Honeywell

ST 3000 Smart Transmitter

Series 100 Remote Diaphragm Seals Models

STR12D	0-10 to 0-400 inH_2O	0-25 to 0-1000 mbar
STR13D	0-5 to 0-100 psid	0-0.35 to 0-7 bar
STR14G	0-5 to 0-500 psig	0-0.35 to 0-35 bar
STR17G	0-100 to 0-3000 psig	0-7 to 0-210 bar
STR14A	0-5 to 0-500 psia	0-0.35 to 0-35 bar

34-ST-03-64
11/98

Specification and Model Selection Guide

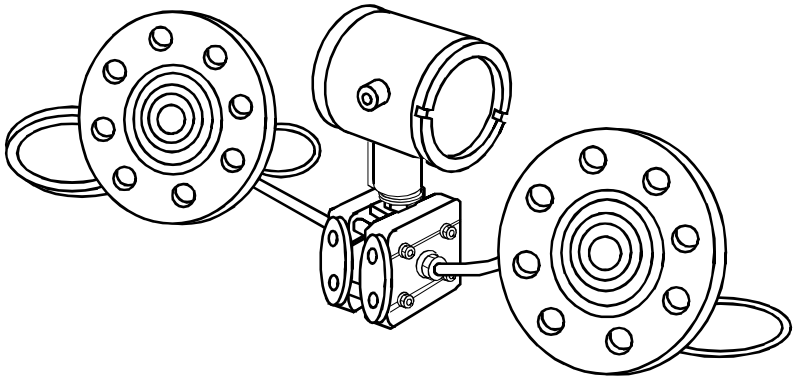
Function

Honeywell's microprocessor-based ST 3000® Series 100 Transmitter with Remote Diaphragm Seals (Figure 1) measures process pressures and levels, and transmits an output signal proportional to the measured variable. The output signal is transmitted in either an analog 4 to 20 milliampere format or in a digital DE protocol format for direct digital communications with our TDC 3000®X control system. A protocol option will let you use these transmitters in FOUNDATION™ Fieldbus[1] networks.

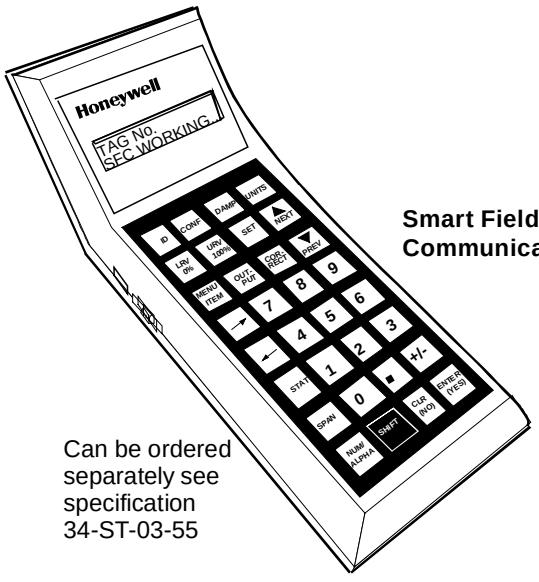
You easily select the analog or digital transmission format through the Smart Field Communicator (SFC®) which is the common hand-held operator interface for our Smartline® Transmitters. All configuration, operation, and communications functions are under the control of the ST 3000 Smart Transmitter's micro-processor and are accessible through the SFC.

Remote diaphragms seals are used:

- when the process medium is a slurry or has suspended solids that may clog the instrument line,
- when the process medium might freeze or solidify due to ambient or process temperature changes,
- with corrosive process mediums
- with high temperature processes,
- for Sanitary applications.



Remote Diaphragm Seals Transmitter Model STR12D



Smart Field Communicator

Can be ordered separately see specification 34-ST-03-55

24260

Figure 1—ST 3000 Series 100 transmitter with remote diaphragm seals.

[1] FOUNDATION™ Fieldbus is a trademark of the Fieldbus Foundation.

Industrial Automation and Control, 16404 N. Black Canyon Highway, Phoenix, AZ 85023

Features

- Choice of linear or square root output conformity is a simple configuration selection.
- Direct digital integration with TDC 3000^X system 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 temperature and static pressure. (Static pressure measurement is not made on In-line Gauge and Absolute units.)
- Added “smart” features include configuring lower and upper range values, simulating accurate analog output, and selecting preprogrammed engineering units for display.
- Smart transmitter personality with local or remote interfacing means significant manpower efficiency improvements in commissioning, start-up, and ongoing maintenance functions.

Description

The ST 3000 transmitter can replace any 4 to 20 milliampere 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: a differential pressure sensor, a temperature sensor, and a static pressure sensor. (Static pressure measurement is not made on In-line Gauge and Absolute units.) Microprocessor-based electronics provide major improvements over conventional transmitters: higher span-turndown ratio, improved temperature and pressure compensation, and improved accuracy.

Like other Smartline Transmitters, the ST 3000 features two-way communication between the operator and the transmitter through our SFC. You can connect the SFC anywhere that you can access the transmitter signal lines, and it provides the capabilities of transmitter adjustments and diagnostics from remote locations, such as the control room.

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 model transmitter.

Specifications

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	—	—	—	—	–55 to 90	–67 to 194
Humidity % RH	10 to 55		0 to 100		0 to 100		0 to 100	
Overpressure – Flange Rating **ANSI Class 150** **ANSI Class 300**	See Model Selection Guide.							
Vacuum Region - Minimum Pressure **mmHg absolute**	Atmospheric (See Figure 4 for Vacuum limitations.)							
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 5)							

*Ambient Temperature Limit is a function of Process Interface Temperature. (See Figure 2.)

Performance Under Rated Conditions* - Model STR12D (0-10 to 0-400 inH_2O)

Parameter	Description
Upper Range Limit** **inH2O** **mbar**	400 (39.2°F/4°C is standard reference temperature for inH_2O range.) 1000
Minimum Span **inH2O** **mbar**	10 Note: Recommended minimum span in square root mode is 20 inH_2O (50 mbar). 25
Turndown Ratio	40 to 1
Zero Elevation and Suppression	No limit except minimum span within ±100% URL.
Accuracy (Reference – Includes combined effects of linearity, hysteresis, and repeatability) • *Accuracy includes residual error after averaging successive readings.*	**In Analog Mode:** ±0.2% of calibrated span or upper range value (URV), whichever is greater, terminal based. For URV below reference point (50 inH_2O), accuracy equals: $\pm 0.1 + 0.1 \left(\frac{50\ \text{in}H_2O}{\text{span in}H_2O} \right)$ or $\pm 0.1 + 0.1 \left(\frac{125\ \text{mbar}}{\text{span mbar}} \right)$ in % span **In Digital Mode:** ±0.175% of calibrated span or upper range value (URV), whichever is greater, terminal based. For URV below reference point (50 inH_2O), accuracy equals: $\pm 0.075 + 0.10 \left(\frac{50\ \text{in}H_2O}{\text{span in}H_2O} \right)$ or $\pm 0.075 + 0.10 \left(\frac{125\ \text{mbar}}{\text{span mbar}} \right)$ in % span
Combined Zero and Span Temperature Effect per 28°C (50°F)	**In Analog Mode:** ±1.2% of span. For URV below reference point (100 inH_2O), effect equals: $\pm 0.2 + 1.0 \left(\frac{100\ \text{in}H_2O}{\text{span in}H_2O} \right)$ or $\pm 0.2 + 1.0 \left(\frac{250\ \text{mbar}}{\text{span mbar}} \right)$ in % span **In Digital Mode:** ±1.175% of span**.** For URV below reference point (100 inH_2O), effect equals: $\pm 0.175 + 1.0 \left(\frac{100\ \text{in}H_2O}{\text{span in}H_2O} \right)$ or $\pm 0.175 + 1.0 \left(\frac{250\ \text{mbar}}{\text{span mbar}} \right)$ in % span

*Performance specifications are based on reference conditions of 25°C (77°F), zero (0) static pressure, 10 to 55% RH, and 316L Stainless Steel barrier diaphragm.

**Transmitter URL limit or maximum seal pressure rating, whichever is lower.

Performance Under Rated Conditions* - Model STR13D (0-5 to 0-100 psid)

Parameter	Description
Upper Range Limit** **psid** **bar**	100 7
Minimum Span **psid** **bar**	5 0.35
Turndown Ratio	20 to 1
Zero Elevation and Suppression	No limit except minimum span within –18% and +100% of URL. Specifications valid from –5% to 100% of URL.
Accuracy (Reference – Includes combined effects of linearity, hysteresis, and repeatability) • *Stated accuracy **does not** apply for models with 2.9 inch diameter remote seal diaphragms.* • *Accuracy includes residual error after averaging successive readings.*	**In Analog Mode:** ±0.1% of calibrated span or upper range value (URV), whichever is greater, terminal based. For URV below reference point (30 psi), accuracy equals: $\pm 0.05 + 0.05 \left(\frac{30 \text{ psi}}{\text{span psi}}\right)$ or $\pm 0.05 + 0.05 \left(\frac{2 \text{ bar}}{\text{span bar}}\right)$ in % span **In Digital Mode:** ±0.075% of calibrated span or upper range value (URV), whichever is greater, terminal based. For URV below reference point (30 psi), accuracy equals: $\pm 0.025 + 0.05 \left(\frac{30 \text{ psi}}{\text{span psi}}\right)$ or $\pm 0.025 + 0.05 \left(\frac{2 \text{ bar}}{\text{span bar}}\right)$ in % span
Combined Zero and Span Temperature Effect per 28°C (50°F)	**In Analog Mode:** ±0.33% of span. For URV below reference point (30 psi), effect equals: $\pm 0.05 + 0.28 \left(\frac{30 \text{ psi}}{\text{span psi}}\right)$ or $\pm 0.05 + 0.28 \left(\frac{2 \text{ bar}}{\text{span bar}}\right)$ in % span **In Digital Mode:** ±0.305% of span. For URV below reference point (30 psi), effect equals: $\pm 0.025 + 0.28 \left(\frac{30 \text{ psi}}{\text{span psi}}\right)$ or $\pm 0.025 + 0.28 \left(\frac{2 \text{ bar}}{\text{span bar}}\right)$ in % span

*Performance specifications are based on reference conditions of 25°C (77°F), zero (0) static pressure, 10 to 55% RH, and 316L Stainless Steel barrier diaphragm.

