

# spirax sarco

TI-IBR16-08-IN  
 Issue 8

## 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.

**Standards :** This product fully complies with the requirements of the Indian Boiler Regulations, 1950.

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

### Sizes and pipe connections

½", ¾", 1", 1¼", 1½", 2", 2½" and 3" screwed BSP or NPT.

### Optional extras

#### Strainer screens

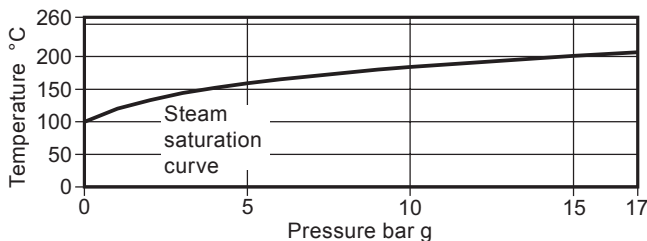
Stainless steel screen	Perforations	1.6, 3 mm
	Mesh	40, 100, 200
Monel	Perforations	0.8, 3 mm
	Mesh	100

#### Blowdown or drain valve connections.

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

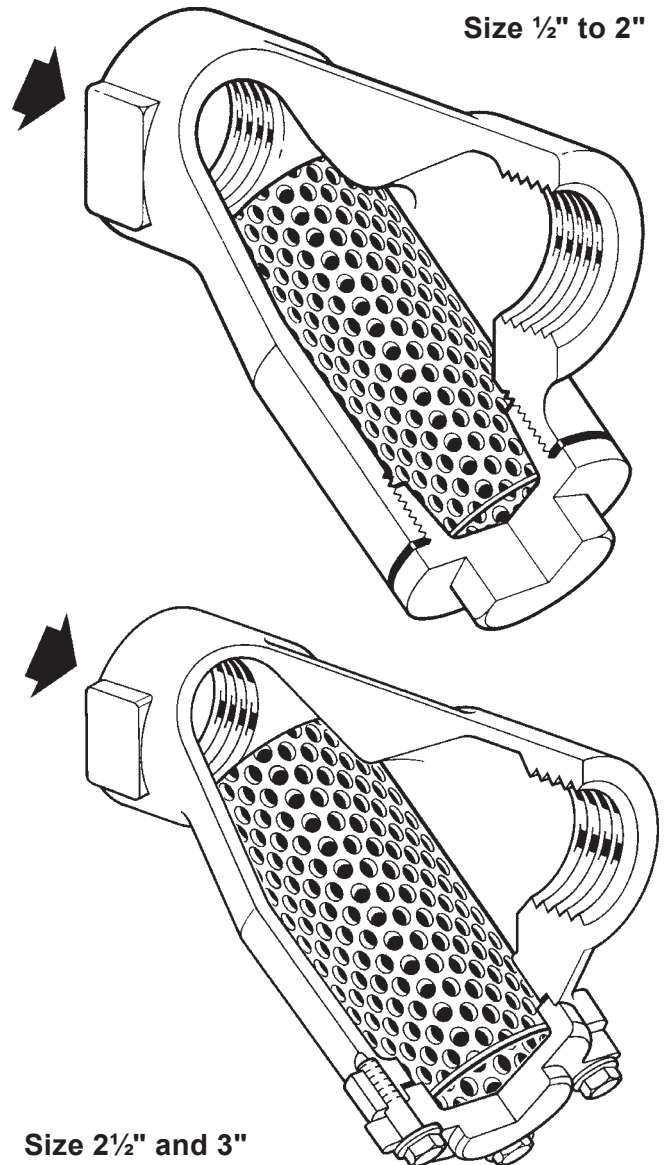
Strainer size	Blowdown valve	Drain valve
½"	¼"	¼"
¾" and 1"	½"	½"
1¼" and 1½"	1"	¾"
2" to 3"	1¼"	¾"

