Guardian™ 407/412 Pressure Relief Valve, 3" and 4" NPS Connection

The Betts' Guardian™ vent is a spring-loaded reclosing pressure relief device/valve for use on a cargo tank's primary pressure relief system. The pressure relief valve is designed, tested and marked in accordance with US DOT 49CFR §178.345-10, §178.347-4 and §178.348-4. The body and O-ring holder are constructed of 316L stainless steel with PTFE standard seals for compatibility with a wide range of products and temperatures.

- Available ECTFE (Halar®) lined/coated
- 3" or 4" NPS mounting
- Compact optimized flow design
- Seal tabs on shroud and body
- Multiple seal material options

Minimum Bursting Pressure: 200 psi [13.8 bar]

Part Number	Size and Connection	Weight
RVP3N*-**	3" Pressure Relief Valve w/ 3" NPS Mounting	13.2 lbs. [6.0 kg.]
RVP4N*-**	4" Pressure Relief Valve w/ 4" NPS Mounting	12.8 lbs. [5.8 kg]

• An example part number for a 3" Valve for a 25 MAWP tank with PTFE seals would be **RVP3NT-25.**

• Vents can be specified with ECTFE (Halar®) lined/coated wetted components for aggressive chemical applications by adding an 'L' in the part number, as shown (e.g. RVPL3NT-25).

* Seal Material Code	Material	Temp. Range
T	PTFE	-40°F to +400°F [-40°C to +204°C]
F	Fluorosilicone	-50°F to +350°F [-45°C to +176°C]
K	Kalrez	-20°F to +400°F [-28°C to +204°C]
VB	FKM BLT	-15°F to +400°F [-26°C to +204°C]

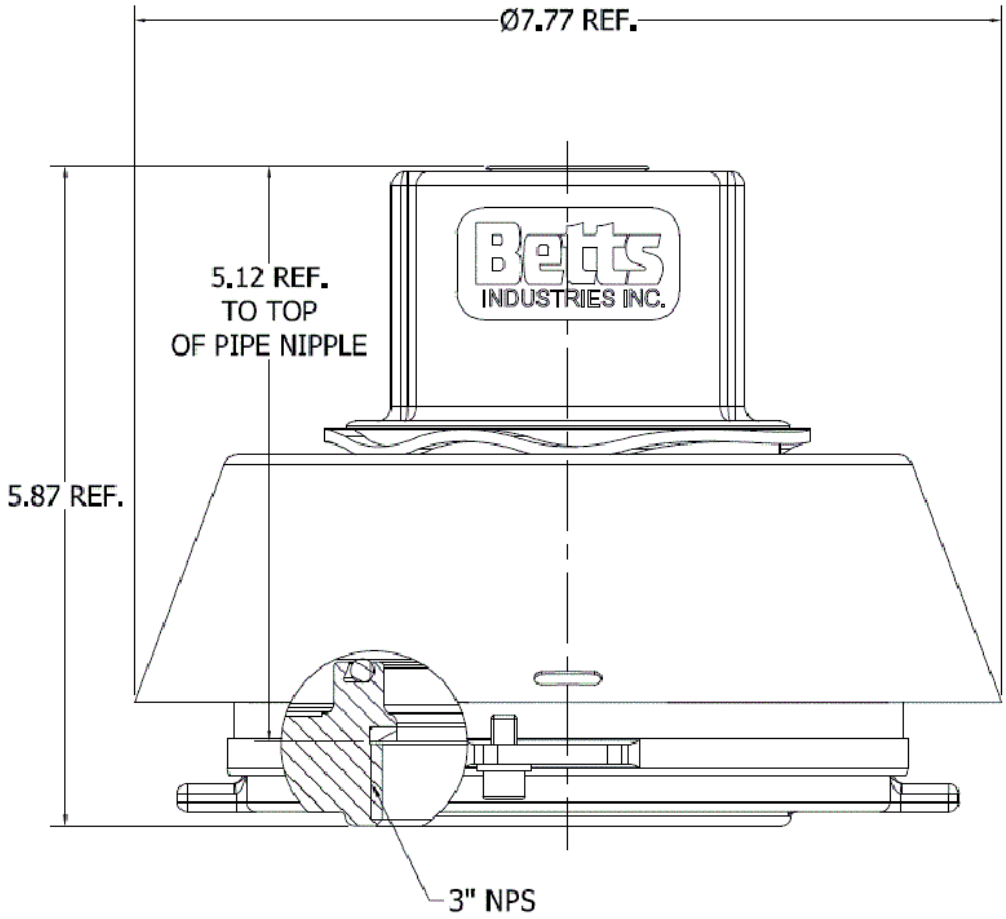
Valve Size	** Code Tank MAWP	Set Pressure	Rated Air Flow Capacity (out-breathing)	Water Flow Rate

