## **PVC Pipe Flange Dimensions & Information**



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#### GENERAL INFORMATION

#### **Recommendations For Installers And Users**

Plastic piping systems should be ENGINEERED, INSTALLED, and OPERATED in accordance with ESTABLISHED DESIGN AND ENGINEERING STANDARDS AND PROCEDURES For plastic piping systems. Suitability for the intended service application should be determined by the installer and /or user prior to installation of a plastic piping system. PRIOR TO ASSEMBLY, all piping system components should be inspected for damage or irregularities. Mating components should be checked to assure that tolerances and engagements are compatible. Do not use any components that appear irregular or do not fit properly. Contact the appropriate manufacturer of the component product in question to determine usability.

**Solvent Weld Connections** - Use quality solvent cements and primers formulated for the intended service application, pipe size and type of joint. While the pipe and fitting materials may be compatible with the intended medium, the solvent cement may not be. Consult the manufacturer for suitability of use. Read and follow the cement and primer manufacturers' applications and cure time instructions thoroughly. Be sure to use the correct size applicator.

Threaded Connections - Use a quality grade thread sealant. WARNING: SOME PIPE JOINT COMPOUNDS OR PTFE PASTES MAY CONTAIN SUBSTANCES THAT COULD CAUSE STRESS CRACKING TO PLASTIC. Spears® Manufacturing Company recommends the use of Spears® BLUE 75™ thread sealant which has been tested for compatibility with Spears® products. Please follow the sealant manufacturer's application/installation instructions. Choice of an appropriate thread sealant other than those listed above is at the discretion of the installer. 1 to 2 turns beyond FINGER TIGHT is generally all that is required to make a sound plastic thread connection. Unnecessary OVERTIGHTENING will cause DAMAGE TO BOTH PIPE AND FITTING.

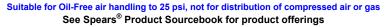
"Lead Free" low lead certification - unless otherwise specified; all Spears® Thermoplastic Flanges specified here-in are certified by NSF International to ANSI/NSF® Standard 61, Annex G and is in compliance with California's Health & Safety Code Section 116825 (commonly known as AB1953) and Vermont Act 193. Weighted average lead content <=0.25%.

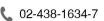




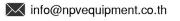


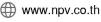
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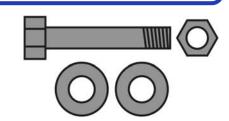
#### **Bolt Kit Selection Guide**

**Bolt Hardware Kits Available** 

For Connection of 2-Spears® Flanges

Includes Bolts, Nuts & Flat Washers for Specified Flange Size

- · Order Gaskets & Bolt Kits Separately
- Pre-coated, Anti-seize Lubricated Bolts
- Available in Zinc Coated Steel, Type 316 Stainless Steel or Type 304 Stainless Steel



| Flange        | Bolts*  | Diameter | Length |        | Kit Part Number |         |
|---------------|---------|----------|--------|--------|-----------------|---------|
| Size          | Per Kit | (inTPI)  | (in.)  | Zinc   | 316 SS          | 304 SS  |
| 1/2           | 4       | 1/2 - 13 | 2      | HK-005 | HK1-005         | HK2-005 |
| 3/4 & 1       | 4       | 1/2 - 13 | 2-1/4  | HK-010 | HK1-010         | HK2-010 |
| 1-1/4 & 1-1/2 | 4       | 1/2 - 13 | 2-1/2  | HK-015 | HK1-015         | HK2-015 |
| 2             | 4       | 5/8 - 11 | 3      | HK-020 | HK1-020         | HK2-020 |
| 2-1/2         | 4       | 5/8 - 11 | 3-1/4  | HK-025 | HK1-025         | HK2-025 |
| 3             | 4       | 5/8 - 11 | 3-1/2  | HK-030 | HK1-030         | HK2-030 |
| 4             | 8       | 5/8 - 11 | 3-1/2  | HK-040 | HK1-040         | HK2-040 |
| 5 & 6         | 8       | 3/4 - 10 | 4      | HK-060 | HK1-060         | HK2-060 |
| 8             | 8       | 3/4 - 10 | 4-1/2  | HK-080 | HK1-080         | HK2-080 |
| 10 & 12       | 12      | 7/8 - 9  | 6      | HK-120 | HK1-120         | HK2-120 |

## **Bolt Torque**

Recommended Bolt Torque is shown in Table 1. Threads should be clean and well lubricated. Actual field conditions may require variations in these recommendations. CAUTION: UNNECESSARY OVER TORQUING WILL DAMAGE THE FLANGE.

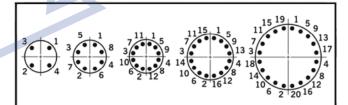
Table 1

| Flange Size (in.) | Recommended Torque (ft. lbs.) |
|-------------------|-------------------------------|
| 1/2 - 1-1/2       | 12                            |
| 2 - 4             | 25                            |
| 5                 | 30                            |
| 6 - 8             | 40                            |
| 10                | 64                            |
| 12                | 95                            |
| 14 - 24           | 110                           |

#### **Torque Sequence**

Bolt Torque sequence is shown Below in Table 2.

