
			ANSI 300	22	_ _ _ DDC _ _ _ _ _ _	•	•
		3"	ANSI 150	22	_ _ _ DFA _ _ _ _ _ _	•	•
			ANSI 300	22	_ _ _ DFC _ _ _ _ _ _	•	•

Table II continued next page

[1] Standard facing 125-250 AARH RF (raised face) serrated surface finish.
[4] Plastic Plugs are TEMPORARY ONLY to protect threads and MUST be REMOVED before installation
Note: Remote seal system pressure rating is body rating or seal rating, whichever is less.

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TABLE II - SEALS (continued)

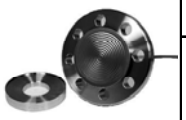
						Availability STR9xx 3D	4G
 Flush Flanged Seal with Lower (continued)	Wetted Material		Diaphragm	Lower	Selection		
			316L SS	316L SS	_ _ _ _ _ _ BA _ _ _ _	•	•
			Hastelloy® C-276	316L SS	_ _ _ _ _ _ BB _ _ _ _	•	•
			Hastelloy® C-276	Hastelloy® C-276	_ _ _ _ _ _ BC _ _ _ _	•	•
			Monel 400®	Monel 400®	_ _ _ _ _ _ BE _ _ _ _	•	•
			Tantalum	316L SS	_ _ _ _ _ _ BF _ _ _ _	1	1
			Tantalum	Hastelloy® C-276	_ _ _ _ _ _ BG _ _ _ _	1	1
			Tantalum	Tantalum Clad	_ _ _ _ _ _ BH _ _ _ _	10	10
	Non-Wetted Material *(upper, upper insert)*		Upper	Upper Insert	Selection		
			316L SS	316L SS	_ _ _ _ _ _ _ _ 4 _ _ _	•	•
			Carbon Steel	316L SS	_ _ _ _ _ _ _ _ 5 _ _ _	•	•
	Bolts [6]		No Selection		_ _ _ _ _ _ _ _ 0 _ _	•	•
	Flushing Connections and Plugs[4] *Metal plug material will be the same as Lower material, if metal plug is chosen - (SS Plug for CS Lower and Tantalum Clad)*		None		_ _ _ _ _ _ _ _ _ 0 _	•	•
			One 1/4" with plastic plug		_ _ _ _ _ _ _ _ _ H _	•	•
			One 1/4" with metal plug		_ _ _ _ _ _ _ _ _ J _	•	•
			Two 1/4" with plastic plugs		_ _ _ _ _ _ _ _ _ M _	•	•
			Two 1/4" with metal plugs		_ _ _ _ _ _ _ _ _ N _	•	•
			One 1/2" with plastic plug		_ _ _ _ _ _ _ _ _ P _	•	•
			One 1/2" with metal plug		_ _ _ _ _ _ _ _ _ Q _	•	•
			Two 1/2" with plastic plugs		_ _ _ _ _ _ _ _ _ R _	•	•
			Two 1/2" with metal plugs		_ _ _ _ _ _ _ _ _ S _	•	•
	Gasket		Klinger® C-4401 *(non-asbestos)*		_ _ _ _ _ _ _ _ _ _ K	c	c
			Grafoil®		_ _ _ _ _ _ _ _ _ _ G	•	•
			Teflon®		_ _ _ _ _ _ _ _ _ _ T	c	c
			Gylon® 3510		_ _ _ _ _ _ _ _ _ _ L	d	d
 Flange Seal with Extended Diaphragm	Diaphragm Diameter	Flange Size	Flange Pressure Rating [1]		Selection		
	2.8"	3" *(2.8" OD extension)*	ANSI Class 150		_ _ _ EFA _ _ _ _ _ _	•	•
			ANSI Class 300		_ _ _ EFC _ _ _ _ _ _	•	•
			DIN DN80-PN40		_ _ _ EFM _ _ _ _ _ _	•	•
	3.5"	4" *(3.70" OD extension)*	ANSI Class 150		_ _ _ FGA _ _ _ _ _ _	•	•
			ANSI Class 300		_ _ _ FGC _ _ _ _ _ _	•	•
			DIN DN100-PN40		_ _ _ FGP _ _ _ _ _ _	•	•
	Wetted Material		Diaphragm	Ext. Tube	Selection		
			316L SS	316L SS	_ _ _ _ _ _ EA _ _ _ _	•	•
			Hastelloy® C-276	316L SS	_ _ _ _ _ _ EB _ _ _ _	•	•
			Hastelloy® C-276	Hastelloy® C-276	_ _ _ _ _ _ EC _ _ _ _	•	•
	Flange Material		CS *(Nickel Plated)*		_ _ _ _ _ _ _ _ 7 _ _ _	•	•
			316L SS		_ _ _ _ _ _ _ _ 8 _ _ _	•	•
	Bolts		No Selection		_ _ _ _ _ _ _ _ 0 _ _	•	•
	Extension Length		2"		_ _ _ _ _ _ _ _ _ 2 _	•	•
			4"		_ _ _ _ _ _ _ _ _ 4 _	•	•
			6"		_ _ _ _ _ _ _ _ _ 6 _	•	•
	No Selection		No Selection		_ _ _ _ _ _ _ _ _ _ 0	•	•