**Transmitter URL limit or maximum seal pressure rating, whichever is lower.

Performance Under Rated Conditions* - Model STR14G (0-5 to 0-500 psig)

Parameter	Description
Upper Range Limit** **psig** **bar**	500 35
Minimum Span **psig** **bar**	5 0.35
Turndown Ratio	100 to 1
Zero Elevation and Suppression	No limit except minimum span from absolute zero to 100% of URL. Specifications valid over this range.
Accuracy (Reference – Includes combined effects of linearity, hysteresis, and repeatability) • *Accuracy includes residual error after averaging successive readings.*	**In Analog Mode:** ±0.1% of calibrated span or upper range value (URV), whichever is greater. For URV below reference point (20 psi), accuracy equals: $\pm 0.05 + 0.05 \left(\frac{20 \text{ psi}}{\text{span psi}}\right)$ or $\pm 0.05 + 0.05 \left(\frac{1.4 \text{ bar}}{\text{span bar}}\right)$ in % span **In Digital Mode:** ±0.075% of calibrated span or upper range value (URV), whichever is greater. For URV below reference point (20 psi), accuracy equals: $\pm 0.025 + 0.05 \left(\frac{20 \text{ psi}}{\text{span psi}}\right)$ or $\pm 0.025 + 0.05 \left(\frac{1.4 \text{ bar}}{\text{span bar}}\right)$ in % span
Combined Zero and Span Temperature Effect per 28°C (50°F)	**In Analog Mode:** ±1.88% of span. For URV below reference point (75 psi), effect equals: $\pm 0.2 + 1.68 \left(\frac{75 \text{ psi}}{\text{span psi}}\right)$ or $\pm 0.2 + 1.68 \left(\frac{5.25 \text{ bar}}{\text{span bar}}\right)$ in % span **In Digital Mode:** ±1.855% of span For URV below reference point (75 psi), effect equals: $\pm 0.175 + 1.68 \left(\frac{75 \text{ psi}}{\text{span psi}}\right)$ or $\pm 0.175 + 1.68 \left(\frac{5.25 \text{ bar}}{\text{span bar}}\right)$ in % span

*Performance specifications are based on reference conditions of 25°C (77°F), zero (0) static pressure, 10 to 55% RH, and 316L Stainless Steel barrier diaphragm.

**Transmitter URL limit or maximum seal pressure rating, whichever is lower.

Performance Under Rated Conditions* - Model STR17G (0-100 to 0-3000 psig)

Parameter	Description
Upper Range Limit** **psig** **bar**	3000 210
Minimum Span **psig** **bar**	100 7
Turndown Ratio	30 to 1
Zero Elevation and Suppression	No limit except minimum span from absolute zero to 100% of URL. Specifications valid over this range.
Accuracy (Reference – Includes combined effects of linearity, hysteresis, and repeatability) • *Accuracy includes residual error after averaging successive readings.*	**In Analog Mode:** ±0.15% of calibrated span or upper range value (URV), whichever is greater. For URV below reference point (300 psi), accuracy equals: $\pm 0.10 + 0.05 \left(\frac{300\ \text{psi}}{\text{span psi}}\right)$ or $\pm 0.10 + 0.05 \left(\frac{21\ \text{bar}}{\text{span bar}}\right)$ in % span **In Digital Mode:** ±0.125% of calibrated span or upper range value (URV), whichever is greater. For URV below reference point (300 psi), accuracy equals: $\pm 0.075 + 0.05 \left(\frac{300\ \text{psi}}{\text{span psi}}\right)$ or $\pm 0.075 + 0.05 \left(\frac{21\ \text{bar}}{\text{span bar}}\right)$ in % span
Combined Zero and Span Temperature Effect per 28°C (50°F)	**In Analog Mode:** ±0.70% of span. For URV below reference point (500 psi), effect equals: $\pm 0.20 + 0.50 \left(\frac{500\ \text{psi}}{\text{span psi}}\right)$ or $\pm 0.2 + 0.50 \left(\frac{34.5\ \text{bar}}{\text{span bar}}\right)$ in % span **In Digital Mode:** ±0.675% of span. For URV below reference point (500 psi), effect equals: $\pm 0.175 + 0.50 \left(\frac{500\ \text{psi}}{\text{span psi}}\right)$ or $\pm 0.175 + 0.50 \left(\frac{34.5\ \text{bar}}{\text{span bar}}\right)$ in % span

*Performance specifications are based on reference conditions of 25°C (77°F), zero (0) static pressure, 10 to 55% RH, and 316L Stainless Steel barrier diaphragm.

**Transmitter URL limit or maximum seal pressure rating, whichever is lower.

Performance Under Rated Conditions* - Model STR14A (0-5 to 0-500 psia)

Parameter	Description
Upper Range Limit psia **bar absolute**	500 35
Minimum Span psia **bar absolute**	5 0.35
Turndown Ratio	100 to 1
Zero Elevation and Suppression	No limit except minimum span from 0 to 100% URL.
Accuracy (Reference – Includes combined effects of linearity, hysteresis, and repeatability) • *Accuracy includes residual error after averaging successive readings.*	**In Analog Mode:** ±0.1% of calibrated span or upper range value (URV), whichever is greater. For URV below reference point (20 psi), accuracy equals: $\pm 0.05 + 0.05 \left(\frac{20 \text{ psi}}{\text{span psi}} \right)$ or $\pm 0.05 + 0.05 \left(\frac{1.4 \text{ bar}}{\text{span bar}} \right)$ in % span **In Digital Mode:** ±0.075% of calibrated span or upper range value (URV), whichever is greater. For URV below reference point (20 psi), accuracy equals: $\pm 0.025 + 0.05 \left(\frac{20 \text{ psi}}{\text{span psi}} \right)$ or $\pm 0.025 + 0.05 \left(\frac{1.4 \text{ bar}}{\text{span bar}} \right)$ in % span
Combined Zero and Span Temperature Effect per 28°C (50°F)	**In Analog Mode:** ±1.88% of span. For URV below reference point (50 psi), effect equals: $\pm 0.2 + 1.68 \left(\frac{50 \text{ psi}}{\text{span psi}} \right)$ or $\pm 0.2 + 1.68 \left(\frac{3.5 \text{ bar}}{\text{span bar}} \right)$ in % span **In Digital Mode:** ±1.855% of span For URV below reference point (50 psi), effect equals: $\pm 0.175 + 1.68 \left(\frac{50 \text{ psi}}{\text{span psi}} \right)$ or $\pm 0.175 + 1.68 \left(\frac{3.5 \text{ bar}}{\text{span bar}} \right)$ in % span

*Performance specifications are based on reference conditions of 25°C (77°F), zero (0) static pressure, 10 to 55% RH, and 316L Stainless Steel barrier diaphragm.

**Transmitter URL limit or maximum seal pressure rating, whichever is lower.

Performance Under Rated Conditions – General for all Models

Parameter	Description
Output (two-wire)	Analog 4 to 20 mA or digital communications DE mode.
Supply Voltage Effect	±0.005% span per volt.
Damping Time Constant	Adjustable from 0 to 32 seconds digital damping.
RFI Protection (Standard)	Negligible (20 to 1000 MHz at 30 volts per meter).
CE Conformity (Europe)	89/336/EEC, Electromagnetic Compatibility (EMC) Directive.

Physical and Approval Bodies

Parameter	Description
Process Interface	See Model Selection Guide for Material Options for desired seal type.
Seal Barrier Diaphgram	316L Stainless Steel, Monel, Hastelloy C, Tantalum
Seal Gasket Materials	Klinger C-4401 (non-asbestos) Grafoil
Mounting Bracket	Carbon Steel (Zinc-Chromate plated) or Stainless Steel.
Fill Fluid (Meter Body)	Silicone (DC 200) S.G. @ 25°C = 0.94 CTFE (Chlorotrifluoroethylene) S.G. @ 25°C = 1.89
Fill Fluid (Secondary)	Silicone (DC 200) S.G. @ 25°C = 0.94 CTFE (Chlorotrifluoroethylene) S.G. @ 25°C = 1.89 Silicone (DC 704) S.G. @ 25°C = 1.07 NEOBEE M-20 S.G. @ 25°C = 0.90 Syltherm 800 S.G. @ 25°C = 0.93
Electronic Housing	Epoxy-Polyester hybrid paint. Low copper-aluminum alloy. Meets NEMA 4X (watertight) and NEMA 7 (explosion proof). Stainless steel optional.
Capillary Tubing	Armored Stainless Steel or PVC Coated Armored Stainless Steel. **Length:** 5, 10, 15, 20, 25, and 35 feet (1.5, 3, 4.6, 6.1, 7.5, and 10.7 meters). 2 or 6 inches (51 to 152 millimeters) long close-coupled nipple is also available. Refer to Figure 3 for guide to maximum capillary length vs. diaphragm diameter.
Wiring	Accepts up to 16 AWG (1.5 mm diameter).
Mounting	See Figure 6.
Dimensions	**Transmitter:** See Figures 9 and 10. **Seal:** See Model Selection Guide.
Net Weight	**Transmitter:** 15.4 pounds (7 Kg). Total weight is dependent on seal type and capillary length.
Approval Bodies	Approved as explosion proof and intrinsically safe for use in Class I, Division 1, Groups A, B, C, D locations, and nonincendive for Class I, Division 2, Groups A, B, C, D locations. Approved EEx ia IIC T5 and EEx d IIC T6 per CENELEC standards; and Ex N II T5 per BS 6941.