Table 2

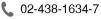


## **Temperature Pressure Rating**

| -   | System Operating<br>Temperature °F (°C) |               | 110<br>(43)  | 120<br>(49)  | 130<br>(54)  | 140<br>(60)  | 150<br>(66)  | 160<br>(71)  | 170<br>(77)  | 180<br>(82)  | 190<br>(88)  | 200<br>(93)  |
|---|---|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| _   | PVC                                     | 150<br>(1.03) | 135<br>(.93) | 110<br>(.76) | 75<br>(.52)  | 50<br>(.34)  | -0-<br>(-0-) | -0-<br>(-0-) | -0-<br>(-0-) | -0-<br>(-0-) | -0-<br>(-0-) | -0-<br>(-0-) |
| Flange<br>Pressure<br>Rating<br>psi (MPa) | CPVC                                    | 150<br>(1.03) | 140<br>(.93) | 130<br>(.90) | 120<br>(.83) | 110<br>(.76) | 100<br>(.70) | 90<br>(.62)  | 80<br>(.55)  | 70<br>(.48)  | 60<br>(.41)  | 50<br>(.34)  |
| por (will d)                              | PP                                      | 150<br>(1.03) | 105<br>(.72) | 90<br>(.62)  | 80<br>(.55)  | 65<br>(.45)  | 50<br>(.34)  | 45<br>(.31)  | 30<br>(.21)  | 20<br>(.14)  | -0-<br>(-0-) | -0-<br>(-0-) |

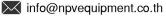
Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas See Spears® Product Sourcebook for product offerings

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## **PVC Pipe Flange Dimensions & Information**



#### **Gaskets**

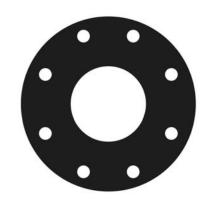
Full faced, 1/8" thick elastomer gaskets with a Shore "A" Durometer of approximately 70 is recommended.

#### **Gasket Selection Guide**

## Following Gasket Numbers Available from Spears®

- Order Gaskets & Bolt Kits Separately
- 1/8" Full-Face design with ANSI Class 150 Bolt Patterns
- Pressure rated to 150 psi @ 73°F
- Available in Buna-N, EPDM, or FKM

| - |                |                  |                    |                  |           |
|---|----------------|------------------|--------------------|------------------|-----------|
|   | Flange<br>Size | Bolts<br>Per Kit | (<br>Buna-N        | Gasket Part Numb | er<br>FKM |
|   | 1/2            | 4                | GK1-005            | GK2-005          | GK3-005   |
|   | 3/4            | 4                | GK1-003<br>GK1-007 | GK2-007          | GK3-007   |
|   | 1              | 4                | GK1-010            | GK2-010          | GK3-010   |
|   | 1-1/4          | 4                | GK1-012            | GK2-012          | GK3-012   |
|   | 1-1/2          | 4                | GK1-015            | GK2-015          | GK3-015   |
|   | 2              | 4                | GK1-020            | GK2-020          | GK3-020   |
|   | 2-1/2          | 4                | GK1-025            | GK2-025          | GK3-025   |
|   | 3              | 4                | GK1-030            | GK2-030          | GK3-030   |
|   | 4              | 8                | GK1-040            | GK2-040          | GK3-040   |
|   | 5              | 8                | GK1-050            | GK2-050          | GK3-050   |
|   | 6              | 8                | GK1-060            | GK2-060          | GK3-060   |
|   | 8              | 8                | GK1-080            | GK2-080          | GK3-080   |
|   | 10             | 12               | GK1-100            | GK2-100          | GK3-100   |
|   | 12             | 12               | GK1-120            | GK2-120          | GK3-120   |



#### Flange Make-up

Once a flange is joined to pipe, the method for joining two flanges is as follows:

- 1. Piping runs joined to the flanges must be installed in a straight line position to the flange to avoid stress at the flange due to misalignment. Piping must also be secured and supported to prevent lateral movement which can create stress and damage the flange.
- 2. With gasket in place, align the bolt holes of the mating flanges by rotating the ring into position.
- 3. Insert all bolts, washers (two standard flat washers per bolt), and nuts.
- 4. Make sure the faces of the mating surfaces are flush against gasket prior to bolting down the flanges.
- 5. Tighten the nuts by hand until they are snug. Establish uniform pressure over the flange face by tightening the bolts in 5 ft.-lbs. increments according to the sequence shown in **Table 2** following a 180° opposing sequence.
- 6. Care must be taken to avoid "bending" the flange when joining a Spears® flange to a "raised face" flange, or a wafer-style valve. Do not use bolts to bring together improperly mated flanges.

