**azbil**

# Holder Ring Assemblies
## Model NOH

The Holder Ring Assembly is a combination of a holder ring and an orifice plate designed for ring-type-joint (RTJ) flanges of ANSI or JPI Specifications. The holder ring has a function of holding the orifice plate and also a function as a gasket to prevent leakage of the process fluid. This metallic sealing system is applicable to a fluid at high temperature and high pressure. The pressure tapping system normally is of the flange tap type.
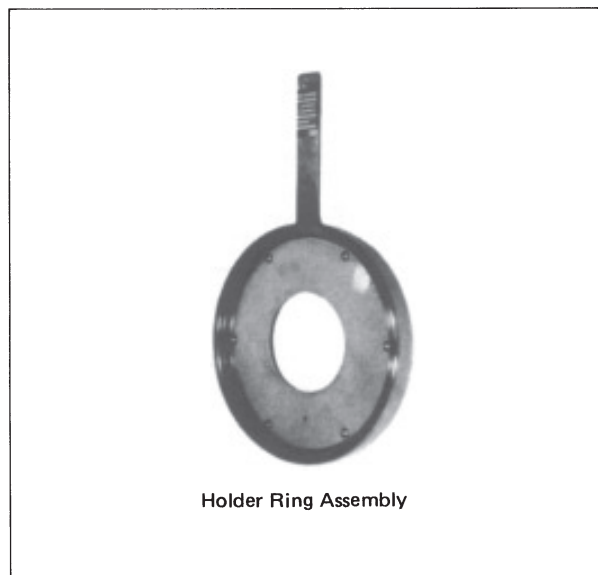


Holder Ring Assembly

## Standard Specifications

**Types of orifices bores:**
Regular-edge concentric bore,
Quardrant-edge concentric bore

**Calculation standards:**
Regular-edge concentric bore:
JIS Z8762-1969 (ISO R541-1967)
Quardrant-edge concentric bore:
Shell Flow Meter Engineering Handbook, 1968

