



TI-P123-22
 CMGT Issue 7

AVM7

Stainless Steel Thermostatic Air Vent

Description

The AVM7 is a 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 Ra the AVM7 operates close to steam temperature. The product is individually packaged with protective end caps and sealed in a polythene bag.

Options

Special connections to suit most piping systems.

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.

Sizes and pipe connections

1/4", 1/2", 3/4" and 1" screwed BSP or NPT.
 1/2", 3/4" and 1" O/D x 16 swg (0.065") wall thickness tube butt weld.
 1/2", 3/4" and 1" sanitary clamp compatible hygienic connection.

DIN 11850 (Series 1) tube butt weld ends

12 mm O/D x 1.0 mm wall thickness tube butt weld (DN10-D)
 18 mm O/D x 1.0 mm wall thickness tube butt weld (DN15-D)

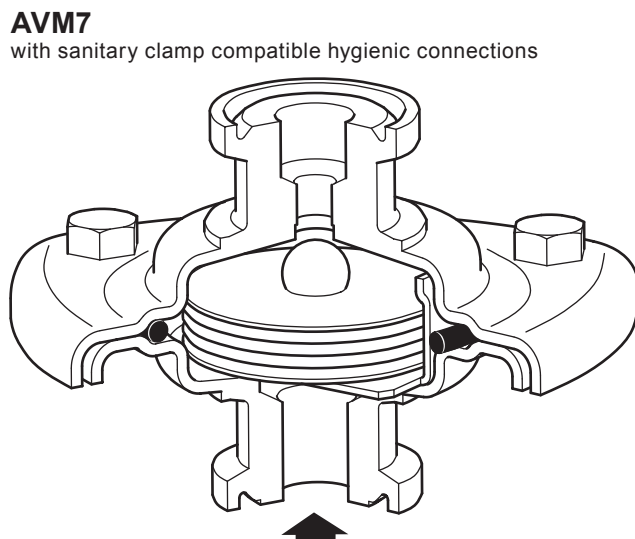
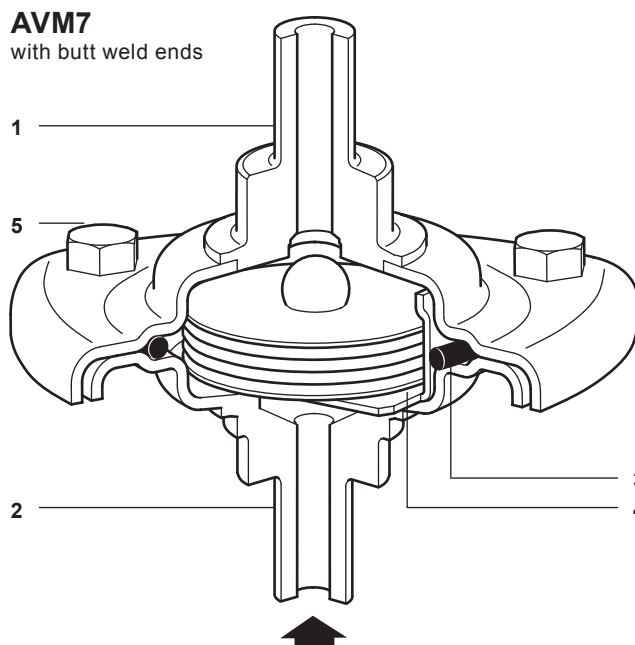
ISO 1127 (Series 1) tube butt weld ends

13.5 mm O/D x 1.6 mm wall thickness tube butt weld (DN8-I)
 17.2 mm O/D x 1.6 mm wall thickness tube butt weld (DN10-I)
 21.3 mm O/D x 1.6 mm wall thickness tube butt weld (DN15-I)

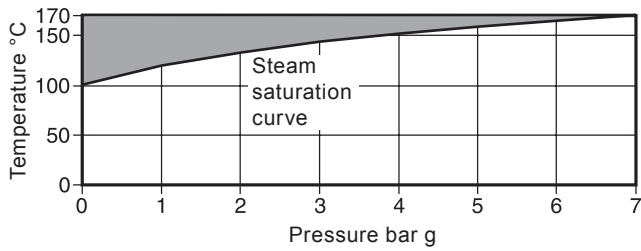
Note: On request other connection options are available at extra cost. Please note that seat end spares for specially requested connections will require a minimum order quantity - Please consult Spirax Sarco for further information.

