

# BUTTERFLY VALVE - SUPERVISORY SWITCH GROOVED END FAF 3599



3599



## Features

- FAF 3599 Supervisory Switch Butterfly Valve is installed on up-right axis to the pipeline, quarter turn (90 degree) operating disc, maintains 100% tight sealing in either direction through the EPDM robed into inner walls of the valve body.
- Head loss is at minimum level through the double shaft design.
- The position of the valve can be monitored with the use of the on-board tracking and electric circuitry This avoids damage that could be caused by the valve in a closed position during a possible fire.
- The valve can be controlled with lower torques through the gearbox mounted.
- It can be used as a line shutoff valve or as a regional control valve.
- Inner and outer surfaces are coated with minimum 250 microns fusion bonded epoxy.

## Temperature

- -21°C ~ +110°C

## PRODUCTION STANDARDS

DN65 → DN250  
300PSI 20 Bar

Design	EN 593
Connection	Wafer Type ISO 7005-1 EN 1092-1
Face to Face	EN 593
Marking	EN 19
Tests	EN 12266-1
Corrosion Protection	Electrostatic Powder Epoxy

## Product Description

FAF3599 Grooved End Butterfly Valve Supervisory Switch are indicating type valves designed for use in fire protection systems where a visual indication is required as to whether the valve is open or closed. They can be used as system, sectional, and pump water control valves.

## Versions

- Standard version with gearbox
- Prepared for electrical actuator
- With electrical actuator
- Hand lever
- With pneumatic actuator
- Custom production for specific orders

## Accessories

- T-key, FAF7250
- Extension spindle, ST steel, FAF3790
- Surface box, cast iron, FAF3790
- Position indicator
- Flange adaptors, FAF3960

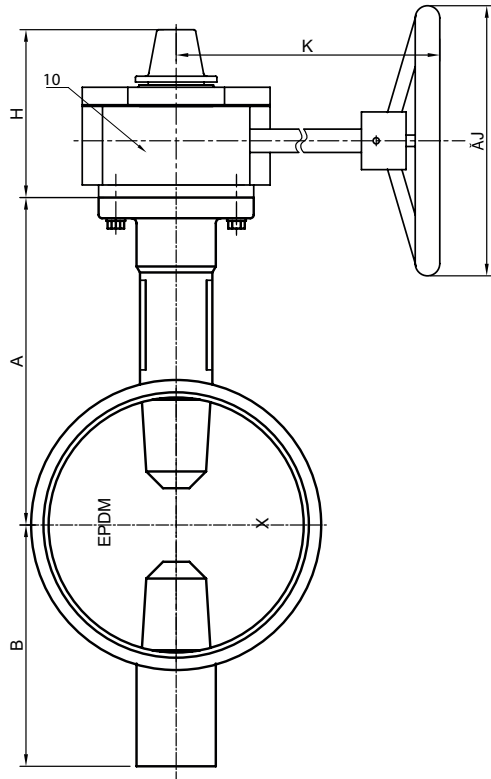
## Scope of Application

- Firefighting
- Chamber installation
- Installation in plants
- Pipelines
- Water treatment plants
- Pumping stations
- Tanks
- Seawater applications
- Industry

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### MATERIAL SELECTION

Body EN-GJS-400 Ductile Iron / GGG40

Bonnet EN-GJS-400 Ductile Iron / GGG40

Stem AISI 416 Stainless Steel

Sealing EPDM

### PRODUCTS MODEL CODES

FAF 3590	SUPERVISORY SWITCH - WAFER END
FAF 3599	SUPERVISORY SWITCH - GROOVED END

### VALVE TEST PRESSURE (Bar)

MAX. OPERATING PRESSURE	BODY / SHELL TEST	SEAT TEST
20	30	22

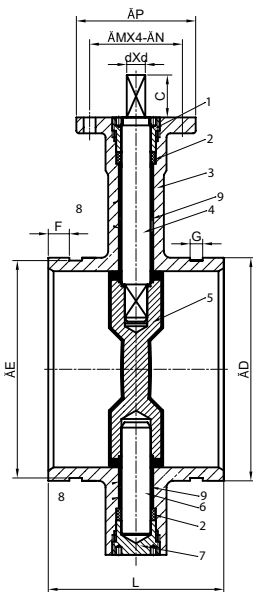
100% of the valves are subjected to hydrostatic tests at FAF facilities.

### Note

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

### Material List

NO	ITEM	MATERIALS
1	Drive Shaft Nut	Steel
2	O-ring	EPDM
3	Body	Ductile Iron
4	Drive Shaft	SS416
5	Disc	Ductile Iron + EPDM
6	Centering Shaft	SS416
7	Centering Shaft Nut	Steel
8	Bearing	PTFE
9	O-ring	EPDM
10	Signal Box	Ductile Iron

