

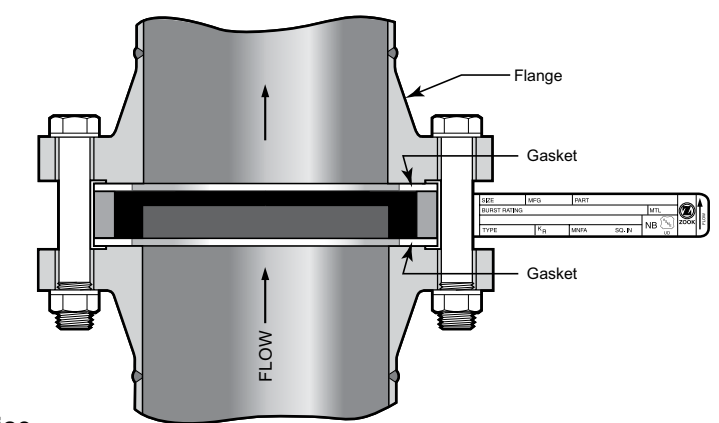
## Features

- The best choice for low and intermediate burst ratings
- Available in nominal sizes 1/2" (15 mm) thru 24" (600 mm) diameters
- Designed to fit industry standard flanges ASME B16.5, ISO and JIS
- Burst ratings 0.25 psig (0.02 barg) to 150 psig (10.34 barg)
- 0% manufacturing range
- Operating pressures to 90% of the disk's marked burst pressure. Contact ZOOK for operating ratio for burst pressures below 40 psig (2.76 barg)
- 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. Contact ZOOK for higher temperature ratings. The specified temperature shall be at the disk location at the time when the disk is expected to rupture
- Counterbore side of the disk contacts the process media
- Vacuum supports are available for ratings below 25 psig (1.72 barg)
- May be configured to withstand high back pressure generated in closed piping systems
- Many standard Mono disks in common sizes and pressure ratings are available for RAPID Delivery. Contact ZOOK for more information  
 Sizes in (mm): 1" (25), 1-1/2" (40), 2" (50), 3" (80), 4" (100), 6" (150), 8" (200) to fit ASME B16.5 Class 150 flanges  
 Burst Pressures psig (barg): 10 (0.69), 15 (1.03), 20 (1.38), 25 (1.72), 30 (2.07), 40 (2.76), 50 (3.45), 75 (5.17), 100 (6.89), 125 (8.62), 150 (10.34)  
**Note:** RAPID Delivery Mono disks are supplied with adhesive tags
- ASME (UD) and PED (CE) compliance available

