

Style 707-IJ NPS-to-JIS Transition Coupling



1.0 PRODUCT DESCRIPTION

Available Sizes

- 8 – 12”/200A – 300A JIS-sized steel pipe to 8 – 12”/DN200 – DN300 NPS-sized steel pipe.

Pipe Material

- JIS-sized standard weight carbon steel to NPS-sized standard weight carbon steel
- JIS-sized standard weight stainless steel to NPS-sized standard weight stainless steel

Maximum Working Pressure

- Up to 363 psi | 2500 kPa | 25 bar

Operating Temperature Range

- Dependent on gasket selection from Section 3.0
- For alternate gasket materials available, reference Victaulic [publication 05.01](#)

Function

- Provides a single coupling connection for grooved end JIS-sized steel pipe or fittings to grooved end NPS-sized steel pipe or fittings of the same nominal size
- Provides a flexible joint for expansion, contraction and deflection

Pipe Preparation

- Roll or cut grooved steel in accordance with [publication 25.01](#): Victaulic Original Groove System (OGS) Groove Specifications for NPS-sized pipe and [publication 25.08](#): Victaulic Japanese Industrial Standard (JIS) Groove Specifications for JIS-sized pipe

2.0 CERTIFICATION/LISTINGS



ALWAYS REFER TO ANY NOTIFICATIONS AT THE END OF THIS DOCUMENT REGARDING PRODUCT INSTALLATION, MAINTENANCE OR SUPPORT.

System No.		Location	
Submitted By		Date	

Spec Section		Paragraph	
Approved		Date	

3.0 SPECIFICATIONS – MATERIAL

Housing: Ductile iron conforming to ASTM A536, Grade 65-45-12

Housing Coating: (specify choice)

Standard: Orange enamel

Optional: Hot dipped galvanized

Optional: Contact Victaulic with your requirements for other coatings

Gasket: (specify choice¹)

Victaulic Grade “E” EPDM

EDPM (Green stripe color code). Temperature range -30°F to +230°F/-34°C to +110°C. May be specified for hot water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. UL Classified in accordance with ANSI/NSF 61 for cold +73°F/+23°C and hot +180°F/+82°C potable water service and ANSI/NSF 372. NOT COMPATIBLE FOR USE WITH PETROLEUM SERVICES OR STEAM SERVICES

Grade “T” Nitrile

Nitrile (Orange stripe color code). Temperature range -20°F to +180°F/-29°C to +82°C. May be specified for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range. Not compatible for hot water services over +150°F/+66°C or for hot dry air over +140°F/+60°C. NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES OR STEAM SERVICES.

Others

For alternate gasket selection, reference [publication 05.01](#): Victaulic Seal Selection Guide.

¹ Services listed are General Service Guidelines only. It should be noted that there are services for which these gaskets are not compatible. Reference should always be made to the latest [Victaulic Seal Selection Guide](#) for specific gasket service guidelines and for a listing of services which are not compatible.

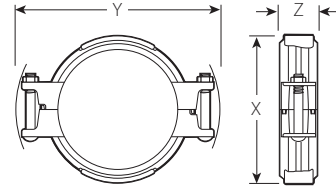
Bolts/Nuts: (specify choice)

Standard: Metric – Carbon steel oval neck track bolts meeting the mechanical property requirements of ISO 898-1 Class 9.8. Carbon steel hex nuts meeting the mechanical property requirements of ASTM A563M Class 9 (hex nuts). Track bolts and hex nuts are zinc electroplated per ASTM B633 ZN/FE5, finish Type II.

Optional: Imperial – Carbon steel oval neck track bolts meeting the mechanical property requirements of ASTM A449. Carbon steel hex nuts meeting the mechanical property requirements of ASTM A563 Grade B (heavy hex nuts). Track bolts and hex nuts are zinc electroplated per ASTM B633 ZN/FE5, finish Type III.

Optional: Stainless steel oval neck track bolts meeting the mechanical property requirements of ASTM F593, Group 2 (316 stainless steel), condition CW. Stainless steel heavy hex nuts meeting the mechanical property requirements of ASTM F594, Group 2 (316 stainless steel), condition CW, with galling reducing coating.

