

Victaulic® Coupling for Double Grooved HDPE Pipe Style 908



8 – 18" IPS &
250 – 450 mm ISO



20 – 36" IPS &
500 – 900 mm ISO

1.0 PRODUCT DESCRIPTION

Available Sizes

- 8 – 36" IPS
- 250 – 900 mm ISO

Maximum Working Pressure

- Meets or exceeds the pressure rating of the pipe - see Section 5.0.

Application

- Designed for double grooved HDPE pipe from SDR 7 to 17
- Standard Victaulic coupling assembly procedure used for installation

NOTE

- For HDPE pipe preparation and tools, see [publication 24.06](#).

2.0 CERTIFICATION/LISTINGS



Product designed and manufactured under Victaulic's Quality Management System, as certified by LPCB in accordance with ISO -9001:2008.

ALWAYS REFER TO ANY NOTIFICATIONS AT THE END OF THIS DOCUMENT REGARDING PRODUCT INSTALLATION, MAINTENANCE OR SUPPORT.

System No.		Location	
Submitted By		Date	

Spec Section		Paragraph	
Approved		Date	

3.0 SPECIFICATIONS – MATERIALS

Housing:

Ductile iron conforming to ASTM A536, Grade 65-45-12.

Housing Coating: (specify choice)

Standard: Orange enamel.

Optional: Fusion bonded epoxy, galvanized and other coatings are available.

Coupling Gasket: (specify choice¹)

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, hydrocarbons, air with oil vapors, vegetable and mineral oils within the specified temperature range; not compatible for hot dry air over 140°F/ 60°C and water over +150°F/+66°C. NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES OR STEAM SERVICES.

Grade “E” EPDM

EPDM (Green stripe color code). Temperature range -30°F to +230°F/-34°C to +110°C. May be specified for cold and 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 ANSI/NSF 372. NOT COMPATIBLE FOR PETROLEUM SERVICES.

Grade “EF” EPDM

EPDM (Green “X” color code). Temperature range -30°F to +230°F/-34°C to +110°C. May be specified for hot and cold water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. Also meets hot and cold potable water requirements per DVGW, KTW, ÖVGW, SVGW, and French ACS (Crecep), approved for W534, approved for EN681-1 Type WA cold potable, and Type WB hot potable water service. NOT COMPATIBLE FOR USE WITH PETROLEUM SERVICES OR STEAM SERVICES.

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.

NOTE

- The maximum temperature ratings shown exceed the temperature ratings for HDPE pipe. Consult individual pipe manufacturers for specific temperature

Pipe End Stiffener: Type 316 stainless steel

Hardware:

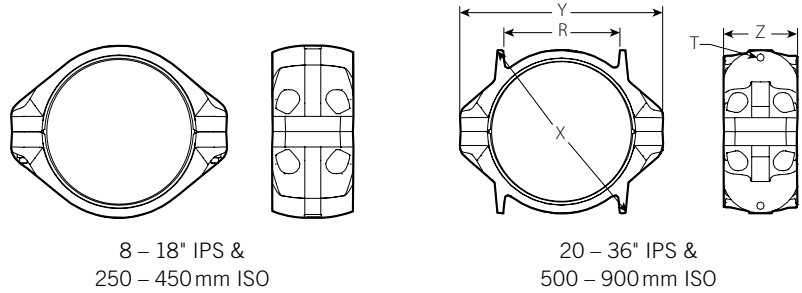
Bolts/Nuts: (specify choice²)

Standard: Carbon steel oval neck track bolts meeting the mechanical property requirements of ASTM A449 (imperial) and ISO 898-1 Class 9.8 (M10-M16) Class 8.8 (M20 and greater). Carbon steel hex nuts meeting the mechanical property requirements of ASTM A563 Grade B (imperial - heavy hex nuts) and ASTM A563M Class 9 (metric - hex nuts). Track bolts and hex nuts are zinc electroplated per ASTM B633 ZN/FE5, finish Type III (imperial) or Type II (metric), with or without fluoropolymer top coat. Hardened steel washers conforming to ASTM F436 Type 3 (weathering steel).

Optional²:Stainless steel oval neck track bolts meeting the mechanical property requirements of ASTM A193 Class 2, Grade B8M. Stainless steel heavy hex nuts meeting the mechanical property requirements of ASTM A194 Grade 8M Heavy Hex, with galling reducing coating. Hardened steel washers conforming to ASTM F436 Type 3 (weathering steel).

