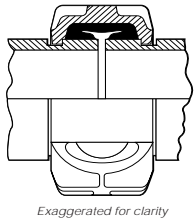


Style 77 Standard Flexible Coupling

PRODUCT DESCRIPTION



See Victaulic publication 10.01 for details.

Exaggerated for clarity

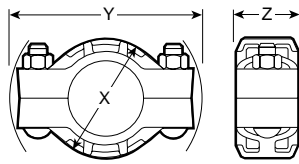
Style 77 couplings are designed with cross-ribbed construction to provide a strong component for pressure piping systems. Sizes 3/4 - 12" (20 - 300 mm) are two-piece housings. Sizes 14 - 22" (350 - 550 mm) are cast in four identical segments, with larger sizes cast in six segments. This eases handling and assures concentricity.

All sizes are provided with plated bolts and nuts. Galvanized and stainless steel housings are also available.

Independent testing has shown the Style 77 coupling to be an effective stress relief and vibration attenuation device providing performance superior to braided steel and elastomeric arch-type connectors when used in close proximity to the source of vibration. Refer to 26.04 for vibration information.

Independent testing has shown that Victaulic Style 77 and 75 flexible couplings and Style 07 Zero-Flex® rigid couplings provide exceptional functionality during and after earthquake conditions. Refer to 26.05 for further information.

DIMENSIONS



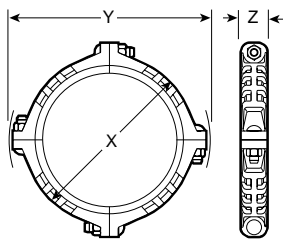
3/4 - 12" Sizes

Pipe Size		Max. Work Pres. PSI* kPa	Max. End Load Lbs.* N	Allow. Pipe End † Sep. In./mm	Deflect. Fr. Cl. †		@ Bolt/Nut No. - Size Inches mm	Dimensions Inches/millimeters			Aprx. Wgt. Each Lbs. kg
Nominal Diameter In./mm	Actual Out. Dia. In./mm				Per Cplg. Deg.	Pipe In./Ft. mm/m		X	Y	Z	
3/4 20	1.050 26.7	1,000 6900	865 3850	0 - 0.06 0 - 1.6	3° - 24'	0.72 60	2 - 3/8 X 2	2.13 54	4.00 102	1.75 44	1.1 0.5
1 25	1.315 33.4	1,000 6900	1,360 6050	0 - 0.06 0 - 1.6	2° - 43'	0.57 48	2 - 3/8 X 2	2.38 61	4.12 105	1.75 44	1.2 0.5
