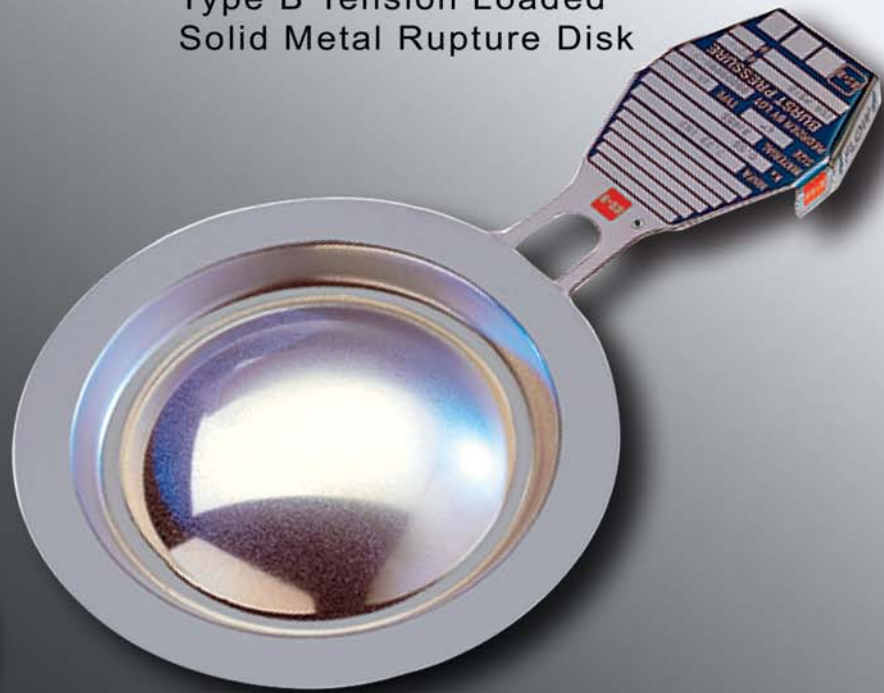




TYPE B™ SOLID METAL RUPTURE DISKS

Type B Tension Loaded
Solid Metal Rupture Disk



BS&B Quik-Sert
Safety Head

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for the Most Complete, up-to-date Information

TYPE B TENSION LOADED SOLID METAL RUPTURE DISK

The Type B Solid Metal Disk, available in many sizes and metals, withstands mild or severe corrosive conditions, elevated or cold temperatures, static or pulsing pressures – and still provides reliable overpressure protection for pressure systems within defined limits. The design utilizes a dome-shaped disk with a 30° angular seating arrangement. System pressure is applied to the dished or concave side, subjecting disk metal to tension loading.



Type B Rupture Disk – Prebulged solid metal disk with angular seat, before and after rupture.

Type BV Rupture Disk for Vacuum Applications

If back pressure on convex (atmospheric) side of disk will ever exceed the pressure applied to concave (pressure) side of disk, a vacuum support may be required. Supports are not required with all disks. See table below.

When vacuum supports are required for Type B angular seat disk

If pressure rating of disk is below these minimums, a vacuum support is required.

| Where Condition is: | Full Vacuum | 2/3 Vacuum | 1/3 Vacuum |
|---------------------------|--|------------|------------|
| Absolute pressure is: | 0 psia | 5psia | 10psia |
| Back pressure is: | 14.7psia | 9.7psia | 4.7psia |
| Rupture Disk Material is: | and pressure rating of disk is less than | | |
| Aluminum | 450 psig | 360 psig | 270 psig |
| Silver | 700 psig | 560 psig | 420 psig |
| Nickel | 1200 psig | 960 psig | 720 psig |
| Monel | 1200 psig | 960 psig | 720 psig |
| Inconel | 1200 psig | 960 psig | 720 psig |
| 316 stainless steel | 1200 psig | 960 psig | 720 psig |

