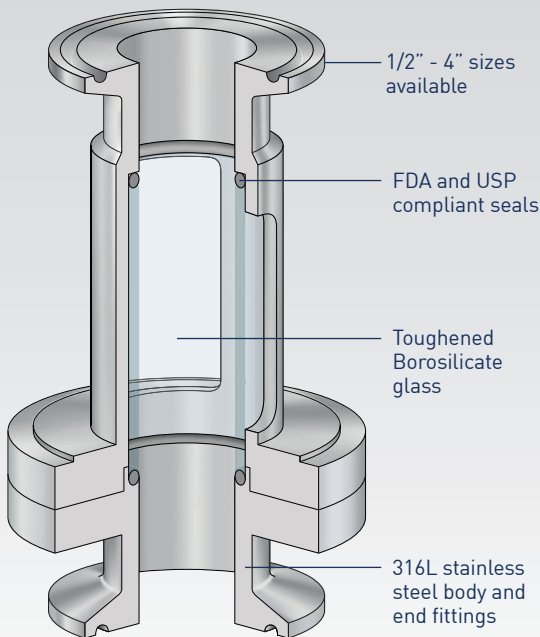


# HSG03 SIGHT GLASS

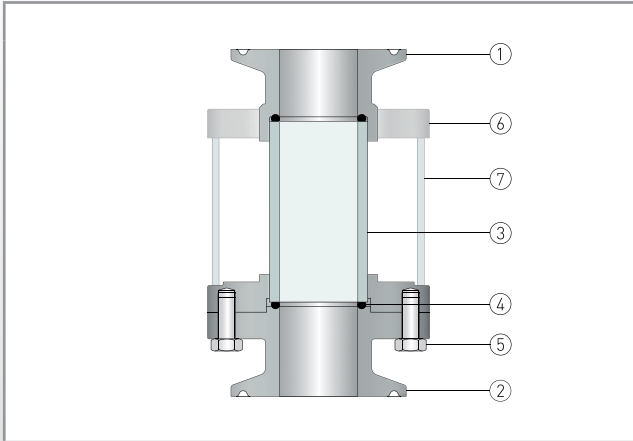


## HSG03

The HSG03 range of sight glasses are designed for use in high purity applications where through window visibility is required. The bore of the glass and end fittings match that of the corresponding tubing size thus eliminating the possibility of fluid retention, even when units are installed horizontally. The unique bolted body design ensures that any torsional forces exerted by the piping systems are transferred through the machined body of the unit therefore protecting the glass against possible damage. An optional Polycarbonate knock shield is also available for improved security.

<b>P Pressure Rating</b>	Up to 10 barg
<b>T Temperature Rating</b>	150°C with EPDM seals 200°C with Viton or Silicone seals 200°C with FEP-Silicone seals 135°C when knock shield fitted
<b>Connections</b>	1/2" - 4" ASME BPE clamp 1/2" - 2" ASME BPE weld end DN8 - DN50 DIN and ISO clamp DN8 - DN50 DIN and ISO weld end
<b>Wetted Parts</b>	Body - 316L stainless steel Glass - Borosilicate
<b>Seal Material</b>	EPDM, Viton, Silicone or FEP-Silicone
<b>Surface Finish</b>	Wetted surfaces - 0.5 microns Ra (SF1) External surfaces - 0.8 microns Ra
<b>Options</b>	Polycarbonate knock shield Low ferrite stainless steel (WN1.4435), C22 and other alloys Perlast seals (High performance PTFE) Backlight Electropolished finish (SF4)
<b>C Certification</b>	Certificate of conformity Material certification FDA Elastomer compliance certificate USP Elastomer compliance certificate Certified 'Animal Derived Ingredient' free
<b>★ Features</b>	<ul style="list-style-type: none"> <li>• Full bore design for optimal drainability</li> <li>• Suitable for piping systems where torsional loads exist</li> <li>• Two large viewing apertures for unobstructed monitoring of the flow media</li> <li>• Optional knock shield for increased glass protection</li> <li>• Metal-metal assembly joint for controlled seal compression</li> <li>• All material fully certified</li> <li>• Easy replacement of glass and seals</li> </ul>

