

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:

IECEx SIR 12.0100X

issue No.:4

Status:

Current

Date of Issue:

2013-09-24

Page 1 of 4

Certificate history: Issue No. 4 (2013-9-24) Issue No. 3 (2013-7-8) Issue No. 2 (2013-6-14)

Issue No. 1 (2013-1-14) Issue No. 0 (2012-9-4)

Applicant:

Honeywell Inc. 512 Virginia Drive Fort Washington

Pennsylvania 19034 United States of America

Electrical Apparatus:

Model ST700 and ST800 Pressure Transmitters

Optional accessory:

Type of Protection:

Intrinsic Safety and Type nA

Marking:

Ex ia IIC T4 Ga

Ex nA IIC T4 Gc IP66/IP67

Ta: -50°C to + 70°C (-20°C to + 70°C with display) for Ex ia Ta: -50°C to + 85°C (-20°C to + 70°C with display) for Ex nA

Approved for issue on behalf of the IECEx

Certification Body:

C Ellaby

Position:

Deputy Certification Manager

Signature:

(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.

2. This certificate is not transferable and remains the property of the issuing body.

3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

SIRA Certification Service Rake Lane Eccleston Chester CH4 9JN United Kingdom





IECEx Certificate of Conformity

Certificate No.:

IECEx SIR 12.0100X

Date of Issue:

2013-09-24

Issue No.: 4

Page 2 of 4

Manufacturer:

Honeywell Inc. 512 Virginia Drive Fort Washington Pennsylvania 19034

United States of America

Additional Manufacturing location

(s):

Honeywell Automation India Limited

56 & 57 Hadapsar Industrial Avenida Miguel De La Estate

Pune, 411013

India

Honeywell Process Solution

Madrid #8102 Colonia Lote Bravo Ciudad Juárez, Chihuahua

C.P. 32695 Mexico

Honeywell (Tianjin) Ltd Building 21 JinBin

Development No 156 Nan Hai Rd TEDA, Tianjin 300457

China

Honeywell Inc.

Honeywell Process Solutions 525 E Market St.

York, Pennsylvania 17405-

19034

United States of America

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0: 2011

Explosive atmospheres - Part 0: General requirements

Edition: 6.0

IEC 60079-11: 2011

Edition: 6.0

Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

IEC 60079-15: 2010

Edition: 4 Edition: 2

IEC 60079-26: 2006

Explosive atmospheres - Part 15: Equipment protection by type of protection "n" Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga

This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

GB/SIR/ExTR12.0212/00 GB/SIR/ExTR13.0255/00 GB/SIR/ExTR13.0010/00

GB/SIR/ExTR13.0172/01

Quality Assessment Report:

NL/DEK/QAR11.0062/00 NL/KEM/QAR07.0010/03

NL/DEK/QAR12.0078/00

NL/DEK/QAR13.0025/00



IECEx Certificate of Conformity

Certificate No.:	IECEx SIR 12.010	00X
Date of Issue:	2013-09-24	issue No.: 4
		Page 3 of 4
		Schedule
EQUIPMENT: Equipment and systems cove	ered by this certificate are	
Refer to the Annexe		
CONDITIONS OF CERTIFIC	ATION: YES as shown	below:
Refer to the Annexe		



IECEx Certificate of Conformity

Certificate No.;

IECEx SIR 12.0100X

Date of Issue:

2013-09-24

Issue No.: 4

Page 4 of 4

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 1	- this Issue introduced the following changes:		
15	To allow for 20% tolerance on inductor L5, Li was increased from 820 µH to 984 µH; the entity		
	parameters for the Increased Safety version in the description were amended accordingly.		
2.	The enclosure cover was modified to use an under-cut in place of chamfer.		
3.	The modification to boards to resolve manufacturing issues was recognised.		
4.	The introduction of an alternative Terminal Block Board, p/n 50055719, that includes an Auxiliary Board p/n 50054839, and an alternative Foundation Fieldbus/Profibus Communications Board, p/n 50054689. The description was modified to recognise this version and to clarify that the original version uses a HART/DE Communications Board.		
Issue 2	- this Issue introduced the following changes:		
1,,	The introduction of Pressure Transmitter STA7XX (Absolute), STD7XX (Differential), and STG7XX (Gauge) model series which are completely identical to the STA8XX (Absolute), STD8XX (Differential), and STG8XX (Gauge) model series, differing only in the factory calibration method/software. The description was modified to recognize these new versions.		
2.	The introduction of Pressure Transmitter model series STF7XX and STF8XX (Flange Mount) and STR7XX and STR8XX (Remote Seal) which provide new methods of connection to the pressurized process. The description was modified to recognize these new versions.		
Issue 3	- this Issue introduced the following changes:		
1,	EXTR no. GB/SIR/ExTR13.0172/00 was replaced by GB/SIR/ExTR13.0172/01, the Equipment description, STR7XX model reference number being amended.		
Issue 4	- this Issue introduced the following changes:		
1,	Revisions to HART/DE Terminal Block Board which allows Intrinsic Safety entity parameters for inductance (Li) to be reduced, and current (li) to be increased as shown below*		
	Ui = 30 V, Ii = 225 mA, Pi = 900 mW, Ci = 3.9nF, Li = 0 µH		
	*These parameters are only applicable to units manufactured after 27 September 2013		
2.	The recognition of two additional manufacturing locations in Pune, 411013 India and Avenida Miguel De La Madrid #8102, Colonia Lote Bravo, Ciudad Juárez, Chihuahua C.P. 32695, Mexico.		

