



EC TYPE-EXAMINATION CERTIFICATE 1

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: Sira 12ATEX2233X Issue: 4

Model ST700 and ST800 Pressure Transmitters 4 Equipment:

5 Applicant: Honeywell Inc.

(These products may be manufactured at any Honeywell Facility listed Address: 512 Virginia Drive 6 on Quality Assurance Notification DEKRA 13ATEXQ0161 that has been

Fort Washington

audited for the manufacture of the type of protection listed) Pennsylvania 19034

USA

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

IFC 60079-0:2011 IEC 60079-11:2011 EN 60079-26:2006

The above list of documents may detail standards that do not appear on the UKAS Scope of Accreditation, but have been added through Sira's flexible scope of accreditation, which is available on request.

- 10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- This EC type-examination certificate relates only to the design and construction of the specified 11 equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.
- 12 The marking of the equipment shall include the following:



II1G

Ex ia IIC T4 Ga

Ta: -50° C to + 70° C (-20° C to + 70° C with display)

Project Number 31122

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Deputy Certification Manager

Sira Certification Service

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





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13 DESCRIPTION OF EQUIPMENT

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 μF , Li = 984 μH

Ui = 30 V, Ii = 225 mA, Pi = 900 mW, Ci = 0.004 μF , Li = 0 μH 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, $Ci = 0 \mu\text{F}$, $Li = 984 \mu\text{H}$

The model designations are as follows:

STA8XX Series

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

Whore

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)

 $d = A_i D_i G$ or H (Adapter flange and bolt kit)

 $e = B_1C_1D_1K_1M_1N_1$, S or 0 (Bolt Material)

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

 $g = A_1B_1C$ 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)

 $k = D_rF_rH$ 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)

v = Four digit alphanumeric code (Factory identification)

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STD8XX Series

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

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STG8XX Series

- STG830-bcdefg-h-C-jkl-mno-p-qrs-t-v (Dual Head Gauge), MWP 50 psi (3.5 bar)
- STG840-bcdefg-h-C-jkl-mno-p-qrs-t-v (Dual Head Gauge), MWP 500 psi (35 bar)
- STG870-bcdefg-h-C-jkl-mno-p-qrs-t-v (Dual Head Gauge), MWP 3000 psi (210 bar)
- STG83L-bcdefg-h-C-jkl-mno-p-qrs-t-v (In-Line Gauge), MWP 500 psi (3.5 bar)
- STG84L-bcdefg-h-C-jkl-mno-p-qrs-t-v (In-Line Gauge), MWP 500 psi (35 bar)
- STG87L-bcdefg-h-C-jkl-mno-p-qrs-t-v (In-Line Gauge), MWP 3000 psi (210 bar)
- STG88L-bcdefg-h-C-jkl-mno-p-qrs-t-v (In-Line Gauge), MWP 6,000 psi (420 bar)
- STG89L-bcdefg-h-C-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)

 $g = A_1B_1C$ 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)

 $k = D_rF_rH$ 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)

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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)

 $s = A_1B_1C_1D_1E_1F_1G$ 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)

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STR8XX Series: (Remote Seal Meter Bodies)

- STR82D-abcdefq-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-pgr-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)

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

Flush Flange Seal

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

ij = 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)

" DA DD DO DE DE

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)

I= 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)

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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)
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)

l= 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)
l= 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)

 $w = A_1B_1C_1D_1E_1F_1G$ 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)

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EC TYPE-EXAMINATION CERTIFICATE

Sira 12ATEX2233X Issue 4

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, $Ci = 0.004 \mu\text{F}$, $Li = 984 \mu\text{H}$.

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.

