



TI-P064-02  
 ST Issue 11

## Fig 34 Carbon Steel Strainer - ASTM Material

### Description

The Fig 34 is an integrally flanged Y-type strainer designed to remove rust, scale and other debris from the pipeline. It is produced from carbon steel, ASTM material.

The standard stainless steel screen in the DN15 to DN80 is 0.8 mm perforations and in the DN100 to DN200 it is 1.6 mm perforations.

**NB:** A low temperature carbon steel strainer is available on request.

### Standards

This product fully complies with the requirements of the European Pressure Equipment Directive 97/23/EC.

### Certification

The product is available with a manufacturer's Typical Test Report as standard and certification to EN 10204 3.1 for body and cap by order. **Note:** All certification / inspection requirements must be stated at the time of order placement.

### Optional extras

#### Strainer screens

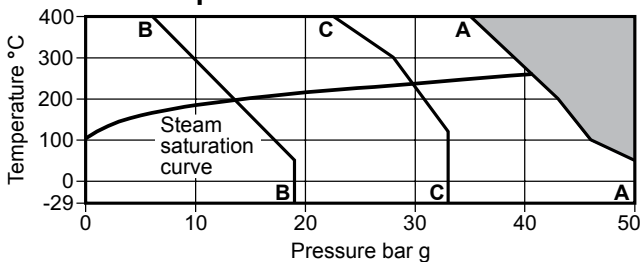
Stainless steel screen	Perforations	1.6 mm (DN15 to DN80) 3.0 mm (DN15 to DN200)
	Mesh	40, 100 and 200
Monel screen	Perforations	0.8 mm (DN15 to DN80) 1.6 mm (DN100 to DN200) 3.0 mm (DN15 to DN200)
	Mesh	100

#### 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 to DN125	1 1/4"	3/4"
DN150 and DN200	2"	3/4"

### Pressure/temperature limits



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

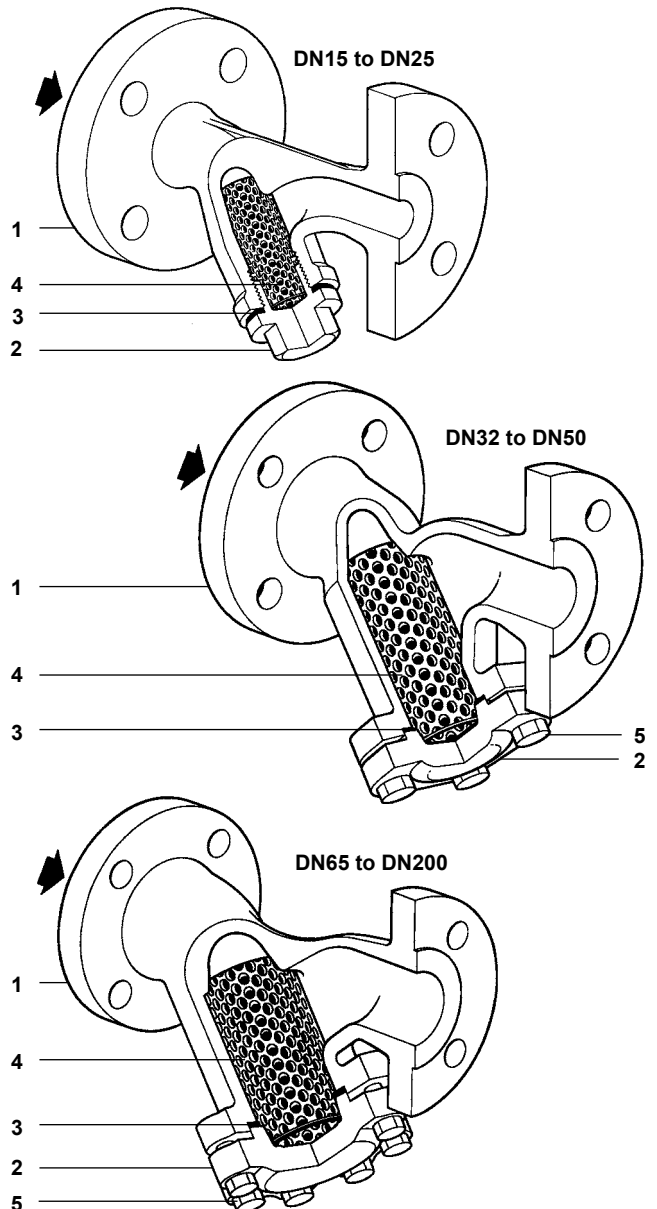
**A - A** Flanged ASME 300                      **C - C** Flanged JIS/KS 20  
**B - B** Flanged ASME 150

Body design conditions		PN50 / ASME 300
PMA	Maximum allowable pressure	50 bar g @ 37.7°C
TMA	Maximum allowable temperature	398.8°C @ 34.8 bar g
Minimum allowable temperature		-29°C
PMO	Maximum operating pressure	50 bar g @ 37.7°C
TMO	Maximum operating temperature	398.8°C @ 34.8 bar g
Minimum operating temperature		-29°C

**Note:** For lower operating temperatures consult Spirax Sarco.  
 Designed for a maximum cold hydraulic test pressure of 78 bar g

### Sizes and pipe connections

DN15, DN20, DN25, DN32, DN40, DN50, DN65, DN80, DN100, DN125, DN150 and DN200  
 Standard flange ASME Class 150, ASME Class 300 and JIS/KS 20.