**Available ranges**

**I) Holder Rings and Orifice Plates**

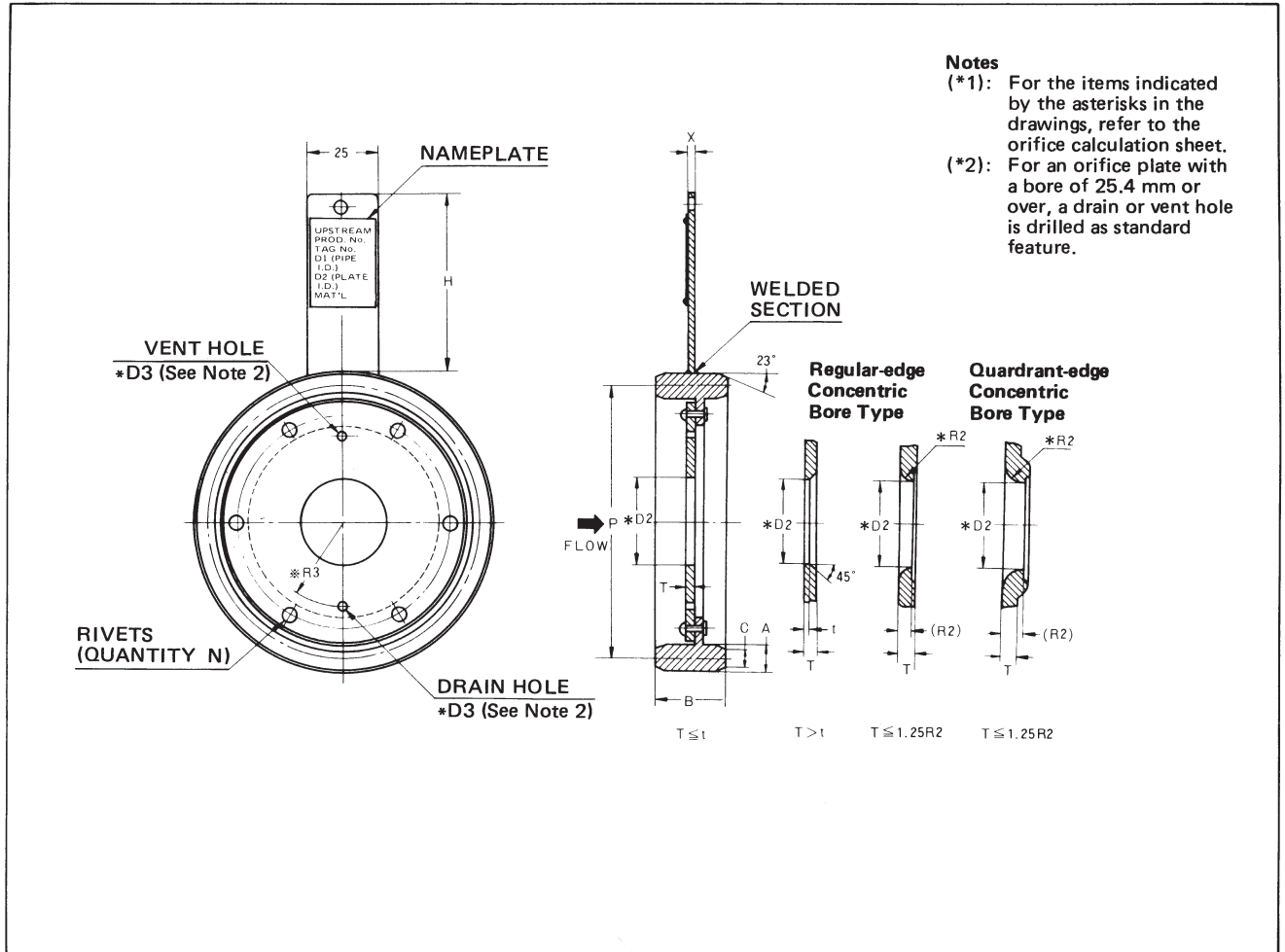| Type of orifice bore | Tapping system | Nominal diameter | Flange specification [*2] | Plate thickness (mm) | Plate material | Shape of holder ring sealing plane | Holder ring material [*4] | $\beta$; Limit of diameter ratio for restriction (D2/D1) [*5] |
|---|---|---|---|---|---|---|---|---|
| Regular-edge concentric bore | Flange taps | 1½" to 14" [*1] | ANSI (or JPI) 300, 600 1b | 1½" to 6"=3 | SUS304 | Octagonal [*3] | Soft iron for industrial-use grade, | 1½"=0.10~0.50 2"=0.10~0.60 2½"=0.10~0.65 3"=0.10~0.70 4"=0.10~0.75 |
| Quardrant-edge concentric bore | | 1½" to 10" | | 8" to 14"=5 | SUS316 | | SUSF304, SUSF316 | 1½"=0.20~0.50 2"=0.20~0.60 2½"=0.20~0.65 3"=0.20~0.70 |

**Notes**
(*1): The regular-edge concentric bore orifice for 1½" pipe is available, although it is not covered by the standard specifications.
(*2): The dimensions of ANSI and JPI flanges are identical.
(*3): Oval shapes also are available upon special order.
(*4): Other material also are available.
[Ex. SFHV12B (ASTM F1 equivalent), SFHV23B (ASTM F11 equivalent. etc.)]
(*5): $\beta$: Diameter ratio of restriction is checked using a nomograph. Request it if required.