For higher back pressures and other disk metals. Consult factory

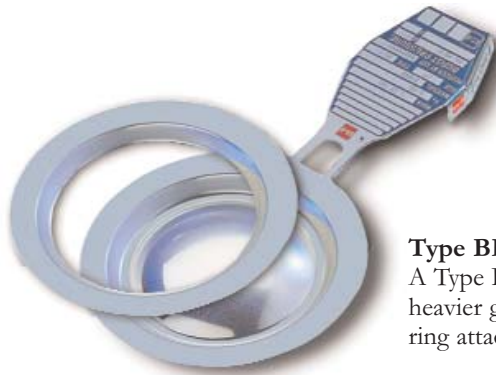
Conversion to Metric Units: Bars =PSIG ÷ 14.504

KG/cm² =PSIG ÷ 14.22



Type BV Rupture Disk – A Type B disk has an attached vacuum support to assure a proper fit

Type BR Rupture Disks for Minimum Disk Burst Pressure



Type BR Rupture Disk:
A Type B thin disk with heavier gauge metal BR ring attached to top side



Type BRR Rupture Disk:
A Type B thin disk with BR rings attached to both top and bottom sides



Type BRV Rupture Disk:
A Type B thin disk with BR ring and vacuum support attached



Type BSV Rupture Disk: A Type B disk with vacuum support and soft gasket ring attached to bottom side of disk. For - disks in high vacuum service

If the pressure rating for a Type B Rupture Disk is at or near the minimum, a thin disk is dictated and a BR protective rating is required.

When Type B disk should use BR protective ring

If burst pressure for Type B disk is lower than those shown below for standard sizes and disk metals, a BR protective ring should be considered. All ratings are psig.

| Disk Size | Disk Material | | | | | | | | | | |
|-----------|---------------|------|------------------|------|------------------|------|--------------------|------|-------|------|-------|
| | Aluminum | | Nickel Alloy 200 | | Monel® Alloy 400 | | Inconel® Alloy 600 | | 316SS | | |
| in. | mm. | psig | barg | psig | barg | psig | barg | psig | barg | psig | barg |
| 1 | 25 | 260 | 17.92 | 1100 | 76 | 1450 | 100 | 1800 | 124 | 2100 | 144.7 |
| 1 1/2 | 40 | 173 | 11.42 | 733 | 50.5 | 967 | 66.7 | 1200 | 82.7 | 1400 | 96.5 |
| 2 | 50 | 104 | 7.17 | 440 | 30.3 | 580 | 40.7 | 720 | 49.6 | 840 | 58 |
| 3 | 80 | 73 | 5 | 309 | 21.3 | 407 | 28 | 506 | 35 | 590 | 40.7 |
| 4 | 100 | 57 | 3.9 | 241 | 16.6 | 318 | 22 | 395 | 27.2 | 461 | 31.8 |
| 6 | 150 | 43 | 3 | 181 | 12.5 | 238 | 16.4 | 296 | 20.4 | 345 | 23.7 |
| 8 | 200 | 33 | 2.3 | 138 | 9.5 | 181 | 12.4 | 225 | 15.5 | 263 | 18.13 |
| 10 | 250 | 25 | 1.72 | 107 | 7.4 | 141 | 9.7 | 175 | 12.06 | 204 | 14.06 |
| 12 | 300 | 22 | 1.5 | 92 | 6.3 | 121 | 8.3 | 150 | 10.3 | 175 | 12.06 |
| 14 | 350 | 19 | 1.3 | 79 | 5.4 | 104 | 7.2 | 129 | 8.9 | 150 | 10.3 |
| 16 | 400 | 17 | 1.2 | 69 | 4.75 | 91 | 6.2 | 113 | 7.79 | 131 | 9.03 |
| 18 | 450 | 15 | 1.03 | 61 | 4.2 | 81 | 5.6 | 100 | 6.9 | 117 | 8.06 |
| 20 | 500 | 13 | .89 | 55 | 3.8 | 73 | 5 | 90 | 6.2 | 106 | 7.3 |
| 24 | 600 | 10 | .70 | 46 | 3.2 | 60 | 4 | 75 | 5.17 | 88 | 6.07 |