² Optional bolts/nuts available in imperial size only

4.0 DIMENSIONS

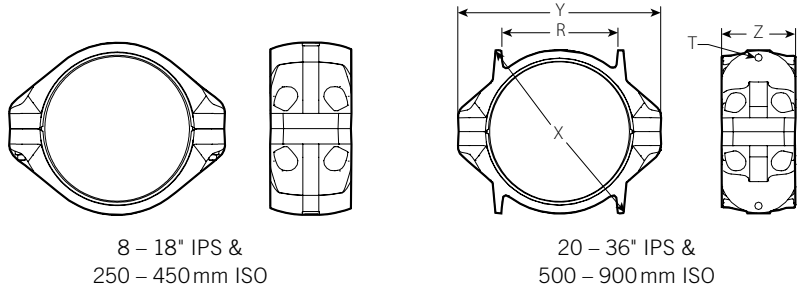


IPS Size		Bolt/Nut		Joint Assembled					Weight
Nominal inches	Actual Outside Diameter inches mm	Qty.	Size inches	R	T (dia.)	X	Y	Z	Approximate (Each) lb kg
				mm inches	mm inches	inches mm	inches mm	inches mm	
8	8.625 219.1	4	5/8 x 5	-	-	10.13 257	14.50 368	6.50 165	55.0 25.0
10	10.750 273.1	4	3/4 x 5	-	-	12.63 321	17.36 441	7.00 178	73.0 33.0
12	12.750 323.9	4	3/4 x 5	-	-	14.50 368	18.88 480	7.00 178	77.0 35.0
14	14.000 355.6	4	7/8 x 5 1/2	-	-	16.38 416	21.38 543	8.38 213	117.0 53.0
16	16.000 406.4	4	7/8 x 5 1/2	-	-	18.25 464	23.38 594	9.50 241	158.0 72.0
18	18.000 457.2	4	7/8 x 5 1/2	-	-	20.13 511	25.63 651	9.50 241	178.0 81.0
20	20.000 508.0	4	7/8 x 5 1/2	15.8 400.3	1.0 25.4	28.00 711	27.88 708	10.00 254	247.0 112.0
22	22.000 558.8	4	7/8 x 5 1/2	17.3 438.4	1.0 25.4	30.25 768	29.50 749	10.50 267	277.0 125.6
24	24.000 609.6	4	1 x 6	18.0 457.2	1.0 25.4	32.25 819	32.25 819	12.00 305	366.0 166.0
28	28.000 711.2	4	1 x 6	20.0 508.0	1.0 25.4	36.63 930	36.50 927	13.00 330	455.0 206.4
30	30.000 762.0	4	1 1/8 x 7	22.0 558.8	1.0 25.4	38.63 981	38.75 984	13.63 346	525.0 238.1
32	32.000 812.8	4	1 1/8 x 7	24.0 609.6	1.0 25.4	40.63 1032	40.75 1035	14.00 356	594.0 269.4
36	36.000 914.4	4	1 1/4 x 7	22.3 565.4	1.0 25.4	44.00 1118	44.75 1137	15.25 387	726.0 329.3

NOTE

- Lead time and availability vary by size. Contact your local Victaulic representative for additional information.

