



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 ($\frac{1}{2}$ " to 3") is 0.8 mm perforations and in the DN100 to DN200 (4" to 8") it is 1.6 mm perforations.

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

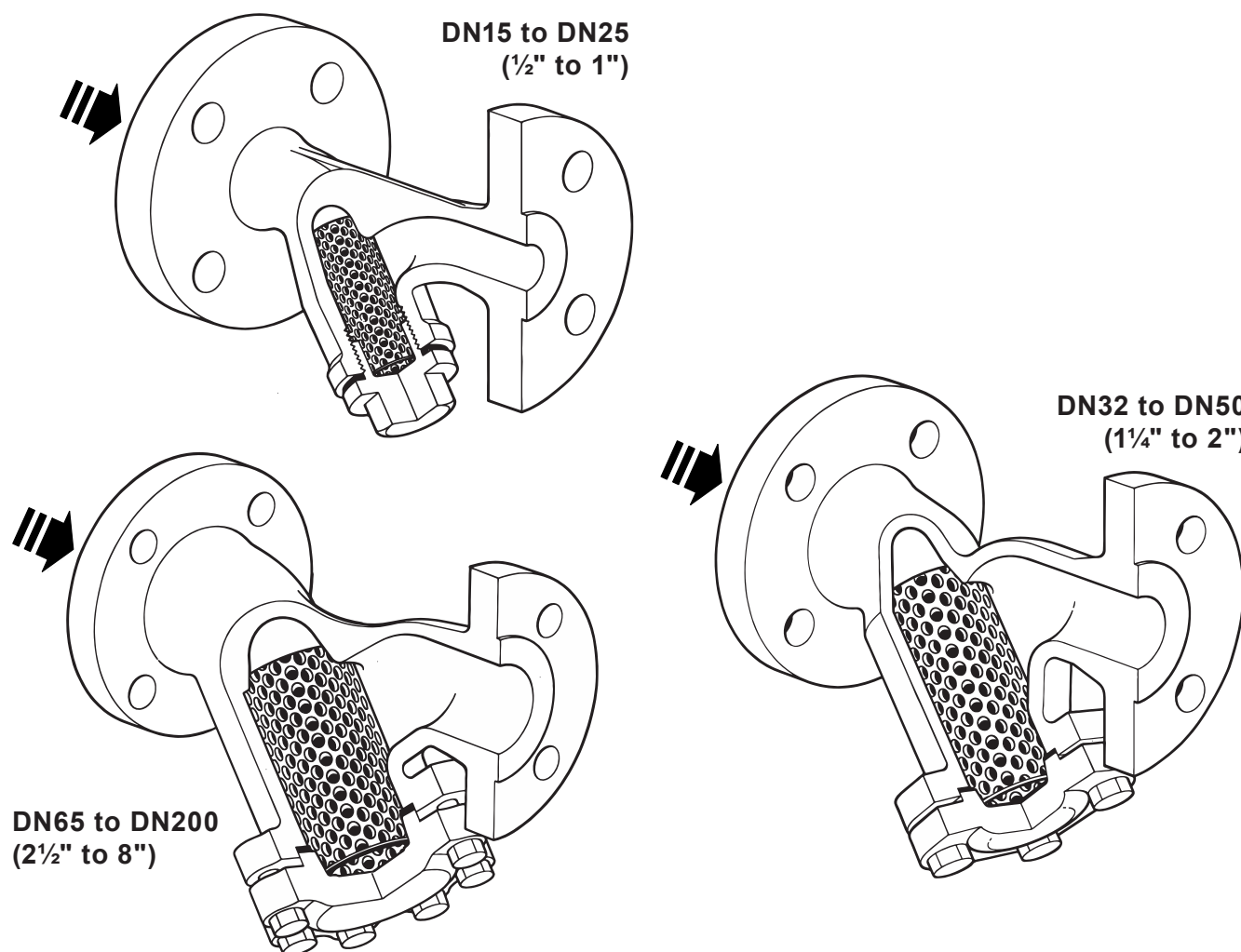
Standards

This product fully complies with the requirements of the European Pressure Equipment Directive 2014/68/EU.

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	(½" to 3")
		3.0 mm	DN15 to DN200	(½" to 8")
	Mesh	40, 100 and 200		
Monel screen	Perforations	0.8 mm	DN15 to DN80	(½" to 3")
		1.6 mm	DN100 to DN200	(4" to 8")
		3.0 mm	DN15 to DN200	(½" to 8")
	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.