1 1/4 32	1.660 42.2	1,000 6900	2,160 9610	0 - 0.06 0 - 1.6	2° - 10'	0.45 38	2 - 1/2 X 2 1/2	2.65 67	5.00 127	1.88 48	2.0 0.9
1 1/2 40	1.900 48.3	1,000 6900	2,835 12615	0 - 0.06 0 - 1.6	1° - 56'	0.40 33	2 - 1/2 X 2 1/2	3.13 79	5.38 137	1.88 48	2.1 1.0
2 50	2.375 60.3	1,000 6900	4,430 19715	0 - 0.06 0 - 1.6	1° - 31'	0.32 26	2 - 1/2 X 2 1/2	3.63 92	5.88 149	1.88 48	2.6 1.2
2 1/2 65	2.875 73.0	1,000 6900	6,490 28880	0 - 0.06 0 - 1.6	1° - 15'	0.26 22	2 - 1/2 X 2 3/4	4.25 108	6.50 165	1.88 48	3.1 1.4
76,1 mm	3.000 76,1	1,000 6900	7,070 31460	0 - 0.06 0 - 1.6	1° - 12'	0.26 22	2 - 1/2 X 2 3/4	4.38 111	6.63 168	1.88 48	3.2 1.5
3 80	3.500 88,9	1,000 6900	9,620 46810	0 - 0.06 0 - 1.6	1° - 2'	0.22 18	2 - 1/2 X 2 3/4	5.00 127	7.13 181	1.88 48	3.7 1.7
3 1/2 90	4.000 101,6	1,000 6900	12,565 55915	0 - 0.06 0 - 1.6	0° - 54'	0.19 16	2 - 5/8 X 3 1/4	5.63 143	8.25 210	1.88 48	5.6 2.5
4 100	4.500 114,3	1,000 6900	15,900 70755	0 - 0.13 0 - 3.2	1° - 36'	0.34 28	2 - 5/8 X 3 1/4	6.13 156	8.88 226	2.13 54	6.7 3.0
108,0 mm	4.250 108,0	1,000 6900	14,180 63100	0 - 0.13 0 - 3.2	1° - 41'	0.35 29	2 - 16 X 82.5	6.00 152	8.63 219	2.13 54	11.0 5.0
5 125	5.563 141,3	1,000 6900	24,300 108135	0 - 0.13 0 - 3.2	1° - 18'	0.27 23	2 - 3/4 X 4 1/4	7.75 197	10.65 270	2.13 54	10.6 4.8
133,0 mm	5.250 133,0	1,000 6900	21,635 96275	0 - 0.13 0 - 3.2	1° - 21'	0.28 24	2 - 20 X 108	7.63 194	10.38 264	2.13 54	10.0 4.5
139,7 mm	5.500 139,7	1,000 6900	23,745 105665	0 - 0.13 0 - 3.2	1° - 18'	0.28 24	2 - 20 X 108	8.63 219	10.65 270	2.13 54	10.0 4.5
6 150	6.625 168,3	1,000 6900	34,470 153390	0 - 0.13 0 - 3.2	1° - 5'	0.23 18	2 - 3/4 X 4 1/4	8.63 219	11.88 302	2.13 54	12.0 5.4
159,0 mm	6.250 159,0	1,000 6900	30,665 136460	0 - 0.13 0 - 3.2	1° - 9'	0.24 20	2 - 20 X 108	8.63 219	11.50 292	2.13 54	13.2 6.0
165,1 mm	6.500 165,1	1,000 6900	33,185 147660	0 - 0.13 0 - 3.2	1° - 6'	0.23 19	2 - 3/4 X 4 1/4	8.88 226	11.63 295	2.13 54	13.2 6.0

