

Low Torque AV Gaskets

Standard Features (Sizes 1/2" - 12")

- PTFE or PVDF-bonded EPDM for maximum corrosion resistance
- Perfect sealing at low bolt tightening torque ratings, longer gasket life
- Ideal for plastic piping systems, as well as metal or plastic-lined metal systems
- Sulfur cured
- Durometer:
 - 1) EPDM: 65 - 70
 - 2) PTFE-bonded: 95 - 100
 - 3) PVDF-bonded: 83 - 85
- Working temperature:
 - 1) EPDM: -40° - 195° F
 - 2) PTFE-bonded: -40° - 250° F
 - 3) PVDF-bonded: -40° - 250° F
- Approximately a one-third bolt tightening torque rating as compared with flat or envelope type gasket.
- Thickness of bonded materials
 - PTFE: All Sizes: 0.012" [0.3mm]
 - PVDF: Sizes 1/2" - 2": 0.016" [0.4mm]
 - PVDF: Sizes 3" - 10": 0.016" [0.4mm]
- PTFE-bonded gasket excellent for most corrosive chemicals
- PVDF-bonded gasket is ideal for the following:
 - 1) Semiconductor industry, because of its purity
 - 2) Aggressive chemicals (strong acids, bases, halogens, etc.)
 - 3) Media that generates any volatile gas (PVDF gas permeation is only 1/50 of PTFE)
- Both the PTFE and PVDF-bonded gaskets employ a proprietary laminating process for bonding to EPDM, providing the greater elasticity required for lower sealing torques

Sample Specification

All AV gaskets shall be of low torque, full face to ANSI B16.5 dimensions and shall have two concentric, convex, molded rings between center hole and bolt hole circle in EPDM, PTFE-bonded EPDM or PVDF-bonded EPDM, as manufactured by Asahi/America, Inc.

Specifications

- Materials/Sizes:**
- 1) EPDM: 1/2" - 12"
 - 2) PTFE-bonded EPDM: 1/2" - 12"
 - 3) PVDF-bonded EPDM: 1/2" - 10"
- (Except 1-1/4" and 2-1/2")

Dimensions (Sizes 1/2" - 12") (in.)

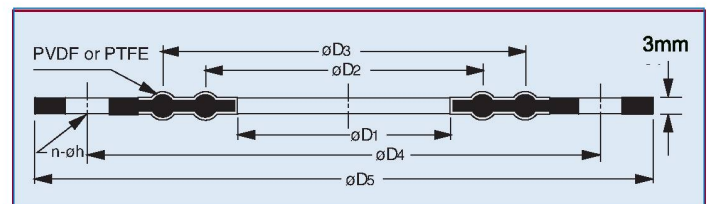
| NOMINAL SIZE | | | | | | | | |
|--------------|-----|------|------|------|------|------|-----|----|
| INCHES | mm | D1 | D2 | D3 | D4 | D5 | h | n |
| 1/2 | 15 | 0.7 | 1.0 | 1.6 | 2.4 | 3.4 | 0.6 | 4 |
| 3/4 | 20 | 0.9 | 1.3 | 1.9 | 2.8 | 3.8 | 0.6 | 4 |
| 1 | 25 | 1.2 | 1.5 | 2.1 | 3.1 | 4.2 | 0.6 | 4 |
| 1-1/4 | 32 | 1.5 | 2.0 | 2.6 | 3.5 | 4.5 | 0.6 | 4 |
| 1-1/2 | 40 | 1.7 | 2.1 | 2.7 | 3.9 | 4.9 | 0.6 | 4 |
| 2 | 50 | 2.1 | 2.7 | 3.3 | 4.7 | 5.9 | 0.8 | 4 |
| 2-1/2 | 65 | 2.7 | 3.4 | 4.0 | 5.5 | 6.9 | 0.8 | 4 |
| 3 | 80 | 3.2 | 3.9 | 4.4 | 6.0 | 7.4 | 0.8 | 4 |
| 4 | 100 | 4.0 | 4.7 | 5.4 | 7.5 | 8.9 | 0.8 | 8 |
| 5 | 125 | 5.0 | 5.7 | 6.5 | 8.5 | 9.9 | 0.9 | 8 |
| 6 | 150 | 5.9 | 6.6 | 7.5 | 9.5 | 10.9 | 0.9 | 8 |
| 8 | 200 | 7.8 | 8.5 | 9.7 | 11.8 | 13.4 | 0.9 | 8 |
| 10 | 250 | 9.8 | 10.6 | 12.1 | 14.3 | 15.9 | 1.0 | 12 |
| 12 | 300 | 11.8 | 12.8 | 13.9 | 17.0 | 18.9 | 1.0 | 12 |

Recommended Bolt Torque*

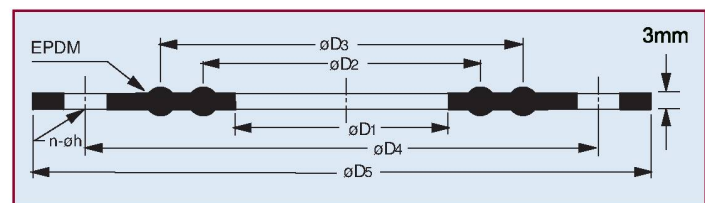
| NOMINAL SIZE | | PTFE PVDF | EPDM |
|--------------|-----|-----------|------|
| INCHES | mm | | |
| 1/2 | 15 | 13 | 6 |
| 3/4 | 20 | 13 | 6 |
| 1 | 25 | 15 | 15 |
| 1-1/4 | 32 | 15 | 15 |
| 1-1/2 | 40 | 15 | 15 |
| 2 | 50 | 17 | 17 |
| 2-1/2 | 65 | 17 | 17 |
| 3 | 80 | 22 | 22 |
| 4 | 100 | 22 | 22 |
| 5 | 125 | 30 | 30 |
| 6 | 150 | 30 | 30 |
| 8 | 200 | 41 | 41 |
| 10 | 250 | 41 | 41 |
| 12 | 300 | 44 | 44 |

* Expressed in FT-LBS

PVDF or PTFE-Bonded Gasket



EPDM Gasket



AV Gaskets

1.0 Scope:

All requirements are for EPDM, PVDF bonded EPDM, or PTFE bonded EPDM Low Torque AV Gaskets.

2.0 Materials:

PVDF – Conforming to ASTM D3222-91A Cell Classification Type II

EPDM – Ethylene Propylene Diene Terpolymer Rubber

PTFE - Teflon® Polytetrafluoroethylene

2.1 Material continued:

Durometer values:

EPDM: 65 – 70

PTFE Bonded: 95-100

PVDF: 83-85

Curing process:

Sulfur cured

3.0 Gaskets:

Gaskets shall be of Low Torque design, full face to ANSI B16.5 dimensions and have 2 raised convex rings concentric to center hole and bolt circle. Gaskets shall require about 1/3 the tightening torque of other flat type or envelope style gaskets.

3.1 Approved Manufacturer

Gaskets shall be provided by Asahi/America, Inc. of Lawrence, MA with no approved equals. Manufacturer must be ISO-9001 certified.

4.0 Working Temperature:

Gaskets shall have temperature ratings as follows:

EPDM -40 to 195°F

PVDF-bonded -40 to 250°F

PTFE-bonded -40 to 250° F

5.0 Installation Procedures:

All valve joints shall be flanged and prepared using Asahi AV gaskets for 150 lb flanges. The recommended bolt torque and installation procedure shall be to the manufacturers standard specifications and requirements.