



Cert. No. LRQ 0963008

ISO 9001

# spirax sarco

TI-P017-07  
ST Issue 10

## AE30, AE30A, AE30B and AE30C

### Automatic Air Eliminators / Air and Gas Vents for Liquid Systems

#### Description

The AE30 range of automatic air eliminators/air and gas vents are designed for use on liquid installations. The body and the cap are made from a special brass alloy, which is dezincification resistant (DZR).

#### Available options

**AE30** Air eliminator/air vent

**AE30A** Air eliminator/air vent with check valve

**AE30B** Air eliminator/air vent with lockshield

**AE30C** Air eliminator/air vent with check valve and lockshield

The fitted lockshield valve (versions AE30B and AE30C) has a unique 3 way locking system enabling the valve to be either locked open, locked closed or be used as conventional ball valve. Operation of the valve is by using our lockshield key which is available from Spirax Sarco.

#### Standards

This product fully complies with the requirements of the European Pressure Equipment Directive 97/23/EC.

#### Certification

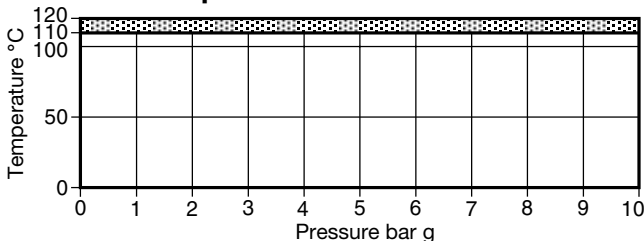
This product is available with a manufacturer's Typical Test Report.  
**Note:** All certification/inspection requirements must be stated at the time of order placement.

