

	MECA-INOX	Ref.:	UM-2PCS-MANUAL-R2-v0
		Date:	2024/03/15
	R2 FLANGED 2-PIECE VALVE INSTALLATION AND OPERATING MANUAL	Edit:	JVE
		Approval:	ENE

## R2 Flanged 2-Piece Valve

# INSTALLATION AND OPERATING MANUAL



	MECA-INOX	Ref.:	UM-2PCS-MANUAL-R2-v0
		Date:	2024/03/15
	R2 FLANGED 2-PIECE VALVE INSTALLATION AND OPERATING MANUAL	Edit:	JVE
		Approval:	ENE

# INDEX

1	Foreword .....	3
2	Storage and transport .....	3
2.1	Storage .....	3
2.2	Transport.....	3
3	Installation manual.....	3
3.1	Precautions before installation.....	3
3.2	Installation .....	4
3.3	Commissioning.....	4
4	User Manual .....	5
4.1	Principle .....	5
4.2	Usage .....	5
4.3	Operating Range .....	5
5	Maintenance.....	6
6	Contact us.....	6

	MECA-INOX	Ref.:	UM-2PCS-MANUAL-R2-v0
		Date:	2024/03/15
	R2 FLANGED 2-PIECE VALVE INSTALLATION AND OPERATING MANUAL	Edit:	JVE
		Approval:	ENE

# 1 Foreword

This manual covers the installation and usage instructions for Meca-Inox R2 2-piece ball valves. Before using the valve, please read the entire manual carefully and ensure everything is clear. If in doubt, please contact Meca-Inox.

The R2 2-piece ball valves should be used under service conditions within the range defined by the pressure/temperature diagram (classification is determined by the body and seat materials). Using the valve outside this range may result in body or valve part failure and fluid leakage.

# 2 Storage and transport

## 2.1 Storage

Before installation, ensure that the valves are:

- Stored in a clean, dry, and non-corrosive atmosphere.
- Kept away from heat or direct sunlight.
- Kept in their original packaging to avoid damage or dirt accumulation. The protective caps should be kept in place and removed just before installing the valve.

Do not keep the ball valves in an intermediate position for an extended period, as this could damage the seats.

## 2.2 Transport

Lifting and handling should only be performed by qualified personnel. When handling the valves, appropriate equipment and accessories (straps, fasteners, hooks, etc.) must be sized and selected according to the weight of the valve.

Do not lift the valve by its handle, as they are not designed to support the weight of the entire valve. Doing so could lead to damage to the handle or valve and result in injury.

# 3 Installation manual

## 3.1 Precautions before installation

- Check the integrity of the valve’s packaging and ensure the valve is clean and the ends are protected by protective covers.
- Open the valve’s packaging and remove the protective covers from the ends.

	<b>MECA-INOX</b>	Ref.:	UM-2PCS-MANUAL-R2-v0
		Date:	2024/03/15
	R2 FLANGED 2-PIECE VALVE INSTALLATION AND OPERATING MANUAL	Edit:	JVE
		Approval:	ENE

### Space requirements :

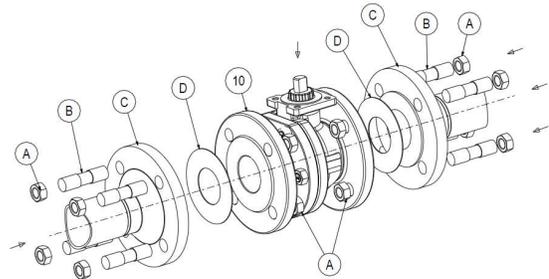
- Before positioning the valve on the line, ensure that the pipes do not exert stress on the valve. There should be no misalignment between the upstream and downstream pipes. Additionally, the piping should be designed to avoid excessive stress due to temperature variations.
- Leave sufficient space to allow for valve operation.
- Keep in mind that enough space is necessary for assembly and potential maintenance of the valve.

### 3.2 Installation

- Place the valve to allow for proper operation once mounted.
- The valves should remain assembled during installation on the pipeline.

Note : the valves can be heavy and must be adequately supported during installation.

- 1) Position the two lower threaded studs (B) through the pipe flanges and the valve flanges.
- 2) Insert the flange gaskets (D) between the flanges (C and 10).
- 3) Pass the remaining threaded studs through the flanges (C and 10)
- 4) Position the nuts (A) on the threaded studs (B).
- 5) Tighten the nuts (A) on the threaded studs (B). Refer to the applicable standard for the flange tightening torques.



