



# PVC & CPVC BUTTERFLY VALVES

BF-2-0317

## Innovation, Versatility & High Performance Technology

### Basic Valve Options

Butterfly Valves can be purchased with any combination of the following options:

- Lever Handle valve (through 8" only)
- Gear Operated valve
- valve Only (no handle/operator)
- True Lug Valves—  
Stainless Steel—  
Zinc Plated Steel
- Buna-N Seat
- EPDM Seat
- FKM Seat
- PTFE Sleeved Seat

### Valve Repair & Accessory Kits

- Lever Handle Kit
- Gear Operator Kit
- Chainwheel Operator Kit
- Lug Insert Sets (for standard valve—  
Stainless Steel  
— Zinc Plated Steel
- 2" Square / T-Style Gear Operator Nuts
- Seat & Seal Carrier Replacement Kit
- valve Overhaul Kits
- Stem Extension Kit

### Cv Values & Operating Torque

Valve Size	Cv Degrees Open						Operating Torque (in.-lbs.)
	15°	30°	45°	60°	75°	90°	
1-1/2	2	8	20	36	61	81	100
2	3	11	27	49	82	109	110
2-1/2	5	19	48	86	144	192	206
3	9	35	86	155	259	345	360
4	10	41	103	185	308	411	420
6	28	113	281	506	844	1125	720
8	56	225	562	1012	1687	2249	1200
10	111	444	1110	1998	3330	4440	1320
12	158	631	1577	2839	4732	6309	1920
14	176	705	1762	3172	5286	7048	See Note
16	211	846	2114	3805	6341	8455	See Note

**NOTE:** Operating torque for large diameter valves varies significantly with system operating pressure, flow direction and velocity. Contact Spears® for torque requirement based on application.

SPEARS® Butterfly Valves are designed for installation with user supplied full-face, 1/8" thick Neoprene (or desired elastomer) gaskets, hex bolts, nuts, and washers. True Lug Valves may be installed for flow in either direction. Standard Valves may be installed for flow in either direction in a dual flange (flange each side) installation, but require attention to direction of flow when installed in a single-side (flange one-side only) application for dead-end service. Consult installation instructions for details of single-side installation and special instructions for use of lug-insert option.

### General Conformance Specifications

**Material** — ASTM D 1784 (PVC Cell Classification 12454, CPVC Cell Classification 23447); EPDM Valves Certified by NSF International for potable water service.

**Bolt Hole Pattern** — ANSI/ASME B-16.5; CLASS 150

**Laying Length (Standard valve ONLY)** — AWWA C504 (wafer valve); MSS SP-67

**Pressure Class** — 150B, AWWA C504

**Hydrostatic Pressure Test** — AWWA C504, ASTM D 1599

SUITABILITY OF VALVE AND VALVE COMPONENTS FOR APPLICATION AND OPERATING ENVIRONMENT IS AT USER'S DISCRETION AND RESPONSIBILITY.

### Sample Engineering Specification

All thermoplastic valves shall be Butterfly type constructed from PVC Type I Cell Classification 12454 or CPVC Type IV Cell Classification 23447. All valve seats and O-rings shall be Buna-N, EPDM or FKM. Seat shall be a non-liner type interlocked to valve body. Bolt hole patterns shall conform to ANSI/ASME B-16.5 CL 150. Disc shall be offset design with Type 316 stainless steel stem. Lever operated valves shall be equipped with high impact polypropylene handle having built-in lockout capability. Gear operated valves shall be equipped with position indicator and high impact polypropylene handwheel. Valves through size 12" shall accept field installable lug inserts or shall be factory installed True Lug type. Lugs shall be stainless steel or zinc plated steel. Valves shall be pressure rated at 150 psi for water at 73°F, as manufactured by Spears® Manufacturing Company.

### NOT FOR DISTRIBUTION OF COMPRESSED AIR OR GASES

For additional information, please refer to Spears® Price Schedule MSRP-1 for applicable part numbers and pricing.



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