

BALL VALVE

FAF1400

1400



Features

- FAF1400, PN 40 flanged ball valve is operating by a ball having a hole with the same size as the flow section, through the help of the stem, rotating quarter turn (90 degree) between teflon seats where the ball to be parallel or perpendicular to the flow axis.
- Can be installed bidirectional.
- Through the stainless steel belleville spring reinforced teflon (PTFE) seats, 100% tight sealing is achieved in lowest and highest pressure ratings.
- Can be installed directly to the pump without any need for additional intermediary parts.
- The compatibility of teflon material with various flow types and its resistance to higher temperatures enables it to be used in wide range of applications.
- It is appropriate to be used in fully open or fully closed position
- In fully open position, since there is no reduction in flow section, the head loss is nearly zero.
- Can be operated with lower torque ratings.

Temperature

- +200 °C

PRODUCTION STANDARDS

DN15 → DN150

PN 16-25-40

Design	EN 331 - TS 9809
Connection	EN 1092-2 / ISO 7005-2
Face to Face	DN15-DN125: EN 558 Series 1 / DIN3202 F1 DN150: EN 558 Series 28 / DIN3202 F7
Marking	EN 19
Tests	EN 12266-1
Corrosion Protection	Industrial Epoxy

Product Description

FAF1400 series are robust and reliable flanged ball valves for fitting in between PN40 flanges. Body material in ductile iron iron with stainless steel ball and stems are improving the durability of the valve. FAF1400 series are offering a large wide range of applications through to PTFE sealing.

Versions

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

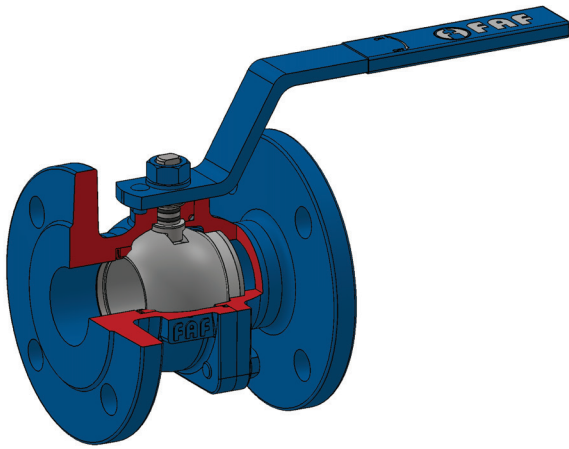
Scope of Application

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

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MATERIAL SELECTION

Body EN-GJS-400 Ductile Iron / GGG40

Ball 1.4086 Stainless Steel
1.4016 Stainless Steel
1.4301 - AISI 304 Stainless Steel
1.4401 - AISI 316 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

FAF1400	BALL VALVE - PN40 - FLANGED - FULL BORE
FAF1440	BALL VALVE - PN40 - THREADED END
FAF1445	BALL VALVE - CL800 - SCREWED END
FAF1450	BALL VALVE - PN40 - FLANGED - REDUCED BORE

VALVE TEST PRESSURE (Bar)

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

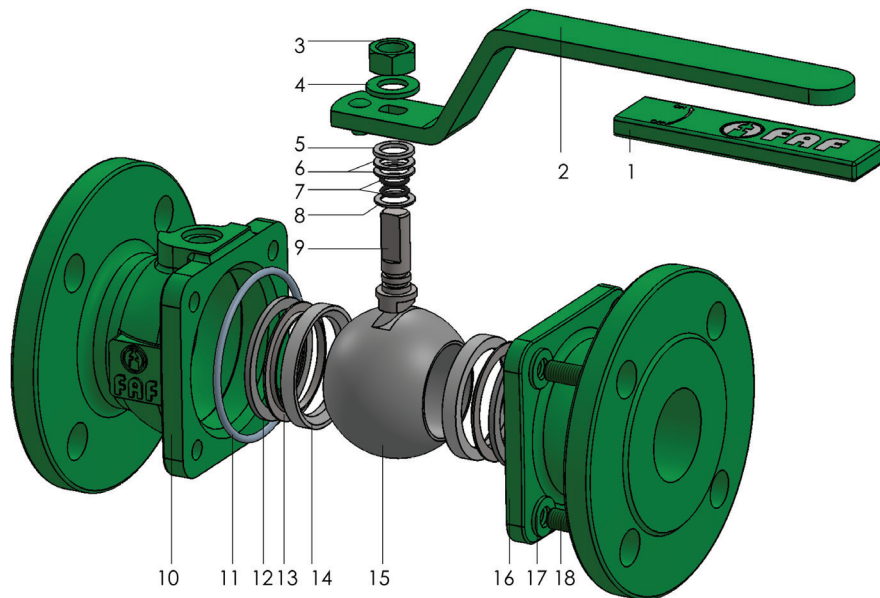
100% of the valves are subjected to hydrostatic tests at FAF facilities.

