

# spirax sarco

## AVM7

TI-P123-22  
CMGT Issue 11

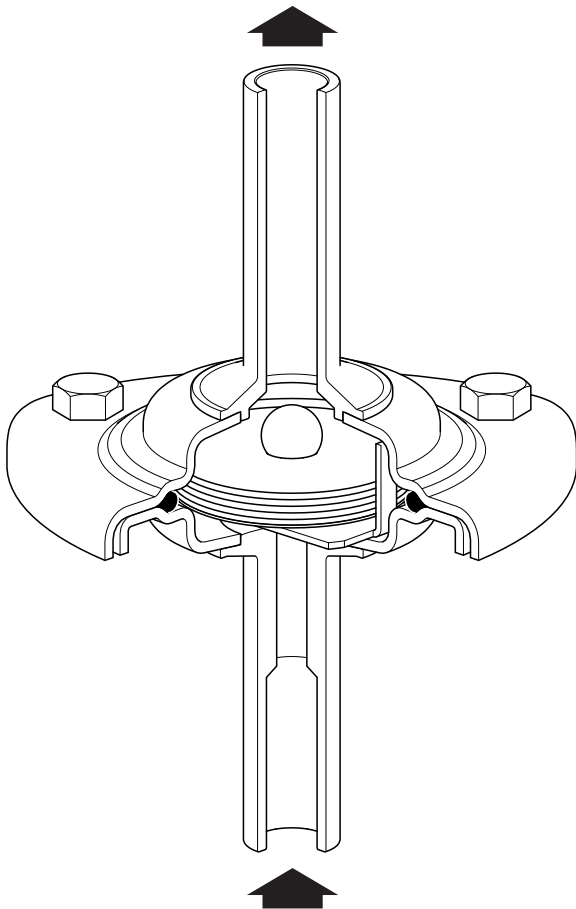
## Balanced Pressure Thermostatic Air Vent

### Description

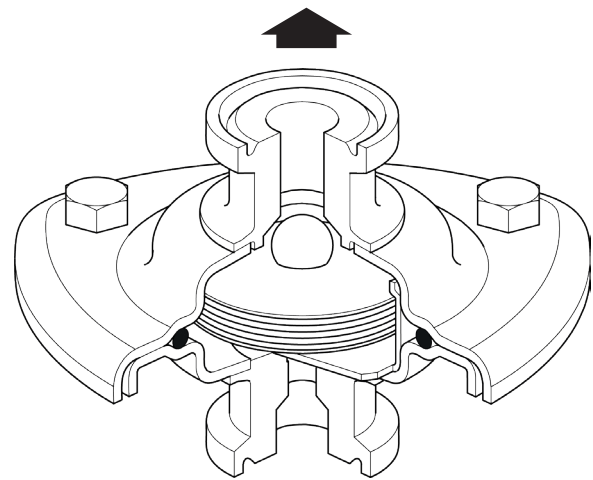
The AVM7 is a clean (chemical-free) maintainable thermostatic air vent designed to remove air and other non-condensable gases from clean steam systems. Manufactured in 316L stainless steel with minimal crevices, and a typical internal surface finish of 1.6 - 3.2  $\mu\text{m Ra}$  the AVM7 operates close to steam temperature. Each trap is individually packaged within an 'ISO CLASS 7' clean environment with protective end caps and sealed in a protective plastic bag.

