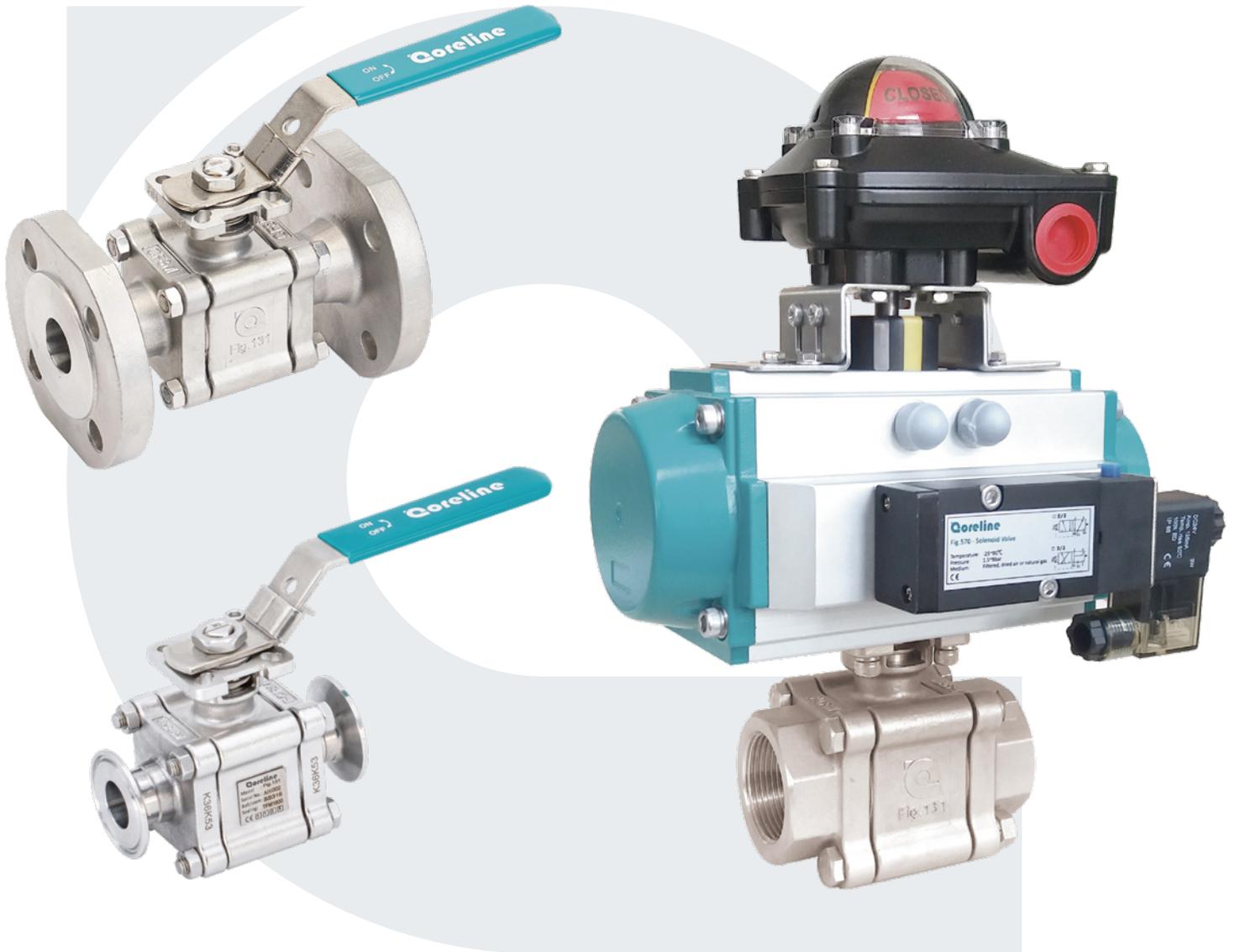


3pc Ball Valve

Fig.130,131
Fig.135



CE  FDA API607 ISO15848-1 ISO10497 TA-LUFT ISO27895 SIL3

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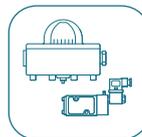
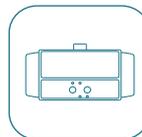
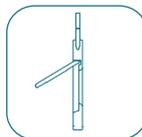
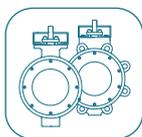




