

Victaulic® Stainless Steel Rigid Coupling

Style 489



1.0 PRODUCT DESCRIPTION

Available Sizes:

- 1½ – 12"/DN40 – DN300

Pipe Material:

- Stainless steel

Maximum Working Pressure:

- Accommodates pressures up to 600 psi/4136 kPa
- Working pressure dependent on material, wall thickness and size of pipe

Application:

- Provides a rigid pipe joint designed to restrict axial or angular movement

Pipe Preparation:

- Exclusively for use with fittings, valves, accessories and pipe which feature ends formed with the Victaulic OGS groove profile (see Section 7.0 for Reference Materials)

NOTE

- For duplex and super duplex options, please see [publication 17.33](#) for the Style 489DX coupling.

2.0 CERTIFICATION/LISTINGS



This system is certified to ISO 9001:2008 by the LPCB under certificate No. 104

- See [publication 02.06](#): Victaulic Potable Water Approvals ANSI/NSF for potable water approvals if applicable.

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: Type 316 stainless steel, conforming to ASTM A351, A743 and A744, Grade CF8M.

Gasket: (specify choice¹)

Grade “E” EPDM

EPDM (Green stripe color code). Temperature range -30°F to +230°F/-34°C to +110°C. May be specified for cold and 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 PETROLEUM SERVICES OR STEAM SERVICES.**

Grade “EF” EPDM²

EPDM (Green “X” color code). May be specified for hot and cold water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. Also meets hot and cold potable water requirements per DVGW W270, UBA Elastomer Guideline, ÖVGW, SVGW, and French ACS approved for EN681-1 Type WA cold potable, and Type WB hot potable water service. WRAS approved material to BS 6920:2014 for cold and hot potable water service up to +149°F/+65°C. **NOT COMPATIBLE FOR USE WITH PETROLEUM SERVICES OR STEAM SERVICES.**

Grade “EW” EPDM

EPDM (Green W 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. WRAS approved material to BS 6920 for cold and hot potable water service up to +149°F/+65°C. 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, hydrocarbons, air with oil vapors, vegetable and mineral oils within the specified temperature range; not compatible for hot dry air over +140°F/+60°C and water over +150°F/+66°C. **NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES OR STEAM SERVICES.**

Grade “O” Fluoroelastomer

Fluoroelastomer (Blue stripe color code). Temperature range +20°F to + 300°F/-7°C to +149°C. May be specified for many oxidizing acids, petroleum oils, halogenated hydrocarbons, lubricants, hydraulic fluids, organic liquids and air with hydrocarbons. **NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES OR STEAM SERVICES.**

Grade “A” White Nitrile

White nitrile (White gasket). Temperature range +20°F to +180°F/-7°C to +82 °C. No carbon black content. Meets FDA requirements. Conforms to CFR Title 21 Part 177.2600. 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.**

Others

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

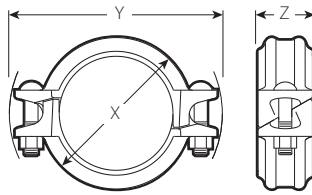
¹ Services listed are General Service Guidelines only. It should be noted that there are services for which these gaskets are not compatible. Reference should always be made to the latest [Victaulic Seal Selection Guide](#) for specific gasket service guidelines and for a listing of services which are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

² Available exclusively in Europe.

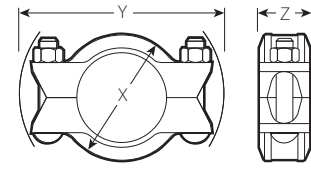
Bolt/Nuts:

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

4.0 DIMENSIONS



1 1/2 – 4"/DN40 – DN100 sizes



5 – 12"/141.3 mm – DN300 sizes

Size		Pipe End Separation ³	Bolt/Nut ⁴			Dimensions				Weight
Nominal inches DN	Actual Outside Diameter inches mm	Allowable inches mm	Qty.	Size inches		Nut Torque ft-lbs N·m	X inches mm	Y inches mm	Z inches mm	Approximate (Each) lb kg
1 1/2 DN40	1.900 48.3	0.05 1.3	2	3/8	x 2 1/2	18 - 22 25 - 30	2.86 73	4.42 118	1.84 47	1.6 0.7
2 DN50	2.375 60.3	0.05 1.3	2	3/8	x 2 1/2	18 - 22 25 - 30	3.34 85	5.19 132	1.86 47	1.6 0.7
2 1/2	2.875 73.0	0.05 1.3	2	3/8	x 2 1/2	18 - 22 25 - 30	3.92 100	5.62 143	1.86 47	1.9 0.9
DN65	3.000 76.1	0.05 1.3	2	3/8	x 2 1/2	18 - 22 25 - 30	4.02 102	5.72 145	1.86 47	2.0 0.9
3 DN80	3.500 88.9	0.05 1.3	2	1/2	x 2 3/4	45 - 50 60 - 68	4.54 115	6.78 172	1.86 47	2.8 1.3
4 DN100	4.500 114.3	0.19 4.8	2	1/2	x 2 3/4	45 - 50 60 - 68	5.77 147	7.90 201	2.07 53	4.0 1.8
5	5.563 141.3	0.25 6.4	2	3/4	x 4 1/4	85 - 125 115 - 170	7.05 179	10.63 270	2.25 57	12.50 5.7
DN125	5.500 139.7	0.25 6.4	2	3/4	x 4 1/4	75 - 100 100 - 135	7.07 180	11.13 283	2.38 60	12.0 5.5
	6.500 165.1	0.25 6.4	2	7/8	x 5 1/2	125 - 200 170 - 275	8.16 207	12.68 321	2.50 64	15.5 7.0
6 DN150	6.625 168.3	0.25 6.4	2	7/8	x 5 1/2	125 - 200 170 - 275	8.16 207	12.68 321	2.50 64	15.5 7.0
	8.515 216.3	0.25 6.4	2	1	x 5 1/2	200 - 300 275 - 400	10.63 270	15.00 381	2.75 70	24.0 10.9
8 DN200	8.625 219.1	0.25 6.4	2	1	x 5 1/2	200 - 300 275 - 400	10.63 270	15.00 381	2.75 70	24.0 10.9
	10.528 267.4	0.25 6.4	2	1	x 6 1/2	200 - 300 275 - 400	13.09 332	17.25 438	3.00 76	33.0 15.0
10 DN250	10.750 273.0	0.25 6.4	2	1	x 6 1/2	200 - 300 275 - 400	13.09 332	17.25 438	3.00 76	33.0 15.0
	12.539 318.5	0.25 6.4	2	1	x 6 1/2	200 - 300 275 - 400	15.13 384	19.13 486	3.13 80	40.0 18.1
12 DN300	12.750 323.9	0.25 6.4	2	1	x 6 1/2	200 - 300 275 - 400	15.13 384	19.13 486	3.13 80	40.0 18.1

³ The allowable pipe end separation dimension shown is for system layout purposes only. Style 489 rigid couplings are considered rigid connections and will not accommodate expansion/contraction or angular movement of the piping system. Contact Victaulic for torsional resistance information.

⁴ Metric thread size bolts are available for all coupling sizes upon request. Contact Victaulic for details.