



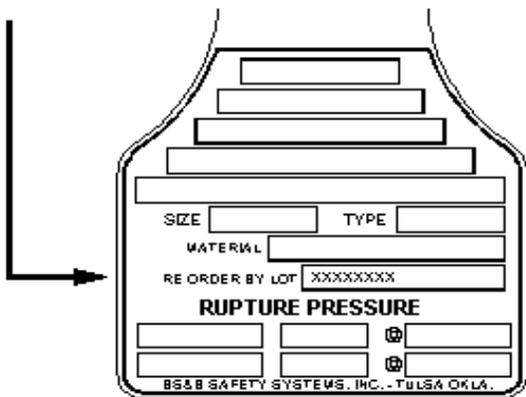
BS&B SAFETY SYSTEMS, INC.
BS&B SAFETY SYSTEMS LTD.

AV RUPTURE DISK

INSTALLATION INSTRUCTIONS

BULLETIN
77-8001I

- THE DISK IS DESIGNED SPECIFICALLY FOR THE PROTECTION OF ATMOSPHERIC VESSELS AND FOR ISOLATING RELIEF VALVES FROM BOTH MANIFOLD AND ATMOSPHERIC CONTAMINATION
- ORDER REPLACEMENT DISKS BY LOT NUMBER



Installing the AV Disk

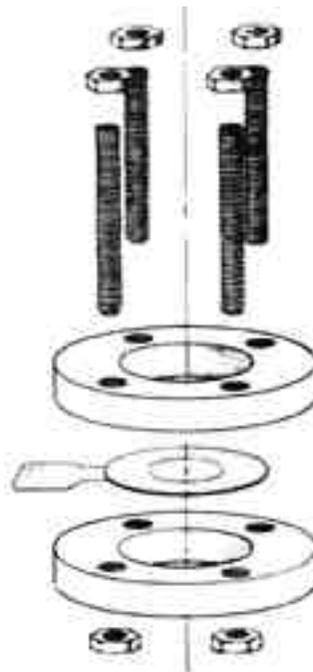
Follow the steps below for proper installation

1. Insert AV Disk centrally between companion flanges in order that name plate giving disk specification may be read easily. (Note reverse installation will give identical burst pressure).
2. For type AVV disk supplied with a vacuum support the disk must be installed with the vacuum support towards the system pressure or medium.
3. Install Studs and Nuts:
Evenly torque down studs and nuts per the following table.

- Select proper location for the AV Disk**
1. **CAUTION - VENT TO SAFE AREA**
Do not locate where personnel or property could be exposed to the product being discharged through the disk. Any equipment or property in the vicinity of discharge could be damaged.
 2. Consider recoil or "kickback". Recoil is the force the system will experience upon rupture. Recoil is approximately twice the disk rating (psig) times the relief area (in²). Provide adequate support for piping and connections. If the discharge is free-vented, a baffle plate mounted with extra length studs will minimize recoil.
 3. The AV Disk should not be subject to excessive structural bending stresses.

Before you install the Disk

1. **Inspect companion flanges**
Clean seating surfaces of both flanges before installing the disk.
2. **Inspect the rupture disk**
Handle Disk carefully - it is a precision instrument. Examine both sides of the disk for any damage.
3. **Examination of disk**
Examine for any indentations or severe scratches. A damaged disk must not be installed as it may result in premature failure.



NOTE: Corrosion and service conditions may affect disk life thus requiring periodic change.