The model designations for the ST700 series are as follows:

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-bcdefq-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)

 $d = A_i D_i G$ or H (Adapter flange and bolt kit)

 $e = B_1C_1D_1K_1M_1N_1$, 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)

 $k = D_rF_rH$ or P (Output/Protocol)

 $I = A_1B_1C_1D_1E_1F_1G_1H_2J$ 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)

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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)

 $e = B_1C_1D_1K_1M_1N$ or S (Bolt Material)

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

g = H or S (Static Pressure)

 $h = A_iB$ 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)

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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-grs-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-qrs-t-v (In-Line Gauge), MWP 6,000 psi (420 bar)
- STG79L-bcdefg-h-B-jkl-mno-p-grs-t-v (In-Line Gauge), MWP 10,000 psi (690 bar)

Where:

 $b = A_1B_1C_1D_1E_1F_1G_1H_1J_1K_1L_1J_2J_3J_4J_5J_6J_7$ 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)

 $e = B_{r}C_{r}D_{r}K_{r}M_{r}N$ or S (Bolt Material)

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

 $g = A_1B_1C$ 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)

 $k = D_rF_rH$ 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)

v = Four digit alphanumeric code (Factory identification)

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Sira Certification Service

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EC TYPE-EXAMINATION CERTIFICATE

Sira 12ATEX2233X Issue 4

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)

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)

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EC TYPE-EXAMINATION CERTIFICATE

Sira 12ATEX2233X Issue 4

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, 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))

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)

I= 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)

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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)
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)

 $w = A_1B_1C_1D_1E_1F_1G$ 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)

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EC TYPE-EXAMINATION CERTIFICATE

Sira 12ATEX2233X Issue 4

Variation 1 - This variation introduced the following changes:

- i. To allow for 20% tolerance on inductor L5, Li was increased from 820 μ H to 984 μ H; the safety description in the description was amended accordingly.
- ii. The enclosure cover was modified to use an under-cut in place of chamfer.
- iii. The modification to boards to resolve manufacturing issues was recognised.
- iv. 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.

Variation 2 - This variation introduced the following changes:

- i. 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.
- ii. 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.

Variation 3 - This variation introduced the following changes:

- i. The HART/DE Terminal Block Board was revised to allow the Intrinsic Safety entity parameters for inductance (Li) to be reduced and current (Ii) 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
- ii. The recognition of two additional manufacturing locations Pune, 411013 India and Chihuahua. Mexico.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report no.	Comment
0	31 August 2012	R28471A/00	The release of the prime certificate.
1	14 January 2013	R29157A/00	The introduction of Variation 1.
2	14 June 2013	R30841A/00	The introduction of Variation 2.
3	8 July 2013	R30841A/01	Report R30841A/01 replaced R30841A/00.
4	11 September 2013	R31122A/00	The introduction of Variation 3.

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Sira 12ATEX2233X Issue 4

- 15 SPECIAL CONDITIONS FOR SAFE USE (denoted by X after the certificate number)
- 15.1 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.
- 15.2 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.
- 16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

- 17 CONDITIONS OF CERTIFICATION
- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.
- 17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.
- 17.3 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.
- 17.4 Each manufactured sample shall withstand a pressure test to 1.5 times the maximum working pressure.