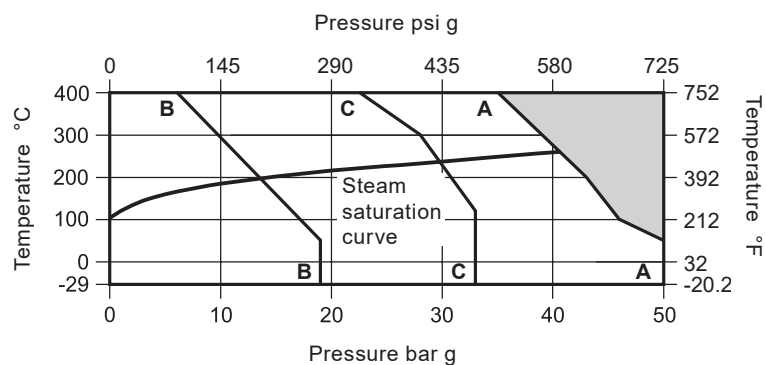
Strainer size	Blowdown valve	Drain valve
DN15 (½")	¼"	¼"
DN20 and DN25 (¾" and 1")	½"	½"
DN32 and DN40 (1¼" and 1½")	1"	1"
DN50 to DN125 (2" to 5")	1¼"	1¼"
DN150 and DN200 (6" and 8")	2"	¾"

Sizes and pipe connections

DN15, DN20, DN25, DN32, DN40, DN50, DN65, DN80, DN100, DN125, DN150 and DN200
(½", ¾", 1", 1¼", 1½", 2", 2½", 3", 4", 5", 6" and 8")

Standard flange ASME Class 150, ASME Class 300 and JIS/KS 20.

