

GATE VALVE OS&Y

FAF 6400

6400



Features

- The position of the fire protection valve can be monitored with the use of the on-board tracking circuitry. This avoids damage that could be caused by the valve in a closed position during a possible fire.
- Full bore characteristics without disruption of flow results in low the valve.
- 100 % tight sealing is achieved through EPDM covered wedge fully contacting the fusion bonded epoxy coated flow surface.
- The top of the shaft bearing and shaft nuts are made of MS58 brass. High precision machining enables low
- Operation torques. Inner and outer surfaces are coated with minimum 250 microns.
- Flanged end connections.
- FM Approved.
- Lightweight ductile iron body and bonnet.
- Lower operating torque, designed for a higher life cycle.

Temperature

- -21°C ~ +110°C

PRODUCTION STANDARTS

DN65 → DN300
300PSI - 20 Bar

Design	AWWA C515
Connection	ASME/ANSI B16.1 Class 150 Flanged
Face to Face	ASME B16.10
Marking	EN 19
Tests	EN 12266-1
Pressure Class	EN 12266-1
Corrosion Protection	Electrostatic Powder Epoxy

Product Description

The resilient wedge, ductile iron gate valve features Class 150 flanged, flat face end connections for easy installation and accessibility. Outside screw and yoke (OS&Y) gate valves are recommended when positive shutoff and a quick visual indicator of open/closed position is required.

Versions

- Standard version with hand wheel
- Standard version with supervisory switch
- Gearbox
- With pneumatic actuator
- Custom production for specific orders

Scope of Application

- Hot water lines
- Cold water lines
- Fire applications
- Power plants
- Industry



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MATERIAL SELECTION

Body EN-GJS-400 Ductile Iron / GGG40

Bonnet EN-GJS-400 Ductile Iron / GGG40

Stem 1.4021 - AISI 304 Stainless Steel

Sealing EPDM

PRODUCTS MODEL CODES

FAF6400	OS&YGATE VALVE - RISING STEM
FAF6410	OS&YGATE VALVE - NON RISING STEM

VALVE TEST PRESSURE (Bar)

MAX. OPERATING PRESSURE	BODY / SHELL TEST	SEAT TEST
16	24	17,6

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

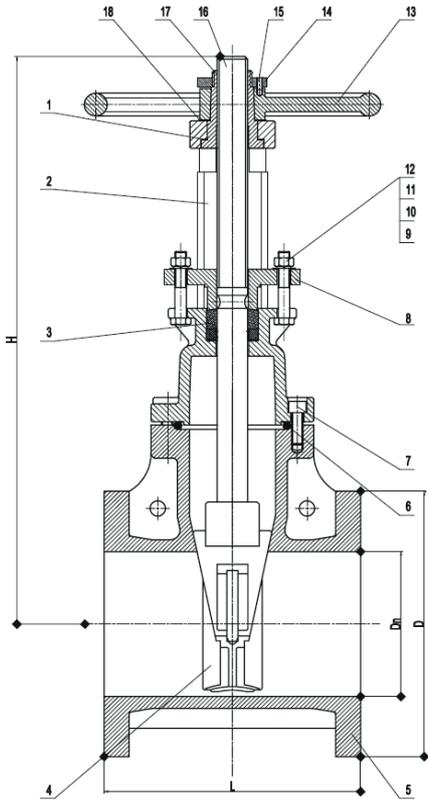
Note

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

GATE VALVE OS&Y FAF 6400

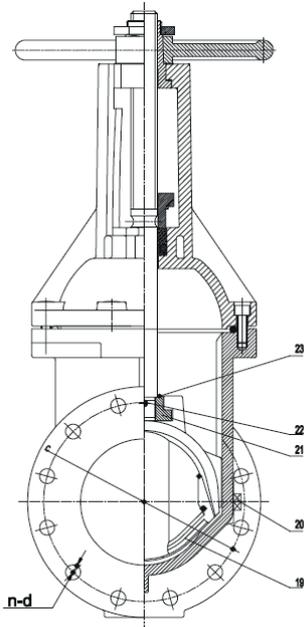
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Material List



NO	ITEM	MATERIALS
1	O-RING	C95400
2	Shaft Jacket	Ductile Iron
3	Seal	Grafit
4	Disc	DUCTILE IRON + EPDM
5	Body	DUCTILE IRON
6	O-ring	EPDM
7	Bolt	STEEL
8	Seal Cap	DUCTILE IRON
9	Cap Nut	STEEL
10	Stamp	STEEL
11	Bolt	STEEL
12	Distance Ring	STEEL
13	Hand Wheel	DUCTILE IRON
14	Lock Cap Nut	C95400
15	Pinning Screw	SS304
16	Shaft	SS304
17	Shaft Nut	C95400
18	O-ring	C95400
19	Disc Body	DUCTILE IRON
20	Test Socket	C95400
21	Hook Nut	CF8M
22	Pin	SS304
23	Seal	EPDM

Technical Details & Drawing, Dimensions



OS&Y Gate Valve Dimensions (mm)

