

Flange-Sight flow indicator DIN 3237 TYPE FS01 / FS02 / FS03



Description:

Sight flow indicators with flange connection acc. DIN 1092-2/B1 or ANSI – 150/300 LBS, are used for optical control of fluids and gases, for horizontal and vertical pipelines.

Product features:

- suitable for neutral and non-neutral **liquids and gaseous media.**
- with flap
- with PTFE-spinner (only liquid media)
- **installation position:**
with flap: horizontal or vertical with direction of flow from the bottom up
standard or PTFE-spinner: any position

connection:

DN15- 1/2", DN20 - 3/4", DN25 – 1", DN32 – 1 1/4", DN40 – 1 1/2", DN50 – 2",
DN65 – 2 1/2", DN80 – 3", DN100 – 4", DN125 – 5", DN150 – 6", DN200 – 8"

operating pressure:

max. 40 bar – depending from media & operating temperature

Materials:

Component

Type FS01
Body Grey cast iron GG25 (EN-GJL-250)
Cover Grey cast iron GG25 (EN-GJL-250)
Seal graphite
Screw 4.6 / 5.6 vz
temperature min. -10°C
Glass Soda lime glass DIN 8902 / to +150°C
borosilicate glass DIN 7080 / to +280°C

Type FS02

Carbon steel GS-C 25 (WCB)
Carbon steel GS-C 25 (WCB)
graphite
4.6 / 5.6 vz
min. -10°C

Type FS03

Stainless steel 1.4408 (AISI 316 L)
Stainless steel 1.4408 (AISI 316 L)
graphite
A4
min. -60°C (down to -200°C on request)

Pressure – Temperature – Application limits:

For FS01 grey cast iron:

Operating temperature bis °C	20	150	200	250	280
PN16 / ANSI 150 lbs	16,0	14,4	12,8	11,2	9,6

For FS02 carbon steel:

Operating temperature bis °C	20	150	200	250	280
PN16 / ANSI 150 lbs	16,0	14,0	13,3	12,1	11,0
PN40 / ANSI 300 lbs	40,0	35,0	33,3	30,4	27,6

For FS03 stainless steel:

Operating temperature bis °C	20	150	200	250	280
PN16 / ANSI 150 lbs	16,0	14,5	13,4	12,7	11,8
PN40 / ANSI 300 lbs	40,0	36,3	33,7	31,8	29,7

Dimensions:

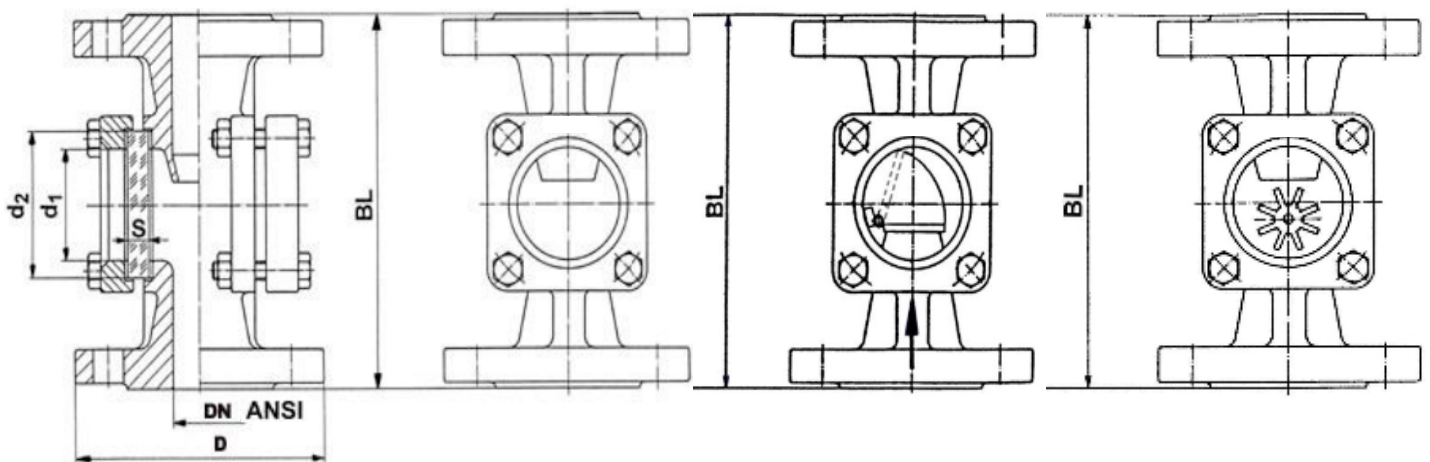
Standard



Flap



PTFE-spinner



According to DIN-3237 norm:

