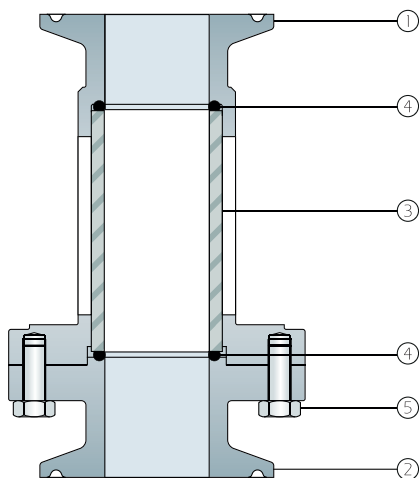




The HSG03 range of sight glasses are designed for use in high purity applications where through window visibility is required. The bore of the glass and end fittings match that of the corresponding tubing size thus eliminating the possibility of fluid retention, even when units are installed horizontally. The unique bolted body design ensures that any 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.

- P Pressure Rating**
Up to 10 barg
- T Temperature Rating**
Up to - 135°C with FDA grade EPDM seals
150°C with USP grade EPDM seals
200°C with Viton, Silicone or FEP-Silicone seals
135°C when knock shield fitted
- C Connections**
1/2" - 4" ASME BPE clamp
1/2" - 2" ASME BPE weld end
DN8 - DN50 DIN and ISO clamp and weld end
- S Seal Materials**
EPDM, Viton, Silicone or FEP-Silicone
- W Surface Finish**
Wetted surfaces - 0.5 microns Ra
External surfaces - 0.8 microns Ra
- ✓ Options**
Polycarbonate knock shield
Enhanced surface finishes and electropolishing
Low sulphur stainless steel, C22 and other alloys
- C Available Certification**
 - CofC** Certificate of Conformity
 - MTR's** Material Certification
 - FDA** FDA Elastomer compliance certificates
 - USP** USP Elastomer compliance certificates
 - ADI** Certified 'Animal Derived Ingredient' free



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

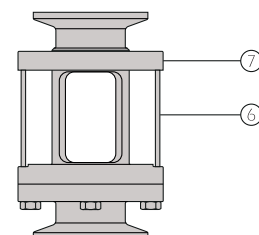
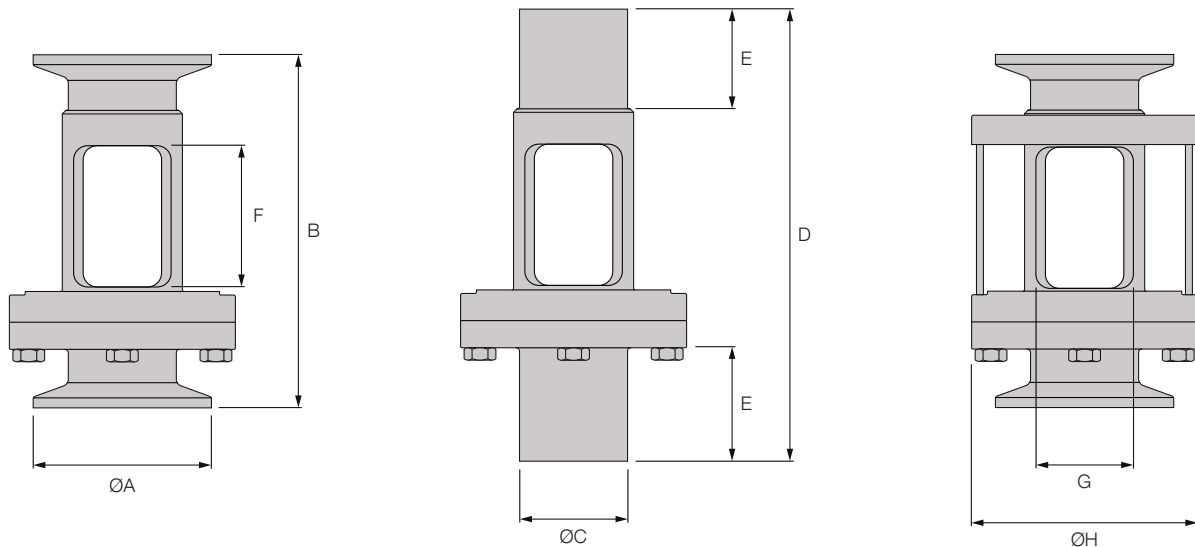


Illustration showing knock shield fitted

HSG03



	Size ASME BPE	Connections		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	0.10
	3/4"	✓	✓	25	90	19.05	128	28	40	120°	44	0.10
	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



Packaging

Individually capped, bagged and boxed



Service Parts

Seal kit comprising part 4 (2 off per set) and knock shield lens part 6



Specification

See product selector sheet for specification and ordering detail

Staitech

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Specifications subject to change without notice. HSG03-TB - 01/15



Illustration showing knock shield fitted

- Maximum operating pressure - 10 barg
- Maximum operating temperature -
Up to: 135°C with FDA grade EPDM seals
150°C with USP grade EPDM seals
200°C with Viton, Silicone or FEP-Silicone seals
135°C with knock shield fitted
- 1/2" - 4" ASME BPE clamp and weld end connections
- DIN and ISO sizes
- Borosilicate glass viewing window

ASME BPE part number ordering key

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

Example

HSG03	-	050C	-	EBKU	-	EP
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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).

