

STX2100

Differential Pressure (Flow) Transmitter



Models FKC...5

The STX2100 differential pressure (flow) transmitter accurately measures differential pressure, liquid level, gauge pressure or flow rate, and transmits a proportional 4 to 20mA signal. The transmitter utilizes a unique micromachined capacitance silicon sensor with state-of-the-art microprocessor technology to provide exceptional performance and functionality.

Features

- High accuracy up to ±0.065%
- Minimum environmental influence
- HART® communications protocol
- Application flexibility
- Programmable output Linearization Function
- Burnout current flexibility Under Scale: 3.2 to 4.0mA, Over Scale: 20.0 to 22.5mA
- Dry calibration without reference pressure

bhge.com

STX2100 Specifications

Functional Specifications

Type: FKC...5

Smart, 4 to 20mA DC + HART® digital signal

Service

Liquid, gas, or vapour

Pressure Ranges

- · Static Pressures to 160 bar
- Span from 1 mbar to 30 bar

To minimise environmental influence, span should be greater than 1/40 of the maximum span in most applications.

Lower Limit of Static Pressure (Vacuum Limit)

- Silicone oil fill sensor: See Code Symbols table
- Fluorinated oil fill sensor: 660 mbar absolute at temperatures below +60C°

Over Range Limit

To maximum static pressure limit

Output Signal

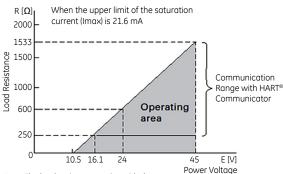
4 to 20mA DC (linear or square root) with digital signal superimposed on the 4 to 20mA signal

Power Supply

- Transmitter operates on 10.5V to 45V DC at transmitter terminals.
- 10.5V to 32V DC for the units with optional arrester.

Load Limitations (see figure below)

For use with a HART® communicator, a minimum load of 250 Ω is required.



Note: The load resistance varies with the upper limit of the saturation current [Imax] as follows:

$$R [\Omega] = \frac{E [V] - 10.5}{(Imax [mA] + 0.9) \times 10^{-3}}$$

CE Marking

The product is CE marked for electromagnetic compatibility directive 2014/30/EU, and on hazardous location approval options (10th code digit = K, M, N, P, Q, R, T, W, and X), use in explosive atmospheres in accordance with 'ATEX' directive 2014/34/EU.

The product has been assessed as a 'pressure accessory' assessed against the requirements for sound engineering practice in accordance with the pressure equipment directive 2014/68/EU.

Hazardous Locations

Note: cCSAus certified models are assessed as 'Single Seal' devices in accordance with ANSI/ISA 12.27.01-2011, rated -40°C to +85°C, maximum working pressure 18 MPa (180 bar)

Authority (Digit 10=) Intrinsic safety ATFX (K/M/W) **⟨£x**⟩_{||1G} IECEx (N/T/W) Ex ia IIC T5 Ga (-40°C \leq Ta \leq +50°C) Ex ia IIC T4 Ga (-40°C \leq Ta \leq +70°C) 1. Certificates DEKRA 14ATEX0014X, IECEx CSA 14.0009X 2. Entity Parameters Ui ≤ 28 Vdc, Ii ≤ 94.3 mA, Pi ≤ 0.66 W Ci = 36 nF/26 nF for models with/without Arrester Li = 0.7 mH/0.6 mH for models with/without Analogue Indicator cCSAus (J/L/W) Class I, Division 1, Groups A, B, C, and D Exia T4 (-40°C \leq Ta \leq +70°C) or T5 (-40°C \leq Ta \leq +50°C) Control Drawing X-A3-0605 Enclosure Type 4X Single Seal (see note) 1. Certificate CSA 70049572 2. Entity parameters Vmax = 28 Vdc, Imax = 94.3 mA, Pmax = 0.66 W Ci = 36 nF/26 nF for models with/without Arrester Li = 0.7 mH/0.6 mH for models with/withoutAnalogue Indicator Authority (Digit 10=) Flameproof / Explosion pro ATEX (M/W/X) **(€x)** _{II 2 G} IECEx (N/R/W) Ex d IIC T6 Gb (-40°C \leq Ta \leq +65°C) Ex d IIC T5 Gb (-40°C \leq Ta \leq +85°C) Class I, Division 1, Groups C and D, T5 (Ta + 85°C) 1. Certificates

cCSAus (E/L/W)

DEKRA 14ATEX0012X IECEx CSA 14.0008X 2. Electrical ratings

• Model without arrester: 45 Vdc max., 4-20 mA loop powered, 1.0125 W max.

