Cert. No. LRQ 0963008

ISO 9001

# spirax sarco

**TI-P164-01**
ST Issue 5

# Fig 4, Fig 5 and Fig 6 Brass Strainers

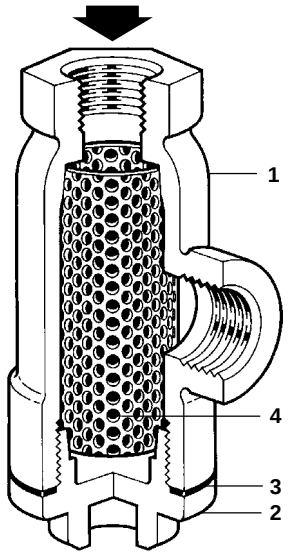


**Fig 4**

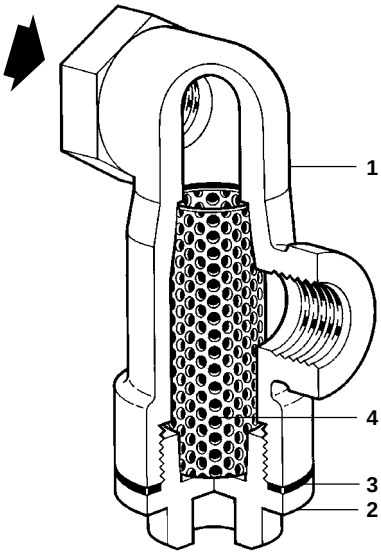


**Fig 5**

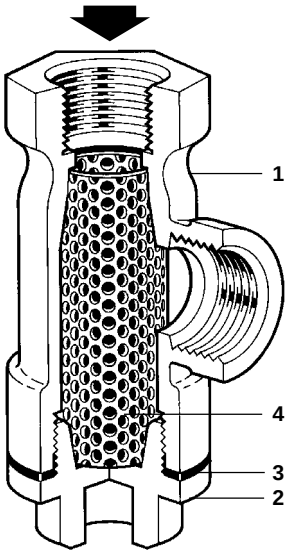


**Fig 6**

## Description

The Fig 4, Fig 5 and Fig 6 are yellow metal screwed strainers. The Fig 4 and Fig 6 are angle type and the Fig 5 is a straight type strainer. The standard stainless steel screen for all types is 0.8 mm perforations. As options, other perforations and mesh sizes are available as well as monel screens. The strainer cap can be drilled and tapped for blowdown and drain valves if required.

## Sizes and pipe connections

**Fig 4 and Fig 5** ½" and ¾", **Fig 6** ½", ¾" and 1"
Screwed BSP (BS 21 parallel) or NPT

## Optional extras

**Strainer screens**

| | | |
|---|---|---|
| **Stainless steel screen** | Perforations | 1.6 and 3 mm |
| | Mesh | 40, 100 and 200 |
| **Monel screen** | Perforations | 0.8 and 3 mm |
| | Mesh | 100 |

**Blowdown or drain valve connections**
The cap can be drilled and tapped to the following sizes to enable a blowdown or drain valve to be fitted at extra cost.

| Strainer size | Blowdown valve or drain valve |
|---|---|
| ½", ¾" | ½" |
| 1" | ¾" |

## Materials

| No. | Part | Material | |
|---|---|---|---|
| 1 | Body | Brass | EN 12165 CW 617N |
| 2 | Cap | Brass | EN 12165 CW 617N |
| 3 | Cap gasket | Reinforced exfoliated graphite | |
| 4 | Strainer screen | Stainless steel | 316L |

## Certification

This product is available with certification to EN 10204 2.2.
**Note:** All certification/inspection requirements must be stated at the time of order placement.

## Limiting conditions (ISO 6552)

| Strainers | Fig 4 Fig 5 | Fig 6 |
|---|---|---|
| Body design conditions | PN16 | PN25 |
| PMA - Maximum allowable pressure | 16 bar g | 25 bar g |
| TMA - Maximum allowable temperature | 250°C | 250°C |
| PMO - Maximum operating pressure | 13.4 bar g | 18.5 bar g |
| TMO - Maximum operating temperature | 250°C | 250°C |
| Minimum operating temperature | -198°C | -198°C |
| Designed for a maximum cold hydraulic test pressure of: | 24 bar g | 38 bar g |

## Operating range

**Fig 4 and Fig 5 strainers**

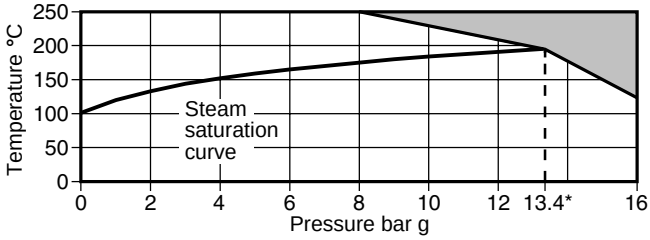
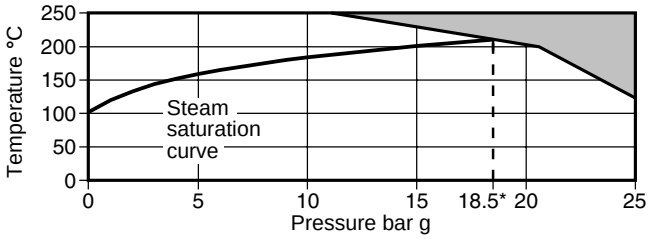



**Fig 6 strainers**




The product must not be used in this region.