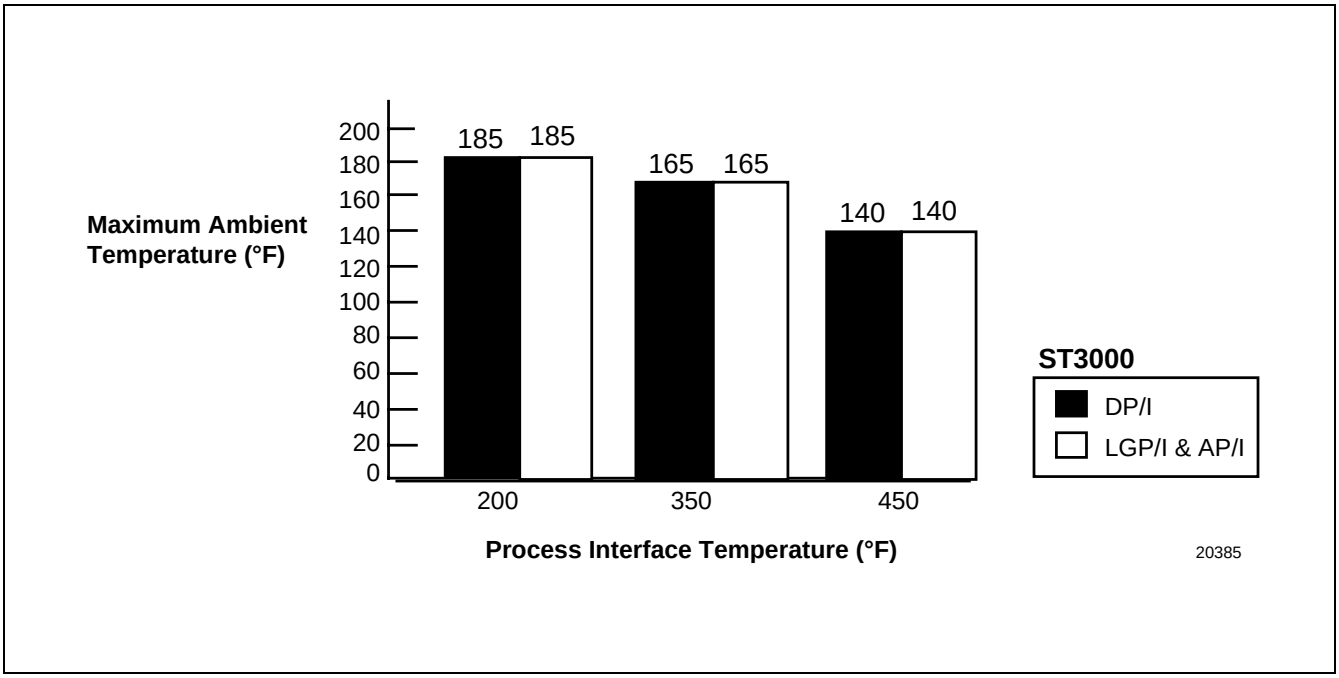


Figure 2—Ambient temperature and process interface chart.

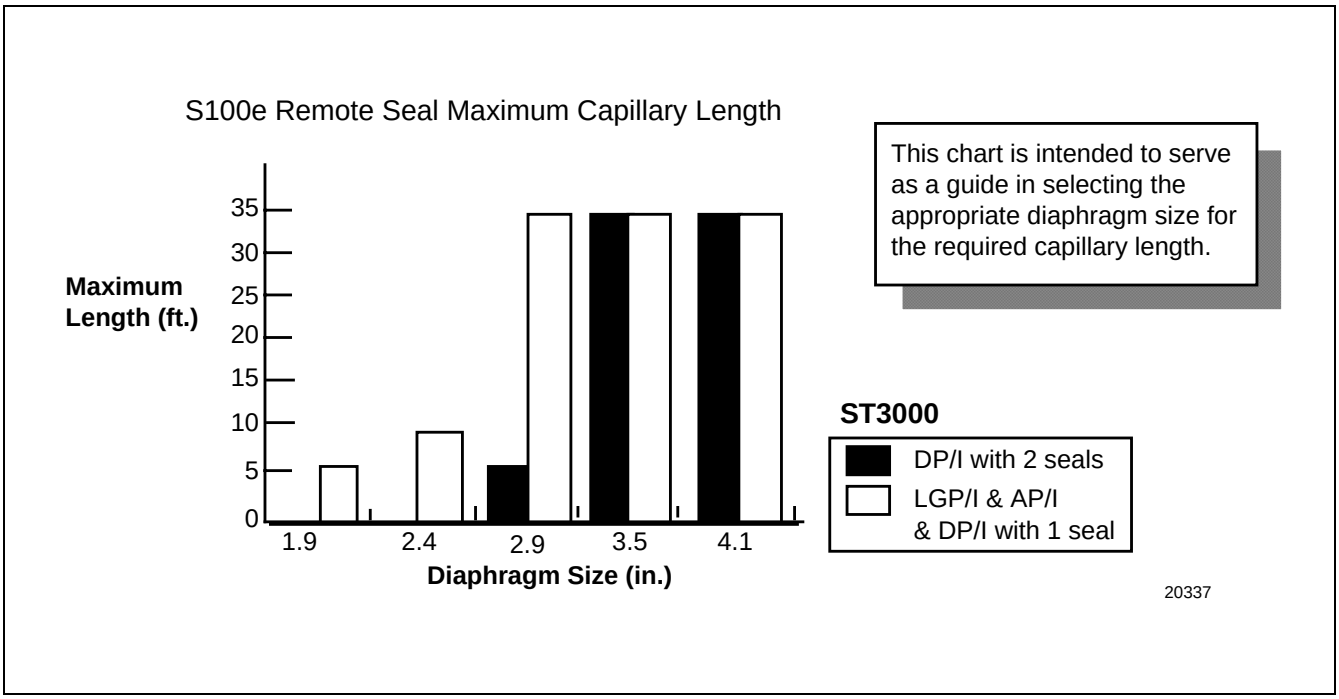


Figure 3—Maximum capillary length and diaphragm size chart.

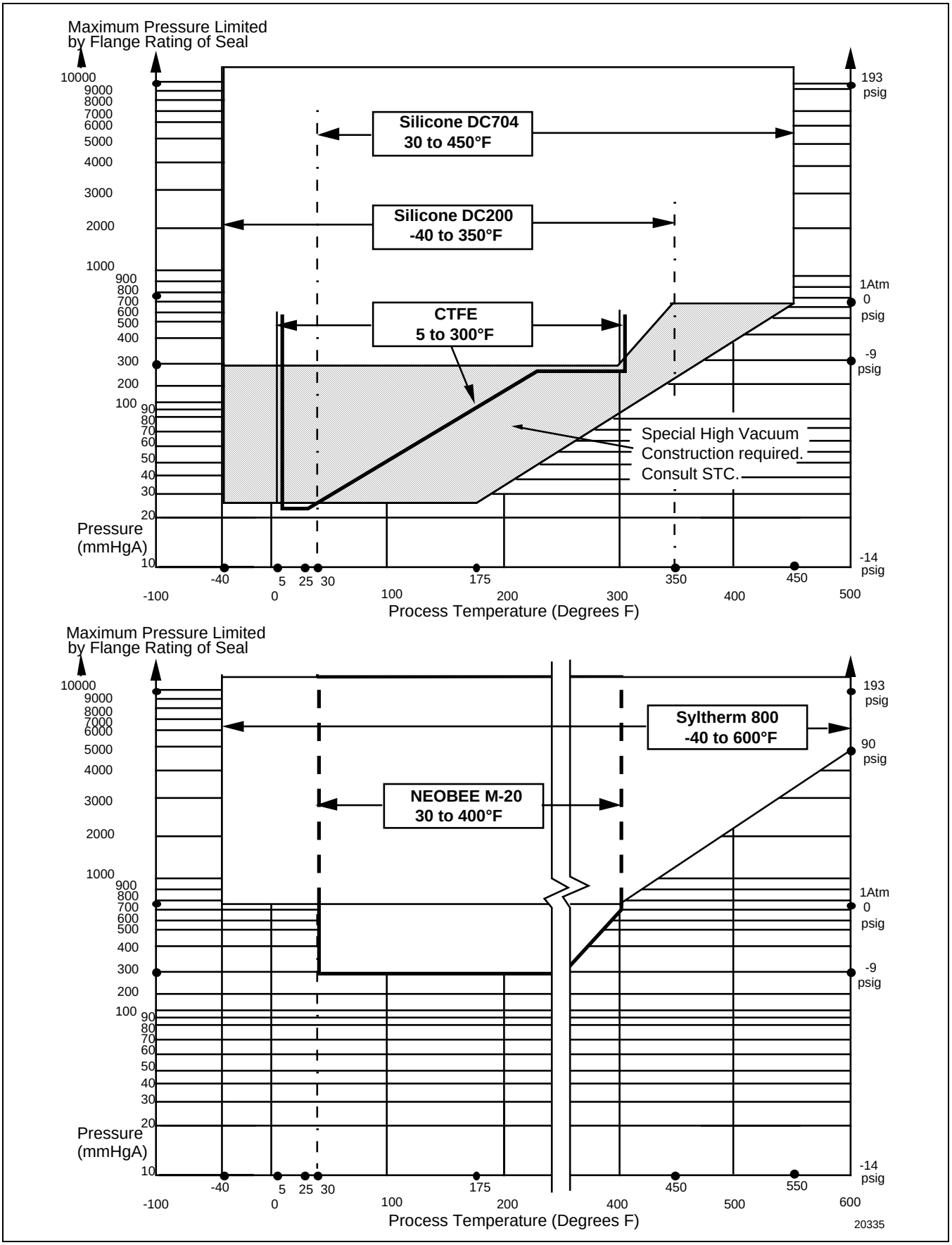


Figure 4—ST 3000 Remote Seals operable limits for pressure vs. temperature.

