# Sight Glass Windows

# **SGW Series**

# Sight Glass Windows

The sight glass windows offered by Steriflow are suitable for a wide range of applications in high purity vessel and tubing systems typically found in the pharmaceutical or bio-pharmaceutical industry.

The large borosilicate window design ensures an optimal view into the process. The SGW Series sight glass windows are made using a technologically advanced process where the borosilicate glass is fused to the stainless steel Tri-clamp™ outer ring. The two pieces become one continuous fused piece with exceptional strength. There are no gaps or cracks because there is no interface demarcation between glass and the outer ring. Standard units are available in 1/2" to 6" sizes with Tri-clamp™ compatible connections. Alternative sizes and connection types may also be supplied upon request.

### **F**EATURES

- Large viewing area
- Compact design
- Exceptional Strength: One continuous fusion of glass and Duplex Stainless steel
- Suitable for CIP and SIP
- Better than SF5, 20 Ra µin (0,5 µm Ra) mechanical polish, with electropolish is standard.
   Other finishes available upon request.
- Hygienic design: No interface line between glass and steel means no cracks or crevices.

### **D**OCUMENTATION

The following documentation is shipped with each order:

- Steriflow Unicert: Each Unicert includes individual serial numbers, with heat numbers and attached MTR's directly traceable to each valve.
  - Traceable Material Heat Number
  - Certificate of Surface Finish
  - A certificate of conformance regarding the Boro silicate glass is available upon request at time of order.





### **APPLICATIONS**

For viewing process consistency, mix and clarity in the following and other applications.

Media and Buffer Prep

- Buffer Dilution
- Media Mixing

Upstream and Downstream

- Bioreactor
- Centrifuge outflow
- Permeate concentration
- Formulation vessel



### **SPECIFICATIONS**

Sizes: 1/2", 3/4", 1", 1-1,2", 2", 2-1/2", 3", 4", 6"

### **End Connections**

• ASME BPE Tri-clamp® compatible

### **Materials of Construction**

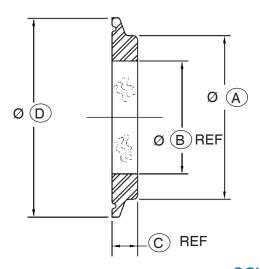
- Body Duplex Stainless Steel (UNS 31803/ 32205)
  Note: This material is listed in ASME BPE section MM-2.1 as one that demonstrates the ability to meet the standards surface finish and welding criteria.
- Optional Materials: Hastelloy<sup>™</sup> and other materials upon request
- Glass Borosilicate
- Gasket and Clamp supplied by Customer

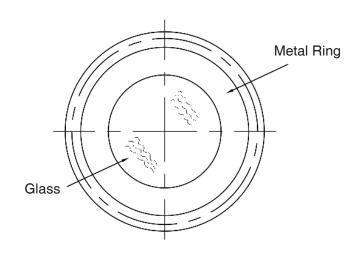
### **Surface Finish**

 Better than SF5; 20 Ra μin (0,5 μm) mechanical finish and Electropolish

## Pressure Temperature Ratings

Standard Tube OD (in.)	Max Pressure At		
	536° F	280°C	
	Psig	Bar	
1/2	362	25	
3/4	362	25	
1	232	16	
1-1/2	232	16	
2	232	16	
2-1/2	232	16	
3	150	10.3	
4	150	10.3	
6	90	6.2	





### **SGW DIMENSIONS**

Standard	A	B	C	D
Tube OD (in.)		Inches (mm)		Inches (mm
1/2	0.71 (18)	0.39 (10)	0.39 (10)	0.98 (25)
3/4	0.71 (18)	0.39 (10)	0.39 (10)	0.98 (25)
1	1.61 (41)	0.98 (25)	0.39 (10)	1.99 (51)
1-1/2	1.61 (41)	0.98 (25)	0.39 (10)	1.99 (51)
2	2.05 (52)	1.18 (30)	0.39 (10)	2.52 (64)
2-1/2	2.72 (69)	1.38 (35)	0.39 (10)	3.05 (78)
3	2.99 (76)	1.57 (40)	0.39 (10)	3.58 (91)
4	4.02 (101)	2.17 (55)	0.47 (12)	4.69 (119)
6	5.98 (152)	2.95 (75)	0.63 (16)	6.57 (167)

### **ORDERING SCHEMATIC**

Model	Size

	Model
SGW	Sight Glass Window

	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®	
600	6" ASME BPE Tri-Clamp®	