



**INSTALLATION, SERVICE AND  
MAINTENANCE INSTRUCTIONS**

**ANNEX FOR CE ATEX REGISTERED EQUIPMENT UNDER  
DIRECTIVE 2014/34/EU:**

## **Ex BUTTERFLY VALVES**

**The contents of this Annex complements the information included in the instruction manual. The instructions of this Annex must also be observed whenever equipment registered under Directive 2014/34/EU is used.**

**If applicable, this Annex is complemented with the manuals of ATEX registered components which form part of the assembly (e.g., actuators, inductive sensors, etc.).**



**Original Manual**

10.001.30.01EN

(A) 2022/11

## EU Declaration of Conformity ATEX 2014/34/EU

We,

**INOXPA, S.A.U.**

Telers, 60  
17820 – Banyoles (Girona)

Hereby declare under our sole responsibility that the machine

**VALVE**

Model

**BUTTERFLY**

From serial number **IXXXXXXXXX** to **IXXXXXXXXX** <sup>(1)</sup>

Fulfills all the relevant provisions of Safety and Health from ATEX 2014/34/EU Directive and are adapted to the harmonized norms:

EN ISO 80079-36:2016  
EN ISO 80079-37:2016  
EN 1127-1:2019  
EN 13237:2012  
EN 15198:2007

This Declaration of Conformity covers equipment with the following ATEX marking:



II 2G Ex h IIB T6...T3 Gb

II 2D Ex h IIIB T85 °C...T200 °C Db

The technical documentation referenced 018028/15 is on file with the notified body INSTITUT NATIONAL DE L'ENVIRONNEMENT INDUSTRIEL ET DES RISQUES (INERIS), Parc Technologique Alata BP 2, 60550 Verneuil-en-Halatte, France. Reference num. 0080.

Signed by and on behalf of:

**INOXPA, S.A.U.**



David Reyero Brunet  
Technical Office Manager  
Banyoles, 2022

<sup>(1)</sup> the serial number may be preceded by a slash and by one or two alphanumeric characters

# 1. Safety

## 1.1. INSTRUCTION MANUAL

## 1.2. INSTRUCTIONS FOR START-UP

## 1.3. SAFETY

### 1.3.1. Warning symbols



**Danger. Important indications for protection against explosions.**

## 1.4. GENERAL SAFETY INSTRUCTIONS

### 1.4.1. During installation



To reduce danger originating from static electricity, the assembly should be grounded to ensure electric continuity between the pipes and valves.

### 1.4.2. During operation



The limit values of the working conditions in an explosive atmosphere should not be exceeded.



The valve was selected according to the working conditions specified by the user, for which INOXPA will not be liable for damages which may be caused from using the valve under different conditions to those indicated in the order, according to the ATEX (F-O-PED-01) form.

### 1.4.3. During maintenance



**Danger. Important indications for protection against explosions.**



An explosive atmosphere may be generated or may exist during the disassembly of the valve, for which reason safe work permits should be issued and these tasks should only be carried out by qualified and trained personnel.

### 1.4.4. In compliance with the instructions

Any nonfulfillment of the instructions may result in risk for the operators, the environment, the machine and the installations, and may result in the loss of any right to claim damages.

This nonfulfillment may result in the following risks (in addition to those already indicated in the manual):

- Generation of explosive atmospheres and risk of explosion.

## **1.5. GUARANTEE**

Any guarantee will be cancelled immediately and as a matter of law, in addition to any claim made by third parties for civil liability being payable to us (in addition to the conditions already indicated in the manual) in case:

- The material is used incorrectly or is not used according to the working conditions in the classified area, operating in a different classified area, temperature or pressure conditions and/or using a different substance.

## 2. Table of Contents

Sections in italics include changes with respect to the manual. The indications of these sections should be observed in addition to those of the valve manual.

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## 3. Receipt and installation

### 3.1. CHECK SHIPMENT



It should be checked that the valve received adheres to the working conditions in the classified area and the conditions of the order.

### 3.2. DELIVERY AND UNPACKING

#### 3.2.1. Delivery

#### 3.2.2. Unpacking

### 3.3. IDENTIFICATION

In case of ATEX valves, the following identification will be used on a complementary basis:



II 2G Ex h IIB T6...T3 Gb

II 2D Ex h IIIB T85 °C...T200 °C Db

The temperature class and the maximum surface temperature depend on the temperature of the product to be stirred and the ambient temperature.

Temperature class for explosive gas atmospheres

Temperature class	Product temperature (in process or cleaning)	Room temperature
T6	$\leq 60\text{ °C}$	-20 °C to +40 °C
T5	$\leq 75\text{ °C}$	
T4	$\leq 110\text{ °C}$	
T3	$\leq 140\text{ °C}$	

Maximum surface temperature for explosive dust atmospheres

Maximum surface temperature	Product temperature (in process or cleaning)	Room temperature
T85 °C	$\leq 85\text{ °C}$	-20 °C to +40 °C
T100 °C	$\leq 100\text{ °C}$	
T125 °C	$\leq 125\text{ °C}$	
T 200 °C	$\leq 200\text{ °C}$	

### 3.4. SITE

### 3.5. ASSEMBLY



To reduce danger originating from static electricity, the assembly should be grounded to ensure electric continuity between the pipes and valve.

