

# QuickVic® Flexible Coupling for Steel



SEE VICTAULIC PUBLICATION 10.01 FOR DETAILS

## STYLE 177

The Style 177 QuickVic flexible coupling is installation-ready, and joins 2-6"/50-150 mm standard roll grooved and cut grooved steel pipe.\* The coupling's unique design eliminates loose parts, insures consistent installation and provides substantial gains in productivity.

\* Sizes 2-4"/50-100 mm may be used to join 304/304L and 316/316L Schedule 10 stainless steel pipe with a maximum rated working pressure of 300 psi/2065 kPa.



### MATERIAL SPECIFICATIONS

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

**Housing Coating:** Orange enamel.

**Gasket:**

- **Grade "EHP"**

EHP (Red stripe color code) Temperature range -30°F to +250°F/-34°C to +121°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 plated carbon steel, trackhead meeting the physical and chemical requirements of ASTM A-449 and physical requirements of ASTM A-183.

**JOB/OWNER**

System No. \_\_\_\_\_  
 Location \_\_\_\_\_

**CONTRACTOR**

Submitted By \_\_\_\_\_  
 Date \_\_\_\_\_

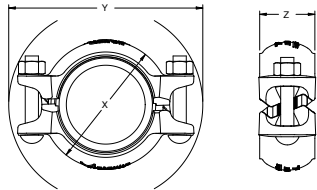
**ENGINEER**

Spec Sect \_\_\_\_\_ Para \_\_\_\_\_  
 Approved \_\_\_\_\_  
 Date \_\_\_\_\_

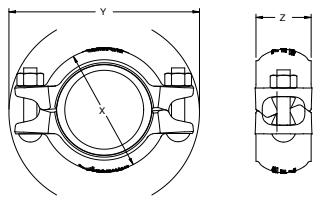
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### DIMENSIONS



STYLE 177 PRE-ASSEMBLED  
(INSTALLATION-READY CONDITION)

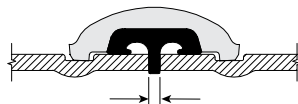


STYLE 177 JOINT ASSEMBLED

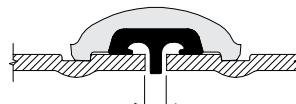
Size		Pipe End Sep. Inches/mm			Bolt/Nut No. – Size	Dimensions – Inches/mm					Aprx. Wgt. Ea.
Nominal Size Inches/mm	Actual Outside Diameter Inches/mm	(1) Min	(2) Max	(3) Max		Pre-assembled (Installation-ready condition)		Joint Assembled			
					Inches/mm	X	Y	X	Y	Z	Lbs. kg
2 50	2.375 60.3	0.13 3.2	0.19 4.8	0.25 6.4	2 – 3/8 x 2 1/2	3.87 98	5.59 142	3.56 90	5.39 137	2.05 52	2.0 0.9
2 1/2 65	2.875 73.0	0.13 3.2	0.19 4.8	0.25 6.4	2 – 3/8 x 2 1/2	4.36 111	6.13 156	4.05 103	5.89 150	2.05 52	2.4 1.1
3 80	3.500 88.9	0.13 3.2	0.19 4.8	0.25 6.4	2 – 1/2 x 3	5.00 127	7.05 179	4.68 119	6.81 173	2.04 52	3.1 1.4
4 100	4.500 114.3	0.13 3.2	0.25 6.4	0.38 9.5	2 – 1/2 x 3	5.98 152	8.24 209	5.61 142	7.92 201	2.15 54	3.7 1.7
6 150	6.625 168.3	0.13 3.2	0.25 6.4	0.38 9.5	2 – 5/8 x 3 1/4	8.23 209	11.18 284	7.95 202	10.92 277	2.09 53	6.3 2.9

(1) The minimum pipe end separation as required by the gasket center leg for roll or cut grooved pipe. See illustrations below.