#### **Configuration Terminology**

Multi-Bolt Pattern Ring - Bolt hole drilling accepts ANSI and Metric Flanges

Socket - Slip socket connection for solvent cement welding

Spigot - Pipe O.D. connection for solvent welding

Fipt - Female Iron Pipe Thread

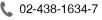
SR Fipt - Spears® patented Special Reinforced (SR) plastic thread

IPS - Iron Pipe Size

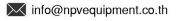
PIP - Plastic Irrigation Pipe

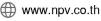
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## **PVC Pipe Flange Dimensions & Information**

## **Molded Flange 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 18"; 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 PVC materials approved for potable water use by NSF International (NSF®).

Glass-filled PVC 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 I.D. & Spigot O.D. - ASTM D 2467 (PVC).

Threads - ASTM F 1498.

Bolt Hole Pattern - ANSI B16.5: ASTM D 4024.

Material - ASTM D 1784 (PVC Cell Classification 12454-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, ± 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, ± 1/16 inch.

R = Height (thickness) of flange ring,  $\pm 1/16$  inch.

 $O.D = Outside diameter of ring, \pm 1/16 inch.$ 

Bolt Circle Diameter = ANSI B 16.5 Standard; ASTM D 4024, ± 1/16 inch.

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas See Spears® Product Sourcebook for product offerings

www.npv.co.th

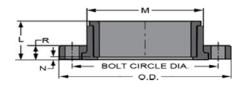
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# **PVC Pipe Flange Dimensions & Information**



# Flange Van Stone PIP (with plastic ring

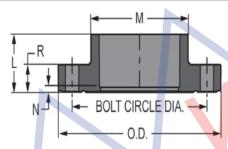
Socket



| Part Number | Size      | L       | M      | N     | O.D.    | R       | Bolt Circle<br>Dia. | Bolt Size | No of<br>Bolts | Approx. Wt.<br>(Lbs.) |
|-------------|-----------|---------|--------|-------|---------|---------|---------------------|-----------|----------------|-----------------------|
| 354-060     | 6X6.140   | 3-5/16  | 7-9/16 | 5/16  | 11-7/32 | 1-3/8   | 9-1/2               | 3/4       | 8              | 5.02                  |
| 354-080     | 8X8.160   | 4-13/32 | 9-5/16 | 5/16  | 13-9/16 | 1-1/2   | 11-3/4              | 3/4       | 8              | 8.03                  |
| 354-100     | 10X10.200 | 5-23/32 | 11-3/4 | 21/32 | 16-1/16 | 1-23/32 | 14-1/4              | 7/8       | 12             | 14.16                 |
| 354-120     | 12X12.240 | 6-19/32 | 13-3/4 | 5/8   | 19      | 1-11/16 | 17                  | 7/8       | 12             | 20.58                 |