• Model with arresters

32 Vdc max., 4-20 mA loop powered, 1.0125 W max. Class I, Groups C and D

T5 (-40°C \leq Ta \leq +85°C) or T6 (-40°C \leq Ta \leq +65°C) Enclosure Type 4X Single Seal (see note) 1. Certificate

CSA 70049572 2. Electrical ratings

42.4 Vdc max., 4-20 mA loop powered Authority (Digit 10=) Type "nA" / Non-incendive & Division 2

ATEX (M/P/W) IECEx (N/Q/W)

⟨<u>E</u>x⟩_{II 3 G}

Ex nA IIC T5 Gc (-40°C \leq Ta \leq +70°C)

1. Certificates DEKRA 14ATEX0013 IECEx CSA 14.0009X

2. Electrical ratings

· Model without arrester

45 Vdc max., 4-20 mA loop powered, 1.0125 W max.

Model with arrester

32 Vdc max., 4-20 mA loop powered, 1.0125 W max Optional analogue indicator not available for type "nA"

cCSAus (J/L/W) Class I, Division 2, Groups A, B, C, and D

Non-incendive Class I, Division 2, Groups A, B, C, and D T4 (-40°C \leq Ta \leq +70°C) or T5 (-40°C \leq Ta \leq +50°C)

Control Drawing X-A3-0605 Enclosure Type 4X Single Seal (see note) 1. Certificate CSA 70049572

2. Electrical ratings (Class I, Division 2) 42.4 Vdc max., 4-20 mA loop powered Optional analogue indicator not available for Class I. Division 2

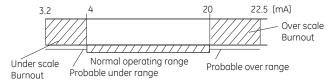
3. Electrical ratings (Non-incendive Class I, Division 2) Vmax = 28 Vdc, Imax = 94.3 mA, Pmax = 0.66 WCi = 36 nF/26 nF for models with/without Arrester Li = 0.7 mH/0.6 mH for models with/without Analogue Indicator

Burnout Direction

If self-diagnostic detects transmitter failure, the analogue signal will be driven to one of the following:

Output Hold: Output signal is held at the value just before failure happens.

Output Overscale: Adjustable within the range of 20.0mA to 22.5mA, factory set to 20.8 mA Output Underscale: Adjustable within the range of 3.2mA to 4.0mA, factory set to 3.8 mA



Output limits conforming to NAMUR NE43 by order, factory set to Hold

Zero/Span Adjustment

Zero and span are adjustable externally from the adjustment screw, or via a HART® communicator.

Damping

The time constant is adjustable from 0.06 to 32 seconds, factory set to 0.06 s

Zero Elevation/Suppression

-100% to +100% of URL

Normal/Reverse Action

Selectable, factory set to Normal

Indication

Analogue indicator or 5-digit LCD meter, as specified

Loop-Check Output

Transmitter can be configured to provide a constant signal between 3.2mA and 22.5mA

Temperature Limit

Ambient: -40 to +85°C

(-20 to +80°C for LCD indicator) (-40 to +60°C for arrester option)

(-10 to +60°C for fluorinated oil filled sensor)

Ambient and process temperature restrictions apply to versions approved for use in hazardous locations.

Process: -40 to +120°C for silicone oil fill sensor

-20 to +80°C for fluorinated oil fill sensor

Storage: -40 to +90°C

Humidity Limit

0 to 100% RH

Local Configurator with LCD Display (Option)

Local configurator with 3 push button and LCD display

Programmable Output Linearization Function

Output signal can be characterized with "14 points linear approximation function"

Communication

The following items can be displayed or configured:

HART [®] Pro	otocol	By Local Configurator (with 3 push- button LCD indicators)			
Display	Set	Display	Set		
~	~	✓	~		
~	~	✓	~		
~	_	~	_		
~	~	✓	~		
~	_	✓	_		
~	~	✓	~		
~	~	~	~		
~	~	✓	~		
~	~	~	~		
✓	✓	✓	~		
~	~	~	~		
_	~	_	~		
~	_	~	_		
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~	~	✓	~		
~	~	~	~		
~	~	✓	~		
~	~	~	~		
~	_	~	_		
	HART® Pro	HART® Protocol Display Set V V V V V V V V V V V V V V V V V V V	Configur HART® Protocol (with 3 p button indicat		

Note: The HART® communicator's version must be higher than 7.0 for supporting the following items: 'Saturate current', 'Write Protect' and 'History'.

