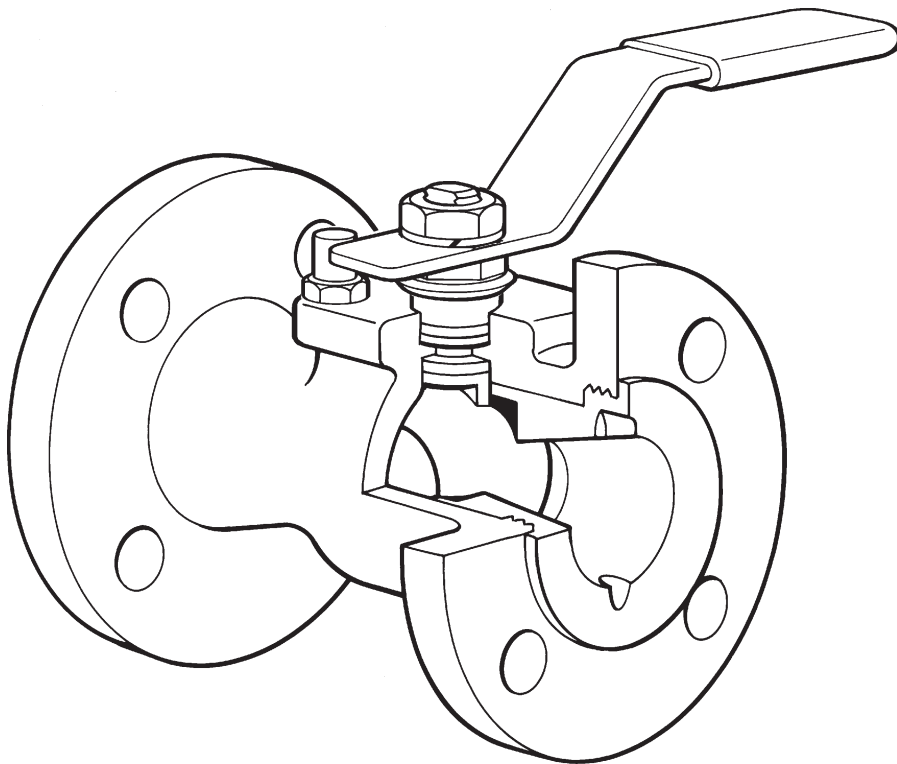


M40 ISO Ball Valve

Installation and Maintenance Instructions



Installation

Although the valve has great structural integrity, severe misalignment and / or the pulling effect of incorrect pipe length will have a detrimental effect on the valve and must be avoided. Particular attention should be paid to correct pipe alignment such that the inlet pipework and valve are all on the same axis.

Valves are for on/off applications and may be installed with flow in either direction. When used on steam services:

1. Fit a trapped drain pocket upstream of the valve.
2. Open valve slowly to prevent the risk of waterhammer damage.

Safety note

Before commencing any dismantling work ensure that no flow is taking place in the pipeline; that the line is isolated elsewhere, or that the flow of the fluid is discontinued. Any fluid remaining in the line should be drained off before dismantling the valve.

Maintenance

General

When seats are replaced and the valve is reassembled it is advisable to conduct a hydraulic test to the body at 30 bar g and a seat leakage test using compressed air at 7 bar g.

Note: A special tool is required in order to remove the insert (item 2). This service is only available at Spirax Sarco.

To replace main stem seals and seats.

1. Remove valve from line (see safety note).
2. Using special tool - an example of which is available from Spirax Sarco, unscrew the insert (2).
3. It is now possible to remove the seats (5) and the ball. Withdraw the stem and replace the main stem seal (6A).
4. Reassemble.
5. Ensure that a PTFE based sealant compound is applied to the insert thread.
6. The insert (2) should be tightened to the torques shown in the table opposite.

To replace secondary stem seals

1. Remove nuts (9 and 9A).
2. Replace stem seals (6).

Note: If leakage is observed through the stem it may be stopped by tightening gland nut (9A) without necessitating the replacement of stem seals.

Spare parts

The spare parts available are shown in heavy outline. Parts drawn in broken line are not supplied as spares.

Available spare

Seat and stem seal set	5, 6
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How to order spares

Always order spares by using the description given in the column headed Available Spare and stating the size and type of ball valve required.

Example: 1 - Seat and stem seal set for DN50 M40V2 ISO ball valve.

Recommended tightening torques

Insert

Item	Size	N m
2	DN25	108 - 135
	DN40	135 - 160
	DN50	215 - 245
	DN65	245 - 270
	DN80	405 - 605
	DN100	540 - 740
	DN150	1 000 - 1 2000

Gland nut

Item	Size	N m
9A	DN25 - DN65	34 - 41
	DN80	40 - 47
	DN100	54 - 61
	DN150	196 - 216

