

GROOVED BUTTERFLY VALVE WITH TAMPER SWITCH



Available Sizes
1" through 12" (50/300 mm)

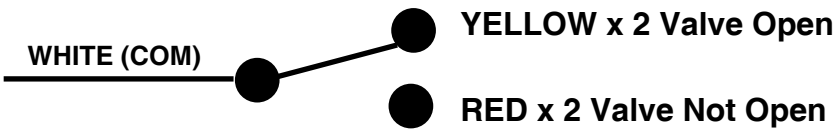
Designed for Fire Protection Services Only

Weatherproof actuator housing approved for indoor and outdoor use.

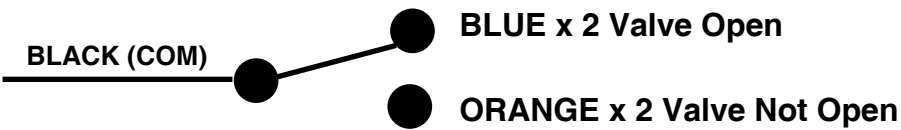
- Design Standard: API609
- Connection Ends: Groove to AWWA C606
- Top Flange Standard: ISO 5211
- Stem drive by keys, parallel or diagonal square or flat head
- Working Pressure: 300PSI
- Temperature Range: 32° to 176° F
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA

WIRING DIAGRAM:

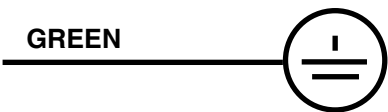
SUPERVISORY SWITCH



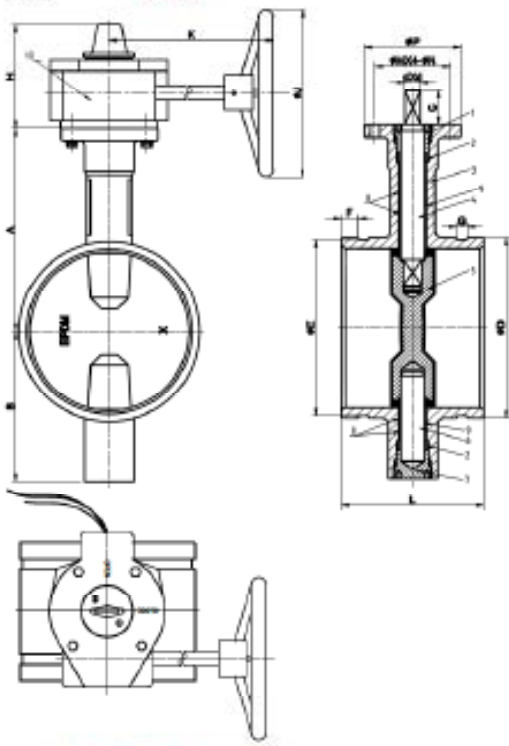
AUXILIARY SWITCH



ACTUATOR CASE
GROUND



System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	



SPECIFICATIONS: MATERIAL

1. **Upper Shaft Sealing Nut**
2. **Shaft (Stem) Seal:** EPDM
3. **Body:** Ductile Iron conforming to ASTM A-536, Grade 65-45-12
4. **Upper Shaft (Stem):** 416 stainless steel conforming to ASTM A-582
5. **Disc:** Ductile Iron conforming to ASTM A-536, Grade 65-45-12, with EPDM Coating
6. **Lower Shaft (Stem):** 416 stainless steel conforming to ASTM A-582
7. **Lower Shaft (Stem) Sealing Nut:** WCB conforming to ASTM A-216
8. **Stem Bushing:** PTFE conforming to ASTM A-4894
9. **O-Ring (Seat):** Grade "E" EPDM conforming to ASTM D-2000
10. **Gear Box:**