Performance Specifications for Linear Output

Selectable, factory set to Linear Output

Reference conditions: silicone oil fill, 316L SS isolating diaphragms, 4 to 20mA analogue output in linear mode

Accuracy Rating

(including linearity, hysteresis, and repeatability)

• Max Span: 320 mbar and above models

For spans greater than 1/10 of URL: ±0.065% of span

For spans below 1/10 of URL:

 \pm (0.015 + 0.05 (0.1 x URL / Span)) % of span

• Max Span: 10 mbar, 60 mbar models

For spans greater than 1/10 of URL: ±0.1% of span

For spans below 1/10 of URL:

 \pm (0.05 + 0.05 (0.1 x URL / Span)) % of span

Stability

 $\pm 0.1\%$ of upper range limit (URL) for 10 years for 6th digit code 3, 5, 6, 8.

STX2100 Specifications

Temperature Effect

(Effects per 28°C change between the limits of -40°C and +85°C)

Zero Shift	Total Effect
Range Code (6th dig "1"/10mbar,	lit in Code symbols): "2"/60mbar
\pm (0.125 + 0.1 \times URL / Span) %	\pm (0.15 + 0.1 x URL / Span) %
Range Code (6th dig "3"/320mbar, "5"/1300mbar, "	lit in Code symbols): 6"/5000mbar, "8"/30000mbar
± (0.075 + 0.0125 × URL / Span) %	\pm (0.095 + 0.0125 × URL / Span) %

Double the effects for material code (7th digit in Code symbols) "H", "M", and "T".

Static Pressure Effect

Static Pressure Code (5th digit in Code symbols)	Zero Shift (% of URL)
"1"/10mbar sensor	±0.2%/32bar
"2"/60mbar sensor	±0.2%/100bar
"3"/all ranges	±0.035%/69 bar

Double the effects for material code (7th digit in Code symbols) "H", "M", and "T"

Overrange Effect

Static Pressure Code (5th digit in Code symbols)	Zero Shift (% of URL)
"1"/10mbar sensor	±0.2%/32bar
"2"/60mbar sensor	±0.2%/100bar
"3" (FKC□35, 36, 38)	±0.1%/160bar
"3" (FKC□33)	±0.15%/160bar

Double the effects for material code (7th digit in Code symbols) "H", "M", and "T"

Performance Specifications for Square Root Output

Selectable, factory set to Linear Output

Accuracy Rating

Output	Span > 0.1 x URL	Span < 0.1 x URL
50 to 100%	±0.065%	\pm (0.015 + 0.05 × 0.1 × URL/Span)%
20 to 50%	±0.163%	$\pm 2.5 \times (0.015 + 0.05 \times 0.1 \times URL/Span)\%$
10 to 20%	±0.325%	$\pm 5 \times (0.015 + 0.05 \times 0.1 \times URL/Span)\%$
	Output	Accuracy

Output	Accuracy									
Max Span 10mbar, 60mbar Model										
50 to 100%	±0.1%									
20 to 50%	±0.25%									
10 to 20%	±0.5%									

Temperature Effect

Effects per 28°C change between the limits of -40°C and +85°C

Range Code (6th digit in Code symbols	Shift at 20% Output Point
"1" and "2"	$\pm (0.375 + 0.25 \times URL/Span)\%/28^{\circ}C$
"3" through "8"	±(0.24 + 0.03125 × URL/Span)%/28°C

Low Flow Cut-off

Customer configurable for any point from 0 to 20% of output

Performance Specifications Common to Both Output Modes

Supply Voltage Effect

Less than 0.005% of calibrated span per 1V

Update Rate

60 ms

Response Time

(at 63.3% of output signal without damping)

Range Code (6th digit in Code symbols)	Time Constant (at 23°C)	Dead Time						
"1"	0.33 sec							
"2"	0.3 sec	0.12.000						
"3"	0.12 sec	- 0.12 sec						
"5" through "8"	0.08 sec							
Response Time = Time Constant + Dead Time								

Mounting Position Effect

Zero shift less than 1.2 mbar for a 10° tilt in any plane, no effect on span

This error can be corrected by adjusting Zero. Double the effect for a fluorinated oil fill sensor.