### 3.6. CHECKING AND INSPECTION

### 3.7. WELDING



Safe work permits should be issued for any welding work in the presence of potentially explosive atmospheres, with it being advised that this type of work be carried out in unclassified atmospheres (there is no explosive atmosphere in the location of the valve during handling).

#### 3.7.1. Weld/weld butterfly valve

#### 3.7.2. Sandwich butterfly valve

#### 3.7.3. Valve with pneumatic operation



In case that the pneumatic actuator is not supplied by INOXPA, this should comply with the specifications of ATEX Directive 2014/34/EU and all the supplier's specifications should be observed at all times.

### 3.8. ACTUATOR AIR CONNECTION

#### RESPONSIBILITY FOR ATEX CERTIFICATION

In case that INOXPA, S.A. supplies a valve without actuator, control head or proximity detectors, the certification mark of protection against explosion is only relative to the valve. All the equipment mounted should have separate certification, furnished by the equipment manufacturer and, as a minimum, with the same or a grade higher of protection than the valve. The complete group should be separately certified by the equipment manufacturer and should include a different marking to that of the valve.

In case that INOXPA, S.A. supplies the complete group, the certification against explosion and the mark engraved on the valve itself will be relative to the specific group.

## 4. Start-up

### 4.1. STARTING



It should be verified that the valve received adheres to the working conditions in the classified area and the requested conditions.



Ensure that there is an electric continuity between the valve and the installation, as well as that the installation has electric grounding.  
Under no circumstances can the handlever be removed, since this would leave the butterfly electrically isolated.

### 4.2. OPERATION



Do not modify the operating parameters for which the valve/actuator have been designed without prior written authorization from INOXPA.



This valve was selected for a given set of working conditions in potentially explosive atmospheres when the order was placed in accordance with the ATEX (F-O-PED-01) Form. INOXPA will not be liable for any damage resulting from the incompleteness or inaccuracy of the information provided by the buyer (type of liquid, viscosity, classification of the potentially explosive area, gas generated by the potentially explosive atmosphere, etc.).

#### 4.2.1. Operation with two-position handlever

#### 4.2.2. Operation with multiposition handlever



## 6. Maintenance

### 6.1. GENERAL INFORMATION



The assembly and disassembly of the valves (with or without pneumatic operation) should only be carried out by qualified personnel, taking into consideration that safe work permits are required in the presence of potentially explosive atmospheres.



In case that the valve does not include the actuator, control head or proximity detectors, and the client wishes to install these, the specifications of ATEX Directive 2014/34/EU should be fulfilled.

### 6.2. MAINTENANCE

#### 6.2.1. Maintenance of joints

#### 6.2.2. Storage

#### 6.2.3. Spare parts

*On requesting replacement parts for a valve operating in a classified area, the order should explicitly indicate that these are for a valve for operation in an ATEX area, as well as the characteristics of this area.*

*In case this is not carried out, INOXPA will not be held responsible for the operation of the valve with parts inappropriate for the classified area where it is installed.*

### 6.3. CLEANING



Before commencing the disassembly and assembly work, the presence or the possible formation of potentially explosive atmospheres should be considered.

#### Cleaning of the exterior



The exterior of the unit must be cleaned to avoid excessive accumulation of combustible or explosive powder on the exterior surface of the unit. Under no circumstances should it be allowed to accumulate to a thickness in excess of 2 mm.

## 7. Assembly and disassembly



The assembly and disassembly of the valves (with or without pneumatic operation) should only be carried out by qualified personnel, with the need for the issuance of safe work permits being considered in the presence of potentially explosive atmospheres.

### 7.1. DISASSEMBLY/ASSEMBLY OF VALVE WITH TWO-POSITION HANDLEVER

### 7.2. DISASSEMBLY/ASSEMBLY OF VALVE WITH MULTIPOSITION HANDLEVER



Under no circumstances can the handlever be removed, since the butterfly would remain electrically isolated.

### 7.3. DISASSEMBLY/ASSEMBLY OF VALVE WITH PNEUMATIC ACTUATOR

### 7.4. ASSEMBLY OF JOINT

### 7.5. ASSEMBLY OPTIONS OF THE ACTUATOR



In case that the actuator is supplied by INOXPA, it should comply with the specifications of ATEX Directive 2014/34/EU and the supplier's specifications should be observed at all times.

## 8. Technical Specifications

Temperature range. See section 3.3.

### 8.1. TECHNICAL SPECIFICATIONS

#### PNEUMATIC ACTUATOR GENERAL DATA

**To prevent a considerable temperature rise, under no circumstances can the pneumatic actuator exceed 12 cycles per minute.**

**Under all circumstances, it is not recommended to exceed 2/3 cycles per minute to ensure a reasonable useful life of the joints.**