



Cert. No. LRQ 0963008

ISO 9001

# spirax/sarco

TI-P162-01

ST Issue 8

## Fig 1738 Carbon Steel Strainer

### Description

The Fig 1738 is a cast carbon steel integrally flanged Y-type strainer with flanged screen cover. 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 cover can be drilled and tapped for blowdown and drain valves if required. An additional feature of the Fig 1738 is that the body can be drilled and tapped for fitting a steam trap.

### Standards

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

### Certification

This product is available with certification to EN 10204 3.1. **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, DN150 and DN200

Standard flanges: EN 1092 PN100, ASME / ANSI 600 and 900.

### Optional extras

#### Strainer screens

Strainer screens	Perforations	1.6 mm	(DN15 to DN80)
	Mesh	40 and 100	
Monel screen	Perforations	0.8 mm	(DN15 to DN80)
		1.6 mm	(DN100 to DN200)
	Mesh	100	

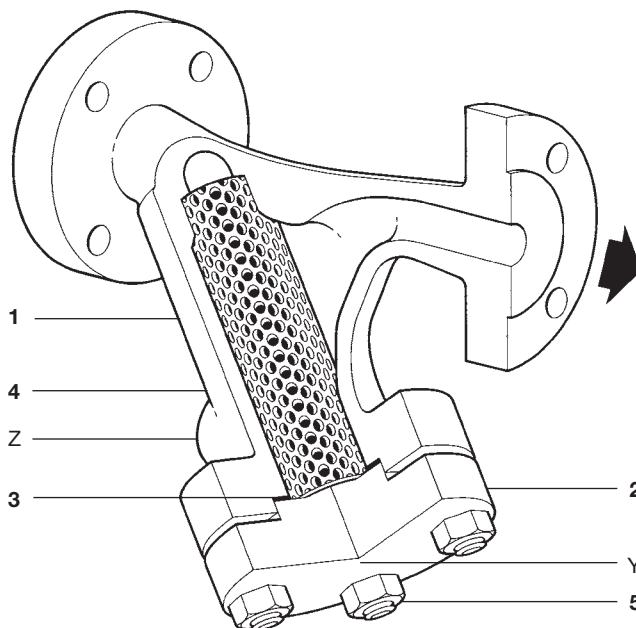
### Blowdown / drain valve and steam trap connection

The cap at location 'Y' can be drilled to enable a blowdown or drain valve to be fitted. The body at location 'Z' can be drilled to enable a steam trap to be fitted. These options are available at extra cost.

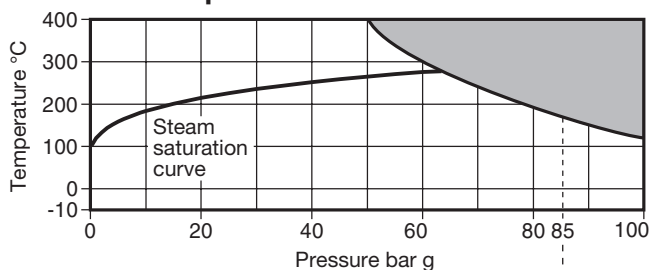
Strainer size	Blowdown/drain valve	Steam trap
DN15	1/4"	3/8"
DN20	1/2"	3/8"
DN25	3/4"	1/2"
DN32	1"	1/2"
DN40	1"	1/2"
DN50	1"	3/4"
DN65	1 1/4"	3/4"
DN80	1 1/2"	3/4"
DN100	1 1/2"	1"
DN150	2"	1"
DN200	2"	1 1/2"

### Materials

No.	Part	Material	
1	Body	Carbon steel	ASTM A216 WCB
2	Cover	DN15 - DN25 Carbon steel	ASTM A105N
		DN32 - DN200 Carbon steel	ASTM A216 WCB
3	Cover gasket	Stainless steel	AISI 304
4	Strainer screen	Stainless steel	AISI 304L
5	Cover studs	Carbon steel	ASTM A193 Gr. B7
	Cover nuts	Carbon steel	ASTM A194 Gr. 2H



### Pressure/temperature limits



Please note: The DN200 is rated to PN85

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

Body design conditions		DN15 to DN150	PN100
		DN200	PN85
PMA	Maximum allowable pressure	100 bar g @ 120°C	
TMA	Maximum allowable temperature	400°C @ 50 bar g	
Minimum allowable temperature		-10°C	
PMO	Maximum operating pressure for saturated steam service	63 bar g @ 280°C	
TMO	Maximum operating temperature	400°C @ 50 bar g	
Minimum operating temperature		-10°C	
<b>Note:</b> For lower operating temperatures consult Spirax Sarco			
ΔPMX	Maximum differential pressure is limited to the PMO		
Designed for a maximum cold hydraulic test pressure of 150 bar g			

