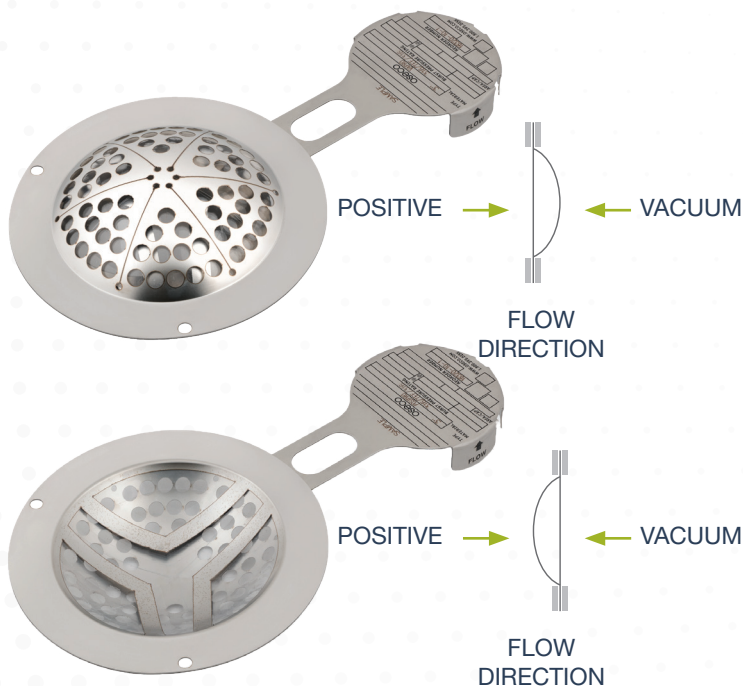


# VAPRO / POSIPRO

VACUUM AND POSITIVE PRESSURE PROTECTION

*The bi-directional VAPRO / POSIPRO discs are excellent for applications requiring both **positive** and **vacuum** pressure protection.*



## VAPRO

The VAPRO is used in applications requiring extremely low vacuum relief. It can activate as low as 6" Water Column (W.C.) vacuum. The burst pressure range encompasses 6" - 30" (W.C.), with a positive burst pressure range of 4 psig to 150 psig.

## POSIPRO

The POSIPRO is used in applications requiring extremely low positive pressure relief. It can activate as low as 6" W.C. It is excellent for storage tank pressure protection.

As vessel pressure approaches the disc set pressure, a girdle is loaded until it collapses back past a knife blade assembly, opening the seal. Under vacuum conditions, a perforated metal top section activates at a predetermined set point.

### Size

3" - 10"

### Temperature Range

-25° to 400° F (316 Stainless Steel)

### Burst Pressures

**VAPRO:** Vacuum: 6" - 30" W.C. | Positive: 4-150 psig

**POSIPRO:** Positive: 6" - 30" W.C. | Vacuum: 4-14.7 psig

**Let us help you with all  
your pressure relief questions.**

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**REQUEST A QUOTE FOR  
THE VAPRO/POSIPRO**



# TECHNICAL SPECIFICATIONS



	VAPRO	POSIPRO
Size range	3"-10" (75-250mm)	3"-10" (75-250mm)
Burst pressure range	<i>Vacuum:</i> 6" - 30" W.C. <i>Positive:</i> 4-150 psig	<i>Positive:</i> 6" - 30" W.C. <i>Vacuum:</i> 4-14.7 psig
Temperature range	-25° to 400° F (316 Stainless Steel girdle)	-25° to 400° F (316 Stainless Steel girdle)
Standard materials	Perforated, composite-style controlling membranes, fluoropolymer seals and a 316 Stainless Steel girdle.	316 Stainless Steel with a fluoropolymer seal
Operating Ratio	<i>Vacuum:</i> Within 1" W.C. below 10" W.C., 90% of min. vacuum burst pressure above 10" W.C. <i>Positive:</i> 80%	<i>Positive:</i> Within 1" W.C. below 10" W.C., 90% of min. positive burst pressure 10"-30" W.C. <i>Vacuum:</i> Up to 80% of vacuum burst pressure
Performance Tolerance	<i>Vacuum:</i> 6" W.C. MIN/MAX <i>Positive:</i> +/- 5%	<i>Positive:</i> 6" W.C. MIN/MAX <i>Vacuum:</i> +/- 5%
Manufacturing Range	<i>Vacuum:</i> 6" W.C. MIN/MAX <i>Positive:</i> 0%, 5%, 10%	<i>Positive:</i> 6" W.C. Opening Range <i>Vacuum:</i> -10%, -5% or 0%

## Related Products

### Sensors

LPSFI

### Holders

VRDI (VAPRO)

POSI (POSIPRO)

# VAPRO Burst Pressure Ranges

VAPRO Ranges of Vacuum and Positive Pressure Relief



SIZE		VACUUM RELIEF (inches H <sub>2</sub> O) <i>Range of Starting Relief Points Available</i>	POSITIVE PRESSURE RELIEF (psig @ 72° F)	
inches	mm	316 SS GIRDLE H <sub>2</sub> O Inches W.C. (mbarg)	MIN psig (barg)	MAX psig (barg)
3	80	6-30 (14.9-74.6)	11 (0.8)	150 (10.3)
4	100	6-30 (14.9-74.6)	8 (0.6)	125 (8.6)
6	150	6-30 (14.9-74.6)	6 (0.4)	100 (6.9)
8	200	6-30 (14.9-74.6)	5 (0.3)	75 (5.2)
10	250	6-30 (14.9-74.6)	4 (0.3)	50 (3.4)

## Example – VAPRO Required Relief Spread:

Operator requests 6" VAPRO with 316 Stainless Steel girdle to relieve at 30" H<sub>2</sub>O vacuum. VAPRO will puncture at above 30" H<sub>2</sub>O and achieve maximum flow area at or below 36" H<sub>2</sub>O positive pressure.

## Burst Tolerance - Vacuum

6" W.C. MIN/MAX

## Burst Tolerance - Positive

+/-2 psig at or below 40 psig  
+/-5% above 40 psig

+/-0.14 barg at or below 2.8 barg  
+/-5% above 2.8 barg

# POSIPRO Burst Pressure Ranges

## POSIPRO Ranges of Vacuum and Positive Pressure Relief



SIZE		POSITIVE PRESSURE RELIEF <i>Starting Relief Points</i>	VACUUM RELIEF (psig @ 72° F)	
inches	mm	Inches W.C. (mbarg)	MIN psig (barg)	MAX psig (barg)
3	80	6-30 (14.9-74.6)	11 (0.8)	14.7 (1.0)
4	100	6-30 (14.9-74.6)	8 (0.6)	14.7 (1.0)
6	150	6-30 (14.9-74.6)	6 (0.4)	14.7 (1.0)
8	200	6-30 (14.9-74.6)	5 (0.3)	14.7 (1.0)
10	250	6-30 (14.9-74.6)	4 (0.3)	14.7 (1.0)

### Example – POSIPRO Required Relief Spread:

Operator requests 8" POSIPRO with 316 Stainless Steel girdle to relieve at 25" W.C. positive pressure. POSIPRO will puncture at above 25" W.C. and achieve maximum flow area at or below 31" W.C. positive pressure.