Table II continued next page

[1] Standard facing 125-250 AARH RF (raised face) serrated surface finish.
[4] Plastic Plugs are TEMPORARY ONLY to protect threads and MUST be REMOVED before installation
[6] Bolt material will be same as Upper Material. However, if Table III bolt/nut option is chosen, seal bolt material will be the same.
Note: Remote seal system pressure rating is body rating or seal rating, whichever is less.

TABLE II - SEALS (continued)

	Diaphragm Diameter	Flange Size	Flange Pressure Rating Dependent on Customer Flange [1]		Selection	Availability STR9xx 3D	4G
 Pancake Seal	3.5"	3"	ANSI Class 150/300/600		_ _ _ GFA _ _ _ _ _ _	•	•
	Wetted Material		**Diaphragm**	**Body**	**Selection**		
			316L SS	316L SS	_ _ _ _ _ _ GA _ _ _ _	•	•
			Hastelloy® C-276	316L SS	_ _ _ _ _ _ GB _ _ _ _	•	•
			Hastelloy® C-276	Hastelloy® C-276	_ _ _ _ _ _ GC _ _ _ _	•	•
			Monel 400®	Monel 400®	_ _ _ _ _ _ GE _ _ _ _	•	•
			Tantalum	Tantalum [7]	_ _ _ _ _ _ GG _ _ _ _	1	1
	Non-Wetted Materials		No Selection		_ _ _ _ _ _ _ _ 0 _ _ _	•	•
	No Selection		No Selection		_ _ _ _ _ _ _ _ _ 0 _ _	•	•
	Calibration Rings 		None		_ _ _ _ _ _ _ _ _ _ A _	•	•
			316L SS		_ _ _ _ _ _ _ _ _ _ B _	5	5
			Hastelloy® C-276		_ _ _ _ _ _ _ _ _ _ C _	5	5
			Monel 400®		_ _ _ _ _ _ _ _ _ _ D _	5	5
	Flushing Connections and Plugs[4] *Metal plug material will be the same as Lower material, if metal plug is chosen - (SS Plug for CS Lower and Tantalum Clad)*		None		_ _ _ _ _ _ _ _ _ _ _ 0	•	•
			One 1/4" with plastic plug		_ _ _ _ _ _ _ _ _ _ _ H	6	6
			One 1/4" with metal plug		_ _ _ _ _ _ _ _ _ _ _ J	6	6
			Two 1/4" with plastic plugs		_ _ _ _ _ _ _ _ _ _ _ M	6	6
			Two 1/4" with metal plugs		_ _ _ _ _ _ _ _ _ _ _ N	6	6
			One 1/2" with plastic plug		_ _ _ _ _ _ _ _ _ _ _ P	6	6
			One 1/2" with metal plug		_ _ _ _ _ _ _ _ _ _ _ Q	6	6
			Two 1/2" with plastic plugs		_ _ _ _ _ _ _ _ _ _ _ R	6	6
			Two 1/2" with metal plugs		_ _ _ _ _ _ _ _ _ _ _ S	6	6

Table II continued below

TABLE II - SEALS (continued)

