



TI-P162-03
ST Issue 1

Fig 18HP
Alloy Steel
Strainer

Description

The Fig 18HP is an alloy steel butt weld Y-type strainer with flanged screen cover that has been designed in accordance with ASME B16.34:2004 and ASME VIII. The standard stainless steel screen in the DN15 to DN50 size range has 0.8 mm perforations – See 'Optional extras' for alternative perforations/mesh sizes and screen materials. If required, the strainer cover can be drilled and tapped for blowdown and drain valves.

Standards

This product fully complies with the requirements of the European Pressure Equipment Directive 97/23/EC and carries the mark when so required.

Certification

This product is available with certification to EN 10204 3.1 and NACE Approval.

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

Sizes and pipe connections

DN15, DN20, DN25, DN32, DN40, DN50 (½", ¾", 1", 1¼", 1½", 2")
Screwed BSP (BS21) and NPT (ASME B 1.20.1)
Socket weld ASME B 16.11 and BS 3799
Butt weld ASME B16.25 Schedule 160, Schedule 80 and Schedule 40

Optional extras

The following optional extras are available for all unit sizes at an extra cost and must be stated at the time of order placement:

0.8 mm (standard), 1 mm, 1.6 mm, 3 mm and 6mm

Perforations: Contact Spirax Sarco for availability of perforations not displayed.

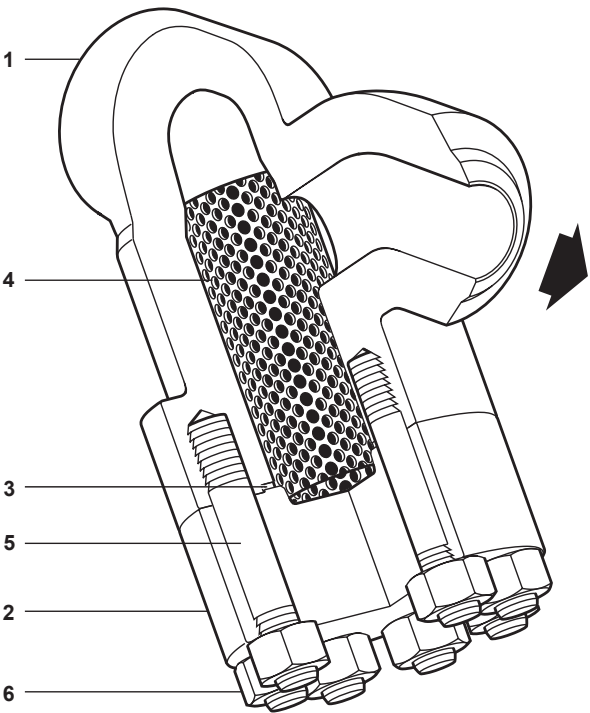
Mesh: M20, M40, M60, M100, M200 and M400
Contact Spirax Sarco for availability of mesh screens not displayed.

Screen material: AISI 316, AISI 316L (standard), AISI 304, AISI 304L and Monel

Blowdown/drain valve connection

The cover can be drilled to the following sizes to enable a blowdown or drain valve to be fitted. This option is available at extra cost.

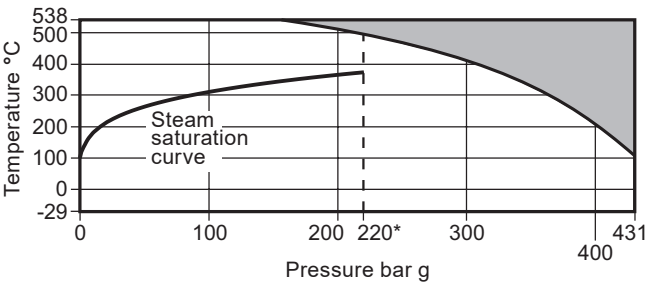
Strainer size	Blowdown valve	Drain valve
DN15 - DN25	½"	½"
DN32 - DN50	1¼"	¾"



Materials

No.	Body	Material
1	Body	Alloy steel EN 10213: 1.7379 and ASTM A217 WC9
2	Cover	Alloy steel EN 10213: 1.7379 and ASTM A217 WC9
3	Cover gasket	Stainless steel + Graphite
4	Strainer screen	Stainless steel AISI 316L
5	Cover studs	Alloy steel ASTM A193 Gr. B16
6	Cover nuts	Alloy steel ASTM A194 Gr. 7

Pressure / temperature limits



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

Body design conditions		ASME 2500
PMA	Maximum allowable pressure	431 bar g @ 38°C
TMA	Maximum allowable temperature	538°C @ 154 bar g
Minimum allowable temperature		-29°C
* PMO	Maximum operating pressure for saturated steam service	220 bar g @ 374°C
TMO	Maximum operating temperature	538°C @ 154 bar g
Minimum operating temperature		-29°C
Note: For lower operating temperatures consult Spirax Sarco		
Designed for a maximum cold hydraulic test pressure of 646 bar g		

Local regulations may restrict the use of this product to below the conditions quoted.
In the interests of development and improvement of the product, we reserve the right to change the specification without notice.

