

## SPECIFICATION

### REGULATION TO MAKE CALCULATION

STANDARD : ISA 1932 / ISO R541 – 1967 / ASME Fluid Meters

ORIFICE TYPE : Concentric / Eccentric / Segmental or specified

TAPPING TYPE : Flange Taps / Corner Taps / Vena Taps

NOMINAL PIPE SIZE : 20mm (3/4") to 1500mm (60")

FLANGE RATING : JIS 5K / 10K / 20K / 40K / 63K

ANSI 150lbs / 300lbs / 600lbs / 900lbs or specified

PLATE THICKNESS : 2mm / 3mm / 5mm / 8mm / 10mm

ORIFICE MATERIAL : 304S.S. / 316S.S. or specified

FLANGE MATERIAL : Cast Iron ASTM A126 /  
316S.S. A182 Gr.F316 /  
Carbon Steel ASTM .A105 /  
304S.S. A182 Gr.F304  
or specified

PIPE MATERIAL : Cast Iron ASTM A126 /  
Carbon Steel ASTM A105 /  
304S.S. A182 Gr.F304 or specified

FLANGE CONNECTION : Slip – On / Weld – Neck or specified

LEAD PIPE CONNECTION : PT 1/2"NPT Female or specified

GASKET MATERIAL : Asbestos or specified

BOLTS & NUTS MATERIAL : SCM3 / S45C or specified

## PIPING SIZE

Table 1

CODE	PIPING SIZE	CODE	PIPING SIZE
- 020	3/4" ( 20 mm )	- 450	18" ( 450 mm )
- 025	1" ( 25 mm )	- 500	20" ( 500 mm )
- 040	1-1/2" ( 40 mm )	- 550	22" ( 550 mm )
- 050	2" ( 50 mm )	- 600	24" ( 600 mm )
- 065	2-1/2" ( 65 mm )	- 650	26" ( 650 mm )
- 080	3" ( 80 mm )	- 700	28" ( 700 mm )
- 100	4" ( 100 mm )	- 750	30" ( 750 mm )
- 125	5" ( 125 mm )	- 800	32" ( 800 mm )
- 150	6" ( 150 mm )	- 850	34" ( 850 mm )
- 175	7" ( 175 mm )	- 900	36" ( 900 mm )
- 200	8" ( 200 mm )	- 1K0	40" ( 1000 mm )
- 250	10" ( 250 mm )	- 1K1	44" ( 1100 mm )
- 300	12" ( 300 mm )	- 1K2	48" ( 1200 mm )
- 350	14" ( 350 mm )	- 1K3	54" ( 1300 mm )
- 400	16" ( 400 mm )	- 1K5	60" ( 1500 mm )
- xxx	To be specified		

