

spirax sarco

AE50S Automatic Air and Gas Vent for Liquid Systems

Description

The AE50S automatic air and gas vent is designed for use on liquid systems. It has a welded construction and the body is manufactured in 304L austenitic stainless steel.

Standards

This product fully complies with the requirements of the European Pressure Equipment Directive 97/23/EC and carries the **CE** mark when so required.

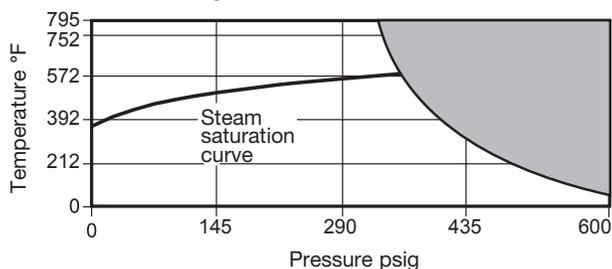
Certification

The product is available with material certification EN 10204 3.1 for bowl, cover and inlet connection as standard.

Sizes and pipe connections

Inlet	3/4" female	NPT (optional BSP)
Outlet	1/2" female	NPT (optional BSP)

Pressure/temperature limits

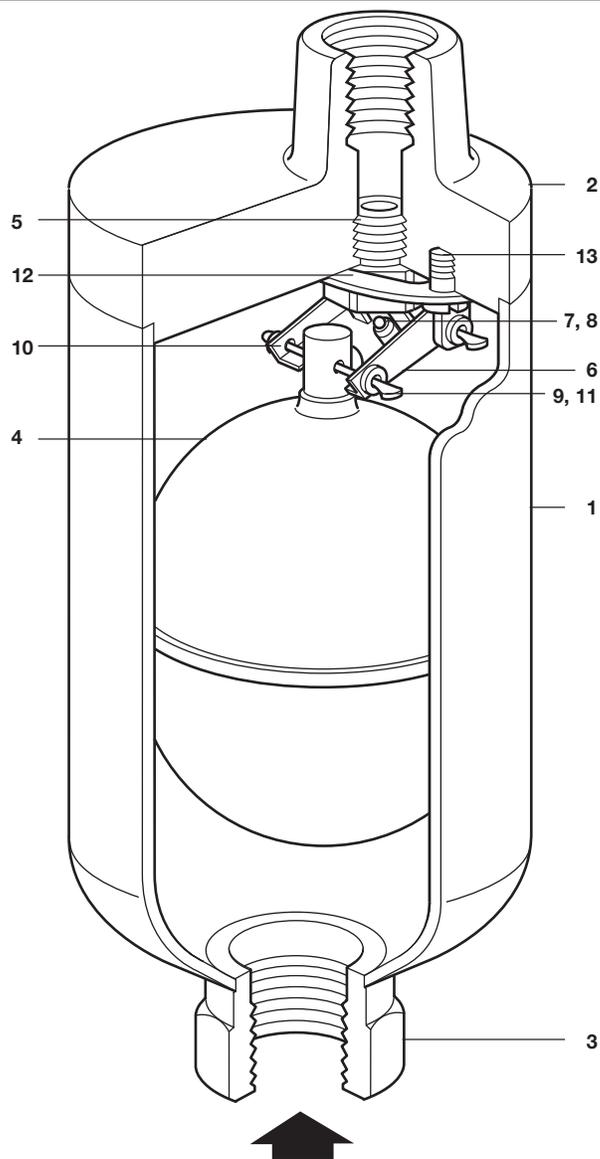


The product **must not** be used in this region.

