

# BALL VALVE

## FAF 1470

1470



### Features

- Smooth and flawless body binding is achieved through full automated welding machines.
- Non leakage is possible from the body due to non-mechanical type of assembly.
- Through its single body design, the stress and elongation/compression on the pipeline due to high temperature differences effecting the valve performance is eliminated.
- Can be manufactured with different stem lengths and extension spindles. Suitable for underground installation.
- Can be installed directly to the pump without any need for additional intermediary parts.
- Suitable to install actuator and gearbox.
- Ease of insulation due to its pipe shaped body.
- It is appropriate to be used in fully open or fully closed position
- Can be operated with lower torque ratings.

### Temperature

- +200 °C

### PRODUCTION STANDARDS

DN15 → DN300  
PN 10-16-25-40

Design	EN 331
Connection	EN 12627
Marking	EN 19
Tests	EN 12266-1
Corrosion Protection	Industrial Epoxy

### Product Description

FAF1470 fully welded ball valve is operating by a ball having a hole with the same size as the flow section, through the help of the stem, inside a body made by welding of 3 piece high pressure resistant steel pipes, rotating quarter turn (90 degree) between teflon seats where the ball to be parallel or perpendicular to the flow axis.

### Versions

- Various ball, stem and body material alternatives available
- Standard version with handlever
- Prepared for electrical actuator
- With electrical actuator
- Gearbox
- Custom production for specific orders

### Scope of Application

- LPG
- Natural gas
- Superheated water
- Steam
- Power plants
- Fluids without acidity or alkalinity properties
- Chamber installation
- Installation in plants
- Pipelines
- Tanks
- Industry

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### MATERIAL SELECTION

**Body** 1.0037 - ST47 Steel

**Ball** 1.4016 - AISI 430 Stainless Steel  
1.4301 - AISI 420 Stainless Steel

**Stem** 1.4021 - AISI 420 Stainless Steel  
1.4301 - AISI 304 Stainless Steel  
1.4401 - AISI 316 Stainless Steel

**Sealing** PTFE

### PRODUCTS MODEL CODES

FAF1470	BALL VALVE - WELDED END
FAF1480	BALL VALVE - FLANGED END

### VALVE TEST PRESSURE (Bar)

MAX. OPERATING PRESSURE	BODY / SHELL TEST	SEAT TEST
10	15	11
16	24	17,6
25	37,5	27,5
40	60	44

100% of the valves are subjected to hydrostatic tests at FAF facilities.

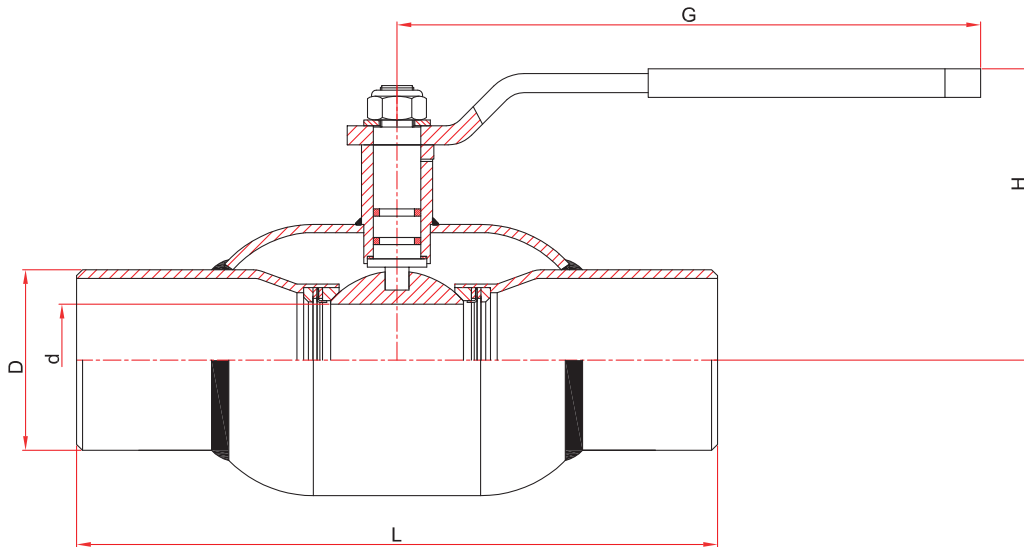
### Note

- For proper use and safety precautions please follow the installation and operating instructions.

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### Technical Details & Drawing, Dimensions



DN Ømm	DIMENSION					RATINGS			STUD SIZE	BOLT / NUT QTY	FASTENING MOMENT Nm	WRENCH SIZE (mm)
	D FAF 1470	L FAF 1470	H	G	d	KV m³/h	Tork Nm	Weight kg				
15	21,3	230	63	170	10	6	7	0,6	M12X55	4X2	85	19
20	26,9	230	67	170	15	16	7	0,8	M12X60	4X2	85	19
25	33,7	230	73	180	19	30	7	1,1	M12X60	4X2	85	19
32	42,4	260	87	180	24	60	7	1,6	M16X65	4X2	205	24
40	48,3	260	100	165	30	110	7	2,2	M16X65	4X2	205	24
50	60,3	300	115	200	38	178	10	3,3	M16X70	4X2	205	24
65	76,1	300	123	225	47	300	12	4,4	M16X75	8X2	205	24
80	88,9	300	135	250	62	360	25	6	M16X80	8X2	205	24
100	114,3	325	143	300	76	590	45	9,1	M20X90	8X2	400	30
125	139,7	330	175	350	96	950	95	14,1	M24X90	8X2	691	36
150	165,1	350	195	420	119	1400	175	20,2	M24X100	8X2	691	36
200	219,1	400	225	420	142	2650	290	36,5	M24X100	12X2	691	36
250	273	530	350	**	190	5400	405	135	M27X110	12X2	1010	41
300	323,9	700	420	**	240	9200	575	185	M27X120	16X2	1010	41

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### Ball Valve Maintenance Instructions

Follow the instructions below to perform maintenance and cleaning of Ball Valves.

