

Victaulic Couplings Performance Data for PE-Xa Pipe



Style 905



Style 907



Style 908

1.0 PRODUCT DESCRIPTION

Available Sizes

- 63 – 710 mm ISO cross-linked polyethylene (PE-Xa)

Pipe Materials

- PE-Xa pipe conforming to DIN 16892 and DIN 16893 (SDR 7.4 – 21)

Operating Temperature Range

- -20°F to +230°F/-29°C to +110°C (subject to pipe manufacturer's temperature limit and Victaulic gasket compatibility)
- For available gaskets and performance options, reference [publication 19.07](#) (Style 905), [publication 19.10](#) (Style 907), and [publication 19.09](#) (Style 908)
- **Maximum Working Pressure**
- Couplings are rated to the pressure rating of the PE-Xa pipe on which they are installed (refer to section 2.0 Performance for further information)

Function

- Couplings may be specified for use on PE-Xa pipe, ranging in wall thickness from SDR 7.4 to 21.
- Suitable for use on services recommended by the PE-Xa pipe manufacturer

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	

2.0 PERFORMANCE

Style 905 and Style 907 – ISO Standard

Pressure Rating: joints made with Style 905 and Style 907 couplings meet the pressure rating of the PE-Xa pipe.

Nominal Size	PE-Xa Pipe ¹ Maximum Joint Working Pressure					
	SDR					
	7.4	9	11	13.6	16.2	21
mm	Bar kPa psi					
63 – 355	24	19	15	12	10	8
	2400	1900	1500	1200	1000	800
	348	276	218	174	145	116

¹ PE-Xa pipe conforming to DIN 16892/16893 at 68°F/20°C and safety factor C = 1.25. Reference pipe manufacturer data for de-rating factors at other temperatures.

Style 908 – ISO Standard

Pressure Rating: joints made with Style 908 couplings meet the pressure rating of the PE-Xa pipe.

Nominal Size	PE-Xa Pipe ² Maximum Joint Working Pressure					
	SDR					
	7.4	9	11	13.6	16.2	21
mm	Bar kPa psi					
250 – 280	24	19	15	12	10	8
	2400	1900	1500	1200	1000	800
	348	276	218	174	145	116
315 – 630	19*	19	15	12	10	8
	1900*	1900	1500	1200	1000	800
	276*	276	218	174	145	116
710	12*	12*	12*	12	10	8
	1200*	1200*	1200*	1200	1000	800
	174*	174*	174*	174	145	116

² PE-Xa pipe conforming to DIN 16892/16893 at 68°F/20°C and safety factor C = 1.25. Reference pipe manufacturer data for de-rating factors at other temperatures.

* Maximum joint working pressure may be increased to full pipe pressure rating with the use of pipe end stiffeners. Contact Victaulic for details.

2.1 PERFORMANCE

Style 905 and Style 907 – ISO Standard

Allowable Tensile Load (ATL): joints made with Style 905 and Style 907 couplings can sustain tensile loads noted below.

Nominal Size mm	Allowable Tensile Loads ³					
	SDR					
	7.4	9	11	13.6	16.2	21
	N lb					
63	6975	5916	4946	4083	3434	–
	1568	1330	1112	918	772	–
75	9933	8340	6913	5792	4924	3830
	2233	1875	1554	1302	1107	861
90	14248	12032	10000	8318	7046	5494
	3203	2705	2248	1870	1584	1235
110	21360	17913	14906	12304	10462	8274
	4802	4027	3351	2766	2352	1860
125	27508	23313	19305	15880	13465	10645
	6184	5241	4340	3570	3027	2393
140	34576	29091	24100	19915	17028	13314
	7773	6540	5418	4477	3828	2993
160	45087	37921	31645	26071	22152	17482
	10136	8525	7114	5861	4980	3930
180	56991	47912	39998	33050	27948	21974
	12812	10771	8992	7430	6283	4940
200	70286	59308	49082	40608	34678	27250
	15801	13333	11034	9129	7796	6126
225	89169	75059	62222	51573	43744	34487
	20046	16874	13988	11594	9834	7753
250	110022	92376	76919	63530	54184	42240
	24734	20767	17292	14282	12181	9496
280	138002	116045	96406	79663	67751	53259
	31024	26088	21673	17909	15231	11973
315	174699	146827	122108	100921	85900	67084
	39274	33008	27451	22688	19311	15081
355	221606	186603	154954	127971	108750	85179
	49819	41950	34835	28769	24448	19149

³ Allowable tensile loads shown are straight are for straight pulling of unpressurized assembled pipe sections for a maximum period of one half hour at 68°F/20°C. Consult pipe manufacturer's recommendation for ATL reduction factors at elevated temperatures.

