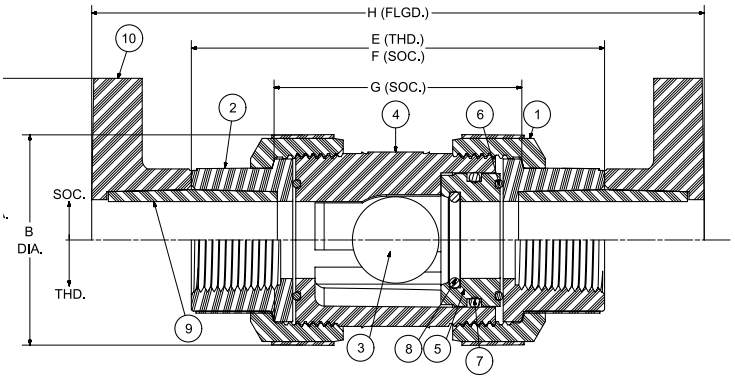
Polypropylene and Kynar® PVDF True Union Ball Check, and Vent Valves

Chemtrol Figure Numbers

Type Valve	End Conn	Elastomeric Trim	Materials			
			Black Polypro	Chem-Pure Natural Polypro	Red PVDF	Natural PVDF
Ball Check Valve	Soc.	FKM	S61BC-V	S62BC-V	S65BC-V	S66BC-V
	Thd.	FKM	T61BC-V	NA	T65BC-V	T66BC-V
	Flgd.	FKM	F61BC-V	NA	F65BC-V	F66BC-V

Features

- Rated at 150 psi with non-shock service at 73°F
- Gravity ball check may be converted for air or gas venting by replacement of standard ball with natural polypropylene floater ball. Then install valve upside down for fluid to lift ball into seat.
- Free oscillation of ball in guide ribs facilitates full port flow with minimum turbulence and chatter.
- Equally effective in checking back flows from head pressure on the discharge or suction sides of pump.



Construction Materials

Components[1]	Black PP	Nat. PP	Red PVDF	Nat. PVDF
1. Union Nut	Black PP	Nat. PP	Red PVDF	Nat. PVDF
2. End Connector	Black PP	Nat. PP	Red PVDF	Nat. PVDF
3. Ball – Standard for Check or Foot Valve – Floater Ball for Vent Valve[2]	Nat. GBPP[4] Natural PP Floater Ball		Nat. PVDF	
4. Body[1]	Black PP	Nat. PP	Red PVDF	Nat. PVDF
5. C.V. Seat-Carrier	Nat. PP		Nat. PVDF	
6. O-ring[3] Body & Carrier; End Seal	FKM			
7. O-ring[3] Seat-Carrier, OD Seal	FKM			
8. O-ring[3] Seat Seal	FKM			
9. Plain End Pipe Nipple for Flanged Valve	Black PP	Nat. PP	Red PVDF	Nat. PVDF
10. Flange–Socket for Flanged Valve	Black PP	Nat. PP	Red PVDF	Nat. PVDF

1 All components except valve bodies are available as replacement parts.
2 Gravity ball check valves are converted to vent valves by replacing the standard ball with a floater ball and inverting the valve at installation–with seat up.
3 Each replacement O-ring kit contains all the O-rings required to refurbish any True Union Check or Ball Valve (regardless of model or style), or a minimum of two pipe unions.
4 Polypropylene filled with glass micro-beads.

Dimensions[1]–Weights–Fluid Flow Coefficients

Valve Size	Ball Check/Foot A	B	C	D	Ball Check Valve E Thd.	F Soc.	G Soc.	H Flgd.	Approx.[2] Wt. Lbs.	Seating Head Ft – H_2O Vert.	Horiz.	Fluid Flow Coefficient C_V[3]
1/2	3.50	1.98	2.63	0.50	3.94	4.13	2.36	6.27	0.42	6	7	5
3/4	3.88	2.44	2.63	0.75	4.65	5.02	3.00	7.38	0.72	6	7	10
1	4.26	2.83	3.63	1.00	5.08	5.40	3.12	7.99	1.05	4	5	19
1 1/2	5.00	4.08	5.50	1.50	6.38	6.99	4.21	10.18	2.62	4	5	56
2	6.00	5.23	5.50	2.00	7.36	8.02	4.99	11.45	4.76	4	5	101

1 Dimensions shown are for PVC and CPVC. Due to molding shrinkage the dimensions for PP and PVDF would be somewhat less, and the end-to-end length of threaded equals socket valves.
2 Weights shown for ball valve figures are PVC threaded models. For an approximation of PVDF, and PP check valve weights the PVC weight may be multiplied by factors of 1.275, or 0.656 respectively.
3 C_V values are based on the basic valve laying length (G).

Maximum Operating Pressure (psi vs. Temperature

Operating Temperature (F)	PP	PVDF
100	150	150
110	140	150
120	130	150
130	118	150
140	105	150

Operating Temperature (F)	PP	PVDF
150	93	140
160	80	133
170	70	125
180	60	115
190	N.R.	106

Operating Temperature (F)	PP	PVDF
200	N.R.	97
250	N.R.	50
280	N.R.	25

N.R. - Not recommended

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