Companion Flange Torque ANSI Ratings

| DISK SIZE | | COMPANON FLANGE ANSI RATING | TORQUE | |
|-----------|-----|-----------------------------|--------|--------|
| IN | MM | | NM | FT-LBS |
| 2 | 50 | 150 | 57 | 42 |
| | | 300 | 57 | 42 |
| 3 | 80 | 150 | 57 | 42 |
| | | 300 | 102 | 75 |
| 4 | 100 | 150 | 57 | 42 |
| | | 300 | 102 | 75 |
| 6 | 150 | 150 | 102 | 75 |
| | | 300 | 102 | 75 |
| 8 | 200 | 150 | 102 | 75 |
| | | 300 | 165 | 122 |
| 10 | 250 | 150 | 165 | 122 |
| | | 300 | 248 | 183 |
| 12 | 300 | 150 | 165 | 122 |
| | | 300 | 369 | 272 |
| 14 | 350 | 150 | 248 | 183 |
| | | 300 | 369 | 272 |
| 16 | 400 | 150 | 248 | 183 |
| | | 300 | 523 | 386 |
| 18 | 450 | 150 | 369 | 272 |
| | | 300 | 523 | 386 |
| 20 | 500 | 150 | 369 | 272 |
| | | 300 | 523 | 386 |
| 24 | 600 | 150 | 949 | 700 |
| | | 300 | 523 | 386 |

Companion Flange Torque DIN/AFNOR/UNI Ratings

| DISK SIZE | | COMPANON FLANGE DIN/AFNOR/UNI RATING | TORQUE | |
|-----------|-----|---|--------|--------|
| IN | MM | | NM | FT-LBS |
| 2 | 50 | 10/16/25/40 | 62 | 46 |
| 3 | 80 | 10/16/25/40 | 62 | 46 |
| 4 | 100 | 10/16 | 62 | 46 |
| | | 25/40 | 122 | 90 |
| 6 | 150 | 10/16 | 122 | 90 |
| | | 25/40 | 210 | 155 |
| 8 | 200 | 10 | 122 | 90 |
| | | 16 | 122 | 90 |
| | | 25 | 210 | 155 |
| | | 40 | 312 | 230 |
| 10 | 250 | 10 | 122 | 90 |
| | | 16 | 210 | 155 |
| | | 25 | 312 | 230 |
| | | 40 | 423 | 312 |
| 12 | 300 | 10 | 122 | 90 |
| | | 16 | 210 | 155 |
| | | 25 | 312 | 230 |
| | | 40 | 423 | 312 |
| 14 | 350 | 10 | 122 | 90 |
| | | 16 | 210 | 155 |
| | | 25 | 423 | 312 |
| | | 40 | 580 | 428 |
| 16 | 400 | 10 | 210 | 155 |
| | | 16 | 312 | 230 |
| | | 25 | 580 | 428 |
| | | 40 | 650 | 480 |
| 18 | 450 | 10 | 210 | 155 |
| | | 16 | 312 | 230 |
| | | 25 | N/A | N/A |
| | | 40 | 650 | 480 |
| 20 | 500 | 10 | 210 | 155 |
| | | 16 | 423 | 312 |
| | | 25 | 580 | 428 |
| | | 40 | 813 | 600 |
| 24 | 600 | 10 | 312 | 230 |
| | | 16 | 580 | 428 |
| | | 25 | 650 | 480 |
| | | 40 | 813 | 600 |
| 30 | 800 | 10 | 423 | 312 |
| | | 16 | 650 | 480 |
| | | 25 | 813 | 600 |
| | | 40 | 881 | 650 |

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Where the products involved include a rupture disk inside a rupture disk holder, each must be of the proper type to be utilized with its mating part as otherwise recommended by and manufactured by BS&B. Substitution of either a rupture disk or rupture disk holder not manufactured by BS&B voids the aforementioned warranty and BS&B SPECIFICALLY DISCLAIMS ANY AND ALL LIABILITY FOR DAMAGES, EITHER DIRECT OR INDIRECT, INCIDENTAL OR CONSEQUENTIAL, ARISING FROM THE USE OF ASSEMBLIES NOT WHOLLY COMPRISED OF BS&B MANUFACTURED PRODUCTS.

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There is no guarantee against corrosion or erosion caused by acids, chemicals, their fumes, or the like.



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BS&B Safety Systems, Inc.
7455 East 46th Street
Tulsa, OK 74145
Telephone: 918-622-5950
Facsimile: 918-665-3904
www.bsbsystems.com

or

BS&B Safety Systems Ltd.
Raheen Business Park
Raheen, Limerick, Ireland
Telephone: +353 61 227022
Facsimile: +353 61 227987
www.bsb.ie