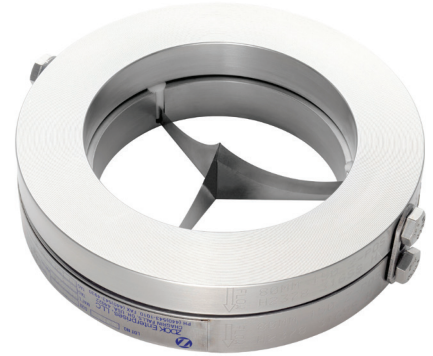




Low Pressure Rupture Disk Assembly

Protect Your Processing or Storage Tank
from Vacuum and Over-Pressurisation



Now available with the unique ZOOK
replaceable knife blade design

- Dull blades can result in collapsed tanks
- Allows higher level of safety maintenance
- Site spares availability leads to greater safety of operation
- Provides lower cost inventory compared to other designs
- Lower costs, less downtime, enhanced safety.
- Replacement blades - easy to change

The ZOOK Z-VAC Series is a range of bi-directional rupture disks and holders which prevent excess vacuum conditions with optional over pressurisation protection for processing and storage tanks.

The assembly design allows ultra low-pressure relief in the vacuum direction (starting at 1" (25mm) of water column differential) and features user replaceable knife blades to ensure optimum performance. The assembly may also be specified to protect equipment from over pressurisation.

Features

- User replaceable knife blade design ensures optimum performance
- Highly accurate, ultra-low burst pressures starting at 1" water column
- Dual-Acting design, with laser cut metal top section and girdle (when ordered in 316SS)
- Sizes 50mm to 300mm / 3" to 12"
- Standard 316SS girdle for full range of vacuum pressures ensures clean opening of seal at specified pressure
- Burst ratings from 1" (25mm) of water column to 150psig (10.34barg)
- Temperature ratings to 500°F (260°C)
- Permanently attached 3D stainless steel tag shows positive and vacuum flow directions
- Optional burst indication
- Special holder for sanitary couplings available

Z-VAC Components

Process Side Ring

Provides seat area protection for seal on applications that do not require positive pressure relief.

Seal

Evenly distributes pressure in both the vacuum and positive pressure direction.

Girdle

Standard material is 316SS. Also available in TEFLON. The girdle controls the standard min. to max. inches of water column negative (vacuum) pressure rating.

Knife Blades

Precision sharpened, user-replaceable knife blades ensure clean opening of seal.

Inlet / Outlet Holder

Insert type rupture disk holder manufactured from 316SS or carbon steel. Sanitary holder design available.

Options

Laser Cut Non-Opening Pressure Cap

Provides support to the seal in the event of positive pressure.

Laser Cut Rated Pressure Cap

Controls the positive pressure relief setting when required.

Z-VAC Series

Features

- User replaceable knife blades
- Designed for installation between standard pipe flanges, sanitary fitting available
- Designed exclusively for use with the Z-VAC series rupture disk
- Non-torque sensitive flat seal design
- The Z-VAC Holder and Rupture Disk are pre-assembled using safety designed clips
- Standard materials of construction: 316SS or carbon steel. Other materials available upon request
- Permanently attached stainless steel nameplates are standard. Nameplates show position and vacuum flow directions to provide visual verification that holder assembly is properly oriented in the piping system



Disk Size	Positive Pressure Relief		Negative (Vacuum) Relief				TEFLON or 316SS Girdle
			Start Relief Rating (minimum) inches of water column		Full Relief Rating (maximum) inches of water column		
	Min (bar/psig)	Max (bar/psig)	TEFLON Girdle		316SS Girdle		
			Min	Max	Min	Max	
50mm/2"	1.03/15	10.3/150	1	30	1	30	Plus (+) 6 inches of water column from start of relief (minimum rating)
80mm/3"	0.55/6	10.3/150	1	30	1	30	
100mm/4"	0.48/7	8.62/125	1	30	1	30	
150mm/6"	0.28/4	6.89/100	1	30	1	30	
200mm/8"	0.21/3	5.17/75	1	20	1	30	
250mm/10"	0.21/3	3.45/50	N/A	N/A	1	30	
300mm/12"	0.14/2	2.76/40	N/A	N/A	1	30	
Max. Temp.	Dependant on Girdle Material		66°C / 150°F		260°C / 500°F		

Table 1 - Z-VAC Series Minimum and Maximum Pressure Ratings @ 22°C (72°F)
N/A Not Available

Nominal Size	ASME B16.5 Flange Classes†		Height
	Class 150 O.D.	Class 300/600 O.D.‡	
50mm/2"	101.6mm/4"	107.95mm/4.4"	31.75mm/1.25"
80mm/3"	133.35mm/5.25"	146.05mm/5.75"	
100mm/4"	171.45mm/6.75"	177.80mm/7"	
150mm/6"	219.08mm/8.62"	247.65mm/9.75"	
200mm/8"	276.23mm/10.87"	304.80mm/12"	
250mm/10"	336.55mm/13.25"	-	44.45mm/1.75"
300mm/12"	406.40mm/16"	-	

Table 2 - Holder Dimensions - mm/inches
† Available to fit DIN and JIS flanges
‡ Contact ZOOK for flange class rating 600



Safety through knowledge and performance

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