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Certificate Annexe

Certificate Number: Sira 12ATEX2233X

Equipment: Model ST700 and ST800 Pressure Transmitters

Applicant: HONEYWELL



Issue 0

Drawing no.	Sheets	Rev.	Date (Sira stamp)	Title
34-ST-25-35	1 to 4	21 Jun 12	16 Aug 12	User's Manual (selected pages)
34-XY-33-03	1 to 4	7 June 12	16 Aug 12	Installation Instruction for plugs and adapter
50049827	1 of 1	Α	16 Aug 12	End Cap, aluminum
50049829	1 of 1	Α	16 Aug 12	End Cap, with Window, aluminum
50049830	1 of 1	A6	16 Aug 12	Window
50049832	1 of 1	Α	16 Aug 12	End Cap with Window assembly
50049882	1 of 1	A3	16 Aug 12	End Cap, stainless steel
50049884	1 of 1	A3	16 Aug 12	End Cap, with Window, stainless steel
50049889	1 of 1	A2	16 Aug 12	Nameplate – ATEX
50049892	1 to 2	A4	16 Aug 12	Control Drawing – I.S. and Div 2
50049903	1 to 4	Α	16 Aug 12	Housing, aluminum
50049919	1 to 4	A1	16 Aug 12	Housing, stainless steel
50050918	1 of 1	Α	16 Aug 12	Hart DE, PWB
50050919	1 to 3	C1	16 Aug 12	Hart DE, Assy
50050919-001	1 to 3	D	16 Aug 12	Hart, BOM, without Reed Switch Bd
50050919-002	1 to 3	D	16 Aug 12	Hart, BOM, with Reed Switch Bd
50050919-003	1 to 3	D	16 Aug 12	DE, BOM, without Reed Switch Bd
50050919-004	1 to 3	D	16 Aug 12	DE, BOM, with Reed Switch Bd
50050920	1 to 3	С	16 Aug 12	Hart DE Connectors Board, Schematic
50052625	1 of 1	A3	16 Aug 12	Advanced Display, PWB
50052626	1 to 4	C1	16 Aug 12	Advanced Display, Assy
50052626-001	1 to 3	C1	16 Aug 12	Advanced Display, BOM
50052627	1 to 2	Α	16 Aug 12	Advanced Display Board, Schematic
50053142	1 of 1	Α	16 Aug 12	Pressure Sensor, PWB
50053143	1 to 3	В	16 Aug 12	Pressure Sensor, Assy
50053143-001	1 to 2	В	16 Aug 12	Pressure Sensor, BOM
50053144	1 to 2	В	16 Aug 12	M360 Pressure Sensor Board, Schematic
50055715	1 of 1	С	16 Aug 12	Terminal Block, PWB
50055715-001	1 to 16	С	16 Aug 12	Terminal Block, artwork
50055716	1 to 3	С	16 Aug 12	Terminal Block, Assy
50055716-001	1 to 3	D	16 Aug 12	Terminal Block, BOM
50055716-002	1 to 3	D	16 Aug 12	Terminal Block, BOM
50055717	1 to 2	С	16 Aug 12	Terminal Block Board, Schematic
50064346	1 to 5	A6	16 Aug 12	Agency Drawing
50065673	1 of 1	A5	16 Aug 12	Basic Display, PWB
50065674	1 to 3	A5	16 Aug 12	Basic Display, Assembly
50065674-001	1 to 2	A5	16 Aug 12	Basic Display, BOM
50065675	1 of 1	A5	16 Aug 12	Basic Display Board, Schematic
50066127	1 of 1	Α	16 Aug 12	Reed Switch, PWB
50066128	1 to 2	Α	16 Aug 12	Reed Switch, Assembly
50066128-001	1 to 2	Α	16 Aug 12	Reed Switch, BOM
50066129	1 of 1	Α	16 Aug 12	Reed Switch Board, Schematic
50071726	1 of 1	A1	21 st Aug 12	Nameplate, Top

