Certificate Number E199034

Report Reference E199034 -1999-06-11

Date 2022-May-05

Issued to: Pepperl+Fuchs SE

Lilienthalstrasse 200 Mannheim 68307 DE

This is to certify that representative samples of

TELEMETERING EQUIPMENT FOR USE IN HAZARDOUS

**LOCATIONS** 

See Addendum Page for Product Designation(s).

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 1203, Explosion-Proof and Dust-Ignition-Proof Electrical

Equipment for Use in Hazardous (Classified) Locations

Additional Information: See the UL Online Certifications Directory at

https://iq.ulprospector.com for additional information

This Certificate of Compliance does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.





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This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

#### CYLINDRICAL SWITCH SENSORS

Cylindrical Switch Sensors for use in Class I, Division 2, Groups A, B, C, and D Hazardous Locations. Models U, followed by B, C, or J, followed by a number, followed by a number, followed by G, followed by M, followed by E0, E2, E6, E7, or IU, followed by V1 or V15, followed by HA.

Cylindrical Switch Sensors for use in Class I, Division 2, Groups A, B, C, and D, Class II, Groups F and G, Class III Hazardous Locations. Models U, followed by B, C, or J, followed by a number, followed by G, followed by M, followed by E0, E2, E6, E7, or IU, followed by V1 or V15, followed by HB.

#### LIMIT SWITCH SENSORS

Limit Switch Sensors for use in Class I, Division 2, Groups A, B, C, and D Hazardous Locations. Models U, followed by J, BE, or C, followed by a number, followed by U4, followed by 8B, E6, E7, E22, IU, IUEO, IUE2, or SA2, may be followed by RS or R2.

#### SURFACE MOUNT FLAT PACK SENSORS

Surface Mount Flat Pack Sensors for use in Class I, Division 2, Groups A, B, C, and D Hazardous Locations. Models U, followed by B, C, or J, followed by a number, followed by FP or FP4, followed by E2, E6, E7, E22, IU, IUEO, or IUE2, may be followed by P4, may be followed by RS or R2. NOMENCLATURE:

#### CYLINDRICAL SWITCH SENSORS

U B 300 - 30 G M - E2 V1 - HA I II III IV V VI VII VIII IX

- I. Sensor Type
  - U Ultrasonic
- II. Series Designation
  - B Basic Series
  - C Classic Series with programming plug
  - J Classic Series
- III. Sensing Range (mm)



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- IV. Housing Diameter (mm)
- V. G-Threaded Housing
- VI. Housing Material

M - Metal

VII. Electrical Output

E0 - Switch point (NPN)

E2 - Switch point (PNP)

E6 - Dual switch point (PNP)

E7 - Switch point (NPN)

IU - Analog current/voltage

VIII. Connector Style

V1 or V15

IX. Hazardous Location Designation

HA - Class I, Division 2, Groups A, B, C, and D Hazardous

Locations (without mounting adapter)

HB - Class I, Division 2, Groups A, B, C, and D, Class II,

Division 2, Groups F and G, Class III Hazardous Locations

(with mounting adapter LIMIT SWITCH SENSORS

U J 3000 + U4 + 8B RS

I II III IV V VI

Sensor Type

U - Ultrasonic

II. Series Designation

J - Transceiver Series

BE - Thru-Beam Series

C - Classic Series

- III. Sensing Range (mm)
- IV. Housing Material

U4 - Metal



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### **Electrical Output**

8B - 8 Bit Digital

E6 - Dual switch point (PNP)

E7 - Switch point (NPN)

E22 - Dual switch point (PNP)

IU - Analog current/voltage

IUEO - Combination analog current/voltage and switch point (NPN)

IUE2 - Combination analog current/voltage and switch point (PNP)

SA2 - Normally Open or Normally Closed (PNP)

### VI. Computer Programmable Parameters

RS or R2 - RS232 SURFACE MOUNT FLAT PACK SENSORS

U J 6000 - FP - IU - P4 - RS I II III IV V VI VII

Sensor Type

U - Ultrasonic

II. Series Designation

**B** - Basic Series

C - Classic Series

J - Classic Series

Sensing Range (mm)

IV. Housing Style

FP - Flat Pack

FP4 - Metal housing with ½ in. NPT threaded conduit opening

**Electrical Output** 

E2 - Switch point (PNP)

E6 - Dual switch point (PNP)

E7 - Switch point (NPN)

E22 - Dual switch point (PNP)

IU - Analog current/voltage

IUEO - Combination analog current/voltage and switch point (NPN)

IUE2 - Combination analog current/voltage and switch point (PNP)



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VI. Housing Material

P4 - Metal with ½ in. NPT threaded conduit opening

VII. Computer Programmable Parameters

RS or R2 - RS232



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