	Diaphragm Diameter	Flange Size	Flange Pressure Rating [1]		Selection	Availability STR9xx 3D	4G
 Chemical Tee "Taylor" Wedge	3.5"	Taylor Wedge 5" O.D.	750 psi		_ _ _ HM0 _ _ _ _ _ _	v	
	Wetted Material		**Diaphragm**	**Body**	**Selection**		
			316L SS	316L SS	_ _ _ _ _ _ HA _ _ _ _	•	
			Hastelloy® C-276	316L SS	_ _ _ _ _ _ HB _ _ _ _	•	
			Hastelloy® C-276	Hastelloy® C-276	_ _ _ _ _ _ HC _ _ _ _	•	
	Non-Wetted Material		No Selection		_ _ _ _ _ _ _ _ 0 _ _ _	•	
	Bolts		No Selection		_ _ _ _ _ _ _ _ _ 0 _ _	•	
	Styles		No Selection		_ _ _ _ _ _ _ _ _ _ 0 _	•	
	No Selection		No Selection		_ _ _ _ _ _ _ _ _ _ _ 0	•	

Table II continued next page

[1] Standard facing 125-250 AARH RF (raised face) serrated surface finish.
[4] Plastic Plugs are TEMPORARY ONLY to protect threads and MUST be REMOVED before installation
[7] Tantalum Body has Tantalum wetted parts and 316 SS non-wetted parts
Note: Remote seal system pressure rating is body rating or seal rating, whichever is less.

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TABLE II - SEALS (continued)

	Diaphragm Diameter	Threaded Process Connection Size (NPT Female)	Seal Pressure Rating * C.S. Bolts	Seal Pressure Rating * 304 SS Bolts	Selection	Availability STR9xx 3D	Availability STR9xx 4G
 Seal with Threaded Process Connection	2.4"	1/2 NPT	2,500 psi	1,250 psi	_ _ _ JJG _ _ _ _ _ _	•	•
		3/4 NPT			_ _ _ JKG _ _ _ _ _ _	•	•
		1 NPT			_ _ _ JLG _ _ _ _ _ _	•	•
	2.9"	1/2 NPT	2,500 psi	1,250 psi	_ _ _ KJG _ _ _ _ _ _	•	•
		3/4 NPT			_ _ _ KKG _ _ _ _ _ _	•	•
		1 NPT			_ _ _ KLG _ _ _ _ _ _	•	•
	4.1"	1/2 NPT	1,500 psi	750 psi	_ _ _ LJG _ _ _ _ _ _	•	•
		3/4 NPT			_ _ _ LKG _ _ _ _ _ _	•	•
		1 NPT			_ _ _ LLG _ _ _ _ _ _	•	•

		Diaphragm	Lower	Selection		
	Wetted Material	316L SS	Carbon Steel	_ _ _ _ _ _ JA _ _ _ _	•	•
		316L SS	316L SS	_ _ _ _ _ _ JB _ _ _ _	•	•
		Hastelloy® C-276	316L SS	_ _ _ _ _ _ JC _ _ _ _	•	•
		Hastelloy® C-276	Hastelloy® C-276	_ _ _ _ _ _ JD _ _ _ _	•	•
		Monel 400®	Monel 400®	_ _ _ _ _ _ JE _ _ _ _	•	•
		Tantalum	316L SS	_ _ _ _ _ _ JF _ _ _ _	1	1
		Tantalum	Hastelloy® C-276	_ _ _ _ _ _ JG _ _ _ _	1	1
	Non-Wetted Material *(upper)*	CS *(Nickel Plated)*		_ _ _ _ _ _ _ _ A _ _ _	•	•
		Stainless Steel		_ _ _ _ _ _ _ _ C _ _ _	w	w
	Bolts [8]	Carbon Steel		_ _ _ _ _ _ _ _ _ C _ _	1	1
		304 SS		_ _ _ _ _ _ _ _ _ D _ _	•	•
	Flushing Connections and Plugs[4] *Metal plug material will be the same as Lower material, if metal plug is chosen - (SS Plug for CS Lower and Tantalum Clad)*	None		_ _ _ _ _ _ _ _ _ _ 0 _	•	•
		One 1/4" with plastic plug		_ _ _ _ _ _ _ _ _ _ H _	•	•
		One 1/4" with metal plug		_ _ _ _ _ _ _ _ _ _ J _	•	•
		Two 1/4" with plastic plugs		_ _ _ _ _ _ _ _ _ _ M _	•	•
		Two 1/4" with metal plugs		_ _ _ _ _ _ _ _ _ _ N _	•	•
		One 1/2" with plastic plug		_ _ _ _ _ _ _ _ _ _ P _	11	11
		One 1/2" with metal plug		_ _ _ _ _ _ _ _ _ _ Q _	11	11
		Two 1/2" with plastic plugs		_ _ _ _ _ _ _ _ _ _ R _	11	11
		Two 1/2" with metal plugs		_ _ _ _ _ _ _ _ _ _ S _	11	11
	Gasket	Klinger® C-4401 *(non-asbestos)*		_ _ _ _ _ _ _ _ _ _ K	c	c
		Grafoil®		_ _ _ _ _ _ _ _ _ _ G	•	•
		Teflon®		_ _ _ _ _ _ _ _ _ _ T	c	c
		Gylon® 3510		_ _ _ _ _ _ _ _ _ _ L	d	d