Vibration Effect

< ±0.25% of span for spans greater than 1/10 of URL Frequency 10 to 150 Hz, acceleration 39.2 m/s²

Dielectric Strength

500V AC, 50/60Hz 1 min., between circuit and earth, except models with arrester option

Insulation Resistance

More than 100 M Ω at 500V DC

Internal Resistance for External Field Indicator

 12Ω max. (connected to test terminals CK+ and CK-)

Physical Specifications

Electrical Connections

1/2-14 NPT, Pg13.5 or M20×1.5

Process Connections

1/4-18 NPT on 54mm centers, as specified Meets DIN 19213

Optional: 1/2-14 NPT for oval flanges

Process-Wetted Parts Material

Material Code (7th digit in Code symbols)	Process Cover	Diaphragm	Wetted Sensor Body	Vent/ Drain
V	316L SS	316L SS	318LN SS (*1)	316L SS
W	316L SS	Hastelloy-C	318LN SS (*1)	316L SS
Н	316L SS (*2)	Hastelloy-C	Hastelloy-C lining	316L SS
J	316L SS	316L SS + Gold Coating	318LN SS (*1)	316L SS
М	316L SS (*2)	Monel	Monel lining	316L SS
Т	316L SS (*2)	Tantalum	Tantalum lining	316L SS
С	316L SS	316L SS + Gold/ Ceramic coating	316L SS + Gold/ Ceramic coating	316L SS

Notes: (*1) Only with Digit 5 = 1 or 2, otherwise 316L SS

(*2) PVDF insert supplied with Digit 5 = 8 (LP and HP sides) and 9 (LP side)

Remark: Sensor gasket: Viton o-ring or PTFE square section gasket. Availability of above material design depends on ranges and static pressure. Refer to "Code symbols".

Non-Wetted Parts Material

Electronics Housing:

Low copper die-cast aluminum alloy finished with polyester coating (standard), or 316 stainless steel, as specified.

Bolts and Nuts:

- Cr-Mo alloy (standard)
- 316 stainless steel
- SS660 for NACE Service

Fill Fluid:

Silicone oil (standard) or fluorinated oil

Mounting Bracket:

304 stainless steel

Environmental Protection

IEC IP66/67 and NEMA 4X

Mounting

- Without mounting bracket: direct mounting on manifold (optional)
- With optional mounting bracket: for 50mm (2") pipe or direct wall mounting

Mass (Weight)

Transmitter: approximately 3.5kg without options

Add: 0.3kg for indicator

0.5kg for mounting bracket

2kg for stainless steel housing (optional)

Optional Features

Indicator

A plug-in analogue indicator (2.5% accuracy)

Local Configurator with LCD Display

An optional 5 digits LCD meter with 3 push buttons

Arrester

- A built-in arrester protects the electronics from lightning surges.
- Lightning surge immunity: 4kV (1.2 × 50μs)

Oxygen Service

Special cleaning procedures are followed throughout the process to maintain all process wetted parts oil free. The fill fluid is fluorinated oil.

Chlorine Service

The fill fluid is fluorinated oil.

Degreasing

Process-wetted parts are cleaned, but the fill fluid is standard silicone oil. Not for use on oxygen or chlorine measurement.

