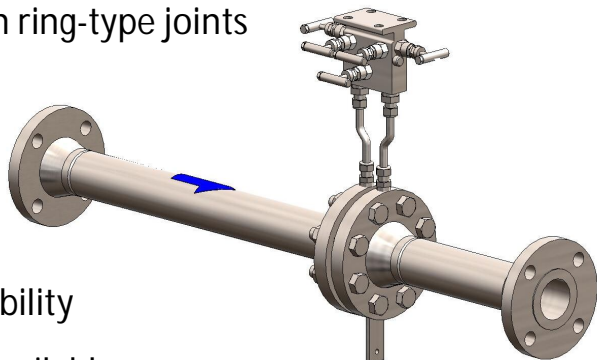




Orifice Plate and Flange Assemblies

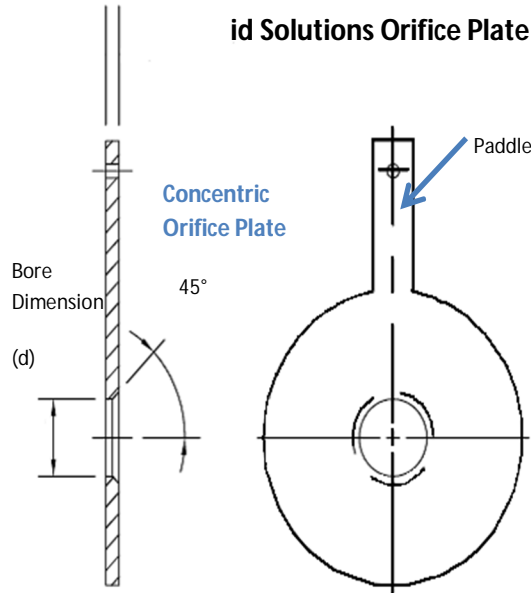
FEATURES:

- Designed in accordance with client specified standards including AGA, ASME, ISO. B31.1 and B31.3
- Meter Runs with welded or flanged integral orifice plate
- Paddle type, concentric (square edge, quadrant, conic), eccentric, segmental, bore & bevel and bore & counter bore
- 304SS, 316SS, Carbon Steel, Alloy 20, monel, hastelloy, duplex SS
- Pipe size: 1/2" to 60" (DN: 15-1500)
- Orifice assemblies: ratings from 300# up to 2500#
- RTJ Orifice Plates are available to fit between ring-type joints
- Up to 200 cP (centiPois) Viscosity
- Repeatability: +/- 0.1% of flow rate
- Accuracy: +/- 1% of flow rate
- Full documentation covering material traceability and compliance to standards and testing is available



Orifice Type	#1 Model	#2 Line Size	
Restriction	IDFRP		
Concentric	IDFCP		
Segmental	IDFSP		
Quadrant	IDFQP		
Eccentric	IDFEP		
		0.5	005
		0.75	075
		1	010
		1.5	015
		2	020
		2.5	025
		3	030
		4	040
		6	060
		8	080
		10	010
		12	120
		14	140
		16	160
		18	180
		20	200
		24	240

id Solutions Orifice Plate Model Description



The Concentric orifice is the most commonly used plate where the orifice bore is positioned in the center of the plate.

Should the plate require a bevel it is machined on the downstream side of the calculated bore dimension.

$$\beta = \frac{d}{D}$$

d orifice diameter
D pipe diameter

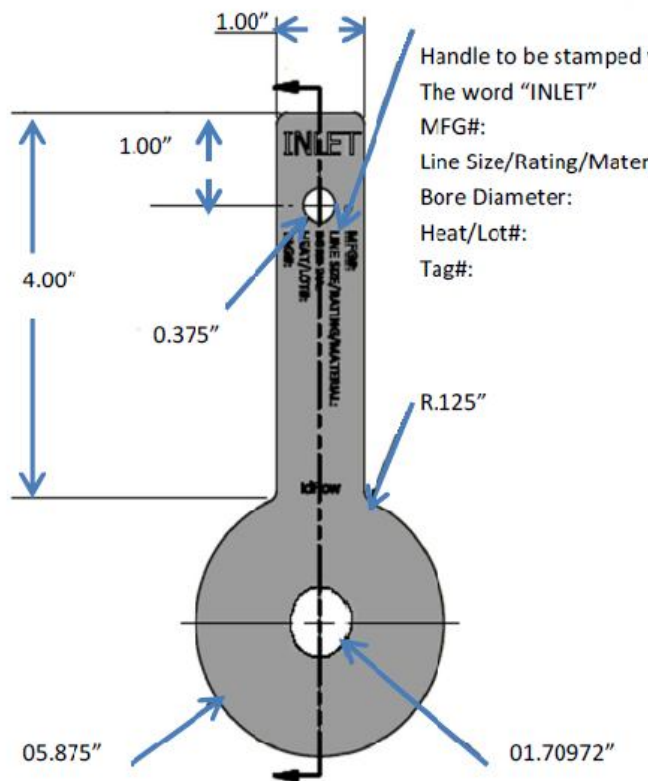
#3 Material	
316SS	316
304SS	304
Carbon Steel	WCB
Hastelloy	HST

