



Member of the FM Global Group

FM Approvals
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CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

Inductive Proximity Sensor. Bia-bcd-ef-gjk*; Nia-bcd-ef-ghjk*; Sia-c-efk*
Inductive Magnet Operated Proximity Sensor. BIM-c-ef-ghjk*
Capacitive Proximity Sensor. BCa-c-efk*

IS / I,II,III / 1 / ABCDEFG T**, T_a **; IS-1.118A; Entity; I / 0 / AEx ia / IIC T**, T_a **; IS-1.118; Entity;

** T-Class is T5 when T_a = 70°C max, or T4 when T_a = 85°C max

Max Entity Parameters:

	V_{max}/U_i (V)	I_{max}/I_i (mA)	P (mW)	C _i (nF)	L _i (µH)
Sensors with Group 1 mechanical construction code	20	60	200	150	150
Sensors with Group 2 mechanical construction code	20	40(T5),50(T4)	200	150	150
Sensors with Group 3 mechanical construction code	20	60	200	250	350
Sensors with Group 4 mechanical construction code	20	40	200	250	350
Sensors with Group 5 mechanical construction code	20	60	130	150	150
Sensors with Group 6 mechanical construction code	20	60	130	250	350
Sensors with Group 7 mechanical construction code	20	40	130	150	150

a = Sensing distance in millimeters.

b = Housing material (cylindrical sensors only): E or blank

c = Mechanical construction code:

To verify the availability of the Approved product, please refer to www.approvalguide.com



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Group 1: AKT, DS20, DSU26, DSU35, DSU35TC, G05, G12, G12SK, G14, G18, G18SK, G180, G182, G19, G28, G30, G30SK, H04, H6.5, H08, HS540, IKE, IKT, INT, ISM, K11, K20, K30, M12, M18, M30, P12, P12SK, P18, P18SK, P30, P30SK, PSM, PST, PT30, Q5.5, Q06, Q10, Q10S, Q11S, Q12, Q14, Q6.5, Q20, QF5.5, S12, S18, S30

Group 2: G12_X, G12SK_X, G18_X, G18SK_X, G19_X, G30_X, G30SK_X, K20_X, M12_X, M18_X, M30_X, P30_X, S18_X, S30_X,

Group 3: CA25, CA40, CK40, CP40, CP80, G47, G47SR, K33, K34, K34SR, K40, K40SR, K90SR, Q25, Q30, Q80

Group 4: K90_X

Group 5: G08, GS880, H08, HS865, NST, PSM, PST, Q06, Q08, Q11, QST, DSU26, FST

Group 6: K08, K09, K10

Group 7: UNT

d = Housing modifier (cylindrical sensors only): E, K, M, T or blank

e = Output Y0, Y1, 2Y0, 2Y1, AY1 or AY0.

f = LED X, X2, X4 or blank.

g = Connector style B1, B2, H1, V1, or blank. (blank in this case is a 2 meter cord; or xM, where x is the cable length in meters *)

h = Connector/sensor transition 1, 3, 4 or blank

j = Wiring code 21, 31, 40, 41, 51, 60 or blank

k = Option /F1, /F2, /F3, /F4, /F5, /S15, /S56, /S74, /S80, /S85, /S90, /S97, /S101, /S105, /S139, /S213, /S235, /S250, /S326, /S328, /S346, /S557, /S561, /S580, /S595, /S665, /S901, /S918, /S947, /S1019, /S1128, /S1139, /S1589, /S1631, /S1674, /S1687, /S1764, /S1765, /S1775 or blank.

* Sensors with integral cable may include a molded connector indicated by the added suffix:

picofast connector PSG 3, PSGV 3, PSG 3.21, PSGV 3.21

eurofast connector RS 4.21T, RSV 4.21T, WS 4.21T, WSE 4.21T

minifast connector RSM 20, RSV 20, WSM 20, WSV 20

Specific Condition for use:

Parts of some of the enclosures are constructed from plastic. To prevent the risk of electrostatic sparking, the plastic surface should only be cleaned with a damp cloth.

Equipment Ratings:

Intrinsically Safe for Class I, II, and III, Division 1, Groups A, B, C, D, E, F and G; and Class I Zone 0 Group IIC; Temperature Class T-Class is T5 when Ta = 70°C max, or T4 when Ta = 85°C max, Entity, in accordance with control drawing IS-1.118 .

FM Approved for:

Turck Inc
3000 Campus Drive
Plymouth, MN 55441

To verify the availability of the Approved product, please refer to www.approvalguide.com

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This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

Class 3600	2011
Class 3610	2010
Class 3810	2005

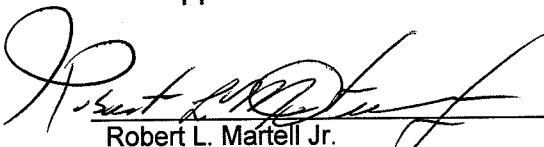
Original Project ID: 1F1A3.AX

Approval Granted: May 18, 1983

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
0T3H6.AX	September 3, 1992		
3044899	June 14, 2012		
130924	<i>October 5, 2013</i>		

FM Approvals LLC



Robert L. Martell Jr.
Assistant Vice President

October 5, 2013

Date

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