


2.1 General description

The SGC40 cast carbon steel and SGS40 stainless steel are double window sight glasses having screwed, sanitary clamp, socket weld and flanged connections.

Standards

These products fully comply with the requirements of the European Pressure Equipment Directive 97/23/EC and carry the  mark when so required.

Certification

These products are available with a manufacturer's Typical Test Report and if specified certification to EN 10204 3.1.

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

Optional extras:

- Visual flow indicator flap to check the flow of the liquid in the pipeline.
- Spring: The visual flow indicator flap can be spring loaded for applications on vertical lines or where there is high flowrates.
- Mica glass protectors for severe applications - When these have been specified the nomenclature becomes SGC40M and SGS40M.

Please see table below to identify when Mica glass protectors are to be used.

Application	Glass choice to be used
Steam or > pH9	Mica glass protectors and Borosilicate glass windows
>150 °C and > pH7	Mica glass protectors and Borosilicate glass windows
<150 °C and < pH7	Borosilicate glass windows only

Note: For further information see the following Technical Information Sheet TI-P130-28.

2.2 Sizes and pipe connections

½", ¾", 1", 1¼", 1½" and 2" Screwed BSP, NPT and Socket weld.

DN15, DN20, DN25, DN40 and DN50 Sanitary clamp connections to ASME BPE.

DN15, DN20, DN25, DN32, DN40, DN50, DN65, DN80 and DN100

Flanged EN 1092 PN40, ASME Class 150 and Class 300, JIS/KS 10 and JIS/KS 20.

Flanged versions have face-to-face dimensions in accordance with EN 558 Series 1.

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

A-B-B Flanged JIS 10 and KS 10.

A-C-C Flanged ASME 150.

A-D-D Flanged EN 1092 PN40.

A-E-E Flanged JIS 20 and KS 20.

A-F-F Screwed BSP, NPT, Sanitary clamp, Socket weld and Flanged ASME 300.

Body design conditions		PN40			
PMA	Maximum allowable pressure	SGC40	40 bar g @ 280 °C (580 psi g @ 536 °F)		
		SGS40	40 bar g @ 178 °C (580 psi g @ 352 °F)		
TMA	Maximum allowable temperature	SGC40	280 °C @ 40 bar g (536 °F @ 580 psi g)		
		SGS40	280 °C @ 32.5 bar g (536 °F @ 472 psi g)		
Minimum allowable temperature		-10 °C	(14 °F)		
PMO	Maximum operating pressure for saturated steam service	PN40	SGC40	31.3 bar g @ 238 °C (454 psi g @ 460 °F)	
			SGS40	28 bar g @ 230 °C (406 psi g @ 446 °F)	
		ASME 150	SGC40	14 bar g @ 198 °C (203 psi g @ 388 °F)	
			SGS40	22.5 bar g @ 220 °C (326 psi g @ 428 °F)	
		ASME 300	SGC40	40 bar g @ 250 °C (580 psi g @ 482 °F)	
			SGS40	33 bar g @ 240 °C (478 psi g @ 464 °F)	
		JIS 10 and KS 10		14 bar g @ 120 °C (203 psi g @ 248 °F)	
		JIS 20 and KS 20		34 bar g @ 120 °C (493 psi g @ 248 °F)	
		TMO	Maximum operating temperature	SGC40	280 °C @ 40 bar g (536 °F @ 580 psi g)
				SGS40	280 °C @ 32.5 bar g (536 °F @ 472 psi g)
Minimum operating temperature		-10 °C	(14 °F)		
Note: For lower operating temperatures consult Spirax Sarco					
Designed for a maximum cold hydraulic test pressure of:		60 bar g	(870 psi g)		