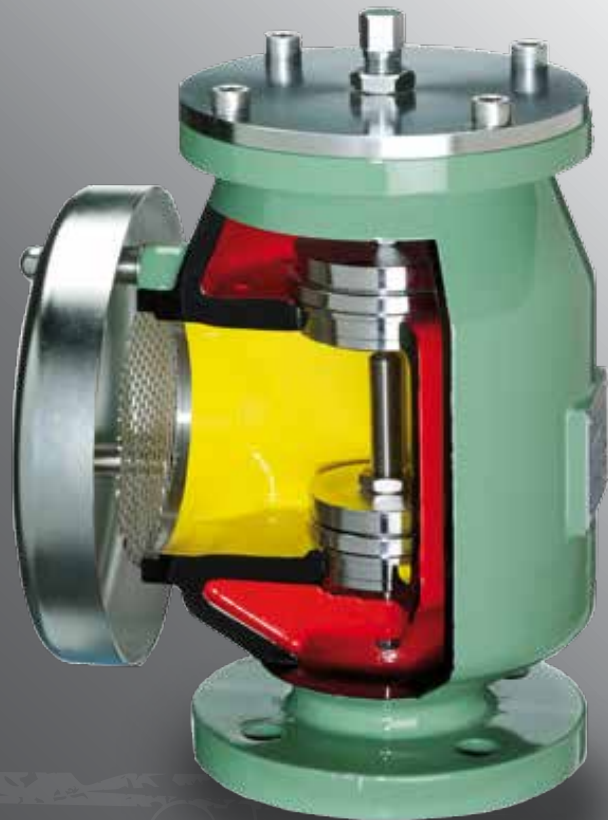


BS&B[®]

Model 944

**End-of-Line Pressure/Vacuum
Relief Vent/Valve**



BSBflamearrester.ie | BSBsystems.com

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Drawing on extensive experience in the pressure relief field, the BS&B FlameSaf® pressure/vacuum relief vent valve offers a dependable, internationally certified and precisely engineered design to prevent excessive pressure or vacuum build-up and rupture/implosion of valuable tankage during normal operations of filling and emptying or from atmospheric changes. Designed for the highest standards of precision and safety, these vents use FEP diaphragms to provide tight seals between pallet and seat, which coupled with the 10% overpressure feature result in reliable and accurate response to even minimal changes in pressure/vacuum. Users benefit from optimized operating conditions close to MAWP/V (Maximum Allowable Working Pressure /Vacuum) while ensuring operation that safeguard both personnel and environment.

Features

- Suitable for normal pressure and vacuum relief
- Complies with API 2000 Seventh Edition / EN ISO 28300
- Certified to ATEX – Directive 94/9/EC
- Weight-loaded stacked pallet design; discharges to atmosphere (guidance is internal to the valve body protecting from freeze-up during inclement weather)
- Achieves full open (flowing pressure/vacuum) at just 10% overpressure
- Provides premium sealing with FEP diaphragms (metal-to-metal available for special requirements or higher settings)
- Leakage rates much tighter than API 2000/EN ISO 28300 requirements
- Weather-hood and screen protect pallets/seats from environment and contamination
- Pallets, seats & stem-guides made from stainless steel
- Modular design reduces requirements for inventory of spare parts

Protection

Gas/air or steam/air mixtures II ½ G c IIB T X

Flange Connection Type

EN or DIN: ISO 7005 - PN10,

JIS B 2220 - 10k

ANSI: ANSI B.16.5 - 150 RF

Other types available upon request



Model 944 End-of-Line Pressure/
Vacuum Relief Vent/Valve

Valve Settings	
Set Pressure	+2.5 mbar [1 inch W.C.] to to +50 mbar [20 inch W.C.]
Set Vacuum	-50 mbar [-20 inch W.C.] to -2.5 mbar [-1 inch W.C.]