Note

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

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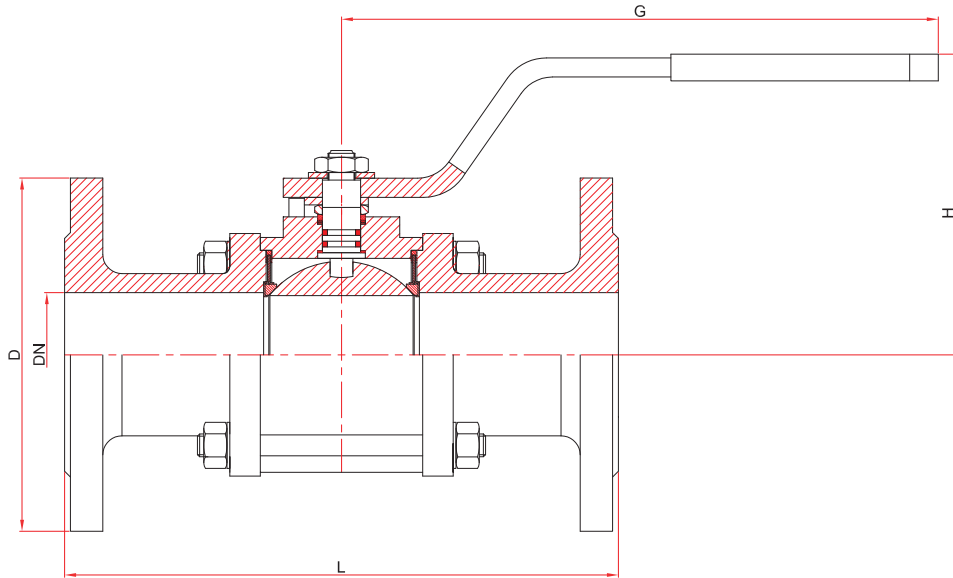
Material List



NO	ITEM	MATERIALS
1	PLASTIC COVER FOR HANDLEVER	PVC
2	HANDLEVER	ST-37 STEEL
3	SAFETY NUT	DIN 985
4	WASHER	C45 DIN 125
5	COMPRESSION WASHER	C45 STEEL
6	PTFE WASHER	PTFE
7	O-RING	VITON
8	PTFE WASHER	PTFE
9	DRIVE SHAFT	STANLESS STEEL 1.4021
10	BODY	EN-GJS-400 DUCTILE IRON (GGG40)
11	O-RING	SILICONE
12	BALL OUTSIDE SEALING GASKET	SILICONE
13	BELEVILLE SPRING	STANLESS STEEL 1.4016
14	BALL INMER SEALING GASKET	PTFE
15	BALL	STANLESS STEEL 1.4301 / 1.4016
16	FLANGE	EN GJL 250 CAST IRON
17	WASHER	C45 DIN 125
18	BOLT	DIN 933

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Technical Details & Drawing, Dimensions



DN Ømm	DIMENSION				RATINGS			STUD SIZE	BOLT / NUT QTY	FAS-TENING MOMENT Nm	WRENCH SIZE (mm)
	D	L	H	G	KV m ³ / h	Tork Nm	Weight Kg				
15	95	130	95	160	18	12	2,8	M12X50	4X2	85	19
20	105	150	110	180	35	12	4,3	M12X55	4X2	85	19
25	115	160	115	180	65	12	5,3	M12X55	4X2	85	19
32	140	180	130	250	115	12	7	M16X70	4X2	205	24
40	150	200	130	270	190	20	9,2	M16X70	4X2	205	24
50	165	230	140	270	310	20	12	M16X75	4X2	205	24
65	185	290	155	310	600	45	18,5	M16X80	8X2	205	24
80	200	310	165	310	950	95	25,3	M16X80	8X2	205	24
100	235	350	210	500	1630	175	34	M20X90	8X2	400	30
125	270	400	225	500	2700	290	68,5	M24X100	8X2	691	36
150	300	450	260	700	5000	345	114	M24X110	8X2	691	36

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Ball Valve Maintenance Instructions

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

Dismounting

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 coulter 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.

Inspection and cleaning

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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.

1400



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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 the 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

