

### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx UL 19.0045X	Issue No: 0	Certificate history
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Issue No. 0 (2019-07-25)
Status: Current

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Date of Issue: 2019-07-25

Applicant: **Dwyer Instruments, Inc.**102 Indiana Highway 212
Michigan City, IN, 46360

United States of America

Equipment: Differential Pressure Switches, Series 1950G

Optional accessory:

Type of Protection: Flameproof "db"

Marking:

Ex db IIB +  $H_2$  T6 Gb

Please see Annex for temperature information.

Approved for issue on behalf of the IECEx Katy A. Holdredge

Certification Body:

Position: Senior Staff Engineer

Signature:

(for printed version)

Date: 2019-07-25

- 1. This certificate and schedule may only be reproduced in full.
- 2. This certificate is not transferable and remains the property of the issuing body.
- 3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

UL LLC 333 Pfingsten Road Northbrook IL 60062-2096 United States of America



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Certificate No: IECEx UL 19.0045X Issue No: 0

Date of Issue: 2019-07-25

Manufacturer: **Dwyer Instruments, Inc.** 

102 Indiana Highway 212 Michigan City, IN, 46360 **United States of America** 

Additional Manufacturing location(s):

W.E. Anderson 250 Highgrove Grandview, MO 64030

United States of America

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

#### STANDARDS:

The apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2017 Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

IEC 60079-1: 2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:7.0

This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

#### **TEST & ASSESSMENT REPORTS:**

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

US/UL/ExTR19.0051/00

**Quality Assessment Report:** 

CA/CSA/QAR09.0006/10



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Schedule

#### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

The Series 1950G Differential Pressure Switches allow for the operation of a switch through means of an internal diaphragm. During operation, the differential pressure causes the displacement of the diaphragm, which in turn magnetically operates the switch.

Please see Annex for additional infomation.

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

- The cover bolts have a minimum property class of 10.9.
- Repairs to the flamepaths are only to be performed by Dwyer Instruments, Inc.

#### Annex:

Annex to IECEx UL 19.0045 Issue 0.pdf



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### **TYPE DESIGNATION**

### Nomenclature:

I – Basic Series Designation 1950G – 1950G Pressure Switch

II – Pressure Range Designation

00 - 0.07 to 0.15 In. WC

0 - 0.15 to 0.5 In. WC

1 – 0.4 to 1.6 ln. WC

5 – 1.4 to 5.5 ln. WC

10 - 3 to 11 In. WC

20 - 4 to 20 In. WC

III - Diaphragm and O-Ring Material Designation

B - Buna N

N - Neoprene

S - Silicone

V - Fluroelastomer

F - Flurosilicone

IV - Input Voltage Supply

24 - 24VDC

120 - 120VAC

240 - 240VAC



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### PARAMETERS RELATING TO THE SAFETY

The lower ambient temperature of the Series 1950G Differential Pressure Switches is dependent upon the O-Ring/Diaphragm material used within the construction based on the table below.

O-Ring/Diaphragm Material	Lower ambient temperature
Buna-N Neoprene	-17°C
Silicone Fluorosilicone	-40°C
Fluroelastomer	-1°C

Supply: 24 Vdc, 120 Vac or 240 Vac ± 10% Relay Contacts: 10A – 120/240 Vac, 28 Vdc Resistive 50mA – 125 Vdc



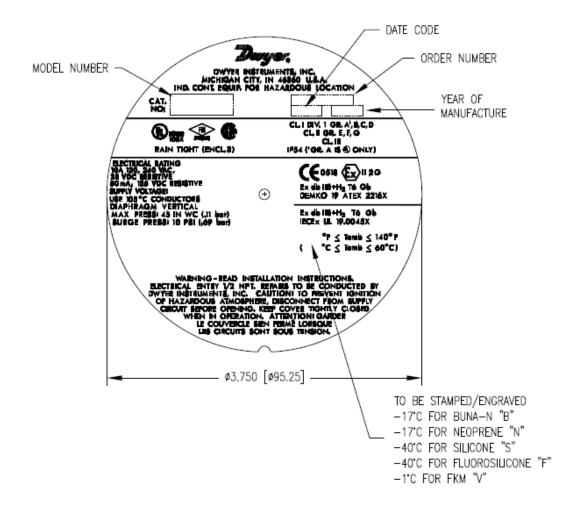
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### **MARKING**

NAMEPLATE OPTION 1:





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#### NAMEPLATE OPTION 2:

