

PRODUCT MODEL CODE LIST

| Type     | Model                       | Rubbers   | Standard   | Size                       |
|----------|-----------------------------|---|--|----------------------------|
| <b>G</b> | <b>*</b>                    | <b>*</b>  | <b>*</b>   | <b>***</b>                 |
| ⋮        | ⋮                           | ⋮   | ⋮  | ⋮                          |
| G Gasket | A Full Face<br>N Inner Face | E EPDM<br>F PVDF-Covering<br>T PTFE-Covering<br>1 Viflon®F/ FKM-F<br>2 Viflon®C / FKM-C<br>V FKM<br>S SBR<br>J EPDM (Lubricant Free)<br>L PTFE (Lubricant Free) | 1 JIS 10K<br>5 JIS 5K<br>A ANSI<br>D DIN<br>W Waterworks | 013 13mm<br>I<br>350 350mm |

AV Gasket Working Temperature Range

| AV Gasket Type          | Working Temperature Range |
|-------------------------|---------------------------|
| AV EPDM Gasket          | -40 - 90°C                |
| * AV CSM Gasket         | -20 - 80°C                |
| * AV NBR Gasket         | -30 - 100°C               |
| * AV IIR Gasket         | -30 - 90°C                |
| * AV FKM Gasket         | -20 - 150°C               |
| * AV SBR Gasket         | 5 - 35°C                  |
| AV PTFE-Covering Gasket | -40 - 120°C               |
| AV PVDF-Covering Gasket | -40 - 120°C               |

<Use Precautions>

1. Values on the left are general working temperature range. It may be invasive depending on type, temperature, etc. of chemical solution.
2. Working temperature range for Viflon®F/FKM-F and Viflon®C/ FKM-C is same as FKM.
3. If insulation is required with EPDM gasket, specify "Insulation EPDM".
4. The marked (\*) ones are build-to-order products.

- These are cast products so there is no unevenness in thickness and the surface is flat. The protrusion of dual-layer O-ring prevents leakage even when the surface pressure is low. Appropriate rubber hardness exerts an buffering effect against heat stress and piping stress. The material of high-quality virgin rubber extends duration of life.

AV Gasket Standard

| Type                 | Standard | JIS 10K | JIS 5K | Waterworks | ANSI, DIN |
|----------------------|----------|---------|--------|------------|-----------|
| Full Face Gasket     |          | ○       | ○      | ○          | ○         |
| Inner-Face Gasket    |          | ○       | ○      | ○          | —         |
| PTFE-Covering Gasket |          | ○       | —      | —          | ○         |
| PVDF-Covering Gasket |          | ○       | —      | —          | ○         |

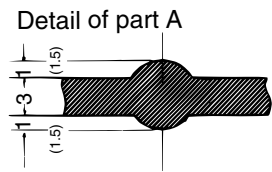
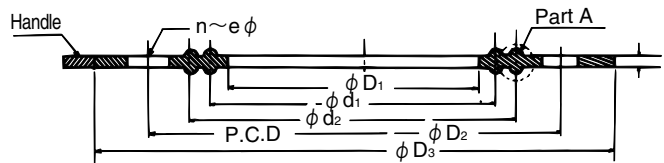
<Use Precautions>

1. When using AV gasket for connecting metal-to-metal flange or resin-to-metal flange, use flat face (FF) metal flange. Using plane-seat flange (RF) may cause damage to gasket.
2. Some materials are not available for AV gasket depending on standard and type. For details, please contact our nearest office.

Full-Face Gasket (JIS 10K, JIS 5K)

PRODUCT MODEL CODE

|         |     |   |             |   |      |
|---------|-----|---|-------------|---|------|
| JIS 10K | ▶ G | A | Rubber Type | 1 | Size |
| JIS 5K  | ▶ G | A | Rubber Type | 5 | Size |



Dimensions in parenthesis show the case of 350 mm (14 inch).

