

# spirax/sarco®

## Stainless Steel Balanced Pressure Thermostatic Air Vent AVM7

### Description

The AVM7 (maintainable) is a vertical body thermostatic air vent, with all AISI 316L construction designed for use in clean steam systems. Normal operation is close to saturated steam temperature.

Model ⇄	AVM7
<b>PMO</b>	102 psig
<b>Sizes</b>	1/4, 1/2", 3/4", 1"
<b>Connections</b>	0.065" O.D. Tube, NPT or Tri-Clamp®
<b>Construction</b>	All 316L Stainless Steel
<b>Options</b>	3.1B available (upon request) FEP encapsulated silicone 'O' ring is recommended and available. For use on systems where there is, or maybe lactic acid present.

\* A registered trademark of Tri-Clover Inc.

### Limiting Operating Conditions

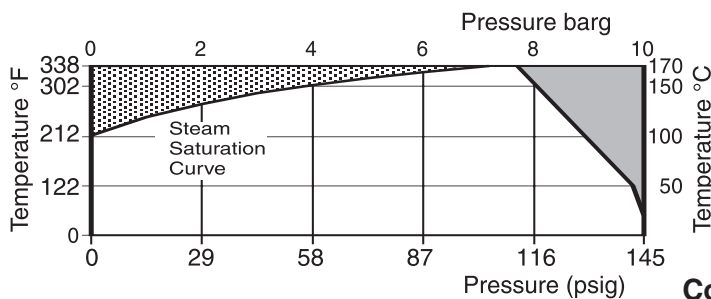
Max. Operating Pressure (PMO) 102 psig (7 barg)

Max. Operating Temperature Saturated Steam Temperature

### Pressure Shell Design Conditions

PMA	145 psig/0-302°F	10 barg/0-150°C
Max. allowable pressure	132 psig/338°F	9 barg/170°C
TMA	338°F/0-132 psig	170°C/0-9 barg
Max. allowable temperature		

### Pressure / temperature limits (ISO 6552)



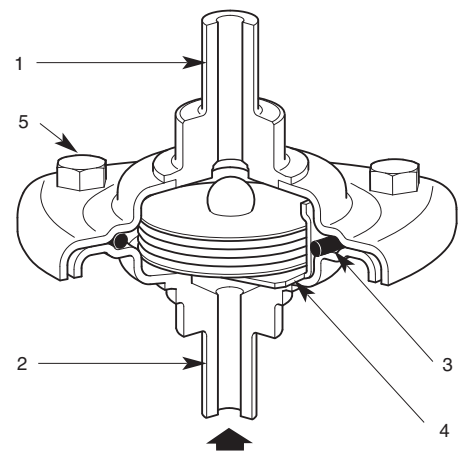
### Capacities

Pressure (psig)	Flow (SCFM)
1	7
5	8
10	11
20	15
30	19
50	28
75	39

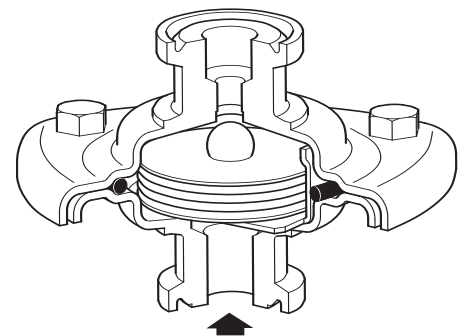
### Typical Applications

Fermenter sterilization, steam barriers (block & bleed systems), sterilizer drainage and air venting, CIP/SIP system condensate drainage, and sterilization of process vessels and pipes.

### AVM7 with butt weld ends



### AVM7 with sanitary clamp compatible hygienic connections



### Construction Materials

No.	Part	Material
1	Body (Inlet)	Stainless steel AISI 316L (1.4404)
2	Body with seal (outlet)	Stainless steel AISI 316L (1.4404)
3	O-Ring gasket (standard)	Grey Viton 'O' ring complies with FDA CFR title 21, paragraph 177 section 2600 and 3A's sanitary standards 20-22.
	O-Ring gasket (optional)	Clear Teflon FEP encapsulated silicone compliant to: - FDA regulation 21 CFR 177.1550 - 3A's sanitary standard 20-22 - USP class VI
4	Element	Stainless Steel AISI 316L
5	Nuts & Bolts Washers	Stainless Steel BS6105 Gr A4 80 Austenitic stainless steel

Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only.

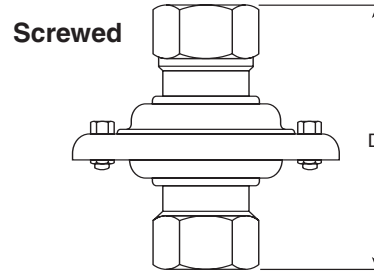
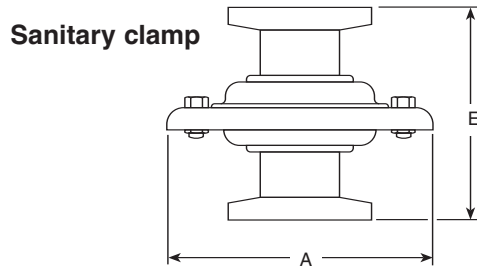
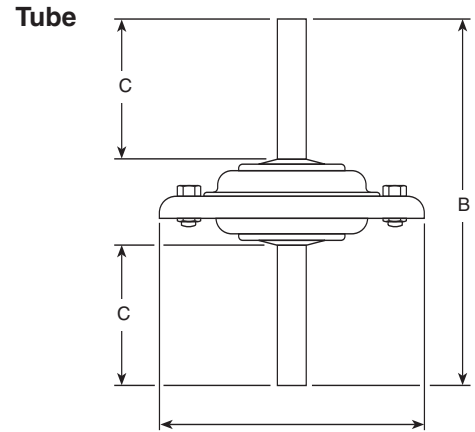
In the interests of development and improvement of the product, we reserve the right to change the specification.

TI-P123-22-US 11.07

# Stainless Steel Balanced Pressure Thermostatic Air Vent AVM7

**Dimensions** (nominal in inches and millimeters)

AVM7									
Size	A	B Tube	C Tube	D Screwed	E Tri-Clamp*	Weight			
						Tube	Screwed	Tri-Clamp*	
1/4"	2.8 70			2.3 .58			1.2 .53		
1/2"	2.8 70	4.2 106	1.5 40	2.9 74	1.85 47	.62 lb .28 kg	.66 lb .30 kg	.48 lb .22 kg	
3/4"	2.8 70	5.1 130	1.5 40	3.2 81	1.85 47	.68 lb .31 kg	.77 lb .35 kg	.48 lb .22 kg	
1"	2.8 70	5.0 126	1.5 40	3.7 95	1.85 47	.77 lb .35 kg	.90 lb .41 kg	.78 lb .37 kg	



## Sample Specification

Steam trap shall be self-adjusting balanced pressure type capable of operating close to saturated steam temperature. All wetted parts shall be manufactured from 316L stainless steel. Air Vent shall be maintainable, and shall be completely self-draining when installed in vertical pipeline. Connections shall be 0.065" extended O.D. tube, Tri-Clamp® compatible, or screwed NPT.

## Installation

The traps are designed for installation in vertical lines with the flow downward to ensure self-draining. The element may be damaged if it is exposed to superheated steam. Full-flow isolating valves, such as Spirax Sarco Model M70i Clean Steam Ball Valve, should be installed so as to permit servicing.

## Maintenance

The AVM7 is a maintainable trap. Maintenance on the AVM7 can be performed once the steam trap is isolated from system and return line pressure. Complete Installation & Maintenance instructions are given in IM-P123-23, which is included with the product.

## Spare Parts

Element Assembly	A
Gasket (Pkt of 3)*	B
Body with Seat	C

\*Viton (standard)  
Clear Teflon FEP encapsulated silicone (optional)

Available spare parts are shown in heavy outline. Parts shown in broken lines are not available as spares.