## DRAWING

680A



Concentric orifice plate

680B

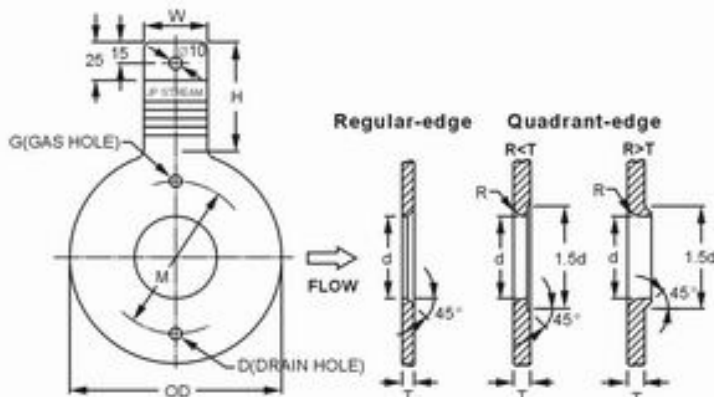


Eccentric orifice plate

680C



Segmental orifice plate

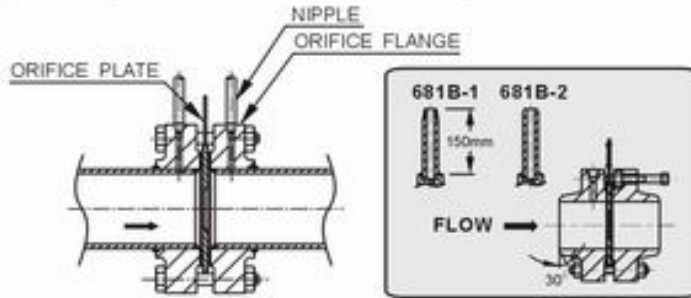


## MODEL SELECTION FOR ORIFICE PLATE

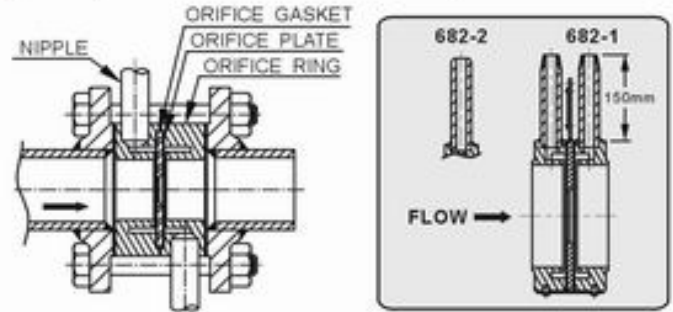
ITEM	CODE	SPECIFICATION
MODEL	680A	CONCENTRIC ORIFICE PLATE
	680B	ECCENTRIC ORIFICE PLATE
	680C	SEGMENTAL ORIFICE PLATE
	680D	OEM VERSIONS
ORIFICE BORE	-0	Regular-edge
	-1	Quadrant-edge
	-2	To be specified
COMPONENTS	0	Orifice plate only
	1	With orifice flange assembly
	2	With orifice ring assembly
	3	To be specified
MATERIAL OF ORIFICE PLATE	0	Not provided
	1	304S.S.
	2	316S.S.
	3	To be specified
THICKNESS OF ORIFICE PLATE	-A	2 mm
	-B	3 mm
	-C	5 mm
	-D	8 mm
	-E	10 mm
	-F	To be specified
VENT / DRAIN HOLE	A	Not required
	B	Vent hole
	C	Drain hole
GASKETS	A	Not required
	B	NBR
	C	PTFE
	D	To be specified
CALCULATION OF BETA RATIO	A	BY USER
	B	BY VENDOR
	C	BY OTHER
PIPING SIZE (See Table 1)	-020	3/4" ( 20 mm )
	-1K5	60" ( 1500 mm )

## DRAWING

### 681A (FLANGE TAP ORIFICE)



### 682 (CORNER TAP ORIFICE)



## MODEL SELECTION

### ORIFICE FLANGE

ITEM	CODE	SPECIFICATION
MODEL	681A	SLIP - ON WELDING TYPE ORIFICE FLANGE
	681B	WELD - NECK TYPE ORIFICE FLANGE
	681C	To be specified
CONNECTION OF LEAD PIPE	-0	1/2"NPT (F)
	-1	With Nipple 1/2"NPT
	-2	With Nipple for welding
	-3	To be specified
FLANGE MATERIAL	0	304S.S.
	1	316S.S.
	2	To be specified
MATERIAL OF BOLTS / NUTS	0	Not required
	1	SCM3 / S45C
	2	304S.S.
	3	316S.S.
GASKET MATERIAL	-A	Not required
	-B	Non - Asbestos sheet
	-C	Vortex gasket ( Non - Asbestos )
	-D	To be specified
FLANGE CONNECTION	A	ANSI / JPI
	B	JIS
	C	DIN
	D	To be specified
PRESSURE RATING OF FLANGE	A	150lb / 10K / PN16
	B	300lb / 20K / PN25
	C	To be specified
PIPING SIZE (See Table 1)	-020	3/4" ( 20 mm )
	-350	14" ( 350 mm )
	-XXX	To be specified

### ORIFICE RING ( CORNER TAPS )

ITEM	CODE	SPECIFICATION
MODEL	682A	ORIFICE RING (WITHOUT PLATE)
	682B	ORIFICE RING WITH PLATE ASSEMBLY
	682C	To be specified
CONNECTION OF LEAD PIPE	-0	1/2"NPT (F)
	-1	With Nipple 1/2"NPT
	-2	With Nipple for welding
	-3	To be specified
MATERIAL OF ORIFICE RING	0	304S.S.
	1	316S.S.
	2	To be specified
FLANGE ASSEMBLY	0	Not required
	1	Required
MATERIAL OF BOLTS / NUTS	-A	Not required
	-B	SCM3 / S45C
	-C	304S.S.
	-D	316S.S.
GASKET MATERIAL	-A	To be specified
	A	Not required
	B	Non - Asbestos sheet
	C	Vortex gasket ( Non - Asbestos )
FLANGE CONNECTION	D	To be specified
	A	ANSI / JPI
	B	JIS
	C	DIN
PRESSURE RATING OF FLANGE	D	To be specified
	A	150lb / 10K / PN16
	B	300lb / 20K / PN25
	C	To be specified
PIPING SIZE (See Table 1)	-020	3/4" ( 20 mm )
	-400	16" ( 400 mm )
	-XXX	To be specified