Size	2½"	3"	4"	5"	6"	8"	10"	12"
DN	65	80	103	128,5	155	204	255	304
L	190	203	229	254	267	292	330	356
DN	178	191	229	254	279	343	406	483
c	139,5	152,5	190,5	216	241,5	298,5	362	432
n/d	4- ø19	4- ø19	8- ø19	8- ø22	8- ø22	8- ø22	12- ø25	12- ø25
H	370	420	447	547	607	754	890	1031
Weight-kg	24	28	39	52	69	115	148	213



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Periodic Inspections

1. The valve stem packing should be inspected at least monthly. If the stem packing shows signs of leakage, simply tighten the adjusting nuts to compress the packing. Do not over-tighten the adjusting nuts as this will make operation of the valve more difficult. If, after tightening the adjusting nuts to their fullest extent, the leakage does not stop, it is then necessary to replace the stem packing. It is not recommended that additional packing rings be added to the stuffing box as this may cause damage to the stem sealing system.
2. The lubrication of the yoke nut should be inspected at least monthly. A high pressure grease gun should be used for valves supplied with ball type grease fittings. The valve stem threads should also be given a coating of lubricant.
3. Bonnet bolt tension should be checked periodically when valves are used in high temperature applications where creep may occur. Although leaks through ring joints are rare, erosion or corrosion could cause rings to fail. In these cases, a new ring gasket is required.

Extraordinary Maintenance or Replacement of Damaged Parts

Stem. If the stem locks or "freezes", causes can generally be attributed to worn packing, a dry yoke nut or dry stem threads. In either of these cases, the following service is required:

- a. *Unscrew gland nuts, remove the gland flange and bushing to expose stem packing and lantern ring. Replace stem packing if it is damaged.
- b. Check lubrication of yoke nut. If it is dry, remove the yoke nut and determine if there is evidence of seizure marks. If so, replace it with a new yoke nut. Also check the nut and stem threads.

Disassembly of Stem Packing

- a. In those cases where the valve can not be removed from the piping system, it is important that prior to servicing, the valve be opened to its fullest extent. Partially unscrew nuts to reduce the compression load on the stuffing box. Remove the stem packing and then replace with new set(s) of packing. Finally, tighten nuts sufficiently while allowing the stem to operate smoothly.
- b. To replace the stem when the valve is completely disassembled for general maintenance follow this procedure:
 - Open the valve half way and remove bonnet bolts and nuts.
 - Lift up the bonnet to remove the wedge.
 - With the bonnet removed, unscrew the gland bolts and lift up the gland flange exposing the stem packing.
 - Remove the stem packing.
 - Remove the stem through the stuffing box.

The procedure to re-assembly the valve is as follows:

Re-insert the stem through the stuffing box taking special care to reassemble parts in sequence. Insert the remaining packing rings into the stuffing box and compress using the gland and flange. Then, reassemble nuts and tighten. Note, the stem must slide freely through the stuffing box without applying excessive force. Finally, install the bonnet gasket making sure it is not damaged. The gasket should be replaced if there is any question as to its performance.

Raise the bonnet, making sure the stem is in a half open position, then connect disc to stem. Lower bonnet on to the valve body making sure that the disc fits exactly into body guides and the bonnet gasket is properly seated. Align holes and tighten bonnet nuts taking care that excessive force is not used, possibly damaging the gasket. Hydrostatically test the valve to assure that there is no leakage.

Disassembly of yoke nut

When necessary use the following procedure for disassembling and replacing yoke nut:

- a. direct hand-operated valves (handwheel)
 - remove set screw;
 - unscrew handwheel nut;
 - remove handwheel;
 - unscrew yoke nut retaining nut, removing spot welds if necessary;
 Reverse the procedure for re-assembly.
- b. bevel gear operated valves
 - to remove the bevel gear from the valve, unscrew nuts and turn the handwheel in the open direction indicated by the arrow until the drive nuts are disengaged from the stem.
 - to check the condition of the drive nut or bearing, unscrew the retainer ring and remove the drive nut and bearing.
 If damaged, a new drive nut or bearing is necessary.tributed to worn packing, a dry yoke nut or dry stem threads. In either of these cases, the following service is required:

Wedge and Seats

Leakage through seats and wedges is not always easy to spot when valves are in service. However, when leaks are identified, immediate action is necessary. Any delay can permanently damage seat or wedge seal surfaces.

To repair or replace wedges or seats, the valve must be removed from the line and the following procedure should be applied:

- make sure that the valve is not under pressure before unscrewing bonnet nuts;
- remove the bonnet, being careful not to damage the gasket;
- remove the bonnet when the wedge is in the half open position;
- lift up the bonnet until the wedge is disconnected from the guides;
- release the wedge from the stem.

If seat surfaces show signs of seizing, pitting, grooves or other defects not deeper than 0.8 mm (1/32") it is possible to repair seating surfaces to its original conditions by relapping the surface with line grain abrasive paste, creating a perfect tightness once again

OS&Y Gate Valve Range



3590
SUPERVISORY SWITCH WAFER
BUTTERFLY VALVE



3599
SUPERVISORY SWITCH GROOVED
END BUTTERFLY VALVE

6400