Since seating area of disk should be free of any deformity or penetration by a foreign substance that might adhere to lip of flange holder, a heavier gauge metal BR ring should be mounted to one or both sides of the disk in the seating area to provide support and protection. When one ring is involved, the assembly is called **Type BR Rupture Disk**. When two-rings are used, the assembly is called **Type BRR Rupture Disk**. If a vacuum support is required, the BR ring is used only on atmospheric side of disk. This assembly is called **Type BRV Rupture Disk**.

A support ring may provide adequate structural strength for the rupture disk, eliminating the need for a vacuum support. See table below for when a BR can be used instead of a BRV.

Minimum burst pressure at which Types B and BR Disks with adequate support ring will withstand full vacuum

| Disk Metal | PSIG | BARG |
|---------------------|------|------|
| Aluminum | 200 | 13.7 |
| Silver | 300 | 20.7 |
| Nickel/Alloy 200 | 500 | 34.5 |
| Monel/Alloy 400 | 500 | 34.5 |
| Inconel/Alloy 600 | 500 | 34.5 |
| 316 stainless steel | 500 | 34.5 |

BR Ring - Standard metal 316 stainless steel special metals include Inconel®, Monel®, Nickel, Hastelloy B and C, 276 Titanium and Tantalum. Aluminum ring is standard on Aluminum disks.

In most applications involving vacuum, the term “commercial vacuum” is used. If extremely high vacuum is involved – in the micron range—seating area of disk may require a soft gasket ring mounted to process side of support. The assembly of disk support and soft gasket ring is called **Type BSV Rupture Disk**. If a BR ring is also attached to the atmospheric side of the disk, the assembly is called **Type BRSV Rupture Disk**. Vacuum grease may also be applied to the soft ring seating surface to provide additional tightness when high vacuum is encountered. Standard materials for soft gasket ring include aluminum and teflon. Special materials include silver or nickel.

Type B Solid Metal Rupture Disks for Elevated or Cold Temperature Service

Minimum/maximum burst pressure ratings for standard Type B Rupture Disks at 72°F are included on pages 6 and 7. To determine burst pressure rating at elevated or cold temperatures, a temperature correction factor must be applied to ratings at 72°F.

The temperature conversion table on page 5 applies only to BS&B Type B series solid metal disks and cannot be used for Type D Composite Disks or reverse buckling disks. Data used to develop the table has been obtained from reliable sources; however, BS&B does not warrant the figures nor will they be held liable for any use to which the figures may be put.

Temperature correction factors are shown in percent from rupture pressure at 72°F. Values are approximate and based on disk metal at temperatures listed.

When selecting Type B Disks for elevated or cold temperature service, check installed conditions whenever possible to determine actual temperatures. You will be able to specify disks with greater burst accuracy.

How to Use the Temperature Conversion Table

To determine the estimated rupture pressure of a disk at temperatures other than 72°F, multiply the rated pressure at 72°F by the temperature correction factor shown for the disk metal.

Example

What is the rupture pressure at 500°F of a nickel disk rated at 300psi at 72°F.

1. Consult temperature conversion table. Correction factor for nickel disk at 500°F is 86%.
2. Multiply disk rating at 72°F by correction factor: $300 \times 0.86 = 258$.

Rupture pressure of a nickel disk rated 300 psi at 72°F is therefore 258 psi at 500°F

If you require a disk for a specific pressure at elevated or cold temperature and want to determine if it is a standard disk, convert the required pressure at elevated or cold temperature to pressure at 72°F.

