



## **MATERIAL SPECIFICATION**



### **BF25 Series**

Body: Ductile Iron, ASTM A536 Gr. 65-45-12

Gland: Carbon Steel, ASTM A570 Gr. A

Body Coating: Epoxy Resin Fusion Bonded

Top Shaft: Stainless Steel, AISI SS410

Under Shaft: Stainless Steel, AISI SS410

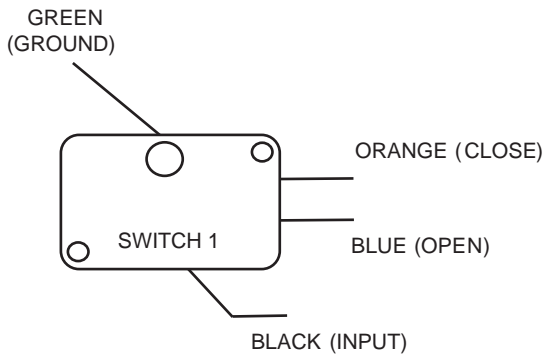
Disc: EPDM Coated Ductile Iron, ASTM A536 Gr. 65-45-12

Screw, Plug, Bolt, Washer, Pin: Galvanized Carbon Steel Surface Passivation

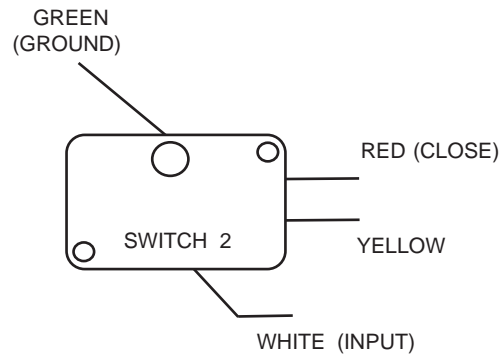
Housing: Cast Iron, ASTM A126 Gr. B

## **TAMPER SWITCH WIRING DIAGRAM**

### **Wiring Diagram**



**Switch 1: Supervisory Switch**



**Switch 2: Auxiliary Switch**

BF-25 series Butterfly Valve is installed with one supervisory switch and one auxiliary switch with actuator suitable for outdoor and indoor use.

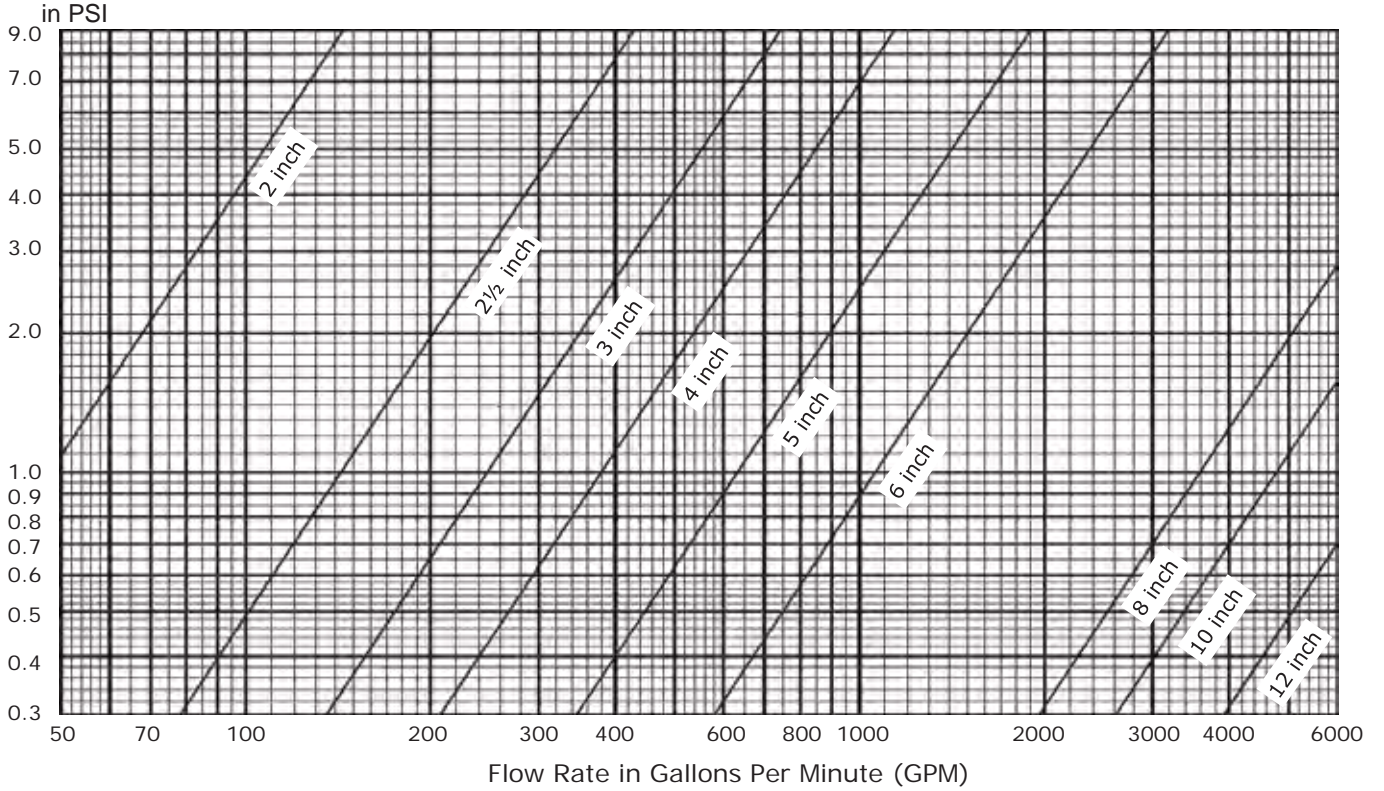
Switches are installed with current monitor, Input Rating: 10A 250 VAC

