



Cert. No. LRQ 0963008

ISO 9001

# spirax sarco

## SGS10

TI-P022-10  
ST Issue 2

## Stainless Steel Sanitary Sight Glass

### Description

The SGS10 sanitary sight glass is a full view, full port sight glass suitable for a wide range of high purity applications in the food, medical, and bio-pharmaceutical industries.

The unit is designed in accordance with the 3A's sanitary standards and is manufactured from 316L stainless steel and toughened borosilicate.

### Surface finish

Internal surface finish - <0.4 uRa (15 micro inch).

### Standards:

- The SGS10 has been designed in full accordance with 3A's sanitary standard 65-00 - design criteria for sight glasses.
- All elastomers used comply with FDA regulation CFR 21 paragraph 177 Section 2600 for EPDM and Section 1550 for PTFE.
- Extended tube weld end material (316L) as per criteria outlined in the current edition of ASME BPE - to special order.

### Certification

This product is available with the following certification:

- EN 10204 3.1 material certifications.
- Certification to 3A's standard No. 65-00 - design criteria for sight glasses.
- Certificate of conformity including internal surface finish.
- Certification of elastomer FDA compliance.

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

### Packaging

Packaging for this product is conducted in a clean environment, segregated from other non stainless steel products, and in accordance with the current edition of ASME BPE. Inlet and outlet connections are capped and the product is sealed in a plastic bag or shrink wrapped prior to boxing.

### Sizes and pipe connections

1/2", 3/4", 1", 1 1/2" and 2" available as standard.  
2 1/2", 3" and 4" are available to special order.

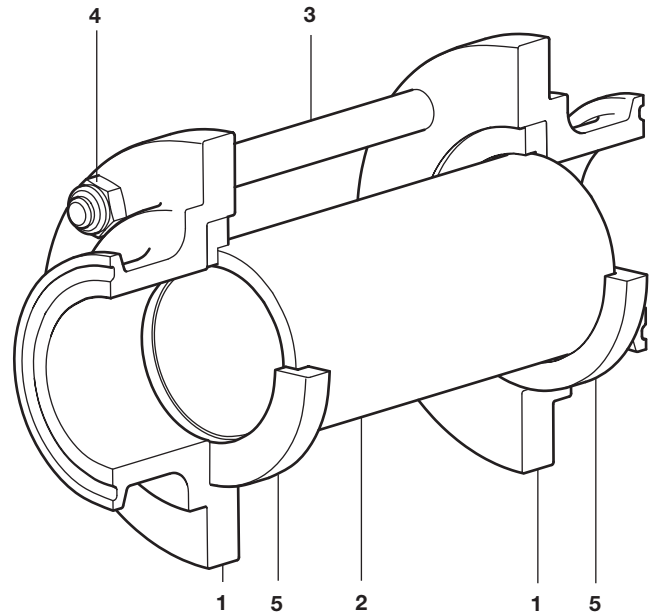
**Note:** DIN connections are marked by the tube O/D dimension: 1/2" = 18 mm, 3/4" = 22 mm, 1" = 28 mm, 1 1/2" = 40 mm, 2" = 52 mm, 2 1/2" = 70mm, 3" = 84 mm and 4" = 104 mm.

**Sanitary clamp** ASME BPE clamp.

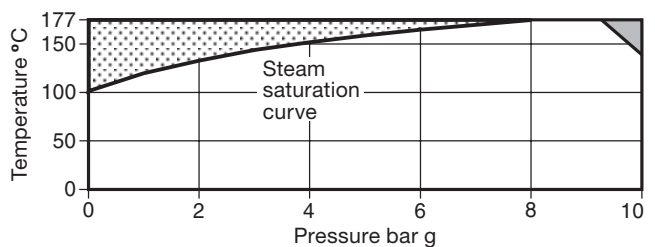
<b>Connections available to special order</b>	Sanitary clamp to DIN 32676.
	Extended tube weld ends to ASME BPE.
	Extended tube weld ends to DIN 11850
	DN15 to DN50 Series 1
	DN65 to DN100 Series 2

### Materials

No.	Part	Material
1	Body	Stainless steel 316L
2	Glass	Borosilicate
3	Tie rods	Stainless steel 316
4	Nuts	Stainless steel 316
5	Seals	1/2" - 3/4"
		1" - 4"



### Pressure/temperature limits



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

The product should not be used in this region or beyond its operating range as damage to the internals may occur.

**Note:** For hygienic/sanitary clamp ends the maximum pressure / temperature may be restricted by the gasket or sanitary clamp used. Please consult Spirax Sarco.

Body design conditions	PN10
PMA Maximum allowable pressure	10 bar g @ 140°C
TMA Maximum allowable temperature	177°C @ 9.2 bar g
Minimum allowable temperature	-254°C
PMO Maximum operating pressure for saturated steam service	6 bar g
TMO Maximum operating temperature	165°C @ 6 bar g
Minimum operating temperature	0°C
Designed for a maximum cold hydraulic test pressure of 15 bar g	

## Dimensions (approximate) in mm

**Note:** To facilitate orbital welding extended tube end connections are provided with 40 mm (1½" - 2½") and 50 mm (3" and 4") tube extensions as specified in ASME BPE.

### Sanitary clamp

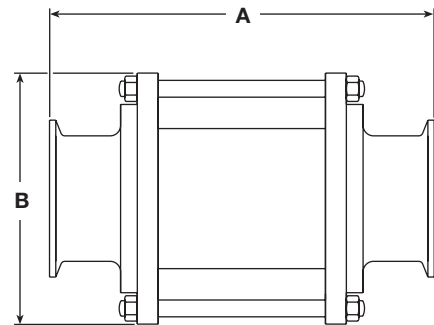
Size	ASME BPE	A	DIN 32676	B
½"	131.4		131.4	47
¾"	131.4		131.4	50
1"	143.0		148.0	79
1½"	151.0		156.0	85
2"	155.0		160.0	105
2½"	155.0		162.8	112
3"	157.0		164.0	125
4"	163.0		180.0	157

### Extended tube weld ends

Size	ASME BPE	A	DIN 11850	B
½"	166.0		156.0	47
¾"	166.0		156.0	50
1"	190.0		190.0	79
1½"	183.0		188.0	85
2"	192.0		192.0	105
2½"	194.0		194.0	112
3"	216.0		216.0	125
4"	218.0		218.0	157

## Weights (approximate) in g

Size	ASME BPE		DIN	
	Clamp	Weld	Clamp	Weld
½"	438	362	426	396
¾"	382	332	450	420
1"	1 186	893	1 344	1 208
1½"	1 126	1 062	1 708	1 132
2"	1 674	1 578	2 202	1 532
2½"	1 684	1 588	2 662	1 952
3"	2 172	1 767	2 710	2 532
4"	3 284	2 951	3 405	3 110



## Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P130-26) supplied with the product.

### Installation note

The SGS10 is intended for use in both the vertical and horizontal position. When installed vertically it can be considered self-draining.

**Note:** The unit must be handled carefully to ensure that the glass and surface finishes are not damaged.

### How to order

**Example:** 1 off Spirax Sarco 2" SGS10 sanitary sight glass with ASME BPE sanitary clamp connections and having an internal surface finish of 0.4 micron Ra (15 micro inch).

Complete with material certification to EN 10204 3.1.

### Spare parts

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

### Available spares

Glass and seal kit	<b>2, 5</b>
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### 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 sight glass.

**Example:** 1 off Glass and seal kit for a 1" Spirax Sarco SGS10 sanitary sight glass with ASME BPE clamp ends.