2.1 PERFORMANCE (CONTINUED)

Style 908 – ISO Standard

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

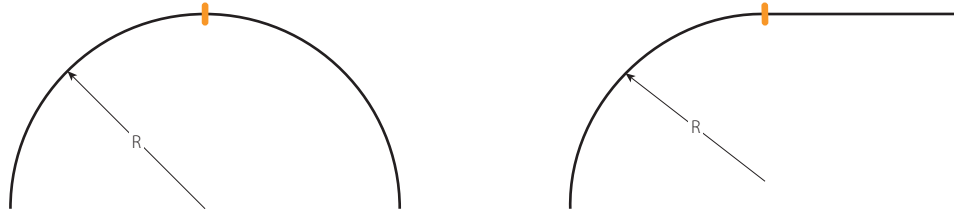
Nominal Size mm	Allowable Tensile Loads ³					
	SDR					
	7.4	9	11	13.6	16.2	21
	N lb					
250	155624	131345	109852	90748	80068	60498
	34986	29528	24696	20401	18000	13601
280	195426	165176	138310	113832	97416	75623
	43933	37133	31093	25591	21900	17001
315	247566	208958	175127	144082	122326	95922
	55655	46976	39370	32391	27500	21564
355	314432	265476	222411	183087	157912	121793
	70687	59681	50000	41160	35500	27380
400	399209	337119	282193	232441	193498	154828
	89746	75787	63440	52255	43500	34807
450	505480	427071	357020	294531	249100	195824
	113636	96009	80261	66213	56000	44023
500	594727	526972	441001	363388	298476	241993
	133700	118468	99141	81693	67100	54402
560	740184	661104	553241	456126	378099	303686
	166400	148622	124374	102541	85000	68271
630	907437	811951	700507	577122	471511	384085
	204000	182534	157480	129742	106000	86346
710	1023091	963197	851753	712448	571596	487967
	230000	216535	191482	160165	128500	109699

³ Allowable tensile loads shown are straight are for straight pulling of unpressurized assembled pipe sections for a maximum period of one half hour at 68°F/20°C. Consult pipe manufacturer's recommendation for ATL reduction factors at elevated temperatures.

2.2 PERFORMANCE

Style 905 and Style 907 – ISO Standard

Bend Radius: joints made with Style 905 and Style 907 couplings can sustain bend radii as noted below.

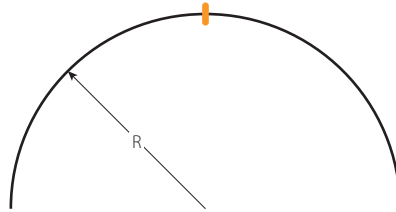


Nominal Size mm	Minimum Recommended Bend Radius SDR					
	7.4	9	11	13.6	16.2	21
	mm inches					
63	1575 62	1575 62	1575 62	1575 62	1701 67	1701 67
75	1875 74	1875 74	1875 74	1875 74	2025 80	2025 80
90	2250 89	2250 89	2250 89	2250 89	2430 96	2430 96
110	2750 108	2750 108	2750 108	2750 108	2970 117	2970 117
125	3125 123	3125 123	3125 123	3125 123	3375 133	3375 133
140	3500 138	3500 138	3500 138	3500 138	3780 149	3780 149
160	4000 157	4000 157	4000 157	4000 157	4320 170	4320 170
180	4500 177	4500 177	4500 177	4500 177	4860 191	4860 191
200	5000 197	5000 197	5000 197	5000 197	5400 213	5400 213
225	5625 221	5625 221	5625 221	5625 221	6075 239	6075 239
250	6250 264	6250 264	6250 264	6250 264	6750 266	6750 266
280	7000 276	7000 276	7000 276	7000 276	7560 298	7560 298
315	7875 310	7875 310	7875 310	7875 310	8505 335	8505 335
355	8875 349	8875 349	8875 349	8875 349	9585 377	9585 377

2.2 PERFORMANCE (CONTINUED)

Style 908 – ISO Standard

Bend Radius: joints made with Style 908 couplings can sustain bend radii as noted below.



Nominal Size mm	Minimum Recommended Bend Radius SDR					
	7.4	9	11	13.6	16.2	21
	mm inches					
250	5000 197	5000 197	6250 246	6250 246	6750 266	6750 266
280	5600 220	5600 220	7000 276	7000 276	7560 298	7560 298
315	6300 248	6300 248	7875 310	7875 310	8505 335	8505 335
355	7100 280	7100 280	8875 349	8875 349	9585 377	9585 377
400	8000 315	8000 315	10000 394	10000 394	10800 425	10800 425
450	9000 354	9000 354	11250 443	11250 443	12150 478	12150 478
500	10000 394	10000 394	12500 492	12500 492	13500 531	13500 531
560	11200 441	11200 441	14000 551	14000 551	15120 595	15120 595
630	12600 496	12600 496	15750 620	15750 620	17010 670	17010 670
710	14200 559	14200 559	17750 699	17750 699	19170 755	19170 755

3.0 NOTIFICATIONS

 **WARNING**



- Read and understand all instructions before attempting to install, remove, adjust, or maintain any Victaulic piping products.
- Depressurize and drain the piping system before attempting to install, remove, adjust, or maintain any Victaulic piping products.
- Wear safety glasses, hardhat, and foot protection.

Failure to follow these instructions could result in death or serious personal injury and property damage.

4.0 REFERENCE MATERIALS

- [I-900: Victaulic HDPE Products Installation and Assembly Manual](#)
- [I-905.Metric: Victaulic Style 905 Installation Instructions](#)
- [I-905.REUSE: Victaulic Style 905 Reuse Instructions](#)
- [I-907.Metric: Victaulic Style 907 Installation Instructions](#)
- [I-908: Victaulic Style 908 Installation Instructions](#)
- [11.07: Victaulic Style 926 Mechanical-T Spigot Outlet](#)
- [19.07: Victaulic Style 905 Coupling for Plain End HDPE Pipe](#)
- [19.09: Victaulic Style 908 Coupling for Double Grooved HDPE Pipe](#)
- [19.10: Victaulic Style 907 Transition Coupling for HDPE-to-Steel](#)
- [24.06: Victaulic Cut Grooving Tools for HDPE Models CG3100, CG3300 and CG3500](#)
- [25.01: Victaulic Original Groove System \(OGS\) Groove Specifications](#)
- [25.16: Victaulic High Density Polyethylene \(HDPE\) Cut Groove Specifications](#)
- [I-ENDCAP: Victaulic End Caps Installation Instructions](#)

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, 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.

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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.

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.

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