Materials of Construction					
	FEP	Ductile Iron	Carbon Steel	Stainless Steel	Other Materials on request
Diaphragm	✓			✓	✓
Valve Set/ Pallet				✓	✓
Valve Seat				✓	✓
Body		✓*	✓**	✓	✓

* Available in sizes DN 50 (2"), DN 80 (3"), DN 100 (4")

** Available in sizes DN 150 (6"), DN 200 (8"), DN 250 (10")

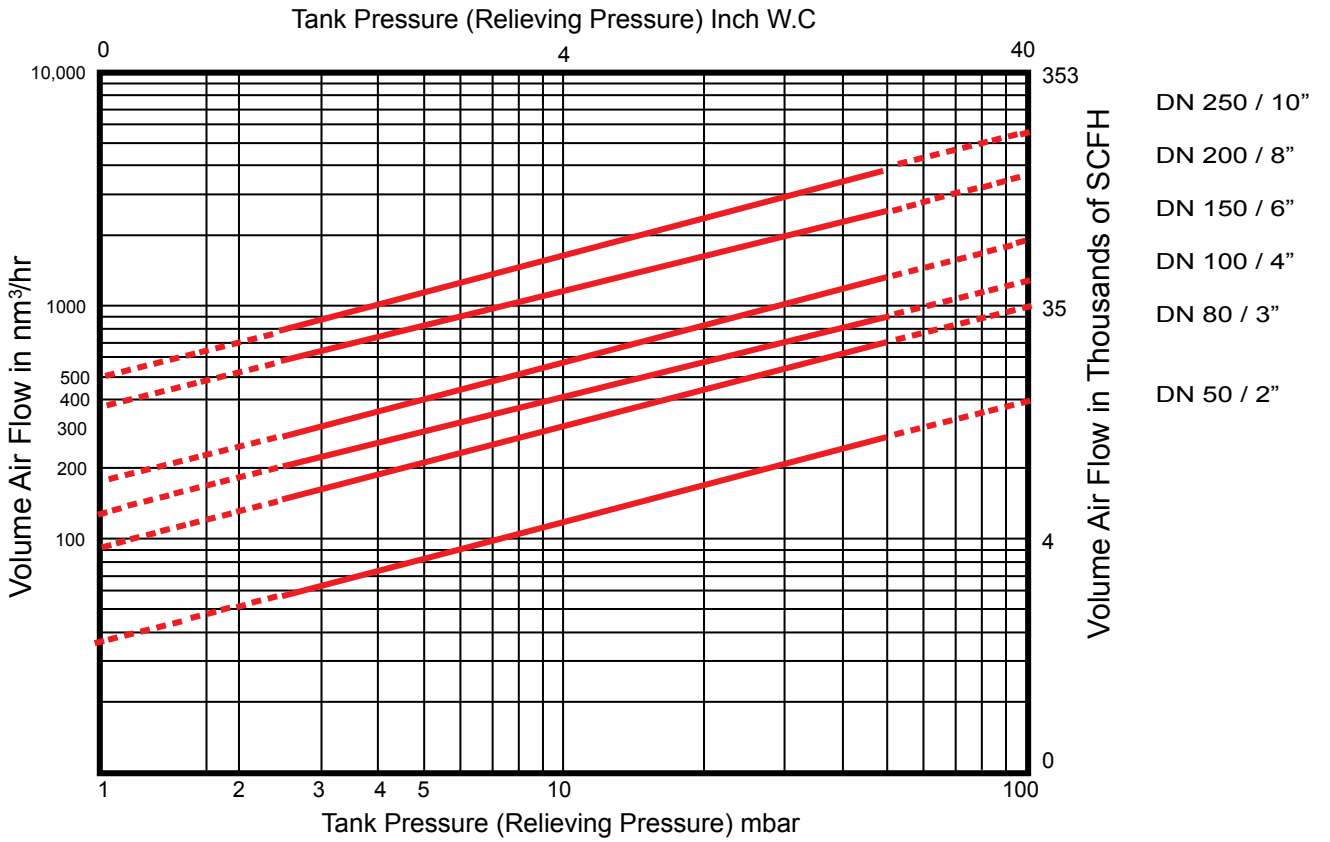
EC Type Examination	
Designation	944 50 to 250
Protective System	Pressure/Vacuum Relief Valve (End-of-Line)
Certificate Number	IBExU14ATEX1244 X
Compliance with	Guideline 94/9/EC (ATEX 95), EN ISO 28300, EN1127-1, EN 13463-1, EN13463-5, API Standard 2000 7th Edition (March 2014)