Fig.130



Fig.131



Fig.135

Storage information

- Store indoors in a dry, clean, and ventilated area.
- Temperature range: -20°C to $+50^{\circ}\text{C}$; humidity $< 75\%$.
- Keep valve in fully open position with plastic dust caps in place.
- For long-term storage (>6 months), apply anti-rust oil to exposed machined surfaces.
- Avoid exposure to sunlight, rain, vibration, or corrosive gases.
- Place valve on pallets or shelves, do not stack heavy loads on top.
- Inspect storage condition every 3 months for corrosion, seal damage, or stiffness.

Pipe preparation

- Ensure the pipeline is well aligned and properly supported to avoid stress on the valve body and end connections.
- The distance between pipe ends must match the valve's installation length, allowing proper sealing and tightening.
- Remove all foreign matter (e.g. dirt, welding slag, metal debris) from the pipeline before installation.
- If flushing is required after installation, keep the valve fully open and do not operate it until cleaning is complete.

Operation and use

- Operate valve with a quarter-turn (90°) handle rotation.
Clockwise = Closed (OFF), Counterclockwise = Open (ON).



- Valve in OPEN position: The handle is in line with the valve or pipeline.
- Valve in CLOSED position: The handle is across the pipeline.

- Operate the valve within its specified pressure, temperature, and media limits.
- Only trained personnel should operate the valve, and must be familiar with its function and position in the system.
- To prevent the valve from sticking due to inactivity, it should be operated at least twice per week.
- Avoid forcing the handle. If resistance is abnormal, check the system before proceeding.

Installation guide

- The valve can be installed in any directions, but avoid upside-down mounting to prevent stem seal damage from debris.
- Install at least 6 pipe diameters away from turbulence sources (See Fig.1).

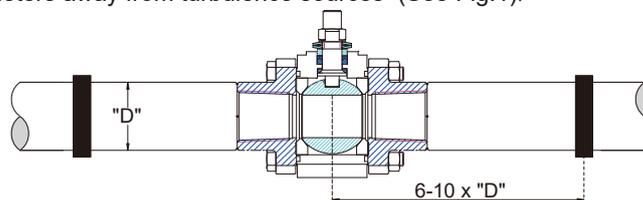


Fig.1
2/4

Installation of thread ends ball valve

- Do not disassemble the valve before installation.
- Sealant is applied to the pipe thread (Packing yarn, Teflon tape etc.).
- Apply wrench only to the hexagon part of the valve end that is to be connected.

Installation of weld ends ball valve

- Align the open ball valve between the pipes and spot weld four places on each weld connection end.

Welding for Fig.130/131:

- The valve should not be separated during TIG welding. Keep the valve in open position and complete the welding process (See Fig.2).
- With the ball valve open flush the pipes.

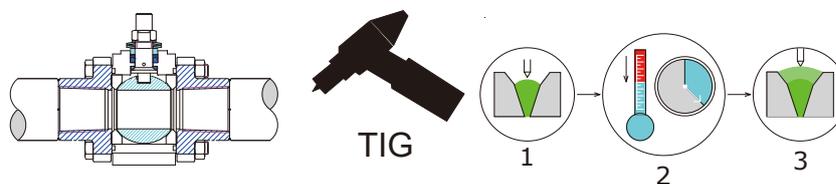


Fig.2 Welding for Fig.130/131

Welding for Fig.135:

- With the ball valve open, disassemble the body from the spot welded connection ends and place the body in a clean and safe place (See Fig.3).