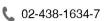
# Flange One Piece

Socket

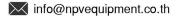


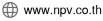
| Part Number           | Size  | L       | M        | N      | O.D.     | R       | Bolt Circle<br>Dia. | <b>Bolt Size</b> | Min. Bolt<br>Length | No of<br>Bolts | Approx. Wt.<br>(Lbs.) |
|-----------------------|-------|---------|----------|--------|----------|---------|---------------------|------------------|---------------------|----------------|-----------------------|
| 851-005               | 1/2   | 1- 1/16 | 1- 9/32  | 5/32   | 3- 1/2   | 9/16    | 2- 3/8              | 1/2              | 2                   | 4              | .20                   |
| 851-007               | 3/4   | 1- 3/16 | 1- 1/2   | 3/16   | 3- 7/8   | 5/8     | 2- 3/4              | 1/2              | 2                   | 4              | .27                   |
| 851-010               | 1     | 1- 5/16 | 1-13/16  | 3/16   | 4- 1/4   | 11/16   | 3- 1/8              | 1/2              | 2-1/4               | 4              | .41                   |
| 851-012               | 1-1/4 | 1-13/32 | 2- 3/16  | 5/32   | 4- 5/8   | 11/16   | 3- 1/2              | 1/2              | 2-1/4               | 4              | .42                   |
| 851-015               | 1-1/2 | 1-21/32 | 2- 1/2   | 1/4    | 5-1/32   | 13/16   | 3- 7/8              | 1/2              | 2-1/2               | 4              | .59                   |
| 851-020               | 2     | 1-23/32 | 2-7/8    | 11/32  | 5-15/16  | 7/8     | 4- 3/4              | 5/8              | 3                   | 4              | .86                   |
| 851-025               | 2-1/2 | 2- 1/4  | 3- 1/2   | 15/32  | 7        | 1-1/16  | 5- 1/2              | 5/8              | 3-1/4               | 4              | 1.50                  |
| 851-030               | 3     | 2- 5/16 | 4- 9/32  | 7/16   | 7-9/16   | 1-3/32  | 6                   | 5/8              | 3-1/4               | 4              | 1.79                  |
| 851-040               | 4     | 2-15/32 | 5-1/4    | 7/32   | 9- 1/16  | 1-5/16  | 7- 1/2              | 5/8              | 3-1/2               | 8              | 2.67                  |
| 851-050               | 5     | 3-7/32  | 6- 3/8   | 3/16   | 10-3/16  | 1-1/32  | 8- 1/2              | 3/4              | 3-1/4               | 8              | 2.99                  |
| 851-060               | 6     | 3-5/16  | 7-19/32  | 9/32   | 10-15/16 | 1-13/32 | 9- 1/2              | 3/4              | 4                   | 8              | 4.05                  |
| 851-080               | 8     | 4-21/32 | 9- 3/4   | 19/32  | 13-17/32 | 1-23/32 | 11-3/4              | 3/4              | 4-1/2               | 8              | 7.82                  |
| 851-100               | 10    | 5-15/32 | 11-13/16 | 15/32  | 16       | 1-3/4   | 14-1/4              | 7/8              | 4                   | 12             | 11.58                 |
| 851-120               | 12    | 6-5/8   | 14       | 5/8    | 19       | 2-1/4   | 17                  | 7/8              | 6                   | 12             | 18.17                 |
| 851-140F <sup>*</sup> | 14    | 7-9/16  | 15-9/16  | 9/16   | 21       | 2-1/16  | 18-3/4              | 1                | 5-1/2               | 12             | 27.24                 |
| 851-160F <sup>*</sup> | 16    | 8-9/16  | 17-3/4   | 9/16   | 23-1/2   | 2-1/2   | 21-1/4              | 1                | 6-1/2               | 16             | 40.08                 |
| 851-180F <sup>*</sup> | 18    | 14-7/16 | 19-1/8   | 5-7/16 | 25       | 2-1/16  | 22-3/4              | 1-1/8            | 4-1/8               | 16             | 45.81                 |
| 851-200F <sup>*</sup> | 20    | 15-5/8  | 21-3/16  | 5-5/8  | 27-1/2   | 2-1/16  | 25                  | 1-1/8            | 5-1/2               | 20             | 57.81                 |
| 851-240F <sup>*</sup> | 24    | 18-5/16 | 25-3/8   | 6-5/16 | 32       | 2-3/16  | 29-1/2              | 1-1/4            | 5-1/2               | 20             | 84.58                 |
| abricated             |       |         | •        | •      |          |         |                     |                  |                     |                |                       |

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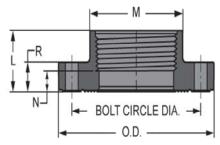






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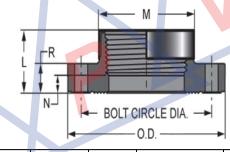
# Flange One Piece



| Part Number | Size  | L       | М       | N       | O.D.   | R      | Bolt Circle<br>Dia. | Bolt Size | No of<br>Bolts | Approx. Wt.<br>(Lbs.) |
|-------------|-------|---------|---------|---------|--------|--------|---------------------|-----------|----------------|-----------------------|
| 852-005     | 1/2   | 1- 1/16 | 1-9/32  | 5/16    | 3- 1/2 | 9/16   | 2- 3/8              | 1/2       | 4              | .20                   |
| 852-007     | 3/4   | 1- 3/16 | 1-17/32 | 15/32   | 3- 7/8 | 5/8    | 2- 3/4              | 1/2       | 4              | .29                   |
| 852-010     | 1     | 1- 5/16 | 1-27/32 | 13/32   | 4- 1/4 | 3/4    | 3- 1/8              | 1/2       | 4              | .40                   |
| 852-012     | 1-1/4 | 1- 3/8  | 2- 7/32 | 17/32   | 4- 5/8 | 23/32  | 3- 1/2              | 1/2       | 4              | .43                   |
| 852-015     | 1-1/2 | 1-5/8   | 2- 1/2  | 5/8     | 5-1/32 | 3/4    | 3-27/32             | 1/2       | 4              | .61                   |
| 852-020     | 2     | 1-13/16 | 3       | 15/16   | 6      | 7/8    | 4- 3/4              | 5/8       | 4              | .95                   |
| 852-025     | 2-1/2 | 2- 1/4  | 3- 1/2  | 11/16   | 7      | 1      | 5- 1/2              | 5/8       | 4              | 1.57                  |
| 852-030     | 3     | 2-9/32  | 4- 9/32 | 15/16   | 7-9/16 | 1-1/8  | 6                   | 5/8       | 4              | 1.87                  |
| 852-040     | 4     | 2-15/32 | 5-7/32  | 1-1/8   | 9-1/16 | 1-7/32 | 7- 1/2              | 5/8       | 8              | 2.91                  |
| 852-060F*   | 6     | 6-11/16 | 7-3/16  | 5-3/16  | 11     | 1-7/16 | 9- 1/2              | 3/4       | 8              | 6.92                  |
| 852-080F*   | 8     | 8-7/16  | 9- 5/16 | 6-11/16 | 13-5/8 | 1-3/4  | 11- 3/4             | 3/4       | 8              | 13.92                 |
| ahricated   |       |         |         |         |        |        |                     |           |                |                       |

