



Cert. No. LRQ 0963008

ISO 9001

# spirax sarco

TI-S60-03  
ST Issue 6

## Fig 33 Cast Iron Strainer

### Description

The Fig 33 is a cast iron integrally flanged Y-type strainer. The standard stainless steel screen in the DN15 to DN80 size range has 0.8 mm perforations, in the DN100 to DN200 size range it has 1.6 mm perforations. Optional 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 European Pressure Equipment Directive 97/23/EC.

### Certification

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

### Optional extras

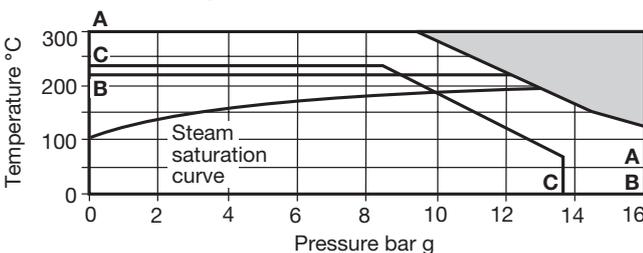
Stainless steel screen	Perforations	1.6 mm (DN15 to DN80)
		3.0 mm (DN15 to DN200)
	Mesh	40, 100, 200
Monel screen	Perforations	0.8 mm (DN15 to DN80)
		1.6 mm (DN100 to DN200)
		3.0 mm (DN15 to DN200)
	Mesh	100

### 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
DN15	1/4"	1/4"
DN20 and DN25	1/2"	1/2"
DN32 and DN40	1"	3/4"
DN50, DN65, DN80, DN100 and DN125	1 1/4"	3/4"
DN150 and DN200	2"	3/4"

### Pressure / temperature limits



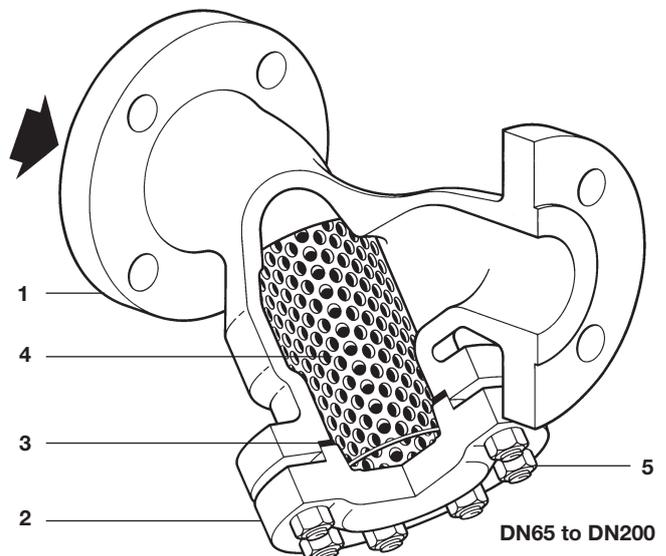
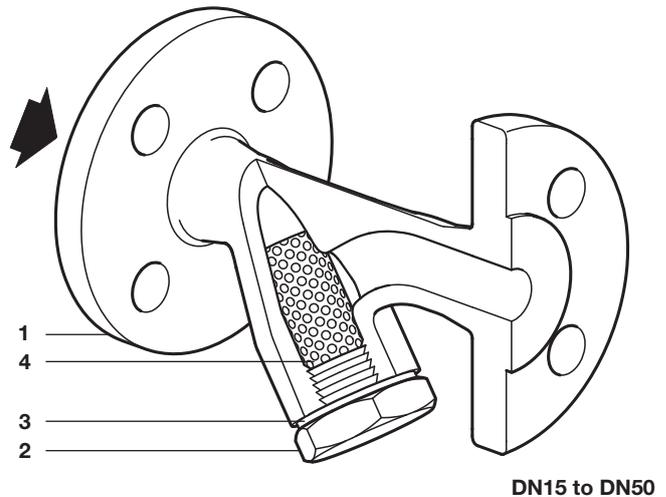
The product **must not** be used in this region.

- A - A Flanged EN 1092 PN16
- B - B Flanged AS 2129 Table F
- C - C Flanged ANSI 125 (including DN15, DN20 flanged ANSI 150)

Body design conditions	PN16	
PMA Maximum allowable pressure	16 bar g	
TMA Maximum allowable temperature	300°C	
Minimum allowable temperature	DN15 to DN50	-10°C
	DN65 to DN200	0°C
PMO Maximum operating pressure for saturated steam service	EN 1092 PN16	13 bar g
	AS 2129 Table F	13 bar g
	ANSI 125	10 bar g
	ANSI 150	10 bar g
TMO Maximum operating temperature	300°C	
Minimum operating temperature	0°C	
Designed for a maximum cold hydraulic test pressure of 24 bar g		

### Sizes and pipe connections

DN15, DN20, DN25, DN32, DN40, DN50, DN65, DN80, DN100, DN125, DN150 and DN200  
Standard available flanges: EN 1092 PN16, AS 2129 table F, ANSI 150 (DN15 and DN20) and ANSI 125 (DN25 to DN200).