Annex: IECEx SIR 12-0100X Issue 4 Annexe.pdf

IECEx SIR 12.0100X Issue 4

Applicant:

Honeywell Inc.

Apparatus:

Model ST700 and ST800 Pressure

Transmitters



Intrinsic Safety Description

The Model ST800 is rated for process temperatures up to 125°C and a maximum process pressure to 68.9 Mpa (10,000 psi) depending upon the Meter Body used. Its enclosure has two compartments. One compartment contains the electronics and uses an End Cap (cover) with a window to permit viewing of the LCD display. The other compartment contains the field terminations and encapsulated Terminal Block board. The Terminal Block board has infallible components to limit the maximum voltage to the other boards to 5.88 Vdc. The Model ST800 is available with either a HART/DE Communications Board or Foundation Fieldbus/Profibus Communication Board.

Model ST800 HART/DE – This version is Intrinsically Safe when installed per drawing 50049892 page 2 with the following entity parameters:

Ui = 30 V, Ii = 105 mA, Pi = 900 mW, Ci = $0.004 \mu F$, Li = $984 \mu H$

Ui = 30 V, Ii = 225 mA, Pi = 900 mW, Ci = 0.004 μ F, Li = 0 μ H when fitted with the HART/DE Terminal Block Board introduced at Issue 4 of the certificate.

Model ST800 FF/PA - This version is Intrinsically Safe when installed per drawing 50049892 page 3 with the following entity parameters:

Ui = 30 V, Ii = 180 mA, Pi = 1 W, Ci = 0 μ F, Li = 984 μ H

Model ST700

The Pressure Transmitter STA7XX (Absolute), STD7XX (Differential), and STG7XX (Gauge) model series are identical to the STA8XX (Absolute), STD8XX (Differential), and STG8XX (Gauge) model series, differing only in the factory calibration method/software.

Model ST700 Pressure Transmitter- HART/DE Communications, -50°C to 70 °C (-20°C to 70 °C with Display). Rated 11-42Vdc, 4-20 mA max. Intrinsically safe when installed per drawing 50049892 with entity parameters:

Ui = 30 V, Ii = 105 mA, Pi = 900 mW, Ci = 0.004 μ F, Li = 984 μ H.

Ui = 30 V, Ii = 225 mA, Pi = 900 mW, Ci = 0.004 μ F, Li = 0 μ H when fitted with the HART/DE Terminal Block Board introduced at Issue 4 of the certificate.

Model ST700 Pressure Transmitter- Foundation Fieldbus/ Profibus Communications, -50°C to 70 °C (-20°C to 70 °C with Display). Rated 9-32Vdc, 4-20 mA max. Intrinsically safe when installed per drawing 50049892 with entity parameters:

Ui = 30 V, Ii = 180 mA, Pi = 1 W, Ci = 0 μ F, Li = 984 μ H.

Type nA Description

The Model ST800 is rated for process temperatures to 125 °C and a maximum process pressure to 68.9 Mpa (10,000 psi) depending upon the Meter Body used. Its enclosure has two compartments. One compartment contains the electronics and uses an End Cap (cover) with a window to permit viewing of the LCD display. The other compartment contains the field terminations and encapsulated Terminal Block board. The Model ST800 is available with either a HART/DE Communications Board or Foundation Fieldbus/Profibus Communication Board.

Page 1 of 15

Sira Certification Service
Rake Lane, Eccleston, Chester, CH4 9JN, England

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: info@siracertification.com
Web: www.siracertification.com

23 September 2013

IECEx SIR 12.0100X Issue 4

Applicant:

Honeywell Inc.

Apparatus:

Model ST700 and ST800 Pressure

Transmitters



Model ST800 HART/DE – This version is rated 11 to 42 Vdc, 4-20 mA and the current extremes under fault are approximately 2 mA and 22 mA.

Model ST800 FF/PA – The rated supply of this version is 9 to 32 Vdc is and the maximum current is less than 25 mA.

Model ST700

The Pressure Transmitter STA7XX (Absolute), STD7XX (Differential), and STG7XX (Gauge) model series are identical to the STA8XX (Absolute), STD8XX (Differential), and STG8XX (Gauge) model series, differing only in the factory calibration method/software.

Model ST700 Pressure Transmitter- HART/DE Communications, -50°C to 85 °C (-20°C to 70 °C with Display). Rated 11-42Vdc, 4-20 mA max.

Model ST700 Pressure Transmitter- Foundation Fieldbus/ Profibus Communications, -50°C to 85 °C (-20°C to 70 °C with Display). Rated 9-32Vdc, 25 mA max.

Sira Certification Service
Rake Lane, Eccleston, Chester, CH4 9JN, England

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: info@siracertification.com
Web: www.siracertification.com

Applicant: Honeywell Inc.