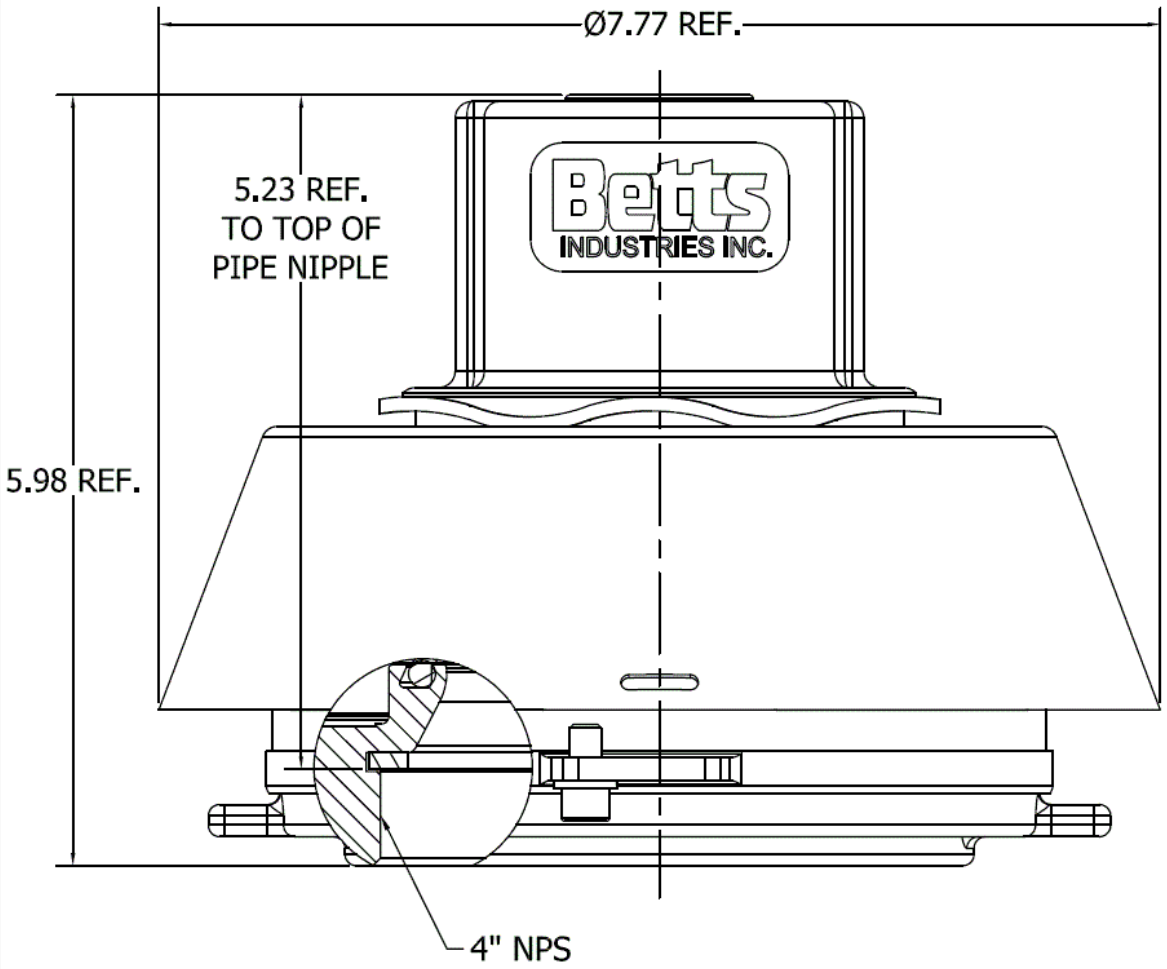
Valve Size	24 Code Tank MAWP	Set Pressure	Rated Air Flow Capacity (out breathing)	Water Flow Rate
3"	25 psig. [1.72 bar]	30 psig [2.06 bar]	379,462 SCFH @ 40 psig [10,745 SCMH @ 2.75 bar]	980 gpm @ 40 psig.
3"	25 psig. [1.72 bar]	30 psig [2.06 bar]	409,558 SCFH @ 45 psig [11,597 SCMH @ 3.10 bar]	1050 gpm @ 45 psig.
3"	30 psig. [2.06 bar]	36 psig [2.48 bar]	409,558 SCFH @ 45 psig [11,597 SCMH @ 3.10 bar]	1050 gpm @ 45 psig.
3"	35 psig. [2.41 bar]	42 psig [2.89 bar]	457,740 SCFH @ 52.5 psig [12,961 SCMH @ 3.62 bar]	1075 gpm @ 52.5 psig.
3"	40 psig. [2.75 bar]	48 psig [3.31 bar]	514,539 SCFH @ 60 psig [14,570 SCMH @ 4.13 bar]	1100 gpm @ 60 psig.
4"	25 psig. [1.72 bar]	30 psig [2.06 bar]	389,482 SCFH @ 40 psig [11,028 SCMH @ 2.75 bar]	1000 gpm @ 40 psig.
4"	25 psig. [1.72 bar]	30 psig [2.06 bar]	432,563 SCFH @ 45 psig [12,248 SCMH @ 3.10 bar]	1100 gpm @ 45 psig.
4"	30 psig. [2.06 bar]	36 psig [2.48 bar]	432,563 SCFH @ 45 psig [12,248 SCMH @ 3.10 bar]	1100 gpm @ 45 psig.
4"	35 psig. [2.41 bar]	42 psig [2.89 bar]	496,955 SCFH @ 52.5 psig [14,072 SCMH @ 3.62 bar]	1150 gpm @ 52.5 psig.
4"	40 psig. [2.75 bar]	48 psig [3.31 bar]	564,486 SCFH @ 60 psig [15,984 SCMH @ 4.13 bar]	1200 gpm @ 60 psig.

Replace ** in Part Number to Designate Cargo Tank MAWP in PSIG

Notes: 1) Values shown are test values. Actual results may vary due to service conditions.

2) Set pressure is defined as point at which continuous flow is seen, felt or heard around the seat area. (nomenclature per ASME Section XII Part TR-110 and TTMA TB-126.)


Ø7.77 REF.
5.12 REF.
TO TOP
OF PIPE NIPPLE
5.87 REF.
Betts
INDUSTRIES INC.
3" NPS



MM-RV002 – INSTALLATION AND MAINTENANCE MANUAL FOR 407/412 P/V/C GUARDIAN VENT

Seal Kit part number: SK-RVPT

***Mounting gasket not included in seal kit**

Spanner wrench part number: 75825EY

Disassembly T-wrench part number : 75819ZC

⚠ **WARNING**: This product can expose you to chemicals including Chromium (hexavalent compounds) which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to: www.P65Warnings.ca.gov. For additional information on Betts products and Proposition 65 list please see: http://www.bettsind.com/prop-65/