### Materials

No. Part	Material	
1 Body	Cast iron	DIN 1691 GG 20
2 Cap DN15 to DN50	SG iron	DIN 1693 GGG 40
Cover DN65 to DN200	Cast iron	DIN 1691 GG 20
3 Cap gasket	Reinforced exfoliated graphite	
4 Strainer screen	Austenitic stainless steel	ASTM A240 316L
5 Cap studs	Carbon steel	BS 4439 Gr. 8.8
Cap nuts	Carbon steel	BS 3692 Gr. 8

## K<sub>v</sub> values

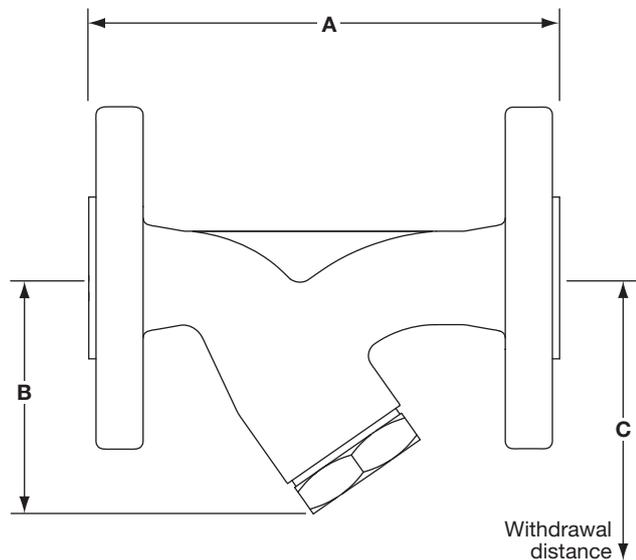
Size	DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
Perforations 0.8, 1.6 and 3.0 mm	5	8	13	22	29	46	72	103	155	237	340	588
Mesh 40 and 100	5	8	13	22	29	46	72	103	155	237	340	588
Mesh 200	4	6	10	17	23	37	58	83	124	186	268	464

For conversion:  $C_V(\text{UK}) = K_V \times 0.963$   $C_V(\text{US}) = K_V \times 1.156$

## Dimensions/weights (approximate) in mm and kg

Size	PN16 AS2129 ANSI*			Screening area cm <sup>2</sup>		Weight
	A	A	A	B	C	
DN15	130	130	130	70	110	27
DN20	150	147	150	80	130	43
DN25	160	157	154	95	150	73
DN32	180	176	176	135	225	135
DN40	200	194	194	145	240	164
DN50	230	224	224	175	300	251
DN65	290	288	228	200	335	327
DN80	310	304	304	210	340	361
DN100	350	350	350	255	415	545
DN125	400	400	400	300	510	843
DN150	480	480	480	345	575	1117
DN200	600	598	598	435	730	1909

\* DN15 and DN20 ANSI 150 and, DN25 to DN200 ANSI 125



## Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-S60-18) supplied with the product.

### 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 DN25 Spirax Sarco Fig 33 strainer having EN 1092 PN16 flanged connections. The strainer must be supplied with a 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.

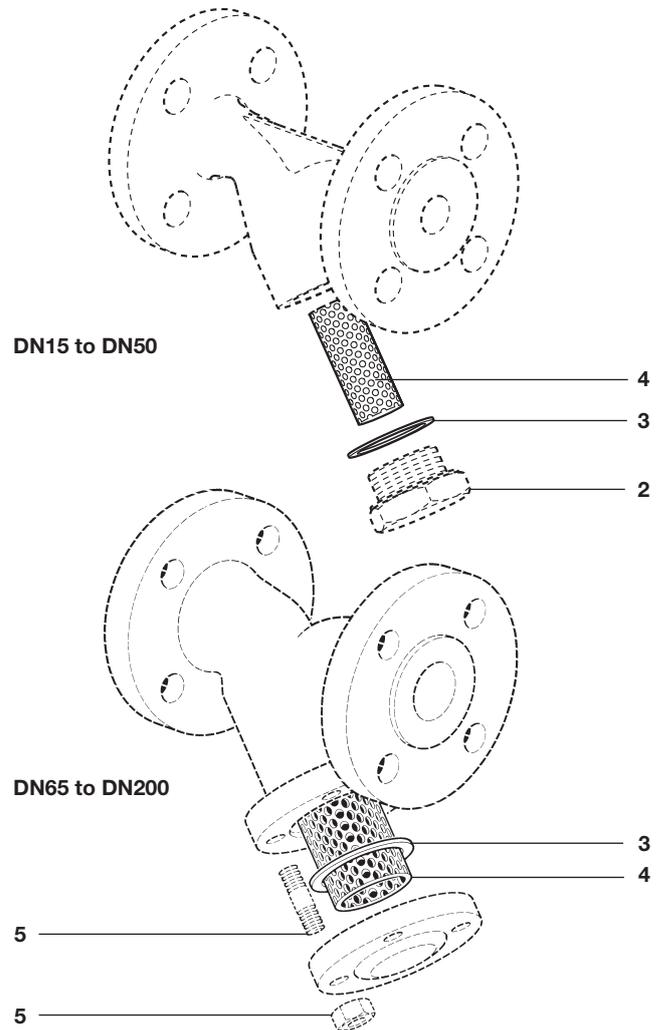
### Available spares

Strainer screen (state material, size of perforation 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 perforations or mesh required.

**Example:** 1 - Strainer screen, stainless steel with 0.8 mm perforations for a DN65 Spirax Sarco Fig 33 strainer.



## Recommended tightening torques

Item	Qty	Size		or mm		N m
2	1	DN15	36		M28	50 - 55
	1	DN20	38		M32	60 - 66
	1	DN25	50		M42	100 - 110
	1	DN32	46		M56	150 - 165
	1	DN40	50		M60	170 - 185
	1	DN50	60		M72	190 - 210
5	8	DN65	19		M12 x 40	20 - 24
	8	DN80	19		M12 x 40	30 - 35
	8	DN100	24		M16 x 50	70 - 77
	8	DN125	24		M16 x 50	80 - 88
	8	DN150	30		M20 x 60	100 - 110
	12	DN200	30		M20 x 70	90 - 100