### 3.3 Commissioning

During hydrostatic tests, it is also necessary to check the quality and cleanliness of the fluid used beforehand. The fluid must be clean and free of any particles (particles can cause damage to the valve internals during operation).

Pipeline cleaning should be performed with the valve initially open. This allows for the removal of welding debris or preparation residues.

	<b>MECA-INOX</b>	Ref.:	UM-2PCS-MANUAL-R2-v0
		Date:	2024/03/15
	R2 FLANGED 2-PIECE VALVE INSTALLATION AND OPERATING MANUAL	Edit:	JVE
		Approval:	ENE

## 4 User Manual

### 4.1 Principle

The R2 2-piece valve is primarily used for on/off applications. It allows fluid flow when fully open and cuts off the line when closed.

**Caution:** It is not recommended to use the valve in an intermediate position, as this could cause seat deformation and eventually lead to leakage.

### 4.2 Usage

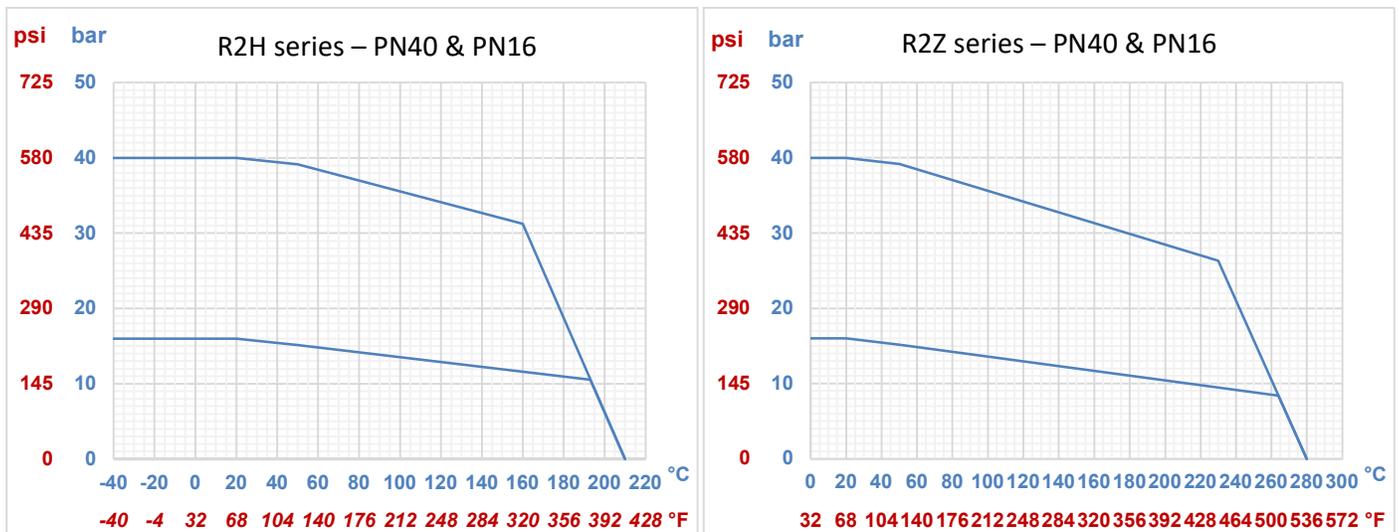
Turn the handle/lever clockwise to close the valve or counterclockwise to open it. Ensure not to apply excessive upward or downward force during operations.

#### Flow Direction Indication

- In the open position, the control element is aligned with the piping, allowing fluid/gas to pass through the valve.
- In the closed position, the control element is perpendicular to the piping, preventing fluid or gas from passing.

A stop is located on the mounting plate to prevent operations beyond the full open and full closed positions. Operations are performed at a 90-degree angle.

### 4.3 Operating Range



	MECA-INOX	Ref.:	UM-2PCS-MANUAL-R2-v0
		Date:	2024/03/15
	R2 FLANGED 2-PIECE VALVE INSTALLATION AND OPERATING MANUAL	Edit:	JVE
		Approval:	ENE

## 5 Maintenance

Please refer to the maintenance manual.

## 6 Contact us

### MECA-INOX

1, rue de la Croix des Maheux  
95031 CERGY-PONTOISE CEDEX (France)

Tel.: +33 (0) 1 78 47 80 00

Fax: +33 (0) 1 78 47 80 01

Email: [infos@meca-inox.com](mailto:infos@meca-inox.com)

Web: [www.meca-inox.com](http://www.meca-inox.com)