Recommended maximum temperatures for metals used in standard Type B Disks:

| | | | | | |
|------------------|-------|-------|---------------------------------|--------|-------|
| Aluminum | 250°F | 121°C | Monel/Alloy 400 | 900°F | 482°C |
| Silver | 250°F | 121°C | Inconel/Alloy 600 | 1100°F | 593°C |
| Nickel/Alloy 200 | 750°F | 399°C | 316ss | 900°F | 482°C |
| | | | Hastelloy C-276/ Alloy C-276 | 900°F | 482°C |

NOTE:

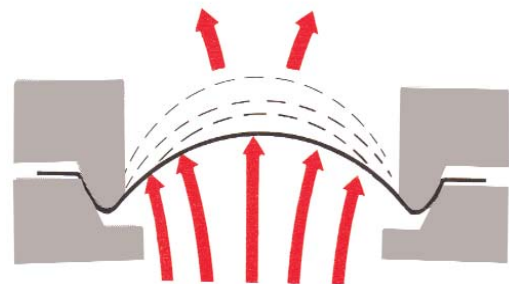
Tension Loaded

Conventional rupture disk with angular seating, pressure loading is on concave side of disk. This puts the disk metal under tension.

As pressure increases on a conventional disk in tension, the seating design allows the dome to thin out to a point where it can no longer withstand the pressure. The disk ruptures and metal segments fold back against the walls of the fitting in an irregular pattern to provide a full opening. The ultimate tensile strength of the metal determines its failure point when loaded in tension.

Fail Safe

Damaged disks rupture at rated pressure or lower, not higher than rated.



Warranty

The Type B Rupture Disk must be used in BS&B rupture disk holder types FA, SA, SF, or UA or other types recommended by and manufactured by BS&B. Substitution of either rupture disk or rupture disk holder not manufactured by BS&B not only may affect the burst pressure or opening characteristics of the disk, it also voids BS&B warranty.

Specifications for Type B Disks Min/Max Pressure Rating at 72°F (22°C)

The following BS&B rupture disks are standard. Those in the most popular materials and bursting pressures are available for quick delivery. Disks with

higher or lower bursting pressures than those listed and in other materials are available on special order. Special metals: Platinum, Titanium, Hastelloy C-276.

