

Heavy-duty, full-face wafer-style Butterfly valves for controlling the flow of slurries, water, or chemicals. The gear operator with position indicator provides excellent throttling capability and ease of operation.

FEATURES AND BENEFITS

- Full boot-seal for durable performance (No flange gaskets required).
- 100% bubble tight shut-off.
- Bolt pattern meets ANSI/ASME B16.5 Class 150 standard.
- Bi-directional: can be installed in either direction.
- Painted cast iron gear box and hand wheel with stainless steel hardware. (non-submersible)

Note: Colonial also offers low-torque, lever-actuated butterfly valves in 2 through 8" sizes. See 411N Series or 311N Series.

MATERIAL OPTIONS

- PVC with PP Disc
- CPVC with CPVC Disc

SEAL OPTIONS

- EPDM
- Buna-N
- FKM

SAMPLE ENGINEERING SPECIFICATIONS

Thermoplastic butterfly valve bodies shall be constructed from PVC Type I, cell class 12454, or CPVC Type IV, cell class 23447 material (one-piece molded). Valve seals and o-rings shall be EPDM, FKM, or Buna-N. Bolt pattern shall conform to ANSI/ASME B 16.5 Class 150 standards. Disc shall be constructed of PP or CPVC material (one-piece molded with stainless steel reinforcement). Gear operator shall include a position indicator. Valves shall be pressure rated at 150 psi, non-shock water at 73° F (8 and 10") and 100 psi, non-shock water at 73° F (12").



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TEMPERATURE CORRECTION FACTORS FOR VALVES & UNIONS (ABOVE 73° F)

Temp (°F)	PVC	CPVC
73	1.00	1.00
80	.88	.96
90	.75	.92
100	.62	.85
110	.50	.77
120	.40	.70
130	.30	.62
140	.22	.55
150	NR	.47
160	NR	.40
170	NR	.32
180	NR	.25
200	NR	.18
210	NR	.15
240	NR	NR
280	NR	NR


NR: Not Recommended

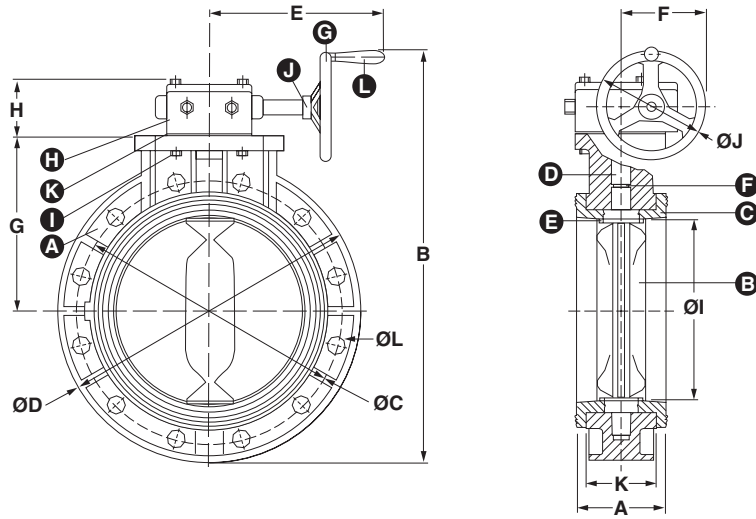
411NG SERIES PART NUMBER TABLE

Size	Material	Part No.
8"	PVC/EPDM	V80411NG
8"	PVC/BUNA-N	V80415NG
8"	PVC/FKM	V80412NG
8"	CPVC/EPDM	V80414NG
8"	CPVC/FKM	V80413NG
10"	PVC/EPDM	V100411NG
10"	PVC/BUNA-N	V100415NG
10"	PVC/FKM	V100412NG
10"	CPVC/EPDM	V100414NG
10"	CPVC/FKM	V100413NG
12"	PVC/EPDM	V120411NG
12"	PVC/BUNA-N	V120415NG
12"	PVC/FKM	V120412NG
12"	CPVC/EPDM	V120414NG
12"	CPVC/FKM	V120413NG

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COMPRESSED AIR WARNING

The products in this document are only intended for use in transferring or storing chemically compatible pressurized liquids. **Do not test or use products in this document with compressed air or other gases.** Doing so is dangerous and could cause injury or great bodily harm should a system fail under compressed air. Only use products that are specifically designed for compressed air/gas service. Call Colonial technical service for more information.





COMPONENTS AND MATERIALS

Part Letter	Component	Quantity	Material
A	Body	1	PVC, CPVC*
B	Disc	1	PP, CPVC*
C	Seal	1	EPDM, FKM, Buna-N
D	Stem	1	410 SS
E	O-Ring	2	EPDM, FKM, Buna-N
F	Stem O-Ring	2	EPDM, FKM, Buna-N
G	Handwheel	1	Powder Paint
H	Gear Box	1	Coated Metal
I	Bolt & Washer	4	304 SS
J	Spring Pin	1	Steel
K	Packing	1	EPDM, FKM, Buna-N
L	Small Handle	1	Steel

*CPVC material choices are special order. Call for price and availability.

DIMENSIONS

Size	A	B	ØC	ØD	E	F
8"	3-7/16"	21-1/4"	11-23/32"	13-1/2"	10-29/32"	6-3/16"
10"	4-5/16"	23-7/32"	14-1/4"	16-3/16"	10-15/16"	6-3/16"
12"	5-3/16"	28-1/32"	17"	19-9/32"	13"	7-9/32"

Size	G	H	ØI	ØJ	K	ØL*
8"	8-9/32"	3"	7-7/8"	7-7/8"	3-1/16"	7/8"
10"	9-7/16"	3"	10-1/32"	7-7/8"	3-3/4"	1"
12"	11-11/16"	3"	12-1/4"	9-27/32"	4-1/2"	1"

*Flange bolt hole diameter: 8" = 8 flange bolt holes; 10 and 12" = 12 flange bolt holes.

WORKING PRESSURE AT 73°F

Non-shock water at 73° F.

Valve Size	PSI
8 and 10"	150
12"	100

TORQUE OPENING (in lbs.)

Valve Size	Opening Torque (lbs)
8"	1,302
10"	2,604
12"	3,906