4.0 DIMENSIONS (Continued)



ISO Size		Bolt/Nut		Joint Assembled					Weight
Nominal mm	Actual Outside Diameter mm inches	Qty.	Size mm inches	R mm inches	T (dia.) mm inches	X mm inches	Y mm inches	Z mm inches	Approximate (Each) kg lb
250 mm	251.2 9.888	4	M20 x 127 ¾ x 5.00	– –	– –	294 11.63	404 16.00	173 6.88	29.0 63.0
280 mm	281.3 11.075	4	M20 x 127 ¾ x 5.00	– –	– –	315 12.40	457 18.00	178 7.00	35.0 77.0
315 mm	316.5 12.459	4	M20 x 127 ¾ x 5.00	– –	– –	357 14.13	476 18.88	178 7.00	36.0 79.0
355 mm	356.6 14.039	4	M22 x 140 7/8 x 5.50	– –	– –	415 16.38	541 21.38	211 8.38	53.0 117.0
400 mm	401.6 15.819	4	M22 x 140 7/8 x 5.50	– –	– –	467 18.38	592 23.38	241 9.50	73.0 161.0
450 mm	452 17.797	4	M22 x 140 7/8 x 5.50	– –	– –	511 20.13	639 25.25	241 9.50	74.0 164.0
500 mm	502.3 19.774	4	M22 x 140 7/8 x 5.50	400.3 15.8	25.4 1.0	705 27.75	706 27.88	254 10.00	116.0 255.0
560 mm	562.5 22.146	4	M22 x 140 7/8 x 5.50	438.4 17.3	25.4 1.0	768 30.25	749 29.50	267 10.50	119.0 262.0
630 mm	632.8 24.915	4	M24 x 152 1 x 6.00	444.5 17.5	25.4 1.0	826 32.50	819 32.25	305 12.00	165.0 364.0
710 mm	713.2 28.079	4	M24 x 152 1 x 6.00	508.0 20.0	25.4 1.0	930 36.63	926 36.50	330 13.00	202.0 445.0
800 mm	803.6 31.638	4	M27 x 178 1 1/8 x 7.00	609.6 24.0	25.4 1.0	1021 40.25	1015 40.00	348 13.75	255.0 562.0
900 mm	904.1 35.593	4	M30 x 178 1 1/4 x 7.00	565.4 22.3	25.4 1.0	1118 44.00	1124 44.25	387 15.25	320.0 705.0

NOTES

- Lead time and availability vary by size. Contact your local Victaulic representative for additional information.
- Metric Bolt/Nuts standard, with the exception of North American, South America and Australian shipments, where Imperial sizes are standard.

5.0 PERFORMANCE

Pressure Rating: joints made with Style 908 couplings can sustain the pressures below.

IPS Size	PE4710 HDPE Pipe ³ DR				
	7	9	11	13.5	17
Nominal Size inches	Pressure Rating psi kPa				
8 – 10	333 2295	250 1725	200 1380	160 1100	125 860
12 – 18 ⁴	250 1725	250 1725	200 1380	160 1100	125 860
20 – 24 ⁴	200 1380	200 1380	200 1380	160 1100	125 860
28 ⁴	– –	160 1100	160 1100	160 1100	125 860
30 ⁴	– –	138 952	138 952	138 952	125 860
32 ⁴	– –	125 862	125 862	125 862	100 690
36 ⁴	– –	100 690	100 690	100 690	80 552

³ HDPE pipe conforming to ASTM D3035 and F714 at 73°F/23°C. Reference plastic pipe manufacture data for derating factors at other temperatures

⁴ For gray shaded ratings, Style 908 pressure performance up to the full pressure rating of the HDPE pipe can be achieved with use of a pipe end stiffener.

NOTE

- Victaulic coupling gaskets have been demonstrated to seal under full (29" of Hg/3.4 kPa [absolute]) vacuum requirements. Consult the specific HDPE pipe manufacturer for their recommended limitations regarding maximum vacuum as well as the effects of temperature and pipe ovality.

ISO Size	PE100 HDPE Pipe ⁵ SDR				
	7.4	9	11	13.6	17
Nominal Size mm	Pressure Rating Bar kPa psi				
250 – 280	25 2500 363	20 2000 290	16 1600 232	12.5 1250 182	10 1000 145
315 – 450 ⁶	20 2000 290	20 2000 290	16 1600 232	12.5 1250 182	10 1000 145
500 – 630 ⁶	16 1600 232	16 1600 232	16 1600 232	12.5 1250 182	10 1000 145
710 ⁶	– – –	12.5 1250 182	12.5 1250 182	12.5 1250 182	10 1000 145
800 ⁶	– – –	10 1000 145	10 1000 145	10 1000 145	8 800 116
900 ⁶	– – –	– – –	8 800 116	8 800 116	6 600 87

⁵ HDPE pipe conforming to ISO 4427-2 at 68°F/20°C. Reference plastic pipe manufacture data for derating factors at other temperatures

⁶ For gray shaded ratings, Style 908 pressure performance up to the full pressure rating of the HDPE pipe can be achieved with use of a pipe end stiffener.

NOTE

- Victaulic coupling gaskets have been demonstrated to seal under full (29" of Hg/3.4 kPa [absolute]) vacuum requirements. Consult the specific HDPE pipe manufacturer for their recommended limitations regarding maximum vacuum as well as the effects of temperature and pipe ovality.

