



TI-P160-02
CMGT Issue 15

Fig 36 Austenitic Stainless Steel Strainer

Description

The Fig 36 is an austenitic stainless steel integrally flanged Y-type strainer.

The standard stainless steel screen in the DN15 to DN80 ($\frac{1}{2}$ " - 3") size range has 0.8 mm perforations, in the DN100 to DN200 (4" to 8") size range it has 1.6 mm perforations. Other perforations, mesh sizes and monel screens are available as options. 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 2014/68/EU and carries the mark when so required.

Certification

The product is available with a manufacturers' Typical Test Report as standard and EN 10204 3.1 for body and cap by special request.

Note: All certification/inspection requirements must be stated at the time of order placement.

Sizes and pipe connections

DN15, DN20, DN25, DN32, DN40, DN50, DN65, DN80, DN100, DN125, DN150 and DN200

($\frac{1}{2}$ ", $\frac{3}{4}$ ", 1", 1 $\frac{1}{4}$ ", 2", 1 $\frac{1}{2}$ ", 3", 4", 5", 6" and 8")

Standard flange:

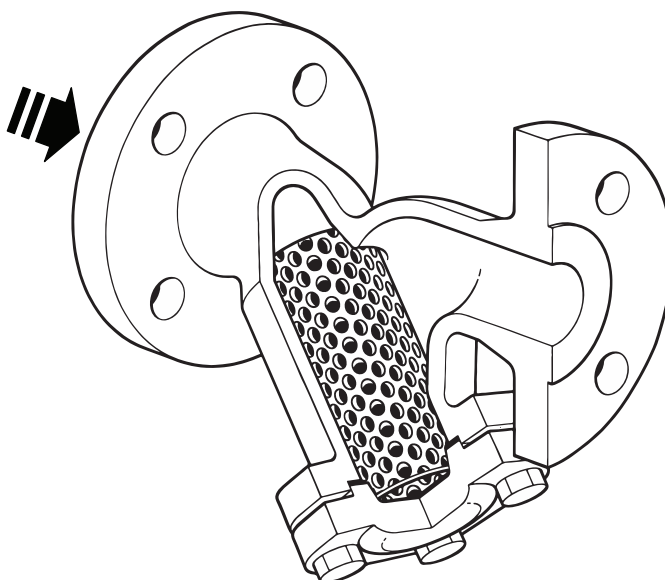
EN 1092 PN16, PN25 and PN40 (DN15 to DN50 ($\frac{1}{2}$ " to 2"))

EN 1092 PN25 and PN40 (DN65 to DN150 (2 $\frac{1}{2}$ " to 6"))

EN 1092 PN40 (DN200 (8"))

ANSI Class 150 and ANSI Class 300 (All sizes)

JIS/KS flanges are available on request.

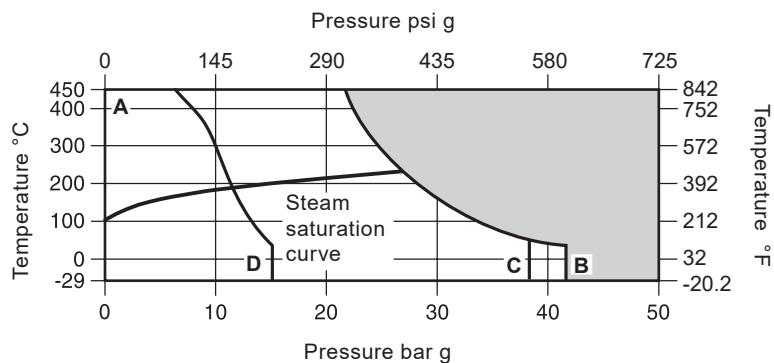


Optional extras

Strainer screens	Stainless steel screens	Perforations	1.6 mm (DN15 to DN80 ($\frac{1}{2}$ " to 3"))
			3.0 mm (DN15 to DN200 ($\frac{1}{2}$ " to 8"))
	Monel screens	Mesh	40, 100, 200
			0.8 mm (DN15 to DN80 ($\frac{1}{2}$ " to 3"))
		Perforations	1.6 mm (DN100 to DN200 (4" to 8"))
			3.0 mm (DN15 to DN200 ($\frac{1}{2}$ " to 8"))
		Mesh	100

Blowdown or drain valve connections	Strainer size	Blowdown valve	Drain valve
	DN15 ($\frac{1}{2}$ ")	$\frac{1}{4}$ "	$\frac{1}{4}$ "
	DN20 and DN25 ($\frac{1}{2}$ " and 1")	$\frac{1}{2}$ "	$\frac{1}{2}$ "
	DN32 and DN40 (1 $\frac{1}{4}$ " and 1 $\frac{1}{2}$ ")	1"	$\frac{3}{4}$ "
	DN50 to DN125 (2" and 5")	1 $\frac{1}{4}$ "	$\frac{3}{4}$ "
	DN150 and DN200 (6" and 8")	2"	$\frac{3}{4}$ "

Pressure/temperature limits



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

A - B Flanged ANSI 300.