[4] Plastic Plugs are TEMPORARY ONLY to protect threads and MUST be REMOVED before installation
[8] If Table III Bolt/Nut option is chosen, Seal bolts will ship as same material, and MAWP may change.
Note: Remote seal system pressure rating is body rating or seal rating, whichever is less.

TABLE II - SEALS (continued)

	Diaphragm Diameter	Flange Size	Pressure Rating		Selection	Availability STR9xx 3D	4G
 Sanitary Seal [9]	1.9"	2"	Customer clamp rating or 600 psi, whichever is less		_ _ _ MD0 _ _ _ _ _ _	25	24
	2.4"	2-1/2"			_ _ _ NE0 _ _ _ _ _ _	24	24
	2.9"	3"			_ _ _ PF0 _ _ _ _ _ _	24	24
	4.1"	4"			_ _ _ QG0 _ _ _ _ _ _	24	24
	Wetted Material		**Diaphragm**	**Body**	**Selection**		
			316L SS	316L SS	_ _ _ _ _ _ N A _ _ _ _	•	•
	Non-Wetted Material		No Selection		_ _ _ _ _ _ _ _ 0 _ _ _	• •	• •
	Bolts		No Selection		_ _ _ _ _ _ _ _ _ 0 _ _	•	•
	Styles		Tri-Clover Tri-Clamp®		_ _ _ _ _ _ _ _ _ _ 8 _	•	•
	Gasket		No Selection		_ _ _ _ _ _ _ _ _ _ _ 0	•	•
 Saddle Seal	**Diaphragm Diameter**	**Size and Bolt Pattern**	**Seal Pressure Rating * *** **C.S. Bolts**	**304 SS Bolts**	**Selection**		
	2.4" **8-Bolt** Design	for 3" Pipe ≥ 4" pipe	1,500 psi	1,500 psi	_ _ _ RFK _ _ _ _ _ _	•	•
					_ _ _ RGK _ _ _ _ _ _	•	•
	2.4" **6-Bolt** Design	for 3" Pipe ≥ 4" pipe	1,250 psi	1,250 psi	_ _ _ RPK _ _ _ _ _ _	•	•
					_ _ _ RQK _ _ _ _ _ _	•	•
	Wetted Material		**Diaphragm**	**Lower Housing**	**Selection**		
			316L SS	Carbon Steel	_ _ _ _ _ _ RA _ _ _ _	•	•
			316L SS	316L SS	_ _ _ _ _ _ RB _ _ _ _	•	•
			Hastelloy® C-276	316L SS	_ _ _ _ _ _ RC _ _ _ _	•	•
			Hastelloy® C-276	Hastelloy® C-276	_ _ _ _ _ _ RD _ _ _ _	•	•
			316L SS	N/A-Body Only [10]	_ _ _ _ _ _ SB _ _ _ _	•	•
			Hastelloy® C-276	N/A-Body Only [10]	_ _ _ _ _ _ SC _ _ _ _	•	•
	Non-Wetted Material		**Body**	**Bolts [8, 10]**	**Selection**		
			Carbon Steel	Carbon Steel	_ _ _ _ _ _ _ _ B _ _ _	1	1
			316L SS	304 SS	_ _ _ _ _ _ _ _ C _ _ _	•	•
	No Selection		No Selection		_ _ _ _ _ _ _ _ _ 0 _ _	•	•
	Styles		No Selection		_ _ _ _ _ _ _ _ _ _ 0 _	•	•
	Gasket		Klinger® C-4401 *(non-asbestos)*		_ _ _ _ _ _ _ _ _ _ _ K	•	•
			Grafoil®		_ _ _ _ _ _ _ _ _ _ _ G	•	•
			Teflon®		_ _ _ _ _ _ _ _ _ _ _ T	•	•
			Gylon® 3510		_ _ _ _ _ _ _ _ _ _ _ L	•	•

[8] If Table III Bolt/Nut option is chosen, Seal bolts will ship as same material, and MAWP may change.
[9] All sanitary seals have dairy grade 3A approval.
[10] Bolts are not included with "body only" selection.
Note: Remote seal system pressure rating is body rating or seal rating, whichever is less.