# HSG03 SIGHT GLASS

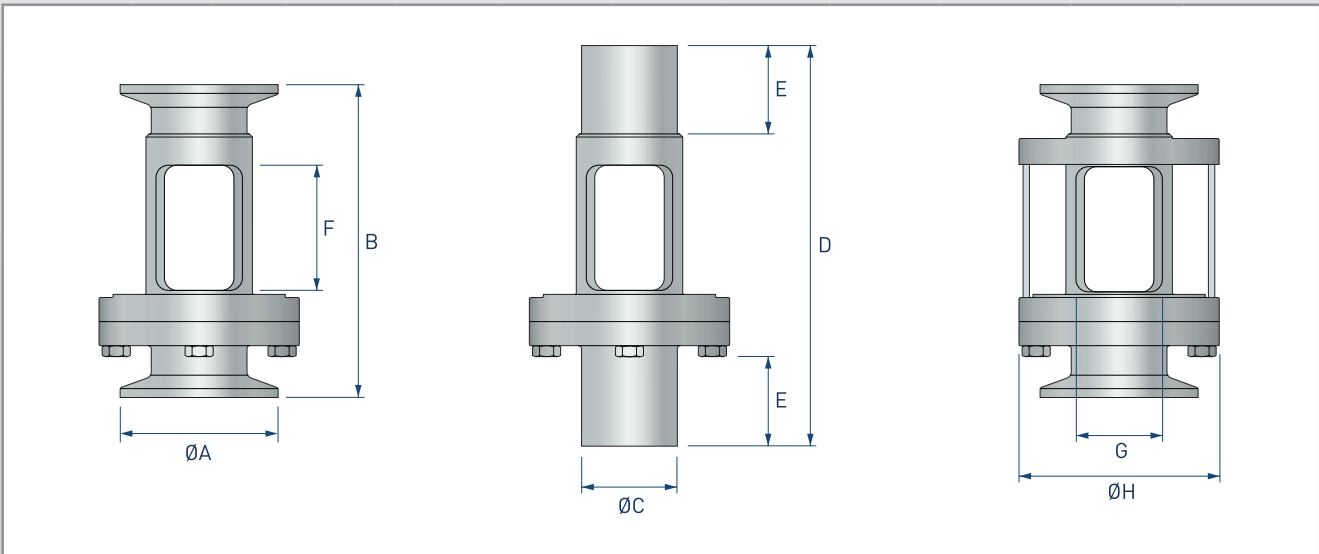


Part	Description
1	Body 316L stainless steel
2	End fittings 316L stainless steel
3	Glass* Borosilicate
4	Seals** EPDM, Viton, Silicone or FEP-Silicone
5	Body screws Stainless steel
6	Support ring*** 316L stainless steel
7	Knock shield*** Polycarbonate

\* Glass meets the requirements of ASTM E 438, Type I, Class A as well as ISO 3585:1998.

\*\* All seals are FDA and USP compliant. EPDM and FEP-Silicone are USP 121°C compliant.

\*\*\* Knock shield is optional.



Size ASME BPE	Size		Dimensions (mm)							Weight (kg)	
	Clamp	Weld	ØA	B	ØC	D	E	F	G Viewing Area*		ØH
1/2"	✓	✓	25	90	12.7	124	28	40	120°	44	0.1
3/4"	✓	✓	25	90	19.05	128	28	40	120°	44	0.1
1"	✓	✓	50.5	100	25.4	128	28	40	120°	64	0.45
1-1/2"	✓	✓	50.5	100	38.1	130	28	40	120°	64	0.7
2"	✓	✓	64	100	50.8	140	28	40	120°	84	1.0
2-1/2"	✓	-	77.5	100	-	-	-	40	120°	100	1.8
3"	✓	-	91	100	-	-	-	40	120°	109	2.5
4"	✓	-	119	100	-	-	-	40	120°	150	3.6

\*Sight glasses have 2 windows at 180° separation

**Service Parts** - Seal kit (4) 2 seals per set, glass (3) and knock shield lens (7)

## Backlight option



ASME BPE part number ordering key							
Product		Size		Connections		Seals	Options
	-				-		
Without knock shield		1/2"	050	Clamp	C	FDA compliant	Electropolishing EP
HSG03		3/4"	075	Weld	W	Silicone - red SR	
With knock shield		1"	100			FDA & USP Class VI compliant	
HSG03KS		1-1/2"	150			EPDM - black EBKU	
		2"	200			Viton - black VBKU	
		2-1/2"	250	Clamp	C	Silicone - white SW	
		3"	300			FEP-Silicone FEPS	
		4"	400			Perlast PLW	

