
NEPSI Hazardous Area Approvals for Fisher® 846 Current-to-Pressure Transducers Instruction Manual (D102005X012)

This supplement provides NESPI Hazardous Area Approval information for the 846 current-to-pressure transducer instruction manual. Use this in conjunction with information provided in the 846 instruction manual (D102005X012).

NEPSI—National Supervision and Inspection Centre for Explosion Protection and Safety of Instrumentation. NEPSI approval is accepted in China.

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. Refer to the instruction manual for all other information regarding the 846 current-to-pressure transducer.

Note

This information supplements the nameplate markings affixed to the product.

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.



Intrinsically Safe

Cert NO. GYJ12.1224X

Ex ia IIC T5/T4 Ga

Special Conditions for Safe Use

The suffix “X” placed after the certificate number indicates that this product is subject to special conditions for safe use, that is:

To avoid an ignition hazard due to impact or friction when product is installed in zone 0 with aluminum housing.

Conditions for Safe Use

1. The external earth connection facility shall be connected reliably.
2. The relationship between temperature class and ambient temperature range is shown as the following:

Temperature Class	T5	T4
Ambient Temperature Range	-40°C ~ +40°C	-40°C ~ +80°C

3. This product should be used in explosive gas atmospheres together with approved associated apparatus, follow the instruction manual of this product and associated apparatus when connecting the wiring. Connect the wiring terminals correctly.
4. Intrinsically safe input parameters:
 $U_i = 40 \text{ VDC}$, $I_i = 200 \text{ mA}$, $P_i = 1.0 \text{ W}$, $C_i = 8 \text{ nF}$, $L_i = 20 \mu\text{H}$
5. Connecting cable between this product and associated apparatus should be insulated screen cable; connect the cable screen functionally to earth ground at safe area.
6. The user shall not change the configuration in order to maintain/ensure the explosion protection performance of this product. Any change may impair safety.
7. For installation, use and maintenance of this product, the end user should observe the instruction manual and the following standards:

GB50257-1996: “Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering”.

GB3836.13-1997 “Electrical apparatus for explosive gas atmospheres Part 13: Repair and overhaul for apparatus used in explosive gas atmospheres”.

GB3836.15-2000: “Electrical apparatus for explosive gas atmospheres Part 15: Electrical installation in hazardous area (other than mines)”.

GB3836.16-2006: “Electrical apparatus for explosive gas atmospheres Part 16: Inspection and maintenance of electrical installation (other than mines)”.

Flameproof

Cert NO. GYJ12.1223X

Ex d IIB T6/T5 Gb

Special Conditions for Safe Use

The suffix “X” placed after the certificate number indicates that this product is subject to special conditions for safe use, that is:

1. For information on the dimensions of the flameproof joints contact the manufacturer.
2. The maximum system pressure shall not exceed 35 psi.

Conditions for Safe Use

1. The external earth connection facility shall be connected reliably.
2. The relationship between temperature class and ambient temperature range is shown as the following:

Temperature Class	T6	T5
Ambient Temperature Range	-40°C ~ +65°C	-40°C ~ +80°C

3. Electrical data:
Max. voltage: 12 VDC; Max. Current: 100 mA.
4. For the cable entry (1/2 NPT), appropriate cable gland with Ex marking at least Ex d IIB shall be used which is approved by ExTL in accordance with GB3836.1-2010 and GB3836.2-2010.
5. Obey the rules “Do not open when energized” or the area known to be non hazardous.
6. The user shall not change the configuration in order to maintain/ensure the explosion protection performance of this product. Any change may impair safety.
7. For installation, use and maintenance of this product, the end user should observe the instruction manual and the following standards:

GB50257-1996: “Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering”.

GB3836.13-1997 “Electrical apparatus for explosive gas atmospheres Part 13: Repair and overhaul for apparatus used in explosive gas atmospheres”.

GB3836.15-2000: “Electrical apparatus for explosive gas atmospheres Part 15: Electrical installation in hazardous area (other than mines)”.

GB3836.16-2006: “Electrical apparatus for explosive gas atmospheres Part 16: Inspection and maintenance of electrical installation (other than mines)”.

Neither Emerson, Emerson Process Management, nor any of their affiliated entities assumes responsibility for the selection, use or maintenance of any product. Responsibility for proper selection, use, and maintenance of any product remains solely with the purchaser and end user.

Fisher is a mark owned by one of the companies in the Emerson Process Management business unit of Emerson Electric Co. Emerson Process Management, Emerson, and the Emerson logo are trademarks and service marks of Emerson Electric Co. All other marks are the property of their respective owners.

The contents of this publication are presented for informational purposes only, and while every effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available upon request. We reserve the right to modify or improve the designs or specifications of such products at any time without notice.

Emerson Process Management
Marshalltown, Iowa 50158 USA
Sorocaba, 18087 Brazil
Chatham, Kent ME4 4QZ UK
Dubai, United Arab Emirates
Singapore 128461 Singapore

www.Fisher.com