

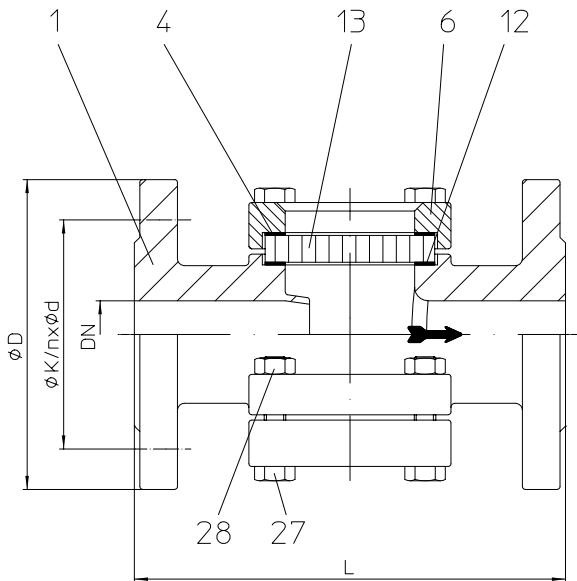
**Double window sight glasses made of cast iron, cast steel, stainless steel**


Fig 660....1 with flanges

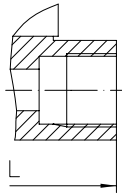


Fig. 660 / 661....2 with screwed sockets

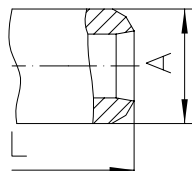


Fig. 660 / 661....4 with butt weld ends

- Double window sight glasses in straight through
- Sight glasses provide visual indication of the flow through pipe works and monitoring of the system.
- In connection with steam traps they will allow the monitoring of the function of steam traps
- **Sight glasses with reinforced windows in acc. to DIN 3237 are available (BR 661)**
- Installation in any position. In connection with the steam trap the sight glass has to be installed in front of it.

Fig. 12.660 / 32.660 / 52.660 PN16 - GG-25, 1.0619+N, 1.4408	Operating limits
Operating pressure PS (bar-g)	16
Operating temperature TS (°C)	300 (borosilicate glass)
max. PH-Wert:	9-10

Fig. 35.660 / 55.660 PN40 - 1.0619+N, 1.4408	Operating limits
Operating pressure PS (bar-g)	40
Operating temperature TS (°C)	300 (borosilicate glass)
max. pH-value:	9-10

Type of connection	PN16	PN40
Flanges ....1	DIN PN16 ANSI 150 RF	DIN PN40 (acc.to DIN 3237)
Screwed sockets ....2	G- and NPT- thread	G- and NPT- thread
Butt weld ends ....4	--	DIN EN 12627 DN 40-50 deviates (refer to table *)

Dimen- sions and weights		Types of connection PN16							Types of connection PN40								
		Flanges			Screwed sockets				Flanges			Screwed sockets			Butt weld ends <sup>1)</sup>		
Nominal diameters		L	D	Weight approx.	LGG-25	L	SW	Weight approx.	L	D	Weight approx.	L	SW	Weight approx.	L	A	Weight approx.
mm	inch	mm	mm	kg	mm	mm	mm	kg	mm	mm	kg	mm	mm	kg	mm	mm	kg
	1/4	--	--	--	100	100	42	2,2	--	--	--	100	42	2,2	--	--	--
10	3/8	--	--	--	100	100	42	2,2	--	--	--	100	42	2,2	130	20	2,2
15	1/2	130	95	4,1	100	100	42	2,2	130	95	3,9	100	42	2,2	130	24	2,2
20	3/4	150	105	4,2	120	100	42	2,2	150	105	4,2	100	42	2,2	150	28	2,2
25	1	160	115	4,2	120	130	60	4,0	160	115	6,5	130	60	4,0	160	37	4,0
32	1 1/4	180	140	8,1	150	130	60	4,0	180	140	8,1	130	60	4,0	180	42	4,0
40	1 1/2	200	150	8,5	150	150	65	4,6	200	150	11,5	150	65	4,6	200	54 *	4,6
50	2	230	165	11,5	180	230	80	7,6	230	165	14,9	230	80	7,6	230	67 *	7,6
65		290	185	23,0	--	--	--	--	290	185	23,0	--	--	--	--	--	--
80		310	200	23,5	--	--	--	--	310	200	31,0	--	--	--	--	--	--
100		350	220	36,0	--	--	--	--	350	235	40,0	--	--	--	--	--	--
125		400	250	47,0	--	--	--	--	--	--	--	--	--	--	--	--	--