NACE Specification

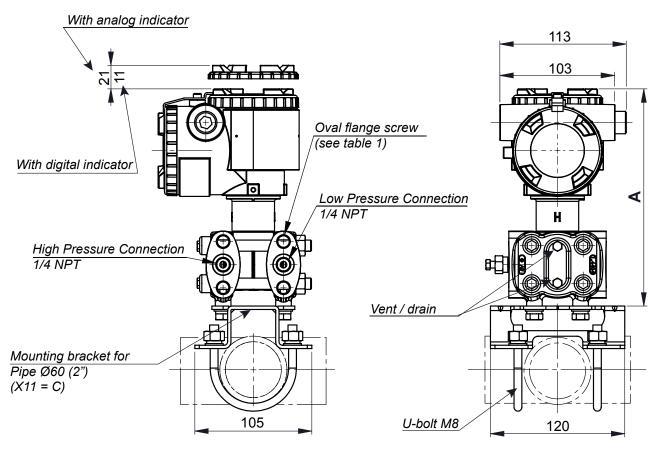
Metallic materials for all pressure boundary parts comply with NACE MR0175/ISO 15156.

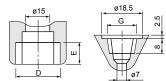
660 stainless steel bolts and nuts comply with NACE MR0175/ISO 15156.

Optional Tag Plate

An extra stainless steel tag with customer tag data is wired to the transmitter.

Outline Diagram <7th digit code: V, H, M, T>





 Code X=4
 Electrical connection D
 Oval flange screw

 R
 M20x1.5
 16
 7/16-20 UNF

 T
 1/2-14NPT
 16
 7/16-20 UNF

 V
 Pg13.5
 10,5
 M10

 W
 M20x1.5
 16
 M10

10,5

7/16-20 UNF

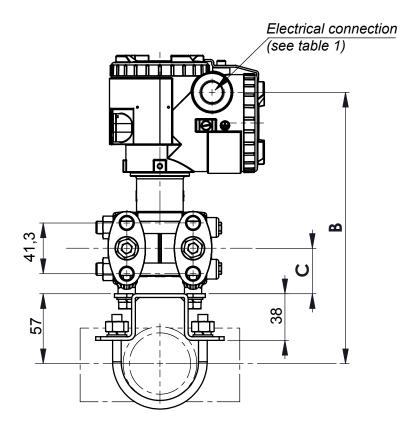
Pg13.5

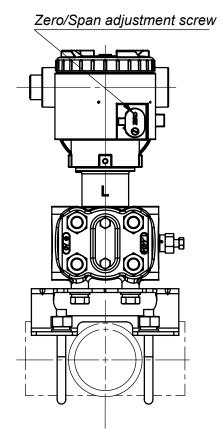
Table 1

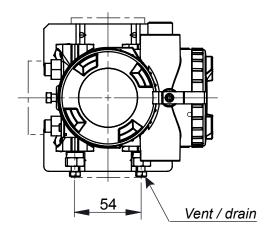
Χ

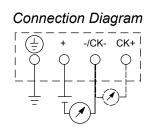
[Note: All units are mm]

	Dimensions									
Model	Α	В	С							
FKC□11 FKC□22	198,5	225,5	38,5							
FKC□33 FKC□35 FKC□36	194	194	37							
FKC□38	198,5	225,5	38,5							