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TABLE III - OPTIONS	Selection	Availability STR9xx 3D	4G	
Communication Options *(Must choose a communications option)*				
Analog only *(can be configured using appropriate Honeywell DE tool)*	AN	●	●	
DE Protocol communications	DE	●	●	
HART® 5.x Protocol compatible electronics	HC	●	●	b
HART® 6.x Protocol compatible electronics	H6	●	●	
FOUNDATION™ Fieldbus Communications	FF	r	r	
Indicating Meter Options				
Analog Meter *(0-100 Even 0-10 Square Root)*	ME	•	•	
Smart Meter	SM	•	•	b
Custom Configuration of Smart Meter	CI	m	m	
Local Zero	LZ	x	x	
Local Zero and Span	ZS	s	s	
Transmitter Housing & Electronics Options				
*No housing conduit plugs or adaptors 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[5] Electronics Housing - *(with M20 Conduit Connections)*	SH	n	n	
316 SS[5] Electronics Housing - (*with M20 to 1/2 NPT 316 SS Conduit Adapter for use with FM and CSA Approval codes)*	A3	i	i	b
1/2 NPT Male to M20 Female 316 SS Certified Conduit Adapter *(ATEX, CSA & IECEx)*	A1	•	•	
1/2 NPT Male to 3/4 NPT Female 316 SS Certified Conduit Adapter *(ATEX, CSA & IECEx)*	A2	•	•	
M20 Male to 1/2 NPT Female 316 SS Certified Conduit Adaptor *(ATEX, CSA & IECEx)*	A4	•	•	
1/2 NPT Zinc-plated Certified Conduit Plug *(ATEX, CSA & IECEx)*	A5	•	•	
1/2 NPT 316 SS Certified Conduit Plug *(ATEX, CSA & IECEx)*	A6	•	•	
M20 316 SS Certified Conduit Plug *(ATEX, CSA & IECEx)*	A7	•	•	
1/2 NPT Non-certified Conduit plug *(Zinc-plated carbon steel, general use)*	A8	•	•	
NAMUR Failsafe Software	NE	15	15	
SIL 2 - TÜV Certified transmitter *(requires HC or H6 and WP options)*	SL	14	14	
Lightning Protection	LP	•	•	
Custom Calibration and I.D. in Memory	CC	•	•	
Transmitter Configuration - *(non-Fieldbus)*	TC	15	15	
Transmitter Configuration - *(Fieldbus)*	FC	21	21	b
Write Protection *(Delivered in the "enabled" position)*	WP	•	•	
Write Protection *(Delivered in the "disabled" position)*	WX	•	•	b
Stainless Steel Customer Wired-On Tag *(4 lines, 26 characters per line, customer supplied information)*	TG	•	•	
Stainless Steel Customer Wired-On Tag *(blank)*	TB	•	•	
Meter Body Options (Carbon Steel standard)				
A286 SS *(NACE)* Bolts and 304 SS *(NACE)* Nuts for Heads	CR	•		
316 SS Bolts and 316 SS Nuts for Process Heads	SS	•		b
B7M Bolts and Nuts for Process Heads	B7	•		
Remote Seal Options				
Gold Plated Seal Diaphragm *(1 Seal)*	G1	j	j	
Gold Plated Seal Diaphragm *(2 Seals)*	G2	j		
Teflon Coated Seal Diaphragm *(1 Seal)* - only for anti-sticking	N1	j	j	b
Teflon Coated Seal Diaphragms*(2 Seals)* - only for anti-sticking	N2	j		
Transmitter Mounting Bracket Options				
Angle Mounting Bracket - Carbon Steel	MB	●	●	
Marine Approved Angle Mounting Bracket - Carbon Steel	MX	●	●	
Angle Mounting Bracket - 304 SS	SB	●	●	b
Marine Approved Angle Mounting Bracket - 304 SS	SX	●	●	
Flat Mounting Bracket - Carbon Steel	FB	●	●	
Services/Certificates Options				
Users Manual Paper Copy *(Standard, HC/H6 or FF ships accordingly)*	UM	•	•	
Clean Transmitter & Seals for Oxygen or Chlorine Service with Certificate	0X	h	h	
Over-Pressure Leak Test with Certificate (F3392)	TP	•	•	
Calibration Test Report and Certificate of Conformance (F3399)	F1	•	•	
Certificate of Conformance (F3391)	F3	•	•	b
Certificate of Origin (F0195)	F5	•	•	
SIL Certificate *(SIL 2/3)* (FC33337)	FE	22	22	
NACE Certificate *(Process-Wetted & Non-Process Wetted)* (FC33339)	F7	o	•	
NACE Certificate for welded meter bodies only (F0198)	F8	16		b
NACE Certificate *(Process-Wetted)* (FC33338)	FG	•	•	
Material Traceability Certification per EN 10204 3.1 (FC33341)	FX	•	•	
Marine Type Approvals *(DNV, ABS, BV, KR & LR)*	MT	2	2	

