

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(CF8M), SS304(CF8), SS316L(CF3M), SS304L(CF3), and Duplex S.S-UNS J92205 (only for without paddle type), and WCB on request;

WCB body is not available for explosion-proof (Ex) applications.

Paddle– SS316/SS316L; Spring– SS316L;

Gauge– Tempered glass; Gasket– Teflon, Gore-Tex, Graphite, Sigma 533

Max. working temperature: -40~150°C (Teflon), -40~240°C (Sigma 533), -40~270°C (Gore-Tex), -40~270°C (Graphite)

Max. working pressure: • **FA type:** [for size of 1/2"(15A) to 2"(50A)]: 16 kg/cm² @25°C water

• **FB / FB-DG (double glasses) / FB-DP (protection fence) type:**

[for size of 1/2"(15A) to 2"(50A)]: 16 kg/cm² @25°C water ; 25 and 40 kg/cm² are on request

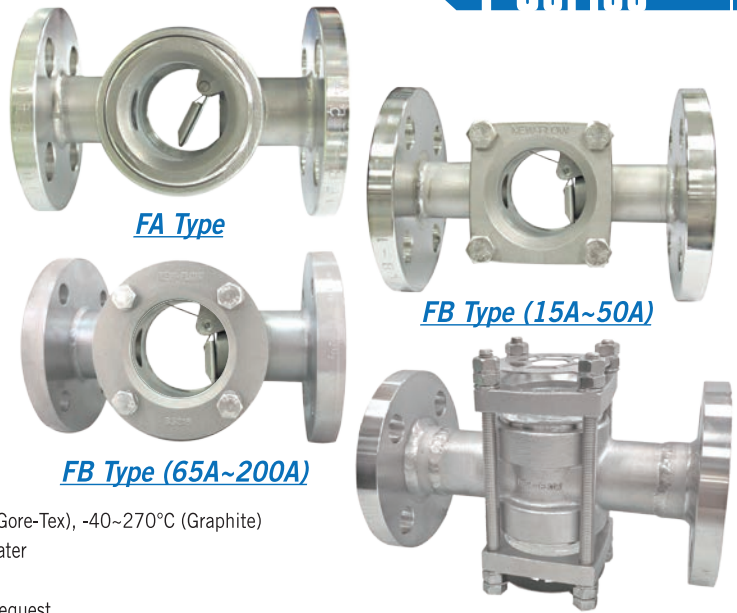
[for size of 2 1/2"(65A) to 8"(200A)]: 16 kg/cm² @25°C water

Optional: • **Protection Fence / SS304:** Protect the glass plate against damage from outside

• Tempered glass x 4pcs: more protection from outside

NOTE.

Operating Pressure Range: 0 to 16 kg/cm² (gauge) for Ex applications.



FB-DP Type (Protection Fence)

*Tempered glass x 4 pcs

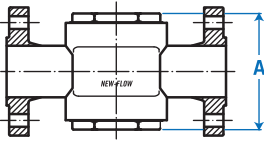
Approvals:



II 2G Ex h IIC Tx Gb

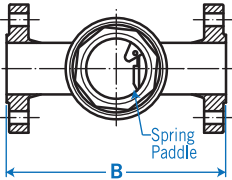
Dimension-mm

FA Type (with paddle): 1/2"(15A)~2"(50A)



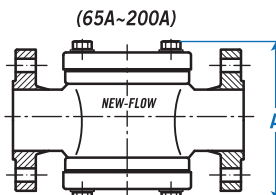
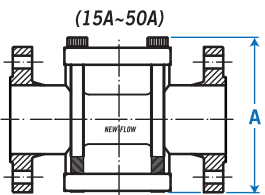
Wetted Parts Material Code		1	2	3	4	6	7
Material	Body / Flange	SS316 (CF8M)	SS304 (CF8)	SS316L (CF3M)	SS304L (CF3)	Duplex S.S UNS J92205	WCB/A105
	Cover	SS316 (CF8M)	SS304 (CF8)	SS316 (CF8M)	SS316 (CF8M)	SS316 (CF8M)	WCB

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



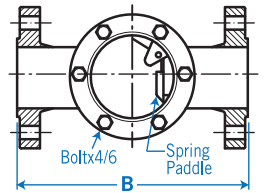
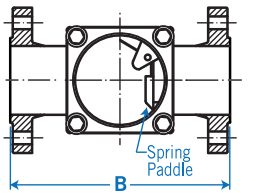
Range Size	1/2" (15A)	3/4" (20A)	1" (25A)	1 1/4" (32A)	1 1/2" (40A)	2" (50A)
A	114	114	114	114	130	150
B	130	130	160	160	200	220
B (option)	140	140	140	140	180	220

FB Type (with paddle): 1/2"(15A)~8"(200A)



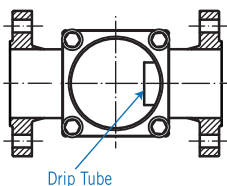
Wetted Parts Material Code		1	2	3	4	6	7
Material	Body/Flange	SS316 (CF8M)	SS304 (CF8)	SS316L (CF3M)	SS304L (CF3)	Duplex S.S UNS J92205	WCB/A105
	Cover	SS316 (CF8M)	SS304 (CF8)	SS316 (CF8M)	SS316 (CF8M)	SS316 (CF8M)	WCB