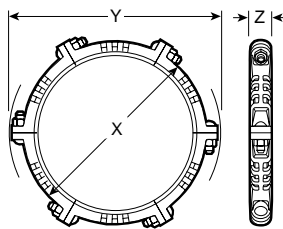
Table continued on page 2.

*†@ Refer to notes on page 2.

DIMENSIONS



14 - 22" Sizes



24" Sizes

Pipe Size		Max. Work Pres. PSI* kPa	Max. End Load Lbs.* N	Allow. Pipe End † Sep. In./mm	Deflect. Fr. Cl †		@ Bolt/Nut No. - Size Inches mm	Dimensions Inches/millimeters			Aprx. Wgt. Each Lbs. kg
Nominal Diameter In./mm	Actual Out. Dia. In./mm				Per Cplg. Deg.	Pipe In./Ft. mm/m		X	Y	Z	
8 § 200	8.625 219,1	800 5500	46,740 207995	0 - 0.13 0 - 3.2	0° - 50'	0.18 14	2 - 7/8 X 5	11.00 279	14.75 375	2.50 63	20.8 9,4
10 § 250	10.750 273,0	800 5500	73,280 326100	0 - 0.13 0 - 3.2	0° - 40'	0.14 12	2 - 1 X 6	13.63 346	17.13 435	2.63 67	31.1 14,1
12 § 300	12.750 323,9	800 5500	102,000 453900	0 - 0.13 0 - 3.2	0° - 34'	0.12 9	2 - 1 X 6 1/2	15.63 397	19.25 489	2.63 67	27.8 12,6
14 350	14.000 355,6	300 2065	46,180 205500	0 - 0.13 0 - 3.2	0° - 31'	0.11 9	4 - 1 X 3 1/2	16.63 422	19.88 505	2.88 73	35.6 16,1
15 375	15.000 381,0	300 2065	53,000 235850	0 - 0.13 0 - 3.2	0° - 29'	0.10 9	4 - 1 X 5 1/2	17.88 454	21.63 549	3.00 76	48.8 22,1
16 400	16.000 406,4	300 2065	60,320 268425	0 - 0.13 0 - 3.2	0° - 27'	0.10 9	4 - 1 X 3 1/2	19.00 482	22.13 562	3.00 76	51.1 23,2
18 450	18.000 457,2	300 2065	76,340 339710	0 - 0.13 0 - 3.2	0° - 24'	0.08 7	4 - 1 X 3 1/2	21.38 543	24.50 622	3.13 80	64.4 29,2
20 500	20.000 508,0	300 2065	94,000 418300	0 - 0.13 0 - 3.2	0° - 22'	0.08 7	4 - 1 1/8 X 4	23.63 600	27.25 692	3.13 80	91.2 41,4
22 550	22.000 559,0	300 2065	114,000 507300	0 - 0.13 0 - 3.2	0° - 19'	0.07 6	4 - 1 1/8 X 4	25.75 654	29.50 749	3.13 80	92.0 41,7
24 600	24.000 609,6	250 1725	113,000 502850	0 - 0.13 0 - 3.2	0° - 18'	0.07 6	6 - 1 1/8 X 4	27.75 704	31.25 794	3.13 80	94.0 42,6

§ Couplings 8, 10, 12" (200, 250, 300 mm) sizes available to JIS standards. Refer to Section 06.17 for details.

*†@ Refer to notes below.

NOTES

* Working Pressure and End Load are total, from all internal and external loads, based on standard weight (ANSI) steel pipe, standard **roll** or **cut** grooved in accordance with Victaulic specifications. Contact Victaulic for performance on other pipe.

WARNING: FOR ONE TIME FIELD TEST ONLY, the Maximum Joint Working Pressure may be increased to 1½ times the figures shown.

† 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 3/4 - 3 1/2" (20 - 90 mm); 25% for 4" (100 mm) and larger.

@ Number of bolts required equals number of housing segments.

Metric thread size bolts are available (color coded gold) for all coupling sizes upon request. Contact Victaulic for details.

WARNING: Depressurize and drain the piping system before attempting to install, remove, or adjust any Victaulic piping products.

MATERIAL SPECIFICATIONS

Housing: Ductile iron conforming to ASTM A-395, grade 65-45-15, and ASTM A-536, grade 65-45-12.

Housing Coating: Orange enamel

- **Optional:** Hot dipped galvanized and others

Coupling Gasket: (specify choice*) †

- **Grade "E" EPDM**

EPDM (Green color code). Temperature range -30°F to +230°F (-34°C to +110°C). Recommended 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 +86°F (+30°C) and hot +180°F (+82°C) potable water service. NOT RECOMMENDED FOR PETROLEUM SERVICES.

- **Grade "T" nitrile**

Nitrile (Orange color code). Temperature range -20°F to +180°F (-29°C to +82°C). Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range. Not recommended for hot water services over +150°F (+66°C) or for hot dry air over +140°F (+60°C).

*Services listed are General Service Recommendations only. It should be noted that there are services for which these gaskets are not recommended. Reference should always be made to the latest Victaulic Gasket Selection Guide for specific gasket service recommendations and for a listing of services which are not recommended.

Bolts/Nuts: Heat treated carbon steel, zinc electroplated to ASTM B633, track-head conforming to physical properties of ASTM A-183 minimum tensile 110,000 psi (758340 kPa).

† Supplemental lubricant is recommended for services installed at or continuously operating below 0°F (-18°C).

- **Optional:** Type 316 stainless steel, Grade B-8M, Class 2.

This product shall be manufactured by Victaulic Company. 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.