5.0 PERFORMANCE (Continued)

Safe Pull Load

Allowable Tensile Load (ATL): joints made with Style 908 couplings can sustain tensile loads noted below.

IPS Size	Allowable Tensile Load ⁷				
	DR				
Nominal inches	7 lb N	9 lb N	11 lb N	13.5 lb N	17 lb N
8	31,200	25,200	21,100	17,500	14,100
	138,784	112,095	93,857	77,844	62,720
10	48,500	39,100	32,800	27,200	21,900
	215,738	173,926	145,901	120,991	97,416
12	68,300	55,100	46,100	38,300	30,900
	303,814	245,096	205,062	170,366	137,449
14	72,000	66,400	55,600	46,100	37,200
	320,270	295,360	247,320	205,062	165,473
16	100,100	86,700	72,600	60,200	48,600
	445,267	385,659	322,939	267,782	216,183
18	132,000	109,800	91,900	76,200	61,500
	587,165	488,412	408,790	338,953	273,564
20	165,200	135,500	113,400	94,100	76,000
	734,846	602,731	504,426	418,576	338,063
22	201,800	164,000	137,200	113,900	91,900
	897,651	729,505	610,293	506,650	408,790
24	242,000	195,200	163,300	135,500	109,400
	1,076,470	868,289	726,391	602,731	486,633
28	–	265,600	222,300	184,500	148,900
	–	1,181,448	988,840	820,697	662,340
30	–	304,900	255,200	211,800	170,900
	–	1,356,263	1,135,186	942,133	760,201
32	–	–	290,300	240,900	194,500
	–	–	1,291,319	1,071,577	865,179
36	–	–	367,400	304,900	246,100
	–	–	1,634,277	1,356,623	1,094,707

⁷ Allowable tensile loads shown are for straight pulling for a maximum period of one half hour at ambient temperature (68°F/20°C).

5.0 PERFORMANCE (Continued)

Safe Pull Load

Allowable Tensile Load (ATL): joints made with Style 908 couplings can sustain tensile loads noted below.

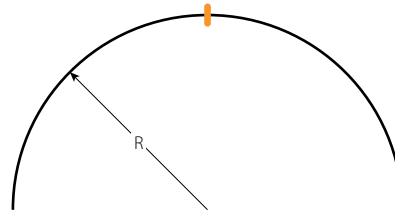
ISO Size	Allowable Tensile Load ⁸				
	SDR				
Nominal mm	7.4 N lb	9 N lb	11 N lb	13.6 N lb	17 N lb
250	173,925 39,100	146,791 33,000	122,770 27,600	101,419 22,800	82,292 18,500
280	218,408 49,100	184,601 41,500	154,576 34,750	127,219 28,600	103,421 23,250
315	276,679 62,200	233,531 52,500	195,721 44,000	161,025 36,200	130,777 29,400
355	351,410 79,000	296,695 66,700	248,565 55,880	204,617 46,000	166,363 37,400
400	446,157 100,300	376,763 84,700	315,377 70,900	259,775 58,400	211,290 47,500
450	564,924 127,000	477,292 107,300	399,004 89,700	329,167 74,000	267,337 60,100
500	– –	588,942 132,400	492,861 110,800	406,121 91,300	330,056 74,200
560	– –	738,846 166,100	618,300 139,000	509,764 114,600	414,127 93,100
630	– –	935,461 210,300	782,887 176,000	644,992 145,000	524,445 117,900
710	– –	1,188,120 267,100	994,178 223,500	819,362 184,200	665,899 149,700
800	– –	1,508,392 339,100	1,262,405 283,800	1,040,439 233,900	845,607 190,100
900	– –	– –	1,597,356 359,100	1,316,674 296,000	1,070,242 240,600

⁸ Allowable tensile loads shown are for straight pulling for a maximum period of one half hour at ambient temperature (68°F/20°C).

