

ATEX DIRECTIVE 2014/34/EU DOCUMENTATION

DECLARATION OF CONFORMITY

VALVE INSTALLATION AND MAINTENANCE INSTRUCTIONS

DESCRIPTION OF LABEL ELEMENTS



Declaration of Conformity in accordance with Directive 2014/34/EU

The manufacturer

MIVAL S.r.I.

Via Montecastello, 53 13037 Serravalle Sesia (VC) - Italy Tel: +39 0163 452600 - Email: info@mival.it www.mival.it

declares that the equipment described in this declaration has been subjected to the evaluation procedure relating to "internal production control" (as per Annex VIII) and complies with the requirements of Directive 2014/34/EU (ATEX), relating to equipment and protective systems intended for use in potentially explosive atmospheres.

Description of the equipment

Valves for industrial plants:

- Maintenance-free streamlined flow valves with bellows
- Traditional-type streamlined flow valves
- Check valves
- · Wafer valves
- · Dual function valves
- Strainers

Materials: cast iron, nodular cast iron, carbon steel, stainless steel

Nominal diameters: DN 15 - DN 300 Nominal pressures: PN 16 - PN 40

Name of the notified body holding the technical file

ATEX notified body 2261

TÜV CYPRUS (TÜV NORD) Ltd, 2 Papaflessa Str., 2235 Latsia, Nicosia, Cyprus

Deposit receipt no. 0207295 dated 27/03/2025

Harmonized standards applied

UNI FN 1127-1:2019 Explosion prevention and explosion protection.

Fundamental concepts and methodology.

UNI EN 13463-1:2009 Non-electrical equipment intended for use in potentially explosive atmospheres.

Basic method and requirements.

UNI EN 15198:2008 Methodology for the risk assessment of non-electrical equipment and components intended for use

in potentially explosive atmospheres.

Other standards, community directives and technical specifications of reference

UNI EN 1092-1:2018 Circular flanges for pipes, valves, fittings and accessories designated by PN.

Steel flanges.

UNI EN 1092-2:2024 Circular flanges for pipes, valves, fittings and accessories designated by PN.

Cast iron flanges.

UNI EN 12266-1:2012 Testing of metal valves. Pressure tests, test procedures and acceptance criteria.

Mandatory requirements.

UNI EN 12266-2:2012 Testing of metal valves. Tests, test procedures and acceptance criteria.

Additional requirements.

Dir. 2014/68/UE Pressure Equipment Directive (PED).

> Identification of the signatory who has the power to commit the manufacturer or his authorized representative established in the European Community

Name and surname: Rossi Paolo

Title: Administrator

Signature:

Date: 27/03/2025

Doc. rev. 27/03/2025

Premise

The valves listed in this manual are intended for use in areas with potentially explosive atmospheres.

Storage and preservation

When leaving the factory, valves are equipped with protective caps for the internal parts of the valve, which must not be removed until the time of installation.

Furthermore, the valves must be stored in a clean, dry and safe environment (do not subject the valves to impacts) until the moment of their installation

Installation

Verify that the valve is suitable for the environment in which it will be installed, through the classification shown on the ATEX plate. In case of installation in seismic zones or extreme climatic conditions, consult MIVAL in advance.

End users are responsible for verifying the compatibility of the product with the specific application, i.e. the pressure and nature of the process fluid, and therefore its suitability and reliability with the product.

Before installing the valve on the pipe, remove the caps from the flanges and check that no dirt has gotten inside; if so, remove it carefully and, if possible, use compressed air for better cleaning.

Install the valve in a position where maintenance can be carried out easily and without danger.

Place the valve between the counterflanges, taking care to center the gaskets as much as possible on the flange projections and insert all the bolts with their nuts. Finally, tighten them with a diametrically opposite frequency to obtain uniform crushing of the gaskets.

The valve must be installed in a stable manner on the pipe, positioning it, if possible, near fixed points (Img.1).

All the linkages will have to be checked again and tightened if necessary after having put the valve into operation, paying attention to the surfaces as they could be particularly hot.

Connect the earth terminal, located at the end of the plate, to the general earth line. The terminal is equipped with an anti-rotation and anti-loosening system. The conductor wire must have a section of no less than 4 mm² (lmg.1).

Appropriate insulation is always recommended in order to reduce the risk of ignition within the potentially explosive atmosphere caused by high surface temperatures.

Do not introduce fluids into the valve that can generate surface temperatures higher than the minimum ignition temperature of the potentially explosive atmosphere in which it is installed.

In case of addition of electrical and/or electronic components for the movement or control of some valve function, they must be chosen and installed in compliance with the protection requirements prescribed by Directive 2014/34/EU ATEX and certified for their safe use. For more information, contact MIVAL directly.