Apparatus: Model ST700 and ST800 Pressure

Transmitters



Model Designations for Intrinsic Safety and Type nA Versions

The model designations are as follows:

STA8XX Series

- STA822-bcdefg-h-D-jkl-mno-p-qrs-t-v (Dual Head Absolute), MWP 15 psi (1.04 barA)
- STA840-bcdefg-h-D-jkl-mno-p-qrs-t-v (Dual Head Absolute), MWP 500 psi (35 barA)
- STA82L-bcdefg-h-D-jkl-mno-p-qrs-t-v (In-line Absolute), MWP 15 psi (1.04 barA)
- STA84L-bcdefg-h-D-jkl-mno-p-qrs-t-v (In-Line Absolute), MWP 500 psi (35 barA)
- STA87L-bcdefg-h-D-jkl-mno-p-qrs-t-v (In-Line Absolute), MWP 3000 psi (206 barA)

Where:

b = A,B,C,D,E,F,G,H,J,K,L,1,2,3,4,5,6,7 or 8 (process wetted head and barrier diaphragm material)

c = 1,2 or 3 (fill fluid)

d = A,D,G or H (Adapter flange and bolt kit)

e = B,C,D,K,M,N, S or 0 (Bolt Material)

f = 0, 1,2,3,4,5,6 or 7 (Vent/Drain Type/Location)

g = A,B,C or 0 (Gasket Material)

h = 1,2 or 3 (Head/Connect orientations)

j = A,B,C,D,E,F,G or H (Electronic Housing Material/entry type/lightning protection)

k = D,F,H or P (Output/Protocol)

I = A,B,C,D,E,F,G,H,J or 0 (Indicator/zero-span buttons/language)

m = 1,2,3 or 4 (Application software)

n = 1,2,3,4,5 or 6 (Output limit, failsafe, write protection)

o = C or S (Output Limit, Failsafe & Write Protect Settings)

p = A,B,C,D,E,F,G or H (Accuracy and Calibration)

q = 0,1,2,3,4,5,6 or 7 (Mounting Bracket)

r = 0.1 or 2 (Customer Tag)

s = A0, A2, A6, A7, A8 or A9 (Conduit plugs and conduit adapter)

t = Two digit alphanumeric code (General options that do not impact certification)

Page 3 of 15

v = Four digit alphanumeric code (Factory identification)

Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: info@siracertification.com
Web: www.siracertification.com

23 September 2013

IECEx SIR 12.0100X Issue 4

Applicant:

Honeywell Inc.

Apparatus:

Model ST700 and ST800 Pressure

Transmitters



STD8XX Series

- STD810- bcdefgh-i-D-jkl-mno-p-qrs-t-v (-10 to +10" H2O), MWP 4500 or 6000 psi
- STD820- bcdefgh-i-D-jkl-mno-p-qrs-t-v (-400" to 400" H2O), MWP 4500 or 6000 psi
- STD825- bcdefgh-i-D-jkl-mno-p-qrs-t-v (-600" to 600" H2O), MWP 4500 or 6000 psi
- STD830- bcdefgh-i-D-jkl-mno-p-qrs-t-v (-100 to 100 psi), MWP 4500 or 6000 psi
- STD870- bcdefgh-i-D-jkl-mno-p-qrs-t-v (-14.2 to 3,000 psi), MWP 4500 or 6000 psi

Where:

b = A,B,C,D,E,F,G,H,J,K,L,X1,2,3,4,5,6,7,8 or 9 (process wetted head and diaphragm material)

c = 1,2,3 or 4 (fill fluid)

d = A,B or H (Adapter flange and bolt kit)

e = B,C,D,K,M,N or S (Bolt Material)

f = 1,2,3,4,5,6 or 7 (Vent/Drain Type/Location)

g = H or S (Static Pressure)

h = A,B or C (Gasket Material)

i = 1,2 or 3 (Head/Connect orientations)

j = A,B,C,D,E,F,G or H (Electronic Housing Material/entry type/lightning protection)

k = D,F,H or P (Output/Protocol)

I = A,B,C,D,E,F,G,H,J or 0 (Indicator/zero-span buttons/language)

m = 1,2,3 or 4 (Application software)

n = 1,2,3,4,5 or 6 (Output limit, failsafe, write protection)

o = C or S (General Configuration)

p = A,B,C,D,E,F,G or H (Accuracy and Calibration)

q = 0,1,2,3,4,5,6 or 7 (Mounting Bracket)

r = 0.1 or 2 (Customer Tag)

s = A0, A2, A6, A7, A8 or A9 (Conduit plugs and conduit adapter)

t = Two digit alphanumeric code (General options that do not impact certification)

Page 4 of 15

v = Four digit alphanumeric code (Factory identification)

Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: info@siracertification.com
Web: www.siracertification.com

23 September 2013

Applicant: Honeywell Inc.

Apparatus: Model ST700 and ST800 Pressure

Transmitters



STG8XX Series

STG830-bcdefg-h-D-jkl-mno-p-qrs-t-v (Dual Head Gauge), MWP 50 psi (3.5 bar)

STG840-bcdefg-h-D-jkl-mno-p-qrs-t-v (Dual Head Gauge), MWP 500 psi (35 bar)

• STG870-bcdefg-h-D-jkl-mno-p-qrs-t-v (Dual Head Gauge), MWP 3000 psi (210 bar)

• STG83L-bcdefg-h-D-jkl-mno-p-qrs-t-v (In-Line Gauge), MWP 500 psi (3.5 bar)

• STG84L-bcdefg-h-D-jkl-mno-p-qrs-t-v (In-Line Gauge), MWP 500 psi (35 bar)

• STG87L-bcdefg-h-D-jkl-mno-p-qrs-t-v (In-Line Gauge), MWP 3000 psi (210 bar)

• STG88L-bcdefg-h-D-jkl-mno-p-qrs-t-v (In-Line Gauge), MWP 6,000 psi (420 bar)

STG89L-bcdefg-h-D-jkl-mno-p-qrs-t-v (In-Line Gauge), MWP 10,000 psi (690 bar)