Code Symbols for STX 2100-

1 2 3	4	5	6	7	8		9	10	11	12	13		14	15		16						
					5	-						-	Γ	ΙĪ	Ī -				DESCR	IPTION		
															1		Туре					
F K C																		+ HART™ digital sign	al			
																	Connections	T	T		7	
																	Process	Oval flange	Electrical			
	м				<u> </u>								<u> </u>		<u> </u>	(*9)	connections 1/4-18 NPT	connection M10	connection M20 x 1,5			
	N														/*c		1/4-18 NPT 1/4-18 NPT	M10	Pg 13,5			
	P		\vdash										1		(-		1/4-18 NPT	M10	1/2-14 NPT			
	R												1			(-/	1/4-18 NPT	7/16-20 UNF	M20 x 1,5			
	Т																1/4-18 NPT	7/16-20 UNF	1/2-14 NPT			
	V															(*13)	1/4-18 NPT	M10	Pg 13,5			
	W																1/4-18 NPT	M10	M20 x 1,5			
	Х															(*13)	1/4-18 NPT	7/16-20 UNF	Pg 13,5			
																	Range and wetted					
																(*2)	Static pressure	Spans		s cover	Measuring	Wetted
		1	1	٧									-				limits		LP side	HP side L SS	diaphragm 316L SS	cell body 318LN SS
		1	1	W									<u> </u>				-1	10/100		iL SS	Hastelloy C	318LN SS
		1	1	J								-	1	1	 		to	mm WC		iL SS	Gold coat	318LN SS
		1	1	H									1	1	t		32 bar	1		L SS	Hastelloy C	Hastelloy C
		2	2	V													-1		316	L SS	316L SS	318LN SS
		2	2	W													to	10/600		L SS	Hastelloy C	318LN SS
		2	2	J	<u> </u>				<u> </u>				<u> </u>	<u> </u>	<u> </u>		100 bar	mm WC		L SS	Gold coat	318LN SS
		2	2	Н	-								1	1	1			-		iL SS	Hastelloy C	Hastelloy C
		3	3	V W	-								1	1	1					il SS	316L SS Hastelloy C	316L SS 316L SS
		3	3	Н																iL SS	Hastelloy C	Hastelloy C
		3	3	М									1					32/3200		L SS	Monel	Monel lining
		3	3	J														mm WC	316L SS		Gold coat	316L SS
		3	3	C												(*14)			316	iL SS	Gold/ceramic	Gold/ceramic
		3	3	Т																iL SS	Tantalum	Tantalum lining
		3	5	V									ļ							L SS	316L SS	316L SS
		3	5	W									ļ							L SS	Hastelloy C	316L SS
		3	5 5	H M									-				-1	0,13/13	316L SS 316L SS		Hastelloy C Monel	Hastelloy C Monel lining
		3	5	J									1				to	m WC	316L SS		Gold coat	316L SS
		3	5	c												(*14)	160 bar		316L SS		Gold/ceramic	Gold/ceramic
		3	5	Т									1			(= .,	200 841			iL SS	Tantalum	Tantalum lining
		3	6	V																iL SS	316L SS	316L SS
		3	6	W																iL SS	Hastelloy C	316L SS
		3	6	Н														0,5/50		L SS	Hastelloy C	Hastelloy C
		3	6	J									ļ					m WC		L SS	Gold coat	316L SS
		3	6	M									<u> </u>		<u> </u>					L SS	Monel	Monel lining
		3	6	T V									-							L SS L SS	Tantalum	Tantalum lining
		3	8	w									1					3/300		iL SS	316L SS Hastelloy C	316L SS 316L SS
		3	8	J	\vdash								 	 	 			m WC		iL SS	Gold coat	316L SS
		8	1	Н									t	t	t	(*5)		10/100 mm WC		insert	Hastelloy C	Hastelloy C
		8	2	Н									l –	i –	i –	(*5)		10/600 mm WC		insert	Hastelloy C	Hastelloy C
		8	3	Н												(*5)		32/3200		insert	Hastelloy C	Hastelloy C
		8	3	М												(*5)		32/3200 mm WC		insert	Monel	Monel lining
		8	3	Т									<u> </u>	<u> </u>	<u> </u>	(*5)	0			insert	Tantalum	Tantalum lining
		8	5	Н	<u> </u>			<u> </u>					├	 	 	(*5)	to 15 box	0,13/13		insert	Hastelloy C	Hastelloy C
		8	5 5	M	-				-			-	1	1	 	(*5) (*5)	15 bar	m WC		insert insert	Monel	Monel lining
		8	6	T H	\vdash			<u> </u>	<u> </u>			-	├—	├	├	(*5)		-		insert	Tantalum Hastelloy C	Tantalum lining Hastelloy C
		8	6	М									!	!	†	(*5)		0.5/50		insert	Monel	Monel lining
		8	6	т.									1	1	t	(*5)		m WC		insert	Tantalum	Tantalum lining
		9	1	Н										1		(*5)		10/100 mm WC	PVDF insert	316L SS	Hastelloy C	Hastelloy C
		9	2	Н												(*5)		10/600 mm WC	PVDF insert	316L SS	Hastelloy C	Hastelloy C
		9	3	Н												(*5)		32/3200	PVDF insert	316L SS	Hastelloy C	Hastelloy C
		9	3	М												(*5)		32/3200 mm WC	PVDF insert	316L SS	Monel	Monel lining
		9	3	Т									<u> </u>	<u> </u>	<u> </u>	(*5)	0		PVDF insert	316L SS	Tantalum	Tantalum lining
		9	5	Н	<u> </u>								<u> </u>	<u> </u>	<u> </u>	(*5)	to	0,13/13	PVDF insert	316L SS	Hastelloy C	Hastelloy C
		9	5	M	\vdash								1	1	1	(*5)	15 bar	m WC	PVDF insert	316L SS	Monel	Monel lining
		9	5 6	T H	-								1	1	1	(*5) (*5)			PVDF insert PVDF insert	316L SS 316L SS	Tantalum Hastelloy C	Tantalum lining Hastelloy C
		9	6	М										 	 	(*5)		0.5/50	PVDF insert	316L SS	Monel	Monel lining
		9	6	T									t	t	t	(*5)		m WC	PVDF insert	316L SS	Tantalum	Tantalum lining
							_			_						, -/						

