



## Technical Information

### Application

Molded CLASS 150 Flange fittings are coupling devices designed for joining IPS (Iron Pipe Size) plastic piping systems, where frequent disassembly may be required, and can be used as a transitional fitting for joining plastic to metal piping systems. Suitability of application is at the discretion of the user.

### Pressure Rating

150 psi, water at 73°F.

### Flange Types

**One Piece** — Available in socket configuration, sizes 1/2" through 8"; threaded and SR threaded (Special Reinforced) configuration sizes 1/2" through 4".

**Van Stone Style** — Two-piece design with rotating flange ring, available in socket configurations, sizes 1/2" through 16"; threaded configurations, sizes 1/2" through 4" and spigot configurations, sizes 1/2" through 12".

**Blind** — Closed ring design for capping off a mating flange, flanged fitting or flanged valve, available in sizes 1/2" through 12".

### Materials

All injection molded flanges are produced from either PVC or CPVC materials approved for potable water use by the National Sanitation Foundation (NSF®).

Glass-filled PVC or CPVC materials may be used in certain Van Stone Style flange rings and large diameter Blind flanges where additional reinforcement is deemed necessary.

### Conformance Standards

**Socket & Spigot** — ASTM D 2467 (PVC); ASTM F 439 (CPVC), as applicable.

**Threads** — ASTM F 1498.

**Bolt Hole Pattern** — ANSI B16.5; ASTM D 4024.

**Material** — ASTM D 1784 (PVC Cell Classification 12454-B, CPVC Cell Classification 23447-B).

### Weights & Dimensions

Specified minimum bolt lengths are based on the use of two Spears® Flanges, two standard flat washers, standard nut and 1/8" thick elastomer full face gasket. Mating with other brands or accessories may require variation. Bolts and gaskets are not supplied with flanges.

### Dimension references:

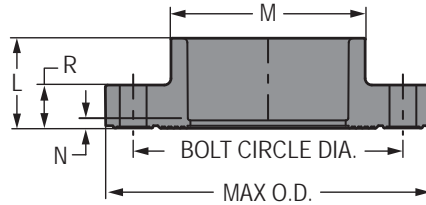
- L** = Overall length of hub,  $\pm 1/16$  inch.
- M** = Outside diameter of socket hub,  $\pm 1/16$  inch.
- N** = (Laying Length) socket/spigot bottom to seal-ring face of flange,  $\pm 1/16$  inch.
- R** = Height (thickness) of flange ring,  $\pm 1/16$  inch.
- Max O.D.** = Outside diameter of ring,  $\pm 1/16$  inch.
- Bolt Circle Diameter** = ANSI B 16.5 Standard; ASTM D 4024,  $\pm 1/16$  inch.



## PVC & CPVC INJECTION MOLDED CLASS 150 FLANGES

### Flange One Piece

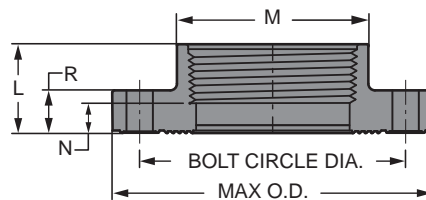
Socket



Part Number		Size	L	M	N	R	Bolt Circle Dia.	No. of Bolt Holes	Bolt Size	Min. Bolt Length	Max O.D.	Approx. Wt. (Lbs.)	
PVC	CPVC											PVC	CPVC
851-005	851-005C	1/2	1-1/16	1-9/32	1/8	9/16	2-3/8	4	1/2	2	3-1/2	.22	.24
851-007	851-007C	3/4	1-3/16	1-1/2	1/8	5/8	2-3/4	4	1/2	2	3-7/8	.31	.31
851-010	851-010C	1	1-5/16	1-13/16	3/16	3/4	3-1/8	4	1/2	2-1/4	4-1/4	.44	.47
851-012	851-012C	1-1/4	1-7/16	2-7/32	3/16	23/32	3-1/2	4	1/2	2-1/4	4-5/8	.41	.42
851-015	851-015C	1-1/2	1-19/32	2-1/2	3/16	23/32	3-7/8	4	1/2	2-1/2	5-1/16	.58	.61
851-020	851-020C	2	1-27/32	3	5/16	27/32	4-3/4	4	5/8	3	6	.82	.95
851-025	851-025C	2-1/2	2-1/4	3-1/2	1/2	1	5-1/2	4	5/8	3-1/4	7	1.63	1.67
851-030	851-030C	3	2-5/16	4-9/32	3/8	1-1/16	6	4	5/8	3-1/4	7-1/2	1.74	1.81
851-040	851-040C	4	2-7/16	5-7/32	3/16	1-5/32	7-1/2	8	5/8	3-1/2	9-1/16	2.67	2.78
851-050	851-050C	5	3-1/4	6-3/8	1/4	1	8-1/2	8	3/4	3-3/4	10-1/8	3.00	3.17
851-060	851-060C	6	3-1/4	7-9/16	1/4	1-3/8	9-1/2	8	3/4	4	11	4.06	4.34
851-080	851-080C	8	4-17/32	9-3/4	1/2	1-7/16	11-11/16	8	3/4	4-1/2	13-5/8	7.67	8.02
851-100F	851-100CF	10	9-7/8	11-15/16	5-5/8	1-1/4	14-1/4	12	7/8	4	16	18.90	19.27
851-120F	851-120CF	12	10-11/16	14-1/8	4-7/16	1-3/8	17	12	7/8	4	19	26.92	30.67

### Flange One Piece

Flt



Part Number		Size	L	M	N	R	Bolt Circle Dia.	No. of Bolt Holes	Bolt Size	Min. Bolt Length	Max O.D.	Approx. Wt. (Lbs.)	
PVC	CPVC											PVC	CPVC
852-005	852-005C	1/2	1-1/16	1-5/16	9/32	9/16	2-3/8	4	1/2	2	3-1/2	.21	.22
852-007	852-007C	3/4	1-3/16	1-17/32	15/32	5/8	2-3/4	4	1/2	2	3-7/8	.30	.32
852-010	852-010C	1	1-5/16	1-13/16	7/16	3/4	3-1/8	4	1/2	2-1/4	4-1/4	.41	.48
852-012	852-012C	1-1/4	1-3/8	2-7/32	17/32	23/32	3-1/2	4	1/2	2-1/4	4-5/8	.44	.46
852-015	852-015C	1-1/2	1-11/16	2-1/2	19/32	23/32	3-27/32	4	1/2	2-1/2	5-1/16	.61	.64