Where

b = A,B,C,D,E,F,G,H,J,K,L,1,2,3,4,5,6,7 or 8 (process wetted head and barrier diaphragm material)

c = 1,2 or 3 (fill fluid)

d = A,D,G or H (Adapter flange and bolt kit)

e = B,C,D,K,M,N or S (Bolt Material)

f = 0, 1,2,3,4,5,6 or 7 (Vent/Drain Type/Location)

g = A,B,C or 0 (Gasket Material)

h = 1,2 or 3 (Head/Connect orientations)

j = A,B,C,D,E,F,G or H (Electronic Housing Material/entry type/lightning protection)

k = D,F,H or P (Output/Protocol)

I = A,B,C,D,E,F,G,H,J or 0 (Indicator/zero-span buttons/language)

m = 1,2,3 or 4 (Application software)

n = 1,2,3,4,5 or 6 (Output limit, failsafe, write protection)

o = C or S (General Configuration)

p = A,B,C,D,E,F,G or H (Accuracy and Calibration)

q = 0,1,2,3,4,5,6 or 7 (Mounting Bracket)

r = 0.1 or 2 (Customer Tag)

s = A0, A2, A6, A7, A8 or A9 (Conduit plugs and conduit adapter)

t = Two digit alphanumeric code (General options that do not impact certification)

Page 5 of 15

v = Four digit alphanumeric code (Factory identification)

Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: info@siracertification.com
www.siracertification.com

23 September 2013

Applicant: Honeywell Inc.

Apparatus: Model ST700 and ST800 Pressure

Transmitters



STF8XX Series: (Flange Mount Meter Bodies)

- STF828-bcdefg-hjk-B-lmn-opq-s-tvww-xx-yyyy (1 bar Transmitter Characterized) ANSI Class 150, MWP 285psi (1.97MPa); ANSI Class 300, MWP 740psi (5.1MPa); or PN 40 Flange, MWP 580psi (4.0MPa)
- STF832-bcdefg-hjk-B-lmn-opq-s-tvww-xx-yyyy (7 bar Transmitter Characterized) ANSI Class 150, MWP 285psi (1.97MPa); ANSI Class 300, MWP 740psi (5.1MPa); or PN 40 Flange, MWP 580psi (4.0MPa)
- STF82F-bcdefg-hjk-B-lmn-opq-s-tvww-xx-yyyy (1 bar Transmitter) ANSI Class 150, MWP 285psi (1.97MPa); ANSI Class 300, MWP 400psi (2.76MPa); or PN 40 Flange, MWP 400psi (2.76MPa)
- STF83F-bcdefg-hjk-B-lmn-opq-s-tvww-xx-yyyy (7 Bar Transmitter) ANSI Class 150, MWP 285psi (1.97MPa); ANSI Class 300, MWP 400psi (2.76MPa); or PN 40 Flange, MWP 400psi (2.76MPa)

Where:

b = A,W, B,C,E,X, F,G,J,L,M, N, R, S, 1,2,3,4,5,or 6 (process wetted head and barrier diaphragm material)

c = 1 or 2 (fill fluid)

d = A, C, H or K (Process Connections)

e = C, S, N or B (Bolts for Process Heads)

f = 1,2,3,4,5 or 6 (Vent/Drain Type/Location)

g = A or B (Gasket Material)

h = 1,2,3,4,5,6,7,8,9,A,B,C,D,E,F,Q,U,V,H,J,K,L,M,N,W,X,Y,S,T,P or R (Head/Connect orientations)

j = 0, 1, 2, 3, or 5 (Gasket ring)

k = 0, F, C, D, E, (Extension)

I= A, B, C, D, E, F, G, H(Electronic Hoiusing Material and Entry type)

m= H, D, F, P (Output/ Protocol)

n = A,B,C,D,E,F,G,H,J or 0 (Indicator/zero-span buttons/language)

o = 1,2,3 or 4 (Application software)

p = 1,2,3,4,5 or 6 (Output limit, failsafe, write protection)

q = C or S (General Configuration)

s = A,B,C,D,E,F,G or H (Accuracy and Calibration)

t = 0,1,2,3,4,5,6 or 7 (Mounting Bracket)

v = 0.1 or 2 (Customer Tag)

ww = A0, A2, A6, A7, A8 or A9 (Conduit plugs and conduit adapter)

xx = Two digit alphanumeric code (General options that do not impact certification)

yyyy = Four digit alphanumeric code (Factory identification)

Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: info@siracertification.com
www.siracertification.com

IECEx SIR 12.0100X Issue 4

Applicant:

Honeywell Inc.

Apparatus:

Model ST700 and ST800 Pressure

Transmitters



- STR82D-abcdefg-hhhjjklmn-B-pqr-stv-w-xyzz-G-FFFF, MWP 1,500 psi
- STR83D-abcdefg-hhhjjklmn-B-pqr-stv-w-xyzz-G-FFFF, MWP 1,500 psi
- STR84A-abcdefg-hhhjjklmn-B-pqr-stv-w-xyzz-G-FFFF, MWP 500 psi
- STR84G-abcdefg-hhhjjklmn-B-pqr-stv-w-xyzz-G-FFFF, MWP 500 psi
- STR87G-abcdefg-hhhjjklmn-B-pqr-stv-w-xyzz-G-FFFF, MWP 1,500 psi

