

# FLOW SIGHT GLASS GAUGE

## F SERIES

Flange Connection With or Without Spring Paddle

The flow sight glass was designed with or without spring paddle for easy observation of flowing fluid from any direction.

### Technical Data

**Service:** Compatible gas and liquid; Water treatment system; Industrial flow system; and Double windows indication

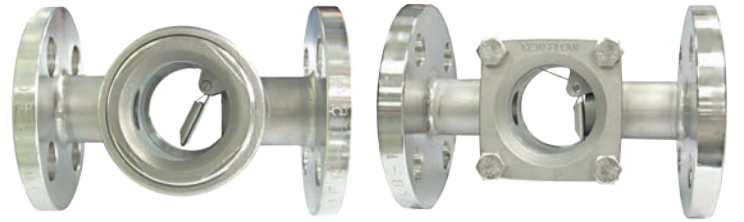
**Material:** Body- SS316, SS304, SS316L, SS304L, and Duplex S.S-UNS J92205 on request only for without paddle type ; Paddle- SS316; Spring- SS316; Gauge- Tempered glass; Gasket- Teflon, Gore-Tex, Graphite, Sigma 533

\*Gasket: Gore Tex, Graphite and Sigma 533 unsuitable for FA type.

**Max. working temperature:** 200°C (option: 300°C available)

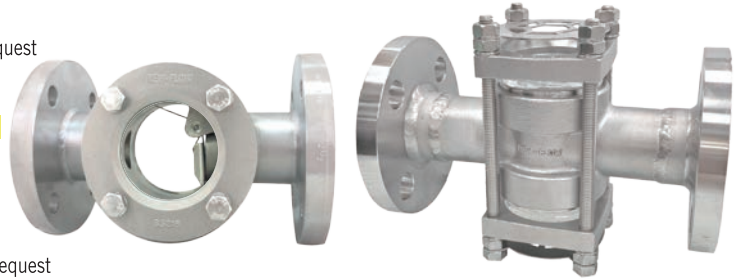
**Max. working pressure:**

- **FA type:** [for size of ½"(15A) to 2"(50A)]: 10 kg/cm² @25°C water
  - **FB / FB-DG (double glasses) / FB-DP (protection fence) type:** [for size of ½"(15A) to 2"(50A)]: 15 kg/cm² @25°C water ; 25 and 40 kg/cm² are on request [for size of 2½"(65A) to 4"(100A)]: 15 kg/cm² @25°C water [for size of 5"(125A) to 8"(200A)]: 10 kg/cm² @25°C water
  - **Explosion Proof type** [for size of ½"(15A) to 8"(200A)]: 16 kg/cm²
- Optional:**
- **Protection Fence / SS304:** Protect the glass plate against damage from outside
  - **Tempered glass x 4pcs:** more protection from outside



FA Type

FB Type (15A~50A)



FB Type (65A~200A)

FB-DP Type (Protection Fence)

\*Tempered glass x 4 pcs

### Approvals:

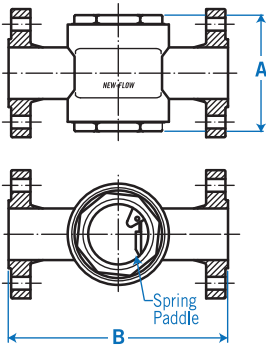
CE 2810



II 2G Ex h IIC Gb Tx

### Dimension-mm

#### FA Type (with paddle): ½"(15A)~2"(50A)

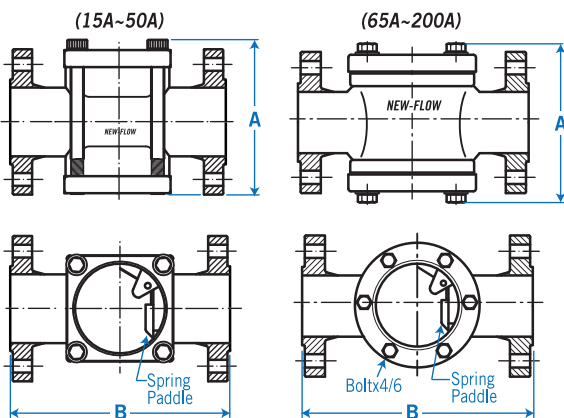


Wetted Parts Material Code		1	2	3	4	6
Material	Body (Flange)	SS316	SS304	SS316L	SS304L	Duplex S.S UNS J92205
	Cover	SS316	SS304	SS316	SS316	SS316

\*Duplex S.S-UNS J92205 only for drip tube type (without paddle).