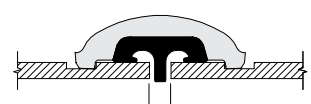
(2 & 3) Maximum pipe end separation to be used for determining overall piping system movement for roll (2) or cut (3) groove pipe. For design and installation purposes, the minimum and maximum pipe end separations should be reduced to the values shown in the table below. These design and installation considerations include thermal growth, settlement, installation misalignment and offsets. See illustrations below.



Minimum Pipe Separation (1)  
Roll and Cut Groove



Maximum Pipe Separation (2)  
Roll Groove



Maximum Pipe Separation (3)  
Cut Groove

Exaggerated for clarity

### DESIGN AND INSTALLATION

The amount of linear movement and angular deflection to be used for design and installation consideration for each coupling is shown in the table below.

Size Range	Design and Installation Values					
	Linear Movement #	Roll Groove Pipe		Linear Movement #	Cut Groove Pipe	
		Angular Deflection †			Angular Deflection †	
Inches/mm		Per Cplg. Deg.	Pipe In/Ft mm/m		Per Cplg. Deg.	Pipe In/Ft mm/m
2	0.06	1.52°	0.32	0.13	3.04°	0.64
50	1.6		26	3.2		52
2 1/2	0.06	1.25°	0.26	0.13	2.50°	0.52
65	1.6		22	3.2		44
3	0.06	1.03°	0.22	0.13	2.06°	0.44
80	1.6		18	3.2		36
4	0.13	1.60°	0.34	0.25	3.20°	0.68
100	3.2		28	6.4		56
6	0.13	1.08°	0.23	0.25	2.16°	0.46
150	3.2		18	6.4		36

† Victaulic recommends for design and installation purposes, these values should be reduced by 50% for 3/4-3 1/2"/20-90 mm sizes; 25% for 4"/100 mm and larger sizes.

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### PERFORMANCE

Size		Schedule 10 (Steel Pipe)			Schedule 40 (Steel Pipe)		
Nominal Inches Actual mm	Actual Outside Diameter Inches mm	Wall Thick. Inches mm	Max. * Joint Work. Press. psi/kPa	Max. * Permis. End Load Lbs./N	Wall Thick. Inches mm	Max. * Joint Work. Press. psi/kPa	Max. * Permis. End Load Lbs./N
2	2.375	0.109	750	3322	0.154	1000	4430
50	60.3	2.77	5170	14896	3.91	6900	19714
2½	2.875	0.120	600	3899	0.230	1000	6492
60	73.0	3.05	4135	17483	5.84	6900	28889
3	3.500	0.120	600	5772	0.216	1000	9621
75	88.9	3.05	4135	25882	5.49	6900	42813
4	4.500	0.120	600	9542	0.237	1000	15905
100	114.3	3.05	4135	42786	6.02	6900	71318
6	6.625	0.134	500	19263	0.28	700	24130
150	168.3	3.40	3445	86375	7.11	4825	108199

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

\* Working Pressure and End Load are total, from all internal and external loads, based on (ANSI) steel pipe, 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 1 ½ times the figures shown.

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### GENERAL NOTES

NOTE: When assembling Style 177 QuickVic flexible couplings onto end caps, take additional care to make certain the end cap is fully seat against the gasket center leg. For Style 177 QuickVic flexible couplings, use Victaulic No. 60 end caps containing "QV" or "QV/EZ" markings on the inside of the face. Non-Victaulic fittings shall not be used with Style 177 QuickVic flexible couplings.

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### INSTALLATION

Reference should always be made to the I-177 Victaulic Field Installation Instructions for the product you are installing. Instructions are included with each shipment of Victaulic products for complete installation and assembly data, and are available in PDF format on our website at [www.victaulic.com](http://www.victaulic.com).

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### WARRANTY

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

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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.

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For complete contact information, visit [www.victaulic.com](http://www.victaulic.com)

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