## Specifications

| Disk Size |     |           |       | MNFA      |                 |                      |                 |                 |                 |                 |                 |                 |                 |   | Thickness* |      |      |                  | Outside Diameter |           |       |       |       |          |       |       |       |       |       |                            |       |                               |       |       | Burst Ratings |       |       |      |        |       |
|-----------|-----|-----------|-------|-----------|-----------------|----------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|---|------------|------|------|------------------|------------------|-----------|-------|-------|-------|----------|-------|-------|-------|-------|-------|----------------------------|-------|-------------------------------|-------|-------|---------------|-------|-------|------|--------|-------|
| NPS       | DN  | Actual ID |       | Full Bore |                 | Vacuum Support Style |                 |                 |                 |                 |                 |                 |                 | ASME CI 150<br>PN6 / 10 / 16 / 20<br>JIS 5K / 10K / 16K |            |      |      | ASME B16.5 Class |                  | DIN & ISO |       |       |       | ISO ONLY |       | JIS   |       |       |       | Min Pressure (All Flanges) |       | Max Pressure (Flange Group 1) |       |       |               |       |       |      |        |       |
|           |     | in        | mm    | in        | mm              | Ring                 | Bar             | Cross           | Plate           | Standard Disk   | Insulated Unit  | 150             | PN6             | PN10  | PN16       | PN20 | 5K   | 10K              | 16K              | 20K       |       |       |       |          |       |       |       |       |       |                            |       |                               |       |       |               |       |       |      |        |       |
| in        | mm  | mm        | in    | mm        | in <sup>2</sup> | mm <sup>2</sup>      | in <sup>2</sup> | mm <sup>2</sup> | in <sup>2</sup> | mm <sup>2</sup> | in <sup>2</sup> | mm <sup>2</sup> | in <sup>2</sup> | mm <sup>2</sup>   | in         | mm   | in   | mm               | in               | mm        | in    | mm    | in    | mm       | in    | mm    | in    | mm    | in    | mm                         | in    | mm                            | in    | mm    | psig          | barg  | psig  | barg |        |       |
| 1/2       | 13  | 15        | 0.62  | 15.7      | 0.30            | 193                  | N/A             | N/A             | N/A             | N/A             | N/A             | N/A             | N/A             | N/A   | 0.63       | 15.8 | 1.75 | 44.4             | 1.75             | 44.4      | 1.73  | 43.9  | 2.01  | 51.0     | 2.01  | 51.0  | 1.75  | 44.4  | 1.89  | 48.0                       | 2.17  | 55.1                          | 2.17  | 55.1  | 2.17          | 55.1  | 25.00 | 1.72 | 150.00 | 10.34 |
| 3/4       | 19  | 20        | 0.82  | 20.8      | 0.53            | 341                  | N/A             | N/A             | N/A             | N/A             | N/A             | N/A             | N/A             | N/A   | 0.63       | 15.8 | 1.75 | 44.4             | 2.13             | 53.9      | 2.13  | 54.1  | 2.40  | 60.9     | 2.40  | 60.9  | 2.13  | 54.1  | 2.09  | 53.0                       | 2.36  | 59.9                          | 2.36  | 59.9  | 2.36          | 59.9  | 25.00 | 1.72 | 150.00 | 10.34 |
| 1         | 25  | 25        | 1     | 25.4      | 0.78            | 503                  | 0.44            | 283             | 0.60            | 387             | 0.47            | 303             | 0.32            | 206   | 0.88       | 22.2 | 2.25 | 57.1             | 2.50             | 63.5      | 2.52  | 64.0  | 2.80  | 71.1     | 2.80  | 71.1  | 2.50  | 63.5  | 2.48  | 62.9                       | 2.80  | 71.1                          | 2.80  | 71.1  | 2.80          | 71.1  | 10.00 | 0.69 | 150.00 | 10.34 |
| 1-1/2     | 38  | 40        | 1.50  | 38.1      | 1.76            | 1,135                | N/A             | N/A             | 1.34            | 864             | 1.05            | 677             | 0.72            | 464   | 0.88       | 22.2 | 2.25 | 57.1             | 3.25             | 82.5      | 3.39  | 86.1  | 3.62  | 91.9     | 3.62  | 91.9  | 3.25  | 82.5  | 3.15  | 80.0                       | 3.39  | 86.1                          | 3.39  | 86.1  | 3.39          | 86.1  | 7.00  | 0.48 | 150.00 | 10.34 |
| 2         | 50  | 50        | 2     | 50.8      | 3.14            | 2,025                | N/A             | N/A             | 2.39            | 1,541           | 1.86            | 1,200           | 1.30            | 838   | 0.88       | 22.2 | 2.25 | 57.1             | 4.00             | 101.6     | 3.78  | 96.0  | 4.21  | 106.9    | 4.21  | 106.9 | 4.00  | 101.6 | 3.54  | 89.9                       | 3.98  | 101.0                         | 3.98  | 101.0 | 3.98          | 101.0 | 3.00  | 0.21 | 150.00 | 10.34 |
| 2-1/2     | 64  | 65        | 2.50  | 63.5      | 4.78            | 3,083                | N/A             | N/A             | 3.65            | 2,354           | 2.94            | 1,896           | 2.04            | 1,316   | 0.88       | 22.2 | 2.25 | 57.1             | 4.75             | 120.6     | 4.59  | 116.5 | 5.00  | 127.0    | 5.00  | 127.0 | 4.75  | 120.6 | 4.52  | 114.8                      | 4.76  | 120.9                         | 4.76  | 120.9 | 4.76          | 120.9 | 3.00  | 0.21 | 125.00 | 8.62  |
| 3         | 76  | 80        | 3     | 76.2      | 7.06            | 4,554                | N/A             | N/A             | 5.56            | 3,587           | 4.31            | 2,780           | 2.95            | 1,903   | 0.88       | 22.2 | 2.25 | 57.1             | 5.25             | 133.3     | 5.20  | 132.0 | 5.59  | 141.9    | 5.59  | 141.9 | 5.25  | 133.3 | 4.96  | 125.9                      | 5.16  | 131.0                         | 5.39  | 136.9 | 5.39          | 136.9 | 2.00  | 0.14 | 100.00 | 6.89  |
