

RUPTURE DISC 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 discs 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 disc 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 disc is a tension loaded angle seated design with composite construction and a vacuum support. The disc 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 disc ruptures. The disc 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 disc shall not exceed 44 PSI. An identification nameplate shall be permanently attached to the disc 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 disc which when properly torqued, will cause a concentrated squeeze on the soft disc material resulting in a leak tight seal.

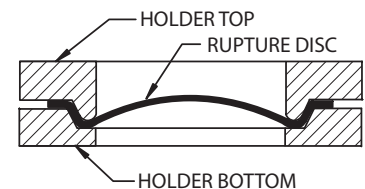
Technical Data

Setting:

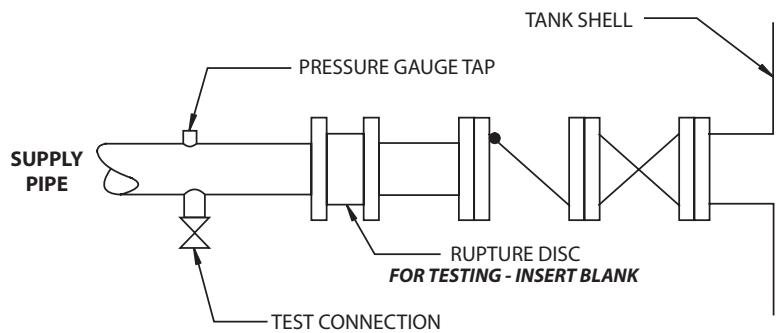
Rupture Pressure.....19-23 PSI (0.085kg)
Max. Back Pressure 21PSI (0.085kg)

Materials of Construction:

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



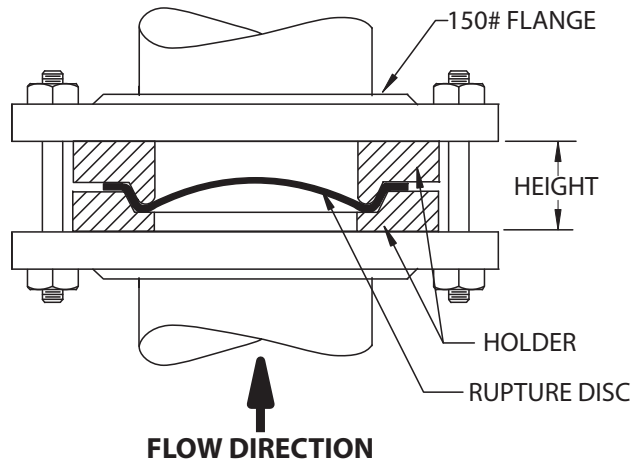
RUPTURE DISC WITH HOLDER



TYPICAL INSTALLATION

RUPTURE DISC SUBSURFACE INJECTION

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