Pressure/temperature limits



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

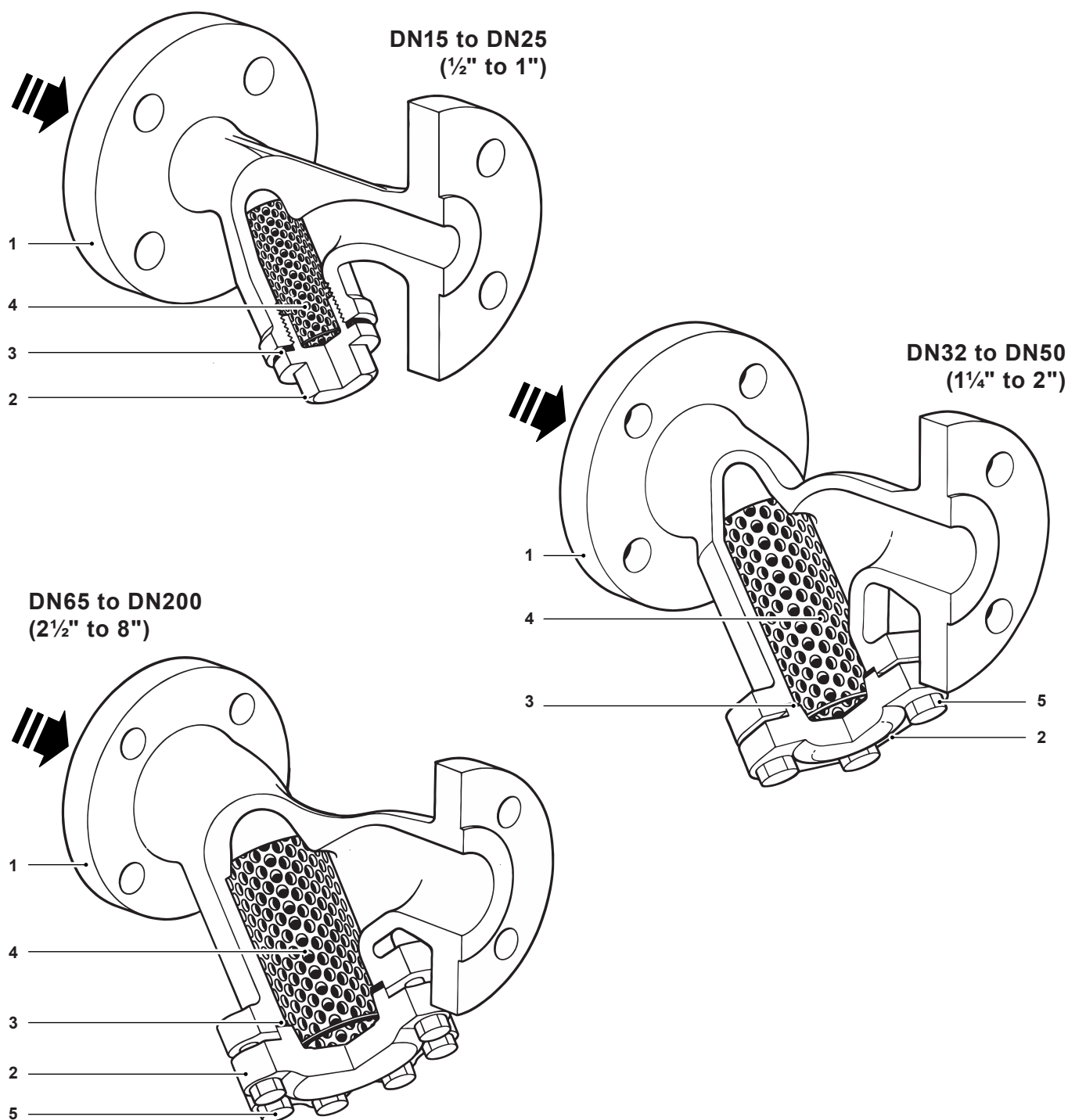
A - A Flanged ASME 300

B - B Flanged ASME 150

C - C Flanged JIS/KS 20

Body design conditions		PN50/ASME 300	
PMA	Maximum allowable pressure	50 bar g @ 37.7 °C	725 psi g @ 100 °F
TMA	Maximum allowable temperature	398.8 °C @ 34.8 bar g	750°F @ 505 psi g
Minimum allowable temperature		-29 °C	-20.2 °F
PMO	Maximum operating pressure	50 bar g @ 37.7 °C	725 psi g @ 100 °F
TMO	Maximum operating temperature	398.8 °C @ 34.8 bar g	750°F @ 505 psi g
Minimum operating temperature		-29 °C	-20.2 °F
Note: For lower operating temperatures consult Spirax Sarco.			
Product is safe for use under full vacuum conditions			
Designed for a maximum cold hydraulic test pressure of		78 bar g	1131 psi g

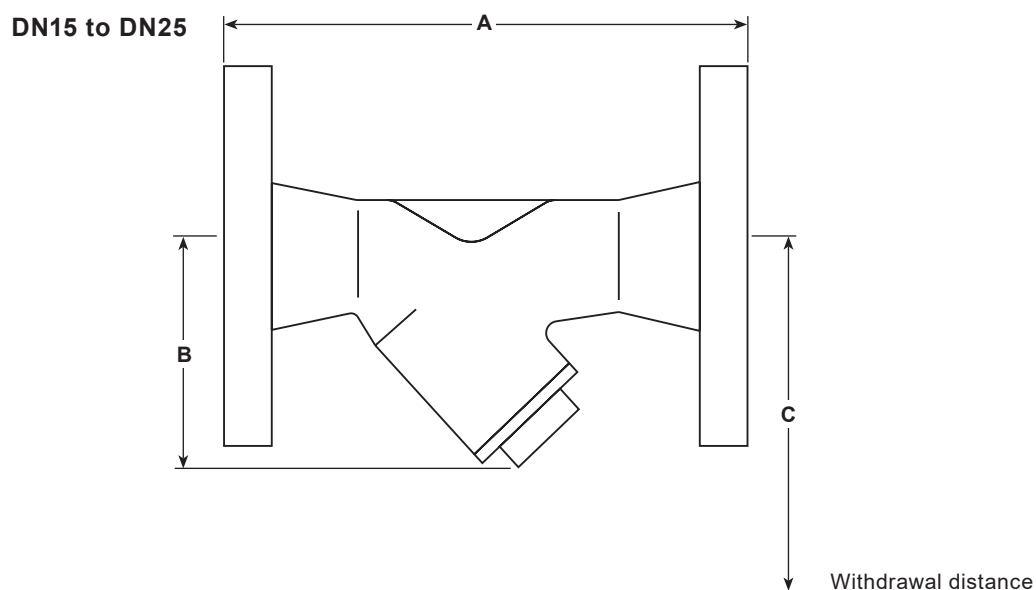
Materials



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

Fig 34 Carbon Steel Strainer - ASTM Material

Dimensions/weights (approximate) in mm (inches) and kg (lbs)



Size	ASME 150 A	ASME 300 A	JIS/KS 20 A	B	C	Screening area cm ² (in ²)	Weight
DN15 (½")	120 (4.72)	127 (5)	126 (4.96)	70 (2.76)	110 (4.33)	27 (4.19)	2.1 (4.63)
DN20 (¾")	144 (5.67)	150 (5.91)	150 (5.91)	80 (3.15)	130 (5.12)	43 (6.67)	2.9 (6.39)
DN25 (1")	154 (6.06)	160 (6.30)	159 (6.26)	95 (3.74)	150 (5.91)	73 (11.3)	3.8 (8.38)
DN32 (1¼")	180 (7.09)	180 (7.09)	178 (7.01)	130 (5.12)	235 (9.25)	135 (20.9)	6.5 (14.3)
DN40 (1½")	200 (7.87)	208 (8.19)	202 (7.95)	146 (5.75)	260 (10.2)	164 (25.4)	9.0 (19.8)
DN50 (2")	230 (9.06)	240 (9.45)	232 (9.13)	180 (7.09)	320 (12.6)	251 (38.9)	10.5 (23.1)
DN65 (2½")	290 (11.4)	289 (11.4)	278 (10.9)	200 (7.87)	325 (12.8)	327 (50.7)	17.5 (38.6)
DN80 (3")	310 (12.2)	311 (12.24)	297 (11.7)	205 (8.07)	330 (13.0)	361 (56.0)	24.0 (52.9)
DN100 (4")	351 (13.8)	351 (13.8)	333 (13.1)	255 (10.0)	405 (15.9)	545 (84.5)	30.0 (66.1)
DN125 (5")	401 (15.8)	401 (15.8)	383 (15.1)	315 (12.4)	510 (20.1)	843 (131)	49.0 (108)
DN150 (6")	473 (18.6)	478 (18.8)	461 (18.1)	345 (13.6)	560 (22.0)	1 117 (173)	68.0 (150)
DN200 (8")	593 (23.3)	600 (23.6)	577 (22.7)	440 (17.3)	710 (28.0)	1 909 (296)	128.0 (282)