IDFCP3-030-316-18-300RF-XS-00						
IDFCP3	030	316	18	300RF	XS	00
#1	#2	#3	#4	#5	#6	#7

The Quadrant bored Orifice Plate is machined with a rounded inlet edge. The thickness of the plate must be at least equal to the radius. Any excess material is removed with a counter-bore on the downstream side of the plate.

The Eccentric bored Orifice Plate is machined off center. With the bottom of the bore setting inscribed within a circle equal to 98% of the pipe diameter.

The Segmental bored Orifice Plate is machined by removing a segment of a circle. With the bottom of the bore setting inscribed within a circle equal to 98% of the pipe diameter.



#4 Plate Thickness		#5 Process Connection	
1/8"	18	ANSI 150 RF	150 RF
1/4"	14	ANSI 300 RF	300 RF
1/2"	12	ANSI 600 RF	600 RF
		ANSI 900 RF	900 RF
		ANSI 1500 RF	1500 RF
		ANSI 150 RTJ	150 RTJ
		ANSI 300 RTJ	300 RTJ
		ANSI 600 RTJ	600 RTJ
		ANSI 900 RTJ	900 RTJ
		ANSI 1500 RTJ	1500 RTJ

#6 Schedule / ID	
Schedule 10	010
Schedule 10S	010S
Schedule 40	040
Schedule 40S	040S
Schedule 80	080
Schedule 80S	080S
Standard	STD
Extra Strong	XS
ID	value
#7	
Drain Hole	DRN
Vent Hole	VNT

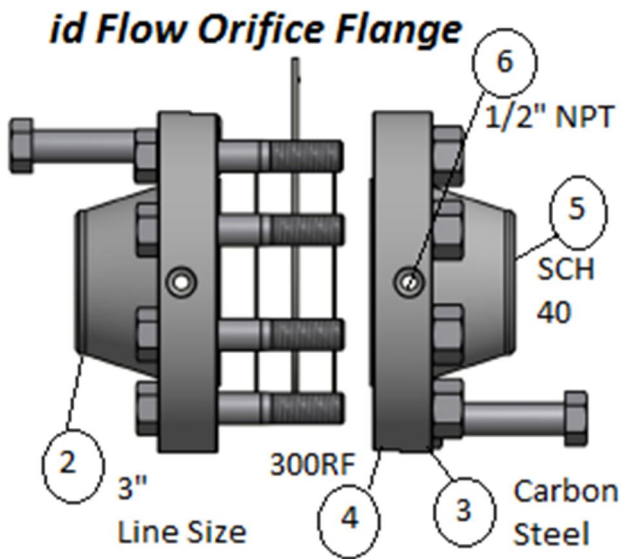
Additional options include bore calculation, drain or vent hole sizing, oxygen cleaning, Material Traceability Certificate, NACE, Canadian Registration, drawing, flange assembly, specified inspection and testing, etcetera.