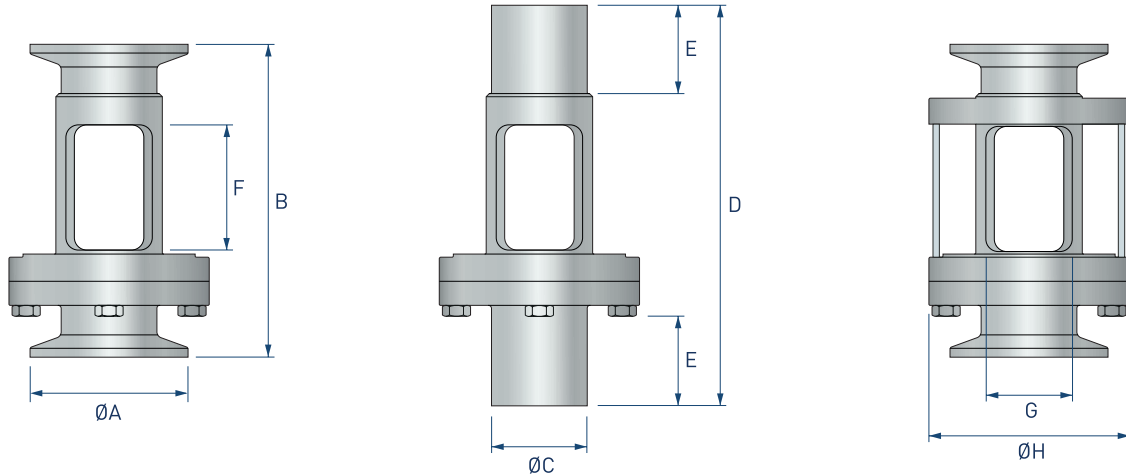
### Example

<b>HSG03</b>	<b>-</b>	<b>050C</b>		<b>-</b>	<b>EBKU</b>		<b>-</b>	<b>EP</b>
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### Specification text

Staitech HSG03 sight glass manufactured in 316L stainless steel with Borosilicate glass and EPDM FDA and USP Class VI compliant seals. 1/2" ASME BPE clamp connections. Wetted surfaces finished to 0.5 microns Ra. External surfaces finished to 0.8 microns Ra. (HSG03-050C-EBKU). For electropolished finish add suffix '-EP' (HSG03-050C-EBKU-EP).

Staitech HSG03 sight glass manufactured in 316L stainless steel with Borosilicate glass and EPDM FDA and USP Class VI compliant seals. Fitted with Polycarbonate knock shield. 1/2" ASME BPE clamp connections. Wetted surfaces finished to 0.5 microns Ra. External surfaces finished to 0.8 microns Ra. (HSG03KS-050C-EBKU). For electropolished finish add suffix '-EP' (HSG03KS-050C-EBKU-EP).



Size DIN	Dimensions (mm)								Weight (kg)
	ØA	B	ØC	D	E	F	G* Viewing area	ØH**	
<b>DN8</b>	25 or 34	90	10.0	124	28	40	120°	44	0.1
<b>DN10</b>	25 or 34	90	12.0	124	28	40	120°	44	0.1
	25 or 34	90	13.0	124	28	40	120°	44	0.1
<b>DN15</b>	25 or 34	90	18.0	128	28	40	120°	64	0.4
	25 or 34	90	19.0	128	28	40	120°	64	0.4
<b>DN20</b>	25 or 34	90	23.0	128	28	40	120°	64	0.45
<b>DN25</b>	50.5	100	28.0	128	28	40	120°	64	0.5
	50.5	100	29.0	128	28	40	120°	64	0.5
<b>DN32</b>	50.5	100	35.0	130	28	40	120°	64	0.7
<b>DN40</b>	50.5	100	41.0	140	28	40	120°	84	1.0
<b>DN50</b>	64	100	53.0	140	28	40	120°	100	1.8

Size ISO	Dimensions (mm)								Weight (kg)
	ØA	B	ØC	D	E	F	G* Viewing area	ØH**	
<b>DN8</b>	25	90	13.4	124	28	40	120°	44	0.1
<b>DN10</b>	25	90	17.2	124	28	40	120°	44	0.1
<b>DN15</b>	34	90	21.3	124	28	40	120°	44	0.1
	50.5	90	21.3	124	28	40	120°	44	0.1
<b>DN20</b>	50.5	100	26.9	128	28	40	120°	64	0.45
<b>DN25</b>	50.5	100	33.7	128	28	40	120°	64	0.6
<b>DN32</b>	64	100	42.4	130	28	40	120°	64	0.7
<b>DN40</b>	64	100	48.3	140	28	40	120°	84	1.0
<b>DN50</b>	77.5	100	60.3	140	28	40	120°	100	1.8