| Disk Material - Unlined Disks | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|-----|----------|-------|------|------|------------------|------|-------|------|------------------|------|-------|------|--------------------|------|-------|------|-------|------|-------|------|------------------------------|------|-------|------|
| Disk Size | | Aluminum | | | | Nickel Alloy 200 | | | | Monel® Alloy 400 | | | | Inconel® Alloy 600 | | | | 316ss | | | | Hastelloy C-276/ Alloy C-276 | | | |
| in | mm | Min. | | Max. | | Min. | | Max. | | Min. | | Max. | | Min. | | Max. | | Min. | | Max. | | Min. | | Max. | |
| | | psig | barg | psig | barg | psig | barg | psig | barg | psig | barg | psig | barg | psig | barg | psig | barg | psig | barg | psig | barg | psig | barg | psig | barg |
| 1/2 | 13 | 80 | 5.5 | 1500 | 103 | 280 | 19.3 | 20000 | 1379 | 340 | 23.5 | 25000 | 1724 | 440 | 30.3 | 30000 | 2068 | 625 | 43 | 30000 | 2068 | - | - | - | - |
| 1 | 25 | 40 | 2.76 | 1000 | 69 | 145 | 10 | 8000 | 552 | 175 | 12 | 10000 | 689 | 225 | 16 | 12000 | 827 | 320 | 22 | 12000 | 827 | 400 | 27.6 | 12000 | 827 |
| 1.5 | 40 | 26 | 1.8 | 750 | 52 | 95 | 6.5 | 6000 | 414 | 115 | 8 | 6000 | 414 | 150 | 10.3 | 6000 | 414 | 210 | 14 | 6000 | 414 | 263 | 18 | 6000 | 414 |
| 2 | 50 | 16 | 1.1 | 570 | 39 | 55 | 3.8 | 4000 | 276 | 67 | 4.6 | 4500 | 310 | 87 | 6 | 6000 | 414 | 120 | 8.3 | 6000 | 414 | 150 | 10 | 6000 | 414 |
| 3 | 80 | 12 | 0.8 | 460 | 32 | 41 | 2.8 | 2500 | 172 | 49 | 3.4 | 3200 | 220 | 63 | 4.4 | 4000 | 276 | 90 | 6.2 | 6000 | 414 | 113 | 8 | 6000 | 414 |
| 4 | 100 | 9 | 0.6 | 360 | 25 | 31 | 2.10 | 1900 | 131 | 37 | 2.5 | 2400 | 165 | 48 | 3.3 | 3000 | 207 | 68 | 4.7 | 6000 | 414 | 85 | 6 | 6000 | 414 |
| 6 | 150 | 7 | 0.48 | 275 | 19 | 23 | 1.6 | 1400 | 97 | 28 | 2 | 1800 | 124 | 36 | 2.5 | 2200 | 152 | 51 | 3.5 | 3600 | 248 | 64 | 4 | 3600 | 248 |
| 8 | 200 | 5 | 0.35 | 205 | 14 | 18 | 1.3 | 1100 | 76 | 22 | 1.5 | 1450 | 100 | 28 | 2 | 1700 | 117 | 40 | 2.76 | 2100 | 145 | 50 | 3.4 | 3600 | 248 |
| 10 | 250 | 4 | 0.275 | 165 | 11 | 14 | 0.97 | 800 | 55 | 17 | 1.2 | 1150 | 79 | 22 | 1.5 | 1400 | 97 | 30 | 2 | 1400 | 97 | - | - | - | - |
| 12 | 300 | 4 | 0.275 | 140 | 9.7 | 12 | 0.8 | 670 | 46 | 15 | 1 | 960 | 66 | 19 | 1.3 | 1000 | 69 | 27 | 1.87 | 1000 | 69 | - | - | - | - |
| 14 | 350 | 3 | 0.21 | 125 | 8.6 | 11 | 0.76 | 570 | 39 | 13 | 0.9 | 750 | 52 | 17 | 1.2 | 750 | 52 | 23 | 1.6 | 750 | 52 | - | - | - | - |
| 16 | 400 | 3 | 0.21 | 105 | 7.2 | 9 | 0.60 | 410 | 28 | 11 | 0.76 | 475 | 33 | 15 | 1 | 500 | 35 | 20 | 1.4 | 500 | 34 | - | - | - | - |
| 18 | 450 | 3 | 0.21 | 95 | 6.5 | 8 | 0.5 | 445 | 30 | 10 | 0.7 | 450 | 31 | 13 | 0.9 | 475 | 33 | 18 | 1.25 | 475 | 33 | - | - | - | - |
| 20 | 508 | 2 | 0.14 | 85 | 5.8 | 8 | 0.5 | 400 | 27.5 | 9 | 0.62 | 450 | 31 | 12 | 0.8 | 450 | 31 | 16 | 1.1 | 450 | 31 | - | - | - | - |
| 24 | 610 | 2 | 0.14 | 71 | 4.9 | 37 | 2.5 | 145 | 10 | - | - | - | - | - | - | - | - | 60 | 4.1 | 230 | 16 | - | - | - | - |