## Flange - Special Reinforced One Piece

SR Fipt

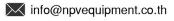


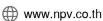
| Part Number | Size  | L       | M       | N      | O.D.    | R      | Bolt Circle<br>Dia. | Bolt Size | No of<br>Bolts | Approx. Wt.<br>(Lbs.) |
|-------------|-------|---------|---------|--------|---------|--------|---------------------|-----------|----------------|-----------------------|
| 852-005SR   | 1/2   | 1- 3/32 | 1-7/32  | 5/8    | 3- 1/2  | 9/16   | 2- 3/8              | 1/2       | 4              | .20                   |
| 852-007SR   | 3/4   | 1- 3/16 | 1- 3/8  | 7/16   | 3- 7/8  | 5/8    | 2- 3/4              | 1/2       | 4              | .27                   |
| 852-010SR   | 1     | 1- 7/16 | 1-23/32 | 9/16   | 4- 1/4  | 23/32  | 3- 1/8              | 1/2       | 4              | .38                   |
| 852-012SR   | 1-1/4 | 1-17/32 | 2- 1/16 | 19/32  | 4- 5/8  | 3/4    | 3- 1/2              | 1/2       | 4              | .49                   |
| 852-015SR   | 1-1/2 | 1-23/32 | 2- 7/16 | 25/32  | 5       | 25/32  | 3- 7/8              | 1/2       | 4              | .64                   |
| 852-020SR   | 2     | 1-27/32 | 3- 1/32 | 15/16  | 5-31/32 | 7/8    | 4- 3/4              | 5/8       | 4              | .99                   |
| 852-025SR   | 2-1/2 | 2-3/32  | 3-19/32 | 25/32  | 7       | 1-1/16 | 5- 1/2              | 5/8       | 4              | 1.58                  |
| 852-030SR   | 3     | 2- 5/16 | 4-5/16  | 15/16  | 7-9/16  | 1- 1/8 | 6                   | 5/8       | 4              | 1.89                  |
| 852-040SR   | 4     | 2-15/32 | 5-1/4   | 1-3/16 | 9-1/16  | 1-7/32 | 7- 1/2              | 5/8       | 8              | 3.00                  |











# **PVC Pipe Flange Dimensions & Information**



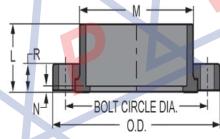
# Flange - Blind



| Part Number | Size  | O.D.    | R       | Bolt Circle<br>Dia. | Bolt Size | Min. Bolt<br>Length | No of<br>Bolts | Approx. Wt.<br>(Lbs.) |
|-------------|-------|---------|---------|---------------------|-----------|---------------------|----------------|-----------------------|
| 853-005     | 1/2   | 3-17/32 | 9/16    | 2- 3/8              | 1/2       | 2                   | 4              | .20                   |
| 853-007     | 3/4   | 3- 7/8  | 5/8     | 2- 3/4              | 1/2       | 2                   | 4              | .28                   |
| 853-010     | 1     | 4-1/4   | 23/32   | 3-1/8               | 1/2       | 2-1/4               | 4              | .40                   |
| 853-012     | 1-1/4 | 4- 5/8  | 11/16   | 3- 1/2              | 1/2       | 2-1/4               | 4              | .37                   |
| 853-015     | 1-1/2 | 5- 1/16 | 23/32   | 3-27/32             | 1/2       | 2-1/2               | 4              | .52                   |
| 853-020     | 2     | 5-31/32 | 27/32   | 4- 3/4              | 5/8       | 3                   | 4              | .81                   |
| 853-025     | 2-1/2 | 6-15/16 | 1-1/16  | 5- 1/2              | 5/8       | 3-1/4               | 4              | 1.54                  |
| 853-030     | 3     | 7- 1/2  | 1-3/16  | 6                   | 5/8       | 3-1/4               | 4              | 1.76                  |
| 853-040     | 4     | 9- 1/16 | 1- 5/32 | 7- 1/2              | 5/8       | 3-1/2               | 8              | 2.69                  |
| 853-060     | 6     | 11-1/4  | 1- 3/8  | 9- 1/2              | 3/4       | 4                   | 8              | 4.25                  |
| 853-080     | 8     | 13- 1/2 | 1- 7/16 | 11- 3/4             | 3/4       | 4-1/2               | 8              | 7.30                  |
| 853-100     | 10    | 16      | 1-11/16 | 14- 1/4             | 7/8       | 5                   | 12             | 11.60                 |
| 853-120     | 12    | 19      | 1-11/16 | 17                  | 7/8       | 5                   | 12             | 17.42                 |

