



Cert. No. LRQ 0963008

ISO 9001

spirax sarco

TI-P163-01
ST Issue 4

Fig 12 SG Iron Strainer

Description

The Fig 12 is an SG iron screwed Y-type strainer. The standard stainless steel screen is 0.8 mm perforations. As options, other perforations and mesh sizes are available as well as monel screens. The strainer cap can be drilled and tapped for blowdown and drain valves if required.

Sizes and pipe connections

1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 2 1/2" and 3" screwed BSP or NPT

Optional extras

Strainer screens

Stainless steel screen	Perforations	1.6, 3 mm
	Mesh	40, 100, 200
Monel	Perforations	0.8, 3 mm
	Mesh	100

Blowdown or drain valve connections.

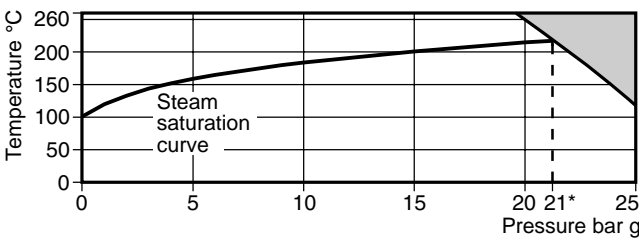
The cap can be drilled to the following sizes to enable a blowdown or drain valve to be fitted.

Strainer size	Blowdown valve	Drain valve
1/2"	1/4"	1/4"
3/4" and 1"	1/2"	1/2"
1 1/4" and 1 1/2"	1"	3/4"
2" to 3"	1 1/4"	3/4"

Limiting conditions

Maximum body design conditions	PN25
PMA - Maximum operating pressure	25 bar g
TMA - Maximum operating temperature	260°C
Designed for a maximum cold hydraulic test pressure of 38 bar g	
Minimum operating temperature	1/2" to 2" -10°C 2 1/2" and 3" 0°C

Operating range



The product must not be used in this region.

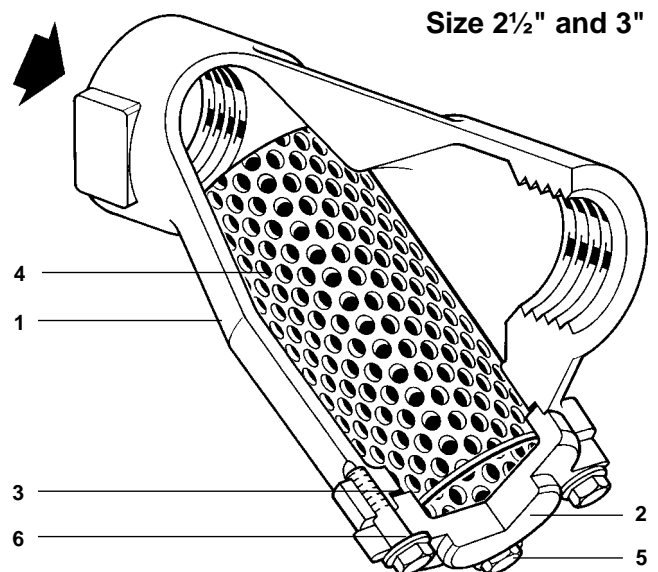
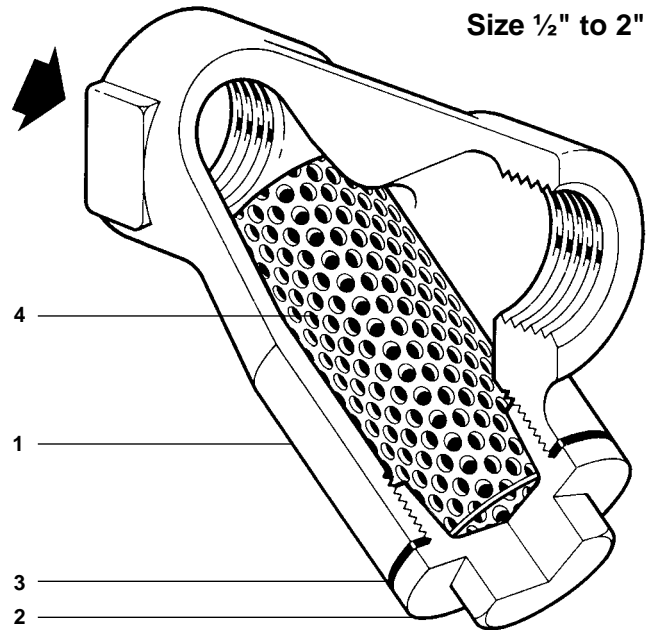
*PMO Maximum operating pressure recommended for saturated steam.

