MONO Type

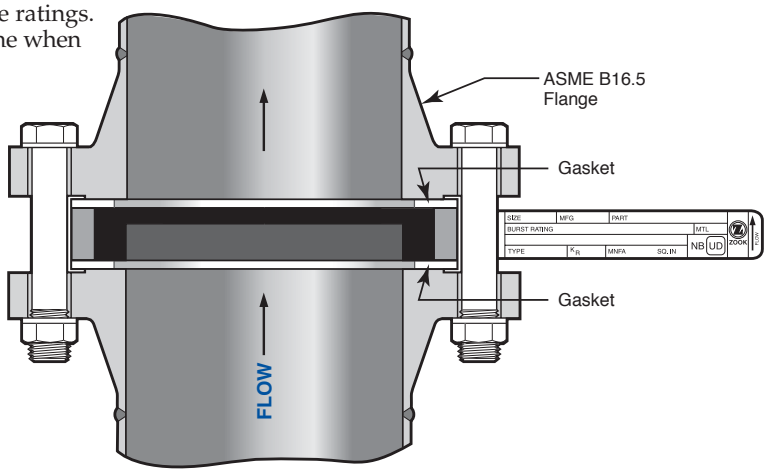
the best choice for low and intermediate burst ratings

BOISWOOD
GAS AND LIQUID CONTROL TECHNOLOGIES
Pressure & Vacuum
Flow
Level & Temperature
Tube & Fittings
HVACR
Custom Services

- Sizes 1/2″ thru 24″ diameters
- Designed to fit ASME B16.5 Class 150 flanges (Higher ratings to fit Class 300 flanges are furnished in the INVERTED and DUPLEX Type Disks)
- Burst ratings 0.25 to 150 psig
- 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)
- 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
- Counterbored side of the disk contacts the process media
- Vacuum supports are available for ratings below 25 psig
- May be configured to withstand high back pressure generated in closed piping systems – request Bak-Pressure™ bulletin
- Stocked MONO Disks, ready for immediate shipment
  Sizes: 1″, 1-1/2″, 2″, 3″, 4″, 6″, 8″ to fit ASME B16.5 Class 150 flanges
  Burst Ratings: 10, 15, 20, 25, 30, 40, 50, 75, 100, 125, 150 psig @ 72°F (22°C)

Note: Sizes 6″ and 8″ with burst ratings 125 and 150 psig @ 72°F (22°C) are stocked in INVERTED type

- ASME UD marking available



Certified Flow Resistance Factor (K_{rgl})

Support Style	K_{rgl}
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

Required Vacuum Support Style for Full Vacuum Service

Size	Burst Rating	Support Style
1″	below 25 psig	MONO – with ring
1-1/2″	below 25 psig	MONO – with bar
2″ - 14″	9 to 25 psig	MONO – with bar
2″ - 14″	5 to below 9 psig	MONO – with cross
2″ - 14″	below 5 psig	MONO – with plate

Contact ZOOK for sizes 16″ and larger

Specifications – ASME B16.5 Class 150

Nominal Disk Sizes	Minimum net flow area (MNFA) Sq. inches					Disk Dimensions				Burst Ratings psig	
	Full Bore	Vacuum support style				Diameter		Thickness*			
		Ring	Bar	Cross	Plate	I.D.	O.D.	Standard Disk	Insulated Unit	Min.	Max.
1/2″	0.30	N/A	N/A	N/A	N/A	0.622″	1-3/4″	5/8″	1-3/4″	25	150
3/4″	0.53	N/A	N/A	N/A	N/A	0.824″	2-1/8″	5/8″	1-3/4″	25	150
1″	0.78	0.44	0.60	0.47	0.32	1″	2-1/2″	7/8″	2-1/4″	10	150
1-1/2″	1.76	N/A	1.34	1.05	0.72	1-1/2″	3-1/4″	7/8″	2-1/4″	7	150
2″	3.14	N/A	2.39	1.86	1.30	2″	4″	7/8″	2-1/4″	3	150
3″	7.06	N/A	5.56	4.31	2.95	3″	5-1/4″	7/8″	2-1/4″	2	150
4″	12.56	N/A	10.56	8.81	5.47	4″	6-3/4″	7/8″	2-1/4″	1.5	150
6″	28.27	N/A	22.27	17.27	12.05	6″	8-5/8″	7/8″	2-1/4″	1	100
8″	50.02	N/A	40.26	31.82	21.14	8″	10-7/8″	1-1/8″	2-3/4″	0.50	100
10″	78.53	N/A	63.53	50.78	32.66	10″	13-1/4″	1-1/2″	3-3/8″	0.25	100
12″	113.09	N/A	89.09	69.09	47.24	12″	16″	2″	4-3/8″	0.25	75
14″	137.88	N/A	108.06	83.31	58.07	13-1/4″	17-5/8″	2-1/4″	4-7/8″	0.25	50
16″	182.65	N/A	144.52	112.65	84.49	15-1/4″	20-1/8″	2-1/2″	5-3/8″	0.25	50
18″	233.70	N/A	181.95	153.70	104.31	17-1/4″	21-1/2″	2-3/4″	5-7/8″	0.25	50
20″	291.03	N/A	233.28	184.53	122.49	19-1/4″	23-3/4″	3″	6-3/8″	0.25	40
24″	424.55	N/A	354.80	294.05	190.61	23-1/4″	28-1/8″	3″	6-3/8″	0.25	25

*Standard disk thickness does not include gaskets.
Insulated unit thickness includes all gaskets

Note: Maximum pressure rating of ASME B16.5 Class 150 flanges is 290 psig @ 100°F (38°C).
The maximum pressure rating is lower at higher temperatures.
Reference ASME/ANSI B16.5