

ATEX Hazardous Area Approvals

Fisher™ i2P-100 Electro-Pneumatic Transducer

Hazardous Area Classifications and Special Instructions for “Safe Use” and Installation in Hazardous Locations

Certain nameplates may carry more than one approval, and each approval may have unique installation/wiring requirements and/or conditions of “safe use”. These special instructions for “safe use” are in addition to, and may override, the standard installation procedures. Special instructions are listed by approval.

Note

This information supplements the nameplate markings affixed to the product and the i2P-100 instruction manual ([D103198X012](#)), available from your [Emerson sales office](#).

Always refer to the nameplate itself to identify the appropriate certification.

⚠ WARNING

Failure to follow these conditions of “safe use” could result in personal injury or property damage from fire or explosion, and area re-classification.

Standards used for Certification

EN60079-0 Amd II 2013; EN60079-11: 2012; EN60079-1: 2014; EN60079-15: 2010; EN60079-31: 2014

All Approvals

All ATEX approved units come with a combined nameplate which carries multiple approvals (intrinsic safety and dust, flameproof and dust, and Type n and dust). During installation, only one type of protection method is allowed. The unit shall be marked by the end-user as to which protection method it was installed as and shall not be changed or utilized in any other manner than was originally marked by the end-user.

⚠ WARNING

For ATEX approvals only, end-user must select and mark only one protection method upon installation. Once marked it shall not be changed. Failure to follow these instructions will jeopardize the explosion safety of the transducer, and may result in personal injury or property damage.

Special Conditions for Safe Use

Intrinsically Safe

1. Before putting in service, the user shall permanently cross out the areas on the nameplate with the types of protection that are not applicable (Ex ia IIC T3..T5, Ex ia IIIC T95°C, Ex db IIC T5/T6, Ex tb IIIC T95°C, LCIE 15 ATEX 3008X or Ex nC IIC T5/T6, Ex tc IIIC T95°C LCIE 15 ATEX 1008X) or mark the selected type of protection. Once determined the type of protection may not be changed.
2. Because the enclosure of the i2P-100 transducer is made of aluminum, if it is mounted in an area where the use of category 1 G apparatus is required, it must be installed such, that, even in the event of rare incidents, ignition sources due to impact and friction sparks are excluded.
3. **Ambient temperature range:**
 - 40°C - + 46°C for temperature class T5
 - 40°C - + 81°C for temperature class T4
 - 40°C - + 85°C for temperature class T3

Electrical data:

Unit must be installed with appropriate I.S barrier with maximum entity ratings as follows:

Ui = 30 V ; li = 100 mA (resistively limited) ; Pi = 1 W ; Ci = 0 nF ; Li = 0 mH

Flameproof

1. Before putting in service, the user shall permanently cross out the areas on the nameplate with the types of protection that are not applicable (Ex ia IIC T3..T5, Ex ia IIIC T95°C, Ex db IIC T5/T6, Ex tb IIIC T95°C, LCIE 15 ATEX 3008X or Ex nC IIC T5/T6, Ex tc IIIC T95°C LCIE 15 ATEX 1008X) or mark the selected type of protection. Once determined the type of protection may not be changed.
2. Electrical connections are typically made using either cable or conduit.
 - If using a cable connection, the cable entry and closing devices shall be certified in type of protection flameproof enclosure “d”, suitable for the conditions of use and correctly installed. For ambient temperatures over 70°C, suitable heat resistant cables and cable glands shall be used.
 - If using a rigid conduit connection, a certified sealing device in type of protection flameproof enclosure “d”, such as a conduit seal with setting compound shall be provided immediately to the entrance of the valve housing. For ambient temperature over 70°C, suitable heat resistant wiring and setting compound for the conduit seal shall be used.
3. Repairs of flameproof joints should not be undertaken by the end user. In the event that flameproof joint must be repaired, contact the manufacturer.

Type n

1. Before putting in service, the user shall permanently cross out the areas on the nameplate with the types of protection that are not applicable (Ex ia IIC T3..T5, Ex ia IIIC T95°C, Ex db IIC T5/T6, Ex tb IIIC T95°C, LCIE 15 ATEX 3008X or Ex nC IIC T5/T6, Ex tc IIIC T95°C LCIE 15 ATEX 1008X) or mark the selected type of protection. Once determined the type of protection may not be changed.

Refer to table 1 for additional information.

Table 1. Additional Approval Information

Certificate	Certification Obtained	Entity Rating	Temperature Code
ATEX	Intrinsically Safe ⊕ II 1 GD Ex ia IIC T3/T4/T5Ga Ex ia IIIC T95°C (Tamb ≤ 85°C) Da	Ui = 30 VDC Ii = 100 mA Pi = 1.0 W Ci = 0 nF Li = 0 mH	T3 (Tamb ≤ 85°C) T4 (Tamb ≤ 81°C) T5 (Tamb ≤ 46°C)
	Flameproof ⊕ II 2 GD Ex db IIC T5/T6 Gb Ex tb IIIC T95°C (Tamb ≤ 855C) Db	---	T5 (Tamb ≤ 85°C) T6 (Tamb ≤ 69°C)
	Type n ⊕ II 3 GD Ex nC II T5/T6 Gc Ex tc III C T95°C (Tamb ≤ 85°C) Dc	---	T5 (Tamb ≤ 85°C) T6 (Tamb ≤ 69°C)

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