



INSTALLATION, SERVICE AND  
MAINTENANCE INSTRUCTIONS

**ANNEX FOR CE MARKED EQUIPMENT ACCORDING TO THE  
ATEX DIRECTIVE 2014/34/EU:**

## **INNOVA G Ex CONTROL VALVE**

**The content of this Annex supplements the information in the instruction manual. The instructions in this Annex must be taken into account in conjunction with the equipment marked according to Directive 2014/34/EU.**

**This Annex is complemented, if applicable, by the manuals of the ATEX-certified components comprising the assembly.**



**Original Manual**

10.247.30.07EN

(0) 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

### **CONTROL VALVE**

Model

### **INNOVA G**

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

Fulfills <sup>(2)</sup> 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 034044/18 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

<sup>(2)</sup> pneumatic actuator D/E make connection between the shaft and the actuator support, to ensure electrical continuity. Likewise, the turret must be in stainless steel

# 1. Safety

## 1.3. SAFETY

### 1.3.1. Warning symbols



**Danger! Important instructions for protection from explosions**

## 1.4. GENERAL SAFETY INSTRUCTIONS

### 1.4.1. During installation

**The reduce the danger from static electricity, the assembly should be earthed to ensure electrical continuity between pipes and valves**

### 1.4.2. During operation

**The limit values for the operating conditions in explosive atmospheres must not be exceeded**

**The valve was selected according to the working conditions specified by the user, therefore INOXPA is not responsible for any damage that may occur due to the use of valve under conditions other than those stated in the order**

### 1.4.3. During maintenance



**Danger! Important instructions for protection from explosions.**

**An explosive atmosphere may be generated or be present when removing the valve therefore safe work permits should be set and these tasks should only be carried out by qualified or trained personnel**

### 1.4.4. Compliance with the instructions

Failure to comply with the instructions may prove hazardous for operators, the environment, the machine and the installations, leading to a loss of rights for claiming damages.

This non-compliance may result in the following hazards (in addition to those already listed in the manual):  
- Generation of explosive atmospheres and risk of explosion.

#### **1.4.5. Warranty**

Any warranty will immediately be declared void, as of right, and we will be entitled to indemnity for any civil liability claim put forward by third parties (in addition to the conditions referred to in the manual):

- The material has been badly used or has not been used according to the conditions for working in the classified zone, in a different classified zone, in temperature or pressure conditions and/or different substance.

## 2. Table of Contents

The instructions provided in these sections of this Annex should be taken into account jointly with the valve manual.

|   |    |
|---|----|
| <b>1. Safety</b>                                  |    |
| 1.1. Instruction Manual                           | -- |
| 1.2. Implementation instructions                  | -- |
| 1.3. Safety                                       | 3  |
| 1.4. General safety instructions                  | 3  |
| <b>2. Table of Contents</b>                       |    |
| <b>3. General information</b>                     |    |
| 3.1. Description                                  | -- |
| 3.2. Application                                  | -- |
| <b>4. Installation</b>                            |    |
| 4.1. Delivery of the valve                        | 6  |
| 4.2. Transport and storage                        | -- |
| 4.3. Identification                               | 6  |
| 4.4. Positioning                                  | -- |
| 4.5. Flow direction                               | -- |
| 4.6. General Installation                         | 6  |
| 4.7. Checking and revision                        | -- |
| 4.8. Welding                                      | 6  |
| 4.9. Valve configuration with actuator            | -- |
| 4.10. Actuator air connection                     | -- |
| <b>5. Start-up</b>                                |    |
| 5.1. Uses of the valve                            | -- |
| 5.2. Start-up                                     | 7  |
| 5.3. Operation                                    | 7  |
| <b>7. Maintenance</b>                             |    |
| 7.1. General information                          | 8  |
| 7.2. Maintenance                                  | 8  |
| 7.3. Cleaning                                     | 8  |
| 7.4. Assembly and disassembly                     | 8  |
| 7.5. Removal / Installation of the INNOVA G valve | 8  |
| 7.6. Replacing the seat seal                      | -- |
| 7.7. Actuator assembly / disassembly              | -- |
| <b>8. Technical specifications</b>                |    |
| 8.1. Technical specifications                     | 11 |
| 8.2. Exploded view and parts list                 | -- |

## 4. Installation

### 4.1. DELIVERY OF THE VALVE

**It should be checked that the valve received is adjusted to the working conditions in the classified zone as well as the order conditions**

### 4.3. IDENTIFICATION

ATEX valves should be identified in a complementary manner:



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

II 2D Ex h IIB 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                | ≤ 60 °C                                      | -20 °C to +40 °C |
| T5                | ≤ 75 °C                                      |                  |
| T4                | ≤ 110 °C                                     |                  |
| T3                | ≤ 140 °C                                     |                  |

