

QuickVic® Rigid Coupling for Steel



STYLE 107H ONLY. SEE PAGE 4 FOR DETAILS.

STYLE 107

The patented Style 107 rigid coupling joins 2 – 12”/50 – 300 mm standard roll grooved and cut grooved steel pipe. The joint is assembled without disassembling the bolts, nuts, gasket and housings. The Style 107 coupling requires lubrication only be applied to the sealing lips of the gasket before sliding the coupling on pipe grooved to Victaulic specifications. Refer to Victaulic Field Installation Instructions for required steps.

The Style 107H provides rigidity with its angle bolt pad design and accommodates pressures ranging from full vacuum (29.9 in Hg/760 mm Hg) up to 750 psi/5170 kPa. The Style 107N provides rigidity with its angle bolt pad design and accommodates pressures ranging from full vacuum (29.9 in Hg/760 mm Hg) up to 500 psi/3450 kPa. The coupling’s maximum pressure rating will depend on the diameter and wall thickness of the pipe.

The Style 107 coupling is rigid and does not accommodate expansion, contraction or angular deflection. Support and hanging requirements correspond to ASME B31.1 Power Piping Code and ASME B31.9 Building Services Piping Code.

Performance data presented in this document is based on use with standard wall, carbon steel pipe. For use with stainless steel pipe, please reference document 17.09 for pressure ratings and end loads. When used on thin wall stainless steel pipe, the Victaulic RX roll set must be used to roll groove the pipe. For further information regarding roll grooving stainless steel, refer to document 17.01.



2 – 8”/50 – 200 MM



10" AND 12”/250 AND 300 MM

MATERIAL SPECIFICATIONS

Housing: Ductile iron conforming to ASTM A-536, grade 65-45-12. Ductile iron conforming to ASTM A-395, grade 65-45-15, is available upon special request.

Housing Coating: Orange enamel.

Optional Coatings:

- Hot dipped galvanized

Gasket:

- **Grade “EHP”**
EHP (Red & Green 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 and NSF 372 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.

JOB/OWNER	CONTRACTOR	ENGINEER
System No. _____	Submitted By _____	Spec Sect _____ Para _____
Location _____	Date _____	Approved _____
		Date _____

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QuickVic® Rigid Coupling for Steel

STYLE 107

MATERIAL SPECIFICATIONS

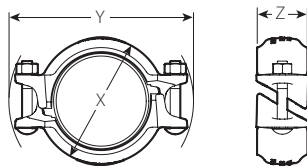
Bolts/Nuts: Heat-treated plated carbon steel, trackhead meeting the physical and chemical requirements of ASTM A-449 and physical requirements of ASTM A-183.

Optional Bolts/Nuts: (Available in imperial size bolts and nuts only.)

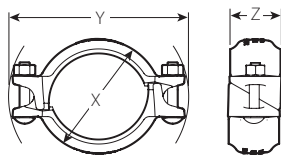
Bolts: Stainless steel, meeting the requirements of ASTM F-593, Group 2 (316 stainless steel), condition CW, with galling resistant coating

Nuts: ASTM F-594, Group 2 (316 stainless steel), condition CW

DIMENSIONS STYLE 107H



STYLE 107H PRE-ASSEMBLED
(INSTALLATION-READY CONDITION)



