# 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				
РМО	102 psig				
Sizes	1/4, 1/2", 3/4", 1"				
Connections	0.065" O.D. Tube, NPT or Tri-Clamp®*				
Construction	All 316L Stainless Steel				
Options	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.				

170°C/0-9 barg

338°F/0-132 psig

## **Limiting Operating Conditions**

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

Max. Operating Temperature Saturated Steam Temperature

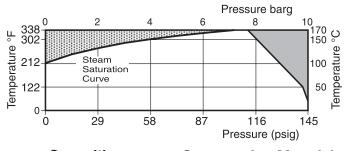
## **Pressure Shell Design Conditions**

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

Max. allowable temperature

Designed for a maximum cold hydraulic test pressure of 155 psig (10.7 barg)

# Pressure / temperature limits (ISO 6552)



## **Capacities**

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

#### **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	FKM compound (V1274-80) complies with FDA 21CFR 177.2600 and is USP Class VI approved. For use on all clean systems or where lactic acid may be present.				
	4	Element	Stainless steel	AISI 316L			
5		Nuts & Bolts	Stainless steel	BS6105 Gr A4 80			
	5	Washers	Austenitic stainle	ess steel			

#### **Standards**

The AVM7 has been designed and built in general accordance with ASME BPE. The unit also complies with the requirements of the European Pressure Equipment Directive. Part 3, `O´ring - Complies with FDA CFR title 21, Paragraph 177, Section 2600 and USP Class VI.

#### Certification

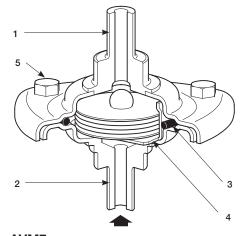
This product is available with certification to EN 10204 3.1

Note: All certification/inspection requirements must be stated at the time of order placement

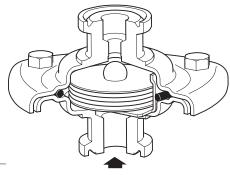
# **Typical Applications**

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



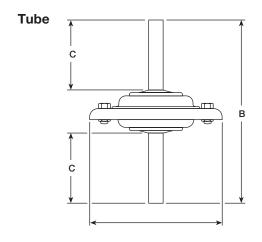
<sup>\*</sup> A registered trademark of Tri-Clover Inc.

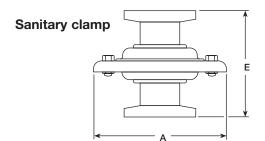
# High Purit

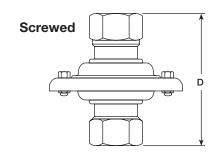
# Stainless Steel Balanced Pressure Thermostatic Air Vent AVM7

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

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







# Sample Specification

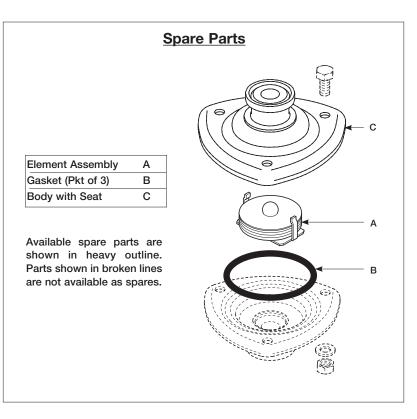
Steam trap shall be self-adjusting balanced pressure type capable of operating close to saturated steam temperature. All wetted parts shall be manufactured from 316L stainless steel. Air Vent shall be maintainable, and shall be completely self-draining when installed in vertical pipeline. Connections 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.



TI-P123-22-US 3.17