Conduit and electrical connections to tamper switch must be in accordance to NFPA 13, 71 and 72.



# FLOW RATE

## Nominal Pressure Drop



**Butterfly Valve Friction Loss**

**GROOVED BUTTERFLY VALVE 2"-12"  
300PSI/250PSI/200PSI**

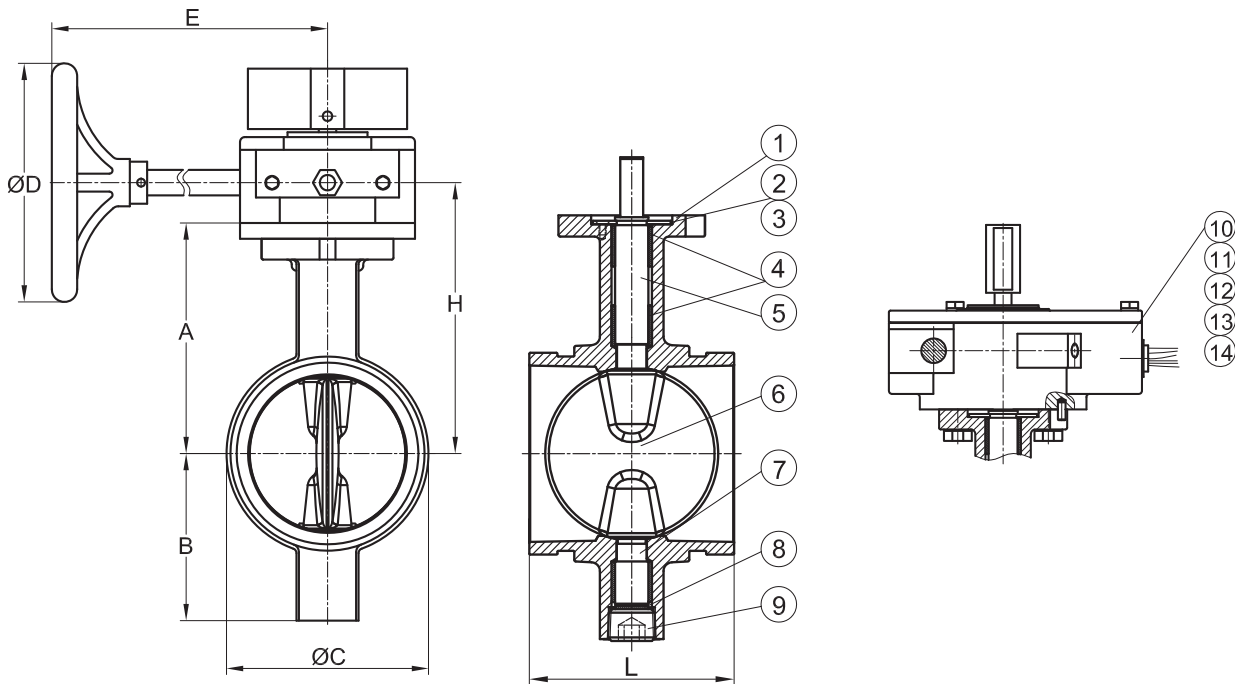


Table 1	Packing	Working Pressure	Working Temperature
	EPDM	300PSI	-10°C~120°C
	NBR	300PSI	-10°C~80°C

SIZE	A	B	ØD		ØC	ØD	E	H	L
2	3.74	3.07	2.37		2.83	5.91	6.26	5.12	3.33
2.5	3.86	3.07	2.87	3.00	3.46	5.91	6.26	5.24	3.86
3	4.13	3.35	3.50		3.86	5.91	6.26	5.51	3.86
4	5.31	4.13	4.50		5.00	5.91	6.26	6.69	4.57
5	5.83	5.04	5.56	5.50	6.14	7.87	6.26	7.20	5.87
6	6.50	5.51	6.63	6.50	7.28	7.87	6.26	7.87	5.81
8	8.03	6.69	8.63		9.25	13.78	9.25	9.51	5.28
10	9.65	8.07	10.75		11.50	13.78	9.25	11.12	6.30
12	10.93	10.17	12.75		13.09	13.78	9.25	12.40	6.50

Valves conform to the standards and specifications:

1. The valve structure conform to MSS-SP67 long
2. The valve test accord with UL1091 / FM1112 300PSI