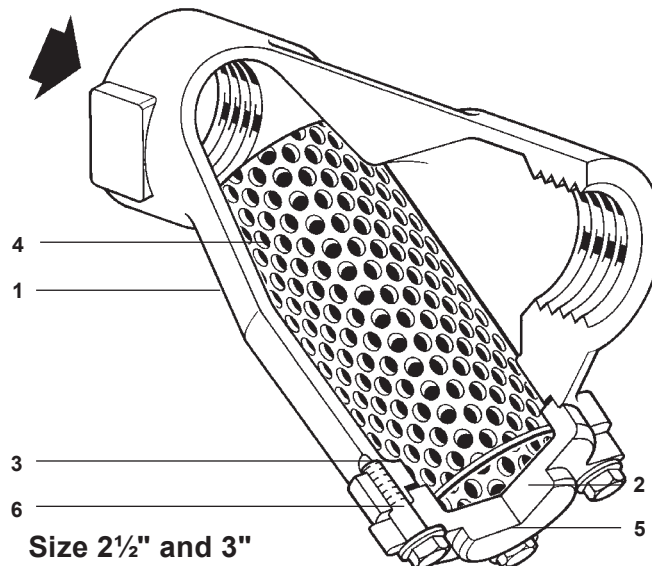
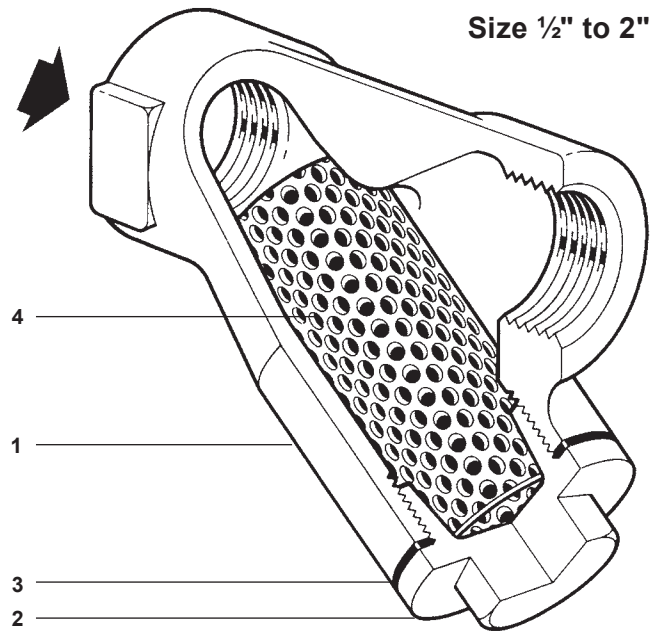
### Pressure/temperature limits



Body design conditions	17 bar g
PMA Maximum allowable pressure	17 bar g @ 260 °C
TMA Maximum allowable temperature	260 °C @ 17 bar g
Minimum allowable temperature	-10 °C
PMO Maximum operating pressure	17 bar g
TMO Maximum operating temperature	17 bar g @ 260 °C
Minimum operating temperature	½" to 2" -10 °C 2½" and 3" 0 °C

**Note:** For lower operating temperatures consult Spirax Sarco  
 Designed for a maximum cold hydraulic test pressure of 25.5 bar g





### Materials

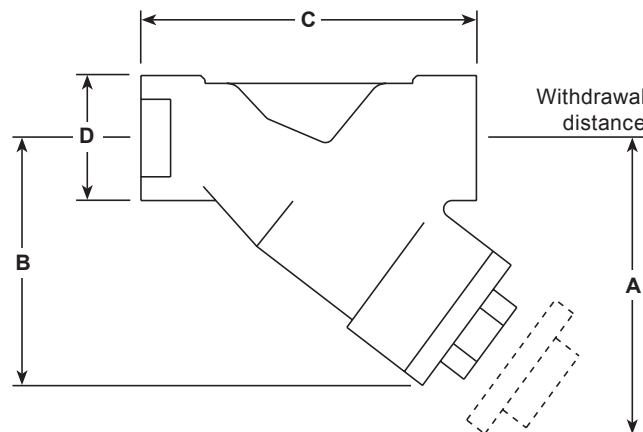
No.	Part	Material	
1	Body	SG iron	DIN 1693 GGG 40
2	Cap	Carbon steel	1.0460 and ASTM A105N
3	Cap gasket	Reinforced exfoliated graphite	
4	Strainer screen	Stainless steel	316L
5	Bolt	Carbon steel	BS 3692 Gr. 8.8
6	Washer	Carbon steel	BS 4320 TI Form A