# Flange Van Stone Style IPS (With Plastic Ring)

Socket



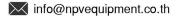
| Part Number | Size  | L       | M        | N     | O.D.    | R       | Bolt Circle<br>Dia. | Bolt Size | No of<br>Bolts | Approx. Wt.<br>(Lbs.) |
|-------------|-------|---------|----------|-------|---------|---------|---------------------|-----------|----------------|-----------------------|
| 854-005     | 1/2   | 1- 1/32 | 1- 7/32  | 5/32  | 3- 1/2  | 9/16    | 2- 3/8              | 1/2       | 4              | .18                   |
| 854-007     | 3/4   | 1-5/32  | 1-15/32  | 5/32  | 3- 7/8  | 5/8     | 2- 3/4              | 1/2       | 4              | .25                   |
| 854-010     | 1     | 1-1/4   | 1- 3/4   | 1/8   | 4- 1/4  | 11/16   | 3- 1/8              | 1/2       | 4              | .35                   |
| 854-012     | 1-1/4 | 1-3/8   | 2-1/8    | 1/8   | 4- 5/8  | 23/32   | 3- 1/2              | 1/2       | 4              | .43                   |
| 854-015     | 1-1/2 | 1-3/8   | 2- 7/16  | 1/8   | 5       | 23/32   | 3- 7/8              | 1/2       | 4              | .55                   |
| 854-020     | 2     | 1-21/32 | 2-31/32  | 1/8   | 6       | 7/8     | 4- 3/4              | 5/8       | 4              | .85                   |
| 854-025     | 2-1/2 | 2       | 3-5/8    | 7/32  | 7       | 1-1/32  | 5- 1/2              | 5/8       | 4              | 1.42                  |
| 854-030     | 3     | 2- 1/8  | 4- 1/4   | 1/4   | 7- 1/2  | 1-1/8   | 6                   | 5/8       | 4              | 1.72                  |
| 854-040     | 4     | 2- 1/2  | 5- 1/4   | 9/32  | 9-3/32  | 1-3/16  | 7- 1/2              | 5/8       | 8              | 2.76                  |
| 854-050     | 5     | 2-31/32 | 6-9/32   | 5/16  | 10- 1/8 | 1-1/4   | 8- 1/2              | 3/4       | 8              | 3.29                  |
| 854-060     | 6     | 3-3/8   | 7- 9/16  | 5/16  | 11      | 1-3/8   | 9- 1/2              | 3/4       | 8              | 4.36                  |
| 854-080     | 8     | 4-13/32 | 9- 5/16  | 5/16  | 13-9/16 | 1-1/2   | 11- 3/4             | 3/4       | 8              | 6.69                  |
| 854-100     | 10    | 5-23/32 | 11- 3/4  | 21/32 | 16-1/16 | 1-25/32 | 14- 1/4             | 7/8       | 12             | 11.68                 |
| 854-120     | 12    | 6-19/32 | 13- 3/4  | 5/8   | 19      | 1-13/16 | 17                  | 7/8       | 12             | 17.65                 |
| 854-140     | 14    | 7-19/32 | 15-9/16  | 9/16  | 21      | 2-1/16  | 18- 3/4             | 1         | 12             | 27.24                 |
| 854-160     | 16    | 8-5/8   | 17-13/16 | 17/32 | 23- 1/2 | 2-15/32 | 21- 1/4             | 1         | 16             | 39.71                 |
| 854-180     | 18    | 9-9/16  | 20       | 9/16  | 25-1/8  | 2-1/2   | 22- 3/4             | 1- 1/8    | 16             | 45.48                 |

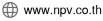
Made in the U.S.A.

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas See Spears® Product Sourcebook for product offerings







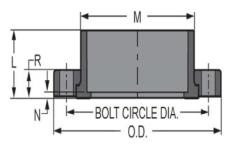




## Schedule 80 PVC Technical **PVC Pipe Flange Dimensions & Information**

# Flange Van Stone Style (Two Piece)

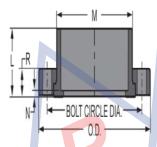
Socket



| Part Number | Size | L       | М       | N     | O.D.    | R       | Bolt Circle<br>Dia. | Bolt Size | No of<br>Bolts | Approx. Wt.<br>(Lbs.) |
|-------------|------|---------|---------|-------|---------|---------|---------------------|-----------|----------------|-----------------------|
| S854-020    | 2    | 1-21/32 | 2-31/32 | 5/32  | 6       | 7/8     | 4- 3/4              | 5/8       | 4              | .96                   |
| S854-030    | 3    | 2- 1/8  | 4- 1/4  | 1/4   | 7- 1/2  | 1- 1/16 | 6                   | 5/8       | 4              | 1.94                  |
| S854-040    | 4    | 2- 1/2  | 5- 1/4  | 1/4   | 9-3/32  | 1-3/16  | 7- 1/2              | 5/8       | 8              | 2.89                  |
| S854-060    | 6    | 3-7/16  | 7- 9/16 | 7/16  | 11-7/32 | 1-3/8   | 9- 1/2              | 3/4       | 8              | 4.72                  |
| S854-080    | 8    | 4- 3/8  | 9-15/32 | 9/32  | 13-9/16 | 1-15/32 | 11- 3/4             | 3/4       | 8              | 5.95                  |
| S854-100    | 10   | 5-23/32 | 11- 3/4 | 21/32 | 16      | 1-25/32 | 14- 1/4             | 7/8       | 12             | 11.56                 |
| S854-120    | 12   | 6-19/32 | 13- 3/4 | 5/8   | 19      | 1-13/16 | 17                  | 7/8       | 12             | 15.95                 |