\*Sight glasses have 2 windows at 180° separation

\*\* Dimension E only applies when knock shield is fitted

DIN part number ordering key																			
Product	Connections		Size		Seals		Options												
Without knock shield HSG03	Clamp	C	DIN DN8	34.0 - 8.0	FDA compliant Silicone - red	SR	Electropolishing EP												
With knock shield HSG03KS				25.0 - 8.0															
			DIN DN10	34.0 - 10.0				FDA & USP Class VI compliant EPDM - black	EBKU										
				25.0 - 10.0															
			DIN DN15	34.0 - 15.0						Viton - black	VBKU								
				25.0 - 15.0															
			DIN DN15	25.0 - 16.0								Silicone - white	SW						
				34.0 - 16.0															
			DIN DN20	34.0 - 20.0										FEP-Silicone	FEPS				
				50.5 - 25.0															
			DIN DN25	50.5 - 26.0												Perlast	PLW		
				50.5 - 26.0															
			DIN DN32	50.5 - 32.0															
				50.5 - 40.0															
	DIN DN40	50.5 - 40.0																	
		64.0 - 50.0																	
	DIN DN50	64.0 - 50.0																	
Without knock shield HSG03	Weld	W	ISO DN8	10.0 - 8.0															
With knock shield HSG03KS				12.0 - 10.0															
			ISO DN10	13.0 - 10.0															
				18.0 - 15.0															
			ISO DN15	19.0 - 16.0															
				23.0 - 20.0															
			ISO DN20	23.0 - 20.0															
				28.0 - 25.0															
			ISO DN32	29.0 - 26.0															
				35.0 - 32.0															
	ISO DN40	41.0 - 38.0																	
		50.3 - 50.0																	
	ISO DN50	50.3 - 50.0																	
<b>Example</b>																			
<b>HSG03</b>	-	<b>C</b>	-	<b>34.0 - 8.0</b>	-	<b>EBKU</b>	-	<b>EP</b>											
<b>Specification text</b>																			
<p>Staitech HSG03 sight glass manufactured in 316L stainless steel with Borosilicate glass and EPDM FDA and USP Class VI compliant seals. DIN DN8 34mm clamp connections. Wetted surfaces finished to 0.5 microns Ra. External surfaces finished to 0.8 microns Ra. (HSG03-C-34.0-8.0-EBKU). For electropolished finish add suffix '-EP' (HSG03-C-34.0-8.0-EBKU-EP).</p> <p>Staitech HSG03 sight glass manufactured in 316L stainless steel with Borosilicate glass and EPDM FDA and USP Class VI compliant seals. Fitted with Polycarbonate knock shield. DIN DN8 34mm clamp connections. Wetted surfaces finished to 0.5 microns Ra. External surfaces finished to 0.8 microns Ra. (HSG03KS-C-34.0-8.0-EBKU). For electropolished finish add suffix '-EP' (HSG03KS-C-34.0-8.0-EBKU-EP).</p>																			

ISO part number ordering key										
Product		Connections		Size		Seals		Options		
Without knock shield HSG03	-	Clamp	C	-	ISO DN8	25.0 - 10.3	FDA compliant	-	Electropolishing	EP
With knock shield HSG03KS	-			-	ISO DN10	25.0 - 14.0	Silicone - red	SR		
					ISO DN15	34.0 - 18.1	FDA & USP Class VI compliant			
						50.5 - 18.1	EPDM - black	EBKU		
					ISO DN20	50.5 - 23.7	Viton - black	VBKU		
					ISO DN25	50.5 - 29.7	Silicone - white	SW		
					ISO DN32	64.0 - 38.4	FEP-Silicone	FEPS		
					ISO DN40	64.0 - 44.3	Perlast	PLW		
					ISO DN50	77.5 - 56.3				
Without knock shield HSG03	-	Weld	W	-	ISO DN8	13.4 - 10.3				
With knock shield HSG03KS	-			-	ISO DN10	17.2 - 14.0				
					ISO DN15	21.3 - 18.1				
					ISO DN20	26.9 - 23.7				
					ISO DN25	33.7 - 29.7				
					ISO DN32	42.4 - 38.4				
					ISO DN40	48.3 - 44.3				
					ISO DN50	60.3 - 56.3				
<b>Example</b>										
<b>HSG03</b>	<b>-</b>	<b>C</b>	<b>-</b>	<b>34.0 - 18.1</b>	<b>-</b>	<b>EBKU</b>	<b>-</b>	<b>EP</b>		
<b>Specification text</b>										
<p>Staitech <b>HSG03 sight glass</b> manufactured in 316L stainless steel with Borosilicate glass and <b>EPDM FDA and USP Class VI compliant</b> seals. <b>ISO DN15 34mm clamp</b> connections. Wetted surfaces finished to 0.5 microns Ra. External surfaces finished to 0.8 microns Ra. (HSG03-C-34.0-18.1-EBKU). For electropolished finish add suffix '-EP' (HSG03-C-34.0-18.1-EBKU-EP).</p> <p>Staitech <b>HSG03 sight glass</b> manufactured in 316L stainless steel with Borosilicate glass and <b>EPDM FDA and USP Class VI compliant</b> seals. Fitted with Polycarbonate knock shield. <b>ISO DN15 34mm clamp</b> connections. Wetted surfaces finished to 0.5 microns Ra. External surfaces finished to 0.8 microns Ra. (HSG03KS-C-34.0-18.1-EBKU). For electropolished finish add suffix '-EP' (HSG03KS-C-34.0-18.1-EBKU-EP).</p>										