Maintenance

All maintenance work that will be carried out on the valve must be carried out by expert and competent personnel to avoid errors that could cause dangerous malfunctions of the valve.

Do not service a valve without first completely depressurizing it and cleaning it of any residues of toxic, explosive or flammable substances.

When carrying out maintenance operations, the personnel in charge must only use tools that do not generate sparks, which are possible sources of ignition for the potentially explosive atmosphere, and wear the required personal protective equipment.

Carry out preventive lubrication every six months, or every 1000 operations, of all components exposed to the potentially explosive atmosphere subject to friction.

For external screw valves, lubricate the bushing through the grease nipple located under the handwheel (Img.2/1); while to lubricate the stem, insert grease through the grease nipple located above the handwheel (Img.2/2). If it is necessary to replace worn or oxidized components, use only original spare parts.

Any leakage from the valve could occur through three points: between the counterflange and the valve flange, between the body and the bonnet or from the stuffing box (Img.3).

It is therefore necessary to periodically check the tightness of all the valve bolts, taking up all the play that may have been created. Periodically check and tighten the sealing components (stuffing gland).

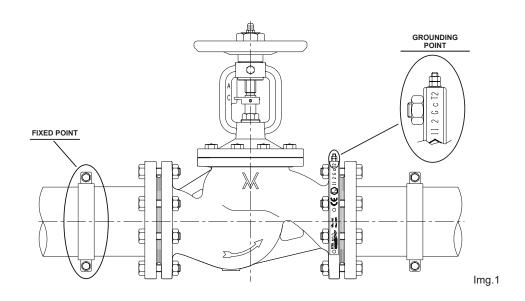
It is strictly forbidden to use open flames or any other device that may release heat, sparks or flames in the vicinity of the valve.

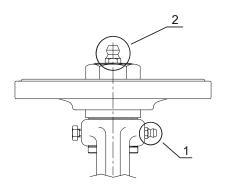
To avoid risks related to the accumulation of electrostatic charges on insulating materials, it is essential to clean the valve only with antistatic or wet cloths.

All parts of the valve are painted with a thickness of less than 2 mm as prescribed by the UNI EN 13463-1:2003 standard; therefore it is strictly forbidden to repaint the valve without first consulting MIVAL.

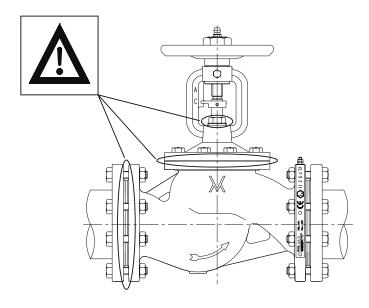
Check the external condition of the equipment on a monthly basis, ensuring that there are no parts damaged by rust.

In case of external oxidation, replace the damaged parts. In case of malfunction or damage, we recommend sending the valve to MIVAL, which will repair or replace it.





Img.2



DESCRIPTION OF ELEMENTS PRESENT ON THE ATEX LABEL LOCATED ON THE VALVE FLANGE



MIVAL S.r.I. Via Montecastello, 53 13037 Serravalle Sesia (VC) www.mival.it info@mival.it - 0163/452600	Logo, name and address of the manufacturer
C€	European Community mark
⟨£x⟩	Mark of conformity to directive 2014/34/EU and related technical standards
II Ex h II C	Group II: for potentially explosive industrial environments (other than mines); h: generic protection; II C: for highly flammable gases or dusts (e.g. hydrogen)
T 2 Gb	T 2: max surface temp. 300°C Gb: high level of protection for gas (zone 1)
T 300° Db	T 300°: max surface temp. 300°C Db: high level of protection for dust (zone 21)
(TERRA	Indication of the point set up for connection to the general earthing line (conductor section > 4mm²)

Note: Code, production lot and year of production can be found on the valve flange

FLUID WORKING	CONDITIONS
According to EN 1092-1	/ 1092-2 standards

PRESSURE-TEMPERATURE RATIO

Material	PN	Temperature [°C]							*		
	PN	-20	-10	100 120 150 20	200	250	300	* undefined			
EN-GJL-250	16	-	16	16	16	14.4	12.8	11.2	9.6		
EN-GJS-400-18-LT	16	16	16	16	16	15.5	14.7	13.9	12.8	_	
EN-GJS-400-18-LT	25	25	25	25	25	24.3	23	21.8	20	re [bar]	
P250GH	40	-	40	37.3	*	34.7	30.2	28.4	25.8	Pressure	
GP 240 GH+N	40	-	40	37.3	*	34.7	30.2	28.4	25.8	_	
GX5CrNiMo 19-11-2	40	-	40	37.3	*	33.8	31.1	29.3	27.6		