

# spirax sarco

## S5 Carbon Steel Separator

### Description

The S5 is a carbon steel baffle type separator used for the removal of entrained liquids in steam, compressed air and gas systems.

### Optional extras

Insulation jackets are available which will increase the performance of the separator, (see TI-P138-01).

### Standards

This product fully complies with the requirements of the European Pressure Equipment Directive 97/23/EC and carries the **CE** mark when so required.

### Certification

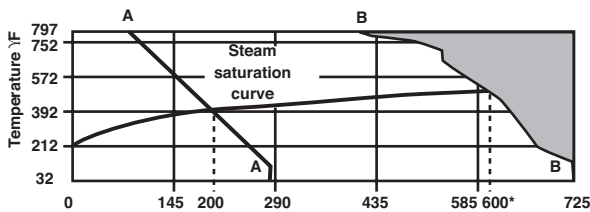
This product is available with certification to EN 10204 3.1.  
**Note:** All certification/inspection requirements must be stated at the time of order placement.


### Sizes and pipe connections

½", ¾", 1", 1¼", 1½" and 2"  
Screwed NPT, butt weld, socket weld.

Flanged BS ANSI Class 150 or 300 with screwed NPT drain and air vent.

### Pressure / temperature limits



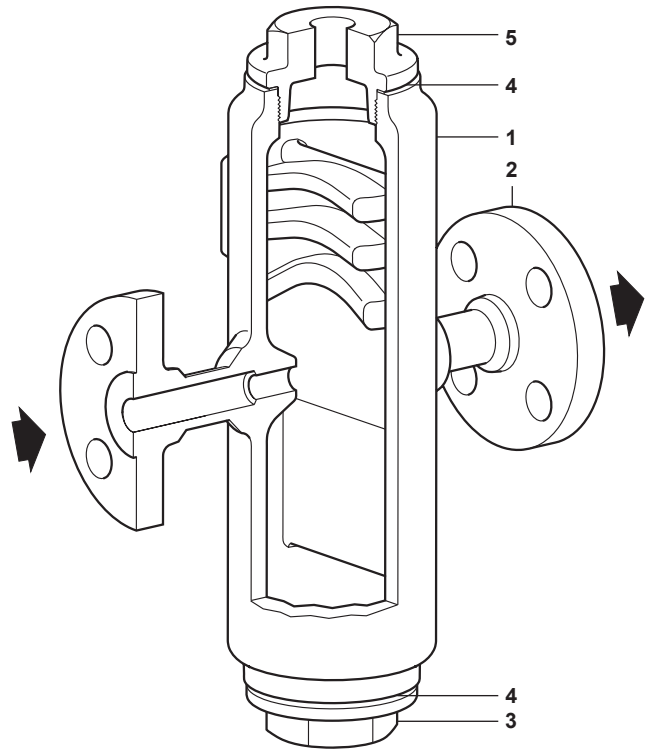
 The product must not be used in this region.

\*PMO Maximum operating pressure for saturated steam

A - A Flanged ANSI Class 150

B - B Flanged ANSI Class 300, screwed NPT, socket weld and butt weld

Body design conditions		PN50/ASME 300	
PMA	Maximum allowable pressure	725 psig @ 122°F	
TMA	Maximum allowable temperature	797°F @ 406 psig	
Minimum allowable temperature		14°F	
PMO	Maximum operating pressure for saturated steam service	ASME 150	218 psig
		ASME 300	600 psig
		Scrd / SW/BW	600 psig
TMO	Maximum operating temperature	797°F @ 406 psig	
Minimum operating temperature		32°F	
Designed for a maximum cold hydraulic test pressure of 1111 psig			



Flanged S5 shown

### Capacities

See TIS 7.003A US

### Materials

No.	Part	Material	
1	Body	Carbon steel	ASTM A216 WCB
2	Flange	Carbon steel	ASTM A105N
3	Cap	Carbon steel	Steel
4	Cap gasket	Reinforced exfoliated graphite	
5	Cap	Carbon steel	Steel

Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only.