Materials

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



Pressure/temperature limits (ISO 6552)



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

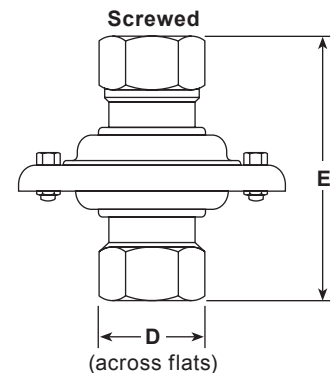
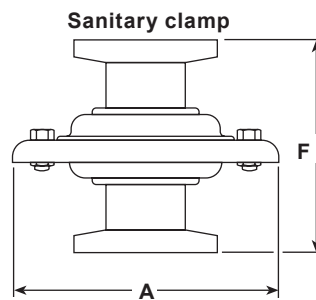
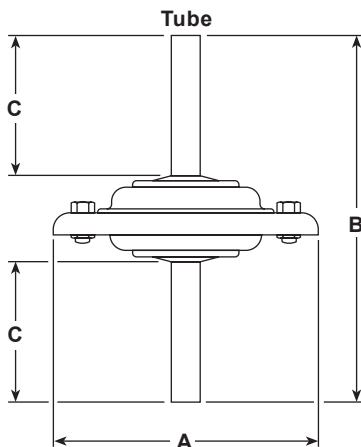
Body design conditions

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/weights (approximate) in mm and kg

Size	A	B	C	D			Weight		
				Screwed	Screwed	Sanitary clamp	Tube	Screwed	Sanitary clamp
1/4"	70	-	-	27	58	-	-	0.53	-
1/2"	70	106	40	27	74	49	0.62	0.66	0.62
3/4"	70	106	40	32	81	49	0.68	0.77	0.62
1"	70	106	40	41	95	53	0.77	0.90	0.90
DN8*	70	106	40	-	-	-	0.53	-	-
DN10	70	106	40	-	-	-	0.53	-	-
DN15	70	106	40	-	-	-	0.62	-	-

*DN8 only available for ISO 1127 tube ends.



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.

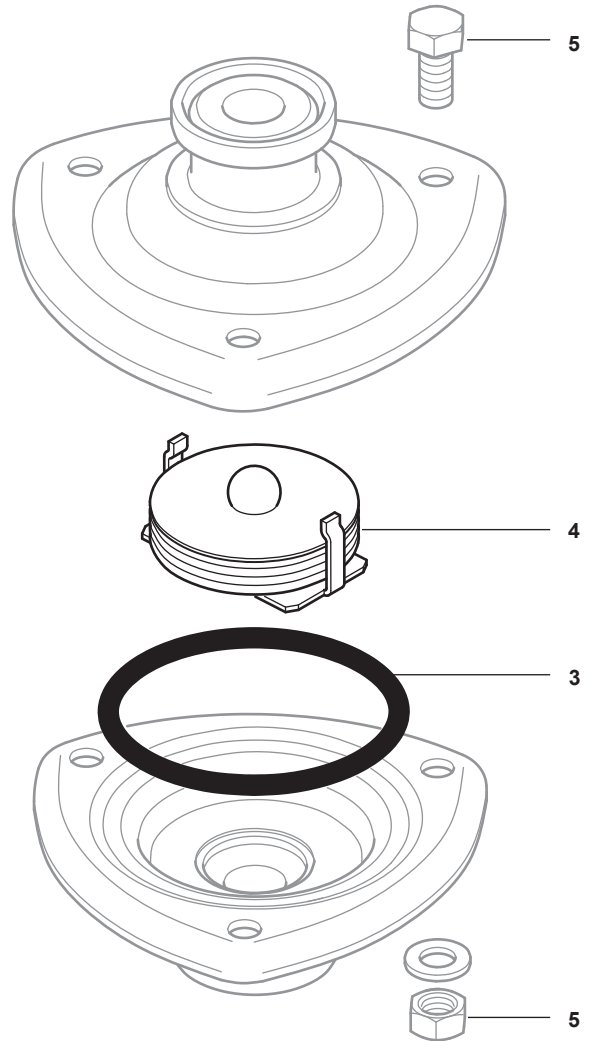
Available spares

Element assembly	4
'O' ring (packet of 3)	3



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 ½" 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