

#### COMPACT 2000 BALL VALVES



### Sample Engineering Specification

All thermoplastic ball valves shall be 2000 Compact type manufactured to ASTM F 1970 and constructed from PVC Type I, ASTM D 1784 Cell Classification 12454 or CPVC Type IV, ASTM D 1784 Cell Classification 23447. All O-rings shall be EPDM or Viton<sup>®</sup>. All valves shall have Safe-T-Shear<sup>®</sup> stem with O-ring stem seal. All handles shall be polypropylene. All valves shall be certified by NSF International for use with potable water. All 1/2" - 2" valves shall be pressure rated to 235 psi, for water @ 73°F, as manufactured by Spears<sup>®</sup> Manufacturing Company.

#### Features – PVC, CPVC

Economical, low profile quarter-turn shutoff valve is excellent for general purpose and many O.E.M applications. PVC and CPVC valves are available in IPS sizes 1/2" through 2" with socket and regular thread.

- · Industrial Grade, Maintenance-Free Sealed Unit
- New Actuator-Ready Body Accepts Spears<sup>®</sup> Improved Mini-Mount Actuator Mounting Kits
- New Double O-ring Stem Seal
- Spears® Safe-T-Shear Stem
- PTFE Self Adjusting Floating Seats
- EPDM or Viton® O-ring Seals
- Full 235 psi Pressure Rating @ 73°F
- NSF Certified for Use with Potable Water
- · Suitable for Vacuum Service
- Produced in ASTM IPS sizes 1/2" 2" with Socket or Threaded End Connectors.

#### **Optional Accessories\***

- · Round Safety Handles
- · Stem Extension Kits
- Square Operator Nuts
- · Multi Mount Valve/Actuation Mounting Kits
- · Mini-Mount Actuation Mounting Kits

#### **Quick-View Valve Selection Chart**

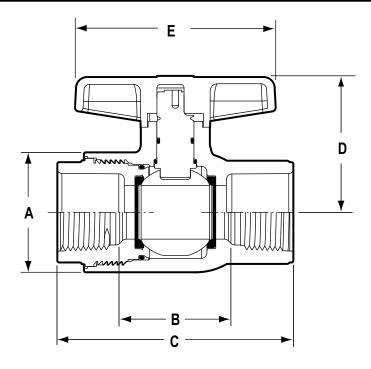
Valve	O-ring	PVC Part	Pressure			
Size	Material	Socket	Threaded	Rating		
1/2	EPDM	6622-005	6621-005			
	Viton®	6632-005	6631-005			
3/4	EPDM	6622-007 6621-00				
	Viton®	6632-007	6631-007	235 psi Non-Shock		
1	EPDM	6622-010	6621-010			
	Viton®	6632-010	6631-010			
1-1/4	EPDM	6622-012	6621-012	Water		
	Viton®	6632-012	6631-012			
1-1/2	EPDM	6622-015	6621-015			
	Viton®	6632-015	6631-015			
2	EPDM	6622-020	6621-020			
	Viton®	6632-020	6631-020			

<sup>1:</sup> For CPVC Valves, add the letter "C" to part numbers listed. (e.g., 6622-005C)

<sup>\*</sup> See "BALL VALVE ACCESSORIES" section for details of individual products.

# **COMPACT 2000 BALL VALVES**





## Dimensions, Weights, Operating Torque & Cv Values

Nominal Size		Dimen	sion Referenc	A	A/4 /I In a \	Oper.2				
	A	B <sup>1</sup>		С	D	E	Approx.	Wt. (Lbs.)	Torque	Cv <sup>3</sup> Values
		Socket	Threaded		ט	_	PVC	CPVC	(inlb.)	
1/2	1-7/16	1-1/4	1-5/8	3-1/16	1-5/8	1-5/8	.18	.20	10	42
3/4	1-13/16	1-1/2	2-1/16	3-9/16	2	2	.29	.31	20	87
1	2-1/16	1-3/4	2-3/16	4	2-5/16	2-5/16	.44	.46	25	157
1-1/4	2-5/8	2-1/6	2-3/4	4-5/8	2-13/16	2-13/16	.68	.70	30	311
1-1/2	3	2-1/2	3-3/8	5-5/16	3-1/16	3-1/16	.99	1.03	50	429
2	3-5/8	3	4	6	3-3/4	3-3/4	1.64	1.70	90	768

### **Temperature Pressure Rating**

System Operating Temperature °F (°C)			100 (38)	110 (43)	120 (49)	130 (54)	140 (60)	150 (66)	160 (71)	170 (77)	180 (82)	190 (88)	200 (93)	210 (99)
Valve Pressure Rating psi (MPa)	1/2" - 2"	PVC	235 (1.62)	211 (1.45)	150 (1.03)	75 (.52)	50 (.34)	-0- (-0-)						
		CPVC	235 (1.62)	219 (1.51)	170 (1.17)	145 (1.00)	130 (.90)	110 (.76)	90 (.62)	80 (.55)	70 (.48)	60 (.41)	50 (.34)	-0- (-0-)

<sup>1:</sup> Valve Lay Length
2: Torque required at valve maximum internal pressure rating, 5ft/sec. Flow velocity.
3: Gallons per minute at 1 psi pressure drop. Valves calculated from laying length, based on derivative of Hazen-Williams equation with surface roughness factor of C=150.