

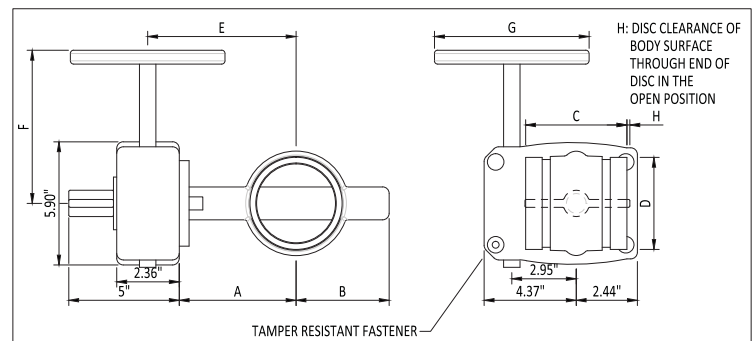
- High quality fire protection control Butterfly Valves in Grooved End connections.
- These valves are UL, ULC listed and FM approved and are available in sizes from 2½" up to 8".
- They are supplied from stock with factory installed UL listed double tamper switch for indoor and outdoor use.

Grooved End 2 ½" - 8" (65mm up to 200mm)



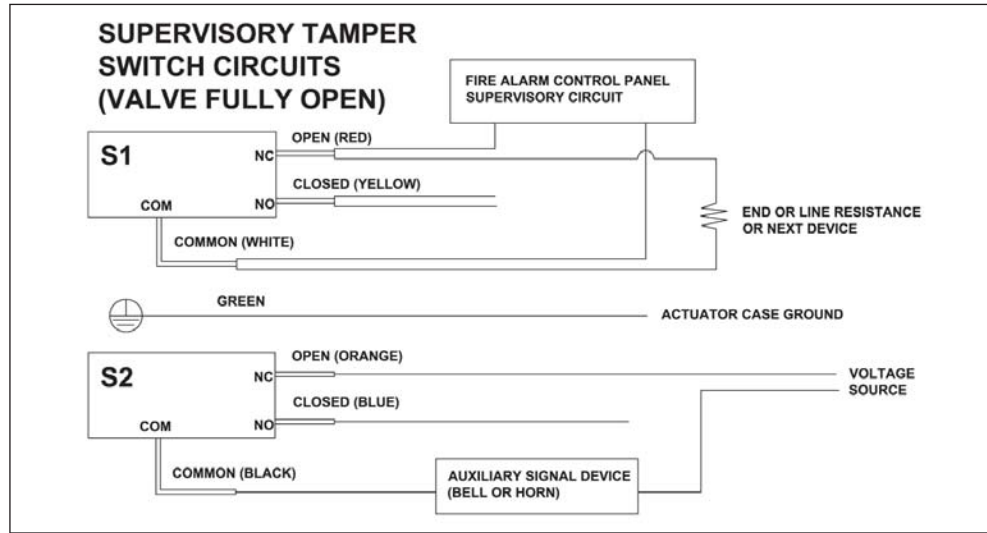
Working Pressure and Temperature	
Working Pressure	300 psi (21.4 bars)
Max. Test Pressure	600 psi (42.8 bars)
Max. Working Temperature	250°F (120°C)

Materials List	
Components	Material
Body	ASTM A-536 Nylon-11 Coated
Disc	ASTM A-536 EPDM Encapsulated
Upper & Lower Stems	AISI 420-SS
Housing	ASTM A-536
Hand Wheel	ASTM A-536
Flag Indicator	ASTM A-536
Shear Pin	ASTM A-510
Segment Gear	ASTM B-148 or B-584
Housing Gasket	EPDM Grade E
O-Rings (All)	EPDM Grade E



Size	A	B	C	D	E	F	G	H
2 ½"	4.13 (105)	3.30 (85)	3.80 (96.4)	2.87 (73.0)	5.31 (135)	5.04 (128)	5.04 (128)	----
3"	4.41 (112)	3.60 (92)	3.80 (96.4)	3.50 (88.9)	5.59 (142)	5.04 (128)	5.04 (128)	----
4"	5.71 (145)	4.30 (108)	4.54 (115.4)	4.50 (114.3)	6.89 (175)	5.04 (128)	5.04 (128)	----
6"	7.05 (179)	5.71 (145)	5.21 (132.4)	6.63 (168.3)	8.23 (209)	8.66 (220)	8.66 (220)	0.28 (7.10)
8"	8.03 (204)	6.70 (170)	5.80 (147.4)	8.63 (219.1)	9.21 (234)	8.66 (220)	8.66 (220)	0.95 (24.2)

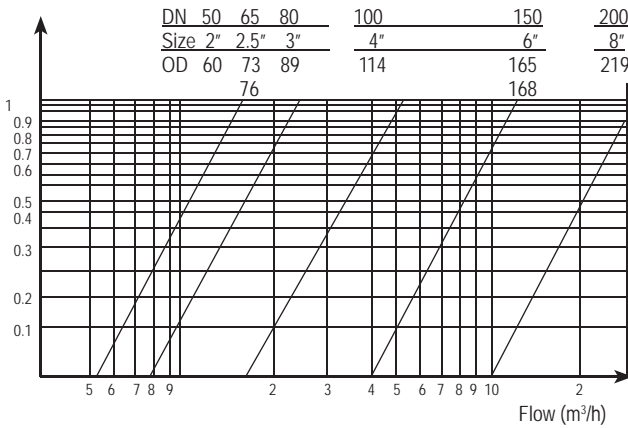
Wiring Diagram



Test Data: BUTTERFLY VALVE

GROOVED END

Flow Characteristics



Flow Coefficient: Kv

Kv=M³/hour across valve at same standard condition (20°C, 1bar)

DW (mm)	Size (in)	OD	30*	40*	50*	60*	70*	80*	90*
65	2 ½"	73	12	27.4	53.1	96	138	156	163
65	2 ½"	76	12	27.4	53.1	96	138	156	163
80	3"	89	18.9	39.4	78.9	144	210	243	249
100	4"	114	30	65.1	129	226	377	488	514
150	6"	165	84	184	369	634	964	1196	1286
150	6"	168	84	184	369	634	964	1196	1286
200	8"	219	165	339	677	1230	2002	2850	3129

$$CV = \frac{Q}{6} KV \quad KV = \frac{Q}{31.6} \sqrt{\frac{\rho_1}{\Delta P}} \quad Q = 31.6 KV \sqrt{\frac{\Delta P}{\rho_1}}$$

Q = flow in m³/h ΔP = pressure loss in bar ρ1 = density in Kg/m³

Size	Part #	Weight
2 ½"	7M99002653	19.84
3"	7M99002654	21.6
4"	7M99002655	24.25
6"	7M99002656	38.36
8"	7M99002657	50.26

Flow Coefficients

The flow coefficient KV is the flow of water through the valve in m³/h, at an average temperature of 20°C, which produces a pressure loss of 1 bar. The relation between Cv and KV is:

$$Cv = \frac{Q}{6} KV$$

Cv VS Disc Angle

