

FEATURES AND BENEFITS

- Corrosion resistant thermoplastic body & disc.
- Compact and light weight design
- Full boot seal for durable performance
- ANSI B16.5 Class 150 Flange Pattern
- ISO 5211 compliant mounting pattern for actuators or gear operators.
- Pressure rating: 150 psi non-shock water @ 73° F 2-10", 100 psi for 12".
- With its robust boot/seal design, no flange gaskets are required
- 100% Bubble tight seal
- Face to face dimensions match Asahi Type 56/57 BFV for direct retrofit.



SAMPLE ENGINEERING SPECIFICATIONS

Butterfly Valve body shall be produced of PVC Type I, cell classification 12454 or CPVC Type IV, cell classification 23447 material. Disc shall be produced of Polypropylene or CPVC material. Valve boot/seal and O-rings shall be made of EPDM, or FKM material. Stem shall be made of stainless steel. The disc bore (center) shall contain a integrally molded stainless steel reinforcement square liner, which engages with the stainless steel valve shaft. Boot/seal (liner) and disc shall be the only wetted parts of the valve. ISO 5211 Mounting pattern on top for direct actuation mount. Bolt pattern shall conform to ANSI/ASME B 16.5 Class 150 standard. Colonial 411ND Series.



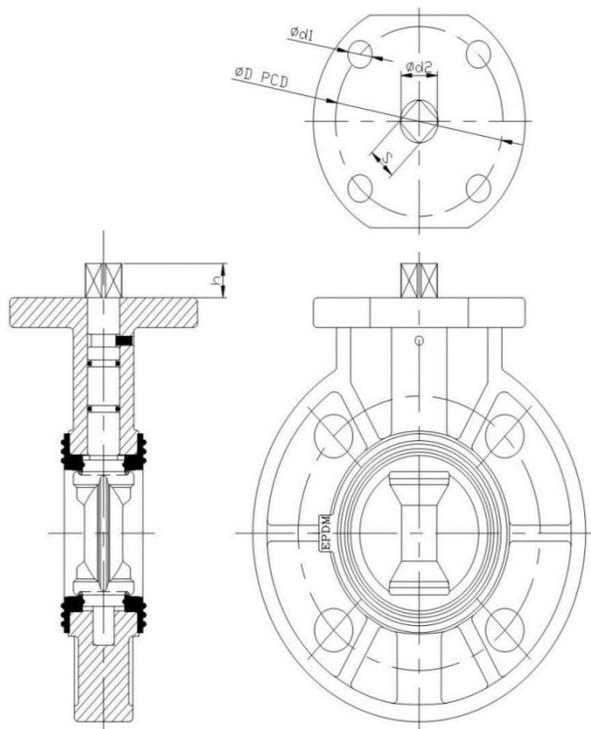
411ND SERIES BUTTERFLY VALVES – 2 - 12" DIRECT-MOUNT

Rev 12/22/14 Added 2-1/2 size detail

CUSTOMER SERVICE: 6400 Corporate Ave., Portage, MI 49002
Toll-free (800)374 0234, Phone (269)323 2495, Fax (269) 323 0630 www.colonialengineering.com

Valve Size	PVC/EPDM	PVC/FKM	CPVC/EPDM	CPVC/FKM
2	V20411ND	V20412ND	V20413ND	V20414ND
2-1/2	V27411ND	V27412ND	V27413ND	V27414ND
3	V30411ND	V30412ND	V30413ND	V30414ND
4	V40411ND	V40412ND	V40413ND </td <td>V40414ND</td>	V40414ND
6	V60411ND	V60412ND	V60413ND	V60414ND
8	V80411ND	V80412ND	V80413ND	V80414ND
10	V100411ND	V100412ND	V100413ND	V100414ND
12	V120411ND	V120412ND	V120413ND	V120414ND

PVC Body with PP Disc and EPDM liner are stocked.
PVC/FKM, CPVC/EPDM, CPVC/FKM are made to order.
Check with Customer Service for lead-time.



Temperature De-rating for Valves & Unions (Above 73° F)				
Temp (°F)	PVC	CPVC	PP	PVDF
73	1.00	1.00	1.00	1.00
80	.88	.96	.93	.93
90	.75	.92	.83	.87
100	.62	.85	.74	.82
110	.50	.77	.66	.76
120	.40	.70	.58	.71
130	.30	.62	.51	.65
140	.22	.55	.40	.61
150	NR	.47	.38	.57
160	NR	.40	.35	.54
170	NR	.32	.29	.51
180	NR	.25	.23	.47
200	NR	.18	.14	.41
210	NR	.15	.10	.38
240	NR	NR	NR	.28
280	NR	NR	NR	.22
NR: Not Recommended				
Caution: Colonial recommends a minimum installation distance of 10 X the pipe diameter from a pump or other sources of turbulence.				

Valve Size	ØD ISO 5211 Mounting Pattern	(S)Stem Sq (mm)	Opening Torque (in.lbs.)	OD of Valve Body (in.)Ø	Bottom to top of top plate (in.)	Recommended torque range for tightening flange bolts (in. lbs.)	Face to face dim (in.)
2	F05 & F07	11	113	6.50	7.31	150-170	1.69
2-1/2	F05 & F07	14	260	7.28	8.09	150-170	1.81
3	F05 & F07	14	260	7.87	8.47	150-170	1.81
4	F07	14	391	9.02	9.84	185-215	2.20
6	F07 & F10	17	738	11.22	12.58	220-260	2.78
8	F10	22	1302	13.50	15.02	440-470	3.35
10	F10	22	2604	16.81	17.84	520-560	4.29
12	F12	27	3906	19.28	21.33	520-560	5.24



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