# Flange Van Stone Style with Multi-Bold Pattern Ring (Two Piece)

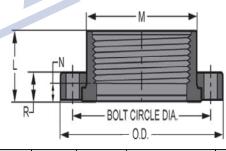
Socket



| Part Number | Size | L       | M       | N     | O.D.    | R     | Bolt Circle<br>Dia Max | Bolt Circle<br>Dia Min | Bolt Size | No of<br>Bolts | Approx. Wt.<br>(Lbs.) |
|-------------|------|---------|---------|-------|---------|-------|------------------------|------------------------|-----------|----------------|-----------------------|
| M854-020    | 2    | 1-11/16 | 2-31/32 | 5/32  | 6       | 13/16 | 4-15/16                | 4- 1/2                 | 5/8       | 4              | .85                   |
| M854-060    | 6    | 3-7/16  | 7- 9/16 | 13/32 | 11-5/16 | 1-3/8 | 9-1/2                  | 9-7/32                 | 3/4       | 8              | 4.17                  |
| M854-080    | 8    | 4-7/16  | 9-3/8   | 5/16  | 13-9/16 | 1-1/2 | 11-3/4                 | 11- 1/2                | 3/4       | 8              | 6.84                  |

# Flange Van Stone Style (Two Piece)

Fipt

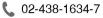


| Part Number | Size  | L       | M       | N     | O.D.   | R      | Bolt Circle<br>Dia. | Bolt Size | No of<br>Bolts | Approx. Wt.<br>(Lbs.) |
|-------------|-------|---------|---------|-------|--------|--------|---------------------|-----------|----------------|-----------------------|
| 855-005     | 1/2   | 1- 1/32 | 1- 7/32 | 5/16  | 3- 1/2 | 9/16   | 2- 3/8              | 1/2       | 4              | .19                   |
| 855-007     | 3/4   | 1- 5/32 | 1-15/32 | 3/8   | 3- 7/8 | 5/8    | 2- 3/4              | 1/2       | 4              | .27                   |
| 855-010     | 1     | 1- 1/4  | 1- 3/4  | 5/16  | 4- 1/4 | 11/16  | 3- 1/8              | 1/2       | 4              | .36                   |
| 855-012     | 1-1/4 | 1-11/32 | 2- 1/8  | 11/32 | 4- 5/8 | 23/32  | 3- 1/2              | 1/2       | 4              | .44                   |
| 855-015     | 1-1/2 | 1-15/32 | 2-15/32 | 7/16  | 5      | 13/16  | 3- 7/8              | 1/2       | 4              | .55                   |
| 855-020     | 2     | 1- 9/16 | 2-31/32 | 17/32 | 6      | 15/16  | 4- 3/4              | 5/8       | 4              | .87                   |
| 855-025     | 2-1/2 | 2       | 3-5/8   | 7/16  | 7      | 1-1/32 | 5- 1/2              | 5/8       | 4              | 1.48                  |
| 855-030     | 3     | 2- 1/8  | 4- 1/4  | 9/16  | 7- 1/2 | 1-1/8  | 6                   | 5/8       | 4              | 1.79                  |

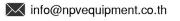
Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas See Spears® Product Sourcebook for product offerings

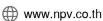
Spears® Manufacturing Company











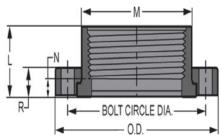
# **PVC Pipe Flange Dimensions & Information**



(Continued)

