



TI-P017-10
CMGT Issue 8

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 2014/68/EU and carries the

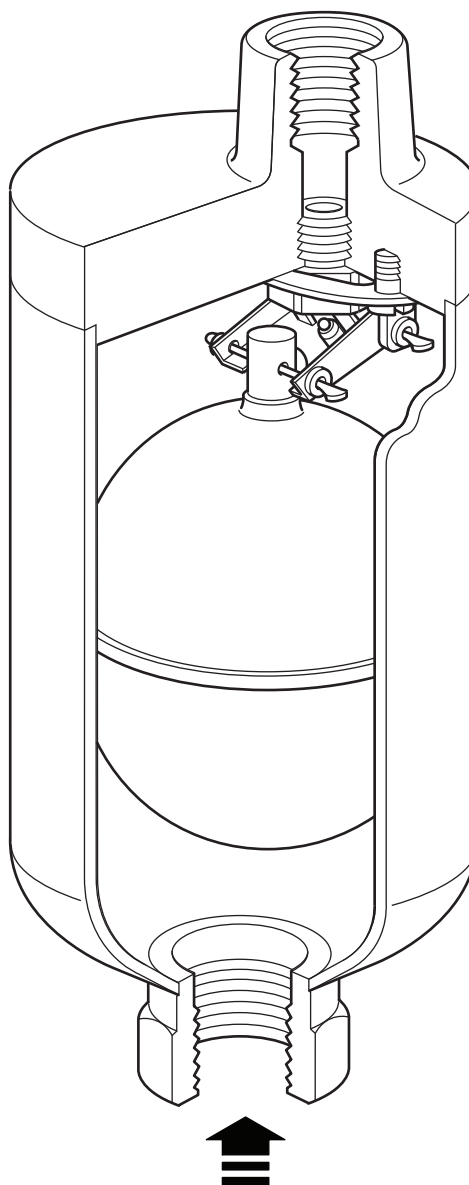
 mark when so required.

Certification

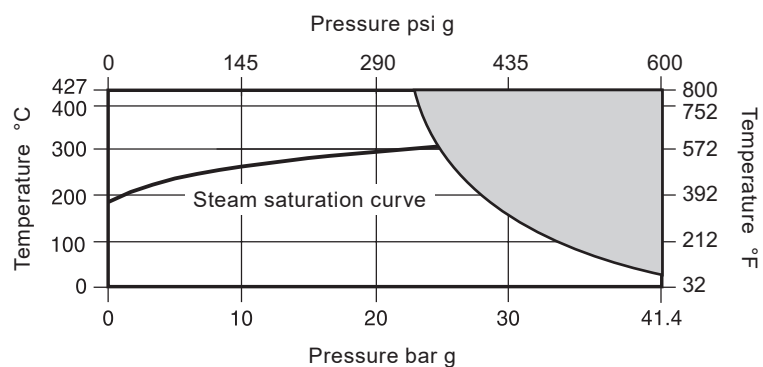
The product is available with material certification EN 10204 3.1 for bowl, cover and inlet connection as standard.

Sizes and pipe connections

Inlet	3/4" female	BSP T Rp (ISO 7-1) or NPT
Outlet	1/2" female	BSP T Rp (ISO 7-1) or NPT



