

General Specifications

Model FOK
Orifice Plate With Integral Ring

GS 06E01D01-00E

Model FOK Orifice Plate with integral Ring is a differential pressure type primary device used to produce a fluid flow restriction in a pipeline. The differential pressure across the orifice plate is proportional to the square of the fluid velocity. The differential pressure is applied to the integral pressure taps through single holes in the 5corner formed by the ring wall and the orifice plate.

The orifice plate with ring is cut and shaped from one block of metal. The pressure tap nipples are welded to the orifice plate and ring.

Model FOK Orifice Plate with Integral Ring is suitable for high pressure and temperature service applications and is similar to Model FOR Orifice Plate with Ring.



STANDARD SPECIFICATIONS

Orifice Bore Type:

- Concentric sharp edge orifices,
- Concentric quadrant edge orifices

Pressure Taps:

- Single hole type corner taps.

Standard Conformance:

- Concentric sharp edge orifices
; JIS Z 8762-2: 2007 (ISO 5167-2:2003).
- Concentric Quadrant edge orifices
; Royal Dutch Shell Laboratory Report 1312M

Nominal Pipe Sizes:

- 50 to 400 mm (2 to 16 inch).

Plate and Nipple Materials:

- SUS 304 stainless steel, SUS 316 stainless steel

Flange Ratings:

- JIS 30, 40 and 63 K
- ANSI Class 300, 600 and 900.
- JPI Class 300, 600 and 900.

Tap Location: See Table 1

Tap Connections:

- 15 mm SCH80 ; JIS 30 K, ANSI·JPI Class 300
- 15 mm SCH160 ; JIS 40K, 63K, ANSI·JPI Class 600, 900

MODEL AND SUFFIX CODES

Model	Suffix Codes	Description
FOK	Model FOK Orifice Plate with Integral Ring
Nominal Pipe Size	□	Flange size in mm; □ mm
Orifice Bore Type	-ENS	Concentric sharp edge, without tab handle
	-QNS	Concentric quadrant edge, without tap handle
Orifice Plate Material	-27	SUS 304 stainless steel
	-32	SUS 316 stainless steel
Flange Rating	-30K	JIS 30 K
	-40K	JIS 40 K
	-63K	JIS 63 K
	-300	ANSI Class 300
	-600	ANSI Class 600
	-900	ANSI Class 900
Tap Location	-060	60° (See Table 1)
	-090	90° (See Table 1)
	-120	120° (See Table 1)
	-180	180° (See Table 1)
	-240	240° (See Table 1)
	-270	270° (See Table 1)
	-300	300° (See Table 1)
Optional Codes	/□	

The number of Bolts	JIS			ANSI, JPI			
	30K	40K	63K	Class 300	Class 600	Class 900	
8	50 – 125 mm	50 – 125 mm	50 – 125 mm	2B – 5B	2B – 5B	2B – 5B	90°, 180°, 270°
12	150 – 250 mm	150 – 250 mm	150 – 250 mm	6B – 8B	6B – 8B	6B – 8B	60°, 120°, 180°, 240°, 300°
16	300 – 400 mm	300 – 400 mm	300 – 400 mm	10B – 12B	10B	10B	90°, 180°, 270°
20	—	—	—	14B – 16B	12B – 16B	12B – 16B	36°, 72°, 108°, 144°, 180°, 216°, 252°, 288°, 324°

■ OPTIONS

Degrease cleaning Treatment:

Cleaned with acetone. Optional codes: /S

With Drain hole or Vent hole:

Limited 25.4 mm or over of orifice bore size.
 With Drain Hole for Gas or Steam. Optional codes: /D
 With Vent Hole for Liquid. Optional codes: /G

Tap Connection:

1/2 NPT male. Optional codes : /TN
 15mm (1/2inch) socket welding. Optional codes : /TS
 15mm (1/2inch) butt welding. Optional codes : /TB
 15mm (1/2inch) with flange. Optional codes : /TF

With Material Certificate:

Reproduced material certificate for Orifice Plate and Tap connection. Optional codes: /M01
 Reproduced material certificate for Orifice Plate, Tap connection and Tap connection with flange. Optional codes: /M02

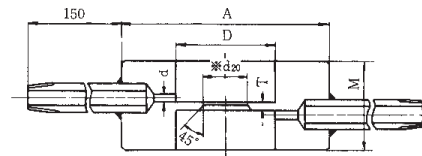
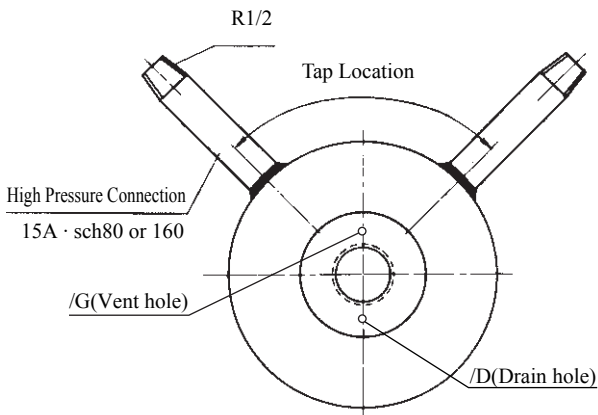
■ ORDERING INSTRUCTIONS

