



TI-P148-38
CMGT Issue 6

CAS14 and CAS14S Austenitic Stainless Steel Ball Float Air and Gas Traps

Description

The CAS14 and CAS14S are austenitic stainless steel ball float gas/air drain traps.

They provide efficient condensate drainage from compressed air and other gas systems, allowing the process to operate to its optimum potential.

The connections are in the vertical plane for flow downwards.

Body and cover castings are produced by a TÜV approved supplier in accordance with AD-Merkblatt WO/TRD100.

Operating media

The CAS14 and CAS14S are designed for use on air or gases within PED group 2.

Note: The CAS14 and CAS14S are not suitable for use on PED group 1 liquids or gases.

Available types


CAS14 fitted with a viton valve cone ½" and ¾"

CAS14S fitted with a stainless steel valve cone ½", ¾" and 1"

Optional extra

An integral screen.

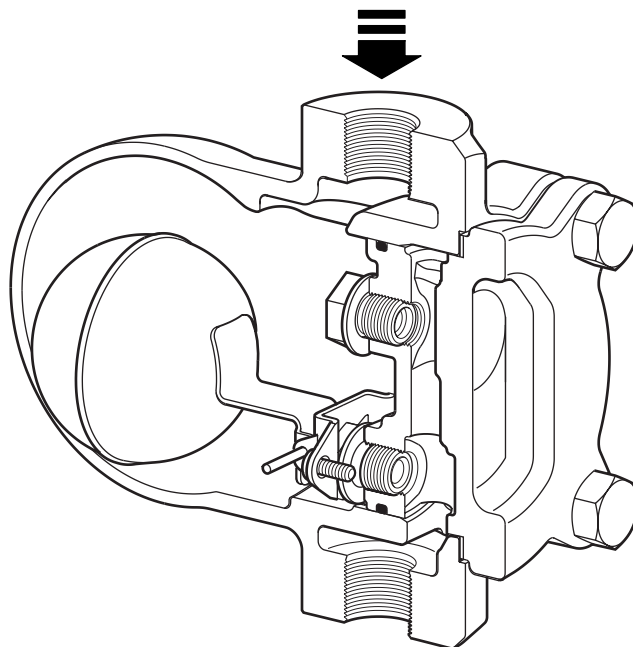
Standards

These products fully comply with the requirements of the European Pressure Equipment Directive 2014/68/EU and carry the  mark when so required.

Certification

This product is available with certification to EN 10204 3.1.B.

Note: All certification/inspection requirements must be stated at the time of order placement.