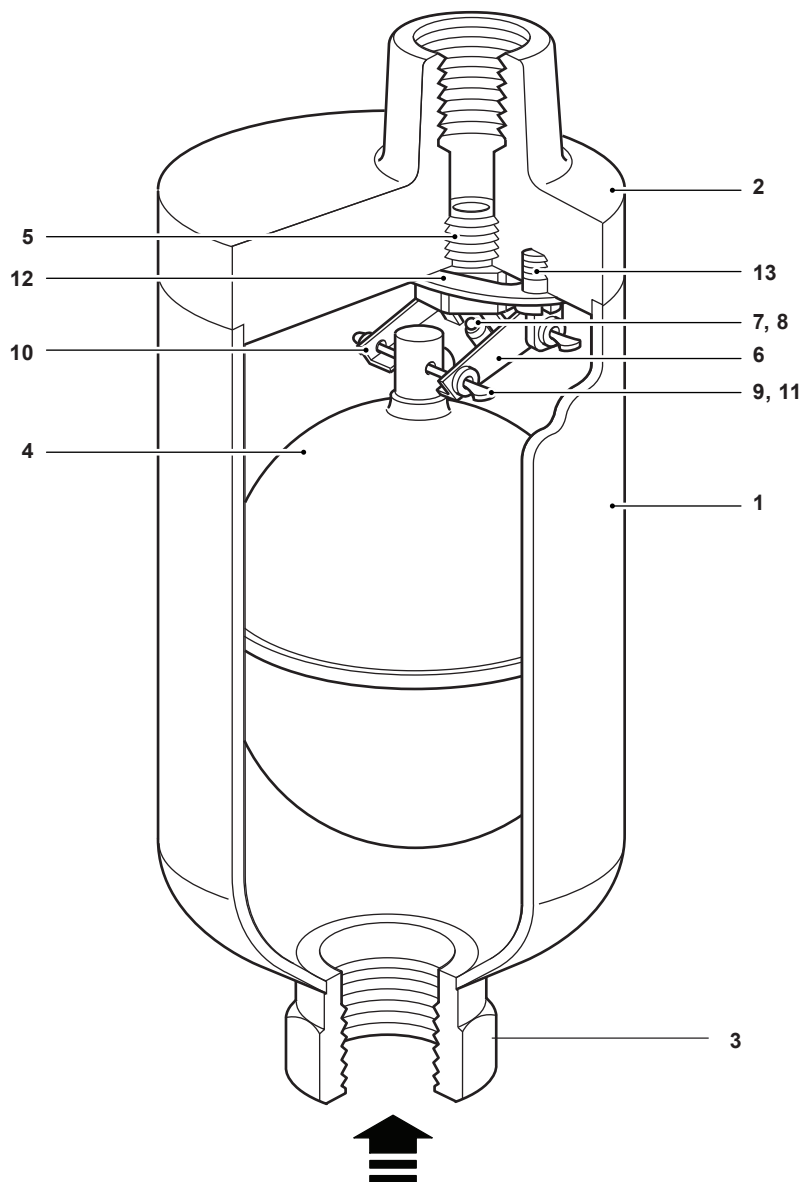
Pressure/temperature limits



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

Body design conditions			ANSI 300
PMA	Maximum allowable pressure	41.4 bar g @ 30 °C	600 psi g @ 86 °F
TMA	Maximum allowable temperature	427 °C	801 °F
	Minimum allowable temperature	-254 °C	-425 °F
PMO	Maximum operating pressure	41.4 bar g @ 30 °C	600 psi g @ 86 °F
TMO	Maximum operating temperature	427 °C @ 23.6 bar g	801 °F @ 342 psi g
	Minimum operating temperature	-60 °C	-76 °F
ΔPMX	Maximum differential pressure	30 bar g	435 psi g
	Designed for a maximum cold hydraulic test pressure of	63 bar g	914 psi g
	Minimum specific gravity of liquid		0.65

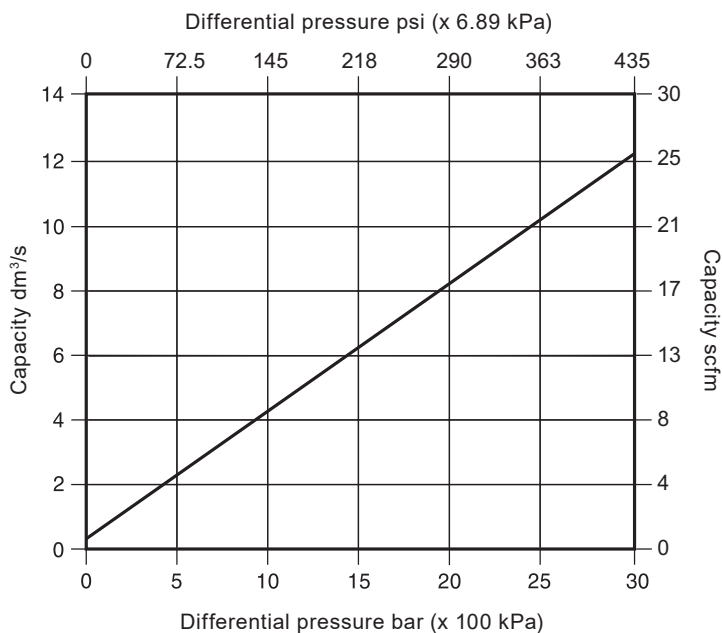
Materials



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
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

Free air discharge capacity

For air at 15 °C



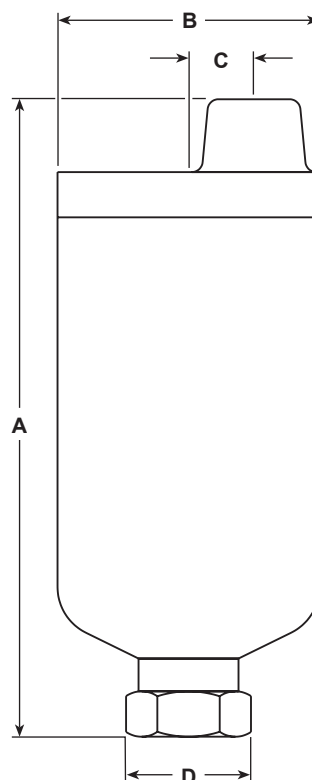
If the temperature of the air differs from 15 °C, the discharge capacity from the graph can be corrected by multiplying it by the following equation:

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

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

Dimensions/weight

(approximate) in mm (inches) and kg (lbs)



A	B	C	D	Weight
175 (6.89)	79 (3.11)	18.5 (0.73)	32 A/F (1.26 A/F)	1 (2.20)

How to order

Example: 1 off Spirax Sarco ¾" AE50S automatic air and gas vent manufactured in austenitic stainless steel having screwed BSP T Rp (ISO 7-1) 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 1 m to 2 m (3.28 to 6.56 f) 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.