

Digispec RF

85047 Intrinsically Instruction, Intrinsically Safe

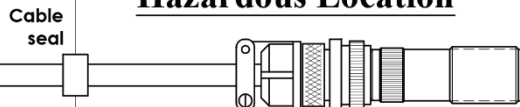
Non-Hazardous Location



(Associated Equipment)
 $V_{max}, U_i \geq U_o, V_{oc} \text{ or } V_t$
 $I_{max}, I_i \geq I_o, I_{sc} \text{ or } I_t$
 $C_o \text{ or } C_a \geq C_i + C_c$

$L_o \text{ or } L_a \geq L_i + L_c$
 $P_t \text{ or } P_o \leq P_i$

Hazardous Location



(Intrinsically Safe Equipment)
 $V_{max}, U_i = 30 \text{ Vdc}$
 $I_{max}, I_i = 100 \text{ mA}$
 $C_i = 0 \text{ nF}$ (For IS100, IS101, IS100A, IS101A, IS220, IS221, IS220A & IS221A)
 $C_i = 12 \text{ nF}$ (For IS90, IS90A, IS91, IS91A, IS160, IS160A, IS161, IS161A, IS170, IS170A, IS171 & IS171A)
 $L_i = 0 \text{ mH max.}$
 $P_{max}, P_i = 0.66 \text{ watts}$

Certifications for IS90A & IS91A,
IS100A & IS101A, IS160A & IS161A,
IS170A & IS171A, IS220A & IS221A

ATEX: II 1 G Ex ia IIC T6...T4 Ga
FM08ATEX0066X

IECEX: Ex ia IIC T6...T4 Ga
IECEX FMG 16.0003X
T4 @ $-40^\circ\text{C} \leq T_{amb} \leq +100^\circ\text{C}$
T5 @ $-40^\circ\text{C} \leq T_{amb} \leq +85^\circ\text{C}$
T6 @ $-40^\circ\text{C} \leq T_{amb} \leq +65^\circ\text{C}$

CE: Compliance with
EN55011, EN50082-2

Certifications for IS90 & IS91,
IS100 & IS101, IS160 & IS161,
IS170 & IS171, IS220 & IS221

USA: Intrinsically Safe
Class I, II, III, Division 1
Group ABCDEFG T6...T5
Class I, Zone 0, AEx ia IIC T6...T5

Canada: Intrinsically Safe
Class I, Division 1
Group ABCD T6...T5
Class I, Zone 0, Ex ia IIC T6...T5
T5 @ $-40^\circ\text{C} \leq T_{amb} \leq +85^\circ\text{C}$
T6 @ $-40^\circ\text{C} \leq T_{amb} \leq +65^\circ\text{C}$

1. Barrier must satisfy the electrical requirements listed above.

Barrier manufacturer's installation drawing must be followed when installing the system. For US installations, the Barrier configuration must be FM Global approved. See Bulletin 4003 for recommended barriers.

2. Installation to be in accordance with the following standards:

for US installations follow ANSI/ISA RP12.6 and the National Electrical Code ANSI/NFPA 70,

for Canadian installations follow the Canadian Electrical Code,

for ATEX installations follow EN 60079-14, for IECEX installations follow IEC 60079-14.

3. Control Equipment connected to associated equipment must not use or generate more than 250V.

4. Sensor must be mounted as part of a bonded structure.

5. Sensor should be de-energized before separating connector and sensor.

6. Aluminum housings: The mounting bracket contains aluminum and is considered to constitute a potential risk of ignition by impact or friction and must be taken into account during installation.

7. Lead Wires: Red/Vs+, Black/Common-, White/Vo Output A, Yellow/Vo Output B, Green/Direction

Connector:

