## 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 $\leq$ mark when so required.

## Certification

The product is available with material certification EN 102043.1 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 @ $30^{\circ} \mathrm{C}$ |
| TMA | Maximum allowable temperature | $427^{\circ} \mathrm{C}$ |
| Minimum allowable temperature | $-254^{\circ} \mathrm{C}$ |  |
| PMO $\quad$ Maximum operating pressure | 41.4 bar g @ $30^{\circ} \mathrm{C}$ |  |
| TMO | Maximum operating temperature | $427^{\circ} \mathrm{C} @ 23.6$ bar g |
| Minimum operating temperature | $-60^{\circ} \mathrm{C}$ |  |
| $\Delta \mathrm{PMX}$ |  | 30 bar gaximum differential pressure |
| Designed for a maximum cold hydraulic test pressure of 63 bar g |  |  |
| Minimum specific gravity of liquid | 0.65 |  |



## Materials



| No. | Part | Material |  |
| :--- | :--- | :--- | ---: |
| $\mathbf{1}$ | Bowl | Austenitic stainless steel | ASTM A240 304L |
| $\mathbf{2}$ | Cover | Austenitic stainless steel | ASTM A182 304L |
| $\mathbf{3}$ | Inlet connection | Austenitic stainless steel | AISI 304 |
| $\mathbf{4}$ | Float | Austenitic stainless steel | AISI 316L |
| $\mathbf{5}$ | Valve seat | Austenitic stainless steel | ASTM A276 316 |
| $\mathbf{6}$ | Lever | Austenitic stainless steel | AISI 304 2B |
| $\mathbf{7}$ | Valve cone | Stainless steel | X30 Cr 13 |
| $\mathbf{8}$ | Washer | Austenitic stainless steel | AISI 301 |
| $\mathbf{9}$ | Washer | Austenitic stainless steel | AISI 304 |
| $\mathbf{1 0}$ | 'E' cap | Austenitic stainless steel | AISI 316 |
| $\mathbf{1 1}$ | Hinge pin | Austenitic stainless steel | AISI 304 |
| $\mathbf{1 2}$ | Support | Austenitic stainless steel | AISI 304 2B |
| $\mathbf{1 3}$ | Screw | Austenitic stainless steel | B5 6105 CI A2.70 |

Free air discharge capacity
For air at $15^{\circ} \mathrm{C}$


If the temperature of the air differs from $15^{\circ} \mathrm{C}$, the discharge capacity from the graph can be corrected by multiplying it by the following equation:

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$273+\mathrm{T}\left(\mathrm{T}\right.$ is the actual temperature in $\left.{ }^{\circ} \mathrm{C}\right)$
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

| A | B | C | D | Weight |
| :---: | :---: | :---: | :---: | :---: |
| 175 | 79 | 18.5 | $32 \mathrm{~A} / \mathrm{F}$ | 1 |



## How to order

Example: 1 off Spirax Sarco $3 / 4^{\prime \prime}$ 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 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 accomodate 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.