For 30" (762mm) - 44"(1117.6mm) Size, consult BS&B for ratings and availability

FEP Lined Disks

| Disk Size | | Aluminum | | | | | | | | Nickel Alloy 200 | | | | | | | | Monel® Alloy 400 | | | | | | | |
|-----------|-----|-------------------------|------|-------------------------|------|------------------------------|------|-------------------------|-----|-------------------------|------|-------------------------|------|------------------------------|------|-------------------------|-----|-------------------------|------|-------------------------|------|------------------------------|------|-------------------------|-----|
| in | mm | Minimum Pressure 1-side | | Minimum Pressure 2-side | | Maximum Pressure 1 & 2 sides | | Maximum Temperature FEP | | Minimum Pressure 1-side | | Minimum Pressure 2-side | | Maximum Pressure 1 & 2 sides | | Maximum Temperature FEP | | Minimum Pressure 1-side | | Minimum Pressure 2-side | | Maximum Pressure 1 & 2 sides | | Maximum Temperature FEP | |
| | | psig | barg | psig | barg | psig | barg | °F | °C | psig | barg | psig | barg | psig | barg | °F | °C | psig | barg | psig | barg | psig | barg | °F | °C |
| 1/2 | 13 | 235 | 16.2 | 380 | 26 | 1500 | 103 | 250 | 121 | 500 | 34 | 600 | 41.3 | 6000 | 414 | 400 | 204 | 500 | 34 | 600 | 41.3 | 6000 | 414 | 400 | 204 |
| 1 | 25 | 90 | 6.2 | 140 | 9.65 | 1000 | 69 | 250 | 121 | 195 | 13.4 | 245 | 138 | 3000 | 207 | 400 | 204 | 225 | 15.5 | 275 | 18.9 | 3000 | 207 | 400 | 204 |
| 1.5 | 40 | 60 | 4.1 | 95 | 6.55 | 700 | 48 | 250 | 121 | 130 | 8.9 | 165 | 11.3 | 2000 | 138 | 400 | 204 | 150 | 10.3 | 185 | 12.7 | 2000 | 138 | 400 | 204 |
| 2 | 50 | 40 | 2.75 | 64 | 4.4 | 500 | 34 | 250 | 121 | 79 | 5.4 | 105 | 7.2 | 1300 | 90 | 400 | 204 | 91 | 6.2 | 115 | 7.9 | 1300 | 90 | 400 | 204 |
| 3 | 80 | 26 | 1.8 | 40 | 2.75 | 400 | 27 | 250 | 121 | 55 | 3.8 | 69 | 4.75 | 900 | 62 | 400 | 204 | 63 | 4.34 | 77 | 5.3 | 900 | 62 | 400 | 204 |
| 4 | 100 | 20 | 1.40 | 31 | 2.1 | 325 | 22 | 250 | 121 | 42 | 2.90 | 53 | 3.6 | 650 | 49 | 400 | 204 | 48 | 3.30 | 59 | 4.06 | 650 | 49 | 400 | 204 |
| 6 | 150 | 15 | 1 | 23 | 1.58 | 240 | 16.5 | 250 | 121 | 31 | 2.1 | 39 | 2.7 | 500 | 34 | 400 | 204 | 36 | 2.5 | 44 | 3.03 | 500 | 34 | 400 | 204 |
| 8 | 200 | 11 | 0.76 | 17 | 1.17 | 180 | 12.4 | 250 | 121 | 24 | 1.6 | 30 | 2 | 375 | 26 | 400 | 204 | 28 | 1.9 | 34 | 2.34 | 375 | 26 | 400 | 204 |
| 10 | 250 | 9 | 0.62 | 14 | 0.96 | 135 | 9.3 | 250 | 121 | 19 | 1.3 | 24 | 1.65 | 300 | 21 | 400 | 204 | 22 | 1.5 | 27 | 1.86 | 300 | 21 | 400 | 204 |
| 12 | 300 | 8 | 0.56 | 12 | 0.82 | 110 | 7.6 | 250 | 121 | 16 | 1.1 | 20 | 1.4 | 250 | 17 | 400 | 204 | 19 | 1.3 | 23 | 1.58 | 250 | 17 | 400 | 204 |

