

spirax

sarco

S1

SG Iron

Separator

TI-P023-02
CMGT Issue 10

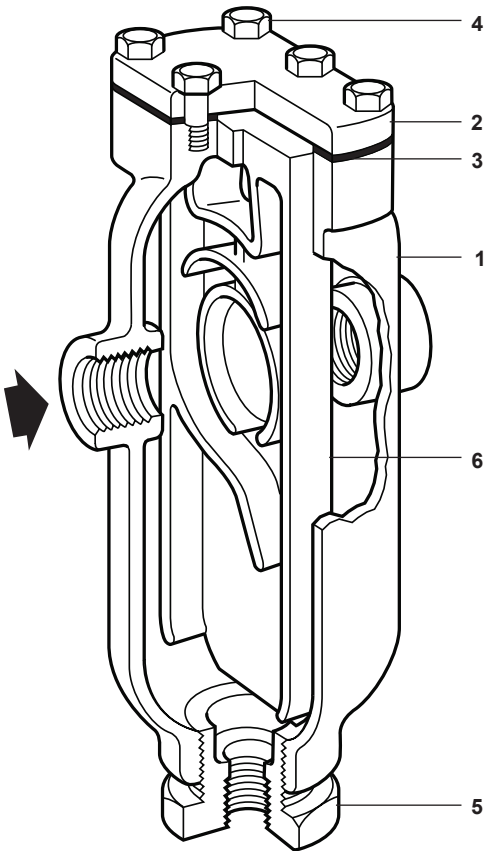
Description
The S1 is a cast SG iron baffle type separator used for the removal of entrained liquids in steam, compressed air and gas systems. The fitting of insulation jackets will increase the performance of the separator.

Standards
This product fully complies with the requirements of the Pressure Equipment Directive (PED).

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

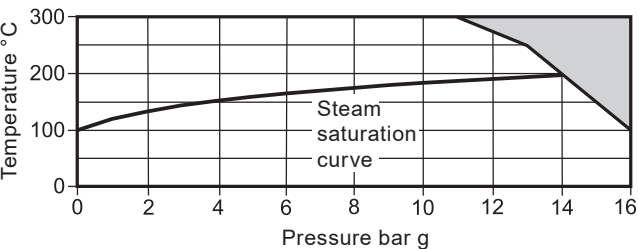
Sizes and pipe connections
½", ¾" and 1" screwed BSP or NPT

Materials			
No. Part		Material	
1	Body	SG iron	DIN 1693 Gr. GGG 40
2	Cover	SG iron	DIN1693 Gr. GGG 40
3	Gasket	Semi-rigid graphite laminate	
4	Bolts	Steel	BS 1768 Gr. 5
5	Bush	½" ¾"	Steel
		1"	Steel
6	Baffle	Cast iron	DIN 1691 Gr. GG20



Pipeline ancillaries
Separators and insulation jackets

Pressure/temperature limits (ISO 6552)

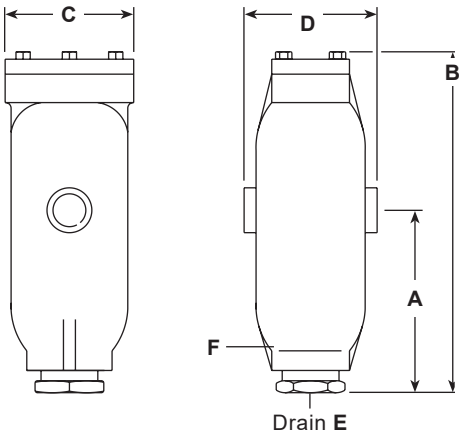


The product **must not** be used in this region.

Body design conditions		PN16
PMA	Maximum allowable pressure	16 bar g @ 100 °C
TMA	Maximum allowable temperature	300 °C @ 11 bar g
Minimum allowable temperature		0 °C
PMO	Maximum operating pressure for saturated steam service	13.8 bar g
TMO	Maximum operating temperature	200 °C @ 13.8 bar g
Minimum operating temperature. Note: For lower operating temperatures consult Spirax Sarco		0 °C
Designed for a maximum cold hydraulic test pressure of:		24 bar g

Dimensions, weights and volumes (approximate) in mm, kg and litres

Size	A	B	C	D	E	F	Weight	Volume
½"	124	225	86	88	½"	1"	2.7	0.53
¾"	156	260	110	113	½"	1½"	4.2	1.13
1"	222	377	143	152	½"	2"	8.1	3.15



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.

Note: To ensure that any separated liquid is drained away quickly, a suitable liquid drainer/steam trap must be connected to the drain connection 'E' - consult Spirax Sarco for further details.

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 ¾" Spirax Sarco S1 separator with SG iron body having screwed BSP connections.

