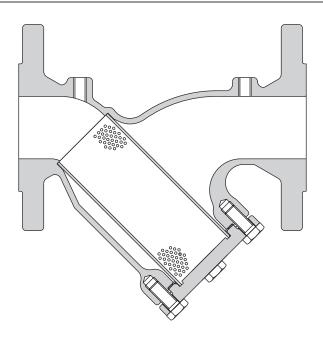
**TI-P160-05** CMGT Issue 13

## spirax Sarco Fig 3616,

# Fig 3616 Food+ Austenitic Stainless Steel Strainer - DIN Material



#### **Description**

The Fig 3616 is an austenitic stainless steel integrally flanged Y-type strainer with flanged screen cover in DIN material. The standard stainless steel screen in the DN15 to 80 has 0.8 mm perforations and in the DN100 to 200 it has 1.6 mm perforations. As options, other perforation 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. The body can also be drilled and tapped for pressure tappings if required.

#### Standards

This product fully complies with the requirements of the European Pressure Equipment Directive 2014/68/EU.

#### Certification

The product is available with material certification to EN 10204 3.1.B for body and cap at extra cost.

Note: All certification must be requested at the time of order placement.

Food+ can be supplied with material Certification for all wetted parts at extra cost.

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

#### Food+ Fig 3616 DN15 to 100 available with a food contact regulation Declaration of Compliance

Designed, manufactured and approved for Steam and Condensate applications, the Fig 3616 Food+ product complies with:

- (EC)1935:2004 Materials and Articles Intended to come into Contact with Food
- (EC)2023:2006 Good Manufacturing Practice for Materials and Articles Intended to come into Contact with Food
- (EU)10/2011 Plastic Materials and Articles Intended to come into Contact with Food
- FDA Code of Federal Regulations title 21 Food and Drugs

This product is intended to be connected into a system that can operate a food contact compliant process.

A list of the materials that could come directly or indirectly into contact with foodstuffs can be found in the Declaration of Compliance available for this product.

**Sizes and pipe connections** DN15, DN20, DN25, DN32, DN40, DN50, DN65, DN80, DN100, DN125, DN150 and DN200. Standard flange BS 4504 PN16.

#### **Optional extras**

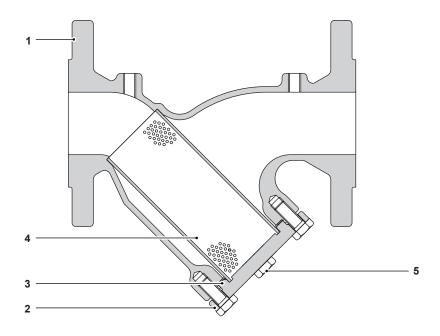
Strainer screens		Doutoustions	1.6 mm (DN15 to 80)		
	Stainless steel screen	Perforations	3.0 mm (DN15 to 200)		
		Mesh	40, 100, 200		
			0.8 mm (DN15 to 80)		
		Perforations	1.6 mm (DN100 to 200)		
	Monel screen		3.0 mm (DN15 to 200)		
		Mesh	100		

#### Blowdown, drain valve and pressure connections

The cap can be tapped to enable a blowdown or drain valve to be fitted. The body can be drilled for pressure tappings. These options are available at extra cost. Connection sizes are as shown opposite.

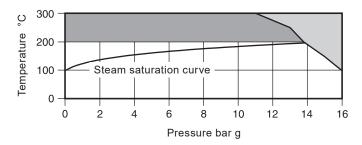
Strainer size	Blowdown valve	Drain valve	Pressure tapping		
DN15 to 20	3/8"	3/8"	1/4"		
DN25 to 32	1/2"	1/2"	1/4"		
DN40 and 80	3/4"	3/4"	1/4"		
DN100 to 200	1"	1"	1/4"		

#### **Materials**



No.	Part	Material	
1	Body	Austenitic stainless steel	EN10213 pt 4 1.4408
2	Сар	Austenitic stainless steel	EN10088 pt 3 1.4401
3	Cap gasket	Reinforced exfoliated graphite or PTFE on EC1935/2004 version	
4	Strainer screen	Austenitic stainless steel	ASTM A240 316L
5	Bolts	Austenitic stainless steel	EN ISO 3506 A2 - 70

### Pressure/temperature limits



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

EC1935/2004 product must not be used in this region.