Customer reference number:

Tag number	Part number	Quantity

Available certification (tick as required)

CofC Certificate of conformity	USP USP elastomer compliance certificates
MTR's Materials certification	ADI Certified 'Animal Derived Ingredient' free
FDA FDA elastomer compliance certificates	

HSG03										
	Size	Dimensions (mm)								Weight (kg)
	DIN	ØA	B	ØC	D	E	F	G Viewing area*	ØH**	
	DN8	25 or 34	90	10.0	124	28	40	120°	44	0.1
	DN10	25 or 34	90	12.0	124	28	40	120°	44	0.1
DN15		25 or 34	90	13.0	124	28	40	120°	44	0.1
		DN20	25 or 34	90	18.0	128	28	40	120°	64
25 or 34			90	19.0	128	28	40	120°	64	0.4
	DN25	25 or 34	90	23.0	128	28	40	120°	64	0.45
		50.5	100	28.0	128	28	40	120°	64	0.5
	DN32	50.5	100	29.0	128	28	40	120°	64	0.5
		50.5	100	35.0	130	28	40	120°	64	0.7
	DN40	50.5	100	41.0	140	28	40	120°	84	1.0
		64	100	53.0	140	28	40	120°	100	1.8

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

* Sight glasses have 2 windows at 180° separation

** Dimension ØH only applies when knock shield is fitted as the body diameter is smaller than the clamp diameter for all sizes

DIN part number ordering key								
Product	Connection		Size		Seals		Options	
Without knock shield HSG03	Clamp	C	DIN DN8	34.0 - 8.0	FDA compliant	EPDM - black EBK	Electropolishing EP	
With knock shield HSG03KS			DIN DN10	25.0 - 8.0				Viton - black VBK
			DIN DN10	34.0 - 10.0				Silicone - red SR
			DIN DN15	25.0 - 10.0				FDA & USP Class VI compliant
			DIN DN15	34.0 - 15.0				EPDM - black EBKU
			DIN DN15	25.0 - 15.0				Viton - black VBKU
			DIN DN15	34.0 - 16.0				Silicone - white SW
			DIN DN20	25.0 - 16.0				FEP-Silicone FEPS
			DIN DN20	34.0 - 20.0				
			DIN DN25	50.5 - 25.0				
	DIN DN25	50.5 - 26.0						
	DIN DN32	50.5 - 32.0						
	DIN DN40	50.5 - 40.0						
	DIN DN50	64.0 - 50.0						
Without knock shield HSG03	Clamp	C	DIN DN8	10.0 - 8.0	FDA compliant	EPDM - black EBK	Electropolishing EP	
With knock shield HSG03KS			DIN DN10	12.0 - 10.0				Viton - black VBK
			DIN DN10	13.0 - 10.0				Silicone - red SR
			DIN DN15	18.0 - 15.0				FDA & USP Class VI compliant
			DIN DN15	19.0 - 16.0				EPDM - black EBKU
			DIN DN20	23.0 - 20.0				Viton - black VBKU
			DIN DN32	28.0 - 25.0				Silicone - white SW
			DIN DN32	29.0 - 26.0				FEP-Silicone FEPS
			DIN DN32	35.0 - 32.0				
			DIN DN40	41.0 - 38.0				
	DIN DN50	53.0 - 50.0						
Example								
HSG03	-	C	-	34.0 - 8.0	-	EBKU	- EP	
Specification text								
<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>								
Customer reference number:								
Tag number		Part number				Quantity		
Available certification (tick as required)								
<input type="checkbox"/>	CofC	Certificate of conformity			<input type="checkbox"/>	USP	USP elastomer compliance certificates	
<input type="checkbox"/>	MTR's	Materials certification			<input type="checkbox"/>	ADI	Certified 'Animal Derived Ingredient' free	
<input type="checkbox"/>	FDA	FDA elastomer compliance certificates						

ISO part number ordering key									
Product		Connection		Size		Seals		Options	
Without knock shield		Clamp	C	ISO DN8	25.0 - 10.3	FDA compliant		Electropolishing	EP
HSG03				ISO DN10	25.0 - 14.0	EPDM - black	EBK		
With knock shield				ISO DN15	34.0 - 18.1	Viton - black	VBK		
HSG03KS				ISO DN20	34.0 - 23.7	Silicone - red	SR		
				ISO DN25	25.0 - 15.0	FDA & USP Class VI compliant			
				ISO DN32	34.0 - 38.0	EPDM - black	EBKU		
				ISO DN40	25.0 - 44.3	Viton - black	VBKU		
				ISO DN50	77.5 - 56.3	Silicone - white	SW		
						FEP-Silicone	FEPS		
Without knock shield		Clamp	C	ISO DN8	13.4 - 10.3	FDA compliant		Electropolishing	EP
HSG03				ISO DN10	17.2 - 14.0	EPDM - black	EBK		
With knock shield				ISO DN15	21.3 - 18.1	Viton - black	VBK		
HSG03KS				ISO DN20	26.9 - 23.7	Silicone - red	SR		
				ISO DN25	33.7 - 29.7	FDA & USP Class VI compliant			
				ISO DN32	42.4 - 38.4	EPDM - black	EBKU		
				ISO DN40	48.3 - 44.3	Viton - black	VBKU		
				ISO DN50	60.3 - 56.3	Silicone - white	SW		
						FEP-Silicone	FEPS		
Example									
HSG03	-	C	-	34.0 - 18.1	-	EBKU	-	EP	
Specification text									
<p>Staitech HSG03 sight glass manufactured in 316L stainless steel with Borosilicate glass and EPDM FDA and USP Class VI compliant seals. ISO DN15 34mm clamp 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 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. ISO DN15 34mm clamp 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>									
Customer reference number:									
Tag number			Part number				Quantity		
Available certification (tick as required)									
<input type="checkbox"/> CofC Certificate of conformity			<input type="checkbox"/> USP USP elastomer compliance certificates						
<input type="checkbox"/> MTR's Materials certification			<input type="checkbox"/> ADI Certified 'Animal Derived Ingredient' free						
<input type="checkbox"/> FDA FDA elastomer compliance certificates									