***** PMO Maximum operating pressure for saturated steam.

*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.*

## $K_V$ values

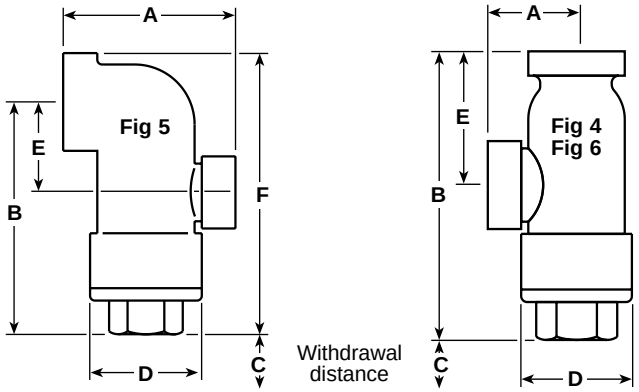
| Size | ½" | ¾" | 1" |
|---|---|---|---|
| **Perforations 0.8, 1.6 and 3 mm** | 4 | 4 | 11 |
| **Mesh 40, 100** | 4 | 4 | 11 |
| **Mesh 200** | 4 | 4 | 9 |

For conversion: $C_V$ (UK) = $K_V$ x 0.963 $C_V$ (US) = $K_V$ x 1.156

## Dimensions / weight (approximate) in mm and kg

**Fig 4 strainer**

| Size | A | B | C | D | E | F | Screening area $cm^2$ | Weight |
|---|---|---|---|---|---|---|---|---|
| **½"** | 36 | 98 | 67 | 42 | 44 | - | 43 | 0.7 |
| **¾"** | 36 | 98 | 67 | 42 | 44 | - | 43 | 0.7 |
| **Fig 5 strainer** | | | | | | | | |
| **½"** | 69 | 96 | 67 | 42 | 41 | 116 | 43 | 0.8 |
| **¾"** | 69 | 96 | 67 | 42 | 41 | 116 | 43 | 0.8 |
| **Fig 6 strainer** | | | | | | | | |
| **½"** | 41 | 121 | 85 | 51 | 60 | - | 73 | 1.0 |
| **¾"** | 41 | 121 | 85 | 51 | 60 | - | 73 | 1.0 |
| **1"** | 53 | 151 | 111 | 65 | 79 | - | 135 | 1.6 |




## Safety information

For full details see the Installation and Maintenance Instructions (IM-S60-19) supplied with the product.

**Pressure**

Before attempting any maintenance of the strainer, consider what is or may have been in the pipeline. Ensure that any pressure is isolated and safely vented to atmospheric pressure before attempting to maintain the strainer. This is easily achieved by fitting Spirax Sarco depressurisation valves type DV (see separate literature for details). Do not assume that the system is depressurised even when a pressure gauge indicates zero.

**Temperature**

Allow time for temperature to normalise after isolation to avoid the danger of burns and consider whether protective clothing (including safety glasses) is required.

**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

For full details see the Installation and Maintenance Instructions (IM-S60-19) supplied with the product.

The strainer should be installed with the strainer cap at the bottom with the inlet at the top on Figs 4 and 6, and at the side on Fig 5.

## Maintenance

For full details see the Installation and Maintenance Instructions (IM-S60-19) supplied with the product.

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.

## 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 ½" Fig 5 strainer, screwed BSP, with a stainless steel screen having 0.8 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<br>(state material, size of perforation 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 - Stainless steel strainer screen having 0.8 mm perforations for a ½" Spirax Sarco Fig 5 strainer.

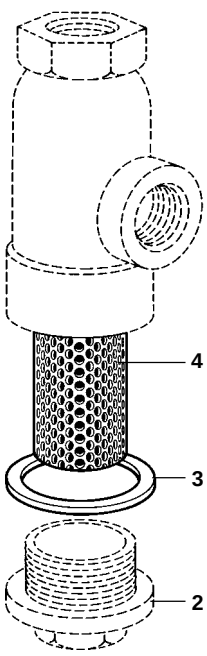



**Fig 4**

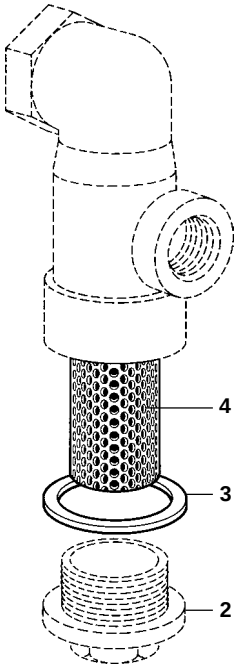



**Fig 5**

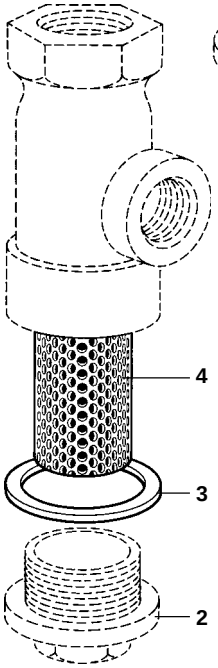



**Fig 6**

**Recommended tightening torques**

| Item | Size | or mm | N m |
|---|---|---|---|
| **2** | **Fig 4 and Fig 5**<br>½" and ¾" | 26 A/F 1" BSP | 42 - 48 |
| | **Fig 6**<br>½" and ¾" | 26 A/F 1¼" BSP | 70 - 80 |
| | **Fig 6**<br>1" | 34 A/F 1¾" BSP | 124 - 144 |