

*PRECISION
FLOW,
INC.*

SOLO  FLOW
ORIFICE PLATE HOLDER

*THE FUTURE OF ACCURACY,
TODAY.*

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FLOW, INC.

Precision Solo Flow® orifice fittings offer accuracy and convenience for metering both gas and liquid flows. These single chambered fittings are fast and simple to operate where line by-pass or pressure shut down is permitted. Because of its one piece body, spillage is avoided, plus the metering station is not disturbed when changing plates, as when spreading flanges. Plate changing is much faster and operation is resumed sooner.



All *Solo Flow®* orifice fittings are designed in accordance with ASME and ANSI requirements. They meet NACE MR-01-75 Latest Edition specifications, and are built to AGA recommendations. Stainless Steel internals are standard on all *Solo Flow®* orifice fittings. Standard body material for the *Solo Flow®* fitting is ASTM A-216 Grade WCC. Other materials are available upon request.

Body Types Available:

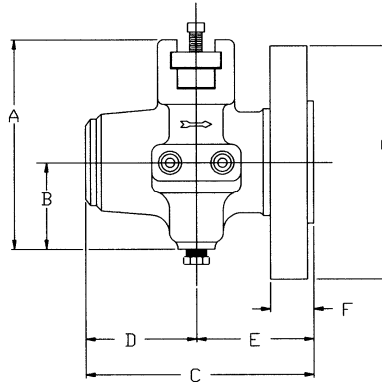
- Flange x Flange*
- Flange x Weld*
- Weld x Weld

*ANSI 150# to 900# - Raised Face or Ring Type Joint



When Ordering, Please Specify:

- Type of Fitting
- Size and Flange Rating
- Bore Size (Schedule) of Fitting



FLANGE x WELD

SIZE	150 LB. ANSI – 275 PSI (GAGE) CWP							QTY. & SIZE STUDS IN FLANGE	APPROX WEIGHT LBS.
	A	B	C	D	E	F	G		
2"	7 3/16"	2 15/16"	7 1/4"	3 5/8"	3 5/8"	7/8"	6"	4 @ 5/8"	50
3"	8 11/16"	3 17/32"	8 1/4"	4 1/8"	4 1/8"	1 1/8"	7 1/2"	4 @ 5/8"	65
4"	9 11/16"	4 1/32"	9"	4 1/2"	4 1/2"	15/16"	9"	8 @ 5/8"	85
6"	12 23/32"	5 11/16"	10 1/4"	5 1/8"	5 1/8"	1"	11"	8 @ 3/4"	145

SIZE	300 LB. ANSI – 720 PSI (GAGE) CWP							QTY. & SIZE STUDS IN FLANGE	APPROX WEIGHT LBS.
	A	B	C	D	E	F	G		
2"	7 3/16"	2 15/16"	7 1/4"	3 5/8"	3 5/8"	7/8"	6 1/2"	8 @ 5/8"	55
3"	8 11/16"	3 17/32"	8 1/4"	4 1/8"	4 1/8"	1 1/8"	8 1/4"	8 @ 3/4"	70
4"	9 11/16"	4 1/32"	9"	4 1/2"	4 1/2"	1 1/4"	10"	8 @ 3/4"	100
6"	12 23/32"	5 11/16"	10 1/4"	5 1/8"	5 1/8"	1 7/16"	12 1/2"	12 @ 3/4"	165

SIZE	600 LB. ANSI – 1440 PSI (GAGE) CWP							QTY. & SIZE STUDS IN FLANGE	APPROX WEIGHT LBS.
	A	B	C	D	E	F	G		
2"	7 3/16"	2 15/16"	8"	4"	4"	1 1/4"	6 1/2"	8 @ 5/8"	65
3"	8 11/16"	3 17/32"	9"	4 1/2"	4 1/2"	1 1/2"	8 1/4"	8 @ 3/4"	80
4"	9 11/16"	4 1/32"	9 1/2"	4 1/2"	5"	1 3/4"	10 3/4"	8 @ 7/8"	120
6"	12 23/32"	5 11/16"	11 1/2"	5 1/8"	5 3/4"	2 1/8"	14"	12 @ 1"	185

WELD x WELD

SIZE	150 – 600 LB. ANSI					CWP PSI GAGE	APPROX WEIGHT LBS.	PIPE SCHEDULE
	A	B	C	D	E			
2"	7 3/16"	2 15/16"	7 1/4"	3 3/4"	3 3/4"	1440	35	40
3"	8 11/16"	3 17/32"	7 1/2"	3 3/4"	3 3/4"	1440	50	40
4"	9 11/16"	4 1/32"	9"	4 1/2"	4 1/2"	1440	70	40
6"	12 23/32"	5 11/16"	10 1/4"	5 1/8"	5 1/8"	1440	135	40