In the interests of development and improvement of the product, we reserve the right to change the specification. TI-P023-11-US 7.17

# S5 Carbon Steel Separator

## Dimensions (approximate) in inches and (mm)

Size	Screwed SW, BW A	ASME 150 A	ASME 300 A	B	C	D	F	G	H
½" DN15	5.1" (130)	8.0" (204)	8.0" (204)	5.9" (150)	11.6" (294)	2.7" (68)	1"	½"	3.3" (83)
¾" DN20	5.1" (130)	8.4" (212)	8.4" (212)	5.8" (146)	13.7" (347)	2.7" (68)	1"	½"	3.3" (83)
1" DN25	7.0" (178)	10.2" (260)	10.2" (260)	6.7" (170.5)	15.2" (386)	2.7" (68)	1"	½"	5.1" (130)
1¼" DN32	7.5" (190)	10.9" (277)	10.9" (277)	7.7" (195)	17.3" (440)	2.7" (68)	1"	½"	5.7" (144)
1½" DN40	8.7" (220)	13.4" (314)	13.4" (314)	8.2" (208)	20.0" (508)	2.7" (68)	1"	1"	6.6" (168)
2" DN50	8.4" (214)	13.4" (314)	13.4" (314)	8.2" (208)	22.0" (558)	2.7" (68)	1"	1"	6.6" (168)

## Weights/volume

(approximate) in pounds and US gallons (kg and litres)

Size	Weight		Volume	
	Scrd/SW/BW	Flanged	Scrd/SW/BW	Flanged
½" DN15	13.2" (6.0)	16.3" (7.4)	0.19" (0.71)	0.19" (0.72)
¾" DN20	15.0" (6.8)	20.1" (9.1)	0.24" (0.90)	0.24" (0.92)
1" DN25	36.5" (12.0)	32.6" (14.8)	0.75" (2.83)	0.76" (2.86)
1¼" DN32	35.1" (15.9)	44.1" (20.0)	1.10" (4.15)	1.11" (4.19)
1½" DN40	48.5" (22.0)	58.6" (26.6)	1.83" (6.93)	1.85" (7.00)
2" DN50	52.7" (23.9)	66.4" (30.1)	2.0" (7.74)	2.08" (7.88)

## Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P023-55) supplied with the product.

### Installation note:

Install in a horizontal pipeline with the drain directly below.

To ensure that any separated liquid is drained quickly, a suitable steam trap/liquid drainer must be connected to the drain connection. For those steam systems where air can be present, air can collect in the upper portion of the separator. In this situation a suitable air vent should be connected to the air vent connection.

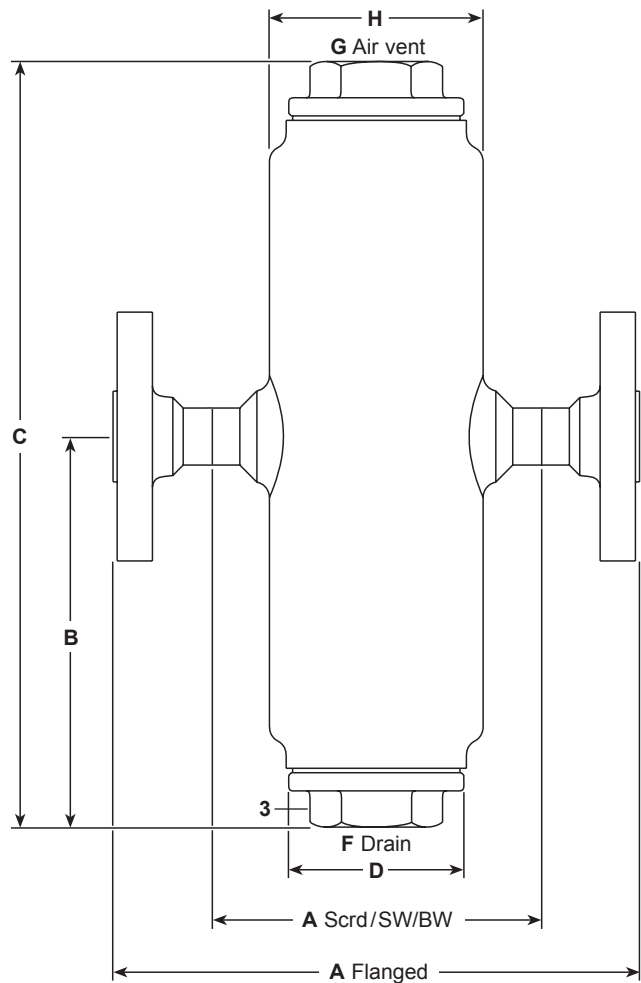
If an air vent is not being fitted then the connection must have the plastic transit protection plug removed and must have a carbon steel class 3000 lb plug fitted.

### Disposal:


The product is recyclable. No ecological hazard is anticipated with disposal providing due care is taken.

## How to order

**Example:** 1 off Spirax Sarco ¾" S5 separator with a carbon steel body flanged to ANSI 150.



## Recommended tightening torques

Items	 (mm)	lb - ft (N m)
3 and 5	1.8" A/F (46 A/F)	133-148 (180-200)

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