3. The valve connecting flange in accordance with AWWA C606 groove connection standard, etc
4. The body surface coated with epoxy
5. Valve plate of A536 + EPDM rubber can choose NBR
6. Working pressure and working temperature: table 1

No	Name	Material
1	Body	DI ASTM A536 65-45-12
2	Gland	ASTM A570 Gr. A
3	Philips Countersunk Head Screw	Galvanized Carbon Steel Surface Passivation
4	Bushing	ASTM B150M C63000
5	Top Shaft	SS410/SS416/SS420
6	Disc	ASTM A536 65-45-12+EPDM/NBR
7	Under Shaft	SS410/SS416/SS420
8	Adjust Washer	ASTM B150M C63000
9	Plug	Galvanized Carbon Steel Surface Passivation
10	Electrical Signals Worm Gear Box	
11	Hexagon Head Bolts	(12.9)Galvanized Carbon Steel Surface Passivation
12	Spring Washer	Galvanized Carbon Steel Surface Passivation
13	Washer	Galvanized Carbon Steel Surface Passivation
14	Pin	Galvanized Carbon Steel Surface Passivation

**LUG TYPE BUTTERFLY VALVE 2"-12"  
300PSI/250PSI/200PSI**

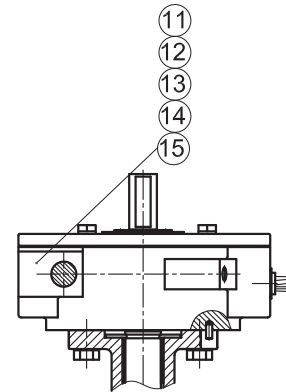
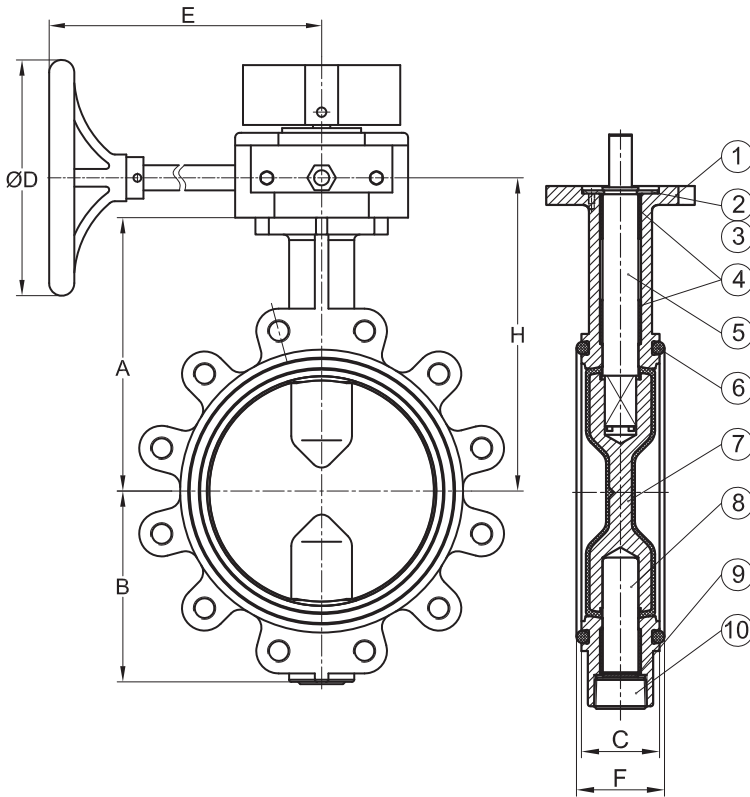