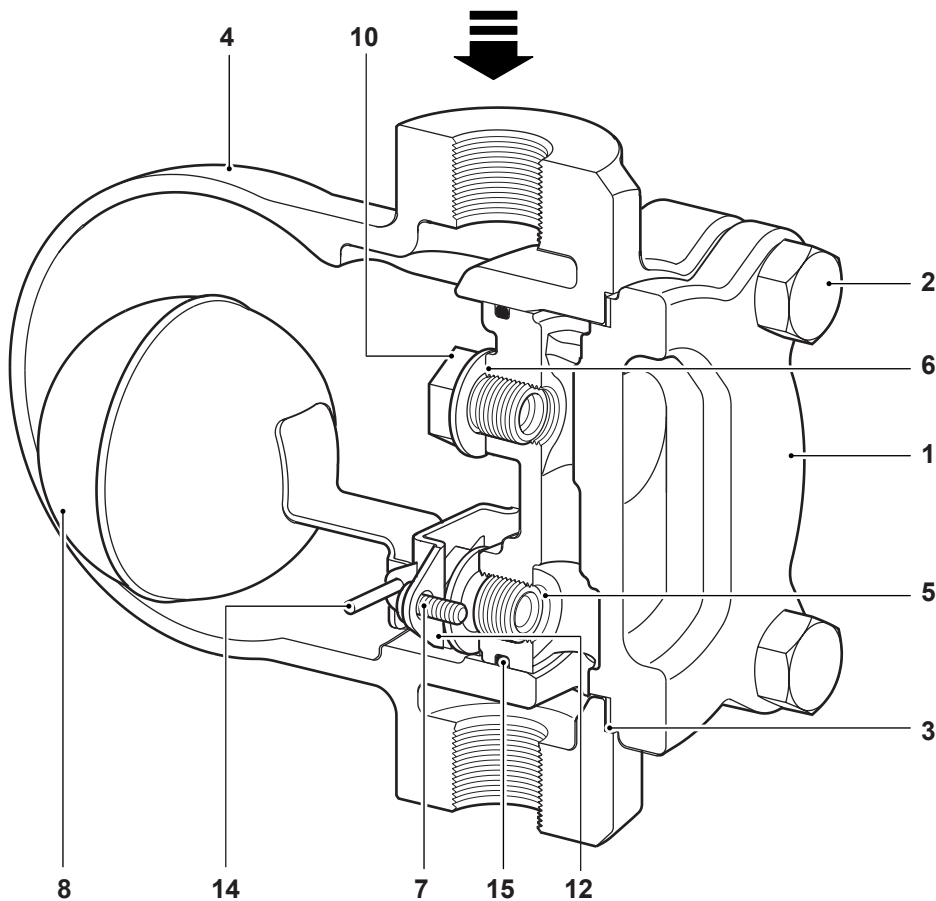


Sizes and pipe connections

½", ¾" and 1" Screwed BSP T Rp (ISO 7-1) (BS 21 and DIN 2999) or NPT (ANSI B 1.20.1).

½", ¾" and 1" Socket weld ends to ANSI B 16.11, BS 3799 Class 3000 and DIN 3239.

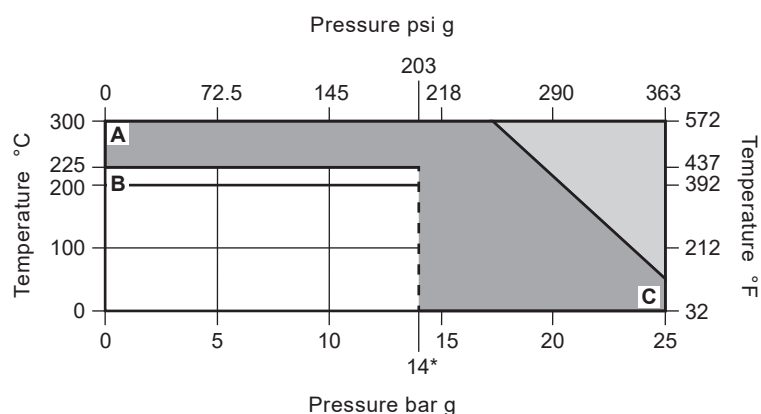
Materials



No.	Part		Material	
1	Body		Austenitic stainless steel (316)	EN 10213-4 (1.4408) ASTM A351 CF8M
2	Cover bolts		Stainless steel	BS EN 3506 A2-70
3	Cover gasket		Reinforced exfoliated graphite	
4	Cover		Austenitic stainless steel (316)	EN 10213-4 (1.4408) ASTM A351 CF8M
5	Main valve seat		Stainless steel	BS 970 431 S29
6	Main valve seat gasket		Stainless steel	
7	Main valve assembly screws		Stainless steel	
8	Ball float and lever		Stainless steel	BS 1449 304 S16
9 *	Valve cone	CAS14	Viton	
		CAS14S	Stainless steel	AISI 440B
10	Blanking plug		Stainless steel	
12	Pivot frame		Stainless steel	
14	Pivot pin		Stainless steel	
15	'O' ring		FDA approved viton to FDA regulation 177.2600	
16 *	Valve spring (1" only)		Stainless steel	

* **Note:** Items 9 and 16 are clearly identified on page 4.