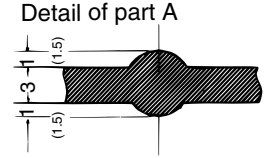
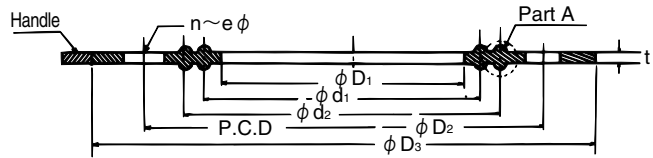
Dimensions Table

(Unit: mm)

| Size | Standard | D <sub>1</sub><br>(Inner Diameter) | D <sub>2</sub><br>(P.C, D) | D <sub>3</sub><br>(Outer Diameter) | n  | e  | d <sub>1</sub> | d <sub>2</sub> | t |
|------|----------|------------------------------------|----------------------------|------------------------------------|----|----|----------------|----------------|---|
| 13   | 5K       | 15                                 | 55                         | 73                                 | 4  | 12 | 22             | 34             | 3 |
|      | 10K      | 15                                 | 65                         | 88                                 | 4  | 15 | 22             | 37             | 3 |
| 15   | 5K       | 18                                 | 60                         | 78                                 | 4  | 12 | 26             | 39             | 3 |
|      | 10K      | 18                                 | 70                         | 93                                 | 4  | 15 | 26             | 41             | 3 |
| 20   | 5K       | 22                                 | 65                         | 83                                 | 4  | 12 | 30             | 44             | 3 |
|      | 10K      | 22                                 | 75                         | 98                                 | 4  | 15 | 32             | 47             | 3 |
| 25   | 5K       | 30                                 | 75                         | 93                                 | 4  | 12 | 39             | 53             | 3 |
|      | 10K      | 30                                 | 90                         | 123                                | 4  | 19 | 38             | 53             | 3 |
| 32   | 5K       | 37                                 | 90                         | 113                                | 4  | 15 | 45             | 60             | 3 |
|      | 10K      | 37                                 | 100                        | 133                                | 4  | 19 | 50             | 65             | 3 |
| 40   | 5K       | 43                                 | 95                         | 118                                | 4  | 15 | 53             | 69             | 3 |
|      | 10K      | 43                                 | 105                        | 138                                | 4  | 19 | 54             | 69             | 3 |
| 50   | 5K       | 54                                 | 105                        | 128                                | 4  | 15 | 64             | 79             | 3 |
|      | 10K      | 54                                 | 120                        | 153                                | 4  | 19 | 68             | 83             | 3 |
| 65   | 5K       | 69                                 | 130                        | 153                                | 4  | 15 | 82             | 101            | 3 |
|      | 10K      | 69                                 | 140                        | 173                                | 4  | 19 | 86             | 101            | 3 |
| 80   | 5K       | 80                                 | 145                        | 178                                | 4  | 19 | 93             | 112            | 3 |
|      | 10K      | 80                                 | 150                        | 183                                | 8  | 19 | 98             | 112            | 3 |
| 100  | 5K       | 102                                | 165                        | 198                                | 8  | 19 | 114            | 133            | 3 |
|      | 10K      | 102                                | 175                        | 208                                | 8  | 19 | 120            | 138            | 3 |
| 125  | 5K       | 127                                | 200                        | 233                                | 8  | 19 | 142            | 165            | 3 |
|      | 10K      | 127                                | 210                        | 248                                | 8  | 23 | 145            | 166            | 3 |
| 150  | 5K       | 150                                | 230                        | 263                                | 8  | 19 | 167            | 193            | 3 |
|      | 10K      | 150                                | 240                        | 278                                | 8  | 23 | 168            | 190            | 3 |
| 200  | 5K       | 198                                | 280                        | 318                                | 8  | 23 | 215            | 240            | 3 |
|      | 10K      | 198                                | 290                        | 328                                | 12 | 23 | 216            | 247            | 3 |
| 250  | 5K       | 249                                | 345                        | 383                                | 12 | 23 | 270            | 301            | 3 |
|      | 10K      | 249                                | 355                        | 398                                | 12 | 25 | 270            | 306            | 3 |
| 300  | 5K       | 300                                | 390                        | 428                                | 12 | 23 | 318            | 349            | 3 |
|      | 10K      | 300                                | 400                        | 443                                | 16 | 25 | 324            | 352            | 3 |
| 350  | 5K       | 350                                | 435                        | 478                                | 12 | 25 | 365            | 385            | 3 |
|      | 10K      | 350                                | 445                        | 488                                | 16 | 25 | 370            | 390            | 3 |

# Full-Face Gasket (DIN, ANSI, Japan Waterworks)

|                    |                 |   |   |             |   |      |
|--------------------|-----------------|---|---|-------------|---|------|
| PRODUCT MODEL CODE | DIN PN10        | G | A | Rubber Type | D | Size |
|                    | ANSI CLASS 150  | G | A | Rubber Type | A | Size |
|                    | Waterworks(SBR) | G | A | S           | W | Size |



Dimensions in parenthesis show the case of 350 mm (14 inch).

