

# MONO Type Disks

*the best choice for low and intermediate burst ratings*

- Sizes 1/2" thru 24" diameters
- Designed to fit ANSI Class 150 flanges (Higher ratings to fit Class 300 flanges are furnished in the INVERTED and DUPLEX Type Disks)
- Burst ratings 0.25 to 150 psig
- 0% manufacturing range
- Operating pressures to 90% of the disk's marked burst pressure
- Temperature ratings -290°F to +700°F (-179°C to +371°C). Maximum temperature rating without insulation is 430°F (221°C) or 700°F (371°C) with insulation. The specified temperature shall be at the disk location at the time when the disk is expected to rupture
- Counterbored side of the disk contacts the process media
- Vacuum supports are available for ratings below 25 psig
- May be configured to withstand high back pressure generated in closed piping systems – request Bak-Pressure™ bulletin

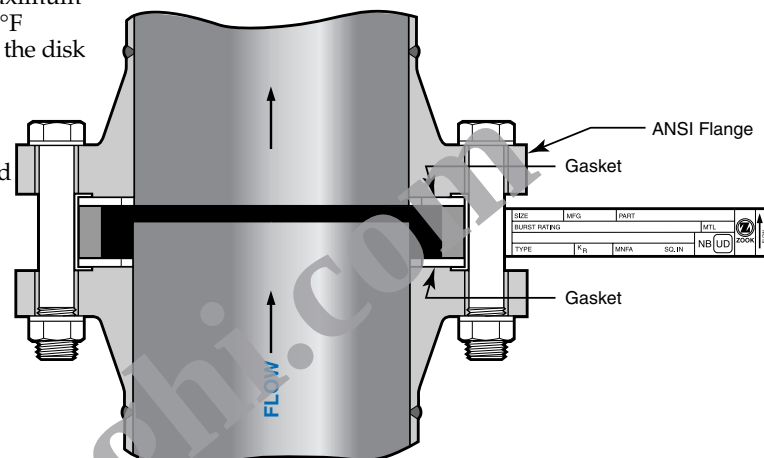
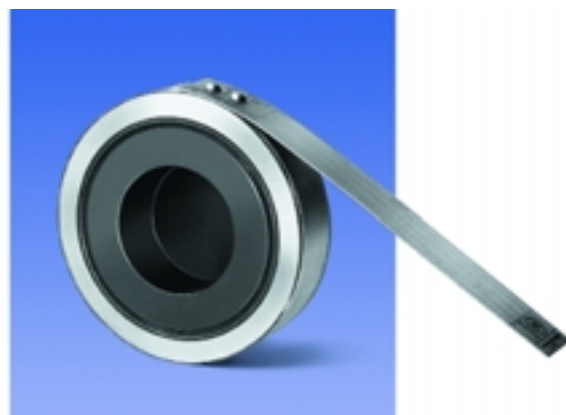
- Stocked MONO Disks, ready for immediate shipment Sizes: 1", 1-1/2", 2", 3", 4", 6", 8" to fit

ANSI Class 150 flanges

Burst Ratings: 10, 15, 20, 25, 30, 40, 50, 75, 100, 125, 150 psig @ 72°F (22°C)

Note: Sizes 6" and 8" with burst ratings 125 and 150 psig @ 72°F (22°C) are stocked in INVERTED type

- ASME UD stamping available



## Required Vacuum Support Style for Full Vacuum Service

| Support Style     | K <sub>r</sub> |
|-------------------|----------------|
| MONO – no support | 0.26           |
| MONO – with bar   | 2.40           |
| MONO – with cross | 5.40           |
| MONO – with ring  | 6.44           |
| MONO – with plate | 15.70          |

| Size     | Burst Rating      | Support Style     |
|----------|-------------------|-------------------|
| 1"       | below 25 psig     | MONO – with ring  |
| 1-1/2"   | below 25 psig     | MONO – with bar   |
| 2" - 14" | 9 to 25 psig      | MONO – with bar   |
| 2" - 14" | 5 to below 9 psig | MONO – with cross |
| 2" - 14" | below 5 psig      | MONO – with plate |

