# AIGNEP

### INSTRUCTION AND ADDITIONAL INFORMATION FLUIDITY



These instructions and additional information complete the standard instruction and service manual of **solenoid valves for fluids** intended for use in areas with the presence of potentially explosive atmospheres in compliance with **Directive 2014/34** / EU (ATEX).

#### **1** Characteristics of equipment

#### 1.1 Marking and explanations

All your equipments have the following label with explanations according to 2014/34/EU. Below is a general explanation and specification of the intended type of protection:

| $\left[ \right] \left[ \right] \left[ \right]$ | <b>Г</b> | <u>3 IIIB T6…T3 T80°C…T200°C Gb Db</u> -10°C <tamb<80°c< th=""></tamb<80°c<>   |
|--|----------|--|
|  |          | Le elettrovalvole ed i relativi accessori, modelli 01F, 02F, 03F, 04F, X1F, X2F, X4F, F1F, F2F, 05F, K2K, 02A presentano marcatura:  |
|  |          | II 2 G Ex h IIB T6T3 Gb -10°C <tamb<80°c<br>II 2 D Ex h IIB T80°C200°C Db -10°C <tamb<80°c< td=""></tamb<80°c<></tamb<80°c<br>   |
|  |          | Marcatura modo di protezione ("h" (ex "c") = l'attrezzatura è costruttivamente sicura); gruppo si gas/polveri; classe di temperatura e max T superficiale; EPL e marcatura supplementare per T ambiente di utilizzo (se diverse dallo standard -20°C <tamb<40°c).< td=""></tamb<40°c).<>   |
|  |          | h: l'attrezzatura è costruttivamente sicura  |
|  |          | T6T3 e T80°CT200°C / -10°C <tamb<80°c: ambiente="" di="" e="" marcatura="" per="" superficiale="" supplementare="" t="" td="" temperatura="" utilizzo.<=""></tamb<80°c:>   |
|  |          | G= gas o vapori; D=polveri   |
|  |          | II 2 apparecchiatura per impianti di superficie (II= apparecchiature da non utilizzare in miniere) con presenza di gas, vapori o polveri di categoria 2 (attrezzatura con un livello di sicurezza elevato in aunto non presenta pericoli di esplosione anche in presenza di un guasto prevedibile; può essere impiegata in aree con probabilità di presenza di atmosfere esplosive zona 1-2 e 21-22. |
|  | ►        | Simbolo di apparecchiatura ATEX  |
|  |          | Simbolo di marcatura CE  |

## 2 Warnings

Risk of explosion!



Follow and understand the instructions to avoid severe damage to persons or things! These instructions are related to an appropriate use of the equipment according to own destination of use.

Note: refer to the relevant specific instructions for accessory or other connected components

#### 2.1 Generalità

The equipment does not have sources of ignition in normal and dysfunction of operating conditions if the following measures are adopted:

- Use of ATEX certified accessories suitable to defined ATEX area
- Adoption of these additional instructions
- Adoption of the measures already foreseen by the manufacturer

#### 2.2 Installation

The installation must be carried out taking care that the product does not create interference, the fluids are compatible and an adequate level of ventilation must be provided.

#### 2.3 Classe di temperatura

The surface temperature depends on the external temperature and / or on the temperature generated by any friction, as well as that of the fluid (Ts). Solar radiation or other sources can affect the surface temperature. Make sure that the temperature is not higher than the ignition temperature. Respect the safety margins provided for by UNI EN 1127-1.

ATTENTION: for use in areas with dust clouds the surface Tmax must be 2/3 of the ignition temperature, while on the surfaces on which dust can be deposited the maximum temperature must be less than 75K of the minimum ignition temperature of the layer of powder (UNI EN 1127-1).

Temperature classes and maximum surface temperature:

| T1: 450 °C | T2: 300 °C | T3: 200 °C | T4: 135 °C | T5: 100 °C | T6: 85 °C |
|------------|------------|------------|------------|------------|-----------|
|------------|------------|------------|------------|------------|-----------|

Ambient temperature marking:

| Equ  | uipment  | Ambient temperature in service  | Additional marking  |
|------|----------|---|---|
| Nor  | ormal    | Maximum: + 40 °C<br>Minimum: - 20 °C                                    | None  |
| Part | rticular | Indicated by the manufacturer and specified in the instructions for use | Ta or Tamb with the particular range, for example: " $0^{\circ}C Ta + 40 \circ C$ " |

Where appropriate, provide adequate protections.

PLEASE NOTE: The ambient temperature and solar radiation or other heat sources can cause a rise in the surface temperature.

#### 2.4 Electrical continuity

The user must take care to ensure continuity and grounding in accordance with the applicable mandatory requirements.

#### 2.5 Cleaning and maintenance

The equipment and all equipment connected to it must be properly stored, handled and maintained in order to prevent the entry of material and the deposit of dust. Maintenance activities must be carried out exclusively by specialized personnel and as indicated by the manufacturer and with tools conforming to what is defined in Appendix A of the UNI EN 1127-1 standard or making sure that there is no explosive atmosphere. Do not make any changes (paint, etc.) to the products without the manufacturer's approval.

ATTENTION: AIGNEP S.p.A. guarantees the products only if used in compliance and according to the intended use indicated by the manufacturer. If the Customer does not communicate any additional requirements on the contractual documents, only the requirements expressed by the manufacturer and / or in the catalog are deemed to be satisfied.