Where:

a=1, 2, 3 or 5 (Number of Seals)

b = 1, 2 or 4 (Primary fill fluid)

c = A, B, C, D or E (Construction)

d= 0, C, S, N, B (Bolts and Nuts for Process Heads)

e = 1,2,3,4,5 or 6 (Secondary Fill Fluid)

f = 0, A, B, C, D, E, F, G, H, J, K, L, M or 2 (Connection to Remote Seal)

q = 1, 2, 3 or 4 (Seal option)

Flush Flange Seal

hhh= AFA, AFC, AFM (Flange Type and Size)

jj= AA, AB, AC, AE or AF (Wetted Material)

k= 1 or 2 (Non Wetted Material (Upper))

I= 1 or 2 (Seal Capillary Connection)

m= A, B, C or D (Calibration Rings)

n= 0, H, J, M, N, P, Q, R or S (Flushing Connections and Plugs)

Flush Flange Seal with Lower

hhh= BFA, BFC, CAA, CCA, CCC, CGA, CGC, CDA, CDC, DAA, DCA, DCC, DDA, DDC, DFA, DFC (Flange Type and Size)

jj= BA, BB, BC, BE, BF, BG or BH (Wetted Material)

k= 4 or 5 (Non Wetted Material)

I= 0 (Bolts)

m= 0, H, J, M, N, P, R, S (Flushing Connections and Plugs)

n= K, G, T or L (Gasket)

Flange Seal with Extended Diaphragm

hhh= EFA, EFC, EFM, FGA, FGC or FGP (Flange Type and Size)

jj= EA, EB, or EC (Wetted Material)

k= 7 or 8 (Non Wetted Material)

l= 0 (Bolts)

m= 2, 4 or 6 (Extension Length)

n= 0(No Selection)

Pancake Seal

hhh= GFA (Flange Type and Size)

jj= GA, GB, GC, GE or GG (Wetted Material)

k= 0 (Non Wetted Material)

I= 0 (Bolts)

m= A, B, C or D (Calibration Ring)

n= 0, H, J, M, N, P, Q, R, S or S (Flushing Connections and Plugs)

23 September 2013 Page 7 of 15 Date:

Form 9530 Issue 1

Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England

+44 (0) 1244 670900 Tel: +44 (0) 1244 681330 Fax: info@siracertification.com Email: Web: www.siracertification.com

IECEx SIR 12.0100X Issue 4

Applicant:

Honeywell Inc.

Apparatus:

Model ST700 and ST800 Pressure

Transmitters



Chemical Tue "Taylor" Wedge

hhh= HMO (Flange Type and Size)
jj= HA, HB, or HC (Wetted Material)
k= 0 (Non Wetted Material)
l= 0 (Bolts)
m= 0 (Styles)

Seal with Threaded Process Connection

hhh= JJG, JKG, JKL, KJG, KKG, KLG, LJG, LKG, or LLG (Bolts and Thread Size) jj= JA, JB, JC, JD, JE, JF, or JG (Wetted Material)

k= A or C (Non Wetted Material)

I= C or D (Bolts)

n= 0 (No Selection)

m= 0, H, J, M, N, P, Q, R or S (Flushing Connections and Plugs)

n = K, G, T or L (Gasket)

Saddle Seal

hhh= RFK, RGK, RPK or RQK (Flange Size)

jj= RA, RB, RC, RD, SB, or SC (Wetted Material)

k= B or C (Non Wetted Material)

I= 0 (Bolts)

m= 0 (Styles)

n= K, G, T or L (Gasket)

p= A, B, C, D, E, F, G, H(Electronic Hoiusing Material and Entry type)

q= H, D, F, P (Output/ Protocol)

r = A,B,C,D,E,F,G,H,J or 0 (Indicator/zero-span buttons/language)

s = 1,2,3 or 4 (Application software)

t = 1,2,3,4,5 or 6 (Output limit, failsafe, write protection)

v = C or S (General Configuration)

W = A,B,C,D,E,F,G or H (Accuracy and Calibration)

x = 0,1,2,3,4,5,6 or 7 (Mounting Bracket)

y = 0.1 or 2 (Customer Tag)

zz = A0, A2, A6, A7, A8 or A9 (Conduit plugs and conduit adapter)

GG = Two digit alphanumeric code (General options that do not impact certification)

FFFF = Four digit alphanumeric code (Factory identification)

Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: info@siracertification.com
Web: www.siracertification.com

IECEx SIR 12.0100X Issue 4

Applicant:

Honeywell Inc.

Apparatus:

Model ST700 and ST800 Pressure

Transmitters



STA7XX Series: (Absolute Meter Body Models)

- STA722-bcdefg-h-B-jkl-mno-p-qrs-t-v (Dual Head Absolute), MWP 15 psi (1.04 barA)
- STA740-bcdefg-h-B-jkl-mno-p-qrs-t-v (Dual Head Absolute), MWP 500 psi (35 barA)
- STA72L-bcdefg-h-B-jkl-mno-p-qrs-t-v (In-line Absolute), MWP 15 psi (1.04 barA)
- STA74L-bcdefg-h-B-jkl-mno-p-qrs-t-v (In-Line Absolute), MWP 500 psi (35 barA)
- STA77L-bcdefg-h-B-jkl-mno-p-qrs-t-v (In-Line Absolute), MWP 3000 psi (206 barA)

