ST Issue 7



# **Carbon Steel Strainer**

**Description** 

The Fig 7 is a carbon steel integrally flanged pot type strainer. The standard stainless steel screen is 3.2 mm perforations. The body has two bosses that can be drilled and tapped to accomodate pressure gauges and the cover has a 5%" UNC-2B tapping for fitting an eyebolt. The body can also be drained of condensate via a drain plug.

#### **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

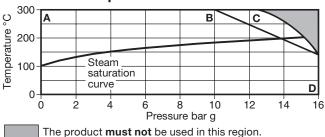
This product is available with certification to EN 10204 3.1. Note: All certification/inspection requirements must be stated at the time of order placement.

**Sizes and pipe connections**DN200 and DN250.
Flanged EN 1092 PN16 and ASME (ANSI) B 16.5 Class 150.

# Optional extras

Pressure gauge connections - Bosses are provided on the body upstream and downstream of the screen which can be drilled and tapped to accommodate pressure gauges.

# Pressure / temperature limits



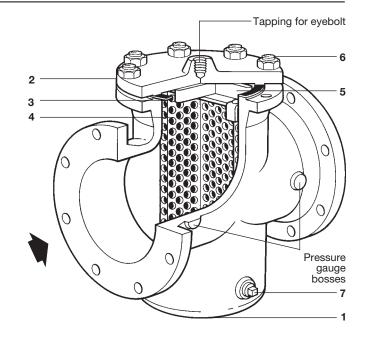
A-C-D Flanged EN 1092 PN16.

A-B-D Flanged ASME (ANSI) 150.

Body d	esign conditions	PN16			
TMA	Maximum allowable temperature	300°C @ 12.3 bar g			
PMA	Maximum allowable pressure	16 bar g @ 100°C			
Minimu	m allowable temperature	-10°C			
TMO	Maximum operating temperature	300°C @ 12.3 bar g			
РМО	Maximum operating pressure (15 bar g for saturated st	16 bar g @ 100°C eam service @ 201°C)			
Minimum operating temperature -10°C					
Designed for a maximum cold hydraulic test pressure of 24 bar g					

# **Materials**

No.	Part	Material		
1	Body	Carbon steel	ASTM A216 WCB	
2	Сар	Carbon steel	ASTM A216 WCB	
3	Cap gasket	Reinforced exfoliated graphite		
4	Strainer screen	Stainless steel	ASTM A240 316L	
5	Frame	Mild steel	BS 970 070 M20	
6	Cap studs	Carbon steel	ASTM A193 B7	
	Cap nuts	Carbon steel	ASTM A194 2H	
7	Drain plug	Steel		

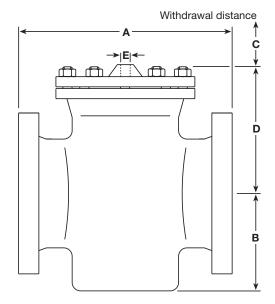


# K<sub>V</sub> values

Size	DN200	DN250		
K <sub>V</sub>	1 196	1 876		
For conversion:	$C_{V}(UK) = K_{V} \times 0.963$	$C_{V}$ (US) = $K_{V} \times 1.156$		

# Dimensions/weights (approximate) in mm and kg

					Screening		
Size	Α	В	С	D	E	area cm <sup>2</sup>	Weight
DN200	406	206	406	247	5/8" UNC-2B	2 129	84
DN250	470	238	470	281	5/8" UNC-2B	3 161	126



# Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-S60-18) supplied with the product.

**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.

### Installation note:

The strainer should be fitted in a horizontal pipeline in the direction of flow as indicated on the body, with the cover at the top. 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.

#### Disposa

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 DN200 Fig 7 strainer flanged to EN 1092 PN16 with stainless steel screen having 3.2 mm perforations.

# **Spare parts**

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

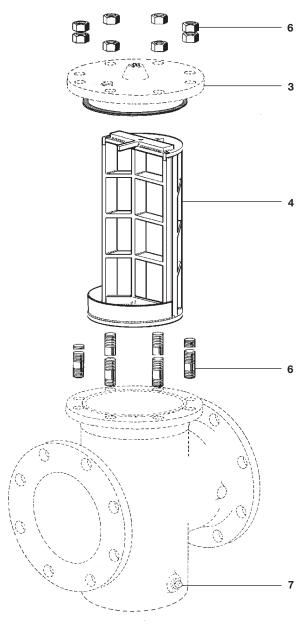
#### Available spares

Strainer screen (state material, size of perforations and size of strainer)		
Cap gasket (packet of 3)		3
Set of cap studs and nuts	DN200 (set of 8)	6
	DN250 (set of 10)	6

#### 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. **Example:** 1 - Stainless steel screen having 3.2 mm perforations for a DN250 Spirax Sarco Fig 7 strainer.

**Note:** When ordering a spare screen it is advisable to order a cap gasket (packet of 3).



## Recommended tightening torques

Item	Size	or mm		N m
6	DN200	(3/4 UNC) to BS 1769		80 - 90
	DN250			110 - 120
7	DN200 DN250		¾" BSP 1" BSP	50 - 55 50 - 55

