

Flow indicator (Double window sight glasses)

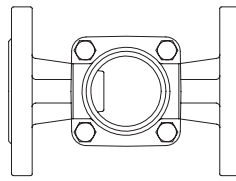
PN16 / PN40

- with flanges
- with screwed sockets
- with butt weld ends

(Fig. 660....1)

(Fig. 660....2)

(Fig. 660....4)



Grey cast iron
Cast steel
Stainless steel

Fig. 660

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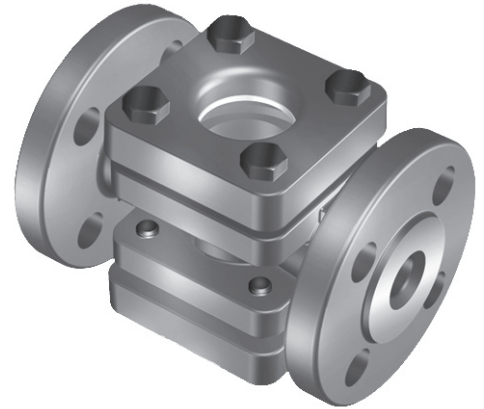


Fig. 660....1

Features:

- with double sided window (borosilicate glass)
- Sight glasses with reinforced windows acc. to DIN 3237
- Mounting in any position
- Robust and water hammer proof design

Flow indicator (Grey cast iron, Cast steel, Stainless steel)

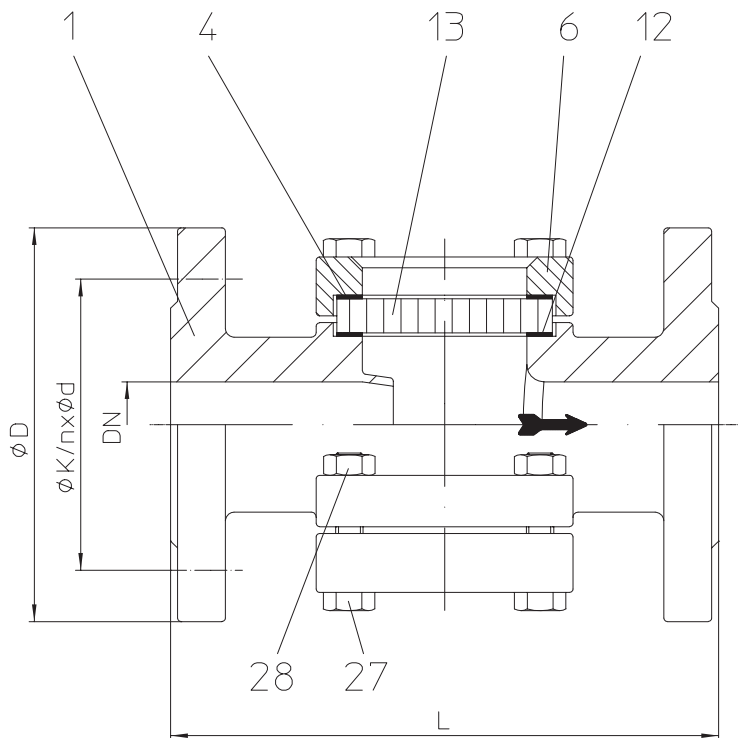


Fig. 660....1 with flanges

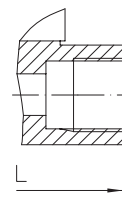


Fig. 660....2 with screwed sockets

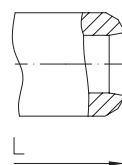


Fig. 660....4 with butt weld ends

Figure	Nominal pressure	Material	Nominal diameter / NPS	Operating pressure PS	Inlet temperature TS	max. pH value
12.660	PN16	EN-JL1040	6 - 200 / 1/4" - 8"	16 barg	120 °C	9-10
				10,2 barg	280 °C	
32.660	PN16	1.0619+N	6 - 200 / 1/4" - 8"	16 barg	120 °C	
				10,2 barg	280 °C	
52.660	PN16	1.4408	6 - 200 / 1/4" - 8"	16 barg	120 °C	
				10,2 barg	280 °C	
35.660	PN40	1.0619+N	6 - 200 / 1/4" - 8"	40 barg	120 °C	
				28 barg	280 °C	
55.660	PN40	1.4408	6 - 200 / 1/4" - 8"	40 barg	120 °C	
				28 barg	280 °C	

For ANSI versions refer to data sheet CONA®Komponenten-ANSI

Types of connection

Other types of connection on request.

- Flanges1 _____ acc. to DIN 2533 or DIN EN 1092-2 (PN16) / DIN 2635 or DIN EN 1092-1 (PN40)
- Screwed sockets2 ____ Rp thread acc. to DIN EN 10226-1 or NPT thread acc. to ANSI B1.20.1
- Butt weld ends4 ____ Weld preparation acc. to EN ISO 9692 identification No. 1.3 and 1.5 (Note restriction on operating pressure / inlet temperature depending to design!)