Table III continued next page

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

TABLE III - OPTIONS (continued)

Warranty Options	STR9xx Selection	3D	4G
Additional Warranty - 1 year	W1	•	•
Additional Warranty - 2 years	W2	•	•
Additional Warranty - 3 years	W3	•	•
Additional Warranty - 4 years	W4	•	•

b

Approval Body	Approval Type	Location or Classification	Selection	3D	4G
No hazardous location approvals			9X	•	•
FM Approvals[SM]	Explosion Proof	Class I, Div. 1, Groups A,B,C,D	1C	•	•
	Dust-Ignitionproof	Class II, III Div. 1, Groups E,F,G			
	Non-Incendive	Class I, Div. 2, Groups A,B,C,D			
	Intrinsically Safe	Class I, II, III, Div. 1, Groups A,B,C,D,E,F,G			
ATEX [10] (LCIE)	Intrinsically Safe, Zone 0	 **Ex ia IIC** T4 (Ta = –50°C to +93°C); T5 (Ta = –50°C to +85°C); T6 (Ta = –50°C to +70°C) Enclosure IP 66/67	3S	•	•
	Intrinsically Safe, Zone 1	 **Ex ia IIC** T4 (Ta = –50°C to +93°C); T5 (Ta = –50°C to +85°C); T6 (Ta = –50°C to +70°C) Enclosure IP 66/67			
	Dust-tight Enclosure, Zone 0	 **Ex tD A20 IP6X** T95°C (at Ta = 93°C) or T80°C (at Ta = 78°C)) Enclosure IP 66/67	33	**26**	**26**
	Flameproof and Dust-tight Enclosure, Zone 1	 **Ex d IIC** T5 (Ta = –40°C to +93°C), T6 (Ta = –40°C to +78°C) Supply 11- 42Vdc **Ex tD A21 IP6X** T95°C (at Ta = 93°C) or T80°C (at Ta = 78°C) Enclosure IP 66/67			
	Non-Sparking, Zone 2	 **Ex nA, IIC** T5 (Ta = –40°C to +93°C), T6 (Ta = –40°C to +78°C); Zone 2 Supply < 42Vdc, 23mA **Ex tD A22 IP6X** T95°C (at Ta = 93°C) or T80°C (at Ta = 78°C) (Honeywell). Enclosure IP 66/67	3N	•	•
	Multiple Marking [11] Int. Safe, Zone 0/1 and Dust-tight Enclosure, or Flameproof, Zone 1 and and Dust-tight Enclosure, or Non-Sparking, Zone 2	 **Ex ia IIC** T4 (Ta = –50°C to +93°C); T5 (Ta = –50°C to +85°C); T6 (Ta = –50°C to +70°C); Ui = 30V; Ii = 100mA **Ex tD A20 IP6X** T95°C (at Ta = 93°C) or T80°C (at Ta = 78°C)	3C	**26**	**26**
		Ex d IIC T5 (Ta = –40°C to +93°C), T6 (Ta = –40°C to +78°C) Supply 11- 42Vdc **Ex tD A21 IP6X** T95°C (at Ta = 93°C) or T80°C (at Ta = 78°C)			
		Ex nA, IIC T5 (Ta = –40°C to +93°C), T6 (Ta = –40°C to +78°C); Zone 2 Supply < 42Vdc, 23mA **Ex tD A22 IP6X** T95°C (at Ta = 93°C) or T80°C (at Ta = 78°C) (Honeywell) Enclosure IP 66/67			