A - C Flanged EN 1092 PN40.

Body design conditions		ANSI 300 (PN50)	
PMA	Maximum allowable pressure	41 bar g @ 38 °C	595 psi g @ 100 °F
TMA	Maximum allowable temperature	450 °C @ 21 bar g	842 °F @ 305 psi g
Minimum allowable temperature		-29 °C	-20.2 °F
PMO	Maximum operating pressure	ANSI 150	16 bar g
		PN40	38 bar g
		ANSI 300	41 bar g
TMO	Maximum operating temperature	450 °C @ 21 bar g	842 °F @ 305 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:		76 bar g	1102 psi g

Kv values

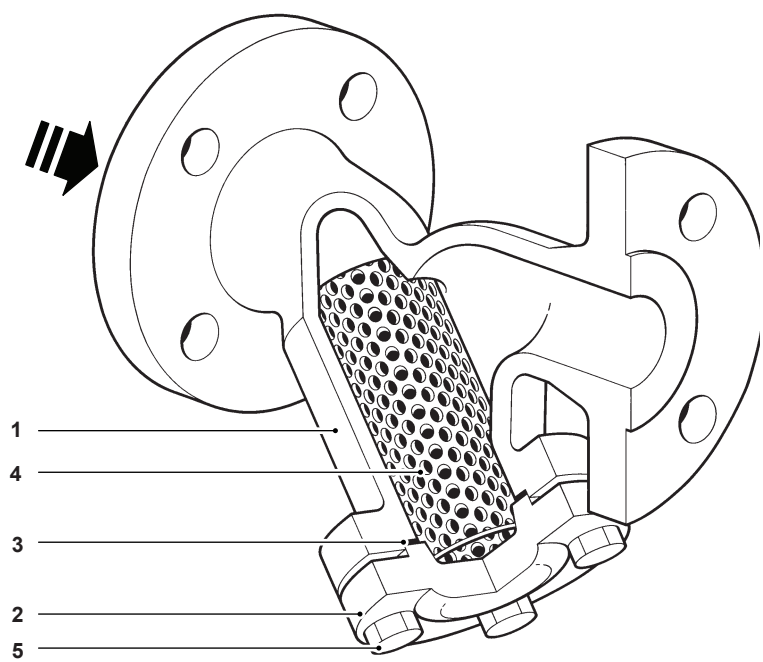
Size	DN15 (½")	DN20 (¾")	DN25 (1")	DN32 (1¼")	DN40 (1½")	DN50 (2")	DN65 (2½")	DN80 (3")	DN100 (4")	DN125 (5")	DN150 (6")	DN200 (8")
Perforations 0.8, 1.6 and 3 mm	5	8	13	22	29	46	72	103	155	237	340	588
Mesh 40 and 100	5	8	13	22	29	46	72	103	155	237	340	588
Mesh 200	4	6	10	17	23	37	58	83	124	186	268	464

For conversion:

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

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

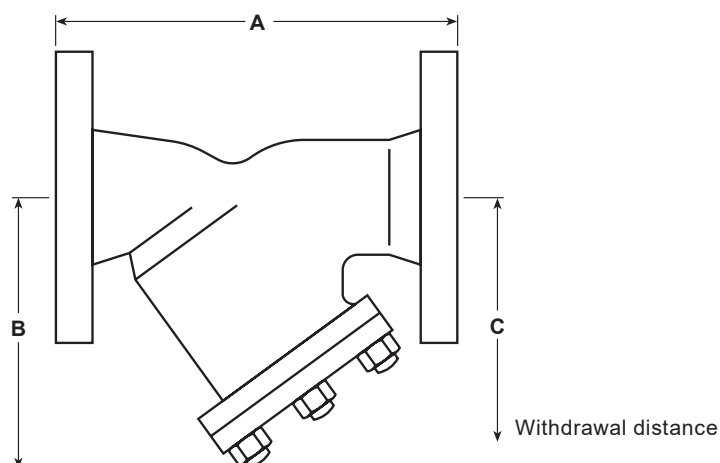
Materials



No.	Part	Size	Material	
1	Body		Austenitic stainless steel	ASTM A351 CF3M
2	Cap	DN15 - DN50 (½" - 2")	Austenitic stainless steel	ASTM A351 CF3M
		DN65 - DN200 (2½" - 8")	Austenitic stainless steel	ASTM A351 CF3M
3	Cap gasket		Reinforced exfoliated graphite	
4	Strainer screen		Austenitic stainless steel	ASTM A240 316L
5	Cap bolt		Austenitic stainless steel	ISO 3506 A2-70