STYLE 107H JOINT ASSEMBLED

STYLE 107H

Size		Allow. Pipe End Sep. †	@ Bolt/Nut	Dimensions – Inches/mm					Aprx. Wgt. Ea.
Nominal Size Inches/mm	Actual Outside Diameter Inches/mm			Pre-assembled (Installation-ready condition)		Joint Assembled			
		Inches/mm	No. - Size Inches/mm	X	Y	X	Y	Z	Lbs./kg
2	2.375	0.15	2 - 3/8 x 2 1/2 M10 x 2 1/2	3.87	5.75	3.63	5.63	1.97	2.1
50	60.3	3.8		98	146	92	143	50	0.9
2 1/2	2.875	0.15	2 - 3/8 x 2 1/2 M10 x 2 1/2	4.37	6.26	4.15	6.15	1.97	2.5
65	73.0	3.8		111	159	105	156	50	1.1
76.1 mm	3.000	0.15	2 - 3/8 x 2 1/2 M10 x 2 1/2	4.43	6.39	4.25	6.28	1.97	2.4
	76.1	3.8		113	162	108	160	50	1.1
3	3.500	0.15	2 - 1/2 x 3 M12 x 3	4.95	7.36	4.71	7.24	1.97	3.1
80	88.9	3.8		126	187	120	184	50	1.4
4	4.500	0.15	2 - 1/2 x 3 M12 x 3	5.97	8.39	5.73	8.29	2.04	3.9
100	114.3	3.8		152	213	146	210	52	1.8
108.0 mm	4.250	0.13	2 - 1/2 x 3 M12 x 3	5.75	8.08	5.36	7.77	2.10	3.6
	108.0	3.2		146	205	136	197	53	1.6
133.0 mm	5.250	0.13	2 - 1/2 x 3 M12 x 3	6.76	9.35	6.525	9.26	2.09	4.8
	133.0	3.2		172	237	166	235	53	2.2
139.7 mm	5.500	0.15	2 - 1/2 x 3 M12 x 3	7.11	9.6	6.9	9.44	2.09	5.0
	139.7	3.8		181	244	175	240	53	2.3
5	5.563	0.15	2 - 1/2 x 3 M12 x 3	7.17	9.72	6.96	9.63	2.09	5.1
125	141.3	3.8		182	247	177	245	53	2.3
6	6.625	0.15	2 - 3/8 x 3 1/4 M16 x 3 1/4	8.31	11.32	8.13	11.23	2.04	6.8
150	168.3	3.8		211	288	207	285	52	3.1
159.0 mm	6.250	0.13	2 - 3/8 x 3 1/4 M16 x 3 1/4	7.89	10.92	7.87	10.80	2.17	7.1
	159.0	3.2		200	277	200	274	55	3.2
165.1 mm	6.500	0.15	2 - 3/8 x 3 1/4 M16 x 3 1/4	8.18	11.30	7.98	11.11	2.10	6.7
	165.1	3.8		208	287	203	282	53	3.0
8	8.625	0.22	2 - 3/8 x 4 M16 x 4	10.57	13.56	10.32	13.44	2.55	10.5
200	219.1	5.6		269	344	262	341	65	4.7
10 – 12" (250 – 300)		For 10 – 12"/250 – 300mm sizes Victaulic offers the Style 107N.							

† The allowable pipe separation dimension shown is for system layout purposes only. Style 107H QuickVic rigid couplings are considered rigid connections and will not accommodate expansion or contraction of the piping system.

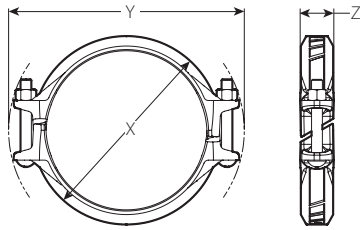
@ Number of bolts required equals number of housing segments.

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

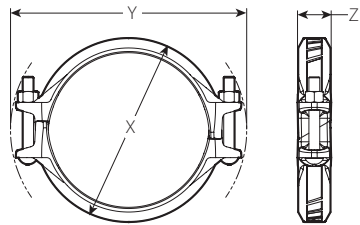
QuickVic® Rigid Coupling for Steel

STYLE 107

DIMENSIONS STYLE 107N



STYLE 107N PRE-ASSEMBLED
(INSTALLATION-READY CONDITION)



STYLE 107N JOINT ASSEMBLED

STYLE 107N

Size		Allow. Pipe End Sep. †	@ Bolt/Nut	Dimensions – Inches/mm					Aprx. Wgt. Ea.
Nominal Size Inches/mm	Actual Outside Diameter Inches/mm			Pre-assembled (Installation-ready condition)		Joint Assembled			
		Inches/mm	No. - Size Inches/mm	X	Y	X	Y	Z	Lbs./kg
2 – 8 50 – 200	For 2 – 8”/50 – 200mm sizes Victaulic offers the Style 107H.								
10 250	10.750 273.0	0.20 5.1	2 – 7/8 x 6 1/2	13.14 334	16.93 430	12.90 328	17.03 433	2.71 69	23.6 10.7
12 300	12.750 323.9	0.20 5.1	2 – 7/8 x 6 1/2	15.61 397	18.97 482	14.91 379	18.96 482	2.71 69	27.2 12.3

† The allowable pipe separation dimension shown is for system layout purposes only. Style 107N QuickVic rigid couplings are considered rigid connections and will not accommodate expansion or contraction of the piping system.

@ Number of bolts required equals number of housing segments.