Where:

b = A,B,C,D,E,F,G,H,J,K,L,1,2,3,4,5,6,7 or 8 (process wetted head and barrier diaphragm material)

c = 1,2 or 3 (fill fluid)

d = A,D,G or H (Adapter flange and bolt kit)

e = B,C,D,K,M,N, S or 0 (Bolt Material)

f = 0, 1,2,3,4,5,6 or 7 (Vent/Drain Type/Location)

g = A,B,C or 0 (Gasket Material)

h = 1.2 or 3 (Head/Connect orientations)

j = A,B,C,D,E,F,G or H (Electronic Housing Material/entry type/lightning protection)

k = D,F,H or P (Output/Protocol)

I = A,B,C,D,E,F,G,H,J or 0 (Indicator/zero-span buttons/language)

m = 1,2,3 or 4 (Application software)

n = 1,2,3,4,5 or 6 (Output limit, failsafe, write protection)

o = C or S (Output Limit, Failsafe & Write Protect Settings)

p = A,B,C,D,E,F,G or H (Accuracy and Calibration)

q = 0,1,2,3,4,5,6 or 7 (Mounting Bracket)

r = 0.1 or 2 (Customer Tag)

s = A0, A2, A6, A7, A8 or A9 (Conduit plugs and conduit adapter)

t = Two digit alphanumeric code (General options that do not impact certification)

Page 9 of 15

v = Four digit alphanumeric code (Factory identification)

Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: info@siracertification.com
www.siracertification.com

Date:

23 September 2013

IECEx SIR 12.0100X Issue 4

Applicant:

Honeywell Inc.

Apparatus:

Model ST700 and ST800 Pressure

Transmitters



STD7XX Series: (Differential Meter Bodies)

- STD710- bcdefgh-i-B-jkl-mno-p-qrs-t-v (-10 to +10" H_2O), MWP 4500 or 6000 psi
- STD720- bcdefgh-i-B-jkl-mno-p-qrs-t-v (-400" to 400" H_2O), MWP 4500 or 6000 psi
- STD730- bcdefgh-i-B-jkl-mno-p-qrs-t-v (-100 to 100 psi), MWP 4500 or 6000 psi
- STD770- bcdefgh-i-B-jkl-mno-p-qrs-t-v (-14.2 to 3,000 psi), MWP 4500 or 6000 psi

Where:

b = A,B,C,D,E,F,G,H,J,K,L,X1,2,3,4,5,6,7,8 or 9 (process wetted head and diaphragm material)

c = 1,2,3 or 4 (fill fluid)

d = A,B or H (Adapter flange and bolt kit)

e = B,C,D,K,M,N or S (Bolt Material)

f = 1,2,3,4,5,6 or 7 (Vent/Drain Type/Location)

g = H or S (Static Pressure)

h = A,B or C (Gasket Material)

i = 1,2 or 3 (Head/Connect orientations)

j = A,B,C,D,E,F,G or H (Electronic Housing Material/entry type/lightning protection)

k = D,F,H or P (Output/Protocol)

I = A,B,C,D,E,F,G,H,J or 0 (Indicator/zero-span buttons/language)

m = 1,2,3 or 4 (Application software)

n = 1,2,3,4,5 or 6 (Output limit, failsafe, write protection)

o = C or S (General Configuration)

p = A,B,C,D,E,F,G or H (Accuracy and Calibration)

q = 0,1,2,3,4,5,6 or 7 (Mounting Bracket)

r = 0,1 or 2 (Customer Tag)

s = A0, A2, A6, A7, A8 or A9 (Conduit plugs and conduit adapter)

t = Two digit alphanumeric code (General options that do not impact certification)

Page 10 of 15

v = Four digit alphanumeric code (Factory identification)

Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: info@siracertification.com
Web: www.siracertification.com

23 September 2013

Applicant: Honeywell Inc.

Apparatus: Model ST700 and ST800 Pressure

Transmitters



STG7XX Series: (Gauge Meter Bodies)

- STG730-bcdefg-h-B-jkl-mno-p-qrs-t-v (Dual Head Gauge), MWP 50 psi (3.5 bar)
- STG740-bcdefg-h-B-jkl-mno-p-qrs-t-v (Dual Head Gauge), MWP 500 psi (35 bar)
- STG770-bcdefg-h-B-jkl-mno-p-qrs-t-v (Dual Head Gauge), MWP 3000 psi (210 bar)
- STG73L-bcdefg-h-B-jkl-mno-p-qrs-t-v (In-Line Gauge), MWP 500 psi (3.5 bar)
- STG74L-bcdefg-h-B-jkl-mno-p-qrs-t-v (In-Line Gauge), MWP 500 psi (35 bar)
- STG77L-bcdefg-h-B-jkl-mno-p-qrs-t-v (In-Line Gauge), MWP 3000 psi (210 bar)
- STG78L-bcdefg-h-B-jkl-mno-p-grs-t-v (In-Line Gauge), MWP 6,000 psi (420 bar)
- STG79L-bcdefq-h-B-jkl-mno-p-grs-t-v (In-Line Gauge), MWP 10,000 psi (690 bar)

Where:

b = A,B,C,D,E,F,G,H,J,K,L,1,2,3,4,5,6,7 or 8 (process wetted head and barrier diaphragm material)

c = 1.2 or 3 (fill fluid)

d = A,D,G or H (Adapter flange and bolt kit)

e = B,C,D,K,M,N or S (Bolt Material)

f = 0, 1,2,3,4,5,6 or 7 (Vent/Drain Type/Location)

g = A,B,C or 0 (Gasket Material)

h = 1.2 or 3 (Head/Connect orientations)

j = A,B,C,D,E,F,G or H (Electronic Housing Material/entry type/lightning protection)