#### Dismounting

Make sure that there is no fluid supply on the line where the valve is detached.

- Unscrewing the connection bolts and nuts in opposite pairs, detach the valve from the line.
- Unscrew the plug over the body with the help of the pins from the body.
- Flanged ball valves are made of flange and body. Unscrewing in opposite pairs of nuts take the nuts out and remove the flange.
- Turn the handle to closed position and pull the sphere out of the body by turning it slightly.
- Unscrew the nut on the handle. Remove the washer, handle, and the compression ring in written order.
- Remove the PTFE rings over the stem.
- Remove the stem pressing on it to drop inside the body.
- Remove the PTFE sealing cord from the flange.
- Remove the O-rings over the stem.

#### Inspection and cleaning

The following periodic preventative maintenance practices are recommended:

- Replace the sphere if excessive scratches and nicks are noted. If lime stains are observed on the sphere, clean the sphere in water with wet sandpaper (400). While maintenance processes, avoid damaging the sphere processed in 0,01mm sensitive CNC machines.
- The package of gasket set, consists of Inner belleville spring and Sphere inner sealing, is on the flange and body side. The inner and outer rings of the gasket package should not have any cracks, tears or cuts observed, or the angled surfaces of the inner ring that meet with the ball should not involve any deep scratches or collapses. The stainless rings should not be deformed. If any of these above exists, demount the gasket package set from the flange and the body and request a new one from our company.
- You may request a new cover gaskets from our company or you may have 1,5 mm Klingerit gasket material cut according to the gasket seat.
- PTFE rings over the stem and O-rings must be replaced with new ones.
- Epoxy couler priming coat is applied on the inner surfaces of the body and the flanges, however, if there exists oxidations, these regions must be cleaned and repainted with similar coatings.
- Do not paint the stem hole and the flangepacking set compression surface.
- Do not paint the stem hole and flange-packing gasket surface.
- Inspect stud threads and nuts. Replace deformed or rusty parts.
- Clean all materials carefully and proceed to mounting.

#### Mounting

- Place the PTFE ring of the stem and the Orings. Lightly grease the surfaces of the O-rings. Mount the stem through body cavity without damaging O-rings.
- On the upper side, mount the PTFE rings, compression ring, handle, washer and the nut respectively.
- Mount the packing set on the body as the inner rings will face the sphere.
- Turn the handle to closed position; place the sphere inside the body as the canal on the sphere will be parallel to the stem key.
- Check if the sphere can freely move forward, back, up and down inside the body cavity.
- Mount the packing set (as the inner rings will face the sphere) and the PTFE ring on the flange. Position the mounted body between two flanges, place studs, nuts and washers and tighten the nut in opposite pairs to eliminate the gaps.

#### Note

It is highly recommended to open and close our valves once in 15 days for a longer service life after installation.

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### Operating Instructions

#### Inspection On Delivery

1. Check for possible damage in shipment, conformance to specifications, opening direction, shortages, etc.
2. Carefully unload all valves - do not drop valve - do not lift valve using gearing, bypass or other appendage as a hook.
3. Valve should be opened and then closed to make sure it works properly. Also check opening direction against the order instruction.
4. Any problems should be reported immediately to delivery company and note on bill of lading, signed by the driver on customer's copy.

#### Inspection Before Installation

1. Check to see the valve end-joints are clean.
2. The valve should not be damaged.
3. Open and close valve - make sure it works properly.
4. Keep valve closed when placing in trench.
5. Inspect casting for damage.
6. Inspect epoxy coating and repair breaks using compatible coating material.

#### Testing

1. Do not backfill valves before hydrostatic system test. Leave the valves exposed while the pipeline is being pressurized. Check to see that all valve joints and pressure containing bolting, including bonnet bolts, are tight.
2. Valves can be tested (but not operated) at 1,1 times the rated pressure of the valve.
3. After testing, steps should be taken to relieve any trapped pressure in body of valves.

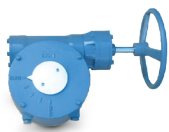
#### Storage

1. Valves should be stored in a partially open position.
2. When possible, keep valves out of the weather.
3. In cold climates the inside of the valve must be kept drained of any water to prevent freezing.
4. When stored outside, valve stem should be in a vertical position, and whenever possible, valves should be covered with a water-proof covering.
5. Protect all parts of the valve at all times.
6. Protect rubber seat of resilient wedge valves from ozone and hydrocarbons (solvents, paints and oils, etc.).

#### Installation

1. Flush the water line completely.
2. Handle valve carefully.
3. Prepare pipe ends in accordance with pipe manufacturers' instructions.
4. Install valve using appropriate instructions for the specified joint (flanged, mechanical joint, slip-on, etc.).
5. Water piping should be properly supported to avoid line stress on valve.
6. In buried applications, make sure that the valve box does not transmit traffic loads or other stress to the valve.
7. Do not use valves to force a pipeline into position.
8. Do not deflect any valve/pipe joint.
9. Protect exterior epoxy coating during backfill.

### Associated Products for Ball Valve Range



3700  
GEARBOX



3770  
ELECTRIC ACTUATOR



2300  
CHECK VALVE  
WAFER SWING



2330  
CHECK VALVE  
WAFER SWING



2350  
CHECK VALVE DUAL



5000  
RUBBER  
EXPANSION JOINT