Victaulic® QuickVic™ Rigid Coupling for Steel Style 107

06.21

2 – 8"/50 – 200 mm

10 and 12"/250 – 300 mm

Performance data presented in this document is based on use with Schedule 10 standard wall, carbon steel pipe. For use with stainless steel pipe, please reference publication 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 publication 17.01.

⚠ WARNING

- **Victaulic RX roll sets must be used when grooving light-wall/thin-wall stainless steel pipe for use with Victaulic Couplings.**

Failure to use Victaulic RX roll sets when grooving light-wall/thin wall stainless steel pipe may cause joint failure, resulting in serious personal injury and/or property damage.

NOTICE

- **Victaulic RX grooving rolls must be ordered separately. They are identified by a silver color and the designation RX on the front of the roll sets.**

Certifications/Listings

See Victaulic publication 10.01 for details

See Victaulic publication 02.06 for portable water approvals if applicable.

Product Description

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 I-100 Victaulic Field Installation Handbook for required steps.

The Style 107H provides rigidity with its angled 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 angled 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.

Job/Owner

System No.	
Location	

Contractor

Submitted By	
Date	

Engineer

Spec Section	
Paragraph	
Approved	
Date	

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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: (specify choice)

- ☐ Standard: Orange enamel.
- ☐ Optional: Hot dipped galvanized and others.

Gasket: (specify choice[1])

- ☐ **Grade "EPDM"**
  EHP (Red and Green stripe color code). Temperature range –30°F to +250°F/–34°C to +121°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 NSF 372. NOT COMPATIBLE FOR PETROLEUM 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, air with oil vapors, vegetable and mineral oils within the specified temperature range. Not compatible for hot water services over +150°F/+66°C or for hot dry air over +140°F/+60°C.

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 Gasket Selection Guide for specific gasket service guidelines and for a listing of services which are not compatible.

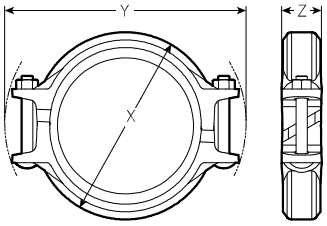
Bolts/Nuts: (specify choice)

- ☐ Standard: Heat-treated plated carbon steel, trackhead meeting the physical and chemical requirements of ASTM A 449 and physical requirements of ASTM A 183
- ☐ Optional: (Available in imperial size bolts and nuts only)

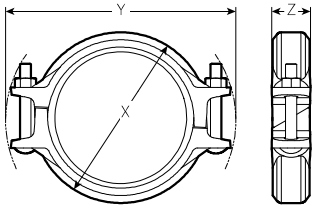
  Bolts: Stainless steel, meeting the requirements of ASTM F 593, Group 2 (316 stainless steel), condition CW, with galling resistant coating.

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

Style 107N



Style 107N Pre-Assembled
(Installation-Ready™ Condition)



Style 107N Joint Assembled

Nominal Size inches mm	Actual Outside Diameter inches mm	Allow. Pipe End Separation [4] inches mm	Bolt/Nut [5] No. – size inches mm	Dimensions Pre-assembled (Installation-ready™ condition) X inches mm	Y inches mm	Joint Assembled X inches mm	Y inches mm	Z inches mm	Approx. Weight Each lbs. kg
2 – 8 50 – 200	For 2 – 8"/50 – 200 mm sizes Victaulic offers the Style 107H								
10 250	10.750 273.0	0.20 5.1	2 – ⅞ x6½	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– ⅞x 6½	15.61 397	18.97 482	14.91 379	18.96 482	2.71 69	27.2 12.3

4 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.

5 Number of bolts required equals number of housing segments.

Note:

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

Performance

Style 107H - ANSI Standard

Size		Schedule 10 (Steel Pipe)			Schedule 40 (Steel Pipe)		
Nominal inches mm	Actual Outside Diameter inches mm	Wall Thinkness inches mm	Maximum Joint Working Pressure [6 7 8] psi kPa	Maximum Permis. End Load [6] lbs. N	Wall Thinkness inches mm	Maximum Joint Working Pressure [6 9 10] psi kPa	Maximum Permis. End Load [6] 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 3.40	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	363 2500	17528 77970	0.322 8.18	600 4135	35056 155936

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

7 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.

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

9 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.

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

Note:

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

Style 107N - ANSI Standard

Size		Schedule 10 (Steel Pipe)			Standard Wall		
Nominal inches mm	Actual Outside Diameter inches mm	Wall Thinkness inches mm	Maximum Joint Working Pressure [11] psi kPa	Maximum Permis. End Load [11] lbs. N	Wall Thinkness inches mm	Maximum Joint Working Pressure [11] psi kPa	Maximum Permis. End Load [11] 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

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

Note:

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

Style 107H - DIN Standard

Size		Normal DIN Wall Pipe			Other DIN Wall Pipe		
Nominal inches mm	Actual Outside Diameter inches mm	Wall Thinkness inches mm	Maximum Joint Working Pressure [12] psi kPa	Maximum Permis. End Load [12] lbs. N	Wall Thinkness inches mm	Maximum Joint Working Pressure [12] psi kPa	Maximum Permis. End Load [12] lbs. N
2 50	2.375 60.3	0.091 2.3	600 4135	2658 11823	0.157 4.0	1000 6900	3323 14780
76.1 mm [13]	3.000 76.1	0.102 2.6	600 4135	4241 18865	0.177 4.5	1000 6900	5301 23580
3 80	3.500 88.9	0.114 2.9	600 4135	5773 25680	0.197 5.0	1000 6900	7216 32098
4 100	4.500 114.3	0.126 3.2	500 3450	7952 35372	0.220 5.6	1000 6900	11928 53058
108.0 mm	4.250 108.0	0.126 3.2	500 3450	7093 31552	0.220 5.6	750 5175	10640 47327
133.0 mm	5.250 133.0	0.126 3.2	500 3445	10824 48147	0.248 6.3	750 5175	16236 72220
139.7 mm [13]	5.500 139.7	0.177 4.5	500 3450	11879 52840	0.217 5.5	750 5175	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	2.800 7.1	700 4825	23228 103324
8 200	8.625 219.1	0.177 4.5	363 2500	17528 77970	0.315 8.0	600 4135	35056 155936
10 250	10.750 273.0	0.197 5.0	300 2065	27200 121040	–	–	–
12 300	12.750 323.9	0.220 5.6	232 1600	29620 130155	–	–	–

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

13 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.

14 FM approved on schedule 10 and 40 pipe: 2, 2 ½, 76.1mm, 3, 4, 139.7 mm, 5, 6 and 8 inch sizes rated to 363 psi/25 bar.

Note:

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

Installation
Reference should always be made to the I-100 Victaulic Field Installation Handbook for the product you are installing. Handbooks 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.

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.

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