Kv values

Size	DN15 (½")	DN20 (¾")	DN25 (1")	DN32 (1¼")	DN40 (1½")	DN50 (2")	DN65 (2½")	DN80 (3")	DN100 (4")	DN125 (5")	DN150 (6")	DN200 (8")
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

For conversion:

$C_v \text{ (UK)} = K_v \times 0.963$

$C_v \text{ (US)} = K_v \times 1.156$

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 a grey line are not supplied as spares.

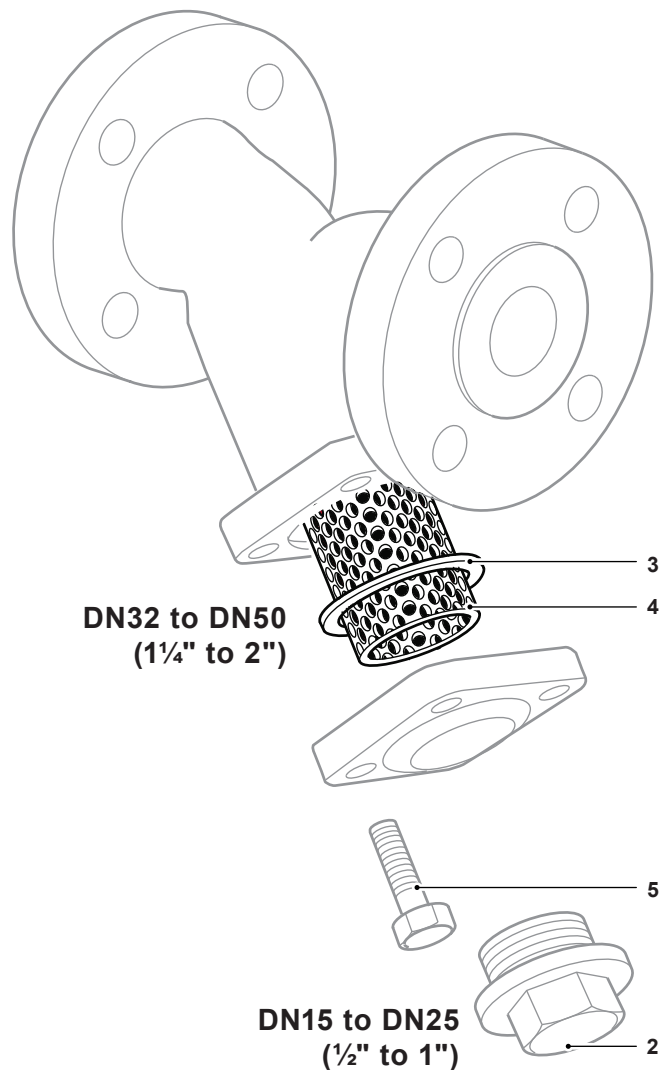
Available spares

Strainer screen (state material, 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 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	ft lbf
2	DN15	(½")	1	22	50 - 55	37 - 41
	DN20	(¾")	1	27	60 - 66	44 - 49
	DN25	(1")	1	27	100 - 110	74 - 81
5	DN32 to DN40	(1¼" to 1½")	4	19 M12 x 30	20 - 24	15 - 18
	DN50	(2")	6	19 M12 x 35	20 - 24	15 - 18
	DN65	(2½")	8	19 M12 x 35	20 - 24	15 - 18
	DN80	(3")	8	19 M12 x 35	30 - 35	22 - 26
	DN100	(4")	8	24 M16 x 45	50 - 55	37 - 41
	DN125	(5")	8	30 M20 x 50	70 - 77	52 - 57
	DN150	(6")	8	30 M20 x 55	80 - 88	59 - 65
	DN200	(8")	12	36 M24 x 65	120 - 230	89 - 170