Body design conditions		ANSI 300
PMA	Maximum allowable pressure	600 psig @ 86°F (41.4 barg @ 30°C)
TMA	Maximum allowable temperature	800°F (427°C)
Minimum allowable temperature		425.2°F (-254°C)
PMO	Maximum operating pressure	600 psig @ 86°F (41.4 barg @ 30°C)
TMO	Maximum operating temperature	800°F @ 342 psig (427°C @ 23.6 barg)
Minimum operating temperature		-40°F (-40°C)
Note: For lower operating temperatures consult Spirax Sarco		
ΔPMX	Maximum differential pressure	435 psig (30 bar g)
Designed for a maximum cold hydraulic test pressure of 914 psig (63 bar g)		
Minimum specific gravity of liquid		0.65

Materials

No.	Part	Material
1	Bowl	Austenitic stainless steel ASTM A240 304L
2	Cover	Austenitic stainless steel ASTM A182 304L
3	Inlet connection	Austenitic stainless steel AISI 304
4	Float	Austenitic stainless steel AISI 316L
5	Valve seat	Austenitic stainless steel ASTM A276 316
6	Lever	Austenitic stainless steel AISI 304 2B
7	Valve cone	Stainless steel X30 Cr 13
8	Washer	Austenitic stainless steel AISI 301



No.	Part	Material
9	Washer	Austenitic stainless steel AISI 304
10	'E' cap	Austenitic stainless steel AISI 316
11	Hinge pin	Austenitic stainless steel AISI 304
12	Support	Austenitic stainless steel AISI 304 2B
13	Screw	Austenitic stainless steel B5 6105 CI A2.70

TI-P017-10-US 2.16

Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only.
In the interests of development and improvement of the product, we reserve the right to change the specification.

AE50S

Automatic Air and Gas Vent for Liquid Systems

Free air discharge capacity

For air at 14.7 psi @ 60°F

psig	25	50	75	100	200	300	400
barg	1.7	3.4	5.2	6.9	13.8	20.7	27.6
Capacity (SCFM)	2.1	3.2	4.9	7.4	12.5	17.6	23.3

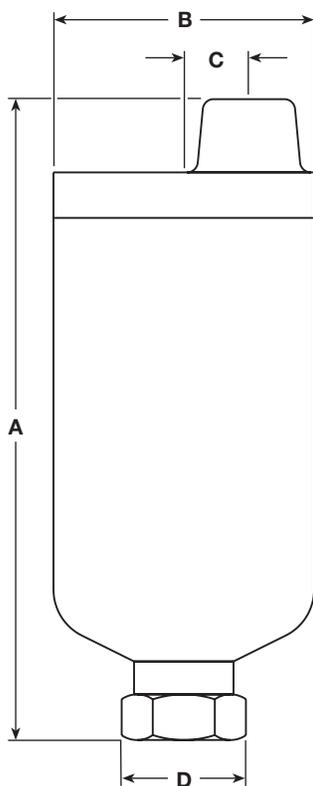
If the temperature of the air differs from 15°C, the discharge capacity from the graph can be corrected by multiplying it by the following equation:

$$\frac{289}{273 + T} \text{ (T is the actual temperature in } ^\circ\text{C)}$$

It may be assumed that the temperature of the air is equal to the temperature of the water.

Dimensions / weight approx in inches (mm) and pounds (kg)

A	B	C	D	Weight
6.9 (175)	3.1 (79)	0.73 (18.5)	1.26 (32 A/F)	2.2 (1)



How to order

Example: 1 off Spirax Sarco ¾" AE50S automatic air and gas vent manufactured in austenitic stainless steel having screwed NPT connections.

Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P017-11) supplied with the product.

Installation note:

The AE50S should be installed vertically with the inlet at the bottom. We recommend piping the discharge to a safe visible point or drain via an air break.

Installation in superheated water:

For superheated water applications we recommend that 3 ft to 6 ft of ¾" vertical pipeline be fitted prior to the inlet of the vent. On superheated water systems the outlet pipework must be sized to accommodate any flash steam created during discharge.

Direct the outlet pipework to a safe point of discharge where there is no risk of injury to personnel or damage to property.

Spare parts

There are no spare parts available for this sealed, maintenance free product.