

DOUBLE DISC SERIES – POLY-SD, SRL AND SCRD-V

DESCRIPTION

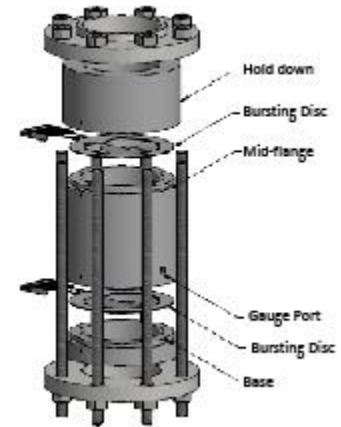
The complete Fike double disc (DD) holder assembly consists of two Axius or two SRL bursting discs installed in a specifically designed holder made of three separate components – the base, mid-flange and holddown (see fig 1). The Fike GI holder configuration allows for ease of installation and maintenance, with preassembly of the unit on a workbench prior to simple insertion between industry standard companion flanges (see figure 2).

Configurations use Axius or SRL Series bursting discs. As with other bursting disc types there is a wide choice of materials for optimum resistance to corrosive processes. Axius double disc holder assemblies are available in sizes DN25 - DN300 (1 - 12 inches) and burst pressures ranging from 0.55 to 41.37 barg.

SRL double disc holder assemblies are available in sizes DN25 - DN200 (1 - 8 inches) and burst pressures ranging from 0.69 to 22.07 barg.

APPLICATIONS

One of the most common applications for a double disc assembly is to protect the primary or upstream bursting disc from high back pressure. This condition can occur when multiple bursting disc assemblies, protecting multiple processes, discharge into a common header. If one bursting disc assembly bursts, the resulting discharge into the common header could subject the remaining bursting disc assemblies to a transient elevated back pressure condition which could potentially affect the performance of the safety system. The standard Axius and SRL DD assemblies are designed for one atmosphere back pressure capability. Consult the factory if a back pressure resistance greater than one atmosphere is required.



APPROVALS:

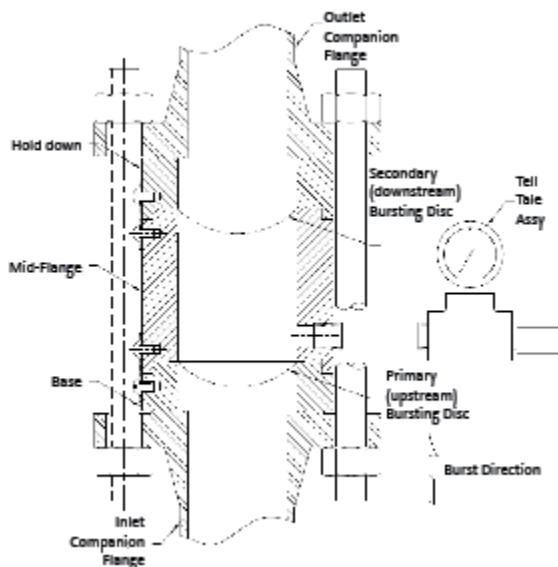
- CE
- UD



To ensure proper operation of any double disc assembly, the mid-flange must be equipped with a means to guarantee that the space between the primary and the secondary discs remains at atmospheric pressure. Pressure must not be allowed to accumulate above atmospheric pressure in the mid-flange volume as this will result in a significant increase in the inlet pressure necessary to cause the primary disc to burst, 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) which 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 redundancy or extended service life under these conditions.

For more information on use of Double Disc Assemblies, please reference Fike bulletin 8.0124.xx.x





AVAILABLE ASME CERTIFIED BURST PRESSURE FOR AXIUS DD IN BARG @ 22°C

Size		316 / 316 L SST		Hastelloy® C276	
		Max Temp 482°C		Max Temp 482°C	
IN	DN	Min BP	Max BP	Min BP	Max BP
1 ¹	25	0.69	36.20	0.83	41.37
1.5	40	0.55	26.54	0.55	26.54 ²
2	50	0.55	26.54	0.55	32.41
3.	80	0.48	22.41	0.48	29.65
4	100	0.48	19.66	0.48	20.69
6	150	0.55	13.79	0.55	13.79
8	200	0.55	10.34	0.55	9.65
10	250	0.55	6.89	0.55	6.21
12	300	0.55	4.83	0.55	4.14

(1) DN25 (1") size is not suitable for liquid systems at burst pressures less than 4.48 barg with an inlet piping length greater than 25 cm.

(2) 26.54 barg is the maximum burst pressure rating with a 316/316L SST ring. 13.79 barg is the maximum burst pressure rating with a Hastelloy® C276 ring.

Note: ASME certification not available for products with fluoropolymer liners or Teflon® coatings.

AVAILABLE ASME CERTIFIED BURST PRESSURE FOR SRL DD IN BARG @ 22°C

Size		316 / 316 L SST		Inconel® 600		Nickel 200/201		Hastelloy® C276	
		Max Temp 482°C		Max Temp 593°C		Max Temp 427°C		Max Temp 482°C	
IN	DN	Min BP	Max BP	Min BP	Max BP	Min BP	Max BP	Min BP	Max BP
1	25	3.45	18.97	3.45	10.69	2.07	5.86	4.14	22.07
1.5	40	3.45	18.97	3.45	10.69	2.07	5.86	4.14	22.07
2	50	1.72	15.86	1.72	12.41	1.24	5.17	3.10	18.28
3.	80	1.52	13.10	1.52	10.34	1.03	4.14	2.76	13.79
4	100	1.38	12.41	1.38	10.34	0.83	3.45	2.41	11.03
6	150	1.24	10.34	1.24	10.34	0.69	3.45	2.21	7.93
8	200	1.17	9.31	1.17	8.97	0.69	4.83	2.07	7.93

Note: 1.5" (DN40) SRL bursting disc requires 1.5" (DN40) SRL DD Holder Assembly. Other sizes require XL DD Holder Assembly.



XL/XLO DOUBLE DISC ASSEMBLY HEIGHTS (MM)

Size		XL Assembly Height	XLO Assembly Height
IN	DN		
1	25	111.3	104.9
1.5	40	139.7	120.7
2	50	157.2	133.4
3	80	206.5	163.6
4	100	257.3	203.5
6	150	335.0	252.5
8	200	435.1	319.3
10	250	546.1	404.9
12	300	655.6	487.4

Notes:

DN40 SRL assembly height 109.5 mm

DN40 SRLO assembly height 103.9 mm