For 30" (762mm) - 44"(1117.6mm) Size, consult BS&B for ratings and availability

FEP Lined Disks

| Disk Size | | Inconel® Alloy 600 | | | | | | | | 316ss | | | | | | | | Hastelloy C-276/Alloy C-276 | | | | | | | |
|-----------|-----|-------------------------|------|-------------------------|------|------------------------------|------|-------------------------|-----|-------------------------|------|-------------------------|------|------------------------------|------|-------------------------|-----|-----------------------------|------|-------------------------|------|------------------------------|------|-------------------------|-----|
| in | mm | Minimum Pressure 1-side | | Minimum Pressure 2-side | | Maximum Pressure 1 & 2 sides | | Maximum Temperature FEP | | Minimum Pressure 1-side | | Minimum Pressure 2-side | | Maximum Pressure 1 & 2 sides | | Maximum Temperature FEP | | Minimum Pressure 1-side | | Minimum Pressure 2-side | | Maximum Pressure 1 & 2 sides | | Maximum Temperature FEP | |
| | | psig | barg | psig | barg | psig | barg | °F | °C | psig | barg | psig | barg | psig | barg | °F | °C | psig | barg | psig | barg | psig | barg | °F | °C |
| 1/2 | 13 | 790 | 54 | 790 | 54 | 10000 | 689 | 400 | 204 | 820 | 56.5 | 910 | 62.7 | 10000 | 689 | 400 | 204 | - | - | 500 | 34.4 | 5000 | 344 | 400 | 204 |
| 1 | 25 | 275 | 18.9 | 325 | 22.4 | 5000 | 344 | 400 | 204 | 370 | 25.5 | 420 | 28.9 | 5000 | 344 | 400 | 204 | 450 | 31 | 333 | 22.9 | 3400 | 234 | 400 | 204 |
| 1.5 | 40 | 185 | 12.7 | 220 | 15.1 | 3400 | 234 | 400 | 204 | 245 | 16.9 | 280 | 19.3 | 3400 | 234 | 400 | 204 | 298 | 20.5 | 333 | 22.9 | 3400 | 234 | 400 | 204 |
| 2 | 50 | 110 | 7.6 | 135 | 9.3 | 1800 | 124 | 400 | 204 | 145 | 10 | 170 | 11.7 | 1800 | 124 | 400 | 204 | 175 | 12 | 200 | 13.7 | 1800 | 124 | 400 | 204 |
| 3 | 80 | 77 | 5.3 | 91 | 6.2 | 1500 | 103 | 400 | 204 | 105 | 7.2 | 120 | 8.3 | 1500 | 103 | 400 | 204 | 128 | 8.8 | 143 | 9.8 | 1500 | 103 | 400 | 204 |
| 4 | 100 | 59 | 4.06 | 70 | 4.8 | 1100 | 75.8 | 400 | 204 | 79 | 5.40 | 90 | 6.2 | 1100 | 75.8 | 400 | 204 | 96 | 6.60 | 107 | 7.3 | 1100 | 75.8 | 400 | 204 |
| 6 | 150 | 44 | 3.03 | 52 | 3.5 | 800 | 55.1 | 400 | 204 | 59 | 4.06 | 67 | 4.6 | 800 | 55.1 | 400 | 204 | 72 | 4.9 | 80 | 5.5 | 800 | 55.1 | 400 | 204 |
| 8 | 200 | 34 | 2.3 | 40 | 2.75 | 600 | 41.4 | 400 | 204 | 46 | 3.17 | 52 | 3.5 | 600 | 41.4 | 400 | 204 | 56 | 3.8 | 60 | 4.1 | 600 | 41.4 | 400 | 204 |
| 10 | 250 | 27 | 1.86 | 32 | 2.2 | 500 | 34.4 | 400 | 204 | 27 | 1.86 | 32 | 2.2 | 500 | 34.4 | 400 | 204 | - | - | - | - | - | - | 400 | 204 |
| 12 | 300 | 23 | 1.6 | 27 | 1.86 | 400 | 27.5 | 400 | 204 | 23 | 1.58 | 27 | 1.86 | 400 | 27.5 | 400 | 204 | - | - | - | - | - | - | 400 | 204 |