Materials

No	Part	Material	
1	Body	SG iron	DIN 1693 GGG 40
2	Cap	SG iron	DIN 1693 GGG 40
3	Cap gasket	Reinforced exfoliated graphite	
4	Strainer screen	Stainless steel	316L
5	Bolt	Carbon steel	BS 3692 Gr. 8.8
6	Washer	Carbon steel	BS 4320 TI Form A

Certification

The product is available with material certification to EN 10204 2.2 for body and cap as standard.



K_v values

Size	For conversion			C _v (UK) = K _v x 0.97			C _v (US) = K _v x 1.17	
	½"	¾"	1"	1¼"	1½"	2"	2½"	3"
Perforations 0.8, 1.6, 3 mm	3.6	11	15.5	26	41	68	82	115
Mesh 40, 100	3.6	11	15.5	26	41	68	82	115
Mesh 200	3.6	9	13.0	21	35	55	66	93

Dimensions / weights (approximate) in mm and kg

Size	A	B	C	D	Screening area cm ²	Weight
½"	87	55	79	32	25	0.47
¾"	110	65	93	36	42	0.77
1"	125	78	110	48	71	1.40
1¼"	155	103	140	60	135	2.15
1½"	190	115	153	65	161	3.30
2"	230	140	177	76	251	5.10
2½"	230	177	274	94	406	7.30
3"	237	183	280	105	406	7.50

Safety information

Pressure

Before attempting any maintenance of the strainer, consider what is or may have been in the pipeline. Ensure that any pressure is isolated and safely vented to atmospheric pressure before attempting to maintain the strainer. This is easily achieved by fitting Spirax Sarco depressurisation valves type DV (see separate literature for details). Do not assume that the system is depressurised even when a pressure gauge indicates zero.

Temperature

Allow time for temperature to normalise after isolation to avoid the danger of burns and consider whether protective clothing (including safety glasses) is required.

Caution: The strainer cap gasket contains a thin stainless steel support ring, which may cause physical injury if it is not handled and disposed of carefully.

Installation

The strainer should be installed in the direction of flow, as indicated on the body. On applications involving steam or gases the pocket should be in the horizontal plane. On liquid systems the pocket should point downwards. Suitable isolation valves must be installed to allow for safe maintenance and trap replacement. Remove all protective caps prior to installation. Open isolation valves slowly until normal operating conditions are achieved. Check for leaks and correct operation. For further information see IM-S60-17

Maintenance



Maintenance can be completed with the strainer in the pipeline, once the safety procedures have been observed. It is recommended that a new gasket is used whenever maintenance is undertaken.

How to clean or replace the strainer screen

Undo the strainer cap and remove the screen. Clean or replace as required and reassemble the strainer cap into the body, ensuring that the screen is located centrally.

Note: When replacing the strainer cap, coat the thread with anti-seize compound, making sure that none gets onto the gasket faces. Ensure that the correct tools and necessary protective equipment are used at all times. When maintenance is complete open isolation valves slowly and check for leaks. For further information see IM-S60-17.

Recommended tightening torques

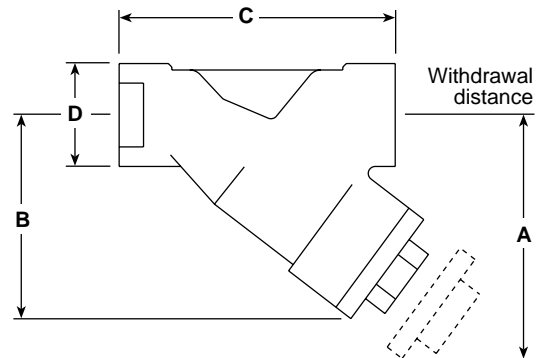
Item	Qty	Size	 or mm		N m
2	1	½"	22	M28	38 - 40
	1	¾"	27	M32	42 - 48
	1	1"	32	M42	70 - 80
	1	1¼"	46	M56	124 - 144
	1	1½"	50	M60	164 - 184
	1	2"	60	M72	234 - 264
5	4	2½"	19	M12	50 - 55
	4	3"	19	M12	50 - 55

Disposal

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

How to order

Example: 1 off Spirax Sarco 2" Fig 12 SG iron strainer, screwed BSP, with stainless steel screen having 0.8 mm perforations.



Spare parts

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

Available spares

Strainer screen (state material, size of perforations or mesh and size of strainer)	4
Cap gasket (packet of 3)	3

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 strainer and perforation or mesh required.

Example: 1 - Strainer screen, stainless steel having 0.8 mm perforations for 1½" Spirax Sarco Fig 12 strainer.

