SG Series

In Line Sight Glasses

The in-line sight glasses offered by Steriflow are suitable for a wide range of ASME BPE applications in high purity tubing systems typically found in the pharmaceutical or bio-pharmaceutical industry.

The double window design ensures optimum viewing area and eliminates the need for a back light. The bore of the glass and end fittings match that of the corresponding tubing size, preventing the possibility of fluid retention, even when units are installed horizontally.

The SG Series sight glasses combine 316L stainless steel end connections with a toughened borosilicate viewing glass making them suitable for both clean-in-place (CIP) and sterilization-in-place (SIP) operations. Standard units are available in 1/2" to 4" sizes with Tri-clamp® compatible connections. Alternative sizes and connection types can also be supplied.

Where there is a risk of accidental damage to the viewing glass, a Polycarbonate shield or perforated viewing tube can be supplied.

FEATURES

- · Full bore flow path
- Large viewing area
- Compact design
- Metal stop provides ideal o-ring compression and prevents pipe torque from affecting glass
- Suitable for CIP and SIP
- SF5, 20 Ra µin (0,5 µm Ra) mechanical polish
- with Electropolish is standard

STANDARDS

- Where applicable, all sight glass models comply with ASME BPE criteria
- All sight glass models are CE compliant under the SEP category of the PED directive
- All seal materials are FDA and USP Class VI compliant

CLEANING & PACKAGING

 All sight glasses are cleaned after manufacture, capped, sealed in a polythene bag and individually boxed





DOCUMENTATION

The following documentation is shipped with each order:

- Steriflow Unicert
 - Traceable Material Heat Number for body and ferrels
 - Certificate of Compliance to FDA and USP Class VI
 - Certificate of Surface Finish
- Final Test Reports and Certificate of Origin available upon request at time of order



SPECIFICATIONS

Sizes: 1/2", 3/4", 1", 1-1,2", 2", 2-1/2", 3", 4"

End Connections

Tri-clamp® compatible

Materials of Construction

- Body 316L Stainless Steel
- End fitting 316L Stainless Steel
- Glass Borosilicate
- Seals EPDM, Viton, Silicone FEP-Silicone, or-Perlast (FFKM) (all FDA and USP VI compliant)

Surface Finish

- Internal SF5; 20 Ra μin (0,5 μm) mechanical
- finish with Electropolish is Standard
- External 32 Ra μin (0,8 μm) mechanical finish

Operating Conditions

- Maximum operating pressure 145 psig (10 barg)
- Maximum allowable temperature with EPDM seals – 175°F (135°C)
- Maximum allowable temperature with Silicone, Viton or FEP Silicone seals - 392°F (200°C)
- Maximum allowable temperature with Perlast seals: 401°F (205°C), including continuous steam service up to 145 psig (10 bar)

Minimum Temps:

EDPM: -40°F (-40°C); Silicone: -76°F (-60°C);
Viton: -4°F (-20°C)

* Standard Silicone not suitable for steam service or SIP

ORDERING SCHEMATIC

Model	Size	Seal	Shield	Finish

	Model	
SG	Sight Glass	

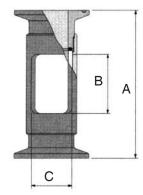
	Size
050	1/2" ASME BPE Tri-Clamp®
075	3/4" ASME BPE Tri-Clamp®
100	1" ASME BPE Tri-Clamp®
150	1-1/2" ASME BPE Tri-Clamp®
200	2" ASME BPE Tri-Clamp®
250	2-1/2" ASME BPE Tri-Clamp®
300	3" ASME BPE Tri-Clamp®
400	4" ASME BPE Tri-Clamp®

Options

- DIN, ISO & SMS sizes available upon request
- Electropolished finishes
- Perforated viewing tube
- Alternative lengths / weld end connections

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Valve Size	Weight lb (kg)
1/2" & 3/4"	0.22 (0,1)
1"	0.66 (0,3)
1 1/2:	0.88 (0,4)
2"	1.32 (0,6)
2 1/2"	1.76 (0,8)
3"	2.20 (1,0)
4"	2.86 (1,3)

Valve Size	А	В	Viewing Area C°
1/2", 3/4"	3.54 (90mm)	1.57 (40mm)	120°
1" - 4"	3.94 (100 mm)	1.57 (40mm)	120°

	Seal	
EP	EPDM, FDA, USP Class VI	
VI	Viton, FDA, USP Class VI	
SI*	Silicone, FDA, USP Class VI	
FI	FEP-Silicon, FDA, USP Class VI	
PL	Perlast (FFKM), FDA, USP Class VI	

* Standard Silicone not suitable for steam service or SIP

	Shield
00	None
KS	Polycarbonate outer shield

	Finish	
EP	Electro-Polish	