## K<sub>V</sub> values

Size	For conversion: C <sub>V</sub> (UK) = K <sub>V</sub> x 0.963    C <sub>V</sub> (US) = K <sub>V</sub> x 1.156							
	½"	¾"	1"	1¼"	1½"	2"	2½"	3"
Perforations 0.8, 1.6 and 3 mm	3.6	11	15.5	26	41	68	82	115
Mesh 40 and 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 <sup>2</sup>	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"	274	177	230	94	406	7.30
3"	280	183	237	105	406	7.50



## Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-IBR16-09-IN) supplied with the product.

### Warning:

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 note:

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.

### Maintenance note:

Maintenance can be completed with the strainer in the pipeline.

### 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 solid outline. Parts drawn in broken line are not supplied as spares.

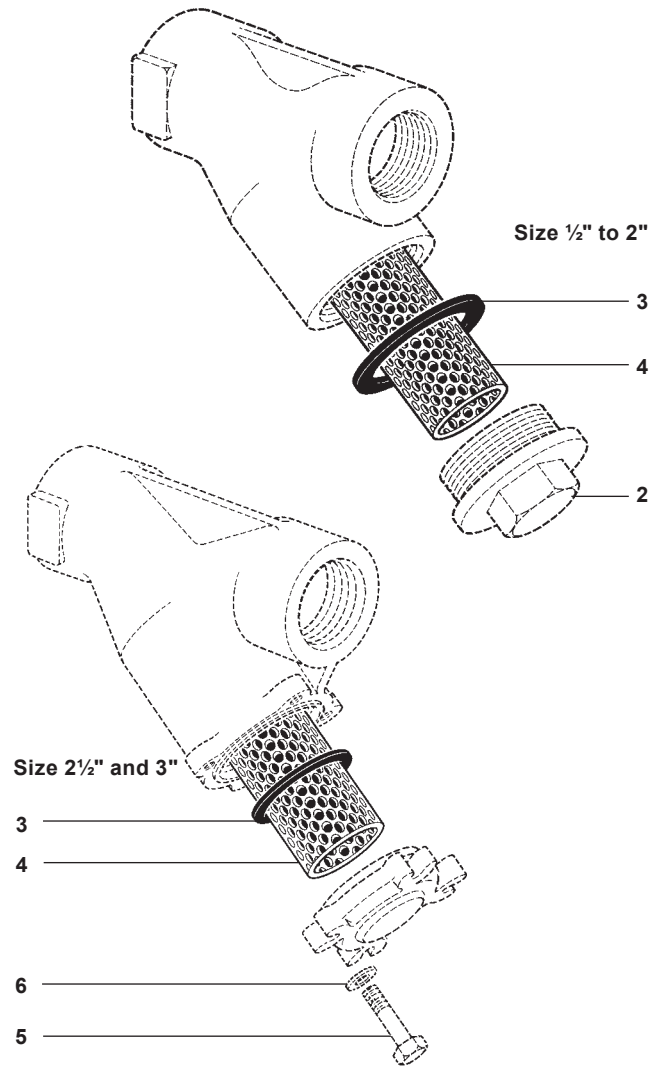
### Available spares

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



### 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 a 1½" Spirax Sarco Fig 12 strainer.



### Recommended tightening torques

Item	Qty	Size	or mm		N m
					
2	1	½"	36	M28	38-40
		¾"	38	M32	42-48
		1"	50	M42	70-80
		1¼"	46	M56	124-144
		1½"	50	M60	164-184
		2"	60	M72	234-264
5	4	2½"	19	M12	50-55
		3"	19	M12	50-55