### Options and available types

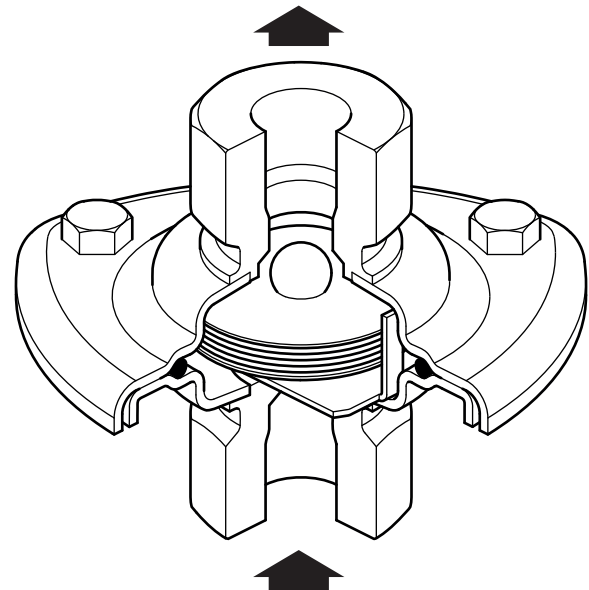
Special connections to suit most piping systems.



Tube ended variant



Sanitary clamp ended variant



Screwed ended variant

**Standards**

- The AVM7 has been designed and manufactured general accordance with ASME BPE standards.
- The unit also complies with the requirements of the EU Pressure Equipment Directive / UK Pressure Equipment (Safety) Regulations.
- FDA CFR Title 21. Paragraph 177. 2600.
- USP Class VI Biological Reactivity Cytotoxicity Testing In-Vivo <88> extracted at 121 °C for 1 hour.
- ADI Free (Animal Derived Ingredients) for materials used, manufacturing processes involved in producing the part.
- TSE/BSE Free as Certified.
- EC1935 : 2004.
- Full material lot number product traceability.

**Certification**

This product is available with the following certification:

- EN 10204 3.1 Material Certification Pressure Retaining Parts - Chargeable.
- EN 10204 3.1 Material Certification for Wetted Parts including the WFI element fill (also available for element spares) - Chargeable.
- Typical Internal Surface Finish - F.O.C.
- Certificate of Compliance for FDA, USP Class VI Testing Statement, and ADI Free Statement - F.O.C
- TSE-BSE Statement - F.O.C.
- EC1935:2004 Declaration of Compliance - F.O.C.
- Declaration of Conformity BS EN ISO 14644-1:2015 Class 7 Clean Room - F.O.C.
- Typical Test Report - F.O.C.

**Note:** All certification/inspection requirements must be stated at the time of order placement, and may be subject to additional cost as detailed above.

**Sizes and pipe connections**

**Sanitary Clamp Ended Variants**

Standard	Issue	Type	Sizes				
ASME BPE		Type A			1/2"	3/4"	
ASME BPE		Type B					1"

**Tube Ended Variants**

Standard	Issue	Type	Sizes				
Imperial		Wall 16 swg			1/2"	3/4"	1"
DIN11850	1999-01	Series-2		DN10	DN15		DN25
ISO1127	1997	Series 1	DN8	DN10	DN15		

**Screwed Ended Variants**

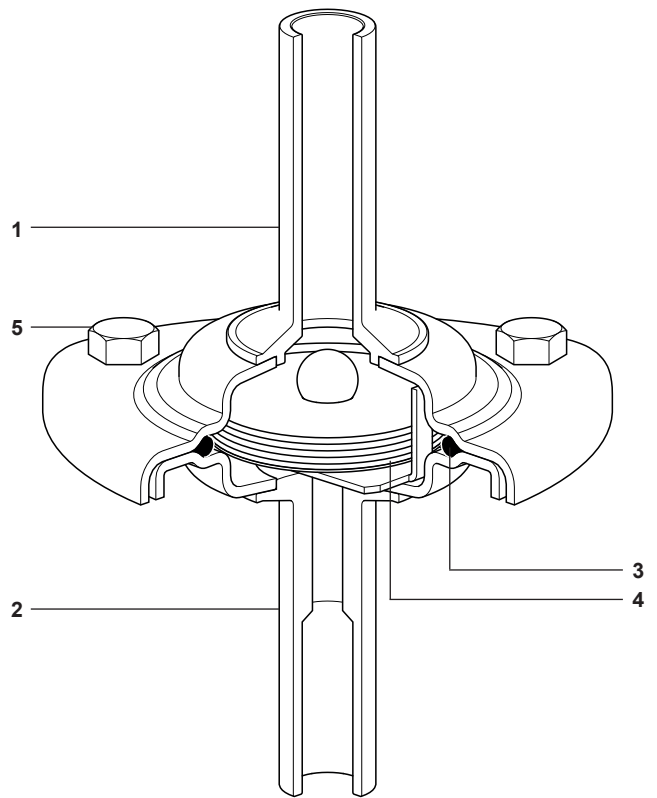
Standard	Issue	Type	Sizes				
Socket BSP Socket NPT				1/4"	1/2"	3/4"	1"

