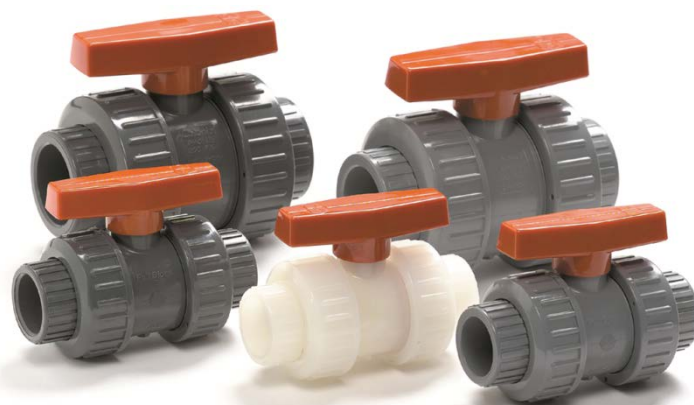


- **Premium quality, Full Port Sch 80 design**, suited for the most demanding industrial, commercial plumbing, aquatic, or irrigation environments. Premium performance in piping systems since 1984.
- Blocked carrier held securely with a patented locking-strip, which also allows for external seat-wear adjustment.
- Dual stem o-rings. The stem is designed to shear above the secondary o-ring under excessive force. This is an important safety feature.
- Two stem-stops for positive shut-off. Floating ball design for pressure-assisted sealing downstream.
- True Union design permits easy removal of valve body for service. Complete inventory of repair parts is readily available.
- Vacuum rating: 26 Hg (inches mercury) with less than 1 Hg loss.
- 100% tested for a bubble-tight seal.
- Meets ASTM F-1970 for pressure-rating.
- Socket dimensions meet all ASTM requirements: PVC D-2467, D-2464; CPVC F-439, F437
- Version with **vented ball** available for sodium hypochlorite application. (See separate submittal)
- Version with Silicone o-rings available for use with Sodium Permanganate in wastewater treatment systems (see part numbers in this brochure)
- Available in PVC, CPVC and Polypropylene. PVC and CPVC versions are certified to NSF/ANSI 61-G & 372

SAMPLE ENGINEERING SPECIFICATIONS: All thermoplastic True Union Ball Valves ½ - 4" shall be Full Port, Schedule 80, and shall be produced of PVC Type I, cell class 12454 or CPVC Type IV, cell class 23447, or natural unpigmented Polypropylene material. O-rings shall be made of EPDM or Viton® FKM material. Valves seats shall be made of PTFE material. Valves shall be assembled using silicone-free lubricant. Valves shall be capable of being adjusted externally for seat-wear, and shall meet ASTM standard F-1970 for pressure rating. End connectors shall be of socket, thread or flange type.



Pressure rating, Cv, Torque, Wgt.

VALVE SIZE	SOCKET & THREAD, PVC & CPVC	FLANGED, PVC & CPVC	SOCKET AND THREAD, PP	Cv ²	OPENING TORQUE ³	WGT. (LBS)
1/2	235	150	150	22	16	0.54
3/4	235	150	150	55	35	0.84
1	235	150	150	112	60	1.03
1-1/4	235	150	150	178	110	3.13
1-1/2	235	150	150	285	110	2.93
2	235	150	150	540	180	5.30
3	150	150		1348	600	9.75
4	150	150		2602	1000	16.15
6 ¹	150	150		2602	1000	21.50

¹ 6" valve is 4" valve with 6 x 4 reducers.

² GPM of water at 1 psi pressure drop, calculated from Hazen-Williams equation.

³ Torque required at maximum pressure rating, with valve installed and interior o-rings wetted.

NOTE: Max recommended fluid velocity is 5 feet per second.

