

## SPECIFICATIONS

# FIGURE 345A & 355A

## THERMOPLASTIC VALVES

### TRUE-UNION BALL CHECK VALVE



FIGURE 345A - PVC WITH NPT AND SW ENDS

FIGURE 355A - CPVC WITH NPT AND SW ENDS

### FEATURES

- Pressure rating: 150 PSI @ 73°F
- 5 PSI minimum shutoff
- Temperature range:
  - PVC: 41°F–122°F (5°C–50°C)
  - CPVC: 32°F–194°F (0°C–90°C)
- EPDM or FPM (Viton®) seals
- Both NPT & socket ends included
- For vertical and horizontal installation\*
- With flow direction arrow
- Machined and tumbled ball for hermetic seal
  - Easy maintenance
  - 5 PSI cracking pressure

\* For vertical up flow only, not down flow. In horizontal installations, standard line drop typically will not allow the ball to seat (a back pressure differential of 5 psi minimum is needed for shutoff).



## PRODUCT SPECIFICATIONS

### Connections

- Threaded dimension: ASTM F 1498, ref. ANSI B1.20.1
- Socket dimension: PVC ASTM D 2467; CPVC ASTM F 439

### Materials

- PVC: Cell classification 12454 per ASTM D1784 (formerly Type I, Grade 1)
- CPVC: Cell classification 23447 per ASTM D1784 (formerly Type IV, Grade 1)

### FIGURE NUMBER MATRIX

FNW 345A/355A		
BODY TYPE	SEALS	SIZE CODE (IN.)
PVC = 345A	EPDM = E	1/2 = D
CPVC = 355A	FPM (Viton®) = V	3/4 = F
		1 = G
		1-1/4 = H
		1-1/2 = J
		2 = K

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#### ABOUT PVC

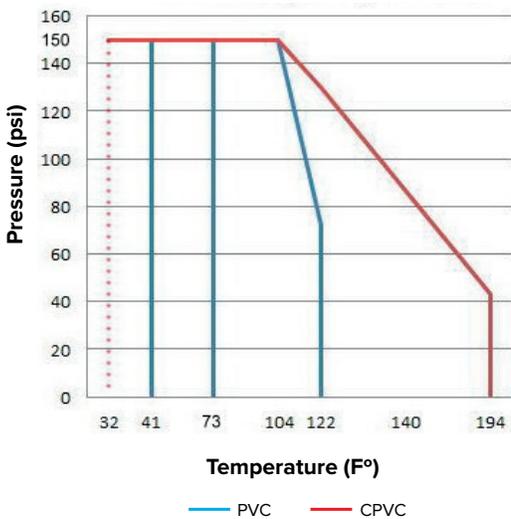
Unplasticised Polyvinyl Chloride, or PVC, is the most widely used of all plastics and commonly used for pressure pipes, fittings and valves. It is rigid, suitable for above and below ground applications. PVC has good chemical resistance and is odorless and tasteless. It is for use with liquids and gases with temperatures +32°F to +140°F\* (for higher temperatures see CPVC) at a wide range of operating pressures. Some poorer quality PVC can leach chemicals into water which can build up in recirculation systems, however most modern pipe is built to specific standards (e.g. BS3505/6, ASTM D 1785, ASTM D2241, DIN 8061/2, KIWA 49, BS4346 PART 1, DIN 8063) to control this. ASTM D1784 controls the compounds for rigid PVC and CPVC.

#### ABOUT CPVC

Chlorinated Polyvinyl Chloride, or CPVC, has been offering the process industry superior corrosion resistance, mechanical strength and excellent life-cycle economics in a single package. Conceptually, CPVC is a PVC homopolymer that has been subjected to a chlorination reaction. It is generally inert to most mineral acids, bases, salts and paraffinic hydrocarbon solutions. CPVC is not recommended for use with chlorinated or aromatic hydrocarbons, esters or ketones. The upper temperature limit on CPVC is 200°F\*. There is no lower temperature limit on CPVC and the material will withstand pressure. However, at very cold temperatures, the material will become brittle and the impact strength will decline.