PN16	design conditions	Body o	
15.7 bar g	Maximum allowable pressure	PMA	
300 °C	Maximum allowable temperature		
200 °C	Maximum EC1935/2004 allowable temperature	TMA	
-29 °C	num allowable temperature	Minim	
15.7 bar g @ 0 °C to 100 °C	Maximum operating pressure	PMO	
300 °C @ 10.8 bar g	Maximum operating temperature	T140	
200°C @ 13.7 bar g	Maximum EC1935/2004 operating temperature	TMO	
-10 °C	num operating temperature : For lower operating temperatures consult Spirax Sarco		
	uct is safe for use under full vacuum conditions	Produc	
24 bar g	gned for a maximum cold hydraulic test pressure of:	Design	

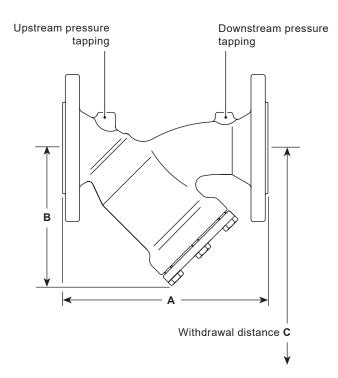
#### Kv values

Size	DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
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: Cv (UK) = Kv x 0.963 Cv (US) = Kv x 1.156

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

			(4.6.6		
Size	PN16 A	В	С	Screening area cm <sup>2</sup>	Weight
DN15	130	69	101	28	2.1
DN20	150	82	125	46	2.9
DN25	160	90	140	79	3.8
DN32	180	114	198	135	6.6
DN40	200	127	210	161	9.0
DN50	230	150	248	251	10.5
DN65	290	162	263	325	17.5
DN80	310	178	272	360	20.0
DN100	350	210	323	540	24.0
DN125	400	253	393	840	38.0
DN150	480	293	454	1 115	50.5
DN200	600	375	584	1 905	88.0



#### Safety information

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

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. Remove all protective caps prior to installation. Open isolation valves slowly until normal operating conditions are achieved. Check for leaks and correct operation.

#### Maintenance

For full details see the Installation and Maintenance Instructions (IM-S60-18) 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 DN40 Fig 3616 strainer, flanged BS 4504 PN16 with austenitic stainless steel screen having 0.8 mm perforations and flanged screen cap.

#### **Spare parts**

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

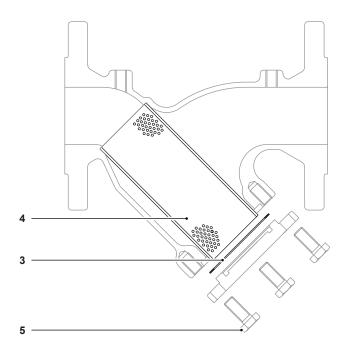
#### Available spares

Strainer screen (state materia	al, perforations or mesh and s	ize of strainer)	4
Cap gasket	DN15 to DN100	(3 off)	3
	DN125 to DN200	(1 off)	3
EC1935/2004 Cap gasket	DN15 to DN100	(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 - Strainer screen, stainless steel having 0.8 mm perforations for DN50 Spirax Sarco Fig 3616 strainer PN16.



#### Recommended tightening torques

Item	Size	Qty		or mm	N m
	DN15 and 20	4	13 A/F	M8 x 20	15 - 20
	DN25	4	13 A/F	M8 x 20	15 - 20
	DN32 and 40	4	13 A/F	M8 x 20	15 - 20
_	DN50	4	16 A/F	M10 x 25	22 - 25
	DN65	4	17 A/F	M10 x 30	22 - 25
5	DN80	6	17 A/F	M10 x 30	22 - 25
	DN100	6	18 A/F	M12 x 35	50 - 60
	DN125	8	19 A/F	M12 x 40	50 - 60
	DN150	8	19 A/F	M12 x 40	50 - 60
	DN200	8	24 A/F	M16 x 50	100 - 110