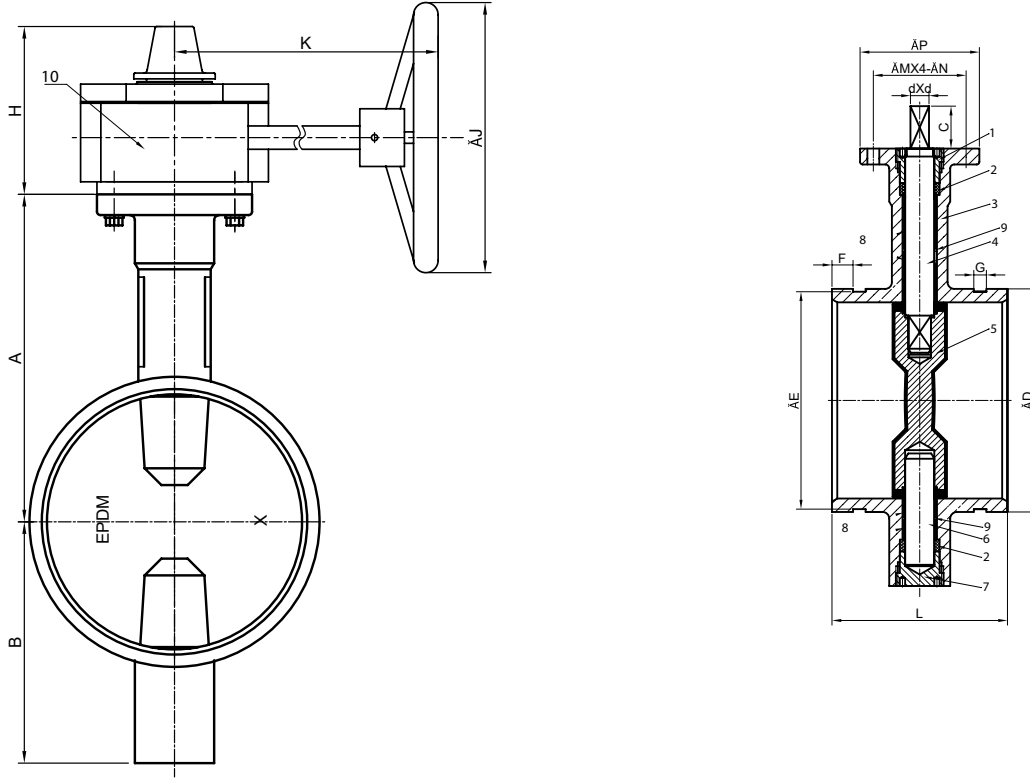


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## Technical Details & Drawing, Dimensions



Butterfly Valve Grooved End Supervisory Switch Dimensions (mm)

Çap/ Ölçü	A	B	C	D	E	F	G	H	K	J	P	M	N	d	L	
2½" - DN65	125	95	32	73/76,1	69,1/72,3	15,9	7,9	111	153	218	152	90	70	9	10	96,4
3" - DN80	140	100	32	88,9	84,9	15,9	7,9	111	153	218	152	90	70	9	11	97
4" - DN100	160	100	32	114,3	110,1	15,9	9,5	111	153	218	152	90	70	9	14	115,1
5" - DN125	170	125	32	139,7/141,3	135,5/137	15,9	9,5	111	153	218	152	90	70	9	14	132,4
6" - DN150	190	140	32	165,1/168,3	160,9/164	15,9	9,5	111	153	218	200	90	70	9	16	132,4
8" - DN200	230	175	32	219,1/216,3	214,4/211,6	19	11,1	126	210	232	300	125	102	12	19	147,4
10" - DN250	260	200	45	267,4/273	262,6/268,3	19	12,7	126	210	232	300	125	102	12	22	159

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## Butterfly Valve Maintenance Instructions

### Dismounting

Position the valve flat with the disc in the closed position.

Loosen the taper pin from the valve disc using a hammer and punch. Note: Punch should be of same size or larger diameter as small end of taper pin to avoid mushrooming of taper pin.

Remove taper pin from disc. Extract the valve shaft from the body using a twisting motion.

Remove the valve disc from body making sure not to damage the seat or disc sealing edge.

Cartridge seat removal can be accomplished from either direction by applying pressure evenly on one face to push the seat through the body.

If the valve is of dead end service design, remove setscrews around periphery of body extending into seat prior to seat removal.

Remove shaft bushings from body as required

### Inspection and cleaning

The following periodic preventative maintenance practices are recommended:

Operate the valve from full open to full closed to assure operability. Check flange bolting for evidence of loosening and correct as needed.

Inspect the valve and surrounding area for previous or existing leakage at flange faces or shaft connections.

Check piping and/or wiring to actuators and related equipment for looseness and correct as needed.

### Mounting

Remove any protective flange covers from the valve.

Inspect the valve to be certain the waterway is free from dirt and foreign matter.

Be certain the adjoining pipeline is free from any foreign material such as rust and pipe scale or welding slag that could damage the seat and disc sealing surfaces.

Any actuator should be mounted on the valve prior to installation to facilitate proper alignment of the disc in the valve seat.

Check the valve identification tag for materials, and operating pressure to be sure they are correct for the application.

Check the flange bolts or studs for proper size, threading and length.

Thoroughly clean all parts. Inspect components for any defects.

Apply a small amount of silicone grease to the inside surfaces of the body, including the upper and lower shaft holes.

Insert the shaft bushings into the body being careful not to allow intrusion into the body seat bore.

Install the seat into the center of the body, making sure the shaft holes in the seat line up with the holes in the body.

Completely coat the inside surfaces of the seat with silicone grease.

Carefully push the disc into the seat in the open position (90 degrees to the body.) Line up the shaft holes of the disc as close as possible with the shaft holes in the seat body.

Insert the shaft through the body and disc, use a twisting motion to align the keyway parallel with the disc.

Insert taper pin(s) into the disc and set with two or three sharp blows.

Wipe dust shield o-ring with silicone grease and place over the shaft into the top of the body.

If the valve is of dead end service design, insert setscrews through the body into the seat.

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