5.0 PERFORMANCE (Continued)

Bend Radius

Bend Radius: joints made with Style 908 couplings can sustain a bending radius as recommended by the Plastic Pipe Institute (PPI) in the Handbook of PE Pipe (2nd ed, Chapter 7, Table 4)

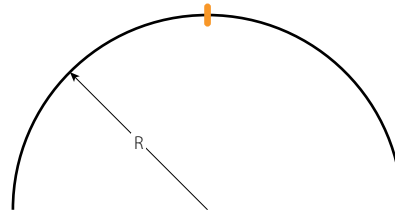


IPS Size	Minimum Recommended Bend Radius				
	DR				
Nominal inches	7 inches mm	9 inches mm	11 inches mm	13.5 inches mm	17 inches mm
8	345 8763	230 5842	216 5486	216 5486	233 5915
10	430 10922	287 7281	269 6833	269 6833	290 7372
12	510 12954	340 8636	319 8103	319 8103	344 8744
14	560 14224	560 14224	467 11853	350 8890	378 9601
16	960 24384	640 16256	533 13547	400 10160	432 10973
18	1080 27432	720 18288	600 15240	600 15240	486 12344
20	1200 30480	800 20320	667 16933	667 16933	540 13716
22	1320 33528	880 22352	733 18627	733 18627	594 15088
24	1440 36576	1440 36576	1200 30480	800 20320	648 16459
28	- -	1680 42672	1400 35560	933 23707	756 19202
30	- -	1800 45720	1500 38100	1000 25400	810 20574
32	- -	1920 48768	1600 40640	1067 27093	864 21946
36	- -	2160 54864	1800 45720	1200 30480	972 25689

5.0 PERFORMANCE (Continued)

Bend Radius

Bend Radius: joints made with Style 908 couplings can sustain a bending radius as recommended by the Plastic Pipe Institute (PPI) in the Handbook of PE Pipe (2nd ed, Chapter 7, Table 4)



ISO Size	Minimum Recommended Bend Radius				
	SDR				
Nominal mm	7.4 mm inches	9 mm inches	11 mm inches	13.6 mm inches	17 mm inches
250	10000 394	6667 262	6250 246	6250 246	6750 266
280	11200 441	7467 294	7000 276	7000 276	7560 298
315	12600 496	8400 331	7875 310	7875 310	8505 335
355	14200 559	14200 559	11833 466	8875 349	9585 377
400	24242 954	16000 630	13333 525	10000 394	10800 425
450	27273 1074	18000 709	15000 591	15000 591	12150 478
500	30303 1193	20000 787	16667 656	16667 656	13500 531
560	33939 1336	22400 882	18667 735	18667 735	15120 595
630	38182 1503	38182 1503	31500 1240	21000 827	17010 670
710	– –	43030 1694	35500 1398	23667 932	19170 755
800	– –	48485 1909	40000 1575	26667 1050	21600 850
900	– –	– –	45000 1772	30000 1181	24300 957

6.0 NOTIFICATIONS

Not applicable. Contact Victaulic for details.

7.0 REFERENCE MATERIALS

[I-900: HDPE Products Installation and Assembly Manual](#)

[I-908: Style 908 Coupling Installation Manual](#)

[19.07: Style 905 Coupling for HDPE Pipe](#)

[19.10: Style 907 Transition Coupling Carbon Steel to HDPE Pipe](#)

[19.11: HDPE Plain End Fittings](#)

User Responsibility for Product Selection and Suitability

Each user bears final responsibility for making a determination as to the suitability of Victaulic products for a particular end-use application, in accordance with industry standards and project specifications, and the applicable building codes and related regulations as well as Victaulic performance, maintenance, safety, and warning instructions. Nothing in this or any other document, nor any verbal recommendation, advice, or opinion from any Victaulic employee, shall be deemed to alter, vary, supersede, or waive any provision of Victaulic Company's standard conditions of sale, installation guide, or this disclaimer.

Intellectual Property Rights

No statement contained herein concerning a possible or suggested use of any material, product, service, or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Victaulic or any of its subsidiaries or affiliates covering such use or design, or as a recommendation for the use of such material, product, service, or design in the infringement of any patent or other intellectual property right. The terms "Patented" or "Patent Pending" refer to design or utility patents or patent applications for articles and/or methods of use in the United States and/or other countries.

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.

Installation

Reference should always be made to the Victaulic installation handbook or installation instructions of the product you are installing. Handbooks are included with each shipment of Victaulic products, providing 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.

Trademarks

Victaulic and all other Victaulic marks are the trademarks or registered trademarks of Victaulic Company, and/or its affiliated entities, in the U.S. and/or other countries.