**Note:** On request other connection options are available at extra cost. Please note that seat end spares for specially requested connections will require a minimum order quantity - Please consult Spirax Sarco for further information.

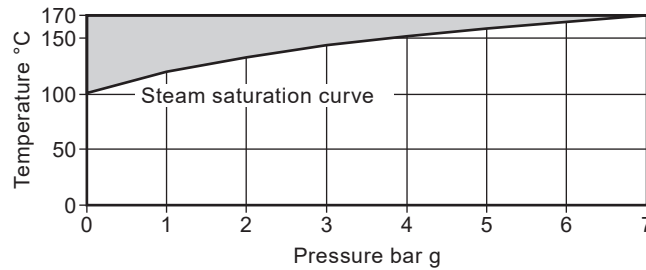
## Materials

No.	Part	Material	
1	Body (outlet)	Stainless steel	316L (1.4404)
2	Body with seal (inlet)	Stainless steel	316L (1.4404)
3	'O' ring	FKM	
4	Capsule element	Stainless steel	316L (1.4404)
5	Nuts and bolts	Stainless steel	BS 6105 Gr. A4 80
	Washers	Austenitic stainless steel	

## Tube Ended Variant



## Pressure/temperature limits (ISO 6552)

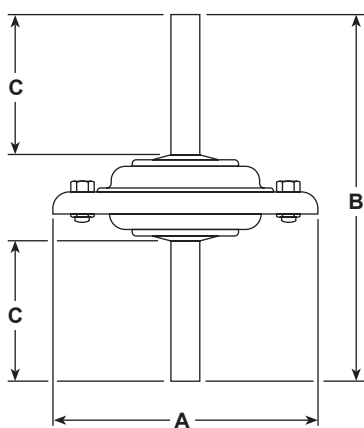


The product should not be used in this region as damage to the internals may occur.

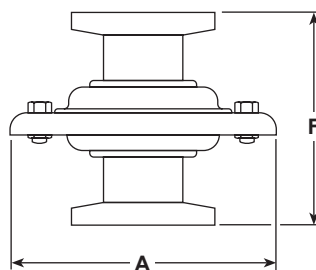
Body design conditions	PN7
PMA Maximum allowable pressure	7 bar g @ 170 °C
TMA Maximum allowable temperature	170 °C @ 7 bar g
Minimum allowable temperature	-10 °C
PMO Maximum operating pressure for saturated steam service	7 bar g
TMO Maximum operating temperature	170 °C
Minimum operating temperature	0 °C
Designed for a maximum cold hydraulic test pressure of	10.7 bar g

**Dimensions** (approximate) in mm  
**Products** each weigh 1kg maximum

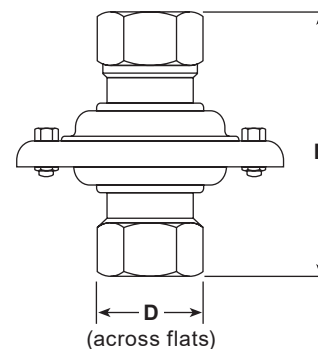
Standard	Sizes	A	B TUBE	C TUBE	D Screwed	E Screwed	F Sanitary Clamp	Weight (kg)
<b>Sanitary Clamp ended variants</b>								
ASME BPE Types A & B	½", ¾" and 1"	70					49 for ½" and ¾", 53 for 1"	1
<b>Tube ended variants</b>								
Imperial 16 swg, DIN11850 Series 2, ISO1127 Series 1	Imperial = ½", ¾" and 1" DIN/ISO = DN8 ISO (1127 only), DN10, DN15	70	106	40				1
<b>Screw ended variants</b>								
Socket BSP + NPT	¼", ½", ¾" and 1"	70			27, 27, 32, 41	58, 74, 81, 95		1