Features

- Double window sight glasses in straight through (borosilicate glass)
- 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
- Installation in any position. In connection with the steam trap the sight glass has to be installed in front of it.
- **Construction acc. to DIN 3237 Sight glasses with reinforced windows**

Selection criteria

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

Example for order data

For monitoring the function of steam traps in pipe work systems, PS = 22bar, TS = 250°C, Screwed sockets G1/2, Body stainless steel, Window borosilicate glass DIN 7080-16.
=> **Flow indicator, Fig. 660, G 1/2, PN16, Stainless steel, Face-to-face dimension 100 mm, Screwed sockets.**

DN	6	10	15	20	25	32	40	50	65	80	100	125	150	200
NPS	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8

Dimensions and weights (Face-to-face acc. to data sheet resp. customer request) Standard-flange dimensions refer to page 4

PN16	Flanges	L	(mm)	--	--	130	150	160	180	200	230	290	310	350	400	480	600
		D	(mm)	--	--	95	105	115	140	150	165	185	200	220	250	285	340
	Weight approx.	(kg)	--	--	3,6	4,2	6,5	8,1	10,5	14,5	23	32	41	47	on request		
Screwed sockets (NPT not for EN-JL1040)	L (EN-JL1040)	(mm)	100	100	100	120	120	160	160	180	--	--	--	--	--	--	--
	L	(mm)	100	100	100	120	120	160	160	230	--	--	--	--	--	--	--
	SW	(mm)	36	36	36	46	46	75	75	80	--	--	--	--	--	--	--
	Weight approx.	(kg)	2,2	2,2	2,2	3,4	3,4	7	7	10	--	--	--	--	--	--	--
PN40	Flanges	L	(mm)	--	--	130	150	160	180	200	230	290	310	350	400	480	600
		D	(mm)	--	--	95	105	115	140	150	165	185	200	235	270	300	375
	Weight approx.	(kg)	--	--	3,6	4,2	6,5	8,1	11,5	14,9	23	33	43	50	on request		
Screwed sockets	L	(mm)	100	100	100	120	120	160	160	230	--	--	--	--	--	--	--
	SW	(mm)	36	36	36	46	46	75	75	80	--	--	--	--	--	--	--
	Weight approx.	(kg)	2,2	2,2	2,2	3,4	3,4	7	7	10	--	--	--	--	--	--	--
	Butt weld ends	L	(mm)	--	100	100	100	120	120	160	230	290	310	350	400	480	600
A		(mm)	--	20	22	28	34	42	49	61	77	90	115	141	170	222	
Weight approx.		(kg)	--	2,2	2,2	2,2	4	4	7	10	18	25	32	35	on request		

Parts					
Pos.	Sp.p.	Description	Fig. 12.660	Fig. 32.660 Fig. 35.660	Fig. 52.660 Fig. 55.660
1		Body	EN-JL1040, EN-GJL-250	GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
4	x (window cpl.)	Gasket	Aramidfaser C4400		
+ 12		Gasket	Graphite		
+ 13		Window	borosilicate glass DIN 7080 max. 280°C		
6		Cover flange	EN-JL1040, EN-GJL-250	GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
27		Hexagon screw	5.6 zinc coated		A4-70
28		Hexagonal nut	5		A4-70
		L Spare parts			

Information / restriction of technical rules need to be observed!

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview and Resistance list).

Operating and installation instructions can be downloaded at www.ari-armaturen.com.

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

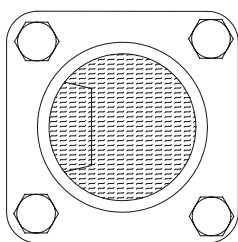


Figure 1: Back pressure of condensate
On a back pressure of condensate the interior space will be filled with liquid.

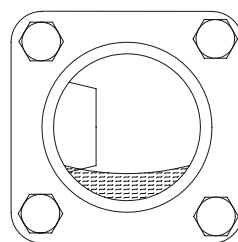


Figure 2: Steam flow
On steam flow the liquid level is lowered below the edge of the inlet pipe. Intensive mixture of water and steam can lead to an intensive bubbling.

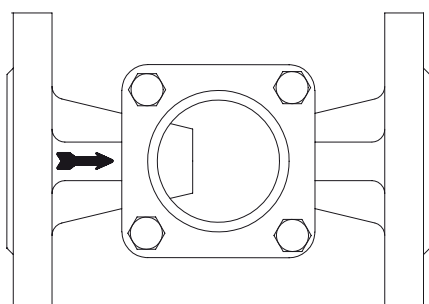


Figure 3: Tetragonal top flange (< DN 65)

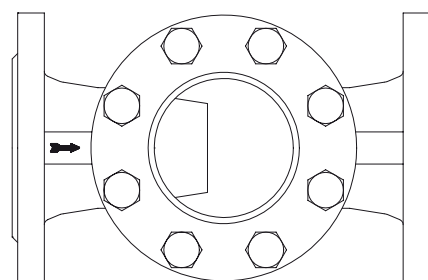


Figure 4: Circular top flange (DN65-250)