4.0 DIMENSIONS



Size				Pipe End Separation ²	Deflection from Centerline		Bolt/Nut ³		Dimensions			Approx. Weight Each
Nominal		Actual Outside Diameter		Allowable	Degrees Per Coupling	Pipe	Qty.	Size	X	Y	Z	
NPS DN inches	JIS mm	NPS mm inches	JIS mm	mm inches		mm/m inches/foot		mm	mm inches	mm inches	mm inches	kg lbs
DN200 8	200A	219.1 8.625	216.3	0 – 3.2 0 – 0.13	0.50	15 0.40	2	M20 x 127	257 10.12	356 14.02	62 2.44	6.3 13.8
DN250 10	250A	273.0 10.750	267.4	0 – 3.2 0 – 0.13	0.40	12 0.14	2	M22 x 165	314 12.36	422 16.61	62 2.44	9.1 20.0
DN300 12	300A	323.9 12.750	318.5	0 – 3.2 0 – 0.13	0.34	10 0.12	2	M22 x 165	367 14.45	475 18.70	62 2.44	10.6 23.3

² Allowable Pipe End Separation and deflection figures show the maximum nominal range of movement available at each joint with JIS roll grooved pipe. Figures for JIS cut grooved pipe may be doubled. These figures are maximums; for design and installation purposes these figures should be reduced by 25% for 100mm (4") and larger.

³ Number of bolts required equals number of housing segments.

5.0 PERFORMANCE

Size				Maximum Joint Working Pressure ⁴	Maximum Permissible End Load ⁴
Nominal		Actual Outside Diameter			
NPS DN inches	JIS mm	NPS mm inches	JIS mm	kPa psi	N lbs
DN200 8	200A	219.1 8.625	216.3	2500 363	94300 21200
DN250 10	250A	273.0 10.750	267.4	2500 363	146600 32900
DN300 12	300A	323.9 12.750	318.5	2500 363	206200 46300

⁴ Working Pressure and End Load are total, from all internal and external loads, based on standard weight steel pipe, standard roll or cut grooved in accordance with Victaulic specifications.

NOTE

- WARNING: FOR ONE-TIME FIELD TEST ONLY, the Maximum Joint Working Pressure may be increased to 1 ½ times the figures shown.

6.0 NOTIFICATIONS

WARNING



- Read and understand all instructions before attempting to install any Victaulic piping products.
 - Depressurize and drain the piping system before attempting to install, remove, adjust, or maintain any Victaulic piping products.
 - Wear safety glasses, hard hat, and foot protection.
 - The Style 707-IJ Transition Coupling shall be used to join only JIS-sized steel and NPS-sized steel, as specified within Section 1.0 of this publication. It shall not be used to connect two JIS-sized pipes or two NPS-sized pipes.
 - During vertical installation, support the upper pipe to prevent the JIS-sized pipe from sliding into the NPS-sized pipe.
- Failure to follow these instructions could result in death or serious personal injury and property damage.

NOTE:

- Style 707-IJ housings also have assembly lugs by each bolt pad to aid proper positioning of the JIS and NPS sides of the housings. These lugs MUST be properly engaged and housings bolted securely together to complete proper assembly.

7.0 REFERENCE MATERIALS

[05.01: Victaulic Seal Selection Guide](#)

[25.01: Victaulic Original Groove System \(OGS\) Groove Specifications](#)

[25.08: Victaulic Japanese Industrial Standard \(JIS\) Groove Specifications for JIS-Sized Pipe](#)

[I-100: Victaulic Field Installation Handbook](#)

User Responsibility for Product Selection and Suitability

Each user bears final responsibility for making a determination as to the suitability of Victaulic products for a particular end-use application, in accordance with industry standards and project specifications, and the applicable building codes and related regulations as well as Victaulic performance, maintenance, safety, and warning instructions. Nothing in this or any other document, nor any verbal recommendation, advice, or opinion from any Victaulic employee, shall be deemed to alter, vary, supersede, or waive any provision of Victaulic Company's standard conditions of sale, installation guide, or this disclaimer.

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Note

This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

Installation

Reference should always be made to the Victaulic installation handbook or installation instructions of the product you are installing. Handbooks are included with each shipment of Victaulic products, providing complete installation and assembly data, and are available in PDF format on our website at www.victaulic.com.

Warranty

Refer to the Warranty section of the current Price List or contact Victaulic for details.

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