### Materials

No.	Part	Material
1	Body	Carbon steel    ASTM A216 WCB
2	Cap	DN15 - DN50    Forged steel    A105N
		DN65 - DN200    Carbon steel    ASTM A216 WCB
3	Cap gasket	Reinforced exfoliated graphite
4	Strainer screen	Stainless steel    ASTM A240 316L
5	Bolts	Carbon steel    ASTM A193 B7

**First for Steam Solutions**

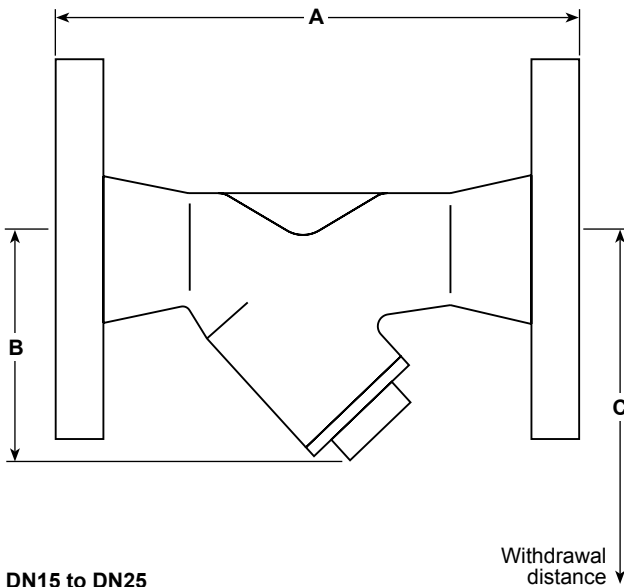
**K<sub>v</sub> values**

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

Size	DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
Perforations 0.8, 1.6 and 3 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

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

Size	ASME			B	C	Screening area cm <sup>2</sup>	Weight
	150 A	300 A	JIS/ KS 20 A				
DN15	120	127	126	70	110	27	2.1
DN20	144	150	150	80	130	43	2.9
DN25	154	160	159	95	150	73	3.8
DN32	180	180	178	130	235	135	6.5
DN40	200	208	202	146	260	164	9.0
DN50	230	240	232	180	320	251	10.5
DN65	290	289	278	200	325	327	17.5
DN80	310	311	297	205	330	361	24.0
DN100	351	351	333	255	405	545	30.0
DN125	401	401	383	315	510	843	49.0
DN150	473	478	461	345	560	1 117	68.0
DN200	593	600	577	440	710	1 909	128.0



DN15 to DN25

**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.

**Warning:**

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

**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 DN40 Fig 34 strainer having flanged ASME 300 connections 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.

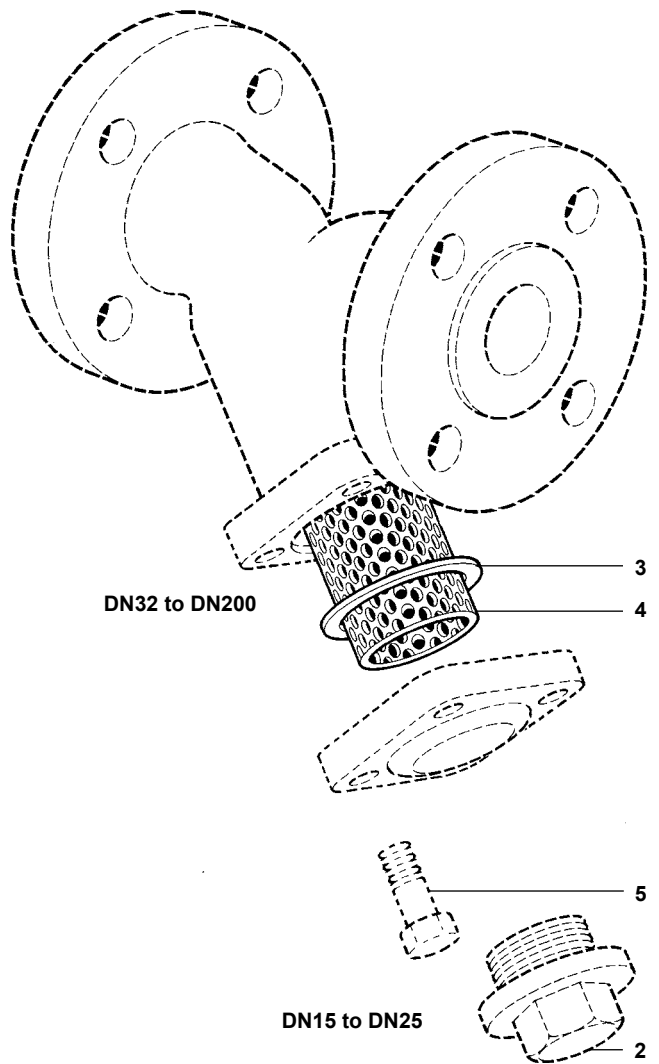
**Available spares**

Strainer screen (state material, 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 off Strainer screen, stainless steel having 0.8 mm perforations for a DN50 Spirax Sarco Fig 34 strainer having ASME 300 connections.



**Recommended tightening torques**

Item	Size	Qty	or		N m
2	DN15	1	22		50 - 55
	DN20	1	27		60 - 66
	DN25	1	27		100 - 110
5	DN32 to DN65	4	19	M12 x 30	20 - 24
	DN80	4	19	M12 x 35	30 - 35
	DN100	8	24	M16 x 45	50 - 55
	DN125	8	30	M20 x 50	70 - 77
	DN150	8	30	M20 x 55	80 - 88
	DN200	12	36	M24 x 65	120 - 130