



ISO 9001

# spirax /sarco

# AVM7

**Stainless Steel** Thermostatic Air Vent

**Description** 

The AVM7 is a maintainable thermostatic air vent designed to remove air and other non-condensible 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.

Special connections to suit most piping systems.

### **Standards**

The AVM7 has been designed in general accordance with ASME BPE.

The unit also complies with the requirements of the European Pressure Equipment Directive 97/23/EC.

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  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$  and 1" screwed BSP or NPT.  $\frac{1}{2}$ ,  $\frac{3}{4}$  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

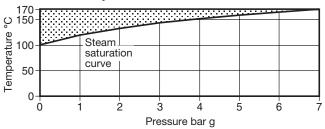
12 mm O/D x 1.0 mm wall thickness tube butt weld (DN10-D) 18 mm O/D x 1.0 mm wall thickness tube butt weld (DN15-D)

### 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)

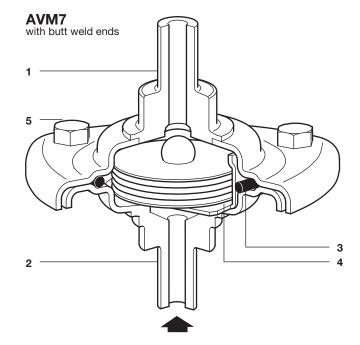
Note: On request other connection options are available at extra cost. Please note that seat end spares for specially requested connections will require a minimum order quantity - Please consult Spirax Sarco for further information.

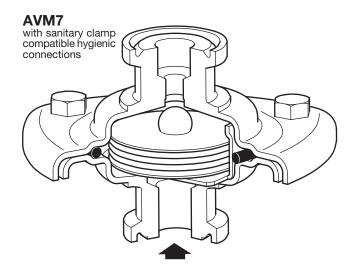
### Pressure/temperature limits (ISO 6552)



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

Body d	esign conditions	PN7		
PMA	Maximum allowable pressure	7 bar g @ 170°C		
TMA	Maximum allowable temperature	170°C @ 7 bar g		
Minimu	-10°C			
РМО	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 10.5 bar g				





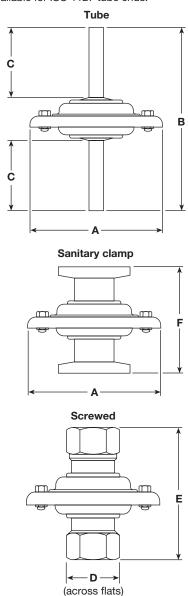
### **Materials**

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		

# Dimensions/weights (approximate) in mm and kg

Size	Α	B Tube	С	D Screwed	E Screwed	F Sanitary clamp	Tube	Weight 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	-	-

<sup>\*</sup>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 broken line are not available as spares.

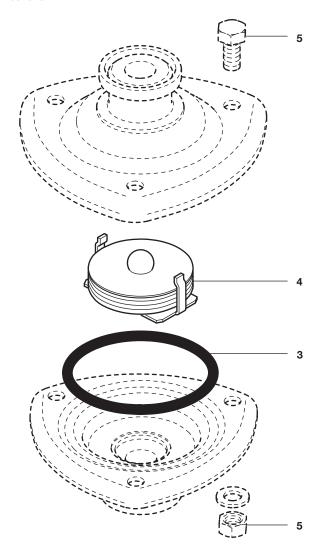
### Available spares

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 No.	Part		or mm	<b>\$</b>	N m
5	Nuts and bolts	8 A/F		M5	3 - 4