Diameter	15	20	25	32	40	50	65	80	100	125	150	200
D (PN16)	95	105	115	140	150	165	185	200	220	250	285	340
D (PN40)	95	105	115	140	150	165	185	200	235	-	-	-
BL	130	150	160	180	200	230	290	310	350	400	480	600
d1	32	32	48	48	65	80	80	100	125	150	175	175
d2	45	45	63	63	80	100	100	125	150	175	200	200
S PN16	10	10	10	10	12	15	15	20	25	25	30	30
S PN40	10	10	15	15	20	25	25	30	-	-	-	-
Weight for FS01 in kg	3,4	4,0	5,9	7,0	10,5	14,0	22,5	30,0	40,0	47,0	67,0	96,0
Weight for FS02/FS03 in kg	3,6	4,0	6,5	7,5	11,0	14,5	23,0	32,0	42,0	47,0	67,0	118,0

With flange connection according to ANSI:

Diameter	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"
D (ANSI 150 lbs)	89	98	108	118	127	152	178	191	228	254	279	343
D (ANSI 300 lbs)	95,2	117,3	123,8	133,4	155,6	165,1	190,5	209,6	-	-	-	-
BL (DIN F1)	130	150	160	180	200	230	290	310	350	400	480	600
d1	32	32	48	48	65	80	80	100	125	150	175	175
d2	45	45	63	63	80	100	100	125	150	175	200	200
S 16 bar	10	10	10	10	12	15	15	20	25	25	30	30
S 40 bar	10	10	15	15	20	25	25	30	-	-	-	-
Weight for FS01 in kg	3,4	4,0	5,9	7,0	10,5	14,0	22,5	30,0	40,0	47,0	67,0	96,0
Weight for FS02/FS03 in kg	3,6	4,0	6,5	7,5	11,0	14,5	23,0	32,0	42,0	47,0	67,0	118,0

Torque in (Nm):

Glass d2 in mm	d1 in mm	4x M8	4x M10	4x M12	4x M14	4x M16	8x M16
45	32	10	12	--	--	--	--
63	48	12	20	23	--	--	--
80	65	--	23	30	--	40	--
100	80	--	--	42	--	70	35
125	100	--	--	--	65	--	50
150	125	--	--	--	--	100	60
175	150	--	--	--	--	--	80
200	175	--	--	--	--	--	90

Versions:



DN15 – DN50
Covers square



DN65 – DN200
Covers round

Options (on request):

- with butt weld ends
- with sight glass light
- with heating jacket
- other materials

Article number:

Component

Body
Cover
Seal
Screw

Type FS01

Grey cast iron GG25 (EN-GJL-250)
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graphite
4.6 / 5.6 vz

Type FS02

Carbon steel GS-C 25 (WCB)
Carbon steel GS-C 25 (WCB)
graphite
4.6 / 5.6 vz

Type FS03

Stainless steel 1.4408 (AISI 316 L)
Stainless steel 1.4408 (AISI 316 L)
graphite
A4

Type	Glass	Connection	Design	Size
FS01	01 – Soda lime glass 02 – Borosilicate glass	0 – DIN PN16 2 – ANSI 150*	0 – Standard 1 – With flap 2 – With PTFE-spinner	03 – DN15 – 1/2" 04 – DN20 – 3/4" 05 – DN25 – 1" 06 – DN32 – 1 1/4" 07 – DN40 – 1 1/2" 08 – DN50 – 2" 09 – DN65 – 2 1/2" 10 – DN80 – 3" 11 – DN100 – 4" 12 – DN125 – 5" 13 – DN150 – 6" 14 – DN200 – 8"

Type	Glass	Connection	Design	Size
FS02 FS03	01 – Soda lime glass 02 – Borosilicate glass	0 – DIN PN16 1 – DIN PN40** 2 – ANSI 150*** 3 – ANSI 300****	0 – Standard 1 – With flap 2 – With PTFE-spinner	03 – DN15 – 1/2" 04 – DN20 – 3/4" 05 – DN25 – 1" 06 – DN32 – 1 1/4" 07 – DN40 – 1 1/2" 08 – DN50 – 2" 09 – DN65 – 2 1/2" 10 – DN80 – 3" 11 – DN100 – 4" 12 – DN125 – 5" 13 – DN150 – 6" 14 – DN200 – 8"

Example No. FS02010005:

FS02 | **01** | **0** | **0** | **05**

Sight flow indicator made of carbon steel
Glass: Soda-lime-glass
Connection: DIN PN16
Design: standard
Size: DN25

*Connection ANSI150 up to DN80 – 3" available

**Version PN40 only with borosilicate glass and up to DN100 – 4" available

***Version ANSI 150 with soda lime glass up to DN125 – 5" available

****Version ANSI 300 with borosilicate glass up to DN80 – 3" available

Image similar, subject change without notice.