#### Sizes and pipe connections

**AE30, AE30A:** Inlet 1/2" female, outlet 1/4" male both BSP or NPT.

**AE30B, AE30C:** Inlet 1/2" male, outlet 1/4" male both BSP.

#### Pressure/temperature limits



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

Body design conditions PN10

PMA Maximum allowable pressure 10 bar g @ 120°C

TMA Maximum allowable temperature 120°C @ 10 bar g

Minimum allowable temperature -10°C

PMO Maximum operating pressure 10 bar g @ 110°C

TMO Maximum operating temperature (at all pressures) 110°C

ΔPMX Maximum differential pressure 8 bar g @ 110°C

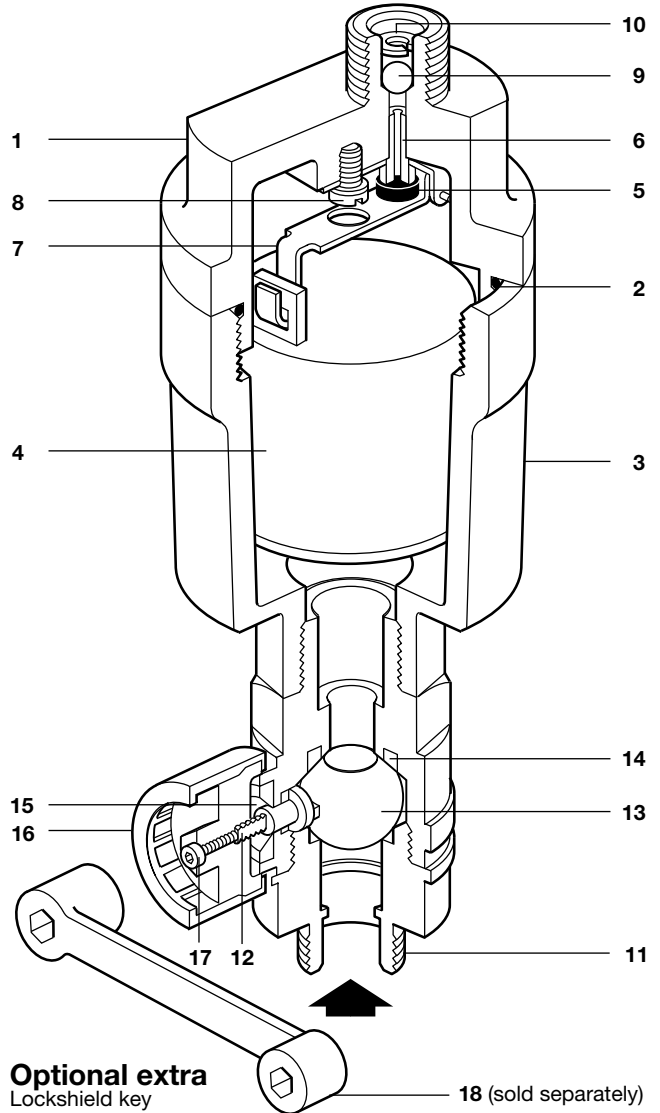
Minimum operating temperature 0°C

Designed for a maximum cold hydraulic test pressure of 15 bar g

Minimum specific gravity of liquid 0.926

#### Materials

No. Part	Material	
1 Cap	DZR brass alloy	BS 2872 CZ 132
2 Cap 'O' ring	Green Viton 75	
3 Body	DZR brass alloy	BS 2872 CZ 132
4 Float	Acetal co hostaform/stainless steel	
5 Valve cone	EPDM or Green Viton (IRHD 50-55)	
6 Valve seat	Stainless steel	BS 970 431 S29
7 Bracket/lever assembly	Stainless steel	BS 1449 304 S11



#### Optional extra

Lockshield key 18 (sold separately)

No. Part	Material	
8 Screw	Stainless steel	BS 4183 18/8
9 Check valve ball	Stainless steel	AISI 440 B (AE30A and C)
10 Circlip (AE30A and C)	Stainless steel	BS 970 302 S25
11 Lockshield valve body	DZR brass alloy	BS 2872 CZ 132 (AE30B and C)
12 Lockshield valve	Hard Cr. DZR alloy	BS 2874 CZ 2132
13 Ball (AE30B and C)	Hard Cr. DZR alloy	BS 2874 CZ 2132
14 Seal (AE30B and C)	Virgin PTFE	
15 Stem seal (AE30B and C)	Virgin PTFE	
16 Cover (AE30B and C)	Polypropylene	
17 Screw (AE30B and C)	Steel	
18 Lockshield key	SG iron	BS 2789

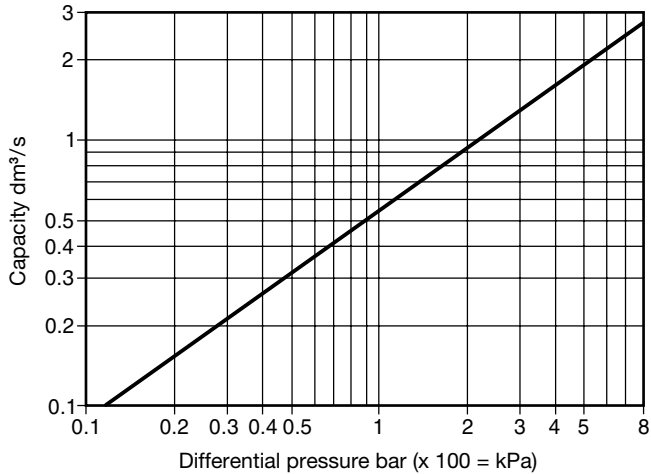
Local regulations may restrict the use of this product to below the conditions quoted.

In the interests of development and improvement of the product, we reserve the right to change the specification without notice.

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## Free discharge capacity

For air at 16°C



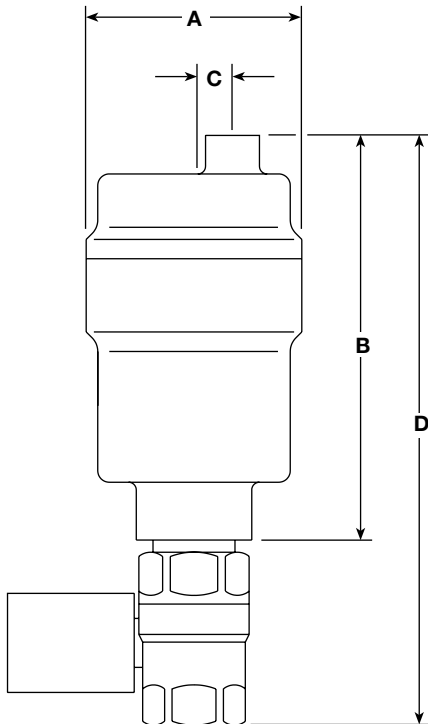
If the temperature of the air differs from 16°C, the discharge capacity from the graph can be corrected by multiplying it by the following equation:

$$\frac{289}{273 + T} \quad (T \text{ is the actual temperature in } ^\circ\text{C})$$

It may be assumed that the temperature of the air is equal to the temperature of the water.

