Certificate of Compliance

Certificate: 2411253 **Master Contract:** 252588

Project: 70025514 **Date Issued:** 2016-01-12

Issued to: **Balluff Incorporated**
8125 Holton Dr
Florence, Kentucky 41042
USA
Attention: Jim Ramler

The products listed below are eligible to bear the CSA Mark shown

C US

US

Issued by: Scott Wallace
Scott Wallace

PRODUCTS

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT-For Hazardous Locations-
CLASS 2258 82 - PROCESS CONTROL EQUIPMENT-For Hazardous Locations - Certified to US Standards

Class I, Division 1, Groups ABCD; Class II, Division 1, Groups EFG; Class III; Enclosure Type 4X/6P
Class I, Zone 1, AEx d IIC T* Ga/Gb
Ex d IIC T* Gb
IP68

BTL5 series Linear Position Transducers, rated 10-30Vdc at 3W max. MWP of 60MPa
Ambient Temperature Range: -50°C to +65°C (**T6**) or -50°C to +80°C (**T5**)

BTL7 series Linear Position Transducers, rated 10-30Vdc at 5W max. MWP of 60MPa
Ambient Temperature Range: -50°C to +70°C (**T6**) or -50°C to +80°C (**T5**)

BTLx-**aci**-M**m**-J-DEXC-*-TA12-**no**
BTLx-**bcd**-M**m**-J-DEXC- *-TA12
BTLx-Q**cefg**-M**m**-J-DEXC- *-TA12
BTLx-S**ch**-M**m**-J-DEXC- *-TA12
BTLx-T**cj**0-M**m**-J-DEXC- *-TA12
BTLx-H**ckl**-M**m**-J-DEXC- *-TA12
BTL7-Vcqr-Mm-J-DEXC-*-TA12

x = 5 or 7
Q = Quadrature output
S = SSI output
T = Profibus DP output
H = CANopen output
V = EtherCAT output
a = Digital pulse output: I, K, L, M, N, P or R.
b = Analog output: A, B, C, E or G.
c = Supply voltage: 1 or 5.
d = Analog output signal characteristic: 0, 1 or 7.
e = Quadrature output signal frequency: 0, 1, 2 or 6.
f = Quadrature output resolution: 0, 1, 2, 3, 5, 6, 7 or 8.
g = Quadrature output mode/update rate: 0, 1, 2 or 4.
h = SSI output signal type, resolution and mode: Any alpha/numeric code (up to 3 digits) not effecting the Explosionproof protection method)
i = BTL7 P/M Interface without DPI/IP interface: 10. BTL7 P/M Interface with DPI/IP interface: 11. Blank for BTL5.
j = Profibus output software configuration: 1, 2 or 3.
k = CANbus output software configuration: 1, 2 or 3.
l = CANbus output baud rate: 0, 1, 2, 3, 4, 5, 6, 7 or 8.
m = Stroke length in millimeters (Maximums: BTL5 = 5080 & BTL7 = 7620)
n = Interrogation method (if a = "R", otherwise blank): E or I.
o = Recirculation count (if a = "R", otherwise blank): 1 to 16.
q = Number of magnets or address setting (Any alpha/numeric code not effecting the Explosionproof protection method)
r = Protocol type (Any alpha/numeric code not effecting the Explosionproof protection method)
***** = S or M = Special electrical or internal mechanical modifications not affecting scheduled drawings or the Explosion-proof/Flame-proof Protection methods and not exceeding 3W for the BTL5 and 5W for the BTL7. (may also be left blank)

Note: The IP68 rating includes a submersion rating of 167ft (51m) for 48 hours.

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APPLICABLE REQUIREMENTS

Canadian Requirements	
CAN/CSA Standard C22.2 No. 0-10	General Requirements - Canadian Electrical Code, Part II
CSA C22.2 No. 25-M1966	Enclosures for Use in Class H Groups E, F, and G Hazardous Locations
CSA C22.2 No. 30-M1986	Explosion-Proof Enclosures for Use in Class I Hazardous Locations - Industrial Products
CSA C22.2 No. 94.1-07	Enclosures for Electrical Equipment, Non-Environmental Considerations
CSA C22.2 No. 94.2-07	Enclosures for Electrical Equipment, Environmental Considerations
CSA C22.2 No. 142-M1987	Process Control Equipment - Industrial Products
CAN/CSA-C22.2 No. 60079-0:07	Electrical apparatus for explosive gas atmospheres – Part 0: General requirements
CAN/CSA-C22.2 No. 60079-1:07	Electrical apparatus for explosive gas atmospheres – Part 1: Flameproof enclosures "d"
CAN/CSA-C22.2 No. 60529:05	Degrees of protection provided by enclosures (IP Code)
US Requirements	
FM 3600-1998	Electric Equipment for use in Hazardous (Classified) Locations General Requirements
FM 3615-2006	Explosionproof Electrical Equipment - General Requirements
FM 3810-2005	Electrical Equipment for Measurement, Control and Laboratory Use
ANSI/ISA-60079-0 (12.00.01)-2009	Explosive atmospheres – Part 0: Equipment – General Requirements
ANSI/ISA-60079-1 (12.22.01)-2009	Explosive Atmospheres - Part 1: Equipment Protection by Flameproof Enclosures “d”
ANSI/UL 50, 12th Ed.	Enclosures for Electrical Equipment, Non-Environmental Considerations
ANSI/UL 50E, 1st Ed.	Enclosures for Electrical Equipment, Environmental Considerations
ANSI/IEC 60529-2004	Degrees of protection provided by enclosures (IP Code)
The following standard(s) were used in whole or in part as a guideline.	
ANSI/NEMA 250-2008	Enclosures for Electrical Equipment (1000 Volts Maximum)

MARKINGS

See Descriptive Report.

Supplement to Certificate of Compliance

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The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

Project	Date	Description
70025514	2016-01-12	Update to report 2411253 to include lower ambient temperature of -50°C, alternate housing cover materials Nitronics 60 and SS316L and European equivalent SS, new model BTL7, replaced o-ring for the cover, and update markings on the label to include French translations of the Explosive and Warning requirements for Canada. Report in Documentum.
2641874	2013-10-23	Update to report 2411253 with lower ambient ranges: -40°C to +65°C for temperature code T6, respectively -40°C to +80°C for temperature code T5.
2411253	2011-06-16	Original Certification - BTL5 Series Linear Position Transducer For Use in Hazardous Locations