Table 1	Packing	Working Pressure	Working Temperature
	EPDM	300PSI/250PSI/200PSI	-10°C~120°C

SIZE	A	B	C	F	ØD	E	H
2	5.53	3.07	1.69	1.86	5.91	6.26	6.91
2.5	6.00	3.07	1.81	1.98	5.91	6.26	7.38
3	6.20	3.35	1.81	1.98	5.91	6.26	7.58
4	6.93	4.13	2.05	2.28	5.91	6.26	8.31
5	7.52	5.04	2.20	2.44	7.87	6.26	8.90
6	7.97	5.51	2.20	2.44	7.87	6.26	9.35
8	9.59	6.69	2.44	2.76	13.78	9.25	11.06
10	10.75	8.07	2.68	2.99	13.78	9.25	12.22
12	12.24	10.16	3.07	3.39	13.78	9.25	13.72

Valves conform to the standards and specifications:

1. The valve structure in accordance with ISO 5752
2. The valve test accord with UL1091 / FM1112 300 psi/300 psi / 200 psi
3. The valve connecting flange in accordance with BS EN 1092-2 PN16, ASME B16.42 CL150
4. The body surface coated with epoxy
5. Valve plate of A536 + EPDM
6. Working pressure and working temperature: table 1

No	Name	Material
1	Body	ASTM A536
2	Gland	ASTM A570 Gr. A
3	Philips Countersunk Head Screw	Galvanized Carbon Steel Surface Passivation
4	Bushing	ASTM B150M C63000
5	Top Shaft	SS410
6	O-Ring	EPDM
7	Disc	ASTM A536+EPDM/NBR
8	Under Shaft	SS410
9	Adjust Washer	ASTM B150M C63000
10	Plug	Galvanized Carbon Steel Surface Passivation
11	Electrical Signals Worm Gear Box	
12	Hexagon Head Bolts	(12.9)Galvanized Carbon Steel Surface Passivation
13	Spring Washer	Galvanized Carbon Steel Surface Passivation
14	Washer	Galvanized Carbon Steel Surface Passivation
15	Pin	Galvanized Carbon Steel Surface Passivation

