



TC Series True Union Ball Check Valves

1/4" - 6" PVC, 1/2" - 6" CPVC AND 1/2" - 2" PP

KEY FEATURES

- Available in PVC, CPVC and PP
- For Horizontal or Vertical Installation
- 1/2" to 6" are Sure Block Design
- Square Cut Seat for Positive Sealing
- Seats with Minimum Back Pressure
- 1/4" and 3/8" are Trim Check Design
- NSF / ANSI 61 and NSF / ANSI 372 Listed

OPTIONS

- Foot Valve Screens

MATERIALS

- PVC Cell Class 12454 per ASTM D1784
- CPVC Cell Class 23447 per ASTM D1784
- PP per ASTM D4101
- FPM and EPDM O-Ring Seals



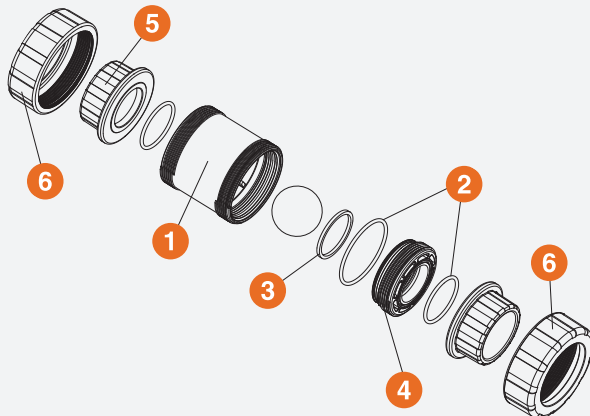
Certified to
NSF/ANSI 61 & 372
1/4" - 4"



Ball check valve with foot valve screen installed

TECHNICAL INFORMATION

EXPLODED VIEW



SELECTION CHART

SIZE	MATERIAL	END CONNECTION	SEALS	PRESSURE RATING
1/4" - 3/8" * (DN8 - DN10)	PVC	Socket or Threaded	FPM	150 PSI @ 70°F 10 Bar @ 21°C Non-Shock
1/2" - 2" (DN15 - DN50)	PVC or CPVC	Socket and Threaded or Flanged****	FPM or EPDM	235 PSI @ 70°F 16 Bar @ 21°C Non-Shock
	pp**	Threaded or Socket Fusion		
2-1/2" - 4" (DN65 - DN100)	PVC or CPVC	Socket, Threaded or Flanged	FPM or EPDM	150 PSI @ 70°F 10 Bar @ 21°C Non-Shock
6" *** (DN150)		Flanged		

* Trim Checks ** 2" PP is rated to 100 PSI @ 70°F Non-Shock *** 4" valve venturied to 6"

**** All flanged valves are rated to 150 PSI @ 70°F Non-Shock

***** PVC and CPVC socket ends available to ISO 727-1 and threaded ends to BS21. PP socket fusion ends per ASTM F2389 and threaded ends per BS21. Flanged ends available in DIN / EN PN10.