SIZE	900 LB. ANSI					CWP PSI GAGE	APPROX WEIGHT LBS.	PIPE SCHEDULE
	A	B	C	D	E			
2"	7 3/16"	2 15/16"	7 1/4"	3 3/4"	3 3/4"	3600	65	80
3"	8 11/16"	3 17/32"	7 1/2"	3 3/4"	3 3/4"	3600	100	80
4"	9 11/16"	4 1/32"	9"	4 1/2"	4 1/2"	3600	120	80

2" PART NO.	3" PART NO.	4" PART NO.	6" PART NO.	DESCRIPTION	MATERIAL	QTY. REQ'D
SEE BELOW	SEE BELOW	SEE BELOW	SEE BELOW	BODY	A-216 GR. WCC	1
7128SF	7129SF	7130SF	7131SF	PLATE HOLDER RING	STAINLESS STEEL	1
7132SF	7133SF	7134SF	7135SF	SEALING BAR	1018 C.F. STEEL	1
7223SF	7224SF	7225SF	7226SF	CLAMPING BAR	1018 C.F. STEEL	1
7136SF	7137SF	7138SF	7139SF	SEALING BAR GASKET	DURABLA	1
7218	7218	7218	7218	CLAMPING BAR SCREWS	ALLOY STEEL	*
6607-12	6607-12	6607-12	6607-12	½" NPT HEX HD. PLUGS	FORGED STEEL	5
7222SF	7222SF	7222SF	7222SF	PLATE HOLDER SCREWS	STAINLESS STEEL	2
7222SF-1	7222SF-1	7222SF-1	7222SF-1	PLATE HOLDER LOCK WASHERS	STAINLESS STEEL	2
8SF-TAG-ID	8SF-TAG-ID	8SF-TAG-ID	8SF-TAG-ID	IDENTIFICATION TAG	ALUMINUM	1
2402	2403	2404	2406	UNIVERSAL TYPE ORIFICE PLATE	304 STAINLESS STEEL**	1
54DS02	54DS03	54DS04	54DS06	ORIFICE PLATE SEAL RING	NITRILE RUBBER***	1

* (4) REQUIRED ON 2" & 3"; (5) REQUIRED ON 4"; (6) REQUIRED ON 6"
 ** ALSO AVAILABLE IN 316 S.S. OR OTHER SPECIAL ALLOY MATERIALS
 *** ALSO AVAILABLE IN OTHER MATERIALS (TEFLON, VITON, ETC.)

TYPE OF FITTING	ANSI CLASS			
	150 ANSI	300 ANSI	600 ANSI	900 ANSI
FLANGE x FLANGE	101SF-XX	103SF-XX	105SF-XX	—
FLANGE x WELD	071SF-XX	073SF-XX	075SF-XX	—
WELD x WELD	—	—	705SF-XX	0746SF-XX

* XX – REPLACE WITH SIZE
 * EXAMPLE: 705SF-02 (2" 600# WELD x WELD)

Removing Orifice Plate

1. De-pressurize, or shut in the line.

► **DANGER!** *Precision Solo Flow® Orifice Fittings are operated under pressurized line conditions. Failure to follow the instructions in this manual can result in serious injury or death.*

2. Once the pressure is reduced, or line is shut in, the sealing bar/ plate holder assembly may then be removed.
3. Loosen the set screws on the clamping bar and slide the clamping bar out.
4. Lift out the sealing bar assembly from the orifice fitting. Lightly tap the sealing bar in order to break the gasket seal.
5. Remove the orifice plate, along with the seal ring, from the plate holder.
6. Remove the seal ring from the orifice plate.

Replacing Orifice Plate

1. Insert orifice plate into new seal ring.
2. Insert the orifice plate with seal ring into the plate carrier. Be sure to install the orifice plate in the correct flow direction. The sealing bar dowel pin may be used as a reference.

► **CAUTION!** *Failure to install orifice plate in the correct flow direction will result in measurement error and loss of revenue.*

3. Insert the sealing bar/ plate holder assembly into the orifice fitting, making sure to align the dowel pin on the sealing bar to the dowel pin hole on the orifice fitting. Make sure the sealing bar gasket comes in full contact with the sealing area.
4. Install the clamping bar. Tighten each of the set screws.
5. The orifice fitting is now ready for pressurization and operation.

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*ORIFICE
FITTINGS*

*METER
TUBES*

SKID PACKAGES

*ORIFICE
PLATES*

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