## For DIN PN10

### ■ Dimensions Table

(Unit: mm)

| Size | D <sub>1</sub> | D <sub>2</sub> | D <sub>3</sub> | n | e  | d <sub>1</sub> | d <sub>2</sub> |
|------|----------------|----------------|----------------|---|----|----------------|----------------|
| 15   | 18             | 65             | 93             | 4 | 14 | 26             | 41             |
| 20   | 22             | 75             | 103            | 4 | 14 | 32             | 47             |
| 25   | 30             | 85             | 113            | 4 | 14 | 38             | 53             |
| 32   | 37             | 100            | 138            | 4 | 18 | 50             | 65             |
| 40   | 43             | 110            | 148            | 4 | 18 | 54             | 69             |
| 50   | 54             | 125            | 163            | 4 | 18 | 68             | 83             |
| 65   | 69             | 145            | 183            | 4 | 18 | 86             | 101            |
| 80   | 80             | 160            | 198            | 8 | 18 | 98             | 112            |

| Size | D <sub>1</sub> | D <sub>2</sub> | D <sub>3</sub> | n  | e  | d <sub>1</sub> | d <sub>2</sub> |
|------|----------------|----------------|----------------|----|----|----------------|----------------|
| 100  | 102            | 180            | 218            | 8  | 18 | 120            | 138            |
| 125  | 127            | 210            | 248            | 8  | 18 | 145            | 166            |
| 150  | 150            | 240            | 283            | 8  | 22 | 168            | 190            |
| 200  | 198            | 295            | 338            | 8  | 22 | 216            | 247            |
| 250  | 249            | 350            | 393            | 12 | 22 | 270            | 306            |
| 300  | 300            | 400            | 443            | 12 | 22 | 324            | 352            |
| 350  | 350            | 460            | 503            | 16 | 22 | 370            | 390            |

## For ANSI Class 150

### ■ Dimensions Table

(Unit: inch)

| Size | D <sub>1</sub> | D <sub>2</sub> | D <sub>3</sub> | n | e    | d <sub>1</sub> | d <sub>2</sub> |
|------|----------------|----------------|----------------|---|------|----------------|----------------|
| 15   | 0.71           | 2.38           | 3.43           | 4 | 0.63 | 1.02           | 1.61           |
| 20   | 0.87           | 2.76           | 3.78           | 4 | 0.63 | 1.26           | 1.85           |
| 25   | 1.18           | 3.13           | 4.17           | 4 | 0.63 | 1.50           | 2.09           |
| 32   | 1.46           | 3.50           | 4.53           | 4 | 0.63 | 1.97           | 2.56           |
| 40   | 1.69           | 3.88           | 4.92           | 4 | 0.63 | 2.13           | 2.72           |
| 50   | 2.13           | 4.74           | 5.91           | 4 | 0.75 | 2.68           | 3.27           |
| 65   | 2.72           | 5.49           | 6.93           | 4 | 0.75 | 3.39           | 3.98           |
| 80   | 3.15           | 6.00           | 7.44           | 4 | 0.75 | 3.86           | 4.41           |

| Size | D <sub>1</sub> | D <sub>2</sub> | D <sub>3</sub> | n  | e    | d <sub>1</sub> | d <sub>2</sub> |
|------|----------------|----------------|----------------|----|------|----------------|----------------|
| 100  | 4.02           | 7.50           | 8.94           | 8  | 0.75 | 4.72           | 5.43           |
| 125  | 5.00           | 8.50           | 9.92           | 8  | 0.87 | 5.71           | 6.54           |
| 150  | 5.91           | 9.51           | 10.91          | 8  | 0.87 | 6.61           | 7.48           |
| 200  | 7.80           | 11.75          | 13.43          | 8  | 0.87 | 8.50           | 9.72           |
| 250  | 9.80           | 14.25          | 15.91          | 12 | 0.98 | 10.63          | 12.05          |
| 300  | 11.81          | 17.01          | 18.94          | 12 | 0.98 | 12.76          | 13.86          |
| 350  | 13.78          | 18.74          | 20.91          | 12 | 1.14 | 14.57          | 15.35          |