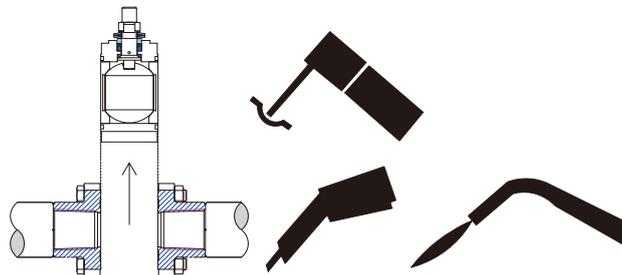


Fig.3 Welding for Fig.135

- Make sure that the connection ends are aligned. Complete the welding of both connection ends to the pipe. Carefully place the open ball valve (body) between the cleaned and cooled connection ends. Make sure that the joint gasket is not scratched against the connection ends, which may cause leakage during operation (See Fig.4).
- With the ball valve open carefully tighten the bolts evenly in a star pattern with a torque wrench under the given torques by Coreline.
- With the ball valve open flush the pipes.

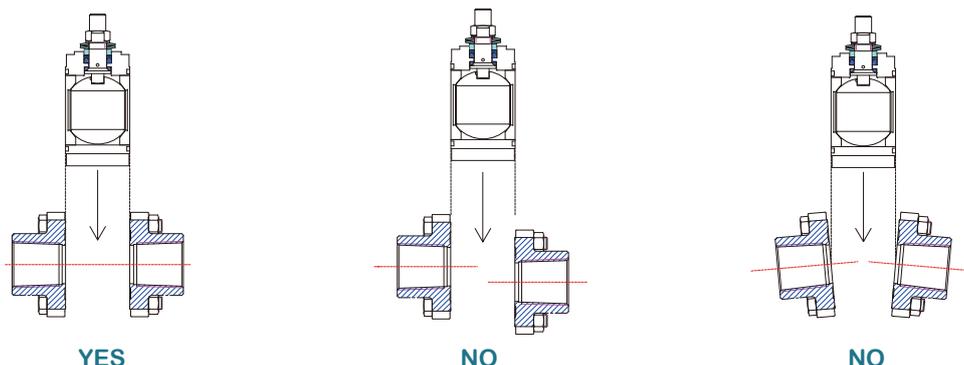


Fig.4

Ball valve function test

□ Gradually open and close the valve until a full 90° turn is obtained. In this way you make sure that the seat is shaped against the ball. This is particularly important when installing new seats.

Tightening torque for the body bolts and stem nut

Tightening torque - body bolting

Size	10F/15R	15F/20R	20F/25R	25F/32R	32F/40R	40F/50R	50F/65R	65F/80R	80F/100R	100F
Torque [Nm]	10	12	20	20	36	36	65	80	110	110

Tightening torque - stem nut

Size	10F/15R	15F/20R	20F/25R	25F/32R	32F/40R	40F/50R	50F/65R	65F/80R	80F/100R	100F
Torque [Nm]	7	9	9	11	11	16	16	19	21	23

Valve tests

Make pressure test and torque test of a re-assembly valve prior to place it back into pipeline.

□ Fix the valve on the pressure test machine with proper toolings. Orient valve so seat to be tested is facing upwards.

Pressure test

□ Introduce 6bar air. Carefully operate the valve under the given air pressure, and then slowly close to make sure the cavity is pressurized. Put water into the upper port to cover the ball and then visually check if there are bubbles. If bubbles appear, pour water out and then operate the valve several times and recheck. Reverse the valve and put air pressure to the port just checked to check for leakage in the other port.

□ Check stem seal by covering the stem top area with water/soap solution. Tighten stem seal if leakage occurs until leakage just stops.

□ Apply a water pressure test according to API598.

Valve torque test

Coreline Fig.130/131/135 ball valves are applied with below torques (See below Table) when the valves are delivered.

Size	Torque [Nm] ¹⁾			Size	Torque [Nm] ¹⁾		
	135 ²⁾	130	131		135 ²⁾	130	131
8F	-	6	8	40F/50R	26	35	35
10F/15R	-	6	8	50F/65R	36	48	49
15F/20R	8	9	8	65F/80R	53	-	68
20F/25R	10	16	14	80F/100R	70	-	101
25F/32R	17	22	18	100F	120	-	124
32F/40R	24	27	28				

1) Torque values include 30% safety factor (Test: 0bar differential pressure, ambient temperature, non-lubricating).

2) Fig.135 ball valve are all with full port design.