RUPTURE DISK
SUBSURFACE INJECTION
NDD050

- Simple Between Flange Installation Even On Existing Tanks
- Assures Positive Shutoff Of Foam Line At Base Of Tank
- Ease Of Maintenance
- Non-Corrosive Stainless Steel & Teflon Disk
- Full Open Path After Burst

Description

National Foam rupture disks are designed for sub-surface applications where expanded foam is injected into the product, either at the base of a product storage tank or through the pipeline supplying product to the tank. Foam lines are normally open to atmosphere and require a positive barrier to prevent product from entering the foam supply line. The check valves normally installed in the foam supply line cannot assure a positive barrier against product leakage into the foam line. Product leakage into the foam line may result in a product spill outside the dike area. Installation of the rupture disk insures a positive method to prevent leakage into the foam line.

Features

- Simple installation even on existing tanks
- Assures positive shutoff of foam line
- Ease of maintenance

Applications

Foam systems using sub-surface injection for application of expanded foam.

Technical Specifications

The rupture disk is a tension loaded angle seated design with composite construction and a vacuum support. The disk shall consist of a stainless steel cap, which shall be dome shaped and have six radial slits that terminate in a break away circle at the top, a seal of PFA film and a stainless steel vacuum support member. Vacuum support shall not hold pressure and shall have six pie shaped sections, which open like petals, when the disk ruptures. The disk shall be designed to rupture with a pressure differential of 19 to 23 PSI at 72°F. The vacuum support shall be capable of withstanding a back pressure of 21 PSI. The total pressure required to rupture the disk shall not exceed 44 PSI. An identification nameplate shall be permanently attached to the disk which shall identify as a minimum the pressure rating and lot number.

The holder shall be insert type designed to mount within the bolt circle of the companion flanges. The holder shall be constructed of carbon steel and shall include a 30° angle seat. The seat shall make a line contact around the circumference of the disk which when properly torqued, will cause a concentrated squeeze on the soft disk material resulting in a leak tight seal.

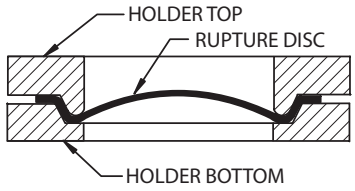
Technical Data

Setting:

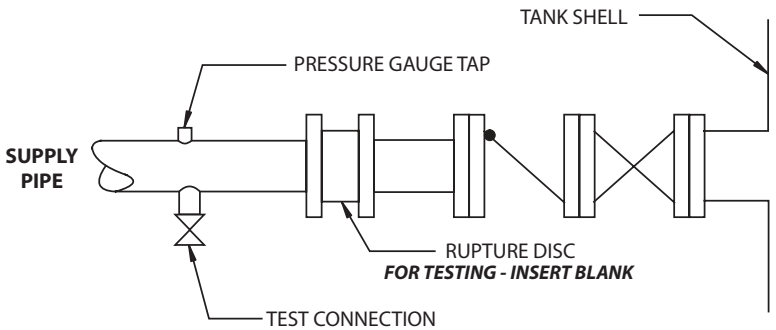
Rupture Pressure.....19-23 PSI (0.085kg)
Max. Back Pressure 21PSI (0.085kg)

Materials of Construction:

Disk..... ...Stainless Steel & PFA
Holder ..... Carbon Steel
Hardware..... Carbon Steel



RUPTURE DISC WITH HOLDER



TYPICAL INSTALLATION

RUPTURE DISK
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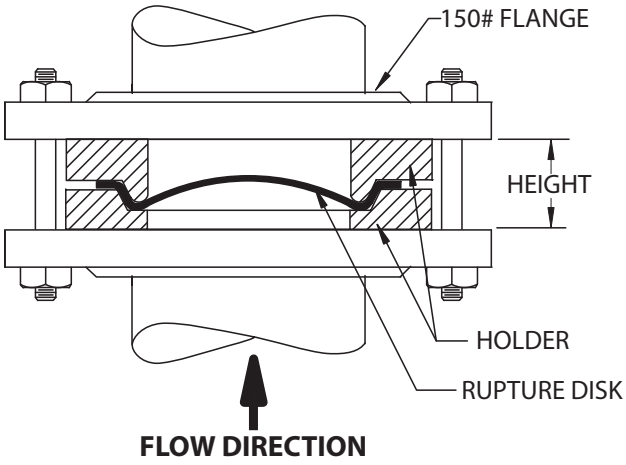

Size	OD		Height	
3	5-1/4	(133)	1-3/4	(44)
4	6-3/4	(171)	1-3/4	(44)
6	8-5/8	(219)	2-1/4	(57)
8	10-7/8	(276)	2-3/8	(60)
10	13-1/4	(337)	2-3/8	(60)
12	16	(406)	2-3/8	(60)

ORDERING INFORMATION

PART NUMBER	DESCRIPTION	LBS	(Kg)
1232-5190-3	3″ Rupture Disk w/ carbon steel wafer type holder for 150# flange	5.1	(2.32)
1232-5190-4	4″ Rupture Disk w/ carbon steel wafer type holder for 150# flange	8.4	(3.83)
1232-5190-6	6″ Rupture Disk w/ carbon steel wafer type holder for 150# flange	14.3	(6.48)
1232-5190-8	8″ Rupture Disk w/ carbon steel wafer type holder for 150# flange	23.0	(10.44)
1232-5191-0	10″ Rupture Disk w/ carbon steel wafer type holder for 150# flange	38.1	(17.28)
1232-5191-2	12″ Rupture Disk w/ carbon steel wafer type holder for 150# flange	61.0	(27.66)
1232-5170-3	3″ Rupture Disk	1.0	(0.45)
1232-5170-4	4″ Rupture Disk	1.0	(0.45)
1232-5170-6	6″ Rupture Disk	1.0	(0.45)
1232-5170-8	8″ Rupture Disk	2.0	(0.9)
1232-5171-0	10″ Rupture Disk	2.0	(0.9)
1232-5171-2	12″ Rupture Disk	2.0	(0.9)

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