## For Waterworks

### ■ Dimensions Table

(Unit: mm)

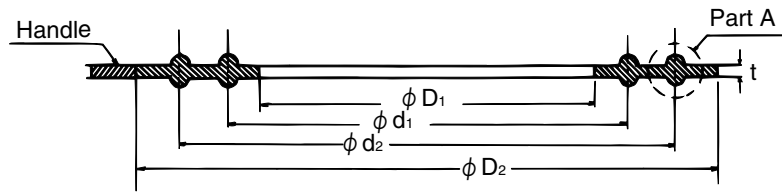
| Size    | D <sub>1</sub> | D <sub>2</sub> | D <sub>3</sub> | n | e  | d <sub>1</sub> | d <sub>2</sub> | t |
|---------|----------------|----------------|----------------|---|----|----------------|----------------|---|
| 40      | 43             | 105            | 138            | 4 | 19 | 54             | 69             | 3 |
| 50      | 53             | 120            | 153            | 4 | 19 | 69             | 85             | 3 |
| 75 (80) | 80             | 168            | 209            | 4 | 19 | 98             | 114            | 3 |
| 100     | 102            | 195            | 236            | 4 | 19 | 120            | 138            | 3 |
| 125     | 127            | 220            | 261            | 6 | 19 | 145            | 164            | 3 |

| Size | D <sub>1</sub> | D <sub>2</sub> | D <sub>3</sub> | n  | e  | d <sub>1</sub> | d <sub>2</sub> | t |
|------|----------------|----------------|----------------|----|----|----------------|----------------|---|
| 150  | 152            | 247            | 288            | 6  | 19 | 171            | 190            | 3 |
| 200  | 202            | 299            | 340            | 8  | 19 | 216            | 240            | 3 |
| 250  | 253            | 360            | 408            | 8  | 23 | 273            | 300            | 3 |
| 300  | 303            | 414            | 461            | 10 | 23 | 325            | 352            | 3 |
| 350  | 353            | 472            | 527            | 10 | 25 | 375            | 405            | 3 |

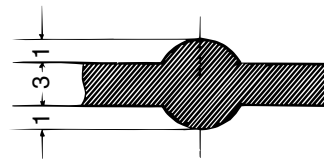
- Notes: 1. 40mm(1 1/2inch) is out of waterworks specification (JIS 10K Standard Products)  
 2. Rubber used for AV gasket is accordance with tap water rubber(JIS K 6353)  
 (SBR: Styrene-Butadiene Rubber)

# Inner-Face Gasket

|                       |                  |   |   |             |   |      |
|-----------------------|------------------|---|---|-------------|---|------|
| PRODUCT<br>MODEL CODE | JIS 10K          | G | N | Rubber Type | 1 | Size |
|                       | JIS 5K           | G | N | Rubber Type | 5 | Size |
|                       | Waterworks (SBR) | G | A | Rubber Type | W | Size |



Detail of part A



For JIS 10K, 5K Material: EPDM

## ■ Dimensions Table

(Unit: mm)

| Size | Standard | $D_2$ | $D_1$ | $d_1$ | $d_2$ | $t$ |
|------|----------|-------|-------|-------|-------|-----|
| 15   | 5K       | 47    | 18    | 26    | 39    | 3   |
|      | 10K      | 54    |       |       |       |     |
| 20   | 5K       | 52    | 22    | 30    | 44    | 3   |
|      | 10K      | 59    |       |       |       |     |
| 25   | 5K       | 62    | 30    | 39    | 53    | 3   |
|      | 10K      | 70    |       |       |       |     |
| 32   | 5K       | 74    | 37    | 45    | 60    | 3   |
|      | 10K      | 80    |       |       |       |     |
| 40   | 5K       | 79    | 43    | 53    | 69    | 3   |
|      | 10K      | 85    |       |       |       |     |
| 50   | 5K       | 89    | 54    | 64    | 79    | 3   |
|      | 10K      | 100   |       |       |       |     |
| 65   | 5K       | 114   | 69    | 82    | 101   | 3   |
|      | 10K      | 120   |       |       |       |     |
| 80   | 5K       | 125   | 80    | 93    | 112   | 3   |
|      | 10K      | 130   |       |       |       |     |
| 100  | 5K       | 145   | 102   | 114   | 133   | 3   |
|      | 10K      | 155   |       |       |       |     |
| 125  | 5K       | 180   | 127   | 142   | 165   | 3   |
|      | 10K      | 187   |       |       |       |     |
| 150  | 5K       | 210   | 150   | 167   | 193   | 3   |
|      | 10K      | 217   |       |       |       |     |
| 200  | 5K       | 257   | 198   | 215   | 240   | 3   |
|      | 10K      | 267   |       |       |       |     |
| 250  | 5K       | 322   | 249   | 270   | 301   | 3   |
|      | 10K      | 329   |       |       |       |     |
| 300  | 5K       | 367   | 300   | 318   | 349   | 3   |
|      | 10K      | 374   |       |       |       |     |