Notes*:

- 1. NOT USED.
- 2. TURN DOWN OF 100:1 IS POSSIBLE, BUT IT SHOULD BE USED AT A SPAN GREATER THAN 1/40 OF THE MAXIMUM SPAN FOR BETTER PERFORMANCE.
- 3. NOT USED.
- 4. GOLD COATING USED ON WETTED MEASURING CELL PARTS FOR HYDROGEN SERVICE. "HYDROSEAL" VERSION WITH GOLD CERAMIC COATING IS AVAILABLE ON REQUEST.
- 5. PROCESS COVER WITH PVDF INSERT WITH 1/2-14 NPT SIDE PROCESS CONNECTION/NO VENT DRAIN, OTHER UPON REQUEST SQUARE SECTION PTFE GASKET. 'SINGLE SEAL' APPROVAL NOT AVAILABLE WHEN DIGIT 5 = 8 OR 9.
- 6. NOT USED.
- 7. STAINLESS STEEL BOLTS/NUTS IN SS 660 ARE IN CONFORMITY WITH NACE MR 0175 / ISO 15156 REQUIREMENTS AND MUST BE USED FOR NACE MR 0175 / ISO 15156 SERVICE.
- 8. NOT USED.
- 9. PROCESS CONNECTION ON THE BOTTOM SIDE.
- 10. NOT USED.
- 11. NOT USED.
- 12. APPROVAL OPTIONS PERMITTING TYPE ""nA"" / DIVISION 2 (DIGIT 10 = J, L, M, N, P, Q, OR W) ARE NOT AVAILABLE WITH ANALOGUE INDICATOR OPTIONS (DIGIT 9 = B, C, D, F, G, H, J OR K).
- 13. Pg 13,5 ELECTRICAL CONNECTION OPTIONS (DIGIT 4 = N, V OR X) ARE NOT AVAILABLE FOR USE WITH APPROVAL OPTIONS WHERE DIGIT 10 = E, L OR W.
- 14. "HYDROSEAL" MODEL WITH GOLD CERAMIC COATING ON A 316L STAINLESS STEEL SUBSTRATE. USE FOR IMPROVED RESISTANCE TO HYDROGEN PERMEATION.
- 15. ATEX APPROVAL OPTIONS ARE SUPPLIED WITH EQUIVALENT IECEX CERTIFICATION AS STANDARD (AND VICE-VERSA).