For 30" (762mm) - 44"(1117.6mm) Size, consult BS&B for ratings and availability

Type B Solid Metal Rupture Disks for Bolted, Flange, and Union Type Safety Heads

Linings - Standard materials: FEP Plastic (Teflon®)
 Maximum temp. 400°F
 Special materials: TFE plastic (Teflon®)
 Maximum Temp. 500°F

Coatings - Vinylite, a mild corrosion retardant for disk metal can be applied to one or both sides of disk. Maximum temperature: 150°F

- All liners have passed a spark test to assure pin hole-free condition.
- Protective ring is required for solid metal disks with FEP/TFE lining on both sides in all disk materials except aluminum. Specify Type BR, BRV, BV, BRV, BRR, BSV (Angular Seat Only)

Burst tolerances are the maximum expected variation from the disk stamped burst pressure.

Normal Rupture Tolerances for Type B Series Solid Metal Disks

| Marked Burst Pressure (psig) | Expected Rupture Tolerance |
|-------------------------------------|----------------------------|
| Greater than 2 to less than 15..... | ± 1.5psig |
| 15 to less than 40..... | ± 2.0psig |
| 40 and above..... | ± 5% |

Standard Manufacturing Ranges for Solid Metal Disks Before the Disk is Stamped

| Desired Pressure Rating | | Test specimens must rupture within limits below of the pressure you specify | | | |
|-------------------------|-------------|---|------|-------|------|
| | | Plus | | Minus | |
| psig | barg | psig | barg | psig | barg |
| 2.5 - 3.5 | 0.17 - 0.24 | 1 | 0.07 | 1 | 0.07 |
| 4 - 6 | 0.3 - 0.4 | 2 | 0.13 | 1 | 0.07 |
| 7 - 10 | 0.48 - 0.03 | 2.5 | 0.17 | 1.5 | 0.1 |
| 11 - 16 | 0.75 - 0.05 | 3 | 0.2 | 2 | 0.13 |
| 17 - 25 | 1.17 - 1.72 | 4 | 0.27 | 2 | 0.13 |
| 26 - 40 | 1.8 - 2.76 | 5 | 0.34 | 3 | 0.2 |
| 41 - 65 | 2.8 - 4.5 | 6 | 0.4 | 4 | 0.27 |
| 66 - 100 | 4.6 - 6.9 | 9 | 0.62 | 5 | 0.34 |
| 101 - 150 | 6.9 - 10.3 | 12 | 0.8 | 6 | 0.4 |
| 151 - 200 | 10.5 - 13.7 | 16 | 1.1 | 9 | 0.62 |
| 201 - 350 | 13.8 - 24.1 | 23 | 1.6 | 12 | 0.8 |
| 351 - 500 | 24.2 - 34.4 | 30 | 2 | 15 | 1.03 |
| 501 & up | 34.5 & up | 6% | 6% | 3% | 6% |

Why A Manufacturing Range?

When ordering a rupture disk, a manufacturing range will automatically be assigned to the specified burst pressure per the table above. This eliminates the necessity for the manufacturer to stock all possible thicknesses of all materials (near 100,000 thicknesses required) to make all burst pressures. As an example, if you order a B Disk to burst at 80psig, BS&B will enter the order to the shop with the standard manufacturing range shown on the above table (+9, -5) or 75 - 89 psig. We will try for your requested pressure of 80psig but can ship the lot of disks if the tag pressure falls between 75-89psig. Once the disk is rated and stamped, 78psig for example, the burst tolerance of ± 5% now applies to this stamped pressure.

Optional: The standard manufacturing ranges shown above can be reduced by 1/2 or 1/4 at additional costs. Hastelloy C-276/Alloy C-276 standard manufacturing range and 1/2 range only

