

TI-P149-01 CMGT Issue 8

Automatic Air Vents for Liquid Systems



Description

AE14	The AE14 is a range of float type air vents for liqui complete unit is readily maintainable. The standard available with an inbuilt stop valve fitted to the inlet	d systems. The body and cover are manufactured in SG iron and the version with a viton valve cone is designated AE14. This model is also port designated AE14SV and AE14ESV.
AE14E	The AE14E is a Water Research Centre (WRc) app with an inbuilt stop valve fitted to the inlet port desi	roved version with an EPDM valve cone. This model is also available gnated the AE14ESV.
AE14S	The AE14S is a stainless steel valve cone version.	
Available	e types	
AE14	Fitted with a viton valve head (standard version)	
AE14E	Fitted with an EPDM valve head	
AE14S	Fitted with a stainless steel valve head	

AE14SV Fitted with a viton valve head and stop valve

AE14ESV Fitted with an EPDM valve head and stop valve

Standards

These products fully comply with the requirements of the Pressure Equipment Directive (PED) and carry the **C E** mark when so required.

Certification

The product is available with material certification to EN 10204 2.2. **Note:** All certification/inspection requirements must be stated at the time of order placement.

Materials



No.	Part		Material	
1	Body		SG iron	DIN 1693 GGG 40
2	Cover bolt		Steel	BS 3692 Gr. 8.8
3	Cover gasket		Reinforced exfoliated graphite	
4	Cover		SG iron	DIN 1693 GGG 40
5	Main valve seat		Stainless steel	BS 970 431 S29
6	Main valve seat gasket		Stainless steel	BS 1449 304 S11
7	Main valve assembly screws		Stainless steel	BS 6105 CI A2-70
8	Ball float and lever		Stainless steel	BS 1449 304 S16
		AE14, AE14SV	Viton	
9	Valve head	AE14E, AE14ESV	EPDM	WRc 9205519
		AE14S	Stainless steel	AISI 440B
10	Pivot frame		Stainless steel	BS 1449 304 S16
11	Pivot pin		Stainless steel	
12 *	Stop valve housing		Brass	BS 2874 CZ 121 3Pb
13 *	Stop valve spindle		Brass	BS 2874 CZ 121 3Pb
14 *	Stop valve head		Brass	BS 2874 CZ 121 3Pb
15 *	'O' rings		Synthetic rubber	Flurocarbon
16 *	Stop valve gasket		Copper	BS 2870 C 101

* Note: Parts 12 to 16 are used for AE14ESV and AE14SV only.

Pressure/temperature limits



Body design conditions			PN16		
PMA Maximum allowable pressure @ 11	0 °C (230 °F)	16 bar g	(232 psi g)		
TMA Maximum allowable temperature @	A Maximum allowable temperature @ 13.6 bar g (197.3 psi g)				
Minimum allowable temperature		0 °C	(32 °F)		
PMO Maximum operating pressure		16 bar g	(232 °F)		
	AE14E and AE14ESV @ 15.5 bar g (224.5 psi g)	127 °C	(261 °F)		
TMO Maximum operating temperature	AE14 and AE14SV @ 14.5 bar g (210 psi g)	200 °C	(392 °F)		
	AE14S @ 13.6 bar g (197.3 psi g)	250 °C	(482 °F)		
Minimum operating temperature		0 °C	(32 °F)		
Δ PMX Maximum differential pressure		14 bar g	(203 psi g)		
Designed for a maximum cold hydraulic to	est pressure of:	24 bar g	(348 psi g)		
Minimum specific gravity of liquid			0.6		

mm and kg

Dimensions/weights (approximate)

AE14, AE14E, AE14S

mm and kg											
Size	Α	В	С	D	Е	F	G	Weight			
1/2" 3/4"	147	114	80	114	105	60	60	2.5			



Size	А	в	С	D	Е	F	G	н	Weight
¹ /2" ³ /4"	148	114	65	129	105	76	60	147	2.7



inches and Ibs							inche	es and	lbs								
Size	Α	В	С	D	Е	F	G	Weight	Size	Α	в	С	D	Е	F	G	Н
1/2" 3/4"	5.78	4.48	3.14	4.48	4.13	2.36	2.36	5.51	1/2"" 3/4"	5.82	4.48	2.55	5.07	4.13	2.99	2.36	5.78

AE14ESV, AE14SV

Weight

5.95

Capacities



Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P149-06) supplied with the product.

Disposal

This product is recyclable. No ecological hazard is anticipated with the disposal of this product providing due care is taken.

How to order

Example: 1 off Spirax Sarco ¹/₂" screwed BSP AE14 automatic air vent with SG iron body and Viton valve head.

Spare parts

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

Available spares

Maintenance kit (Note: Item 9 is attached to item 8 when supplied for the AE14S)	3, 5, 6, 7 (2 off), 8, 9, 10, 11, 14, 15 (2 off), 16
Seal kit	3, 5 (EPDM), 14, 15 (2 off), 16
Valve head (not available for the AE14S) packet of 3 (Note: 1 off EPDM and	Viton valve head is supplied to fit as required) 9

How to order spares

Always order spares by using the description given in the column headed 'Available spares' and state the size and type of automatic air vent.

Example: 1 - Maintenance kit for a Spirax Sarco 1/2" AE14ESV automatic air vent.



Recommended tightening torques

ltem	Part	o m	r m	N m	(lbf ft)
2 *	Cover bolts	17 A/F	M10 x 30	47 - 50	35 - 37
5	Main valve seat	17 A/F		50 - 55	33 - 40
7	Main valve assembly screws	Pozidrive	M4 x 6	2.5 - 3.0	1.8 - 2.2
12 *	Stop valve housing	21 A/F		30 - 35	22 - 26

* Note: Items 2 and 12 are not available as spares.