1 2 3 4 5 6 7 8 9	10	11	12	13		14	15		16	
5 -] - [] - [DESCRIPTION
										Indicator and arrester
1.1.1.	. —									Indicator Arrester Initial setting
5 A 5 - B										None None Analogue, 0-100% linear scale None
5 - 6		1								Analogue, 0-100% linear scale None Analogue, 0-100% sq. root scale None
5 - 0										Analogue, custom scale None
5 - 1		1								Analogue double scale
5 - E									,/	None 4-20 mA DC
5 - F									(*12)	Analogue, 0-100% linear scale Yes
5 - 0	;									Analogue, 0-100% sq. root scale Yes
5 - H	1									Analogue, custom scale Yes HART® / Fuji
5 - K	· 🗀								(*12)	Analogue, double scale Yes digital signal
5 - 1										Digital, 0-100% with push buttons None "SMART"
5 - 2										Digital, custom scale with push buttons None
5 - 3		<u> </u>								Digital, 0-100% sq. root scale with push buttons
5 - 4										Digital, 0-100% with push buttons Yes
5 - 5		+								Digital, custom scale with push buttons Yes
5 - 6	·	+								Digital, 0-100% sq. root scale with push buttons Yes
	A	-			\vdash		-	\vdash		Approvals for hazardous locations None (standard)
	X	—			\vdash		-	\vdash		ATEX - Flameproof (digit 4 = M, P, R, T & W only)
	ĸ	\vdash	 	\vdash	\vdash		\vdash	\vdash		ATEX - Flameproof (digit 4 = M, P, R, T & W Only) ATEX - Intrinsic Safety
	E				\vdash					cCSAus - Explosionproof (digit 4 = P & T only)
	زا									cCSAus - Intrinsic Safety & Non-Incendive/Division 2 (digit 9 = A, E, 1, 2, 3, 4, 5 & 6 only)
	P								(*15)	ATEX - Type "nA" (digit 9 = A, E, 1, 2, 3, 4, 5 & 6 only)
	Q									IECEx - Type "nA" (digit 9 = A, E, 1, 2, 3, 4, 5 & 6 only)
	R									IECEx - Flameproof (digit 4 = M, P, R, T & W only)
	Т								(*15)	IECEx - Intrinsic Safety
	L									cCSAus - Explosionproof, Intrinsic Safety & Non-Incendive/Division 2
	-									(digit 4 = P & T only; digit 9 = A, E, 1, 2, 3, 4, 5 & 6 only)
	М								(*15)	ATEX - Flameproof, Intrinsic Safety & Type "nA"
										(digit 4 = M, P, R, T & W only; digit 9 = A, E, 1, 2, 3, 4, 5 & 6 only) IECEx - Flameproof, Intrinsic Safety & Type "nA"
	N								(*15)	(digit 4 = M, P, R, T & W only; digit 9 = A, E, 1, 2, 3, 4, 5 & 6 only)
										ATEX/IECEx/cCSAus - Flameproof/Explosionproof, Intrinsic Safety & Type "nA"/Non-Incendive/Division 2
	W									(digit 4 = P & T only; digit 9 = A, E, 1, 2, 3, 4, 5 & 6 only)
										Side vent/drain and mounting bracket
										Side vent/drain Mounting bracket
		Α								None (standard) None
		С								None (standard) Yes, SS 304L
		D								Yes None
		F	<u> </u>	<u> </u>	\vdash		 	Н	-	Yes Yes, SS 304L
				<u> </u>	\vdash		-	\vdash		Stainless steel parts
			Y	-	\vdash		-	\vdash		SS tag plate SS housing None None
			Y B		\vdash		-	\vdash	-	None None Yes None
			C		\vdash		1	\vdash	-	None Yes
			E		\vdash			\vdash	-	Yes Yes
					П			М		Special applications and fill fluid
				1						Treatment Fill fluid
				Υ						None (standard) Silicone oil
				w						None (standard) Fluorinated oil
				G						Degreasing Silicone oil
				Α						Oxygen service Fluorinated oil (digit 7 = J, V, W only)
				D						Chlorine service Fluorinated oil (digit 7 = H, T only)
				N						NACE Silicone oil
										Process cover gasket
					-	A	<u> </u>	\vdash		Viton
					-	C		\vdash	/a	PTFE square section gasket in SS flange (custom design)
					لنا	D	_	ш	(*5)	PTFE square section gasket in PVDF insert
							Ι.	$\vdash \vdash$		Bolt/screw material
							A U	\vdash		Carbon steel Cr-Mo (standard) M10 SS 316(L)/316(L) (bolt/nut) M10
							w	\vdash		SS 316(L)/316(L) (bolt/nut) M10 SS 660/660 (bolt/nut) M10
							٧٧	H	-	Special options or design
							(*6)	-		Special options or design Leave blank
							(0)	لنب		rease maliv

Ordering Information

When ordering this instrument, please specify:

- 1. **Product Series** ('STX2100') and **Model Code** digits 1-15 only (see Code Symbols table).
- 2. Calibrated pressure range
- 3. **Indicator and arrestor options D, H, 2 and 5:** specify the required pressure unit of measurement for the custom scale.
- 4. Tag No.: up to 13 alphanumerical characters, if required.



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