**Tube ended variant**



**Sanitary clamp ended variant**



**Screwed ended variant**

**Safety information, installation and maintenance**

For full details see the Installation and Maintenance Instructions (IM-P123-23 ) supplied with the product.

**Installation note:**

The unit is designed for installation in vertical lines with the flow upwards to ensure self-draining operation. Do not expose element to superheat conditions since over-expansion may result.

Suitable isolation valves must be installed to allow for safe maintenance/replacement.

## How to order

**Example:** 1 off Spirax Sarco DN15 AVM7 maintainable thermostatic clean steam air vent with tube ends to ISO 1127, Series 1. (21.3 mm O/D x 1.6 mm wall thickness). Tangent length of tube ends to be 40 mm for ease of orbital welding. Body to be self-draining. Suitable for pressures up to 7 bar g. Material certification to EN 10204 3.1.

## Spare parts

Available parts are shown in solid outline. Parts drawn in a grey line are not available as spares.

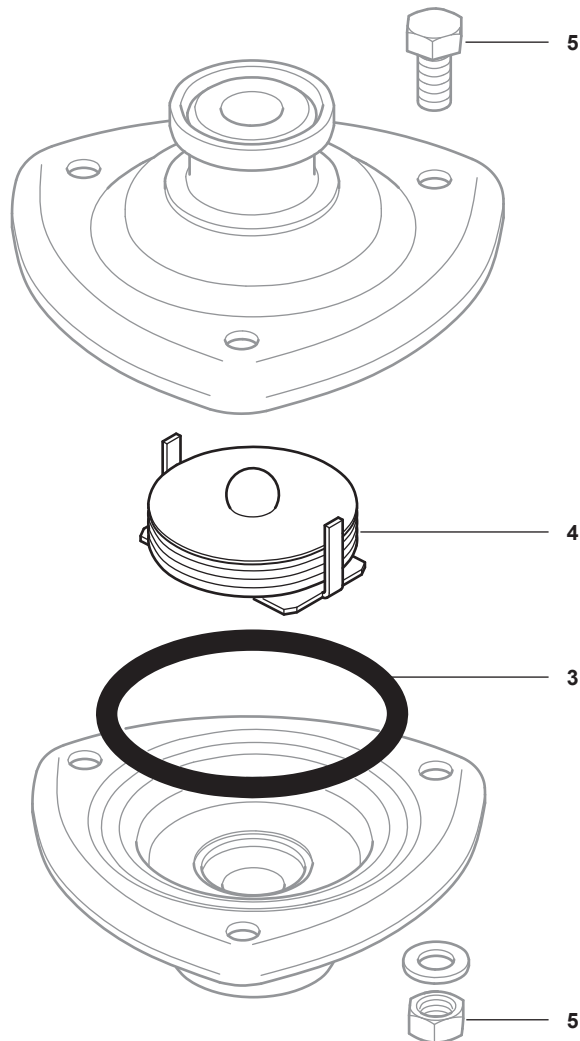
### Available spares

Element assembly	<b>4</b>
'O' ring (packet of 3)	<b>3</b>



### How to order spares

Always order spares by using the description given in the column headed 'Available spares' and state the size, type and end connection of the trap.

**Example:** 1 off Element assembly for a Spirax Sarco 1/2" AVM7 thermostatic clean steam air vent having screwed NPT connections.



### Recommended tightening torques

Item	Part	 or mm		N m
5	Nuts and bolts	8 A/F	M5	3 - 4