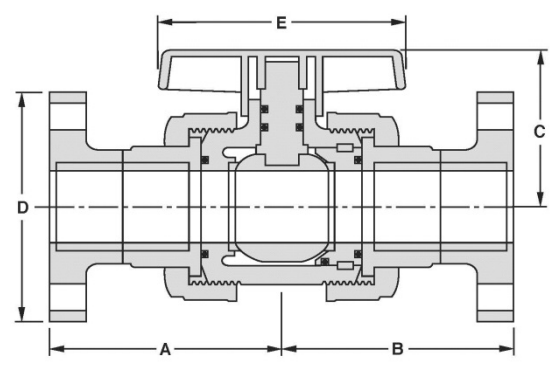
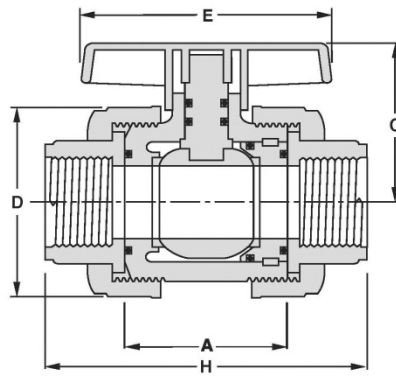
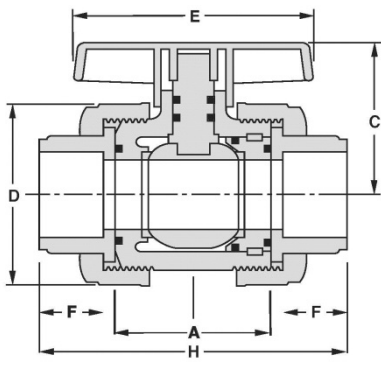
Colonial recommends a minimum installation distance of 10x the pipe diameter from a pump or other sources of turbulence.

Do not use with compressed air or gas.

Pressure ratings per ASTM F-1070, non-shock water at 73°F



REV 031417



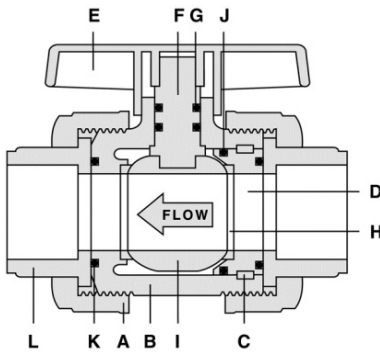
SLIP X SLIP	A	C	D	E	F	H
1/2"	2-1/16"	1-29/32"	2-1/32"	3-7/32"	15/16"	4-1/4"
3/4"	2-5/8"	2-3/8"	2-15/32"	3-7/16"	1"	5-1/8"
1"	2-7/8"	2-19/32"	2-27/32"	4"	1-5/32"	5-3/8"
1-1/4"	3-3/8"	3-19/32"	4-3/32"	5"	1-13/32"	6-1/8"
1-1/2"	3-3/8"	3-19/32"	4-3/32"	5"	1-13/32"	6-1/2"
2"	4-1/4"	4-9/32"	5-5/16"	5-31/31"	1-17/32"	7-3/4"
3"	5-7/8"	5-13/32"	7-7/32"	7-5/8"	1-15/16"	10-5/16"
4"	7"	6-1/32"	8-9/16"	9-15/32"	2-9/32"	12-3/16"

FPT X FPT	A	C	D	E	H
1/2"	2-1/16"	1-29/32"	2-1/32"	3-7/32"	3-11/16"
3/4"	2-5/8"	2-3/8"	2-15/32"	3-7/16"	4-5/16"
1"	2-7/8"	2-19/32"	2-27/32"	4"	5"
1-1/4"	3-3/8"	3-19/32"	4-3/32"	5"	6-1/16"
1-1/2"	3-3/8"	3-19/32"	4-3/32"	5"	5-3/4"
2"	4-1/4"	4-9/32"	5-5/16"	5-31/32"	6-11/16"
3"	5-7/8"	5-13/32"	7-7/32"	7-5/8"	10-1/4"
4"	7"	6-1/32"	8-9/16"	9-15/32"	12-3/16"