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

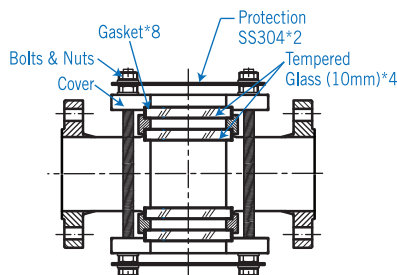


Range Size	1/2" (15A)	3/4" (20A)	1" (25A)	1 1/4" (32A)	1 1/2" (40A)	2" (50A)	2 1/2" (65A)	3" (80A)	4" (100A)	5" (125A)	6" (150A)	8" (200A)
A	72	72	72	115	115	129	164	183	212	247	276	345
B	130	130	160	200	200	220	270	270	320	380	420	500
B (option)	140	140	140	180	180	220	260	260	310	-	-	-
B (300LB)	160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

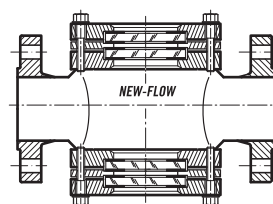
Drip Tube Type (without paddle)



FB-DP Type (Protection Fence)



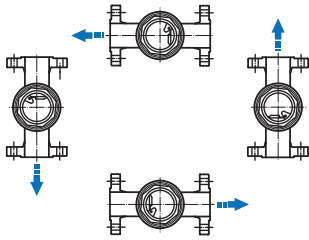
FB-DG Type (Double Glasses)



*UNS J92205 is available for 1/2"(15A) to 1"(25A).

F Series

Mounting Position



Flow Range Table

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

Item Code	Flow Range	Connection Size
F	0~12 M ³ /H	1¼"(32A), 1½"(40A), 2"(50A)
G	0~16 M ³ /H	1¼"(32A), 1½"(40A), 2"(50A)
H	0~18 M ³ /H	2"(50A)
I	0~24 M ³ /H	2"(50A), 2½"(65A)
J	0~22 M ³ /H	3"(80A), FB type available only
K	0~200 M ³ /H	5"(125A), FB type available only

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

Ordering Information

FA/ FB/ FB-DG/ FB-DP/	Code	Type
	W	With Paddle
	N	Without Paddle (Drip Tube) – scale unavailable
		Code Wetted Parts Material
		(1) SS316(CF8M) (2) SS304(CF8) (3) SS316L(CF3M) (4) SS304L(CF3) (5) option (6) Duplex S.S-UNS J92205 (only for drip tube type) (7) WCB Body (A105 flange)
		Code Size
		(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)
		Code Connection Rating
		(P1) PN2.5 (P2) PN6 (P3) PN10 (P4) PN16 (P5) PN25 (P6) PN40 (P7) PN63 (J1) JIS 5K (J2) JIS 10K (J3) JIS 16K (J4) JIS 20K (J5) JIS 30K (J6) JIS 63K (U1) ANSI 75# (U2) ANSI 125# (U3) ANSI 150# (U4) ANSI 300# (U5) ANSI 600# (U6) ANSI 900# (0) Option
		Code Gasket Material
		(1) Teflon (2) Gore-Tex (3) Graphite (4) Sigma 533
		Code CE Mark for PED Request
	3	Stamp
	4	Without
		Code Flow Range
	A~S	Plase refer to the Flow Range Table, and fill out the item code of requested range directly.
	NA	No need flow range scale
	Z	Option
		Code Explosion Proof Certification Request
	N	Without
	C	International IECEx Certification & Europe Union ATEX Certification IECEX & ATEX (Ex) II 2G) Certificate Ex h IIC xx Gb (*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 T4 Gb
		Code Temperature Classification / Condition
	N	Without Explosion proof certification
	T2	[for size ½"(15A) to 2½"(65A)]: 175°C < Tprocess ≤ 270°C and Tamb ≤ 75°C [for size 3"(80A) and larger size]: 140°C < Tprocess ≤ 220°C and Tamb ≤ 75°C
	T3	[for size ½"(15A) to 2½"(65A)]: 110°C < Tprocess ≤ 175°C and Tamb ≤ 75°C [for size 3"(80A) and larger size]: 85°C < Tprocess ≤ 140°C and Tamb ≤ 75°C
	T4	[for size ½"(15A) to 2½"(65A)]: 75°C < Tprocess ≤ 110°C and Tamb ≤ 75°C [for size 3"(80A) and larger size]: 60°C < Tprocess and Tamb ≤ 75°C 75°C < Tprocess ≤ 85°C and Tamb ≤ 75°C
	T5	[for size ½"(15A) to 2½"(65A)]: 60°C < Tprocess and Tamb ≤ 75°C [for size 3"(80A) and larger size]: 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 size]: Tprocess and Tamb ≤ 48°C
		Code Max. Working Pressure
	0	16 kg/cm ²
	1	25 kg/cm ² (for FB type, see Note., sizes ≤ 2")
	2	40 kg/cm ² (for FB type, see Note., sizes ≤ 2")
		Complete Ordering Code