

POLY-SD/SCRD-V DOUBLE DISC SERIES

DESCRIPTION

The complete double disc (DD) holder assembly consists of two rupture discs installed in a permanent holder made of three separate components—the base, midflange and holddown (see figure 1). The GI configuration allows for ease of installation and maintenance, with preassembly of the unit on a workbench before simple insertion between companion flanges (see figure 2).

Configurations use Poly-SD and SCRD-V Series rupture discs. As with all other rupture discs there is a wide choice of materials for optimum resistance to corrosive processes. Double disc holder assemblies are available in sizes 2 - 24" (DN50 - DN600) and burst pressures ranging from 20 - 1600 PSIG (1.38 to 110.32 BARG)

APPLICATIONS

The most common application for a double disc assembly is to protect the primary rupture disc from high back pressure. This condition can occur when multiple rupture disc assemblies, protecting multiple processes, discharge into a common header. If one rupture disc assembly bursts, the resulting discharge into the common header could subject the remaining rupture disc assemblies to a transient elevated back pressure condition. The SCRD-V rupture disc is commonly used as the secondary disc in a DD assembly to withstand potential back pressure events. The standard SCRD-V DD is designed for one atmosphere back pressure capability. Consult the factory if a back pressure greater than one atmosphere is required.

To insure proper operation of any double disc assembly, the mid-flange must be equipped with a means to guarantee the space between the primary and secondary discs remains at atmospheric pressure. Pressure must not be allowed to accumulate above atmospheric pressure in the mid-flange volume. This will result in a significant increase in inlet pressure necessary to cause the primary disc to rupture, thereby compromising the safety of the system.

Environments involving corrosive, toxic or valuable media may be acceptable applications for the double disc assembly. A double disc assembly can help contain any leakage through the primary disc (caused by fatigue, Sulfide stress cracking, or corrosion) and will be captured by the secondary disc. In addition to maintaining atmospheric pressure in the mid-flange volume, it is recommended that a sensing device is installed in the mid-flange capable of providing immediate notice that replacement is needed should leakage develop through the primary disc. When leakage is detected, immediate disc replacement is required. The double disc design is not intended to provide redundant or extended service life.

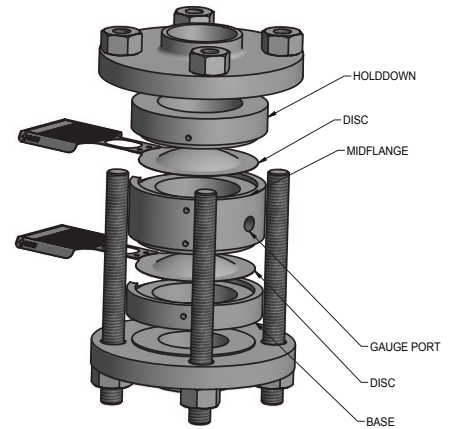


Figure 1: Exploded View of Double Disc Assembly GI

APPROVAL:

- ASME

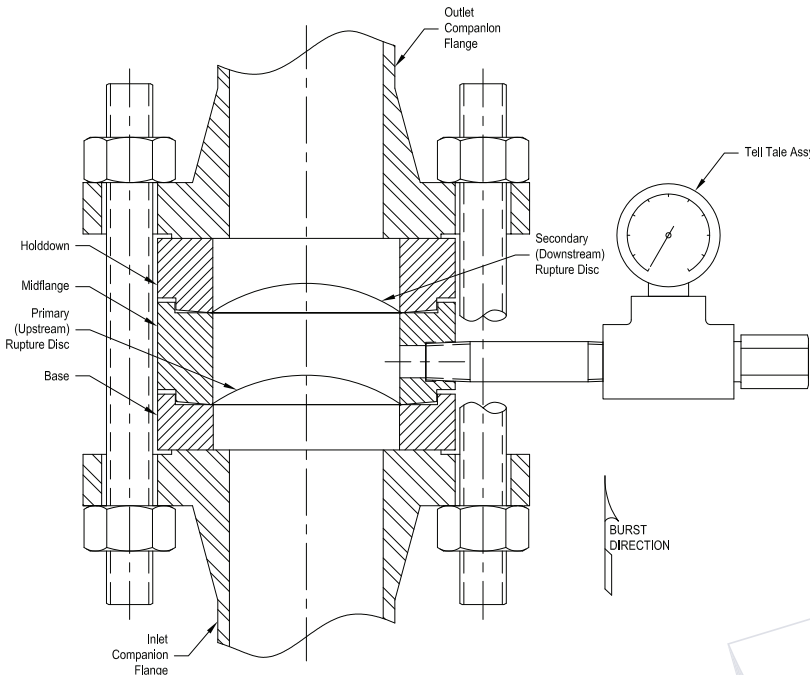


Figure 2: Double Disc GI Installed

AVAILABLE ASME CERTIFIED BURST PRESSURES FOR POLY-SD AND SCRD-V DD IN PSIG @ 72 °F (BARG @ 22°C):

Size		Minimum BP				Max. BP
IN	DN	316 SST	Inconel® 600	Monel® 400	Nickel 200	(All)
2	50	158 (10.89)	132 (9.10)	120 (8.27)	106 (7.31)	1600 (110.32)
3	80	158 (10.89)	132 (9.10)	106 (7.31)	75 (5.17)	1300 (89.63)
4	100	133 (9.17)	106 (7.31)	86 (5.93)	67 (4.62)	1100 (75.84)
6	150	96 (6.62)	75 (5.17)	75 (5.17)	50 (3.45)	500 (34.47)
8	200	75 (5.17)	55 (3.79)	55 (3.79)	30 (2.07)	450 (31.03)
10	250	60 (4.14)	44 (3.03)	44 (3.03)	24 (1.65)	400 (27.58)
12	300	50 (3.45)	37 (2.55)	37 (2.55)	20 (1.38)	350 (24.13)
14	350	43 (2.96)	32 (2.21)	32 (2.21)	17 (1.17)	300 (20.68)
16	400	85 (5.86)	64 (4.41)	64 (4.41)	30 (2.07)	250 (17.24)
18	450	75 (5.17)	55 (3.79)	55 (3.79)	25 (1.72)	200 (13.79)
20	500	65 (4.48)	50 (3.45)	50 (3.45)	25 (1.72)	150 (10.34)
24	600	55 (3.79)	45 (3.10)	45 (3.10)	20 (1.38)	100 (6.89)

HOW TO SPECIFY

Previous Lot Number:	
OR	
Size:	
Burst Pressure	
Flange Rating:	
Disc Material:	
Material:	Base: Midflange: Holddown:
ASME certification:	Yes/No
Back Pressure Requirement:	
Midflange Gauge Tap (IN):	Size: 1/4, 1/2 Qty:
Optional Accessories:	Burst Indication, Jackscrews, Telltale Assembly, Studs & Nuts, Nipple Tee Set, Excess Flow Valve, J-hook