# C UL US FM> SEE VICTAULIC PUBLICATION 10.01 FOR DETAILS

#### STYLE 107H

The patented Style 107H rigid coupling joins  $2-8^{\circ}/50-200$  mm standard roll grooved and cut grooved steel pipe.\* The joint is assembled without disassembling the bolts, nuts, gasket and housings. The Style 107H 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 coupling's maximum pressure rating will depend on the diameter and wall thichkness of the pipe.

The Style 107H 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 light 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 24.01

\* Sizes 2 – 4"/50 – 100 mm may be used to join 304/304L and 316/316L Schedule 10 stainless steel pipe from full vacuum (29.9 in Hg/760 mm Hg) to a maximum rated working pressure of 300 psi/2065 kPa.



PATENTED

#### 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  $-30^{\circ}F$  to  $+250^{\circ}F/-34^{\circ}C$  to  $+121^{\circ}C$ . 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  $+86^{\circ}F/+30^{\circ}C$  and hot  $+180^{\circ}F/+82^{\circ}C$  potable water service. NOT RECOMMENDED FOR PETROLEUM SERVICES.

### • Grade "T" nitrile

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

\* 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.

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

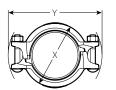
Nuts: ASTM F-594. Group 2 (316 stainless steel), condition CW

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



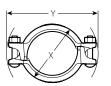
### STYLE 107H

#### **DIMENSIONS**





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





STYLE 107H JOINT ASSEMBLED

Si	ze	Allow. Pipe End Sep. †	@ Bolt/Nut	Dimensions – Inches/mm			Aprx. Wgt. Ea.		
Nominal Size	Actual Outside Diameter	landar /	No Size			Joint Assembled			Lbs./
Inches/ mm	Inches/ mm	Inches/ mm	Inches/ mm	Х	Υ	Х		z	kg
2	2.375	0.15	2 - 3/8 x 2 ½	3.87	5.75	3.63	5.63	1.97	2.1
50	60.3	3.8	M10 x 2 ½	98	146	92	143	50	0.9
2½	2.875	0.15	$2 - \frac{3\%}{M10} \times \frac{21/2}{2}$	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 76.1	0.15 3.8	$2 - \frac{3\%}{M10} \times \frac{21/2}{2}$	4.43 113	6.39 162	4.25 108	6.28 160	1.97 50	2.4 1.1
3	3.500	0.15	$2 - \frac{1/2}{M12} \times \frac{3}{3}$	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	$2 - \frac{1/2}{M12} \times \frac{3}{X}$	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	4.250 108.0	0.13 3.2	$2 - \frac{1/2}{M12} \times \frac{3}{X}$	5.75 146	8.08 205	5.36 136	7.77 197	2.10 53	3.6 1.6
133.0 mm	5.250	0.13	2 - ½ x 3	6.76	9.35	6.525	9.26	2.09	4.8
	133.0	3.2	M12 x 3	172	237	166	235	53	2.2
139.7 mm	5.500 139.7	0.15 3.8	$2 - \frac{1/2}{M12} \times \frac{3}{X}$	7.11 181	9.6 244	6.9 175	9.44 240	2.09 53	5.0 2.3
5	5.563	0.15	$2 - \frac{1/2}{M12} \times \frac{3}{X}$	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 - <sup>5</sup> / <sub>8</sub> x 3 ½	8.31	11.32	8.13	11.23	2.04	6.8
150	168.3	3.8	M16 x 3 ½	211	288	207	285	52	3.1
159.0 mm	6.250	0.13	2 - <sup>5</sup> / <sub>8</sub> x 3 <sup>1</sup> / <sub>4</sub>	7.89	10.92	7.87	10.80	2.17	7.1
	159.0	3.2	M16 x 3 <sup>1</sup> / <sub>4</sub>	200	277	200	274	55	3.2
165.1 mm	6.500	0.15	2 - <sup>5</sup> / <sub>8</sub> x 3 ½	8.18	11.30	7.98	11.11	2.10	6.7
	165.1	3.8	M16 x 3 ½	208	287	203	282	53	3.0
8	8.625	0.22	2 - <sup>5</sup> / <sub>8</sub> x 4	10.57	13.56	10.32	13.44	2.55	10.5
200	219.1	5.6	M16 x 4	269	344	262	341	65	4.7

<sup>†</sup> 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.

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

<sup>@</sup> Number of bolts required equals number of housing segments.

STYLE 107H

#### **PERFORMANCE**

#### **ANSI STANDARD**

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

<sup>\*</sup> 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  $1\,\%$  times the figures shown.

t cULus approved for use on schedule 10 pipe: 2, 2  $\frac{1}{2}$ , 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  $\frac{1}{2}$ , 3, 4, 6 and 8 inch sizes rated to 363 psi/25 bar.

STYLE 107H

#### **PERFORMANCE**

#### **DIN STANDARD**

Size		No	rmal DIN Wall P	ipe	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	2.375	0.091	600	2658	0.157	750	3323	
50	60.3	2.3	4135	11823	4.0	5170	14780	
76.1 mm ŧ	3.000	0.102	600	4241	0.177	750	5301	
	76.1	2.6	4135	18865	4.5	5170	23580	
3	3.500	0.114	600	5773	0.197	750	7216	
80	88.9	2.9	4135	25680	5.0	5170	32098	
4	4.500	0.126	500	7952	0.220	750	11928	
100	114.3	3.2	3450	35372	5.6	5170	53058	
108.0 mm	4.250	0.114	600	8512	0.220	1000	14186	
	108.0	2.9	4135	37862	5.6	6900	63104	
133.0 mm	5.250	0.126	500	10824	0.248	750	16236	
	133.0	3.2	3445	48147	6.3	5170	72220	
139.7 mm ŧ	5.500	0.177	500	11879	0.217	750	17819	
	139.7	4.5	3450	52840	5.5	5170	79262	
6	6.625	0.157	500	17236	0.280	700	24130	
150	168.3	4.0	3450	76670	7.1	4825	107335	
159.0 mm	6.250	0.126	500	15340	0.28	700	21476	
	159.0	3.2	3445	68235	7.1	4825	95529	
165.1 mm	6.500	0.177	500	16592	0.280	700	23228	
	165.1	4.5	3445	73805	7.1	4825	103324	
8	8.625	0.177	300	17528	0.315	600	35056	
200	219.1	4.5	2070	77970	8.0	4135	155936	

<sup>\*</sup> 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  $\frac{1}{2}$  times the figures shown.

 $\mathfrak{t}$  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.

STYLE 107H

#### **GENERAL NOTES**

NOTE: When assembling Style 107H 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 107H 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 107H QuickVic rigid couplings. Non-Victaulic fittings shall not be used with Style 107H 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.