FLANGED	A	B	L*	C	D	E
1/2"	3-3/16"	3-3/16"	6-12/32"	1-29/32"	3-17/32"	3-7/32"
3/4"	3-3/4"	3-3/4"	7-1/2"	2-3/8"	3-29/32"	3-7/16"
1"	4"	4"	8"	2-19/32"	4-9/32"	4"
1-1/4"	4-1/2"	4-1/2"	9"	3-19/32"	4-21/32"	5"
1-1/2"	4-13/16"	4-13/16"	9-5/8"	3-19/32"	5-1/32"	5"
2"	5-5/8"	5-5/8"	11-1/4"	4-9/32"	6"	5-31/32"
3"	7"	7"	14"	5-13/32"	7-1/2"	7-5/8"
4"	7-5/16"	7-5/16"	14-5/8"	6-17/32"	9-7/16"	9-15/32"

* L Overall Dim (A + B)

For 2-1/2" size, see the Colonial Commercial Series TUBV (V27050N, V27052N, V27053N, V27054N) on separate submittal.



Part	Component	Qty	Material
A	Union Nut	2	PVC, CPVC, PP
B	Body	1	PVC, CPVC, PP
C	Locking Strip	1	PVDF
D	Carrier	1	PVC, CPVC, PP
E	Handle	1	ABS
F	Stem	1	PVC, CPVC, PP
G	Stem O-Ring	2	EPDM, Viton®, Silicone
H	Ball Seat	2	PTFE
I	Ball	1	PVC, CPVC, PP
J	Carrier O-Ring	1	EPDM, Viton®, Silicone
K	Face O-Ring	2	EPDM, Viton®, Silicone
L	Connector	2	PVC, CPVC, PP

De-rate pressure for elevated process temps per the chart below:

Temp (°F)	PVC	CPVC	PP
73	1.00	1.00	1.00
80	.88	.96	.93
90	.75	.92	.83
100	.62	.85	.74
110	.50	.77	.66
120	.40	.70	.58
130	.30	.62	.51
140	.22	.55	.40
150	NR	.47	.38
160	NR	.40	.35
170	NR	.32	.29
180	NR	.25	.23
200	NR	.18	.14
210	NR	.15	.10
240	NR	NR	NR
280	NR	NR	NR

MATERIAL CHOICES	SOCKET & THREADED END CONNECTORS	SOCKET	THREADED	FLANGED	SOCKET & THREADED END CONNECTORS	SOCKET	THREADED	FLANGED
SIZE	PVC w/EPDM O-RINGS				PVC w/VITON® O-RINGS			
1/2"	V07101N	-	-	V07121N	V07102N	-	-	V07122N
3/4"	V08101N	-	-	V08121N	V08102N	-	-	V08122N
1"	V10101N	-	-	V10121N	V10102N	-	-	V10122N
1-1/4"	V14101N	-	-	V14121N	V14102N	-	-	V14122N
1-1/2"	V17101N	-	-	V17121N	V17102N	-	-	V17122N
2"	V20101N	-	-	V20121N	V20102N	-	-	V20122N
3"	-	V30101N	V30111N	V30121N	-	V30102N	V30112N	V30122N
4"	-	V40101N	V40111N	V40121N	-	V40102N	V40112N	V40122N
*1/6"	-	V60101N	-	V60121N	-	V60102N	-	V60122N

SIZE	CPVC w/EPDM			CPVC w/VITON®				PP w/VITON®	
1/2"	V07103N	-	-	V07123N	V07104N	-	-	V07124N	V07106N
3/4"	V08103N	-	-	V08123N	V08104N	-	-	V08124N	V08106N
1"	V10103N	-	-	V10123N	V10104N	-	-	V10124N	V10106N
1-1/4"	V14103N	-	-	V14123N	V17104N	-	-	V14124N	V14106N
1-1/2"	V17103N	-	-	V17123N	V17104N	-	-	V17124N	V17106N
2"	V20103N	-	-	V20123N	V20104N	-	-	V20124N	V20106N
3"	-	V30103N	V30113N	V30123N	-	V30104N	V30114N	V30124N	-
4"	-	V40103N	V40113N	V40123N	-	V40104N	V40114N	V40124N	-
*1/6"	-	V60103N	-	-	-	V60104N	-	V60124N	-



Electric and Pneumatic Actuated valves, brackets and accessories are also available.