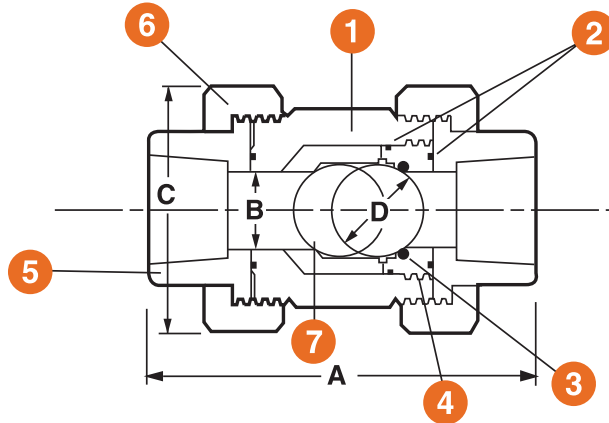
TC Series True Union Ball Check Valves

1/4" - 6" PVC, 1/2" - 6" CPVC AND 1/2" - 2" PP

TECHNICAL INFORMATION, CONTINUED

PARTS LIST

1. Body
2. O-Ring Seals
3. Square Cut O-Ring Seat
4. Seal Retainer
5. End Connector
6. Union Nut



Ball check valve with foot valve screen installed

DIMENSIONS

SIZE in / DN	A in / mm	B in / mm	C in / mm	D in / mm	E in / mm	F in / mm	G in / mm	WEIGHT lbs / kg	
								SOC / THD	FLANGED
1/4 / 8	3.06 / 78	.31 / 8	1.38 / 35	.50 / 13	N/A	N/A	N/A	.13 / .06	N/A
3/8 / 10	3.06 / 78	.31 / 8	1.38 / 35	.50 / 13	N/A	N/A	N/A	.13 / .06	N/A
1/2 / 15	4.63 / 118	.50 / 13	2.25 / 57	.75 / 19	6.75 / 171	4.88 / 124	2.32 / 59	.75 / .34	1.00 / .45
3/4 / 20*	4.75 / 121	.75 / 19	2.63 / 67	1.00 / 25	7.13 / 181	5.00 / 127	2.60 / 66	.75 / .34	1.38 / .63
1 / 25*	5.25 / 133	1.00 / 25	3.00 / 76	1.25 / 32	7.75 / 197	5.88 / 149	2.88 / 73	1.25 / .57	2.13 / .97
1-1/4 / 32*	6.30 / 160	1.25 / 32	4.00 / 102	1.75 / 44	9.19 / 233	6.94 / 176	3.75 / 95	2.00 / .91	3.75 / 1.70
1-1/2 / 40*	6.75 / 171	1.50 / 38	4.00 / 102	1.75 / 44	9.75 / 248	7.06 / 179	3.75 / 95	2.00 / .91	3.75 / 1.70
2 / 50*	8.00 / 203	1.94 / 49	4.75 / 121	2.25 / 57	11.25 / 286	8.56 / 217	4.50 / 114	3.75 / 1.70	5.75 / 2.61
2-1/2 / 65*	10.68 / 271	2.88 / 73	6.56 / 167	3.25 / 83	14.38 / 365	11.25 / 286	2.50 / 64	10.00 / 4.54	14.00 / 6.35
3 / 80	10.56 / 268	2.88 / 73	6.56 / 167	3.25 / 83	14.38 / 365	11.25 / 286	2.50 / 64	10.00 / 4.54	14.00 / 6.35
4 / 100	12.94 / 329	4.00 / 102	8.56 / 217	4.25 / 108	17.00 / 432	14.63 / 372	4.25 / 108	17.00 / 7.71	25.00 / 11.34
6 / 150	N/A	4.00 / 102	N/A	4.25 / 108	19.19 / 487	N/A	N/A	N/A	30.20 / 13.70

Dimensions are subject to change without notice – consult factory for installation information

Hayward TC Ball Check Valves require a minimum of 2 PSI to seat and 1-1/2 PSI cracking pressure to open

* Metric End Connections Available In: BSP – Straight Thread, BSP TR – Tapered Thread and Metric Socket for PVC and CPVC Valves Only

Cv VALUES

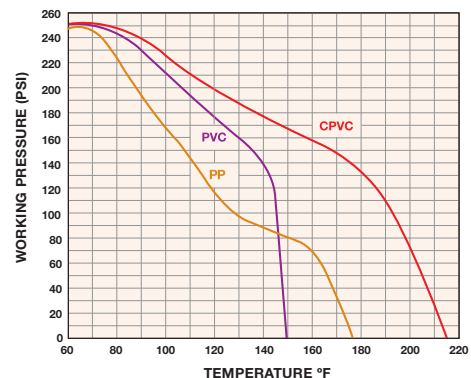
SIZE in / DN	Cv VALUES	SIZE in / DN	Cv VALUES
1/4 / 8	1.0	1-1/2 / 40	45.0
3/8 / 10	3.0	2 / 50	130.0
1/2 / 15	4.8	2-1/2 / 65	170.0
3/4 / 20	7.7	3 / 80	250.0
1 / 25	11.0	4 / 100	400.0
1-1/4 / 32	25.0	6 / 150	340.0

PRESSURE LOSS CALCULATION FORMULA

$$\Delta P = \left[\frac{Q}{Cv} \right]^2$$

ΔP = Pressure Drop
 Q = Flow in GPM
 Cv = Flow Coefficient

OPERATING TEMPERATURE/PRESSURE



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Hayward Flow Control has been a leading manufacturer of industrial thermoplastic valves and process control products for more than 60 years. In fact, Hayward was one of the originators of the first thermoplastic ball valves. Since then, we have remained committed to producing the highest quality products while providing outstanding service.

Liquid Filters and Strainers



Bag Filter vessel

- GFPP
- PVC
- CPVC



Y Strainers

- PVC
- CPVC
- Clear PVC
- PVDF



Simplex Strainers

- PVC
- CPVC
- GFPP
- PVDF
- Eastar® (Clear)



Duplex Strainers

- PVC
- CPVC
- GFPP
- Eastar® (Clear)

Valves and Flow Control



Ball Valves

- PVC
- CPVC
- GFPP
- PVDF



Check Valves

- Ball Check Valves
- Y-Check Valves
- Wafer Check Valves
- Swing Check Valves



Pressure & Chemfeed

- Injection Quills
- Back Pressure
- Pressure Relief
- Diaphragm Valves
- Needle Valves
- Angle Globe Valves



Butterfly Valves

- PVC
- CPVC
- GFPP
- PP
- PVDF



Actuation

- Electric
- Pneumatic



Solenoid Valves

- PVC
- CPVC
- PVDF



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