id Flow Orifice Flange Model Description

Flange Model		#2 Line Size		#3 Flange Material		#4 Process Connection Type		#5 Schedule / ID		#6 Flange Tap Connections	
Weld Neck	IDFWNF	0.5	005								
Slip On	IDFSOF	0.75	075	316SS	316						
Threaded	IDFTF	1	010	304SS	304	ANSI 300RF	300RF				
		1.5	015	Carbon Steel	WCB	ANSI 600RF	600RF	SCH 10	010		
		2	020	Hastelloy	HST	ANSI 900RF	900RF	SCH 10S	010S	1/2 inch NPT	NPT12
		2.5	025			ANSI 1500RF	1500RF	SCH 40	040	<i>Included</i>	
		3	030			ANSI 2500RF	2500RF	SCH 40S	040S	Two 1/16" thick non-asbestos gaskets	
		4	040			ANSI 300 RTJ	300RTJ	SCH 80	080	Required number of number & size of Jackscrew nuts , studs & bolts	
		6	060			ANSI 600 RTJ	600RTJ	SCH 80S	080S		
		8	080			ANSI 900 RTJ	900RTJ	SCH 120	120		
		10	100			ANSI 1500 RTJ	1500RTJ	SCH 160	160		
		12	120			ANSI 2500 RTJ	2500RTJ	Standard	STD		
		14	140			Others on Application		X Strong	XS		
		16	160					XX Strong	XXS		
		18	180					ID	Value		
		20	200								
		24	240								

IDFWNF-030-WCB-300RF-040-NPT12

IDFWNF	030	WCB	300RF	040	NPT12
#1	#2	#3	#4	#5	#6



Options include bore calculation, oxygen cleaning, Material Traceability Certificate, NACE, Canadian Registration, drawing, flange assembly, specified inspection and testing, etcetera.

Type	#1 Model
Meter Run	IDFMR
	#2Pipe
0.5	005
0.75	075
1	010
1.5	015
2	020
2.5	025
3	030
4	040
6	060
8	080
10	100
12	120
14	140
16	160
18	180
20	200
24	240

#3 Material	
316SS	316
304SS	304
Carbon Steel	WCB
Hastelloy	HST

#4 Process Connection	
Weld In	000
ANSI 150 RF	15ORF
ANSI 300 RF	30ORF
ANSI 600 RF	60ORF
ANSI 900 RF	90ORF
ANSI 1500 RF	150ORF
ANSI 150 RTJ	150RTJ
ANSI 300 RTJ	300RTJ
ANSI 600 RTJ	600RTJ
ANSI 900 RTJ	900RTJ
ANSI 1500 RTJ	1500RTJ

#5 Schedule	
Schedule 10	010
Schedule 10S	010S
Schedule 40	040
Schedule 40S	040S
Schedule 80	080
Schedule 80S	080S
Schedule 120	120
Schedule 160	160
Others	

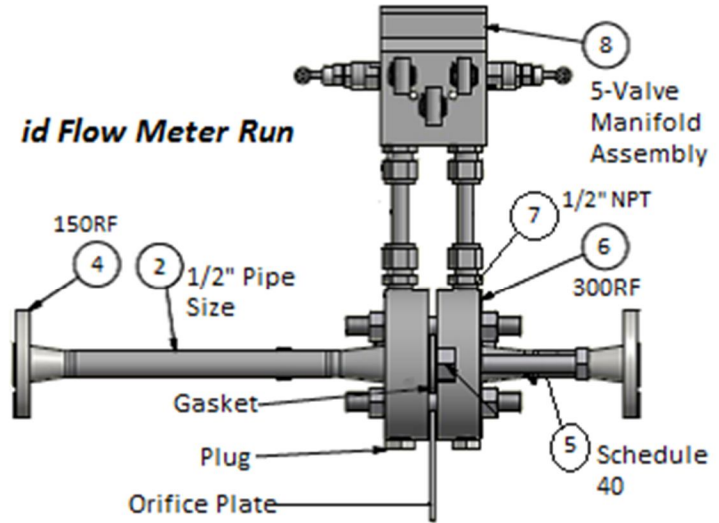
#6 Orifice Flange	
ANSI 150 RF	15ORF
ANSI 300 RF	30ORF
ANSI 600 RF	60ORF
ANSI 900 RF	90ORF
ANSI 1500 RF	150ORF

#7 Instrument Connection		
ANSI 150 RTJ	1/2 inch NPT	NPT12
ANSI 300 RTJ	3/4 inch NPT	NPT34
ANSI 600 RTJ	Socket weld 1/2 inch	SO12
ANSI 900 RTJ		
ANSI 1500 RTJ		

id Solutions Meter Run Model Description

IDFMR-005-WCB-150RF-040-300RF-NPT12

IDFMR	005	WCB	150RF	040	300RF	NPT12
#1	#2	#3	#4	#5	#6	#7



Additional options include bore calculation, oxygen cleaning, Material Traceability Certificate, NACE, Canadian Registration, drawing, flange assembly, specified inspection and testing, integral manifolds, secondary electronics, flow conditioners, etcetera.

