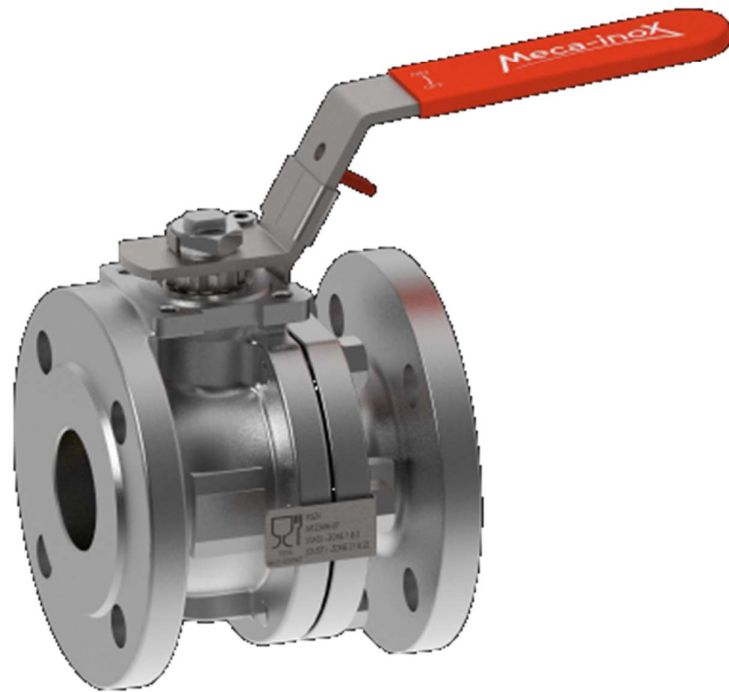

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	R2 Flanged 2-Piece Valve MAINTENANCE MANUAL	Date:	2024/03/15
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R2 Flanged 2-Piece Valve


MAINTENANCE MANUAL



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1 Foreword

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

Before any intervention, ensure that the valves will be properly supported in position after being disconnected from the piping. The use of textile slings wrapped around the valve body is highly recommended.

2 Guidelines


2.1 Recommendations

To avoid any risk of leaks or malfunctions due to degradation or wear, the user is required to conduct a campaign of inspection and preventive maintenance. The nature and frequency of maintenance will depend on the operating conditions of the valve.

To reduce operational problems and extend the valve's lifespan, the following points must be observed:

- Replace all sealing parts during maintenance.
- Use only spare parts produced by Meca-Inox.
- A valve operation every six months is recommended.

It is recommended to keep spare parts kits in stock to perform maintenance as required.

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2.2 Spare parts

Sealings

Including:

- 2 x seats
- 1 x gasket
- 1 x set of gland packing
- 1 x stem thrust seal


DN	R2Z series	R2H series
15	POCH-R2Z015-P1	POCH-R2H015-P9
20	POCH-R2Z020-P1	POCH-R2H020-P9
25	POCH-R2Z025-P1	POCH-R2H025-P9
32	POCH-R2Z032-P1	POCH-R2H032-P9
40	POCH-R2Z040-P1	POCH-R2H040-P9
50	POCH-R2Z050-P1	POCH-R2H050-P9
65	POCH-R2Z065-P0	POCH-R2H065-P9
80	POCH-R2Z080-P0	POCH-R2H080-P9
100	POCH-R2Z100-P0	POCH-R2H100-P9
150	POCH-R2Z150-P0	POCH-R2H150-P9
200	POCH-R2Z200-P0	POCH-R2H200-P9

Ball

DN	All series
15	401509 2PNI
20	402009 2PNI
25	402509 2PNI
32	403209 2PNI
40	404009 2PNI
50	405009 2PNI
65	406509 2PNI
80	408009 2PNI
100	410009 2PNI
150	415009 2PNI
200	420009 2PNI

Stem

DN	All series
15	041505 P4NI
20	042005 P4NI
25	042005 P4NI
32	043205 P4NI
40	043205 P4NI
50	445005 2PNI
65	406505 2PNI
80	406505 2PNI
100	410005 2PNI
150	412505 2PNI
200	420005 2PNI