Range Size	½" (15A)	¾" (20A)	1" (25A)	1¼" (32A)	1½" (40A)	2" (50A)
A	114	114	114	114	130	150
B	130	130	160	160	200	220
B (option)	140	140	140	140	180	220

#### FB Type (with paddle): ½"(15A)~8"(200A)

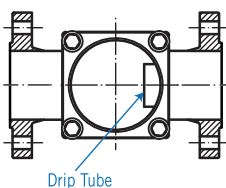


Wetted Parts Material Code		1	2	3	4	6
Material	Body (Flange)	SS316	SS304	SS316L	SS304L	Duplex S.S UNS J92205
	Cover	SS316	SS304	SS316	SS316	SS316

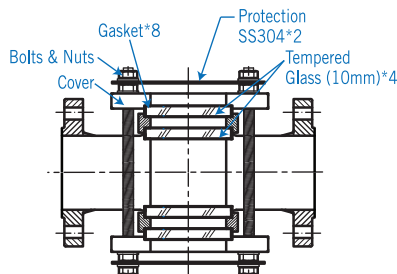
\*Duplex S.S-UNS J92205 only for drip tube type (without paddle).

Range Size	½" (15A)	¾" (20A)	1" (25A)	1¼" (32A)	1½" (40A)	2" (50A)	2½" (65A)	3" (80A)	4" (100A)	5" (125A)	6" (150A)	8" (200A)
A	72	72	72	115	115	129	164	183	212	247	276	345
B	130	130	160	200	200	220	270	270	320	380	420	500
B (option)	140	140	140	180	180	220	260	260	310	-	-	-
B (300LB)	160	160	160	-	-	-	-	-	-	-	-	-

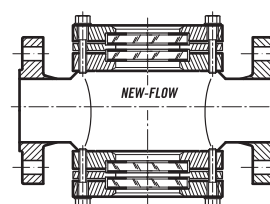
#### Drip Tube Type (without paddle)



#### FB-DP Type (Protection Fence)



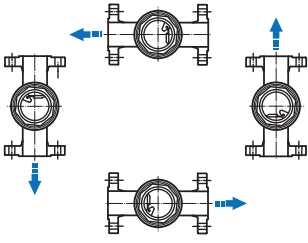
#### FB-DG Type (Double Glasses)



\*UNS J92205 is available for ½"(15A) to 1"(25A).

# F Series

## Mounting Position



Item Code	Flow Range	Connection Size
F	0~12 M <sup>3</sup> /H	1¼"(32A), 1½"(40A), 2"(50A)
G	0~16 M <sup>3</sup> /H	1¼"(32A), 1½"(40A), 2"(50A)
H	0~18 M <sup>3</sup> /H	2"(50A)
I	0~24 M <sup>3</sup> /H	2"(50A)
J	0~22 M <sup>3</sup> /H	3"(80A), FB type available only
K	0~200 M <sup>3</sup> /H	5"(125A), FB type available only

## Flow Range Table

Item Code	Flow Range	Connection Size
A	0~1.5 M <sup>3</sup> /H	½"(15A), ¾"(20A), 1"(25A)
B	0~3 M <sup>3</sup> /H	½"(15A), ¾"(20A), 1"(25A)
C	0~4 M <sup>3</sup> /H	½"(15A), ¾"(20A), 1"(25A)
C-1	0~5 M <sup>3</sup> /H	¾"(20A)
D	0~8 M <sup>3</sup> /H	1¼"(32A), 1½"(40A), 2"(50A)
E	0~10 M <sup>3</sup> /H	1¼"(32A), 1½"(40A), 2"(50A)