| 4         | 102 | 100       | 4     | 101.6     | 12.56           | 8,103                | N/A             | N/A             | 10.56           | 6,812           | 8.81            | 5,683           | 5.47            | 3,529   | 0.88       | 22.2 | 2.25 | 57.1             | 6.75             | 171.4     | 5.98  | 151.8 | 6.38  | 162.0    | 6.38  | 162.0 | 6.75  | 171.4 | 5.75  | 146.0                      | 6.14  | 155.9                         | 6.38  | 162.0 | 6.38          | 162.0 | 1.50  | 0.10 | 100.00 | 6.89  |
| 5         | 127 | 125       | 5     | 127.0     | 19.63           | 12,664               | N/A             | N/A             | 15.88           | 10,245          | 12.70           | 8,193           | 8.39            | 5,412   | 0.88       | 22.2 | 2.25 | 57.1             | 7.75             | 196.8     | 7.16  | 181.8 | 7.55  | 191.7    | 7.55  | 191.7 | 7.75  | 196.8 | 7.12  | 180.8                      | 7.36  | 186.9                         | 7.87  | 199.9 | 7.87          | 199.9 | 1.50  | 0.10 | 100.00 | 6.89  |
| 6         | 152 | 150       | 6     | 152.4     | 28.27           | 18,238               | N/A             | N/A             | 22.27           | 14,367          | 17.27           | 11,141          | 12.05           | 7,774   | 0.88       | 22.2 | 2.25 | 57.1             | 8.63             | 219.0     | 8.15  | 207.0 | 8.58  | 217.9    | 8.58  | 217.9 | 8.63  | 219.2 | 8.31  | 211.0                      | 8.54  | 216.9                         | 9.25  | 234.9 | 9.25          | 234.9 | 1.00  | 0.07 | 75.00  | 5.17  |
| 8         | 203 | 200       | 8     | 203.2     | 50.02           | 32,270               | N/A             | N/A             | 40.26           | 25,974          | 31.82           | 20,528          | 21.14           | 13,638  | 1.13       | 28.5 | 2.75 | 69.8             | 10.88            | 276.2     | 10.31 | 261.8 | 10.75 | 273.0    | 10.75 | 273.0 | 10.88 | 276.3 | 10.12 | 257.0                      | 10.51 | 266.9                         | 11.20 | 284.4 | 11.20         | 284.4 | 0.50  | 0.03 | 75.00  | 5.17  |
| 10        | 254 | 250       | 10    | 254.0     | 78.53           | 50,664               | N/A             | N/A             | 63.53           | 40,987          | 50.78           | 32,761          | 32.66           | 21,070  | 1.50       | 38.1 | 3.38 | 85.8             | 13.25            | 336.5     | 12.48 | 316.9 | 12.91 | 327.9    | 12.95 | 328.9 | N/A   | N/A   | 12.68 | 322.0                      | 12.99 | 329.9                         | 13.90 | 353.0 | N/A           | N/A   | 0.25  | 0.02 | 75.00  | 5.17  |
| 12        | 305 | 300       | 12    | 304.8     | 113.09          | 72,961               | N/A             | N/A             | 89.09           | 57,477          | 69.09           | 44,574          | 47.24           | 30,477  | 2.00       | 50.8 | 4.38 | 111.2            | 16.00            | 406.4     | 14.69 | 373.1 | 14.88 | 377.9    | 15.12 | 384.0 | N/A   | N/A   | 14.45 | 367.0                      | 14.76 | 374.9                         | 15.87 | 403.1 | N/A           | N/A   | 0.25  | 0.02 | 50.00  | 3.45  |
| 14        | 356 | 350       | 13.25 | 336.5     | 137.88          | 88,954               | N/A             | N/A             | 108.06          | 69,715          | 83.31           | 53,748          | 58.07           | 37,464  | 2.25       | 57.1 | 4.88 | 123.9            | 17.63            | 447.6     | 16.65 | 422.9 | 17.24 | 437.9    | 17.48 | 443.9 | N/A   | N/A   | 16.14 | 409.9                      | 16.54 | 420.1                         | 17.60 | 447.0 | N/A           | N/A   | 0.25  | 0.02 | 50.00  | 3.45  |
| 16        | 406 | 400       | 15.25 | 387.3     | 182.65          | 117,838              | N/A             | N/A             | 144.52          | 93,238          | 112.65          | 72,677          | 84.49           | 54,509  | 2.50       | 63.5 | 5.38 | 136.6            | 20.13            | 511.1     | 18.62 | 472.9 | 19.25 | 488.9    | 19.49 | 495.0 | N/A   | N/A   | 18.50 | 469.9                      | 19.02 | 483.1                         | 19.96 | 506.9 | N/A           | N/A   | 0.25  | 0.02 | 50.00  | 3.45  |
| 18        | 457 | 450       | 17.25 | 438.1     | 233.70          | 150,773              | N/A             | N/A             | 181.95          | 117,386         | 153.70          | 99,161          | 104.31          | 67,296  | 2.75       | 69.8 | 5.88 | 149.3            | 21.50            | 546.1     | 20.79 | 528.0 | 21.22 | 538.9    | 21.85 | 554.9 | N/A   | N/A   | 20.87 | 530.1                      | 21.81 | 553.9                         | 22.52 | 572.0 | N/A           | N/A   | 0.25  | 0.02 | 50.00  | 3.45  |
| 20        | 508 | 500       | 19.25 | 488.9     | 291.03          | 187,760              | N/A             | N/A             | 233.28          | 150,502         | 184.53          | 119,051         | 122.49          | 79,025  | 3.00       | 76.2 | 6.38 | 162.0            | 23.75            | 603.2     | 22.76 | 578.1 | 23.39 | 594.1    | 24.29 | 616.9 | N/A   | N/A   | 22.83 | 579.8                      | 23.35 | 593.0                         | 24.69 | 627.1 | N/A           | N/A   | 0.25  | 0.02 | 40.00  | 2.76  |
| 24        | 610 | 600       | 23.25 | 590.5     | 424.55          | 273,902              | N/A             | N/A             | 354.80          | 228,902         | 294.05          | 189,709         | 190.61          | 122,973   | 3.00       | 76.2 | 6.38 | 162.0            | 28.13            | 587.3     | 26.73 | 678.9 | 27.36 | 694.9    | 28.90 | 734.0 | N/A   | N/A   | 27.09 | 688.0                      | 27.44 | 696.9                         | 28.78 | 731.0 | N/A           | N/A   | 0.25  | 0.02 | 25.00  | 1.72  |