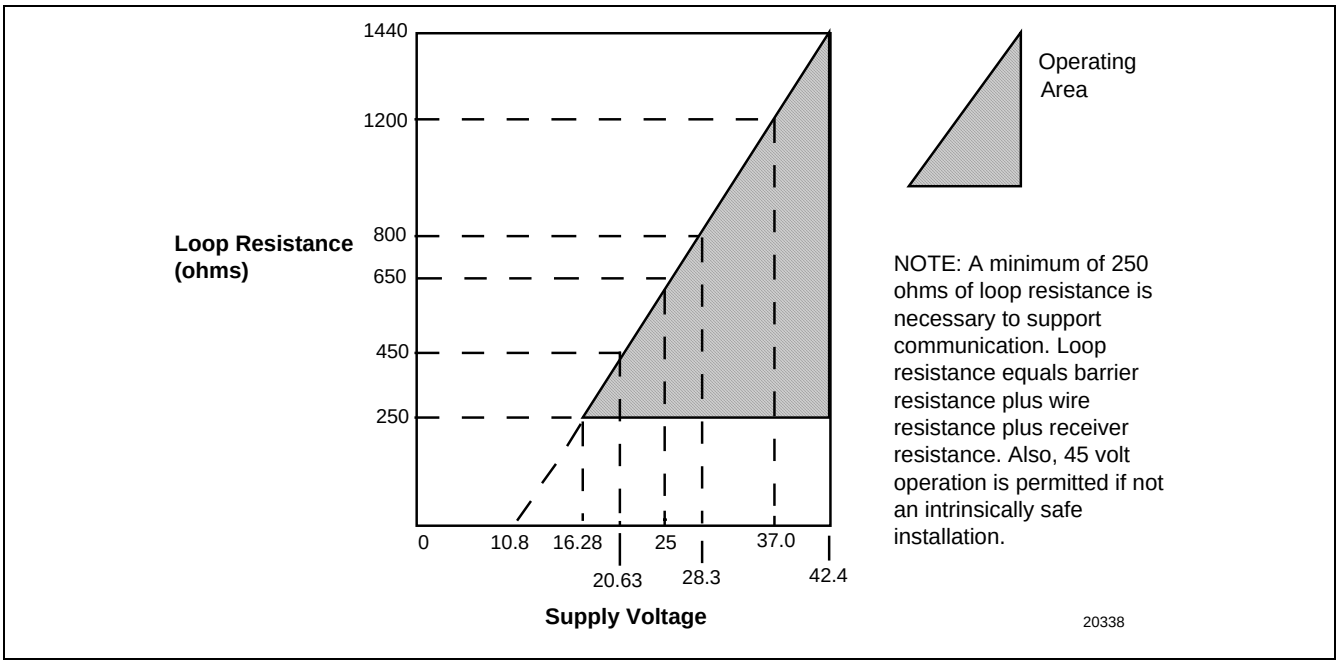
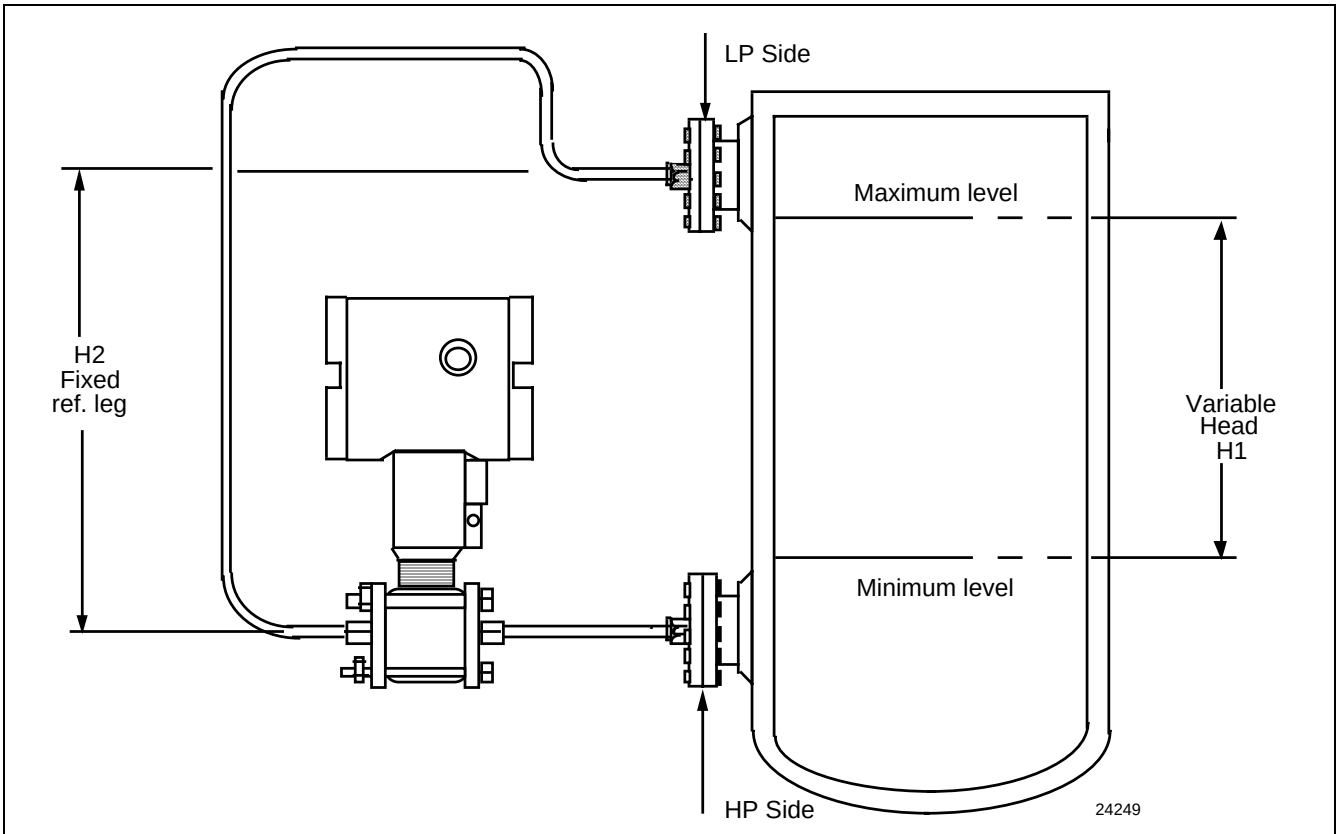


Figure 5—Supply voltage/loop resistance chart.



NOTE: Lower flange seal should not be mounted over 22 feet below or above the transmitter for silicone fill fluid (11 feet for CTFE fill fluid) with tank at one atmosphere. The combination of tank vacuum and high pressure capillary head effect should not exceed 9 psi vacuum (300 mmHg absolute).

Consult Honeywell for installation of STR13D.

Figure 6—The ST 3000 transmitter with remote diaphragm seals shown mounted on a tank.

Application Data*

Liquid Level: Closed Tank
Determine the minimum and maximum pressure differentials to be measured (Figure 7).

P_{Min} = $(SG_p \times a) - (SG_f \times d)$
= LRV when HP at bottom of tank
= –URV when LP at bottom of tank

P_{Max} = $(SG_p \times b) - (SG_f \times d)$
= URV when HP at bottom of tank
= –LRV when LP at bottom of tank

Where:

Minimum level at 4 mA
Maximum level at 20 mA

a = distance between bottom tap and minimum level

b = distance between bottom tap and maximum level

d = distance between taps

SG_f = Specific Gravity of capillary fill fluid (see page 8 for values)

SG_p = Specific Gravity of process fluid

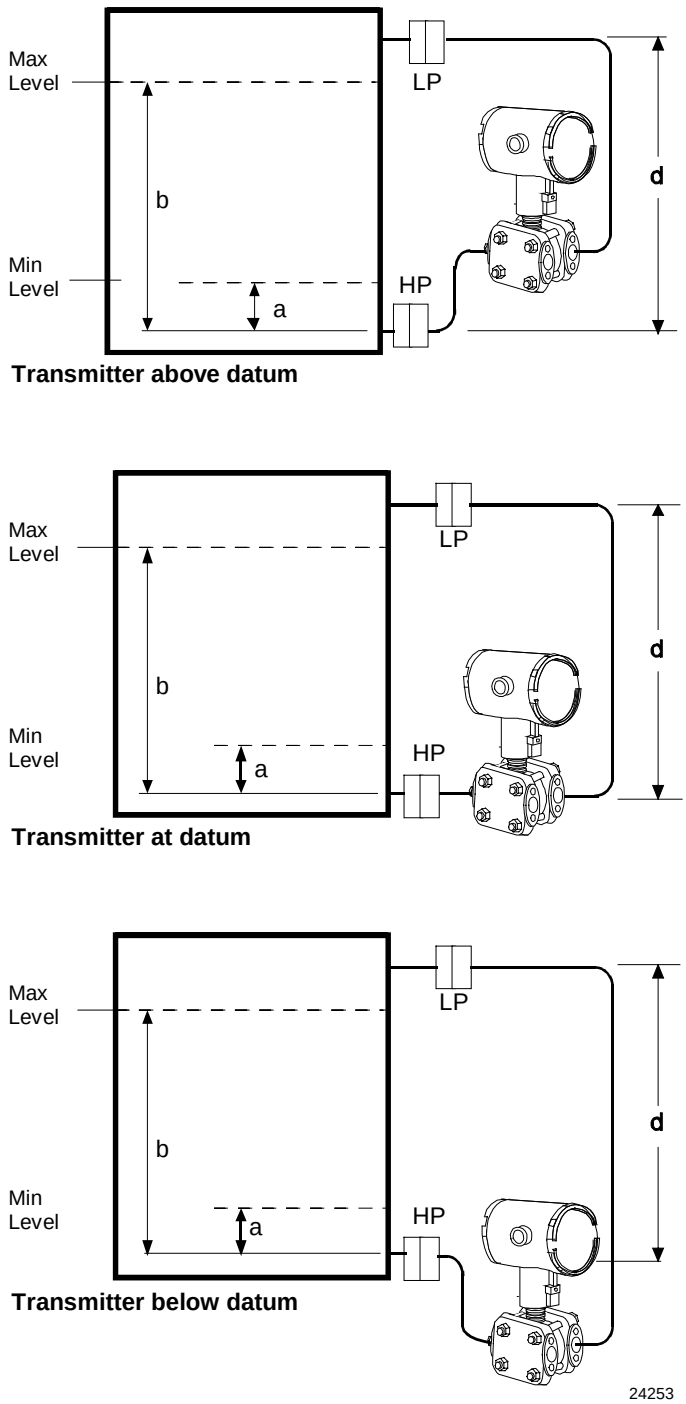


Figure 7—Closed tank liquid level measurement distances.

