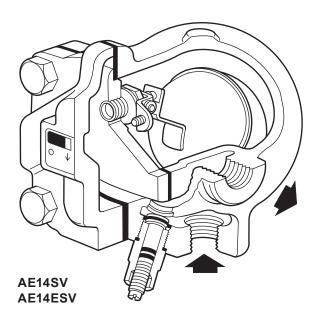
**TI-P149-01** CMGT Issue 10

# spirax /sarco

# SG Iron

# **Automatic Air Vents for Liquid Systems**



# **Description**

The AE14 is a range of float type air vents for liquid systems. The body and cover are manufactured in SG iron and the complete unit is readily maintainable. The standard version with a viton valve cone is designated AE14. This model is also available with an inbuilt stop valve fitted to the inlet port designated AE14SV and AE14ESV.

**AE14E** The AE14E version has an EPDM valve cone. This model is also available with an inbuilt stop valve fitted to the inlet port designated the AE14ESV.

**AE14S** The AE14S is a stainless steel valve cone version.

#### Available 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

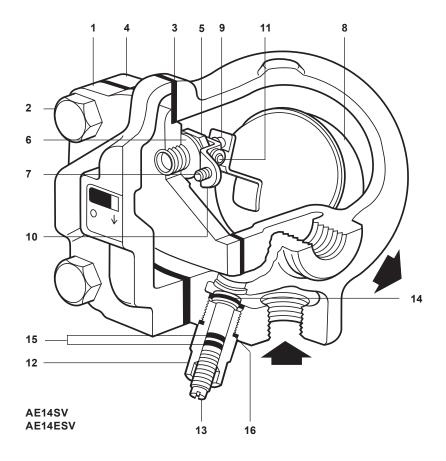
These products fully comply with the requirements of the EU Pressure Equipment Directive/UK Pressure Equipment (Safety) Regulations and carry the few mark when so required.

#### 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.

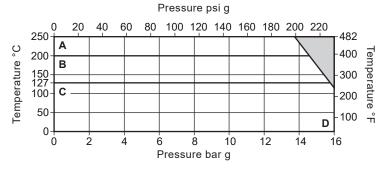
# **Materials**



No.	Part		Material			
1	Body		SG iron	EN-GJS-400-15		
2	Cover bolt		Steel BS 36			
3	Cover gasket		Reinforced exfoliated graphite			
4	Cover		SG iron	EN-GJS-400-15		
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			
		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		

<sup>\*</sup> Note: Parts 12 to 16 are used for AE14ESV and AE14SV only.

# Pressure/temperature limits



The product **must not** be used in this region.

**A - D** AE14S

B - D AE14 and AE14SV

C - D AE14E and AE14ESV

Body design conditions			PN16
PMA Maximum allowable pressure @ 11	16 bar g	(232 psi g)	
TMA Maximum allowable temperature @	250 °C	(482 °F)	
Minimum allowable temperature		0 °C	(32 °F)
PMO Maximum operating pressure		16 bar g	(232 °F)
	<b>AE14E and AE14ESV</b> @ 15.5 bar g (224.5 psi g)	127 °C	(261 °F)
TMO Maximum operating temperature	<b>AE14 and AE14SV</b> @ 14.5 bar g (210 psi g)	200 °C	(392 °F)
	<b>AE14S</b> @ 13.6 bar g (197.3 psi g)	250 °C	(482 °F)
Minimum operating temperature		0 °C	(32 °F)
ΔPMX 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

# **Dimensions/weights** (approximate)

# **AE14, AE14E, AE14S**

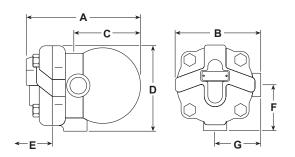
#### mm and kg

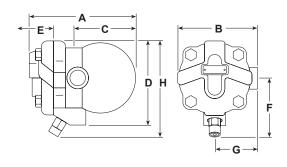
Size	Α	В	С	D	E	F	G	Weight
1/2" 3/4"	147	114	80	114	105	60	60	2.5

# AE14ESV, AE14SV

#### mm and kg

Size	Α	В	С	D	E	F	G	Н	Weight
1/2" 3/4"	148	114	65	129	105	76	60	147	2.7





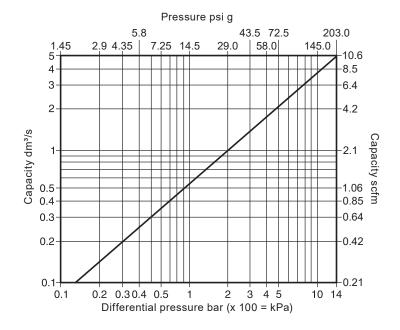
#### inches and lbs

Size	Α	В	С	D	E	F	G	Weight
1/2" 3/4"	5.78	4.48	3.14	4.48	4.13	2.36	2.36	5.51

# inches and lbs

Size	Α	В	С	D	E	F	G	Н	Weight
1/2" 3/4"	5.82	4.48	2.55	5.07	4.13	2.99	2.36	5.78	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 ½" 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

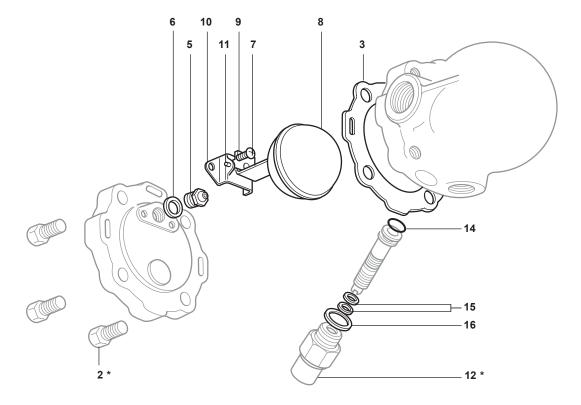
Valve head (not available for the AE14S) packet of 3 (Note: 1 off EPDM and Viton valve head is supplied to fit as required)

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#### 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

Item	Part	© 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

<sup>\*</sup> Note: Items 2 and 12 are not available as spares.