Item #	Size	A	B	C	D	E	F	G	H	J	P	M	N	D	L
6520250	2-1/2"	4.92	3.74	1.26	2.87 3	2.72 2.85	0.63	0.31	4.37	5.98	3.54	2.76	0.35	0.39	3.8
6520251	3"	5.51	3.94	1.26	3.5	3.34	0.63	0.31	4.37	5.98	3.54	2.76	0.35	0.39	3.82
6520252	4"	6.3	3.94	1.26	4.5	4.33	0.63	0.31	4.37	5.98	3.54	2.76	0.35	0.43	4.53
6520253	6"	7.48	5.51	1.26	6.5 6.63	6.33 6.46	0.63	0.37	4.37	7.87	3.54	2.76	0.35	0.63	5.21
6520254	8"	9.06	6.89	1.26	8.52 8.63	8.33 8.46	0.75	0.44	4.96	11.4	4.92	4.02	0.47	0.75	5.8
6520255	10"	10.2	7.87	1.77	10.53 10.75	10.56 12.32	0.75	0.5	4.96	11.4	4.92	4.02	0.47	0.87	6.26

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Check Valve Flow Performance:

Cv Value: The Cv value refers to the number of U.S. gallons of water that flow through a valve per minute at 60°F (15.6°C) when the pressure drop across the valve is 1 psi (pound per square inch).

$$CV = \frac{Q \times \sqrt{SG}}{\sqrt{\Delta P}}$$

Q: The flow rate of the fluid, measured in gallons per minute (GPM).

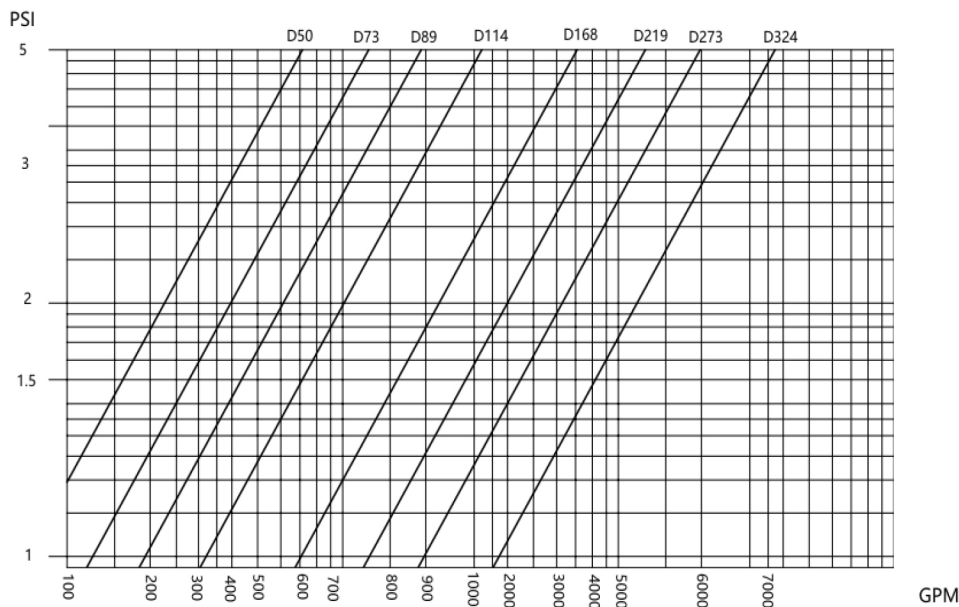
SG: The specific gravity of the fluid, defined as the ratio of the fluid's density to the density of water. For water, SG = 1.

ΔP: The pressure drop across the valve, measured in psi.

Kv Value: The Kv value refers to the number of cubic meters of water that flow through a valve per hour at a water temperature of 15°C when the pressure drop across the valve is 1 bar.

$$CV = 1.156KV$$

Pressure Drop-Flow Rate Chart



Size-Flow Characteristics Chart

DN	D50	D73	D89	D114	D168	D219	D273	D324
Kv	86	145	195	392	1105	1756	2967	5244
Cv	100.362	169.215	227.565	457.464	1289.54	2049.25	3462.49	6119.75

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