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3 Operating Guide

3.1 Disassembly of the valve from the piping

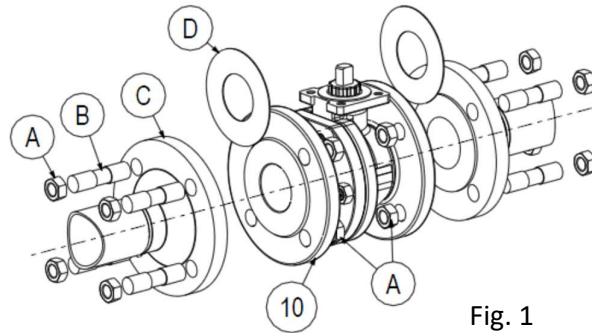


Fig. 1

- 1) Loosen the nuts (A) and remove the threaded studs (B).
- 2) Extract the two flange gaskets (D) (Fig. 1).

3.2 Disassembly of the operating device

- If the valve is manual, disassemble the lever as shown in Fig. 2.
- For an actuated valve, disconnect the actuator from the valve, as well as the support yoke and the drive coupling, as illustrated in Fig. 3.

WARNING: For actuated valves, the actuators must be disconnecte from their power source (air or electricity) before any maintenance operations. This is necessary to avoid any risk of accident.

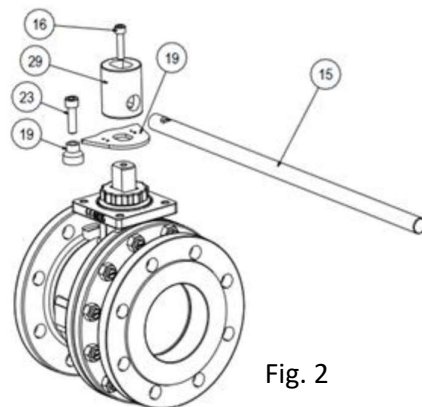


Fig. 2

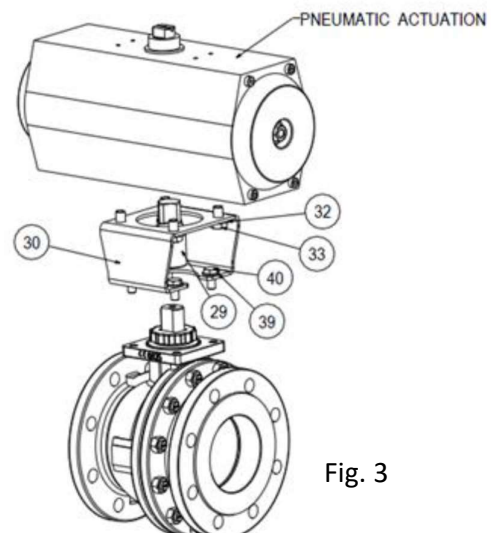

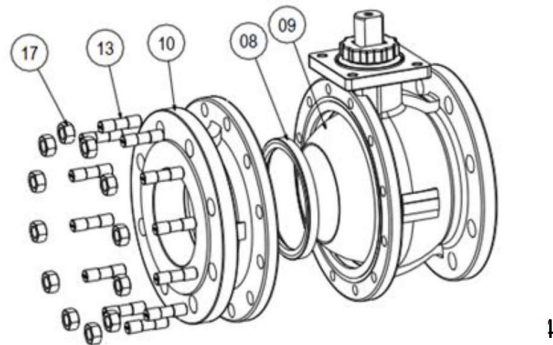


Fig. 3

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3.3 Disassembly of the valve



Ensure that the valve is in the open position before disassembly. Operate the stem if necessary.

- 1) Loosen the studs (13) and nuts (17) (Fig. 4).
- 2) Remove the spool (10) from the valve body.