## Specifications – ANSI Class 150

| Nominal<br>Disk<br>Sizes | Minimum net flow area (MNFA) Sq. inches |                                                                                     |                                                                                     |                                                                                     |                                                                                     | Disk Dimensions |         |                  |                   | Burst Ratings<br>psig |      |
|--------------------------|-----------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|---------|------------------|-------------------|-----------------------|------|
|                          | Full<br>Bore                            | Vacuum support style                                                                |                                                                                     |                                                                                     |                                                                                     |                 |         |                  |                   |                       |      |
|                          |                                         |  |  |  |  | Diameter        |         | Thickness*       |                   |                       |      |
|                          |                                         |                                                                                     |                                                                                     |                                                                                     |                                                                                     | I.D.            | O.D.    | Standard<br>Disk | Insulated<br>Unit | Min.                  | Max. |
| 1/2"                     | 0.30                                    | N/A                                                                                 | N/A                                                                                 | N/A                                                                                 | N/A                                                                                 | 0.622"          | 1-3/4"  | 5/8"             | 1-3/4"            | 25                    | 150  |
| 3/4"                     | 0.53                                    | N/A                                                                                 | N/A                                                                                 | N/A                                                                                 | N/A                                                                                 | 0.824"          | 2-1/8"  | 5/8"             | 1-3/4"            | 25                    | 150  |
| 1"                       | 0.78                                    | 0.44                                                                                | 0.60                                                                                | 0.47                                                                                | 0.32                                                                                | 1"              | 2-1/2"  | 7/8"             | 2-1/4"            | 10                    | 150  |
| 1-1/2"                   | 1.76                                    | N/A                                                                                 | 1.34                                                                                | 1.05                                                                                | 0.72                                                                                | 1-1/2"          | 3-1/4"  | 7/8"             | 2-1/4"            | 7                     | 150  |
| 2"                       | 3.14                                    | N/A                                                                                 | 2.39                                                                                | 1.86                                                                                | 1.30                                                                                | 2"              | 4"      | 7/8"             | 2-1/4"            | 3                     | 150  |
| 3"                       | 7.06                                    | N/A                                                                                 | 5.56                                                                                | 4.31                                                                                | 2.95                                                                                | 3"              | 5-1/4"  | 7/8"             | 2-1/4"            | 2                     | 150  |
| 4"                       | 12.56                                   | N/A                                                                                 | 10.56                                                                               | 8.81                                                                                | 5.47                                                                                | 4"              | 6-3/4"  | 7/8"             | 2-1/4"            | 1.5                   | 150  |
| 6"                       | 28.27                                   | N/A                                                                                 | 22.27                                                                               | 17.27                                                                               | 12.05                                                                               | 6"              | 8-5/8"  | 7/8"             | 2-1/4"            | 1                     | 100  |
| 8"                       | 50.26                                   | N/A                                                                                 | 40.26                                                                               | 31.82                                                                               | 21.14                                                                               | 8"              | 10-7/8" | 1-1/8"           | 2-3/4"            | 0.50                  | 100  |
| 10"                      | 78.53                                   | N/A                                                                                 | 63.53                                                                               | 50.78                                                                               | 32.66                                                                               | 10"             | 13-1/4" | 1-1/2"           | 3-3/8"            | 0.25                  | 100  |
| 12"                      | 113.09                                  | N/A                                                                                 | 89.09                                                                               | 69.09                                                                               | 47.24                                                                               | 12"             | 16"     | 2"               | 4-3/8"            | 0.25                  | 75   |
| 14"                      | 137.88                                  | N/A                                                                                 | 108.06                                                                              | 83.31                                                                               | 58.07                                                                               | 13-1/4"         | 17-5/8" | 2-1/4"           | 4-7/8"            | 0.25                  | 50   |
| 16"                      | 182.65                                  | N/A                                                                                 | 144.52                                                                              | 112.65                                                                              | 84.49                                                                               | 15-1/4"         | 20-1/8" | 2-1/2"           | 5-3/8"            | 0.25                  | 50   |
| 18"                      | 233.70                                  | N/A                                                                                 | 181.95                                                                              | 153.70                                                                              | 104.31                                                                              | 17-1/4"         | 21-1/2" | 2-3/4"           | 5-7/8"            | 0.25                  | 50   |
| 20"                      | 291.03                                  | N/A                                                                                 | 233.28                                                                              | 184.53                                                                              | 122.49                                                                              | 19-1/4"         | 23-3/4" | 3"               | 6-3/8"            | 0.25                  | 40   |
| 24"                      | 424.55                                  | N/A                                                                                 | 354.80                                                                              | 294.05                                                                              | 190.61                                                                              | 23-1/4"         | 28-1/8" | 3"               | 6-3/8"            | 0.25                  | 25   |

\*Standard disk thickness does not include gaskets.

Insulated unit thickness includes all gaskets

Note: Maximum pressure rating of ANSI Class 150 flanges is 290 psig @ 100°F (38°C).

The maximum pressure rating is lower at higher temperatures.

Reference ASME/ANSI B16.5