Larger sizes on request

<sup>1)</sup> not in GG

Standard-flange dimensions refer to page 17

**Parts**

Pos.	Description	Material, Material-No.		
		DIN	DIN	DIN
1	Body	GG-25, 0.6025	1.0619+N, 1.0619.01	GX5CrNiMo19-11-2, 1.4408
4	Gasket (top flange / window) *	Pure graphite	Pure graphite	
6	Top flange	GG-25, 0.6025	1.0619+N, 1.0619.01	GX5CrNiMo19-11-2, 1.4408
12	Gasket (window / body) *	Pure graphite	Pure graphite	
13	Window *	borosilicate glass DIN 7080 max. 300°C	borosilicate glass DIN 7080 max. 300°C	
27	Hexagon screws	5	5	A4-70
28	Hexagon nuts	4.6	5.6 zinc-plated	A4-70

\* Spare part

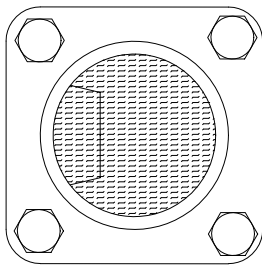
**Flow conditions through a sight glass installed in front of a steam trap**


Figure 1: Back pressure of condensate

On a back pressure of condensate the interior space will be filled with liquid.

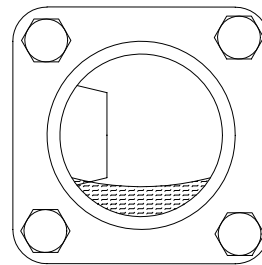


Figure 2: Steam flow

On steam flow the liquid level is lowered below the edge of the inlet pipe. Intensive mixture of water and steam can lead to an intensive bubbling.

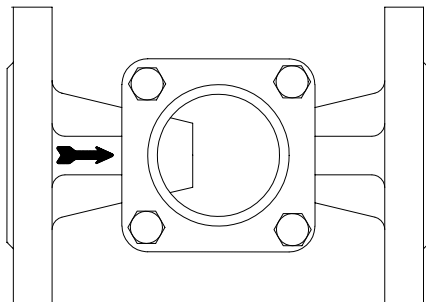


Figure 3: Tetragonal top flange (&lt; DN 65)

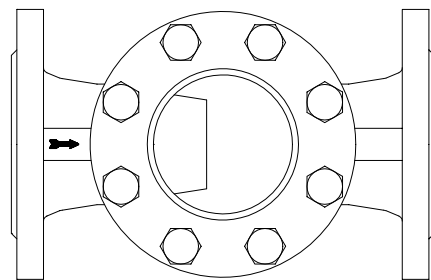


Figure 4: Circular top flange (DN65-100)

**Selection criteria:**

- Operating pressure
- Operating temperature
- Nominal diameter / nominal pressure
- Type of connection
- Body material

**Example for order data:**

For monitoring the function of steam traps in pipe work systems, PS= 22 bar, TS = 250 °C, screwed socket G 1/2, body of stainless steel, window borosilicate glass DIN 7080-16.

=> **Double window sight glass, BR 660, G 1/2, stainless steel, borosilicate glass DIN 7080-16, face-to-face dimension 100 mm, screwed sockets**