

Certificate of Compliance

Certificate: 1393892 Master Contract: 212120

Project: 70041282 **Date Issued:** October 20, 2015

Issued to: American Sensor Technologies, Inc.

450 Clark Dr

Mount Olive, NJ 07828

USA

Attention: David Linder

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.



Konstantín Rybalko

Issued by: Konstantin Rybalko

PRODUCTS

CLASS 2258 82 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations -

Certified to US Standards

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

Class I, Division 1, Groups A, B, C and D; Class II, Div. 1, Groups E, F and G:

Ex d IIC T5 Gb

Ex tb IIIC T100 Db

Class I, Zone 1, AEx d IIC T5 Gb

Zone 21, AEx th IIIC T100 Db

Model AST4600, AST46HA, AST46PT and 46SW Series Explosionproof pressure transducers with the following ratings: Electrical Input: 5V dc or 10 –28Vdc; Electrical Output: 0.5-4.5Vdc ratiometric, 0-5Vdc, 1-5Vdc, 4-20mA, 0-10Vdc, 1-6Vdc, 0.5-5.5Vdc, 0.25-5Vdc, 5mV/V, 10mV/V, 20mV/V, 1-10Vdc, 0.1-5.1Vdc, 0-5Vdc 4wire, 0-10Vdc 4wire, 0.25-4.75Vdc ratiometric, 0.5-4.5Vdc, 0.5 – 2.5Vdc or 28V sourcing solid state relay; -40 Deg. C < Tamb. < +85°C; -40 Deg. C < Process Temp. < +125°C; Maximum Working Pressure for highest pressure sensors: 137.9 MPa (20000 psi); Single Seal; Temperature Code: T5.



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Nomenclature:

AST4600 abcdefghij (-Z = Canadian Registry Number Approval, CRN)

Where: a (fitting information) = A, B, C, D, E, F, G, H, I, J, K, L, M, N, P, R, S, T, U, V, W, Z

b (pressure reference) = 0, 1, 2, A, C, G, V (Models with suffix G or V not suitable for Class II)

c (pressure) = 0000 to 9999

d (pressure unit) = B, H, K, M, P

e (electrical outputs) = 1, 3, 4, 5, 6, 8, 9, A, G, P, 2, B, F, J, M, T

f (electrical connection) = T,U,W,X

g (header material) = 0,1,2,3,4,6

h,i,j (special calibration) = eg: tolerances

AST46HA abcdefghijk (-Z = CRN)

Where: a (port information) = A, B, C, D, E, F, G, H, I, J, K, L, M, N, P, R, S, T, U, V, W, Z

b (pressure reference) = 0, 1, 2, A, C, G, V (Models with suffix G or V not suitable for Class II)

c (pressure) = 0000 to 9999

d (pressure unit) = B, H, K, M, P

e (electrical outputs) = 1, 3, 4, 5, 6, 8, 9, G, P, 2, J, K, L, M, T

f (electrical connection) = T, U, W, X

g (header material) = 0,1,2,3,4,6

h (fail safe mechanism) = N, H, L

i,j,k (special calibration) = eg: tolerances

AST46PT abcdefghijkl (-Z = CRN)



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Where: a (temperature range) = 1, 2, 3, 4, 5

b (fitting) = A, B, C, D, E, F, G, H, I, J, K, L, M, N, P, R, S, T, U, V, W, Z

c (pressure reference) = 0, 1, 2, A, C, G, V (Models with suffix G or V not suitable for Class II)

d (pressure) = 0000 to 9999

e (pressure unit) = B, K, P, H, M

f (electrical outputs) = 1, 2, 3, 4, 5, 6, 8, 9, G, J, M, P, T

g (electrical connection) = T,U,W,X

h (header material) = 0,1,2,3,4,6

i (fail safe mechanism) = N, H, L

j,k,l (special calibration) = eg: tolerances

46SW abcdefghijklm (-Z = CRN)

Where: a (port information) = A, B, C, D, E, F, G, H, I, J, K, L, M, N, P, R, S, T, U, V, W, Z

b (pressure range PSI) = 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11

c (pressure unit) = B, K, P, H, M

d (switch)= C, D, E, F

e (electrical connection) = T, U, W, X

f (header material) = 0, 1, 2, 3, 4, 6

g (pressure reference) = 0, 1, 2, A, C, G, V (Models with suffix G or V not suitable for Class II)

h (switching pressure) = 5 digits: 0 to 20000

i (switching direction) = F, R

j (hysteresis) = 2 digits: 05 to 95

k, l, m (special options) = eg: tolerances

APPLICABLE REQUIREMENTS

C22.2 No. 0-10 - General Requirements - Canadian Electrical Code, Part II



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C22.2 No. 25-1966 (R2009) - Enclosures for Use in Class II, Groups E, F and G Hazardous Locations

C22.2 No. 30-M1986 (R2012) - Explosion-Proof Enclosures for Use in Class I Hazardous Locations

C22.2 No. 142-M1987 (R2009) - Process Control Equipment

ANSI/ISA 12.27.01-2003 - Requirements for Process Sealing Between Electrical Systems and Flammable or Combustible Process Fluids

UL 508 (17th Ed.) - Industrial Control Equipment

UL 1203 (4th Ed.) - Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations

FM 3600 1998 - Electrical Equipment for Use in Hazardous (Classified) Locations - General Requirements

FM 3615 2006 - Explosionproof Electrical Equipment - General requirements

CAN/CSA-C22.2 No. 60079-0:11 - Electrical apparatus for explosive gas atmospheres - Part 0: General requirements

CAN/CSA-C22.2 No. 60079-1:11 - Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosures "d"

ANSI/ISA 60079-0:09 - Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements

ANSI/ISA 60079-1:09 - Electrical Apparatus for Explosive Gas Atmospheres - Part 1: Flameproof Enclosures "d"

CAN/CSA-C22.2 No. 60079-31:12 - Explosive atmosphere – Part 31: Equipment dust ignition protection by enclosure "t".

ANSI/ISA-60079-31:2013 - Explosive atmosphere – Part 31: Equipment dust ignition protection by enclosure "t".