

## 2pc Thread Ball Valve



**Fig.125**

English

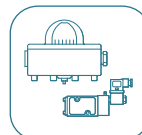
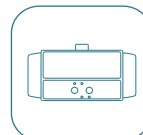
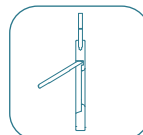
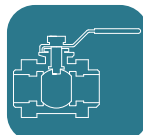
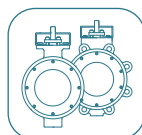
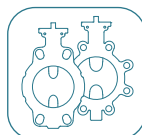


ATEX, CE, SIL and EU1935/2004 (European food approval) for Coreline ball valves.

### Introduction

Carefully read this instruction before installation of the ball valve. Do not use the valve for higher pressure or temperature than allowed in the datasheet. Improper use can lead to person injury or broken material. Dimensions, materials and applicability of the valves should be derived from the technical datasheets and documentation, which can be found in our latest catalogue from our website - [www.coreline.dk](http://www.coreline.dk).

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## Installation

- Remove the protective plastic cap on the two threaded ends, flush and clean the valve.
- Prior to mounting, flush and clean the pipeline to remove unwanted materials, as well as materials that can damage the seat and ball surface.
- Use sealant (e.g. PTFE tapes) to seal threaded ends on the pipeline.
- Apply pipe wrench on the hexagon end of valve only while tightening. Tightening by using the valve body or handle can seriously damage the valve.
- After installation, make sure there is no tension left in the pipeline.

## Operation

- Prior to operation, make sure to clean and flush the whole pipeline completely.
- The operation of the valve consists of turning the stem (by manual or automatic) , 1/4 turn clockwise to close, and 1/4 turn counter-clockwise to open.
- When the handle (if used) and/or stem are in line with the pipeline, the valve is open.
- Besides manual operating, Fig.125 can also be operated with an actuator directly mounted on the ISO5211 top flange.
- Operating torque requirements will vary depending on the length of time between cycles, media in the system, line pressure. The torque values in the following table 1 are based on PTFE seats with clean water as the media.

SIZE	DN	8	10	15	20	25	32	40	50
	INCH	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Torque	Nm	18-22	18-22	18-22	25-35	25-35	25-35	45-60	45-60

Table 1 Break away torque

## Maintenance

- Long life and maintenance-free valves can be maintained under normal working conditions and in accordance with pressure / temperature rating.
- Ball valve can trap pressurized fluid in ball cavity when it is in closed position.
- Prior to maintenance, relieve the line pressure.
- For maximum stem packing life, proper packing adjustment procedure must be followed:  
Should a leakage occur at the bushing packing, re-tighten the stem nut (13), refer to material part list on next page.  
Take care that the stem nut (13) is not tighten too much. Normally the leakage can be stopped by simply turning the stem nut 30° to 60°.

## Replacement of seats and seals

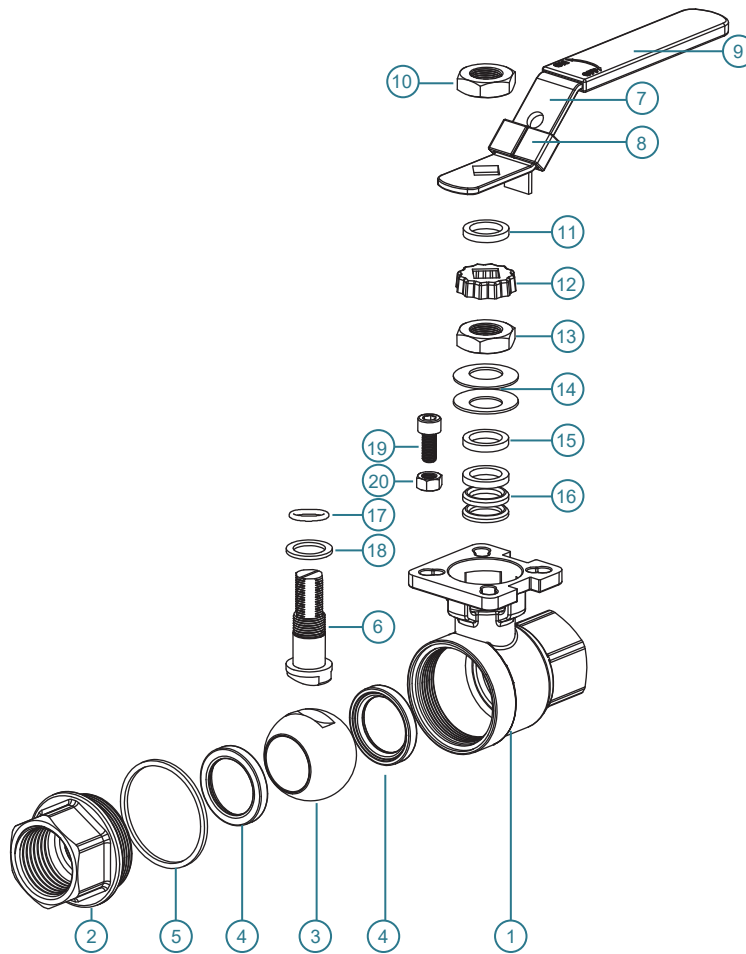
### Disassembly

- Before disassembly, make sure to discharge any hazardous media from the valve inside body cavity.
- Remove valve from pipeline.
- Remove parts of upper part in following order: Handle nut (10), handle (7), washer (11), lock cap (12), stem nut (13), belleville washer (14), gland (15), V-ring packing (16).
- Use pipe wrench to remove end cap (2), body gasket (5), seat (4), ball (3).
- Push stem (6) down into body cavity and remove stem packing (18), O-ring (17) from the body (1).

Caution: Operate carefully to avoid scratching the surface of stem and packing chamber.

### Reassembly

- Reassembly processes is reverse sequence of disassembly.
- Clean and inspect all parts, full replacement of all soft parts (seat, gasket, packing and O-ring) are recommended.
- Tighten the stem nut (13) with proper torque.  
After tightening the stem nut it must be loosened to ensure proper function of the spring washers.
- If possible, test the valve before resuming operation.



### Material part list

No.	Part name	Material	No.	Part name	Material
1	Body	A351 CF8M	8	Locking device	SS304
		A351 CF8	9	Handle sleeve	Vinyl
		A216 WCB	10	Nut	SS304
2	Cap	A351 CF8M	11	Washer	SS304
		A351 CF8	12	Lock cap	SS304
		A216 WCB	13	Nut	SS304
3	Ball	SS316	14	Belleville washer	SS304
		SS304	15	Gland	SS304
4	Seat	PTFE	16	V-ring packing	PTFE
5	Gasket	PTFE	17	O-ring	PTFE
6	Stem	SS316	18	Stem sealing	FPM
		SS304	19	Stop bolt	SS304
7	Handle	SS304	20	Nut	SS304