## Dimensions/weight (approximate) in mm and kg

Version	A	B	C	D	Weight
AE30, AE30A	56	105	10	-	0.7
AE30B, AE30C	56	105	10	155	0.9



## Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P017-08) supplied with the product.

### Installation note:

The automatic air eliminator/air vent should be installed vertically with the inlet at the bottom. We recommend piping the discharge from the air eliminator/air vent to a suitable drainpoint.

### How to order

**Example:** 1 off Spirax Sarco 1/2" AE30C automatic air eliminator with check valve and lockshield valve screwed BSP.

## Spare parts

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

### Available spares

Maintenance kit comprising: **2, 4, 5, 9, 10**  
Valve cone, float, cap 'O' ring, check valve ball and check valve circlip

### Important note

If you have earlier versions of the AE30 designated AE30 and AE30CV which operate over the range 0 - 30 bar then the spares set for the AE30, A, B and C can be used (but this will not convert it to operate over the range 0 - 8 bar).

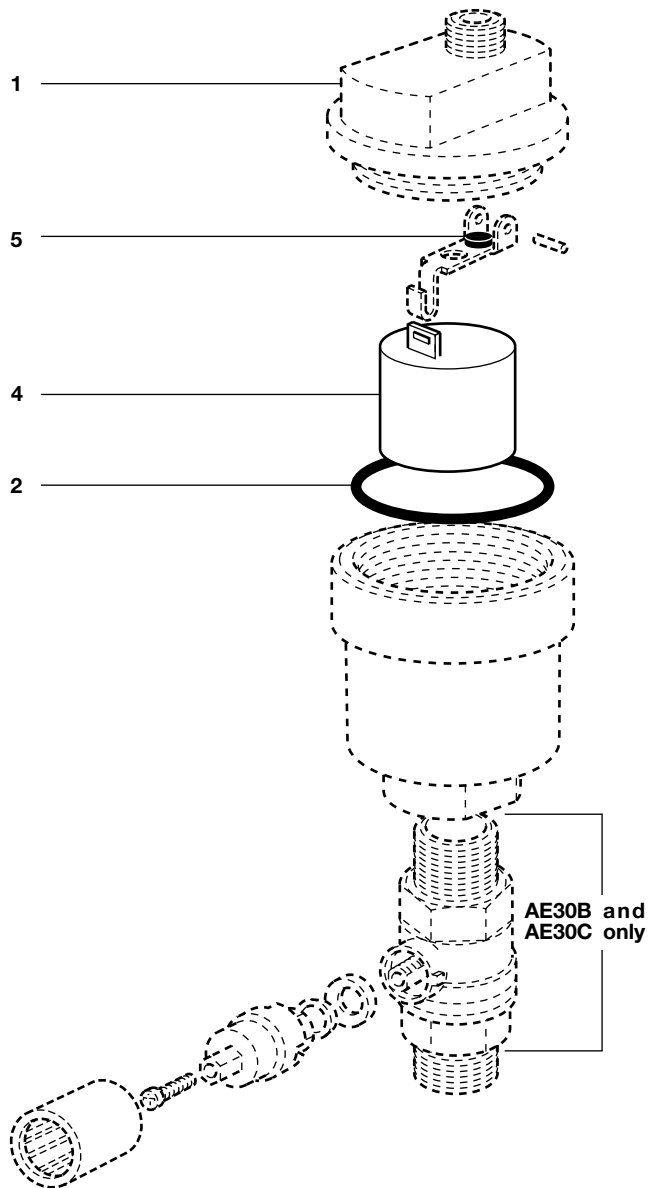
However if you have the AE30H and AE30HCV which operate over the range 3 - 8 bar then the earlier spares set should be used.

### 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 eliminator/air vent.

**Example:** 1 - Maintenance kit for a Spirax Sarco 1/2" AE30A automatic air eliminator with check valve.

**AE30A and AE30C only** — **10**  
**9**



### Recommended tightening torques

Item	or	mm	N m
1		30	10 - 12
8	Cheesehead	M4 x 6	