**WAFER TYPE BUTTERFLY VALVE 2"-12"  
300PSI/250PSI/200PSI**

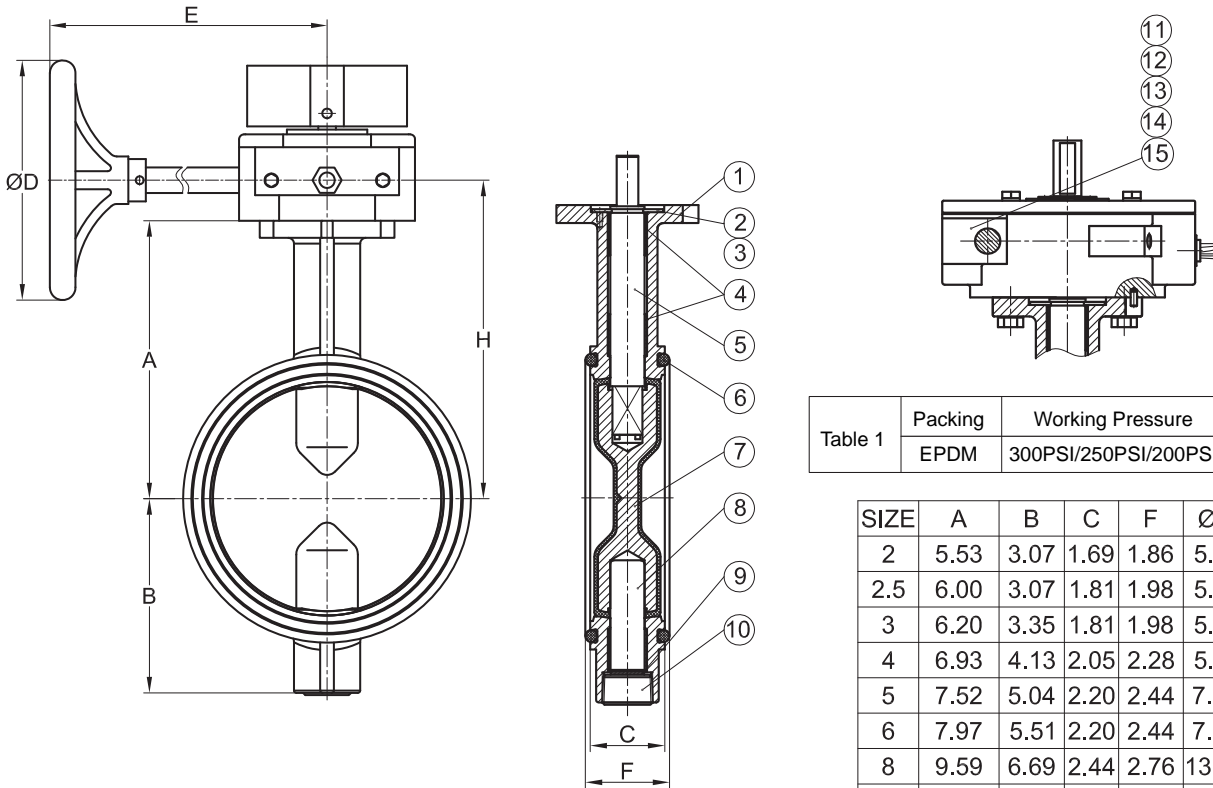


Table 1	Packing	Working Pressure	Working Temperature
	EPDM	300PSI/250PSI/200PSI	-10°C~120°C

SIZE	A	B	C	F	ØD	E	H
2	5.53	3.07	1.69	1.86	5.91	6.26	6.91
2.5	6.00	3.07	1.81	1.98	5.91	6.26	7.38
3	6.20	3.35	1.81	1.98	5.91	6.26	7.58
4	6.93	4.13	2.05	2.28	5.91	6.26	8.31
5	7.52	5.04	2.20	2.44	7.87	6.26	8.90
6	7.97	5.51	2.20	2.44	7.87	6.26	9.35
8	9.59	6.69	2.44	2.76	13.78	9.25	11.06
10	10.75	8.07	2.68	2.99	13.78	9.25	12.22
12	12.24	10.16	3.07	3.39	13.78	9.25	13.72

Valves conform to the standards and specifications:

1. The valve structure in accordance with ISO 5752
2. The valve test accord with UL1091 FM1112 300PSI/250PSI/200PSI
3. The valve connecting flange in accordance with BS EN 1092-2 PN16, ASME B16.42 CL150
4. The body surface coated with epoxy
5. Valve plate of A536 + EPDM
6. Working pressure and working temperature: table 1

No	Name	Material
1	Body	ASTM A536
2	Gland	ASTM A570 Gr. A
3	Philips Countersunk Head Screw	Galvanized Carbon Steel Surface Passivation
4	Bushing	ASTM B150M C63000
5	Top Shaft	SS410
6	O-Ring	EPDM
7	Disc	ASTM A536+EPDM/NBR
8	Under Shaft	SS410
9	Adjust Washer	ASTM B150M C63000
10	Plug	Galvanized Carbon Steel Surface Passivation
11	Electrical Signals Worm Gear Box	
12	Hexagon Head Bolts	(12.9)Galvanized Carbon Steel Surface Passivation
13	Spring Washer	Galvanized Carbon Steel Surface Passivation
14	Washer	Galvanized Carbon Steel Surface Passivation
15	Pin	Galvanized Carbon Steel Surface Passivation