

Orifice Ring Assemblies

Model NOR

Introduction

The Orifice Ring Assemblies (NOR) are used for flow measurement of smaller or medium sized pipes at lower pressures. Each assembly consists of one orifice plate (NOP) and two orifice rings. Taking out a differential pressure employs the corner tap system.

Integral Orifice Block also is available in the corner tap system for higher pressure ratings than the Orifice Ring Assemblies.

Standard Specifications

Nominal pipe diameters:

40mm (1½") to 400mm (16")

Flange ratings:

JIS 5, 10, 16, 20 Kgf/cm²
ANSI (or JPI) 150 lb

(Note: ANSI and JPI ring dimensions are identical.)

Ring material:

SS41, SF45A^(*2), SUS304, SUS316

Differential pressure lead pipes:

½" (15mm), SCH. 80, 150mm long (Select a connection method referring to the model number construction table.)

Gasket:

Material: Asbestos

Thickness: 1.5mm

Manufacture's type No. : V-1501AC or T-1100S



Notes:

(*1): Note that usable pipes are limited depending on pressure rating as shown in the following table. When a special steel pipe is used, specify the type of the pipe when ordering.

Pressure rating	JIS 5, 10 kgf/cm ² ANSI (or JPI) 150 lb	JIS 16, 20 kgf/cm ²
Maximum pipe diameter	SCH. 10S (stainless steel) or SCH. 10 (carbon steel pipe)	SGP

(*2): Azbil Corporation standard SF45A steel is produced by forging JIS structural carbon steel S25C to provide an identical mechanical strength with that of JIS SF45A.

(*3): Use an Orifice Block (Model; NOB) when the fluid temperature is higher than 300°C.

Model Number Table

Basic model no.	Selectable specifications					Optional specifications (Orifice plate)					Description
	I Specifi- cation	II Pressure rating	III Nominal pipe material	IV Orifice ring material	V Diff. press. piping connection	VI Orifice bore	VII Tapping system Available range		VIII Material	IX Thickness	
NOR											Orifice Ring Assembly
	-J	005									JIS 5KRF
		010									" 10KRF
		016									" 16KRF
		020									" 20KRF
	-P	150									JPI 150RF
	-A	150									ANSI 150RF
			040					○	○		Piping size 40mm (1½")
			050					○	○		" 50mm (2")
			065					○	○		" 65mm (2½")
			080					○	○		" 80mm (3")
			090					○	○		" 90mm (3½")
			100					○	○		" 100mm (4")
			125					○	○		" 125mm (5")
			150					○	○		" 150mm (6")
			200					○	○		" 200mm (8")
			250					○	○		" 250mm (10")
			300					○			" 300mm (12")
			350					○			" 350mm (14")
			400					○			" 400mm (16")
											SS41
											SF45A
											SUS316
											SUS304
				C							Nipple with R1/2 external thread
				D							Nipple with 1/2NPT external thread
				E							Nipple with bevel
				F							With nipple flange
					-C	3		↑			Regular-edge concentric bore, corner taps
					-Q	3		↑			Quadrant-edge concentric bore, corner taps
					-X						No orifice plate supplied
									2		SUS316
									7		SUS304
										02	2mm
										03	3mm
										05	5mm
										08	8mm
										10	10mm