For Waterworks Material: SBR

## ■ Dimensions Table

(Unit: mm)

| Size    | $D_2$ | $D_1$ | $d_2$ | $d_1$ | $t$ |
|---------|-------|-------|-------|-------|-----|
| 40      | 85    | 43    | 69    | 54    | 3   |
| 50      | 100   | 53    | 83    | 68    | 3   |
| 75 (80) | 148   | 80    | 110   | 90    | 3   |
| 100     | 175   | 102   | 135   | 115   | 3   |
| 125     | 200   | 127   | 160   | 140   | 3   |
| 150     | 227   | 152   | 187   | 168   | 3   |
| 200     | 279   | 202   | 236   | 218   | 3   |
| 250     | 337   | 253   | 288   | 270   | 3   |
| 300     | 391   | 303   | 340   | 320   | 3   |
| 350     | 445   | 353   | 400   | 370   | 3   |

Notes: 1.40 mm (11/2 inch) is out of waterworks specification. (JIS 10K Standard Product)

2. Rubber used for AV gasket is accordance with tap water rubber (JIS K 6353).

(SBR: Styrene-Butadiene Rubber)

# AV PTFE/PVDF Gasket

|                       |      |   |   |   |          |      |
|-----------------------|------|---|---|---|----------|------|
| PRODUCT<br>MODEL CODE | PTFE | G | A | T | Standard | Size |
|                       | PVDF | G | A | F | Standard | Size |



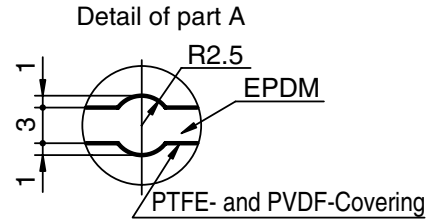
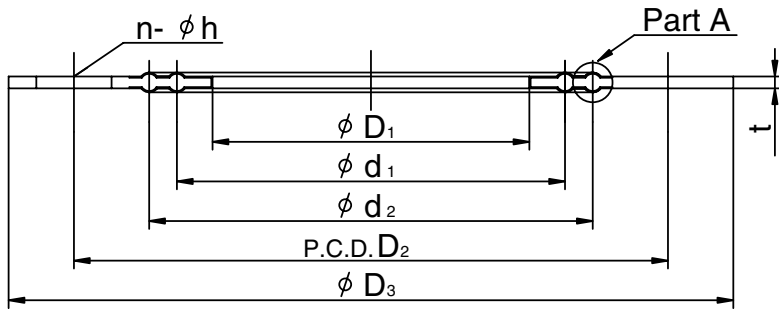
\* PTFE covering thickness is 0.3 – 0.4 mm.



\* PVDF covering thickness is  
15 mm (1/2 inch) – 65 mm (2 1/2 inch).....0.4 mm  
80 mm(3 inch) – 300 mm (12 inch).....0.5 mm

PTFE-Covering

PVDF-Covering



## For JIS 10K

### Dimensions Table

(Unit: mm)

| Size | D <sub>1</sub><br>(Inner Diameter) | D <sub>2</sub> (P.C.D) | D <sub>3</sub><br>(Outer Diameter) | n | e  | d <sub>1</sub> | d <sub>2</sub> | t |
|------|------------------------------------|------------------------|------------------------------------|---|----|----------------|----------------|---|
| 15   | 18                                 | 70                     | 93                                 | 4 | 15 | 26             | 41             | 3 |
| 20   | 22                                 | 75                     | 98                                 | 4 | 15 | 32             | 47             | 3 |
| 25   | 30                                 | 90                     | 123                                | 4 | 19 | 38             | 53             | 3 |
| 32   | 37                                 | 100                    | 133                                | 4 | 19 | 50             | 65             | 3 |
| 40   | 43                                 | 105                    | 138                                | 4 | 19 | 54             | 69             | 3 |
| 50   | 54                                 | 120                    | 153                                | 4 | 19 | 68             | 83             | 3 |
| 65   | 69                                 | 140                    | 173                                | 4 | 19 | 86             | 101            | 3 |