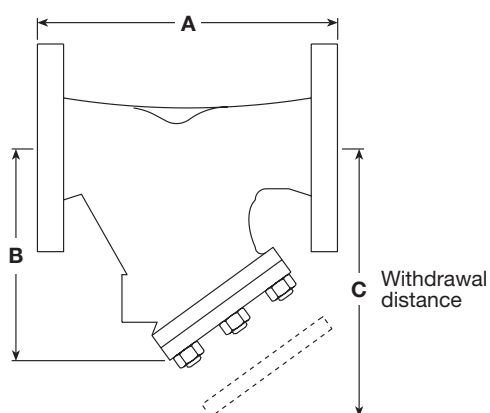
## K<sub>V</sub> values

Size	DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN150	DN200
0.8 mm perforations	5.1	9.2	16.4	27.1	38.1	53.6	91.7	216.5	319.1	463.9	876.2

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

	PN100	ASME 600	ASME 900			
Size	A	A	A	B	C	Weight
DN15	198	202	215	156	246	6.5
DN20	218	221	238	170	275	11.5
DN25	218	220	240	185	288	14.0
DN32	248	256	270	195	323	17.5
DN40	252	255	272	210	343	19.5
DN50	292	296	321	241	385	27.5
DN65	340	342	368	281	451	41.0
DN80	380	384	397	310	492	53.0
DN100	428	437	450	351	564	76.0
DN150	540	560	563	471	760	137.0
DN200	650	670	-	501	950	285.0



## 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 Spirax Sarco DN65 Fig 1738 strainer, flanged to ASME 600 with a stainless steel screen having 0.8 mm perforations.

## Spare parts

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

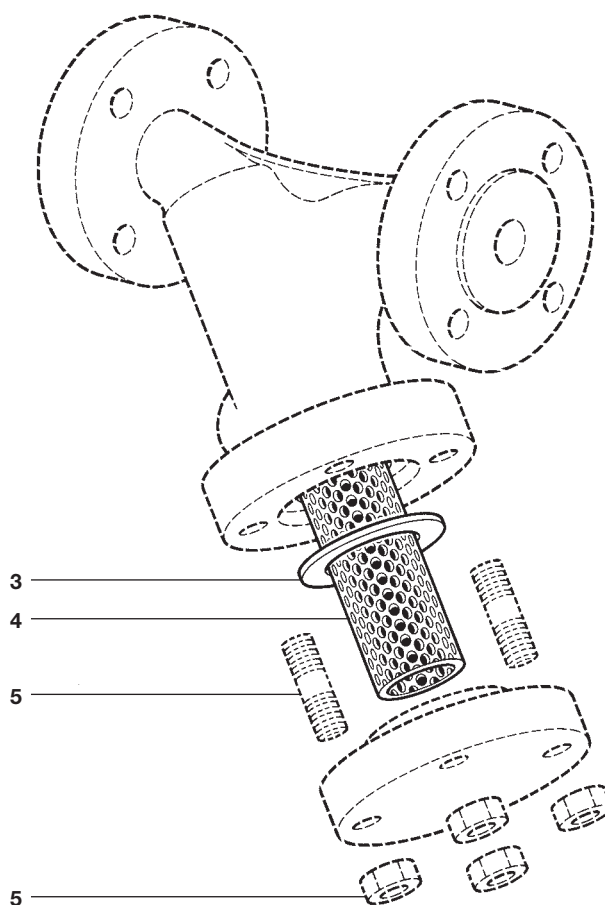
### Available spares

Strainer screen	4
(state material, perforation or mesh and size of strainer)	
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 size and type of strainer and perforation or mesh required.

**Example:** 1 off stainless steel strainer screen having 1.2 mm perforations for a DN80 Spirax Sarco Fig 1738 strainer with EN 1092 PN100 connections.



## Recommended tightening torques

Item	Size	Qty	 or 	mm	N m
5	DN15	4	17 A/F	M10 x 40	14 - 16
	DN20	4	19 A/F	M12 x 45	20 - 22
	DN25	4	19 A/F	M12 x 45	20 - 22
	DN32	8	22 A/F	M14 x 45	27 - 29
	DN40	8	22 A/F	M14 x 45	27 - 29
	DN50	8	19 A/F	M12 x 50	20 - 22
	DN65	8	24 A/F	M16 x 55	50 - 55
	DN80	8	27 A/F	M18 x 55	60 - 66
	DN100	8	30 A/F	M20 x 55	70 - 77
	DN150	8	41 A/F	M27 x 65	90 - 99
	DN200	12	36 A/F	M24 x 76	80 - 88