Item Code	Flow Range	Connection Size
L	0~50 M <sup>3</sup> /H	3"(80A), FB type available only
M	0~160 M <sup>3</sup> /H	3"(80A), FB type available only
N	0~55 M <sup>3</sup> /H	4"(100A), FB type available only
O	0~80 M <sup>3</sup> /H	4"(100A), FB type available only
P	0~120 M <sup>3</sup> /H	5"(125A), FB type available only
Q	0~100 M <sup>3</sup> /H	6"(150A), FB type available only
R	0~200 M <sup>3</sup> /H	6"(150A), FB type available only
S	0~300 M <sup>3</sup> /H	8"(200A), FB type available only

## Ordering Information

FA/ FB/ FB-DG/ FB-DP/	Code	Type
	W	With Paddle
	N	Without Paddle (Drip Tube)– scale unavailable
		<b>Code</b> <b>Wetted Parts Material</b>
		(1) SS316 (2) SS304 (3) SS316L (4) SS304L (5) option (6) Duplex S.S - UNS J92205 (only for drip tube type)
		<b>Code</b> <b>Size</b>
		(1) ½" (15A) (2) ¾" (20A) (3) 1" (25A) (4) 1½" (40A) (5) 2" (50A) (6) 2½" (65A) (7) 3" (80A) (8) 4" (100A) (9) 5" (125A) (10) 6" (150A) (11) 8" (200A) (12) 1¼" (32A)
		<b>Code</b> <b>Connection Rating</b>
		(1) JIS 10K (2) JIS 20K (3) ANSI 150# (4) ANSI 300# (5) PN10 (6) PN16 (7) PN25 (8) option
		<b>Code</b> <b>Gasket Material</b>
		(1) Teflon (2) Gore-Tex (unsuitable for FA type) (3) Graphite (unsuitable for FA type) (4) Sigma 533 (unsuitable for FA type)
		<b>Code</b> <b>CE Mark Request</b>
	3	Stamp
	4	Without
		<b>Code</b> <b>Flow Range</b>
	A~S	Please refer to the Flow Range Table, and fill out the item code of requested range directly.
	N	No need flow range scale
		<b>Code</b> <b>Explosion Proof Certification Request</b>
	N	Without
	C	<b>International IECEx Certification &amp; Europe Union ATEX Certification</b> IECEx & ATEX (Ex) II 2G) Certificate Ex h IIC Gb xx ("xx" stand for Temperature classification. Please select it as below temperature condition.) [e.g. ½"(15A), Tprocess 100°C] Please select T4 as following, and the Explosion proof marks: Ex h IIC Gb T4
		<b>Temperature Classification / Condition</b>
	N	Without Explosion proof certification
	T2	[for size ½"(15A) to 2½"(65A)]: 175°C < Tprocess ≤ 270°C [for size 3"(80A) and larger]: 140°C < Tprocess ≤ 220°C
	T3	[for size ½"(15A) to 2½"(65A)]: 110°C < Tprocess ≤ 175°C [for size 3"(80A) and larger]: 85°C < Tprocess ≤ 140°C
	T4	[for size ½"(15A) to 2½"(65A)]: 75°C < Tprocess ≤ 110°C [for size 3"(80A) and larger]: 60°C < Tprocess and Tamb ≤ 75°C 75°C < Tprocess ≤ 85°C
	T5	[for size ½"(15A) to 2½"(65A)]: 60°C < Tprocess and Tamb ≤ 75°C [for size 3"(80A) and larger]: 48°C < Tprocess and Tamb ≤ 60°C
	T6	[for size ½"(15A) to 2½"(65A)]: Tprocess and Tamb ≤ 60°C [for size 3"(80A) and larger]: Tprocess and Tamb ≤ 48°C
		<b>Complete Ordering Code</b>