Table III Approvals continued next page

TABLE III - Approvals Options (continued)

Approval Body	Approval Type	Location or Classification	Selection	STR9xx 3D	STR9xx 4G	
Canadian Standards Association (CSA)	Explosion Proof	Class I, Div. 1, Groups B,C,D	2J	**26**	**26**	
	Dust-Ignitionproof	Class II, III, Div. 1, Groups E,F,G				
	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 +93ºC), T6 (Ta = -40 to +78ºC)	CA	**26**	**26**	
	Intrinsically Safe, Zone 0/1	**Ex ia IIC**; T3, T4, T5 , T6 See Spec for detailed temperature codes by Communications option				**b**
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 [11] 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	•	•	

[10] See ATEX installation requirements in the ST 3000 User's Manual

[11] 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			
c			II	_ _ _ _ _ _ BF _ _ _ _, _ _ _ _ _ _ BG _ _ _ _, _ _ _ _ _ _ BH _ _ _ _, _ _ _ _ _ _ JF _ _ _ _, _ _ _ _ _ _ JG _ _ _ _,
d	II	_ _ _ _ _ _ BF _ _ _ _, _ _ _ _ _ _ BG _ _ _ _, _ _ _ _ _ _ JF _ _ _ _, _ _ _ _ _ _ JG _ _ _ _,		
h	I, II	_ 2 _ - 2 _ _ _ _ _ _ _ _ _ _ _		
i	III	1C or 2J		
j			II	_ _ _ _ _ _ AF _ _ _ _ _ _ _ _ BF _ _ _ _ _ _ _ _ BG _ _ _ _ _ _ _ _ BH _ _ _ _ _ _ _ _ GG _ _ _ _ _ _ _ _ JF _ _ _ _ _ _ _ _ JG _ _ _ _
m	III	SM		
n			III	1C, 2J
o	III	CR		
q	II	0 _ _ _ _ _ _ _ _ _ _ _ _, 2 _ _ _ _ _ _ _ _ _ _ _ _, 4 _ _ _ _ _ _ _ _ _ _ _ _		
r	III	FISCO/FNICO compliance available only with 1C	III	TC, ME or FISCO/FNICO compliance not available with 3C, 3N, 33, 3S, 2J, CA, Z2, ZD, ZA, 6D & 6S
s			III	FF, ME
v	I	2 _ _		
w			II	_ _ _ _ _ _ JA _ _ _ _
x	III	FF, SM		

Restrictions continued next page

RESTRICTIONS - (continued)

Restriction Letter	Available Only With		Not Available With	
	Table	Selection	Table	Selection
y			I	2 _ _
			III	MB, SB, FB
	II	_ 2 _ _ _ _ _ _ _ _ _ _		
z	I	_ _ D		
1			III	F7
2	III	MX, SX	III	FB, MB, SB
3	I	5 _ _		
5			II	_ _ _ _ _ _ _ _ _ _ _ 0
6			II	_ _ _ _ _ _ _ _ _ _ A _
7			I	1 _ _, 3 _ _
			III	CR
8			III	CC, G1, G2, N1, N2, 0X, TP, MT, F1, TC, FC
9	II	_ _ _ _ _ _ AA2_ _ _ _ _ _ _ _ _ AB2_ _ _		
10	II	_ _ _ _ _ _ _ _ _ _ 0 _	II III	_ _ _ _ _ _ _ _ _ _ _ T F7
11			II	_ _ _ _ _ _JJG_ _ _ _ _ _ _ _ _JKG_ _ _ _ _ _ _ _ _JLG_ _ _ _ _ _ _ _ _CAA_ _ _ _ _ _ _ _ _CCA_ _ _ _ _ _ _ _ _CCC_ _ _
14	III	HC or H6 and WP	III	FF
15			III	FF
16	I	_ _ C		
21	III	FF		
22	III	SL		
24	III		I & II	2 _ _ - _ 2 _ _ _ _ _ _ _ _ _ _
25	II	_ A _ _ _ _ _ _ _ _ _ _ , _G _ _ _ _ _ _ _ _ _ _ , _2 _ _ _ _ _ _ _ _ _ _		
26	III	This approval code requires the selection of a certified conduit plug: A5, A6 or A7		

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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.

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