Operating Conditions	
Temperature	-4 °F (-20 °C) – 320 °F (160 °C)
Maximal 80% of ignition temperature stored medium	
Pressure: Atmospheric	0.8 bar [11.6 psi] to 1.1 bar [15.95 psi] (absolute)

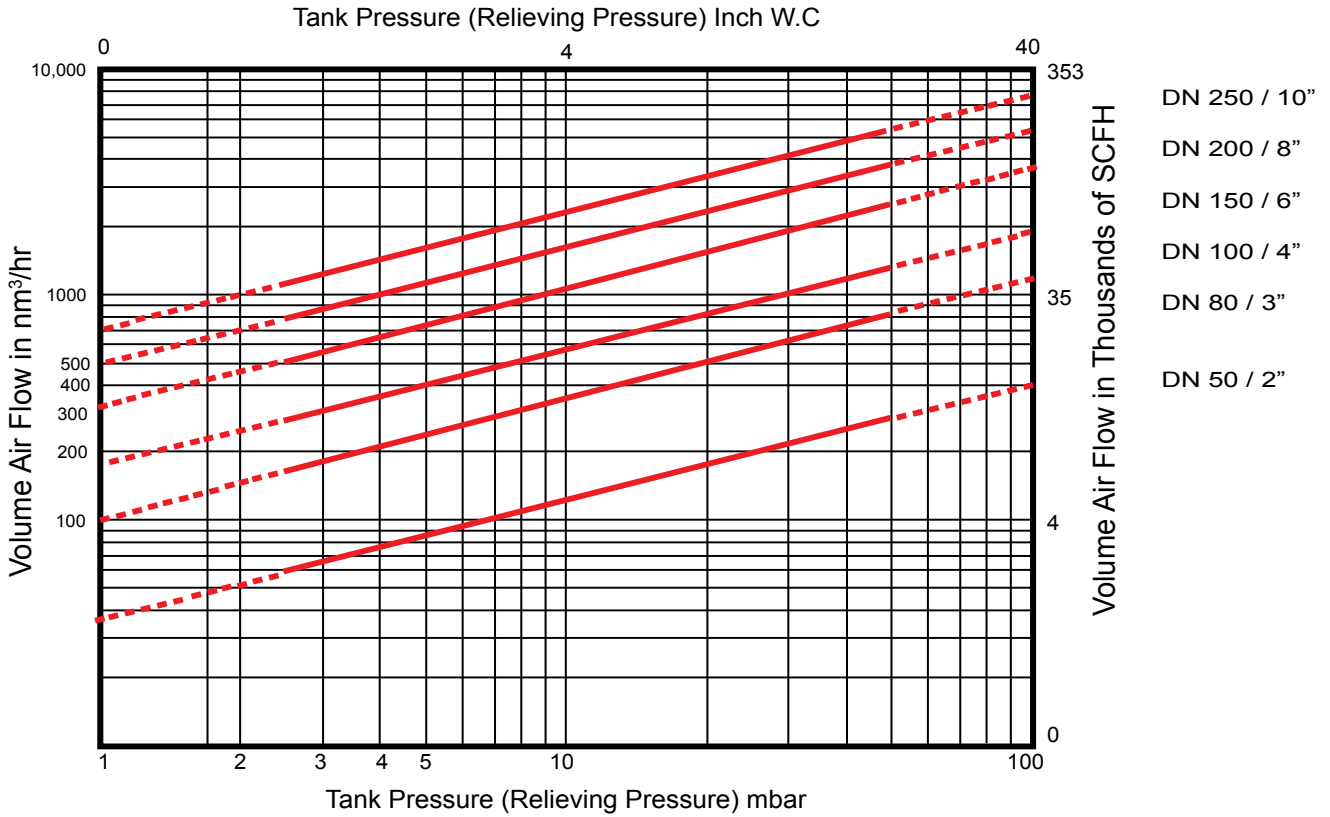
Valve - Maximum Pressure Rating
1 bar [g] (14.5 psig) – all sizes/settings