When ordering or giving quotations, specify;
 1. Model, suffix code and optional codes
 2. Orifice specification sheet

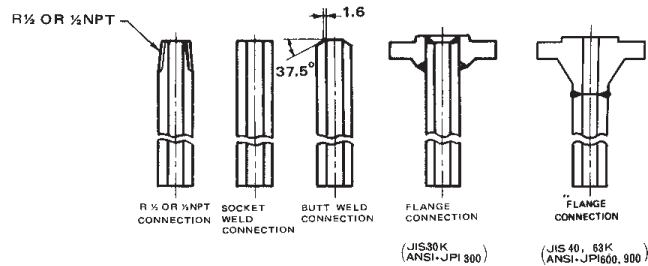
■ RELATED DEVICES

Model FGC Flanges. . Refer to GS 06E01F01-00E

■ EXTERNAL DIMENSIONS



*d₂₀..... Orifice Diameter AT 20°C
 D..... Inside diameter of Ring



Nominal Pipe Size mm (Inc)	Outside Dia of Plate						Thickness of Plate T	Face to Face M	Diameter of Tap Holes d	Thickness of Edge e	Diameter of Hole /G, /D
	JIS 30K	JIS 40K	JIS 63K	ANSI JPI 300	ANSI JPI 600	ANSI JPI 900					
50 (2)	114 (4.5)	114 (4.5)	125 (4.9)	111.1 (4.4)	111.1 (4.4)	142.9 (5.6)	2 (0.1)	40 (1.6)	4 (0.2)	0.5 - 0.8 (0.02 to 0.03)	1.6 (0.06)
65 (2 1/2)	140 (5.5)	140 (5.5)	153 (6.0)	130.2 (5.1)	130.2 (5.1)	165.1 (6.5)	3 (0.1)	50 (2.0)	6 (0.2)	0.5 - 0.8 (0.02 to 0.03)	1.6 (0.06)
80 (3)	150 (5.9)	150 (5.9)	163 (6.4)	149.2 (5.9)	149.2 (5.9)	168.3 (6.6)	3 (0.1)	50 (2.0)	6 (0.2)	0.5 - 0.8 (0.02 to 0.03)	1.6 (0.06)
100 (4)	173 (6.8)	183 (7.2)	196 (7.7)	181.0 (7.1)	193.7 (7.6)	206.4 (8.1)	4 (0.2)	50 (2.0)	6 (0.2)	0.8 - 1.2 (0.03 to 0.05)	1.6 (0.06)
125 (5)	208 (8.1)	226 (8.9)	235 (9.3)	215.9 (8.5)	241.3 (9.5)	247.7 (9.8)	5 (0.2)	50 (2.0)	6 (0.2)	0.8 - 1.2 (0.03 to 0.05)	1.6 (0.06)
150 (6)	251 (9.9)	265 (10.4)	275 (10.8)	250.8 (9.9)	266.7 (10.5)	288.9 (11.4)	5 (0.2)	50 (2.0)	6 (0.2)	0.8 - 1.2 (0.03 to 0.05)	1.6 (0.06)
200 (8)	296 (11.7)	315 (12.4)	330 (13.0)	308.0 (12.1)	320.7 (12.6)	358.8 (14.1)	6 (0.2)	60 (2.4)	8 (0.3)	1.5 - 2.0 (0.06 to 0.08)	1.6 (0.06)
250 (10)	360 (14.2)	380 (15.0)	394 (15.5)	362.0 (14.3)	400.0 (15.7)	435.0 (17.1)	6 (0.2)	60 (2.4)	8 (0.3)	3.5 - 4.0 (0.14 to 0.16)	2.0 (0.08)
300 (12)	420 (16.5)	434 (17.0)	449 (17.8)	422.3 (16.6)	457.2 (18.0)	498.5 (19.6)	6 (0.2)	60 (2.4)	8 (0.3)	3.5 - 4.0 (0.14 to 0.16)	2.5 (0.1)
350 (14)	465 (18.3)	479 (18.9)	488 (19.2)	485.8 (19.1)	492.1 (19.4)	520.7 (20.5)	8 (0.3)	60 (2.4)	8 (0.3)	3.5 - 4.0 (0.14 to 0.16)	2.5 (0.1)
400 (16)	524 (20.6)	534 (21.0)	548 (21.6)	539.8 (21.3)	565.2 (22.3)	574.7 (22.6)	8 (0.3)	60 (2.4)	8 (0.3)	3.5 - 4.0 (0.14 to 0.16)	3.0 (0.11)