* Contact STC-Phoenix concerning applications for model STR13D.

Density or Interface*
Calculate the minimum and maximum pressure differentials to be measured.

P_{min} = $(SG_{min} - SG_f) \times (d)$; minimum density, 4mA output

P_{max} = $(SG_{max} - SG_f) \times (d)$; maximum density, 20mA output

Where:

d = distance between the taps

SG_{max} = maximum Specific Gravity

SG_{min} = minimum Specific Gravity

SGf = Specific Gravity of capillary fill fluid (see page 8 for values)

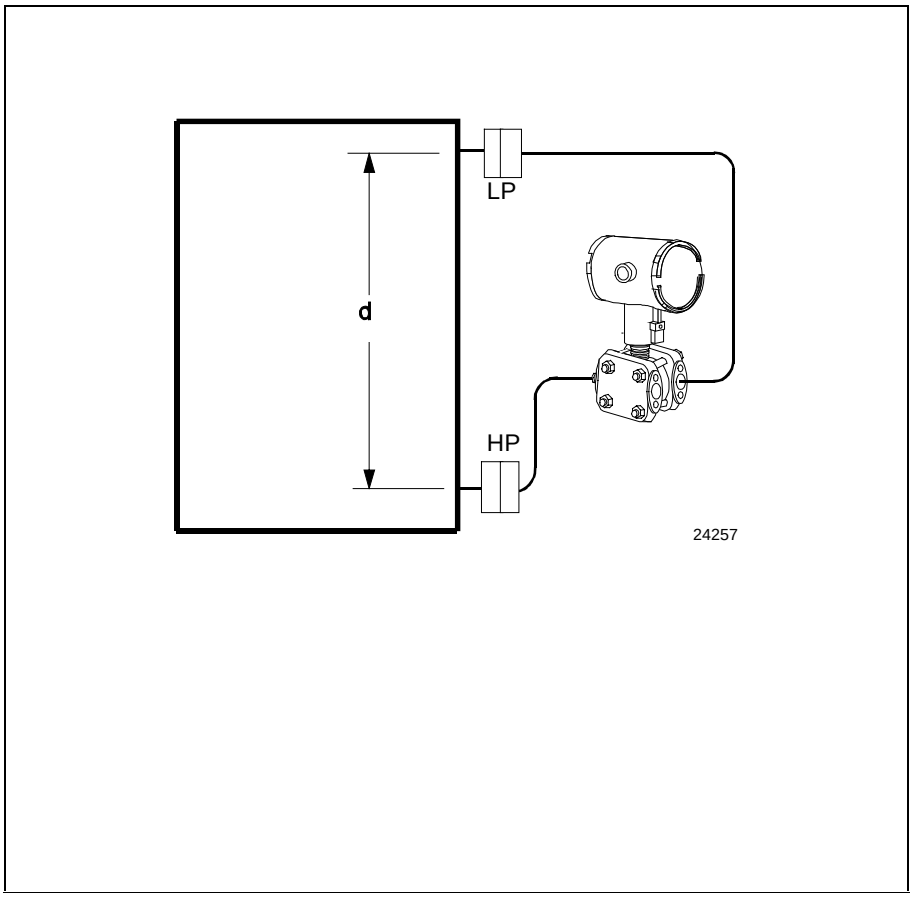


Figure 8—Density, direct acting instrument configuration.

* Contact STC-Phoenix concerning applications for model STR13D.

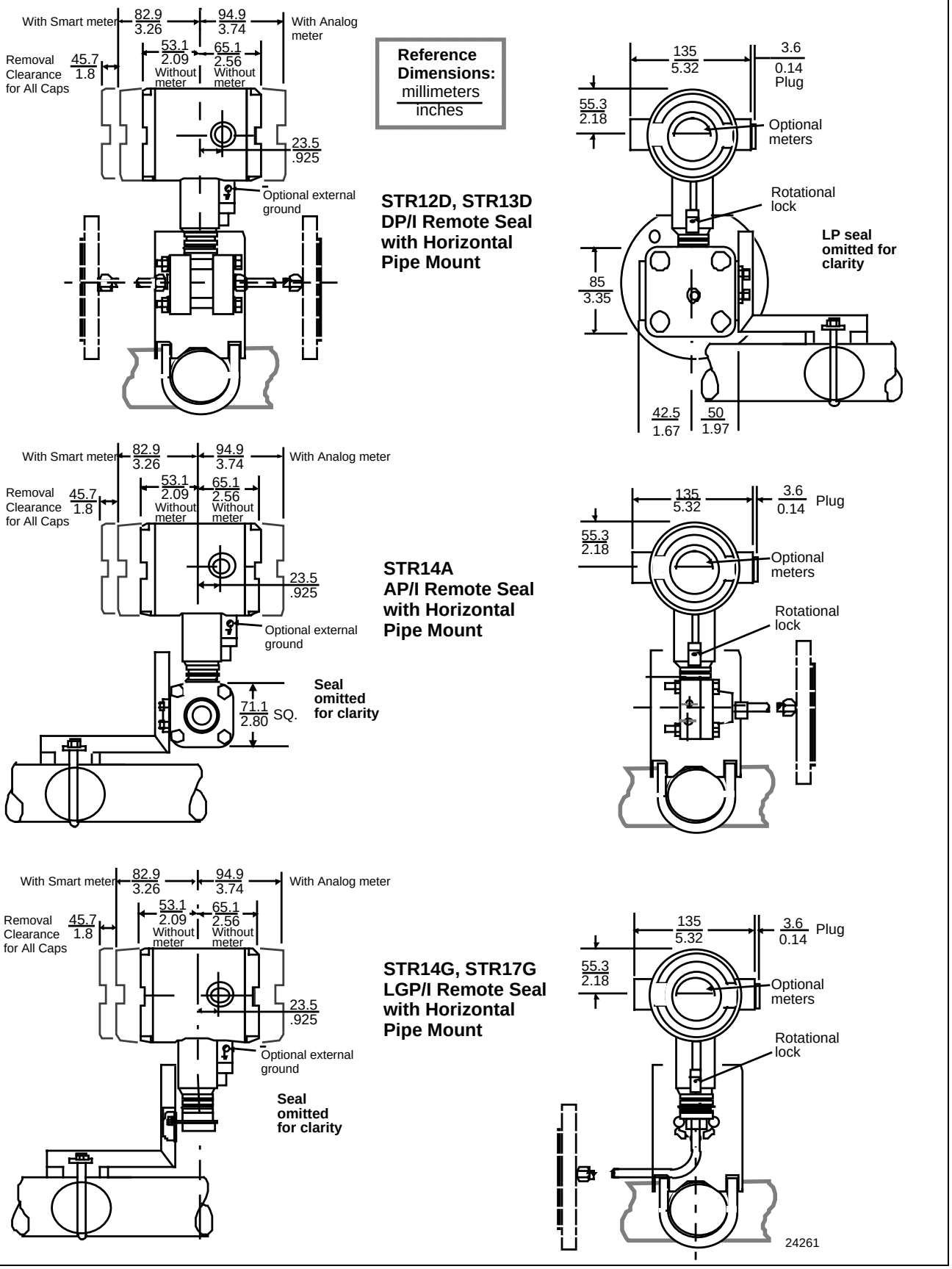


Figure 9 —Approximate horizontal mounting dimensions for Remote Seal Transmitter.