Pressure/temperature limits (ISO 6552)



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

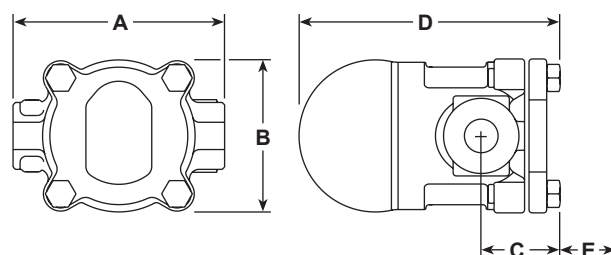
The Viton soft seat versions should not be used in this region.

A - C CAS14S

B - C CAS14

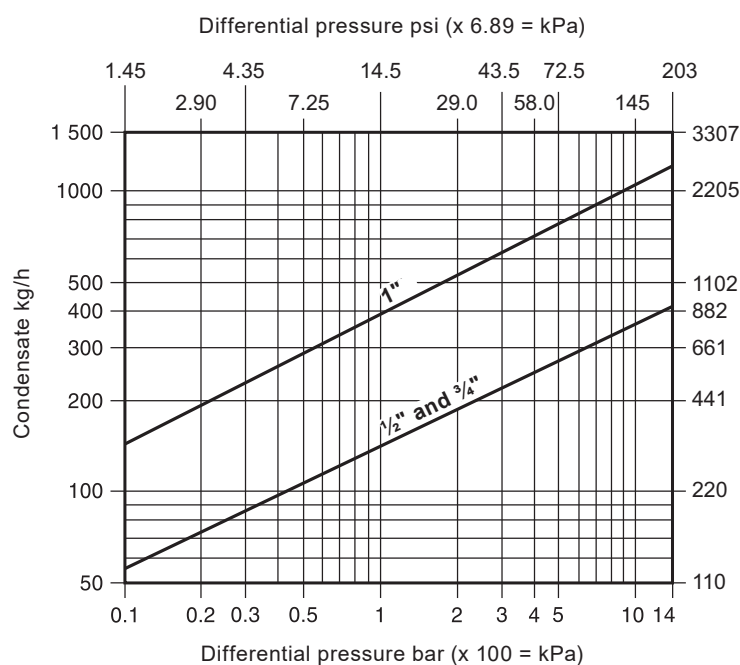
*PMO	Maximum operating pressure			14 bar g	203 psi g
Body design conditions					PN25
PMA	Maximum allowable pressure			25 bar g	363 psi g
TMA	Maximum allowable temperature			300 °C	572 °F
Minimum allowable temperature				-20 °C	-4 °F
PMO	Maximum operating pressure for saturated steam service			14 bar g	203 psi g
TMO	Maximum operating temperature		CAS14	200 °C	392 °F
			CAS14S	225 °C	437 °F
ΔPMX Maximum differential pressure					
Minimum operating temperature				0 °C	32 °F
The maximum differential pressure depends on the specific gravity of the liquid being drained.					
	Specific Gravity				
Trap	1.0	0.9	0.8	0.7	0.6
	Maximum differential pressure bar (psi)				
CAS14	14.0 (203)	14.0 (203)	14.0 (203)	9.0 (131)	5.0 (72.5)
CAS14S					
Minimum specific gravity of liquid				0.6	
Product is safe for use under full vacuum conditions					
Designed for a maximum cold hydraulic test pressure of:				37.5 bar g	544 psi g

Dimensions/weights (approximate) in mm (inches) and kg (lbs)



Size	A	B	C	D	E Withdrawal distance	Weight
1/2"	135 (5.31)	97 (3.82)	48 (1.89)	162 (6.38)	135 (5.31)	3.73 (8.22)
3/4"						
1"	139 (5.47)	113 (4.45)	51 (2.01)	179 (7.05)	145 (5.71)	4.23 (9.33)

Capacities



Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P106-02) supplied with the product.