\* Note: Other materials within valves besides PVC and CPVC can have an affect on the temperature limits of the valve. Temperatures noted above are for the thermoplastic material alone.

#### PRESSURE/TEMPERATURE



#### CV & WEIGHTS

Size (in.)	CV	Wt (lbs)
1/2	10	0.44
3/4	26	0.71
1	37	0.99
1-1/4	40	2.54
1-1/2	80	2.25
2	152	3.9

PARTS BREAKDOWN

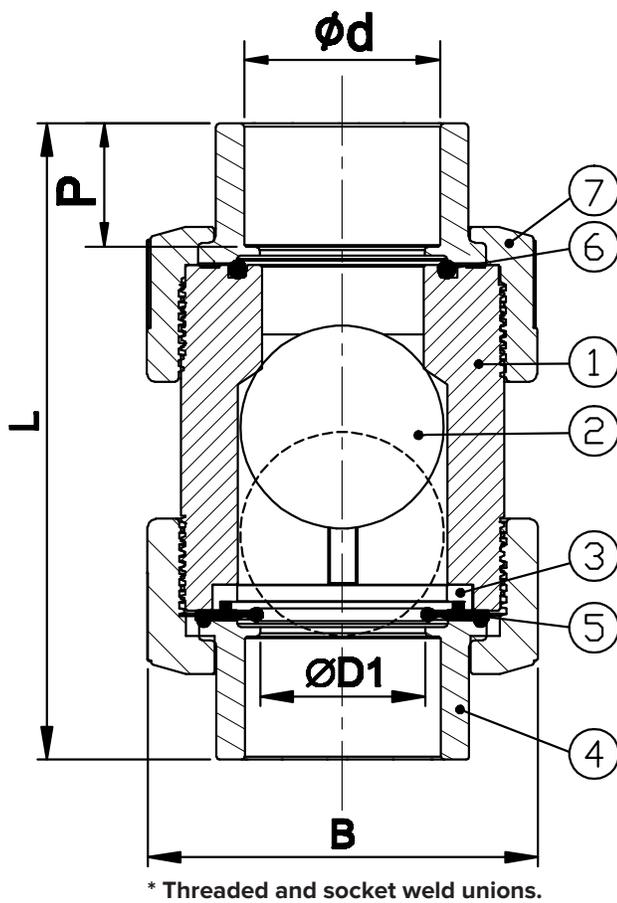
**FIGURE 345A & 355A**

THERMOPLASTIC VALVES  
TRUE-UNION BALL CHECK VALVE



FIGURE 345A - PVC WITH NPT AND SW ENDS  
FIGURE 355A - CPVC WITH NPT AND SW ENDS

PARTS DIAGRAM



PART MATERIALS & QUANTITY

Ref #	Description	Material				Qty
		345A		355A		
		EPDM	Viton®	EPDM	Viton®	
1	Body	PVC		CPVC		1
2	Ball	PVC		CPVC		1
3	Seat Carrier	PVC		CPVC		1
4	End Connector	PVC		CPVC		2
5	Seat	EPDM	FPM (Viton®)	EPDM	FPM (Viton®)	1
6	Solid End O-Ring	EPDM	FPM (Viton®)	EPDM	FPM (Viton®)	1
7	Union Nut	PVC		CPVC		2

REFERENCE CHART

Size (in.)	Dimensions (in.)					
	D1	d		L	B	P
		Socket	Thread			
1/2	0.59	0.848	14	4.094	2.126	0.875
3/4	0.787	1.058	14	4.725	2.492	1
1	0.984	1.325	11.5	5.345	2.874	1.125
1-1/4	1.26	1.67	11.5	6.937	3.842	1.25
1-1/2	1.575	1.912	11.5	6.937	3.842	1.375
2	1.969	2.387	11.5	7.677	4.744	1.5