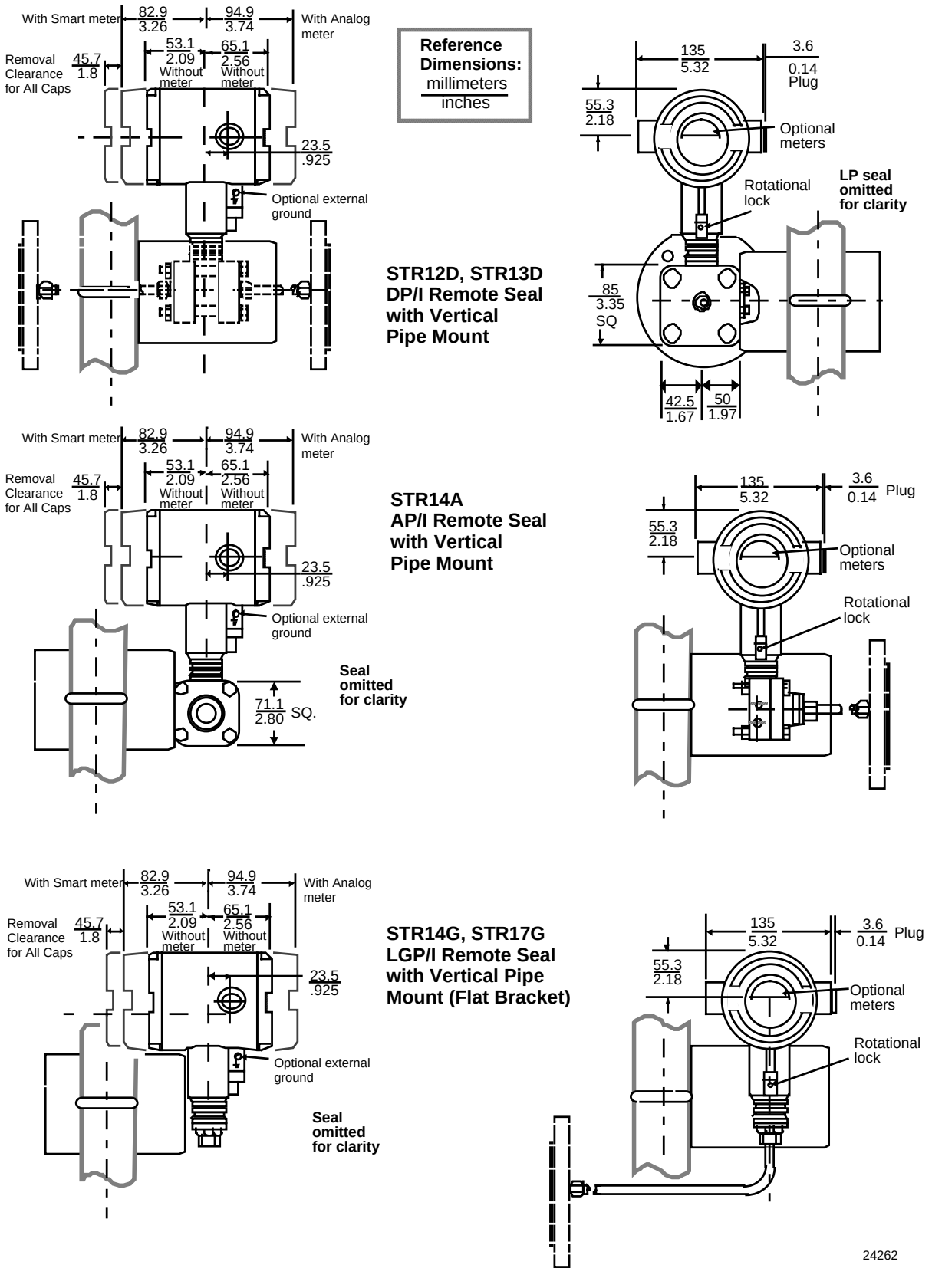


Figure 10—Approximate vertical mounting dimensions for Remote Seal Transmitter.

Options

Mounting Bracket
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.

Indicating Meter
Two integral meter options are available. An analog meter (option ME) is available with a 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 pre-selected engineering units.

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

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. Note that a separate nameplate on the meter body contains the serial number and body-related data. 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 (Option TC)
The factory can configure the transmitter 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.

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.

FOUNDATION Fieldbus (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.

Ordering Information

Contact your nearest Honeywell sales office, or

In the U.S.:
Honeywell
Industrial Automation & Control
16404 N. Black Canyon Highway
Phoenix, AZ 85023
1-800-288-7491

In Canada:
The Honeywell Centre
155 Gordon Baker Rd.
North York, Ontario
M2H 3N7
1-800-461-0013

In Latin America:
Honeywell Inc.
480 Sawgrass Corporate Parkway,
Suite 200
Sunrise, FL 33325
(954) 845-2600

In Europe:
Honeywell PACE
1, Avenue du Bourget
B-1140 Brussels, Belgium
[32-2] 728-2111

In Asia:
Honeywell Asia Pacific Inc.
Room 3213-25
Sun Hung Kai Centre
No. 30 Harbour Road
Wanchai, Hong Kong
2829-8298

In the Pacific:
Honeywell Limited
5 Thomas Holt Drive
North Ryde NSW 2113
Australia
(61 2) 9353 7000

Or, visit Honeywell on the World Wide Web at:
http://www.honeywell.com

Specifications are subject to change without notice.

Model Selection Guide

Instructions

- Select the desired Key Number. The arrow to the right marks the selection available.
- Make one selection from each table, I and II, using the column below the proper arrow. Select as many Table III options as desired (if no options are desired, specify 00). A dot denotes unrestricted availability. A letter denotes restricted availability. Restrictions follow Table IV.

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

KEY NUMBER

Description	Selection	Availability				
0-10" to 0-400" H2O/0-25 to 0-1000 mbar Body Rating*: 2500 psi (172 bar) Compound Characterized	STR12D (**Note**)	↓				
0-5 to 0-100 psi/0-0.34 to 0-7 bar Body Rating*: 2500 psi (172 bar)	STR13D		↓			
0-5 to 0-500 psi/0-0.34 bar to 0-35 bar Body Rating*: 500 psi (35 bar)	STR14G			↓		
0-100 to 0-3000 psi/0-7 bar to 210 bar Body Rating*: 2500 psi (172 bar)	STR17G				↓	
0-5 to 0-500 psia/0-0.34 to 0-35 bar Body Rating*: 500 psi (35 bar)	STR14A					↓

Note: With Model STR12D, Table III, Option CM must be specified.

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

TABLE I - METER BODY

Number of Seals	1 Remote Seal (High Side)+G40	1 _ _	•	•	•	•	•
	2 Remote Seals	2 _ _	•	•			
	1 Remote Seal (Low Side)	3 _ _	•	•			
Fill Fluid	Silicone (DC 200)	_ 1 _	•	•	•	•	•
(Meter Body)	CTFE	_ 2 _	**q**	**q**	**q**	**q**	**q**
Construction	**Non-Wetted Adapter Head Material**						
Standard Dual Head	316 St. St.	_ _ A	•	•			
	Carbon St. (zinc-plated)	_ _ B	•	•			
	316 St. St. for Close-Couple	_ _ D	**y**	**y**			
Standard In-line Design	316 St. St. Bonnet	_ _ A			•	•	
	316 St. St. Bonnet for Close-Couple	_ _ D			**y**	**y**	
Standard Single Head Design	316 St. St. Adapter Head	_ _ A					•
	316 St. St. Head for Close-Couple	_ _ D					**y**

Model Selection Guide, continued

STR14A
STR1_G
STR1_D

TABLE II - SEALS					Selection	2	3	4	7	↓
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.										
Secondary Fill	Silicone (DC 200)				1 _ _ _ _ _ _ _ _ _ _ _	•	•	•	•	•
	CTFE				2 _ _ _ _ _ _ _ _ _ _ _	•	•	•	•	•
	Silicone (DC 704)				3 _ _ _ _ _ _ _ _ _ _ _	p	p	p	p	p
	Neobee(M20) **				4 _ _ _ _ _ _ _ _ _ _ _	•	•	•	•	•
	Syltherm 800 ***				5 _ _ _ _ _ _ _ _ _ _ _	p	p	p	p	p
Connection of Remote Seal to Meter Body	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	z	z
	6 inch long SS nipple close-coupled				_ 6 _ _ _ _ _ _ _ _ _ _	z	z	z	z	z
No Selection					_ _ 0 _ _ _ _ _ _ _ _ _	•	•	•	•	•
Flush Flanged Seal	**Diaphragm Diameter**	**Flange Size**	**Flange Pressure Rating ***							
	3.5"	3"	ANSI Class 150		_ _ _ AFA _ _ _ _ _ _	•	•	•	•	•
			ANSI Class 300		_ _ _ AFC _ _ _ _ _ _	•	•	•	•	•
			DIN DN80-PN40		_ _ _ AFM _ _ _ _ _ _	•	•	•	•	•
	Wetted Material		**Diaphragm**	**Upper Insert**						
			316L SS	316 St. St.	_ _ _ _ _ _ AA _ _ _ _	•	•	•	•	•
			Hastelloy C	316 St. St.	_ _ _ _ _ _ AB _ _ _ _	•	•	•	•	•
			Hastelloy C	Hastelloy C	_ _ _ _ _ _ AC _ _ _ _	•	•	•	•	•
			Monel	Monel	_ _ _ _ _ _ AE _ _ _ _	•	•	•	•	•
	Non-Wetted Material (upper)		CS with Polyester Powder Coating		_ _ _ _ _ _ _ 1 _ _ _	•	•	•	•	•
			316 St. St.		_ _ _ _ _ _ _ 2 _ _ _	•	•	•	•	•
	Bolts		No Selection		_ _ _ _ _ _ _ _ 0 _ _	•	•	•	•	•
	Sytles		No Selection		_ _ _ _ _ _ _ _ _ 0 _	•	•	•	•	•
	Gasket		No Selection		_ _ _ _ _ _ _ _ _ _ 0	•	•	•	•	•

* Standard facing 125-250 AARH RF (raised face) serrated surface finish.

Table II continued next page

** Limited vacuum availability.

*** Minimum static pressure requirement. No vacuum allowed. See Specifications' Figure 4.

STR14A
STR1_G
STR1_D

TABLE II - SEALS (continued)