Maximum surface temperature for explosive dust atmospheres

| Maximum surface temperature | Product temperature (in process or cleaning) | Room temperature |
|-----------------------------|--|------------------|
| T85 °C                      | ≤ 85 °C                                      | -20 °C to +40 °C |
| T100 °C                     | ≤ 100 °C                                     |                  |
| T125 °C                     | ≤ 125 °C                                     |                  |
| T 200 °C                    | ≤ 200 °C                                     |                  |

### 4.6. GENERAL INSTALLATION

**To reduce the danger from static electricity, the assembly should be earthed to ensure electrical continuity between pipes and valves**

### 4.8. WELDING

**Safe work permits must be set for any welding work in potentially explosive atmospheres; it is recommended to this kind of work in non-classified atmospheres (there is no explosive atmosphere in the valve's location during handling)**

## 5. Start-up

### 5.2. START-UP

**It should be checked that the valve received is adjusted to the working conditions in the classified zone as well as the order conditions**

**Ensure electrical continuity between the valve and the installation, as well as connecting the installation to earth**

**The stem and the body are connected to ensure electrical continuity (in case of DE double effect actuator)**

### 5.3. OPERATION

**Do not modify the operating parameters for which the valve has been designed without prior written authorisation from INOXPA**

**The valve was selected for certain working conditions in potentially explosive atmospheres at the time of placing the order. INOXPA is not liable for any damage that may arise if the information provided by the buyer is incomplete or incorrect (liquid type, viscosity, classification of the potentially explosive area, gas generated by the potentially explosive atmosphere, etc.)**

# 7. Maintenance

## 7.1. GENERAL INFORMATION

The assembly and disassembly of the valves must only be carried out by qualified personnel, taking into account the need to adopt safe working conditions in potentially explosive atmospheres

If the positioning head is not supplied with the valve, and the client wants them installed, the specifications of Directive 2014/34/EU ATEX must be met

## 7.2. MAINTENANCE

### 7.2.3. Spare parts

*On requesting spare parts for a valve intended to work in a classified zone, it is necessary to explicitly indicate in the order that they are for valve operating in an ATEX zone, as well as the characteristics of said zone.*

*If the spare parts are not requested in this way, INOXPA shall not be responsible for the case that the valve may not operate with parts which are not suitable for the classified zone where is installed.*

## 7.3. CLEANING

Before beginning the disassembly and assembly work it should be taken into account the presence or possible formation of potentially explosive atmospheres

## 7.4. ASSEMBLY AND DISASSEMBLY



The assembly and disassembly of the valves must only be carried out by qualified personnel, taking into account the need to adopt safe working conditions in potentially explosive atmospheres.

## 7.5. REMOVAL / INSTALLATION OF THE INNOVA G VALVE

The stem and actuator support are connected to ensure electrical continuity, only for double effect actuator (DE)

### 7.5.1. Disassembly:

1. Apply compressed air to the actuator so that the plug stem (08) is in the open position (only for NC valves).
2. Loosen and separate the clamps (34).
3. Separate the actuator (10) from the body assembly.
4. Remove the seal (20B) from the lower opening (02).
5. Release the compressed air in the actuator (only NC valves).
6. Unscrew the Allen bolts (23) from the lantern (21).
7. Unscrew the plug stem (08) from the actuator shaft two 17 mm crescent spanners.



8. Finish unscrewing the plug stem by hand.
9. Once the plug stem is out, remove the body cap (12) and the seals inside it (20B and 05)
10. Extract the guide bushing (17) and the scraper (60), and take out the washer with the electrical continuity connection cable.
11. Extract the seat seal (05C), and the washer with the electrical continuity connection cable.

#### 7.5.2. Assembly:

1. Loosen the scraper (60), the electrical continuity connection cable and the guide bushing (17) on the lantern (21).
2. Insert the lantern (21) underneath the actuator.
3. Lubricate the seals with soapy water if necessary.
4. Install the seals (20B and 05) in the body cap (12) and put this assembly in the lantern.
5. Install the seat assemblies (05C, 05E).
6. Once the seat assembly (05C) is installed, house the washer with the electrical continuity connection cable on the plug stem (08); thread the same with the actuator shaft (10).
7. Tighten the four Allen bolts (23) that secure the lantern (21) to the actuator.
8. Apply compressed air to the actuator so that the plug stem (08) is in the open position (only for NC valves).
9. Install the seal (20B) on the lower opening (02).
10. Install the lower opening (02) and the intermediate body (01) and ensure the assembly is using a clamp.
11. Install the actuator (10) - lantern (21) - plug shaft (08) - body cap (12) assembly to the valve body (01) (can be turned 360° according to the user's needs) and secure it using the clamp (34).
10. Release the compressed air in the actuator (only NC valves).

## 8. Technical Specifications

Temperature range. See section 4.3.

### **PNEUMATIC ACTUATOR GENERAL DATA**

**The pneumatic actuator cannot exceed, under any circumstances, the 12 cycles per minute to ensure that there is no significant increase in temperature.**

**In any case, in ongoing work it is not recommended to exceed the 2/3 cycles per minute to ensure a reasonable life of the seal.**