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

QuickVic® Rigid Coupling for Steel

STYLE 107

PERFORMANCE

STYLE 107H - ANSI STANDARD

Size		Schedule 10			Schedule 40		
Nominal Inches/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 50	2.375 60.3	0.109 2.77	600 4135	2658 11823	0.154 3.91	750 5170	3323 14780
2½ 65	2.875 73.0	0.120 3.05	600 4135	3895 17325	0.203 5.15	750 5170	4869 21658
3 80	3.500 88.9	0.120 3.05	600 4135	5773 25680	0.216 5.49	750 5170	7216 32098
4 100	4.500 114.3	0.120 3.05	500 3450	7952 35372	0.237 6.02	750 5170	11928 53058
5 125	5.563 141.3	0.134 3.4	500 3450	12153 54060	0.258 6.55	750 5170	18229 81086
6 150	6.625 168.3	0.134 3.40	500 3450	17236 76670	0.280 7.11	700 4825	24130 107335
8 200	8.625 219.1	0.148 3.76	300 2070	17528 77970	0.322 8.18	600 4135	35056 155936

* Working Pressure and End Load are total from all internal and external loads grooved in steel pipe 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.

[†] cULus approved for use on schedule 10 pipe: 2, 2 ½, 3 and 4 inch sizes rated to 363 psi/25 bar; 5 and 6 inch rated to 290 psi/20 bar; 8 inch rated to 232 psi/16 bar.

FM approved on schedule 10 pipe: 2, 2 ½, 3, 4, 6 and 8 inch sizes rated to 363 psi/25 bar.

[§] cULus approved for use on schedule 40 pipe: 2, 2 ½, 3, 4, 5, 6 and 8 inch sizes rated to 363 psi/25 bar.

FM approved on schedule 40 pipe: 2, 2 ½, 3, 4, 6 and 8 inch sizes rated to 363 psi/25 bar.

STYLE 107N - ANSI STANDARD

Size		Schedule 10			Standard Wall		
Nominal Inches/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
10 250	10.750 273.0	0.165 4.19	300 2065	27200 121040	0.365 9.27	500 3450	45400 202030
12 300	12.750 323.9	0.180 4.57	200 1375	25500 113475	0.375 9.53	400 2750	51000 226950

* Working Pressure and End Load are total from all internal and external loads grooved in steel pipe 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.

QuickVic® Rigid Coupling for Steel

STYLE 107

PERFORMANCE

STYLE 107H - DIN STANDARD

Size		Normal DIN Wall Pipe			Other DIN Wall 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 50	2.375 60.3	0.091 2.3	600 4135	2658 11823	0.157 4.0	750 5170	3323 14780
76.1 mm †	3.000 76.1	0.102 2.6	600 4135	4241 18865	0.177 4.5	750 5170	5301 23580
3 80	3.500 88.9	0.114 2.9	600 4135	5773 25680	0.197 5.0	750 5170	7216 32098
4 100	4.500 114.3	0.126 3.2	500 3450	7952 35372	0.220 5.6	750 5170	11928 53058
108.0 mm	4.250 108.0	0.126 3.2	500 3450	7093 31552	0.220 5.6	750 5170	10640 47327
133.0 mm	5.250 133.0	0.126 3.2	500 3445	10824 48147	0.248 6.3	750 5170	16236 72220
139.7 mm †	5.500 139.7	0.177 4.5	500 3450	11879 52840	0.217 5.5	750 5170	17819 79262
6 150	6.625 168.3	0.157 4.0	500 3450	17236 76670	0.280 7.1	700 4825	24130 107335
159.0 mm	6.250 159.0	0.126 3.2	500 3445	15340 68235	0.28 7.1	700 4825	21476 95529
165.1 mm	6.500 165.1	0.177 4.5	500 3445	16592 73805	0.280 7.1	700 4825	23228 103324
8 200	8.625 219.1	0.177 4.5	300 2070	17528 77970	0.315 8.0	600 4135	35056 155936

* Working Pressure and End Load are total from all internal and external loads grooved in steel pipe 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.

† cULus approved for use on DIN wall pipe (2.9 mm thickness) 76.1 mm rated to 363 psi/25 bar; (4.0 mm thickness) 139.7 mm rated to 290 psi/20 bar; (4.5mm thickness) 165.1 mm rated to 290 psi/20 bar.

FM approved on schedule 10 and 40 pipe: 108.0 mm 133.0 mm and 159.0 mm to rated to 363 psi/25 bar.

QuickVic® Rigid Coupling for Steel

STYLE 107

GENERAL NOTES

NOTE: When assembling Style 107 QuickVic rigid couplings onto end caps, take additional care to make certain the end cap is fully seated against the gasket end stop. For Style 107 QuickVic rigid couplings, use Victaulic No. 60 end caps containing the “QV” or “QV/EZ” markings on the inside face. Victaulic No. 460-SS stainless steel endcaps shall not be used with Style 107 QuickVic rigid couplings. Non-Victaulic fittings shall not be used with Style 107 QuickVic rigid couplings.

INSTALLATION

Reference should always be made to the Victaulic Field Installation Instructions. Installation instructions are included with each shipment of Victaulic products 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.

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.

For complete contact information, visit www.victaulic.com

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