	Diaphragm Diameter	Flange Size	Flange Pressure Rating *	Const. - See Spec. Figure 34-ST-03-64	Construction - See Spec. 34-ST-03-64 figure	Selection 2	3	4	7	
Flush Flanged Seal with Lower	2.4"	1"	ANSI 150	11	___ BCA _____			•	•	t
			ANSI 300	11	___ BCC _____			•	•	t
		1-1/2"	ANSI 150	11	___ BGA _____			•	•	t
			ANSI 300	11	___ BGC _____			•	•	t
		2"	ANSI 150	11	___ BDA _____			•	•	t
			ANSI 300	11	___ BDC _____			•	•	t
		3"	ANSI 150	11	___ BFA _____			•	•	t
			ANSI 300	11	___ BFC _____			-	-	t
	2.9"	1/2"	ANSI 150	12	___ CAA _____	t	t	•	•	•
		1"	ANSI 150	12	___ CCA _____	t	t	•	•	•
			ANSI 300	12	___ CCC _____	t	t	•	•	•
		1-1/2"	ANSI 150	11	___ CGA _____	t	t	•	•	•
			ANSI 300	11	___ CGC _____	t	t	•	•	•
		2"	ANSI 150	11	___ CDA _____	t	t	•	•	•
			ANSI 300	11	___ CDC _____	t	t	-	-	-
	4.1"	1/2"	ANSI 150	12	___ DAA _____	•	•	•	•	•
		1"	ANSI 150	12	___ DCA _____	•	•	•	•	•
			ANSI 300	12	___ DCC _____	•	•	•	•	•
		1-1/2"	ANSI 150	12	___ DGA _____	•	•	•	•	•
			ANSI 300	12	___ DGC _____	•	•	•	•	•
		2"	ANSI 150	12	___ DDA _____	•	•	•	•	•
			ANSI 300	11	___ DDC _____	•	•	•	•	•
		3"	ANSI 150	11	___ DFA _____	•	•	•	•	•
			ANSI 300	11	___ DFC _____	-	-	-	-	-
	Wetted Material		**Diaphragm**	**Lower**						
			316L SS	316 St. St.	_____ BA ____	•	•	•	•	•
			Hastelloy C	316 St. St.	_____ BB ____	•	•	•	•	•
			Hastelloy C	Hastelloy C	_____ BC ____	•	•	•	•	•
			Monel	Monel	_____ BE ____	•	•	•	•	•
			Tantalum	316 St. St.	_____ BF ____	•	•	•	•	•
			Tantalum	Hastelloy C	_____ BG ____	-	-	-	-	-
	Non-Wetted Material (upper, upper insert)		**Upper**	**Upper Insert**						
			316 St. St.	316 St. St.	_____ 4 ___	•	•	•	•	•
			CS	316 St/ St.	_____ 5 ___	-	-	-	-	-
	Bolts		No Selection		_____ 0 __	-	-	-	-	
	Styles		Without 1/4" NPT Flushing Connection		_____ 0 _	•	•	•	•	•
			With 1/4" NPT Flushing Connection		_____ 7 _	•	•	•	•	•
	Gasket		Klinger C-4401 (non-asbestos)		_____ K	c	c	c	c	c
			Grafoil		_____ G	d	d	d	d	d

Table II continued next page

***** Standard facing 125-250 AARH RF (raised face) serrated finish.

Model Selection Guide, continued

TABLE II - SEALS (continued)

					Selection	STR14A 2	STR1_G 3	STR1_D 4	7	
Flange Seal with Extended Diaphragm	Diaphragm Diameter	Flange Size	Flange Pressure Rating *							
	2.9" (2.85")	3" (2.85" OD extension)	ANSI Class 150		_ _ _ EFA _ _ _ _ _ _	t	t	•	•	•
			ANSI Class 300		_ _ _ EFC _ _ _ _ _ _	t	t	•	•	•
			DIN DN80-PN40		_ _ _ EFM _ _ _ _ _ _	t	t	-	-	-
	3.5"	4" (3.70" OD extension)	ANSI Class 150		_ _ _ FGA _ _ _ _ _ _	•	•	•	•	•
			ANSI Class 300		_ _ _ FGC _ _ _ _ _ _	•	•	•	•	•
			DIN DN100-PN40		_ _ _ FGP _ _ _ _ _ _	-	-	-	-	-
	Wetted Material		Diaphragm	Lower						
			316L SS	316 St. St.	_ _ _ _ _ _ EA _ _ _ _	•	•	•	•	•
			Hastelloy C	316 St. St.	_ _ _ _ _ _ EB _ _ _ _	•	•	•	•	•
			Hastelloy C	Hastelloy C	_ _ _ _ _ _ EC _ _ _ _	-	-	-	-	-
	Non-Wetted Material (flange)		CS with Polyester Powder Coating		_ _ _ _ _ _ _ 7 _ _ _	•	•	•	•	•
	Bolts		No Selection		_ _ _ _ _ _ _ _ 0 _ _	-	-	-	-	-
	Extension Length		2"		_ _ _ _ _ _ _ _ 2 _	•	•	•	•	•
			4"		_ _ _ _ _ _ _ _ 4 _	•	•	•	•	•
			6"		_ _ _ _ _ _ _ _ 6 _	-	-	-	-	-
	Gasket		No Selection		_ _ _ _ _ _ _ _ 0	-	-	-	-	-
Pancake Seal	Diaphragm Diameter	Flange Size	Flange Pressure Rating ** Dependent on customer flange							
	3.5"	3"	ANSI Class 150/300/600		_ _ _ GFA _ _ _ _ _ _	-	-	-	-	-
	Wetted Material		Diaphragm	Body						
			316L SS	316 St. St.	_ _ _ _ _ _ GA _ _ _ _	•	•	•	•	•
			Hastelloy C	316 St. St.	_ _ _ _ _ _ GB _ _ _ _	•	•	•	•	•
			Hastelloy C	Hastelloy C	_ _ _ _ _ _ GC _ _ _ _	•	•	•	•	•
			Monel	Monel	_ _ _ _ _ _ GE _ _ _ _	-	-	-	-	-
	Non-Wetted Material		No Selection		_ _ _ _ _ _ _ _ 0 _ _ _	•	•	•	•	•
	Bolts		No Selection		_ _ _ _ _ _ _ _ 0 _ _	-	-			
	Styles		No Selection		_ _ _ _ _ _ _ _ _ 0 _	-	-			
	Gasket		No Selection		_ _ _ _ _ _ _ _ _ 0	-	-			

Table II continued next page

* Standard facing 125-250 AARH RF (raised face) serrated finish.

** **Caution:** Maximum working pressure of STR14G and STR14A transmitter is 500 psig and STR17G is 3000 psig. Damage to sensosr may result if pressure limit is exceeded.

STR14A
STR1_G
STR1_D

TABLE II - SEALS (continued)

					Selection	2	3	4	7	↓
Chemical Tee "Taylor" Wedge	**Diaphragm Diameter**	**Flange Size**	**Flange Pressure Rating ****							
	3.5"	Taylor Wedge 5" O.D.	750 psi		___ HM0 _____	v	v			
	Wetted Material		**Diaphragm**	**Lower**						
			316L SS	316 St. St.	_____ HA ____	-	-			
			Hastelloy C	316 St. St.	_____ HB ____	-	-			
	Non-Wetted Material		No Selection		_____ 0 ___	-	-			
	Bolts		No Selection		_____ 0 __	-	-			
	Styles		No Selection		_____ 0 _	-	-			
	Gasket		No Selection		_____ 0	-	-			
Seal with Threaded Process Connection	**Diaphragm Diameter**	**Threaded Process Connection Size (NPT Female)**	**Pressure Rating**							
			CS Bolts	**304 SS Bolts**						
	2.4"	1/2" NPT	2500 psi	1250 psi	___ JJG _____			-	-	t
		3/4" NPT			___ JKG _____			-	-	t
		1" NPT			___ JLG _____			-	-	t
	2.9"	1/2" NPT			___ KJG _____	t	t	-	-	-
		3/4" NPT			___ KKG _____	t	t	-	-	-
		1" NPT			___ KLG _____	t	t	-	-	-
	4.1"	1/2" NPT	1500 psi	750 psi	___ LJG _____	-	-	-	-	-
		3/4" NPT			___ LKG _____	-	-	-	-	-
		1" NPT			___ LLG _____	-	-	-	-	-
	Wetted Material		**Diaphragm**	**Lower**						
			316L SS	CS	_____ JA ____	-	-	-	-	-
			316L SS	316 St. St.	_____ JB ____	-	-	-	-	-
			Hastelloy C	316 St. St.	_____ JC ____	-	-	-	-	-
			Hastelloy C	Hastelloy C	_____ JD ____	-	-	-	-	-
			Monel	Monel	_____ JE ____	-	-	-	-	-
			Tantalum	316 St. St.	_____ JF ____	-	-	-	-	-
			Tantalum	Hastelloy C.	_____ JG ____	-	-	-	-	-
	Non-Wetted Material (upper)		CS with Polyester Powder Coating		_____ A ___	-	-	-	-	-
			Stainless Steel		_____ C ___	w	w	w	w	w
	Bolts		C.S.		_____ C __	-	-	-	-	-
			304 St. St.		_____ D __	-	-	-	-	-
	Styles		W/O Flushing Connection		_____ A _	-	-	-	-	-
			With Flushing Connection		_____ F _	-	-	-	-	-
	Gasket		Klinger C-4401 (non-asbestos)		_____ K	c	c	c	c	c
			Grafoil		_____ G	d	d	d	d	d

Table II continued next page

****** **Caution:** Maximum working pressure of STR14G and STR14A transmitter is 500 psig and STR17G is 3000 psig. Damage to sensor may result if pressure limit is exceeded.

Model Selection Guide, continued

TABLE II - SEALS (continued)

					Selection	2	3	4	7	↓
					STR14A					↓
					STR1_G			↓	↓	
					STR1_D	↓	↓			
Sanitary Seal	**Diaphragm Diameter**	**Flange Size**	**Pressure Rating**							
	1.9"	2"	Customer clamp rating or 600 psi, whichever is less		_ _ _ MD0 _ _ _ _ _ _			•	•	
	2.4"	2-1/2"			_ _ _ NE0 _ _ _ _ _ _			•	•	
	2.9"	3"			_ _ _ PF0 _ _ _ _ _ _	t	t	•	•	•
	4.1"	4"			_ _ _ QG0 _ _ _ _ _ _	•	•	•	•	•
	Wetted Material		**Diaphragm**	**Body**						
			316L SS	316 St. St.	_ _ _ _ _ _ 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 St. St. Bolts**						
	2.4"	for 3" pipe-Conoflow or 4" or larger pipe-Conoflow	1250 psi	1250 psi	_ _ _ RPK _ _ _ _ _ _			•	•	t
					_ _ _ RQK _ _ _ _ _ _			•	•	t
	Wetted Material		**Diaphragm**	**Lower Housing**						
			316L SS	C. S.	_ _ _ _ _ _ RA _ _ _ _			•	•	•
			316L SS	316 St. St.	_ _ _ _ _ _ RB _ _ _ _			•	•	•
			Hastelloy C	316 St. St.	_ _ _ _ _ _ RC _ _ _ _			•	•	•
			316 LSS	N/A-Body Only	_ _ _ _ _ _ SB _ _ _ _			•	•	•
			Hastelloy C	N/A-Body Only	_ _ _ _ _ _ SC _ _ _ _			•	•	•
	Non-Wetted Material		**Body**	**Bolts ***						
			C. S.	C. S.	_ _ _ _ _ _ _ _ B _ _ _			•	•	•
			316 St. St.	304 St. St.	_ _ _ _ _ _ _ _ C _ _ _			•	•	•
	No Selection				_ _ _ _ _ _ _ _ _ 0 _ _			•	•	•
	Styles		No Selection		_ _ _ _ _ _ _ _ _ _ 0 _			•	•	•
	Gasket		No Selection		_ _ _ _ _ _ _ _ _ _ _ 0			•	•	•

Note: All sanitary seals have dairy grade 3A approval.