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IJ-S1

TI-P023-49
CMGT Issue 3

Insulation Jacket
for S1 Separators

Description

The IJ-S1 is a range of insulation jackets for fitting to separator type S1. The jackets are of a one-piece design. TI-P023-48 gives details of a payback calculator based on the energy saving to be made by fitting an insulation jacket.

Available types

Available as a one-piece jacket with velcro fastening, for fitting to all sizes of S1 separator. IJ-S1 to fit separator S1 DN15 to DN25.

Limiting conditions

Maximum metal surface temperature	220 °C
Thermal conductivity	0.044 W/m K at 100 °C

Materials

No.	Part	Material
1	Inner and outer face	Silicone rubber coated glass fibre
2	Insulation	Mineral fibre
3	Stitching	Polyester cotton
4	Sealing	Velcro
5	Drawcords	Nylon
6	Label	Nylon

Installation

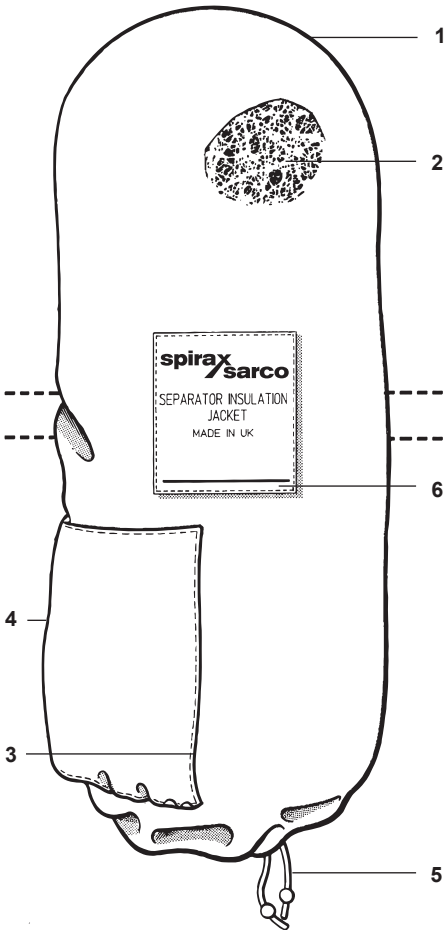
Once the separator has been installed, the insulation jacket can be fitted as follows:

Place the top of the jacket over the top of the separator.
Undo the velcro flaps and slide the jacket down over the separator.
Fasten the two lower flaps.
Then fasten the top flap.
Finally, tie the drawcord around the outlet pipe.

Important note: Both the inner/outer face and insulation are made with a bonded aluminium foil. At a temperature of 120 °C the adhesive bonding the aluminium will start to degrade and delamination of the foil will occur at 150 °C to 170 °C. Scorching of the internal fabric may occur at 150 °C. Neither of these reactions will impair the performance.

Removal

Before removing the jacket, check if the separator is in service. If it is, the metal surface will be hot enough to burn and suitable protective clothing (e.g. gloves) should be worn.
Removal is the reverse procedure to the above.



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Pipeline ancillaries
Separators and insulation jackets

Handling

When the jacket is new, the insulation material is fully enclosed within the inner and outer face and retained by the stitching. In this condition, for handling, no special protective clothing is required. However, if the inner and outer face become unstitched or damaged so as to expose the insulation material, suitable protective clothing (e.g. gloves, safety glasses, face mask and overalls) should be worn.

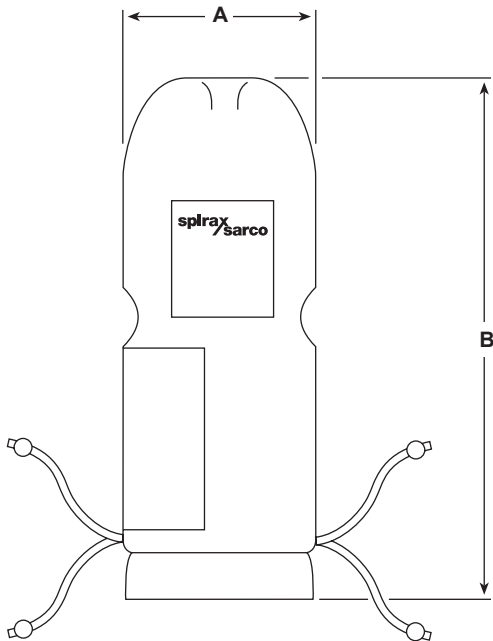
Disposal

This product is not recyclable and is non-combustible. For disposal purposes consider the product to be mineral fibre and dispose of in accordance with local regulations.

Dimensions/mass (approximate) in mm and kg

Size	A	B	Insulation thickness	Mass
DN15	190	350	50	0.57
DN20	210	390	50	0.78
DN25	275	515	50	1.20

The diagram below shows the dimensions of the jacket



How to order

Example: 1 off IJ-S1 insulation jacket to fit a DN25 S1 separator.