| Size | D <sub>1</sub><br>(Inner Diameter) | D <sub>2</sub> (P.C.D) | D <sub>3</sub><br>(Outer Diameter) | n  | e  | d <sub>1</sub> | d <sub>2</sub> | t |
|------|------------------------------------|------------------------|------------------------------------|----|----|----------------|----------------|---|
| 80   | 80                                 | 150                    | 183                                | 8  | 19 | 98             | 112            | 3 |
| 100  | 102                                | 175                    | 208                                | 8  | 19 | 120            | 138            | 3 |
| 125  | 127                                | 210                    | 248                                | 8  | 23 | 145            | 166            | 3 |
| 150  | 150                                | 240                    | 278                                | 8  | 23 | 168            | 190            | 3 |
| 200  | 198                                | 290                    | 328                                | 12 | 23 | 216            | 247            | 3 |
| 250  | 249                                | 355                    | 398                                | 12 | 25 | 270            | 306            | 3 |
| 300  | 300                                | 400                    | 443                                | 16 | 25 | 324            | 352            | 3 |

## For DIN PN10

### Dimensions Table

(Unit: mm)

| Size | D <sub>1</sub> | D <sub>2</sub> | D <sub>3</sub> | n  | e  | d <sub>1</sub> | d <sub>2</sub> |
|------|----------------|----------------|----------------|----|----|----------------|----------------|
| 15   | 18             | 65             | 93             | 4  | 14 | 26             | 41             |
| 20   | 22             | 75             | 103            | 4  | 14 | 32             | 47             |
| 25   | 30             | 85             | 113            | 4  | 14 | 38             | 53             |
| 32   | 37             | 100            | 138            | 4  | 18 | 50             | 65             |
| 40   | 43             | 110            | 148            | 4  | 18 | 54             | 69             |
| 50   | 54             | 125            | 163            | 4  | 18 | 68             | 83             |
| 65   | 69             | 145            | 183            | 4  | 18 | 86             | 101            |
| 80   | 80             | 160            | 198            | 8  | 18 | 98             | 112            |
| 100  | 102            | 180            | 218            | 8  | 18 | 120            | 138            |
| 125  | 127            | 210            | 248            | 8  | 18 | 145            | 166            |
| 150  | 150            | 240            | 283            | 8  | 22 | 168            | 190            |
| 200  | 198            | 295            | 338            | 8  | 22 | 216            | 247            |
| 250  | 249            | 350            | 393            | 12 | 22 | 270            | 306            |
| 300  | 300            | 400            | 443            | 12 | 22 | 324            | 352            |
| 350  | 362            | 460            | 503            | 16 | 22 | 387            | 413            |
| 400  | 407            | 515            | 563            | 16 | 26 | 442            | 472            |

## For ANSI Class 150

### Dimensions Table

(Unit: inch)

| Size (mm) | D <sub>1</sub> | D <sub>2</sub> | D <sub>3</sub> | n  | e    | d <sub>1</sub> | d <sub>2</sub> |
|-----------|----------------|----------------|----------------|----|------|----------------|----------------|
| 15        | 0.71           | 2.38           | 3.43           | 4  | 0.63 | 1.02           | 1.61           |
| 20        | 0.87           | 2.76           | 3.78           | 4  | 0.63 | 1.26           | 1.85           |
| 25        | 1.18           | 3.13           | 4.17           | 4  | 0.63 | 1.50           | 2.09           |
| 30        | 1.46           | 3.50           | 4.53           | 4  | 0.63 | 1.97           | 2.56           |
| 40        | 1.69           | 3.88           | 4.92           | 4  | 0.63 | 2.13           | 2.72           |
| 50        | 2.13           | 4.74           | 5.91           | 4  | 0.75 | 2.68           | 3.27           |
| 65        | 2.72           | 5.49           | 6.93           | 4  | 0.75 | 3.39           | 3.98           |
| 80        | 3.15           | 6.00           | 7.44           | 4  | 0.75 | 3.86           | 4.41           |
| 100       | 4.02           | 7.50           | 8.94           | 8  | 0.75 | 4.72           | 5.43           |
| 125       | 5.00           | 8.50           | 9.92           | 8  | 0.87 | 5.71           | 6.54           |
| 150       | 5.91           | 9.51           | 10.91          | 8  | 0.87 | 6.61           | 7.48           |
| 200       | 7.80           | 11.75          | 13.43          | 8  | 0.87 | 8.50           | 9.72           |
| 250       | 9.80           | 14.25          | 15.91          | 12 | 0.98 | 10.63          | 12.05          |
| 300       | 11.81          | 17.01          | 18.94          | 12 | 0.98 | 12.76          | 13.86          |