* Bolts are not included with "Body Only" selection.

** **Caution:** Maximum working pressure of STR14G and STR14A transmitter is 500 psig and STR17G is 3000 psig. Damage to sensor may result if pressure limit is exceeded.

Model Selection Guide, continued

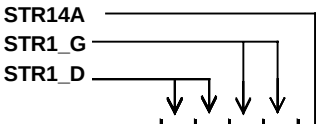


TABLE III - OPTIONS		2	3	4	7		
FOUNDATION Fieldbus Communications	FF	a	a	a	a	a	
Compound Characterized Meter Body	CM	s					
Mounting Bracket - Carbon Steel	MB	•	•	•	•	•	
Mounting Bracket - ST. ST.	SB	•	•	•	•	•	b
Flat Mounting Bracket	FB	•	•	•	•	•	
316 ST.ST. Electronics Housing with M20 Conduit Connections	SH	n	n	n	n	n	
1/2" NPT to M20 316SS Conduit Adapter (BASEEFA EEx d IIC)	A1	n	n	n	n	n	b
1/2" NPT to 3/4" NPT 316 SS Conduit Adapter	A2	u	u	u	u	u	
Lightning Protection	LP	•	•	•	•	•	
Analog Meter (0-100 Even 0-10 Square Root)	ME	•	•	•	•	•	
Smart Meter	SM	•	•	•	•	•	b
A286SS (NACE) Bolts and 302/304SS (NACE) Nuts for Heads	CR	•	•			•	
Stainless Steel Customer Wired-On Tag (4 lines, 28 characters per line, customer supplied information)	TG	•	•	•	•	•	
Stainless Steel Customer Wired-On Tag (blank)	TB	•	•	•	•	•	
Custom Calibration and I.D. in Memory	CC	•	•	•	•	•	
Transmitter Configuration - non-Fieldbus	TC	•	•	•	•	•	b
Transmitter Configuration - Fieldbus	FC	a	a	a	a	a	
Write Protection	WP	•	•	•	•	•	
Clean Transmitter for Oxygen or Chlorine Service with Certificate	0X	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	•	•	•	•	•	
NACE Certificate (F0198)	F7	o	o	•	•	o	
Additional Warranty - 1 year	W1	•	•	•	•	•	
Additional Warranty - 2 years	W2	•	•	•	•	•	b
Additional Warranty - 3 years	W3	•	•	•	•	•	
Additional Warranty - 4 years	W4	•	•	•	•	•	
Local Zero & Span	ZS	m	m	m	m	m	b
Local Zero	LZ	x	x	x	x	x	

Table III continued next page

STR14A
STR1_G
STR1_D

TABLE III - OPTIONS (continued)

Approval Body	Approval Type	Location or Classification	Selection	2	3	4	7	
Factory Mutual	Explosion Proof	Class I, Div. 1, Groups A,B,C,D	F1D3	•	•	•	•	•
	Dust Ignition Proof	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						
CSA	Explosion Proof	Class I, Div. 1, Groups B,C,D	C1C3	•	•	•	•	•
	Dust Ignition Proof	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						
Zone 2 (Europe)	Self-Declared per 94/9/EC (ATEX4)	Ex II 3 GD T (1) X (1) T4 at Tamb. 93°C, T5 at Tamb. 80°C, T6 at Tamb. 65°C	H2D5	•	•	•	•	•
SA	Intrinsically Safe	Ex ia IIC T4	A0CA	•	•	•	•	•
	Non-Incendive	Ex n IIC T6 (T4 with SM option)						
LCIE	Flame Proof/ CENELEC	EEx d IIC T6	E1D8	•	•	•	•	•
	Intrinsically Safe/ CENELEC	EEx ia IIC T5						
	Flame Proof/ CENELEC	EEx d IIC T6	E1D3	•	•	•	•	•
No hazardous location approvals			9X	•	•	•	•	•
Factory Mutual	Explosion Proof	Class I, Div. 1, Groups A,B,C,D	1C	•	•	•	•	•
	Dust Ignition Proof	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						
CSA	Explosion Proof	Class I, Div. 1, Groups B,C,D	2J	•	•	•	•	•
	Dust Ignition Proof	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						
Zone 2 (Europe)	Self-Declared per 94/9/EC (ATEX4)	Ex II 3 GD T (1) X (1) T4 at Tamb. 93°C, T5 at Tamb. 80°C, T6 at Tamb. 65°C	3N	•	•	•	•	•
SA (Australia)	Intrinsically Safe	Ex ia IIC T4	4H	a	a	a	a	a
	Non-Incendive	Ex n IIC T6 (T4 with SM option)						
	Flame Proof	Ex d IIC T6						
LCIE	Flame Proof/ CENELEC	EEx d IIC T6	3A	•	•	•	•	•
	Intrinsically Safe/ CENELEC	EEx ia IIC T5						
	Flame Proof/ CENELEC	EEx d IIC T6	3D	•	•	•	•	•

b

TABLE IV

Factory Identification	XXXX	•	•	•	•	•	

Model Selection Guide, continued

RESTRICTIONS

Restriction Letter	Table	Available Only With Selection	Table	Not Available With Selection
a	Pending			
b	Select only one option from this group			
c			II	_ _ _ _ _ _ BF _ _ _ _, _ _ _ _ _ _ BG _ _ _ _, _ _ _ _ _ _ JF _ _ _ _, _ _ _ _ _ _ JG _ _ _ _,
d	II	_ _ _ _ _ _ BF _ _ _ _, _ _ _ _ _ _ BG _ _ _ _, _ _ _ _ _ _ JF _ _ _ _, _ _ _ _ _ _ JG _ _ _ _,		
h	I, II	_ 2 _ - 2 _ _ _ _ _ _ _ _ _ _ _		
m	III	1C, 2J, 3N, 4G, 3A, 9X	III	ME, FF
n			III	F1D3, C1C3,1C, 2J
o	III	CR		
p			II	DC704 and Syltherm 800 fills and close-couple require SS seal upper. _ _ _ CAA _ _ 5 _ _ _, _ _ _ CCA _ _ 5 _ _ _, _ _ _ CCC _ _ 5 _ _ _, _ _ _ DAA _ _ 5 _ _ _, _ _ _ DCA _ _ 5 _ _ _, _ _ _ DCC _ _ 5 _ _ _, _ _ _ DGA _ _ 5 _ _ _, _ _ _ DGC _ _ 5 _ _ _, _ _ _ DDA _ _ 5 _ _ _, _ _ _ _ _ _ GE _ _ _ _, _ _ _ _ _ _ _ _ A _ _ _ _ _ _ _ _ _ _ _ _ B _ _ _, _ _ _ BCA _ _ 5 _ _ _
q	II	2 _ _ _ _ _ _ _ _ _ _ _ _ _, 4 _ _ _ _ _ _ _ _ _ _ _ _		
r	III	1C, 2J, 3N, 9X	III	SH, TC, ME
t	II	**See Figure 12 in Specification** _ A _ _ _ _ _ _ _ _ _ _, _ G _ _ _ _ _ _ _ _ _ _, _ B _ _ _ _ _ _ _ _ _ _, _ H _ _ _ _ _ _ _ _ _ _, _ 2 _ _ _ _ _ _ _ _ _ _, _ 6 _ _ _ _ _ _ _ _ _ _,		
u	III	F1D3, C1C3, 1C, 2J		
w			II	_ _ _ _ _ _ _ JA _ _ _ _
x	III	FF, SM		

Restrictions continued next page

Model Selection Guide, continued

RESTRICTIONS - (continued)

Restriction		Available Only With		Not Available With
Letter	**Table**	**Selection**	**Table**	**Selection**
y	II	_ 2 _ _ _ _ _ _ _ _ _ _ _, _ 6 _ _ _ _ _ _ _ _ _ _	III II	MB, SB, FB DC704 and Syltherm 800 fills and close-couple require SS seal upper. _ _ _ CAA _ _ 5 _ _ _, _ _ _ CCA _ _ 5 _ _ _, _ _ _ CCC _ _ 5 _ _ _, _ _ _ DAA _ _ 5 _ _ _, _ _ _ DCA _ _ 5 _ _ _, _ _ _ DCC _ _ 5 _ _ _, _ _ _ DGA _ _ 5 _ _ _, _ _ _ DGC _ _ 5 _ _ _, _ _ _ DDA _ _ 5 _ _ _, _ _ _ _ _ _ GE _ _ _ _, _ _ _ _ _ _ _ _ A _ _ _ _ _ _ _ _ _ _ _ B _ _ _, _ _ _ BCA _ _ 5 _ _ _
z	I	_ _ D		

Note: See 13:ST-27 for Published Specials with pricing.
See 13:ST-29 and User's Manual for part numbers.
See 13:ST-OE-9 for OMS Order Entry Information including TC, manuals, certificates, drawings and SPINS.
See 13:ST-OD-1 for tagging, ID, Transmitter Configuration (TC) and calibration including factory default values.
To request a quotation for a non-published "special", fax RFQ with Application Data Sheet (34-ST-18-01) to Marketing Applications.
See Specification 34-ST-03-64 for seal dimensions.