



Valves Technical

CTS Commercial Ball Valves



Features — CPVC

A high quality, quarter-turn shutoff valve designed for line-stop use in Copper Tube Size (CTS) CPVC hot and cold water distribution systems as specified in ASTM D 2846. Approved by national, state and most municipal building codes for use in residential and commercial structures, as well as recreational vehicles, modular homes and mobile home applications. Check local codes for acceptability and restrictions. Available in CTS sizes 1/2" - 2" with socket end connectors.

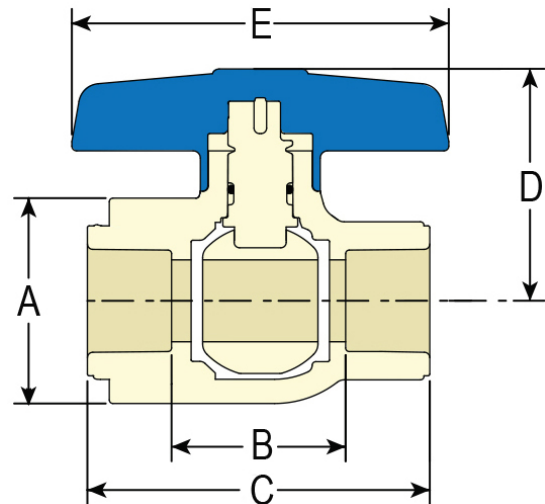
- Chemical & Corrosion Resistant CPVC Construction
- Maintenance-Free Sealed Unit
- CTS Full-Port Design
- High Impact Polypropylene Handle
- Spears® Single O-ring Safe-T-Shear® Stem Design
- EPDM O-rings
- PTFE/HDPE Floating Seat Design
- Suitable for Commercial Hot Water Systems
- Sizes 1/2" - 2" Pressure Rated to 100 psi @ 180°F
- NSF® Certified for Potable Water use
- Assembled with Silicone-Free, Water Soluble Lubricant
- Manufactured to ASTM F 1970

Sample Engineering Specification

All thermoplastic ball valves shall be Copper Tube Size (CTS) sealed unit type constructed from CPVC Type IV, ASTM D 1784 Cell Classification 23447. All O-rings shall be EPDM. All valves shall have double stop Polypropylene handle. All valves shall be certified by NSF International for use in potable water service. All valves shall be manufactured to ASTM F 1970 and pressure rated at 100 psi for water at 180°F, as manufactured by Spears® Manufacturing Company.

Quick-View Valve Selection Chart

Valve Size	O-ring Material	Part Number Socket	Pressure Rating
1/2	EPDM	1922-005	100 psi Non-Shock Water @ 180°F
3/4	EPDM	1922-007	
1	EPDM	1922-010	
1-1/4	EPDM	1922-012	
1-1/2	EPDM	1922-015	
2	EPDM	1922-020	



Dimensions, Weights & C_v Values

Nominal Size	Dimension Reference (inches, ± 1/16)					Approx. Wt. (Lbs.)	C _v ² Values
	A	B ¹	C	D	E		
1/2	1-7/16	1-3/16	2-5/8	1-11/16	2-3/4	.18	37
3/4	1-3/4	1-7/16	2-15/16	2	3-1/4	.26	84
1	2-1/16	1-9/16	3-3/8	2-3/8	3-1/2	.39	151
1-1/4	2-9/16	2	3-7/8	2-13/16	3-3/4	.66	229
1-1/2	2-15/16	2-7/16	4-11/16	3-1/8	4-1/4	.99	330
2	3-9/16	2-13/16	5-1/8	3-7/8	4-31/32	1.50	598

1: Valve Lay Length

2: Gallons per minute at 1 psi pressure drop. Values calculated from valve laying length, based on derivative of Hazen-Williams equation with roughness factor of C=150.

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas

Spears® Manufacturing Company

See Spears® Product Sourcebook for product offerings