

Stainless Steel Flexible Coupling

Style 77S



1.0 PRODUCT DESCRIPTION

Available Sizes

- 8 – 18"/DN200 – DN450

Maximum Working Pressure

- Up to 300 psi/2068 kPa
- Working pressure dependent on material, wall thickness and size of pipe

Application

- Joins OGS roll grooved and cut grooved pipe, as well as OGS grooved fittings, valves and accessories.

Pipe Materials

- Stainless steel pipe

NOTE

- For sizes ¾ – 6"/DN20 – DN150 duplex and/or stainless steel flexible couplings, please see [publication 17.20](#) for the Style 77DX Duplex Stainless Steel Flexible Coupling.

2.0 CERTIFICATION/LISTINGS

NOTE

- 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.

Housing Coating: None

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 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 "EF" EPDM²

EPDM (Green "X" color code). Temperature range -30°F to +230°F/-34°C to +110°C. 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 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.**

Note: Grade "EW" gaskets are available 8 – 12"/DN200 – DN300 sizes only.

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 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. 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 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.

² Available exclusively in Europe.

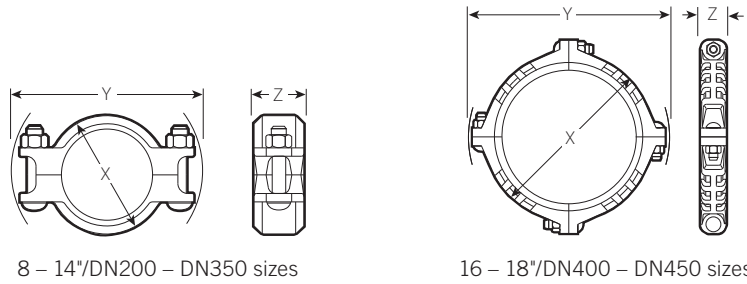
Bolts/Nuts:³

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.

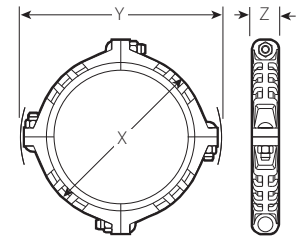
³ Bolts/nuts are available in imperial size only.

4.0 DIMENSIONS

Style 77S



8 – 14"/DN200 – DN350 sizes



16 – 18"/DN400 – DN450 sizes

Size		Pipe End Separation ⁴	Deflection from Centerline		Bolt/Nut		Dimensions			Weight	
Nominal inches DN	Actual Outside Diameter inches mm	Allowable inches mm	Per Coupling Degrees	pipe In/Ft. mm/m	Qty.	Size inches	X inches mm	Y inches mm	Z inches mm	Approximate (Each) lb kg	
¾ – 6 DN20 – DN150		For ¾ – 6"/DN20 – DN150 sizes Victaulic offers duplex and/or super duplex stainless steel couplings. See publication 17.20 for the Style 77DX Duplex Stainless Steel Flexible Coupling.									
8 DN200	8.625 219.1	0 – 0.13 0 – 3.2	0° – 50'	0.18 14	2	7/8 x 5	11.38 229	14.74 374	2.44 62	23.5 10.7	
10 DN250	10.750 273.0	0 – 0.13 0 – 3.2	0° – 40'	0.14 12	2	1 x 6	13.50 343	17.33 440	2.63 67	33.0 15.0	
12 DN300	12.750 323.9	0 – 0.13 0 – 3.2	0° – 34'	0.12 9	2	1 x 6½	15.50 394	19.15 486	2.56 65	35.0 15.9	
14 DN350	14.000 355.6	0 – 0.13 0 – 3.2	0° – 31'	0.11 9	2	1 x 6½	16.56 421	20.44 519	2.81 71	37.0 16.8	
16 DN400	16.000 406.4	0 – 0.13 0 – 3.2	0° – 27'	0.10 9	4	1 x 5½	18.94 481	22.52 572	2.94 75	53.0 24.0	
18 DN450	18.000 457.0	0 – 0.13 0 – 3.2	0° – 24'	0.08 7	4	1 x 5½	21.25 540	24.62 625	3.06 78	62.0 25.0	

⁴ Allowable Pipe End Separation and Deflection figures show the maximum nominal range of movement available at each joint for standard roll grooved pipe. Figures for standard cut grooved pipe may be doubled. These figures are maximums; for design and installation purposes these figures should be reduced by: 50% for ¾ – 3½"/DN20 – DN90; 25% for 4"/DN100 and larger.