 $k = D_r, H \text{ or } P \text{ (Output/Protocol)}$

I = A,B,C,D,E,F,G,H,J or 0 (Indicator/zero-span buttons/language)

m = 1,2,3 or 4 (Application software)

n = 1,2,3,4,5 or 6 (Output limit, failsafe, write protection)

o = C or S (General Configuration)

p = A,B,C,D,E,F,G or H (Accuracy and Calibration)

q = 0,1,2,3,4,5,6 or 7 (Mounting Bracket)

r = 0.1 or 2 (Customer Tag)

s = A0, A2, A6, A7, A8 or A9 (Conduit plugs and conduit adapter)

t = Two digit alphanumeric code (General options that do not impact certification)

Page 11 of 15

v = Four digit alphanumeric code (Factory identification)

Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: info@siracertification.com
Web: www.siracertification.com

23 September 2013

IECEx SIR 12.0100X Issue 4

Applicant:

Honeywell Inc.

Apparatus:

Model ST700 and ST800 Pressure

Transmitters



STF7XX Series: (Flange Mount Meter Bodies)

- STF724-bcdefg-hjk-B-lmn-opq-s-tvww-xx-yyyy (1 bar Transmitter Characterized) ANSI Class 150, MWP 285psi (1.97MPa); ANSI Class 300, MWP 740psi (5.1MPa); or PN 40 Flange, MWP 580psi (4.0MPa)
- STF732-bcdefg-hjk-B-lmn-opq-s-tvww-xx-yyyy (7 Bar Transmitter Characterized) ANSI Class 150, MWP 285psi (1.97MPa); ANSI Class 300, MWP 740psi (5.1MPa); or PN 40 Flange, MWP 580psi (4.0MPa)
- STF72F-bcdefg-hjk-B-lmn-opq-s-tvww-xx-yyyy (1 bar Transmitter) ANSI Class 150, MWP 285psi (1.97MPa); ANSI Class 300, MWP 400psi (2.76MPa); or PN 40 Flange, MWP 400psi (2.76MPa)
- STF73F-bcdefg-hjk-B-lmn-opq-s-tvww-xx-yyyy (7 Bar Transmitter) ANSI Class 150, MWP 285psi (1.97MPa); ANSI Class 300, MWP 400psi (2.76MPa); or PN 40 Flange, MWP 400psi (2.76MPa)

Where:

b = A,W, B,C,E,X, F,G,J,L,M, N, R, S, 1,2,3,4,5,or 6 (process wetted head and barrier diaphragm material)

c = 1 or 2 (fill fluid)

d = A, C, H or K (Process Connections)

e = C, S, N or B (Bolts for Process Heads)

f = 1,2,3,4,5 or 6 (Vent/Drain Type/Location)

g = A or B (Gasket Material)

h = 1,2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F, Q, U, V, H, J, K, L, M, N, W, X, Y, S, T, P or R (Head/Connect orientations)

Page 12 of 15

j = 0, 1, 2, 3, or 5 (Gasket ring)

k = 0, F, C, D, E, (Extension)

I= A, B, C, D, E, F, G, H(Electronic Hoiusing Material and Entry type)

m= H, D, F, P (Output/ Protocol)

n = A,B,C,D,E,F,G,H,J or 0 (Indicator/zero-span buttons/language)

o = 1,2,3 or 4 (Application software)

p = 1,2,3,4,5 or 6 (Output limit, failsafe, write protection)

q = C or S (General Configuration)

s = A,B,C,D,E,F,G or H (Accuracy and Calibration)

t = 0,1,2,3,4,5,6 or 7 (Mounting Bracket)

23 September 2013

v = 0.1 or 2 (Customer Tag)

ww = A0, A2, A6, A7, A8 or A9 (Conduit plugs and conduit adapter)

xx = Two digit alphanumeric code (General options that do not impact certification)

yyyy = Four digit alphanumeric code (Factory identification)

Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: info@siracertification.com
Web: www.siracertification.com

IECEx SIR 12.0100X Issue 4

Applicant:

Honeywell Inc.

Apparatus:

Model ST700 and ST800 Pressure

Transmitters



STR7XX: (Remote Seal Meter Bodies)

- STR73D-abcdefg-hhhjjklmn-B-pgr-stv-w-xyzz-G-FFFF, MWP 1,500 psi
- STR74G-abcdefg-hhhjjklmn-B-pqr-stv-w-xyzz-G-FFFF, MWP 500 psi

Where:

a= 1, 2, 3 or 5 (Number of Seals)
b = 1, 2 or 4 (Primary fill fluid)
c = A, B, C, D or E (Construction)
d= 0, C, S, N, B (Bolts and Nuts for Process Heads)
e = 1,2,3,4,5 or 6 (Secondary Fill Fluid)
f = 0, A, B, C, D, E, E, C, H, J, K, L, M, or 3 (Connection to Remote Seal)

f = 0, A, B, C, D, E, F, G, H, J, K, L, M or 2 (Connection to Remote Seal)

g = 1, 2, 3 or 4 (Seal option)

Flush Flange Seal

hhh= AFA, AFC, AFM (Flange Type and Size)
jj= AA, AB, AC, AE or AF (Wetted Material)
k= 1 or 2 (Non Wetted Material (Upper))
l= 1 or 2 (Seal Capillary Connection)
m= A, B, C or D (Calibration Rings)
n= 0, H, J, M, N, P, Q, R or S (Flushing Connections and Plugs)