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Sira Certification Service

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

Certificate Annexe

Certificate Number: Sira 12ATEX2233X

Model ST700 and ST800 Pressure Transmitters **Equipment:**

Applicant: **HONEYWELL**



Issue 1

Drawing no.	Sheets	Rev.	Date (Sira stamp)	Title
50049827	1 of 1	В	10 Jan 13	End Cap, aluminum
50049829	1 of 1	В	10 Jan 13	End Cap, with Window, aluminum
50049830	1 of 1	Α	10 Jan 13	Window
50049832	1 of 2	В	10 Jan 13	End Cap with Window assembly
50049892	1 to 3	B2	10 Jan 13	End Cap, stainless steel
50052625	1 of 1	С	10 Jan 13	Advanced Display, PWB
50054688	1 of 1	Α	10 Jan 13	Printed Wiring Board FF/PA Communications Board
50054689	1 to 3	Α	10 Jan 13	Printed Wiring Board Assy FF/PA Communications Bd
50054689-001	1 to 3	Α	10 Jan 13	Parts List FF/PA W/O Reed SW ST800
50054689-002	1 to 3	Α	10 Jan 13	Parts List FF/PA With Reed SW ST800
50054690	1 of 4	Α	10 Jan 13	Schematic: ST800 Fieldbus Foundation-FF/PA Com
50054838	1 of 1	Α	10 Jan 13	Printed Wiring Board Auxiliary FF BD
50054839	1 to 3	Α	10 Jan 13	Printed Wiring Assembly Auxiliary FF
50054839-001	1 to 2	Α	10 Jan 13	Parts List ST800 Auxiliary BD Fieldbus
50054840	1 to 2	Α	10 Jan 13	Schematic: ST800 Auxiliary BD Fieldbus
50055718	1 of 1	Α	10 Jan 13	Printed Wiring Board Terminal Block FF
50055719	1 to 3	Α	10 Jan 13	Printed Wiring Board Assy Terminal Block FF
50055719-001	1 to 2	Α	10 Jan 13	Parts List TB Pressure/ FF ST800
50055719-002	1 to 2	Α	10 Jan 13	Parts List TB Pressure/ FF LP ST800
50055720	1 to 2	Α	10 Jan 13	Schematic: ST800 Terminal Block Bd Fieldbus
50064346	1 to 7	B1	10 Jan 13	Agency Drawing
50065673	1 of 1	В	10 Jan 13	Basic Display, PWB
50065674	1 to 4	В	10 Jan 13	Basic Display, Assembly
50065674-001	1 to 2	В	10 Jan 13	Basic Display, BOM
50065675	1 of 1	В	10 Jan 13	Basic Display Board, Schematic
50066128-001	1 to 2	В	10 Jan 13	Reed Switch, BOM

Issue 2

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
50049717	1 to 2	A3	07 Jun 13	Remote Seal In-Line AP/GP Transmitter Assy
50049719	1 to 8	A3	07 Jun 13	Method of Assembly Remote Seals
50049892	1 to 3	С	07 Jun 13	Control Drawing – I.S. and Div 2
50077401	1 to 2	A1	07 Jun 13	Meter Body Assembly Flange Mount CFF
50077521	1 to 3	A3	07 Jun 13	MOA, Meter Body Flange Mount
50077544	1 to 3	A2	07 Jun 13	Method of Assembly, 2" & 3" PSEUDO Flange Mounted
50049872	1 to 57	В	11 Jun 13	ST800/ST700 Pressure Transmitter Product Specification
50049889	1 of 1	D	13 Jun 13	Nameplate – ATEX
50071726	1 to 3	В	11 Jun 13	Nameplate – Product I.D.

Issue 3 - (No new drawings were introduced.)

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Certificate Annexe

Certificate Number: Sira 12ATEX2233X

Equipment: Model ST700 and ST800 Pressure Transmitters

Applicant: HONEYWELL



Issue 4

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
50049839	1 to 4	Ε	05 Sep 13	Terminal Block Assembly
50049892	1 to 3	Ε	05 Sep 13	Control Drawing – I.S. and Div 2
50055715	1 of 1	D	05 Sep 13	Terminal Block, PWB
50055715-001	1 to 16	D	05 Sep 13	Terminal Block, artwork
50055716	1 to 3	D	05 Sep 13	Terminal Block, Assy
50055716-001	1 to 3	Ε	05 Sep 13	Terminal Block, BOM (Pressure/HART/DE)
50055716-002	1 to 3	F	05 Sep 13	Terminal Block, BOM (Pressure/HART/DE LP)
50055717	1 to 2	D	05 Sep 13	Terminal Block Board, Schematic
50064346	1 to 7	С	05 Sep 13	ST800 Agency Drawing
50074062	1 of 1	Α	05 Sep 13	Label
S-12927-C	1 to 8	33	05 Sep 13	Date Coding & Serialization

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