How to order

Example: 1 off Spirax Sarco 1/2" CAS14 austenitic stainless steel ball float air and gas trap having screwed BSP T Rp (ISO 7-1) connections.

Spare parts

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

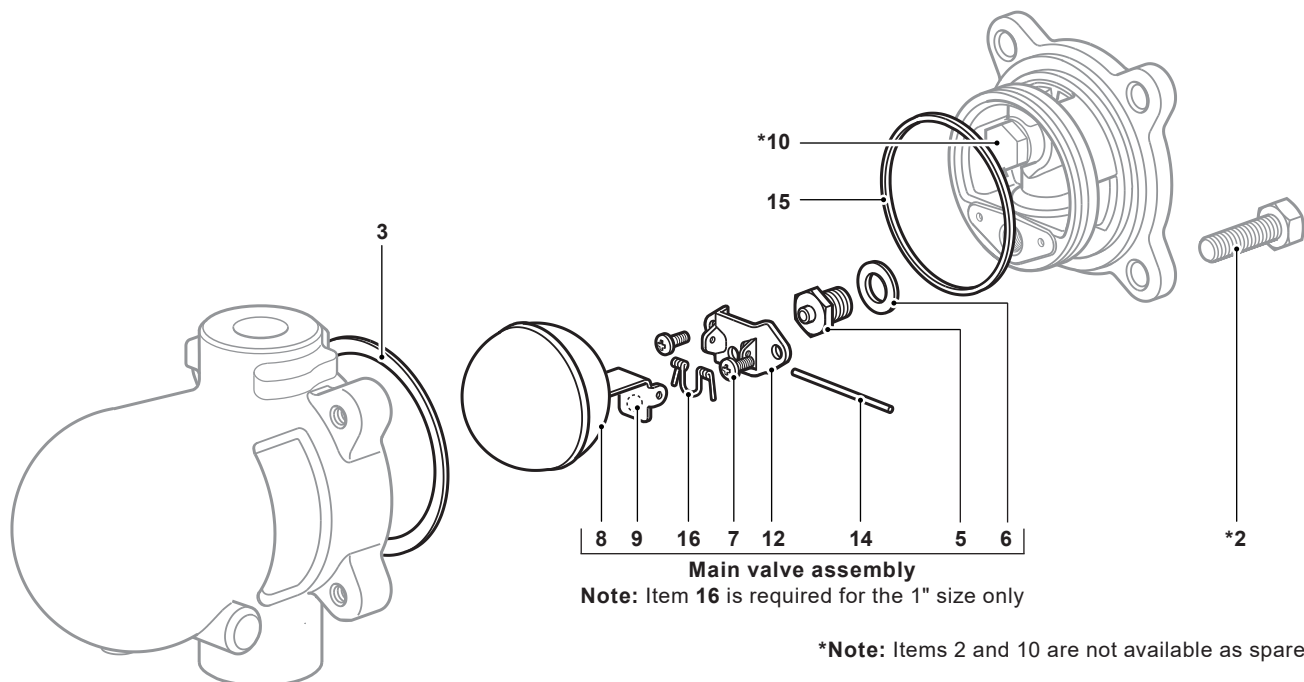
Available spares

Maintenance kit	CAS14	3, 5, 6, 7 (2 off), 8, 9, 12, 14, 15
	CAS14S	3, 5, 6, 7 (2 off), 8, 9, 12, 14 + 16 (1" only), 15
Seal set		3, 9, 15



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 trap.

Example: 1 - Maintenance kit for a Spirax Sarco ½" CAS14 austenitic stainless steel ball float air and gas trap.



Recommended tightening torques

Item	Part	 or  mm	N m	ft lbf
2	Cover bolt	M10 x 30	20 - 25	15 - 18
5	Main valve seat	17 A/F	50 - 55	37 - 41
7	Main valve assembly screws	pozidrive M4 x 6	2.5 - 3.0	1.8 - 2.2
10	Blanking plug	17 A/F	50 - 55	37 - 41