3.4 Replacement of seats (08) and body gasket (14)

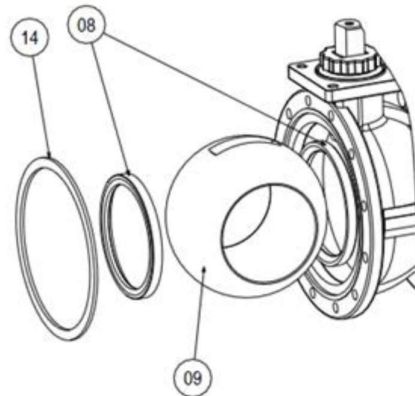



Fig. 5

- 1) Turn the stem 90 degrees. The ball is then in the closed position and can be removed from the body.
- 2) Remove the seats (08) and the body gasket (14) (Fig. 5).
- 3) Replace the seats (08) and body gasket (14) with new ones.

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3.5 Extraction of the ball

- 1) Turn the stem a quarter turn to position the ball in the closed position.
- 2) Remove the ball (09) (Fig. 5).

Notes :

- Visually inspect the surface of the ball. The presence of significant marks on it may cause leaks or premature wear of the seats.
- If necessary, clean the surface of the ball with a clean cloth.
- Make sure to keep the ball protected when it is not mounted in the valve.

3.6 Replacement of the stem packing (06) and thrust washer (04)

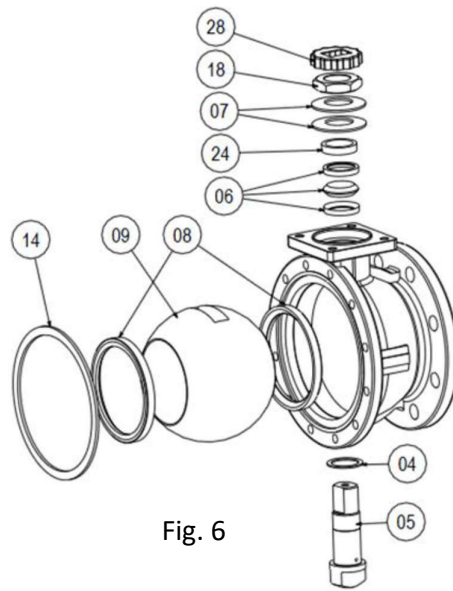



Fig. 6

- 1) Remove the nut lock (28) and loosen the nut (18) (Fig. 6).
- 2) Remove the Belleville washers (07) and the gland (24).
- 3) Press the stem (05) downward to push it into the valve body.
- 4) Remove the stem (05) and replace the thrust washer (04).
- 5) Extract the stem packing from its housing and replace it with a new one.
- 6) Reassemble the assembly by following the previous steps in reverse order (from 5 to 1).
- 7) Retighten the gland nut (18) using the torque specified in Table 1.

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- 8) Place the nut lock (28). If the lock does not engage, tighten up to a maximum of 20% of the theoretical torque while engaging the lock. If it still does not engage, tighten up to a maximum of 1/6th turn until the lock engages.

DN	15	20	25	32	40	50	65	80	100	150	200
Torque (N.m)	5	8	8	12	12	16	35	35	35	50	65
Tolerance	0/+1	0/+1	0/+1	0/+2	0/+2	0/+2	0/+2	0/+2	0/+3	0/+4	0/+4

Table 1 : Gland nut tightening torques

3.7 Reassembly of the valve

- 1) Reassemble all components by following the disassembly instructions in reverse order.

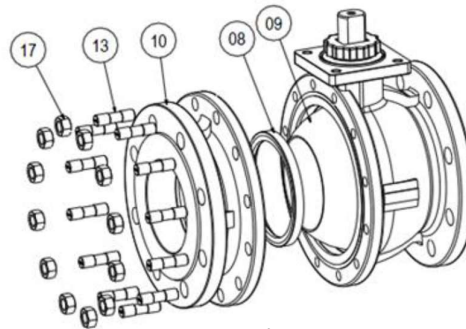



Fig. 7

Ensure to tighten the nuts (13) and studs (17) in a star pattern, applying the following tightening torques :

DN	15	20	25	32	40	50	65	80	100	150	200
Torque (N.m) - R2Z series	60	60	60	60	60	60	60	60	60	130	130
Torque (N.m) - R2H series	60	90	90	90	90	90	90	90	90	150	150

Table 2 : Tightening torque of nuts / studs

- 2) Reassemble the actuator or lever/handle

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4 Contact us

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