## Model No. Table

| Basic Model No. | I Specification | II Pressure rating | III Nominal pipe diameter | IV Holder ring material | V Type of orifice bore | VI Tapping system | VI Available range | VII Material | VIII Thickness | VIII Available range | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NOH | | | | | | | | | | | Holder ring assembly |
| | −P | 300 | | | | | | | | | JPI 300RTJ |
| | | 600 | | | | | | | | | " 600RTJ |
| | −A | 300 | | | | | | | | | ANSI 300RTJ |
| | | 600 | | | | | | | | | " 600RTJ |
| | | | 040 | | | | ○ ○ | | | ○ | Pipe size 1½" |
| | | | 050 | | | | ○ ○ | | | ○ | " 2" |
| | | | 065 | | | | ○ ○ | | | ○ | " 2½" |
| | | | 080 | | | | ○ ○ | | | ○ | " 3" |
| | | | 100 | | | | ○ ○ ○ ○ | | | ○ | " 4" |
| | | | 125 | | | | ○ ○ ○ ○ | | | ○ | " 5" |
| | | | 150 | | | | ○ ○ ○ ○ | | | ○ | " 6" |
| | | | 200 | | | | ○ ○ ○ ○ | | | ○ | " 8" |
| | | | 250 | | | | ○ ○ ○ ○ | | | ○ | " 10" |
| | | | 300 | | | | ○ ○ ○ | | | ○ | " 12" |
| | | | 350 | | | | ○ ○ ○ | | | ○ | " 14" |
| | | | | 1 | | | | | | | Soft iron |
| | | | | 2 | | | | | | | SUS316 |
| | | | | 7 | | | | | | | SUS304 |
| | | | | | −C | 2 | | | | | Regular-edge concentric bore, flange taps |
| | | | | | −Q | 2 | | | | | Quardrant-edge concentric bore, flange taps |
| | | | | | −E | 2 | | | | | Eccentric bore, flange taps |
| | | | | | −S | 2 | | | | | Segment opening, flange taps |
| | | | | | | | | 2 | | | SUS316 |
| | | | | | | | | 7 | | | SUS304 |
| | | | | | | | | | 03 | | 3mm |
| | | | | | | | | | 05 | | 5mm |

## Dimensions



**Notes**
(*1): For the items indicated by the asterisks in the drawings, refer to the orifice calculation sheet.
(*2): For an orifice plate with a bore of 25.4 mm or over, a drain or vent hole is drilled as standard feature.

## Table of Dimensions

(Unit: mm)

| Nominal pipe diameter (inch) | Holder ring | | | | Orifice plate | | Handle (tab) | | No. of rivets N |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Pitch dia. P | Width A | Height B | Width of flat section C | Plate thickness T | Edge thickness t | Height H | Thickness X | |
| 1½ | 68.262 | 7.938 | 26 | 5.232 | 3 | 0.5 | 110 | 2 | 4 |
| 2 | 82.550 | 11.112 | 26 | 7.747 | 3 | 0.8 | 110 | 2 | 4 |
| 2½ | 101.600 | 11.112 | 26 | 7.747 | 3 | 1.0 | 110 | 2 | 4 |
| 3 | 123.825 | 11.112 | 26 | 7.747 | 3 | 1.0 | 110 | 2 | 6 |
| 4 | 149.225 | 11.112 | 26 | 7.747 | 3 | 1.5 | 125 | 3 | 6 |
| 5 | 180.975 | 11.112 | 26 | 7.747 | 3 | 2.0 | 140 | 3 | 6 |
| 6 | 211.138 | 11.112 | 26 | 7.747 | 3 | 2.0 | 140 | 3 | 6 |
| 8 | 269.875 | 11.112 | 28 | 7.747 | 5 | 3.0 | 140 | 3 | 6 |
| 10 | 323.850 | 11.112 | 28 | 7.747 | 5 | 3.0 | 150 | 3 | 6 |
| 12 | 381.000 | 11.112 | 28 | 7.747 | 5 | 5.0 | 150 | 3 | 6 |
| 14 | 419.100 | 11.112 | 28 | 7.747 | 5 | 5.0 | 150 | 3 | 6 |

3

*Specifications are subject to change without notice.*

# Azbil Corporation
## Advanced Automation Company

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

**azbil**

(10)