TI-P017-10 CMGT Issue 6



# 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 Pressure Equipment Directive (PED) and carries the **( (** mark when so required.

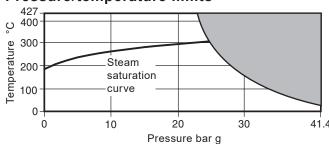
#### Certification

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

# Sizes and pipe connections

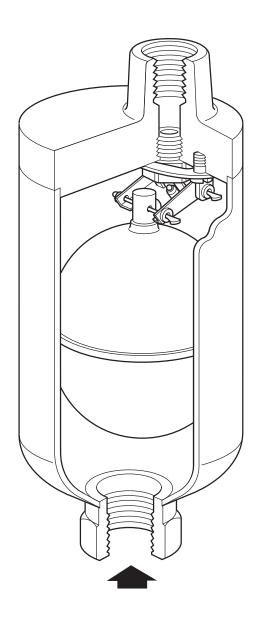
Inlet	¾" female	BSP or NPT	
Outlet	½" female	BSP or NPT	

# Pressure/temperature limits

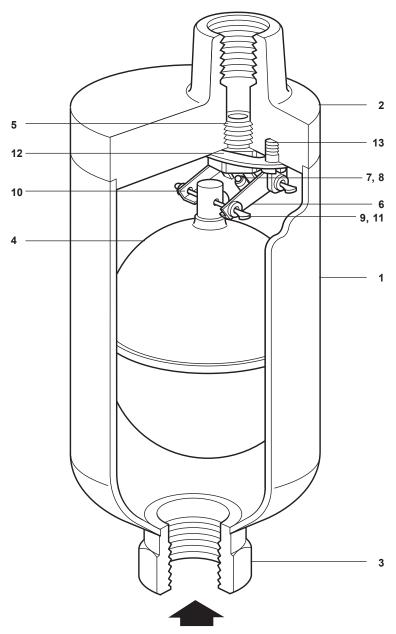


The product must not be used in this region.

Body	design conditions	ANSI 300		
РМА	Maximum allowable pressure	41.4 bar g @ 30 °C		
ТМА	Maximum allowable temperature	427 °C		
Minim	um allowable temperature	-254 °C		
РМО	Maximum operating pressure	41.4 bar g @ 30 °C		
ТМО	Maximum operating temperature	427 °C @ 23.6 bar g		
Minimum operating temperature -60 °				
ΔΡΜΧ	Maximum differential pressure	30 bar g		
Designed for a maximum cold hydraulic test pressure of 63 bar g				
Minimum specific gravity of liquid 0.6				



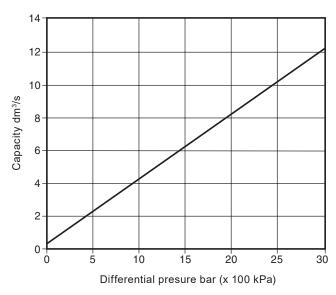
# **Materials**



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	3 Screw Austenitic stainless steel		B5 6105 CI A2.70	

# Free air discharge capacity

For air at 15 °C

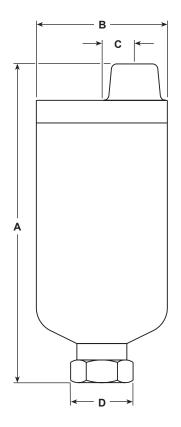


If the temperature of the air differs from 15 °C, the discharge capacity from the graph can be corrected by multiplying it by the following equation:

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

# Dimensions/weight (approximate) in mm and kg

 Α	В	С	D	Weight
175	79	18.5	32 A/F	1



## How to order

**Example:** 1 off Spirax Sarco 3/4" AE50S automatic air and gas vent manufactured in austenitic stainless steel having screwed BSP 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 of 3/4" 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.