Notes: Sizes of 1-1/4" (30 mm), 2-1/2" (65 mm) and 12" (300 mm) for ANSI Standard PVDF-covering gasket cannot be manufactured.

Viflon®

PRODUCT  
MODEL CODE

Viflon®F/FKM-F ▶ G A 1 1 Size

Viflon®C/FKM-C ▶ G A 2 1 Size

- Excellent elution characteristic for TOC, metal ions, etc.
- Better cost performance compared to perfluoro fluorine rubber.

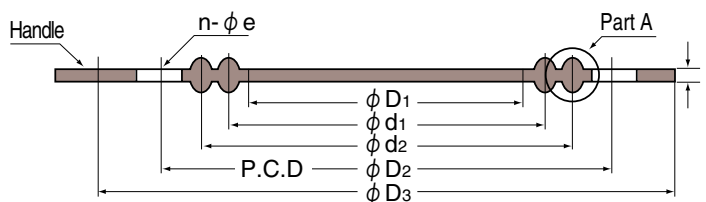
Viflon®F/FKM-F (For Acid-Resistant)

Effective for nitric acid, hydrofluoric acid, hydrochloric acid, etc., especially works well with mixed acid such as nitric hydrofluoric acid.

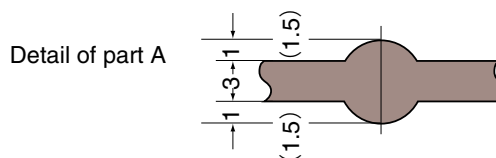
Viflon®C/FKM-C (For Chlorine-Resistant)

Effective for chlorine-type chemicals, especially sodium hypochlorite injection lines, and excellent chemical-resistance compared to conventional fluorine-based rubber.

Viflon®Full Face Gasket



Dimensions in parenthesis show the case of 350 mm (14 inch).



Viflon®F/FKM-F Gasket...For Acid-Resistant Type

Viflon®C/FKM-C Gasket...For Chlorine-Resistant Type

■ Dimensions Table

(Unit: mm)

| Size | Full Face JIS 10K |                |                |                |                |    |    |   |
|------|-------------------|----------------|----------------|----------------|----------------|----|----|---|
|      | D <sub>3</sub>    | D <sub>2</sub> | D <sub>1</sub> | d <sub>2</sub> | d <sub>1</sub> | n  | e  | t |
| 15   | 93                | 70             | 18             | 41             | 26             | 4  | 15 | 3 |
| 20   | 98                | 75             | 22             | 47             | 32             | 4  | 15 | 3 |
| 25   | 123               | 90             | 30             | 53             | 38             | 4  | 19 | 3 |
| 32   | 133               | 100            | 37             | 65             | 50             | 4  | 19 | 3 |
| 40   | 138               | 105            | 43             | 69             | 54             | 4  | 19 | 3 |
| 50   | 153               | 120            | 54             | 83             | 68             | 4  | 19 | 3 |
| 65   | 173               | 140            | 69             | 101            | 86             | 4  | 19 | 3 |
| 80   | 183               | 150            | 80             | 112            | 98             | 8  | 19 | 3 |
| 100  | 208               | 175            | 102            | 138            | 120            | 8  | 19 | 3 |
| 125  | 248               | 210            | 127            | 166            | 145            | 8  | 23 | 3 |
| 150  | 278               | 240            | 150            | 190            | 168            | 8  | 23 | 3 |
| 200  | 328               | 290            | 198            | 247            | 216            | 12 | 23 | 3 |