Dimension Drawings

For JIS 5K, 10K, 16K, 20K; ANSI (or JPI) 150 flanges

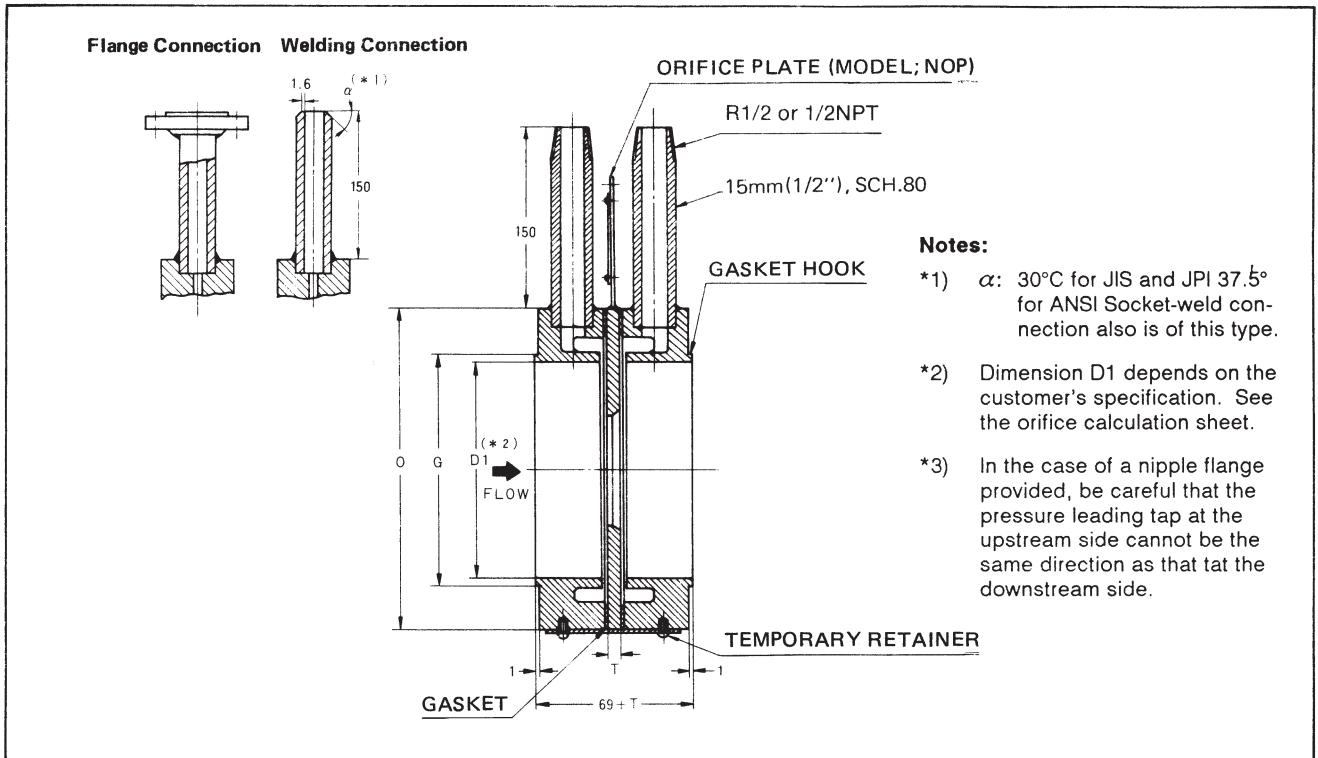


Table of Dimensions

For JIS 5K, 10K, 16K, 20K flanges

(Unit: mm)

Nominal diameter (mm)	Gasket hook OD G	Ring OD O		
		JIS 5K	JIS 10K	JIS 16K, 20K
40	48	83	89	89
50	60	93	104	104
65	76	118	124	124
80	89	129	134	140
90	101	139	144	150
100	114	149	159	165
125	140	184	190	203
150	165	214	220	238
200	216	260	270	283
250	268	325	333	356
300	319	370	378	406
350	357	413	423	450
400	408	473	486	510

For ANSI (or JPI) 150 flanges

(Unit: mm)

Nominal diameter (mm)	Gasket hook OD G	Ring OD O
1½	48	86
2	60	105
2½	76	124
3	89	137
3½	102	162
4	115	175
5	142	197
6	168	222
8	218	279
10	273	340
12	324	410
14	356	451
16	406	514

Ordering Information

When ordering, please specify;

- 1) Model number
- 2) Special specifications

Please read the "Terms and Conditions" from the following URL before ordering or use:

<http://www.azbil.com/products/bi/order.html>

Specifications are subject to change without notice.

The logo for Azbil Corporation, featuring the word "azbil" in a bold, lowercase, sans-serif font.

Azbil Corporation
Advanced Automation Company

1-12-2 Kawana, Fujisawa
Kanagawa 251-8522 Japan
URL: <http://www.azbil.com/>

5th Edition: Issued in Mar. 2015

No part of this publication may be reproduced or duplicated without the prior written permission of Azbil Corporation.