Flush Flange Seal with Lower

hhh= BFA, BFC, CAA, CCA, CCC, CGA, CGC, CDA, CDC, DAA, DCA, DCC, DDA, DDC, DFA, DFC (Flange Type and Size)

jj= BA, BB, BC, BE, BF, BG or BH (Wetted Material)

k= 4 or 5 (Non Wetted Material)

l= 0 (Bolts)

m= 0, H, J, M, N, P, R, S (Flushing Connections and Plugs)

n= K, G, T or L (Gasket)

Flange Seal with Extended Diaphragm

hhh= EFA, EFC, EFM, FGA, FGC or FGP (Flange Type and Size) jj= EA, EB, or EC (Wetted Material) k= 7 or 8 (Non Wetted Material) l= 0 (Bolts) m= 2, 4 or 6 (Extension Length) n= 0(No Selection)

Pancake Seal

hhh= GFA (Flange Type and Size)
jj= GA, GB, GC, GE or GG (Wetted Material)
k= 0 (Non Wetted Material)
l= 0 (Bolts)
m= A, B, C or D (Calibration Ring)
n= 0, H, J, M, N, P, Q, R, S or S (Flushing Connections and Plugs)

Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: info@siracertification.com
www.siracertification.com

Date: 23 September 2013

Page 13 of 15

IECEx SIR 12.0100X Issue 4

Applicant:

Honeywell Inc.

Apparatus:

Model ST700 and ST800 Pressure

Transmitters



Chemical Tue "Taylor" Wedge

hhh= HMO (Flange Type and Size)

jj= HA, HB, or HC (Wetted Material)

k= 0 (Non Wetted Material)

I= 0 (Bolts)

m= 0 (Styles)

n= 0 (No Selection)

Seal with Threaded Process Connection

hhh= JJG, JKG, JKL, KJG, KKG, KLG, LJG, LKG, or LLG (Bolts and Thread Size)

jj= JA, JB, JC, JD, JE, JF, or JG (Wetted Material)

k= A or C (Non Wetted Material)

I= C or D (Bolts)

m= 0, H, J, M, N, P, Q, R or S (Flushing Connections and Plugs)

n= K, G, T or L (Gasket)

Saddle Seal

hhh= RFK, RGK, RPK or RQK (Flange Size)

jj= RA, RB, RC, RD, SB, or SC (Wetted Material)

k= B or C (Non Wetted Material)

I= 0 (Bolts)

m= 0 (Styles)

n= K, G, T or L (Gasket)

p= A, B, C, D, E, F, G, H(Electronic Hoiusing Material and Entry type)

q= H, D, F, P (Output/ Protocol)

r = A,B,C,D,E,F,G,H,J or 0 (Indicator/zero-span buttons/language)

s = 1,2,3 or 4 (Application software)

t = 1,2,3,4,5 or 6 (Output limit, failsafe, write protection)

v = C or S (General Configuration)

w = A,B,C,D,E,F,G or H (Accuracy and Calibration)

x = 0,1,2,3,4,5,6 or 7 (Mounting Bracket)

y = 0.1 or 2 (Customer Tag)

zz = A0, A2, A6, A7, A8 or A9 (Conduit plugs and conduit adapter)

GG = Two digit alphanumeric code (General options that do not impact certification)

FFFF = Four digit alphanumeric code (Factory identification)

Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: info@siracertification.com
Web: www.siracertification.com

Applicant: Honeywell Inc.

Apparatus: Model ST700 and ST800 Pressure

Transmitters



Conditions of Certification for Intrinsic Safety Versions:

- The enclosure is manufactured from low copper aluminum alloy. In rare cases, ignition sources due to impact and friction sparks could occur. This shall be considered during installation, particularly if the equipment is installed in a zone 0 location.
- ii. If a charge-generating mechanism is present, the exposed metallic part on the enclosure is capable of storing a level of electrostatic charge that could become incendive for IIC gases. Therefore, the user/installer shall implement precautions to prevent the build up of electrostatic charge, e.g. earthing the metallic part. This is particularly important if the equipment is installed in a zone 0 location.

Condition of Certification for Type nA Versions:

i. If a charge-generating mechanism is present, the exposed metallic part on the enclosure is capable of storing a level of electrostatic charge that could become incendive for IIC gases. Therefore, the user/installer shall implement precautions to prevent the build up of electrostatic charge, e.g. earthing the metallic part.

Conditions of Manufacture for Intrinsic Safety Versions:

- i. In accordance with IEC 60079-11:2011 clause 10.3, each manufactured sample of the equipment shall be subjected to an electric strength test using a test voltage of 500 Vac applied between the two input terminals and the enclosure. Alternatively, a voltage of 20% higher may be applied for 1 s. There shall be no evidence of flashover or breakdown and the maximum current flowing shall not exceed 5 mA.
- ii. Each manufactured sample shall withstand a pressure test to 1.5 times the maximum working pressure.

Conditions of Manufacture for Type nA Versions:

i. The manufacturer shall subject 100% of completed Pressure Transmitter units to the electrical strength test in IEC 60079-15:2010 clauses 6.5, by applying a voltage of 500 Vrms between all input terminals and the outer enclosure for a minimum of 60 s. Alternatively, a voltage of 700 Vrms may be applied for 100 ms. The current flowing during the test shall not exceed 5 mA.

Page 15 of 15

ii. Each manufactured sample shall withstand a pressure test to 1.5 times the maximum working pressure

Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: info@siracertification.com
www.siracertification.com

23 September 2013