**Notes:**  
 \*Standard disk thickness does not include gaskets. Insulated unit thickness includes all gaskets  
 • Disks w/pressure ratings of 25 psig (1.72 barg) and above will support full vacuum w/o additional support  
 • Maximum pressure rating of ASME B16.5 Class 150 flanges is 290 psig (19.99 barg) @ 100°F (38°C). The maximum pressure rating is lower at higher temperatures. Reference ASME/ANSI B16.5  
 • All pressures shown are based on an ambient temperature of 72°F (22°C)  
 • Not all minimum/maximum pressure and temperature combinations are available. Please contact ZOOK for more information  
 • Unless otherwise noted, stated MNFA and Kr values apply to the rupture disk only and does not include the addition of external vacuum supports or insulated units



Required Vacuum Support Style for Full Vacuum Service

| Disk Size / Range |             | Burst Pressure Range |               | Vacuum Support Style |     |       |       |
|-------------------|-------------|----------------------|---------------|----------------------|-----|-------|-------|
| in                | mm          | psig                 | barg          | Ring                 | Bar | Cross | Plate |
| 1                 | 25          | <25                  | <1.72         | X                    | -   | -     | -     |
| 1-1/2             | 38          | <25                  | <1.72         | -                    | X   | -     | -     |
| 2 thru 14         | 50 thru 356 | 9 to 25              | 0.62 to 1.72  | -                    | X   | -     | -     |
|                   |             | 5 to <9              | 0.34 to <0.62 | -                    | -   | X     | -     |
|                   |             | <5                   | <0.34         | -                    | -   | -     | X     |

Certified Flow Resistance Factor (Krgl)

| Support Style     | Krgl  |
|-------------------|-------|
| 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 |