Pressure Drop/Volume Flow Charts

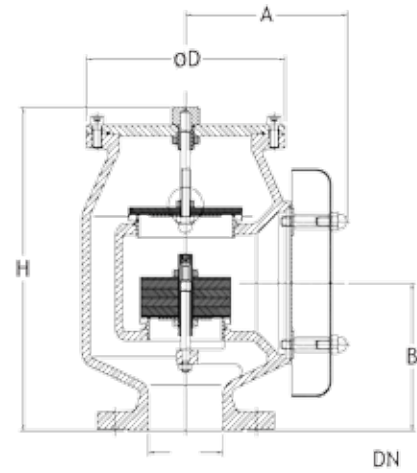
Pressure



Vacuum

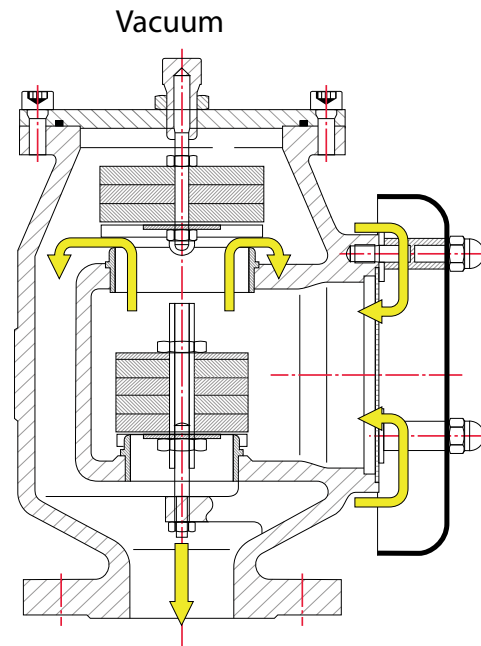
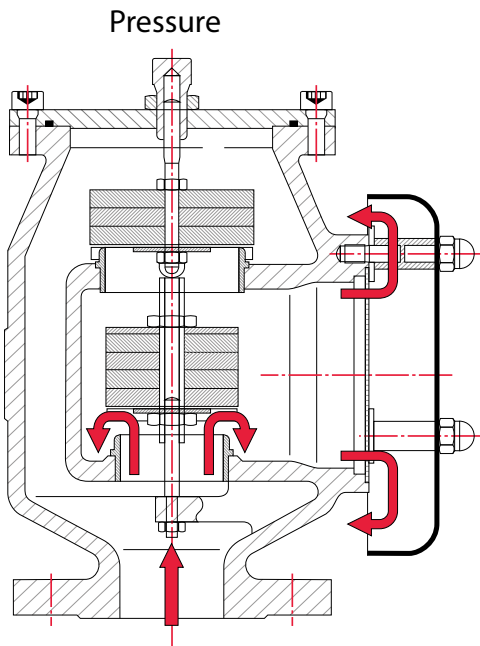


Dimensions (mm / inches)						
DN	50 / 2	80 / 3	100 / 4	150 / 6	200 / 8	250 / 10
A	157 / 6.18	184 / 7.24	217 / 6.54	240 / 9.45	285 / 11.22	376 / 14.8
B	135 / 5.31	162 / 6.38	190 / 7.48	210 / 6.27	277 / 10.91	310 / 12.20
Ø D	170 / 6.69	235 / 9.25	290 / 11.42	330 / 12.99	375 / 14.76	445 / 17.52
H	311 / 12.24	400 / 15.75	453 / 17.83	490 / 19.29	595 / 23.43	695 / 27.36
*Weight (Kg)	*21	*32	*52	*80	*120	*155



Refer to the above Pressure Drop/Volume Flow Charts to select the nominal size (DN)
 * Depending on set pressure

Mode of Operation



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