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



Size	EN1092 PN16/25/40 A	ANSI 150 A	ANSI 300 A	B	C	Screening area cm ²	Weight
DN15	130 (5.12)	124 (4.88)	130 (5.12)	70 (2.76)	120 (4.72)	28 (4.34)	2.5 (5.51)
DN20	150 (5.91)	142 (5.59)	149 (5.87)	80 (3.15)	130 (5.12)	46 (7.13)	4.5 (9.92)
DN25	160 (6.30)	156 (6.14)	163 (6.42)	95 (3.74)	162 (6.38)	79 (12.2)	5.0 (11.0)
DN32	180 (7.09)	180 (7.09)	180 (7.09)	130 (5.12)	235 (9.25)	135 (20.9)	10.0 (22.0)
DN40	200 (7.87)	200 (7.87)	208 (8.19)	146 (5.75)	260 (10.2)	161 (25.0)	12.0 (26.5)
DN50	230 (9.06)	230 (9.06)	241 (9.49)	180 (7.09)	320 (12.6)	251 (38.9)	16.5 (36.4)
DN65	290 (11.4)	290 (11.4)	290 (11.4)	200 (7.87)	325 (12.8)	325 (12.8)	23.0 (50.7)
DN80	310 (12.2)	310 (12.2)	310 (12.2)	205 (8.07)	330 (13.0)	360 (55.8)	35.6 (78.5)
DN100	351 (13.8)	351 (13.8)	351 (13.8)	255 (10.0)	405 (15.9)	540 (83.7)	38.5 (84.9)
DN125	400 (15.7)	400 (15.7)	400 (15.7)	315 (12.4)	510 (20.1)	840 (130)	76.0 (168)
DN150	480 (18.9)	475 (18.7)	480 (18.9)	345 (13.6)	560 (22.0)	1 115 (173)	109.0 (240)
DN200	600 (23.6)	594 (23.4)	600 (23.6)	440 (17.3)	710 (28.0)	1 905 (295)	144.0 (317)

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, once the safety procedures have been observed. It is recommended that a new gasket is used whenever maintenance is undertaken.

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.

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 DN32 Fig 36 strainer having a stainless steel screen with 0.8 mm perforations. The connections are to be flanged EN 1092 PN40.

Spare parts

The spare parts available are shown in solid outline. Parts drawn in a grey line are not supplied as spares.

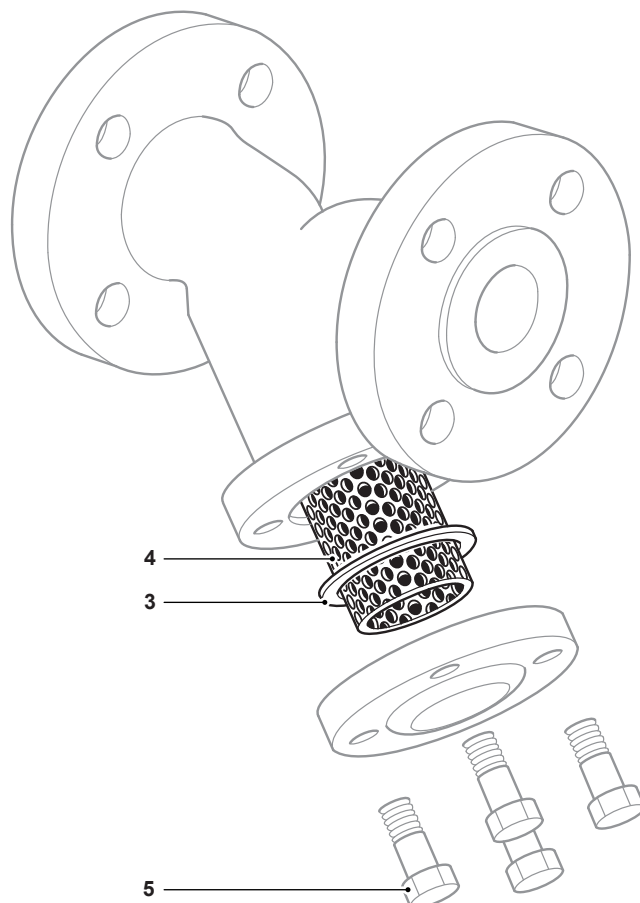
Available spares

Strainer screen (state material, size of perforations or mesh and size of strainer)	4
Cap gasket (3 off)	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 stainless steel strainer screen, having 0.8 mm perforations for a DN50 Spirax Sarco Fig 36 strainer having EN 1092 PN40 connections.



Recommended tightening torques

Item	Size	Qty	 or mm		N m	ft lbf
5	DN15 - DN25	4	16 A/F	M10 x 30	22 - 25	16 - 18
	DN32 - DN40	4	19 A/F	M12 x 35	40 - 45	30 - 33
	DN50	8	19 A/F	M12 x 35	40 - 45	30 - 33
	DN65	8	19 A/F	M12 x 45	40 - 45	30 - 33
	DN80	8	19 A/F	M12 x 50	40 - 45	30 - 33
	DN100	8	24 A/F	M16 x 50	100 - 110	74 - 81
	DN125	8	30 A/F	M20 x 60	160 - 170	118 - 125
	DN150	8	30 A/F	M20 x 65	210 - 230	155 - 170
	DN200	8	36 A/F	M20 x 75	210 - 230	155 - 170