# Flange Van Stone Style (Two Piece)

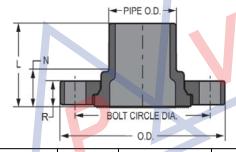
Fipt



|           | Size | L       | M        | N      | O.D.    | R       | Bolt Circle<br>Dia. | <b>Bolt Size</b> | No of<br>Bolts | Approx. Wt.<br>(Lbs.) |
|-----------|------|---------|----------|--------|---------|---------|---------------------|------------------|----------------|-----------------------|
| 855-040   | 4    | 2-1/32  | 5- 1/4   | 5/16   | 9-3/32  | 1-3/16  | 7- 1/2              | 5/8              | 8              | 2.70                  |
| 855-060   | 6    | 6-13/16 | 8-1/4    | 5-1/8  | 11      | 1-3/8   | 9-1/2               | 3/4              | 8              | 8.22                  |
| 855-080   | 8    | 8-1/16  | 9-23/32  | 6-3/16 | 13-9/16 | 1-15/32 | 11-3/4              | 3/4              | 8              | 13.02                 |
| 855-060F* | 6    | 6-13/16 | 7- 3/16  | 5-5/16 | 11-1/4  | 1-3/8   | 9- 1/2              | 3/4              | 8              | 7.30                  |
| 855-080F* | 8    | 8- 1/8  | 9- 5/16  | 6-3/8  | 13-5/8  | 1-9/16  | 11- 3/4             | 3/4              | 8              | 11.70                 |
| 855-100F* | 10   | 10- 3/8 | 11- 9/16 | 8-1/2  | 16      | 1-3/4   | 14- 1/4             | 7/8              | 12             | 21.49                 |
| 855-120F* | 12   | 11-7/8  | 13-3/4   | 9-3/4  | 19-1/16 | 1-3/4   | 17                  | 7/8              | 12             | 33.01                 |

# Flange Van Stone Style (Two Piece)

Spigot

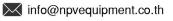


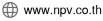
| Part Number | Size  | L       | N       | O.D.    | R       | Bolt Circle<br>Dia. | Bolt Size | No of<br>Bolts | Approx. Wt.<br>(Lbs.) |
|-------------|-------|---------|---------|---------|---------|---------------------|-----------|----------------|-----------------------|
| 856-005     | 1/2   | 1- 3/4  | 7/8     | 3- 1/2  | 9/16    | 2- 3/8              | 1/2       | 4              | .20                   |
| 856-007     | 3/4   | 1-15/16 | 15/16   | 3- 7/8  | 5/8     | 2- 3/4              | 1/2       | 4              | .28                   |
| 856-010     | 1     | 2-5/32  | 1- 1/32 | 4- 1/4  | 11/16   | 3- 1/8              | 1/2       | 4              | .38                   |
| 856-012     | 1-1/4 | 2-5/16  | 1-1/16  | 4- 5/8  | 23/32   | 3- 1/2              | 1/2       | 4              | .47                   |
| 856-015     | 1-1/2 | 2- 5/8  | 1- 9/32 | 5       | 13/16   | 3- 7/8              | 1/2       | 4              | .60                   |
| 856-020     | 2     | 2-27/32 | 1-11/32 | 6       | 7/8     | 4- 3/4              | 5/8       | 4              | .93                   |
| 856-025     | 2-1/2 | 3-3/32  | 1- 9/32 | 7       | 1-1/32  | 5- 1/2              | 5/8       | 4              | 1.55                  |
| 856-030     | 3     | 3-11/32 | 1- 7/16 | 7- 1/2  | 1-1/8   | 6                   | 5/8       | 4              | 1.88                  |
| 856-040     | 4     | 3-13/16 | 1-9/16  | 9-3/32  | 1-1/8   | 7- 1/2              | 5/8       | 8              | 3.01                  |
| 856-060     | 6     | 4-15/16 | 1-7/8   | 11      | 1-3/8   | 9- 1/2              | 3/4       | 8              | 5.11                  |
| 856-080     | 8     | 5-15/16 | 1-7/8   | 13-9/16 | 1-15/32 | 11- 3/4             | 3/4       | 8              | 7.67                  |
| 856-100     | 10    | 8       | 2-11/32 | 16      | 1-25/32 | 14- 1/4             | 7/8       | 12             | 15.61                 |
| 856-120     | 12    | 8-9/16  | 2-1/8   | 19      | 1-13/16 | 17                  | 7/8       | 12             | 22.79                 |

Made in the U.S.A.

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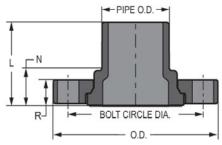




## **Schedule 80 PVC Technical PVC Pipe Flange Dimensions & Information**

# Flange Van Stone Style with Multi-Bolt Pattern Ring (Two Piece)

Spigot



| Part Number | Size | L       | N       | O.D.    | R       | Bolt Circle<br>Dia. | Bolt Size | No of<br>Bolts | Approx. Wt.<br>(Lbs.) |
|-------------|------|---------|---------|---------|---------|---------------------|-----------|----------------|-----------------------|
| M856-020    | 2    | 2-27/32 | 1-11/32 | 6       | 7/8     | 4- 1/2              | 5/8       | 4              | .94                   |
| M856-060    | 6    | 4-11/16 | 1-11/16 | 11-7/32 | 1-3/8   | 9-7/16              | 3/4       | 8              | 4.92                  |
| M856-080    | 8    | 5-15/16 | 1-7/8   | 13-9/16 | 1-17/32 | 11- 1/2             | 3/4       | 8              | 7.82                  |