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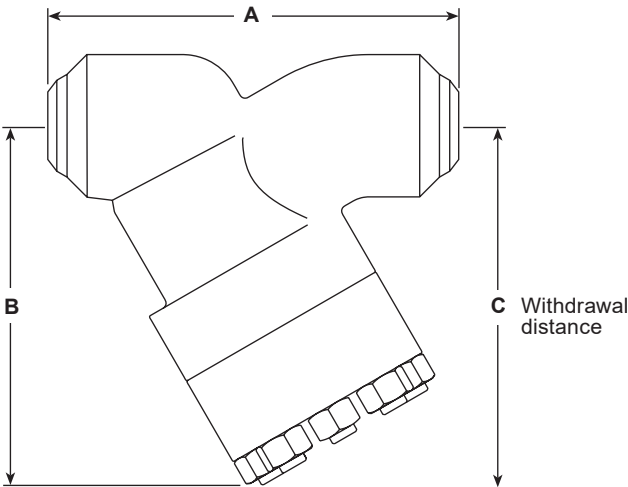
K_V values

Size	DN15	DN20	DN25	DN32	DN40	DN50
perforations 0.8, 1.6 and 3 mm	5	8	13	22	29	46
Mesh M200	4	6	10	17	23	37

Please consult Spirax Sarco for the K_V values of the following screens: 1 mm, 6 mm, M20, M40, M60, M100 and M400.

Dimensions / weights (approximate) in mm and kg

Size	A	B	C	Weight	Volume (L)	Screening area (cm ²)
DN15	180	150	196	8.74	0.130	73 cm ²
DN20				8.79	0.140	
DN25				8.84	0.145	
DN32	280	240	308	28.75	0.850	251 cm ²
DN40				28.82	0.850	
DN50				28.99	0.850	



Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P162-04) supplied with the product.

Warning:

The strainer cover gasket contains a thin stainless steel support ring, which may cause physical injury if 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 horizontal plane. On liquid systems pocket should be point downwards.

Disposal

This product is recyclable. No ecological hazard is anticipated with the disposal of this product, provided due care is taken.

How to order

Example: 1 off Spirax Sarco DN15 Fig 18HP strainer having the standard stainless steel screen with 0.8 mm perforations and Schedule 160 butt weld connections.

Spare parts

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

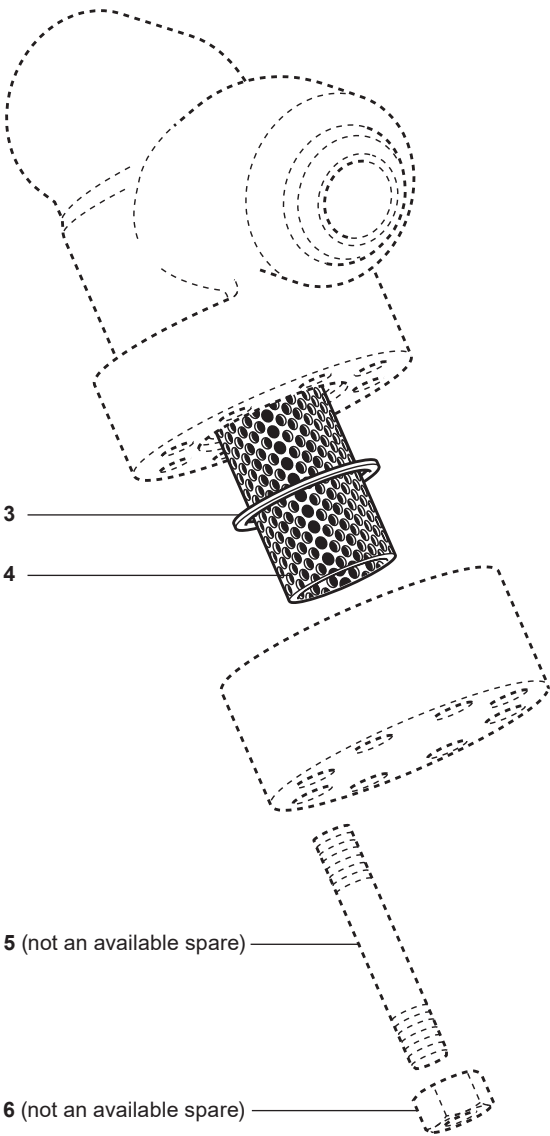
Available spares

	Strainer screen and Cover gasket (state material, perforations or mesh and size of strainer)	4 and 3
Spares kit 1		
Spares kit 2	Cover 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 spares kit required plus the size and type of strainer and perforations or mesh required for the screen.

Example: 1 off Spares kit 1 for a DN50 Spirax Sarco Fig 18HP strainer having butt weld connections. The strainer screen is to be stainless steel with 1.6 mm perforations.



Recommended tightening torques - Items 5 and 6

Sizes	Qty	mm or	N m
DN15 - DN25	4	1¼" ¾" - 10 UNC	140 - 150
DN32 - DN50	8	1¼" ¾" - 10 UNC	120 - 130