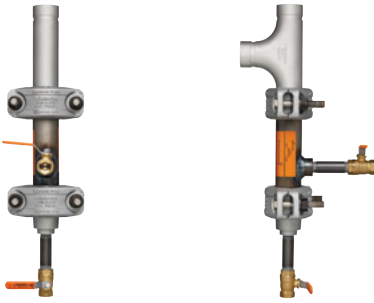


Victaulic Steam and Condensate Riser Drip Legs

Nos. 893C, 893H, 894C and 894H



1.0 PRODUCT DESCRIPTION

Available Sizes

- 2 – 8"/DN50 – DN200

Pipe Material

- Schedules 40 and 80 carbon steel pipe per ASTM A53 Grade B and ASTM A106 Grade B

Maximum Working Pressure¹

- Joints utilizing the No. 893/894 Riser Drip Leg Fitting are suitable for use in saturated steam systems rated up to 150 psi/1034 kPa. Not suitable for use in superheated steam applications.

Operating Temperature Range¹

- -4°F to +365°F/-20°C to +185°C

Function

- Manufactured drip leg with drain capabilities suitable for manual or automatic warm-up
- Uses ¾" NPT ball valve for draining
- Drip leg should be installed at terminal ends of piping, low points and ends of steam lines, bottoms of risers, and ahead of pressure reducing valves, and control valves
- Drip leg should be installed upstream of any adjacent steam stop valves
- For steam mains up to 4", the drip leg should be sized the same size as the main. For steam mains larger than 4", the drip leg should be half of the diameter of the main but never less than 4".

Pipe Preparation

- The No. 893/894 Riser Drip Leg Fitting is exclusively for use on pipe which features the Victaulic OGS-200 groove profile (see section 7.0 for Reference Materials)

¹ For increased pressure or temperature applications, contact Victaulic for details.

2.0 CERTIFICATION/LISTINGS

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 – MATERIAL

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

Seal: Polytetrafluoroethylene (PTFE) composite.

Spring Energizer: Cobalt-chromium-nickel alloy conforming to AMS 5833.

Hex Bolts: ASTM A193, Grade B7, plain finish.

Heavy Hex Nuts: ASTM A194, Grade 2H, plain finish.

Washers: ASTM F436, Type 3, plain finish.

Fitting: Carbon steel, conforming to ASTM A216 Grade WCB.

Housing and Fitting Coating: Zinc coating.

Ball Valve: Forged brass body, per ASTM B16.

Ball: Brass, chrome plated, per ASTM B16.

Stem: Brass, per ASTM B16.

Seat: Tetrafluoroethylene (TFE).

Handle: Carbon steel, zinc plated, with vinyl grip.

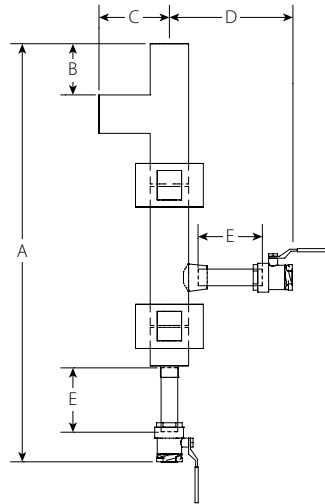
Stem Nut: Carbon steel, zinc plated.

Stem Washer: Tetrafluoroethylene (TFE).

O-Ring: Fluoroelastomer.

4.0 DIMENSIONS

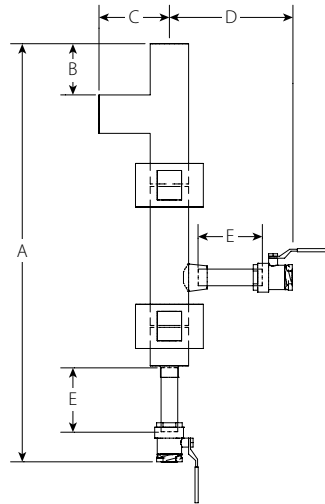
No. 893C Schedule 40 Supervised Warm Up Riser Drip Leg



Size		Dimensions						Weight	
Nominal inches DN	Actual Outside Diameter inches mm	A inches mm	B inches mm	C inches mm	D inches mm	E inches mm	Drip Leg Diameter inches mm	Approx. (Each) Sch. 40 lb kg	
2 DN50	2.375 60.3	26.13 664	3.19 81	4.38 111	7.70 196	4.00 102	2.375 60.3	30.6 13.9	
2½	2.875 73.0	27.38 695	3.69 94	5.13 130	7.95 202	4.00 102	2.875 73.0	39.4 17.9	
3 DN80	3.500 88.9	28.69 729	4.13 105	5.88 149	8.26 210	4.00 102	3.500 88.9	47.8 21.7	
4 DN100	4.500 114.3	31.31 795	5.25 133	7.50 191	8.76 223	4.00 102	4.500 114.3	74.5 33.8	
6 DN150	6.625 168.3	43.62 1108	7.44 189	10.75 273	8.76 223	4.00 102	4.500 114.3	142.9 64.8	
8 DN200	8.625 219.1	50.12 1273	9.94 252	14.25 362	8.67 220	4.00 102	4.500 114.3	236.4 107.2	

4.1 DIMENSIONS

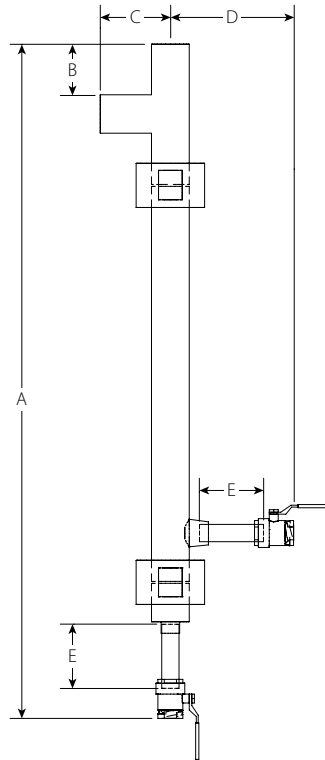
No. 893H Schedule 80 Supervised Warm Up Riser Drip Leg



Size		Dimensions						Weight	
Nominal inches DN	Actual Outside Diameter inches mm	A inches mm	B inches mm	C inches mm	D inches mm	E inches mm	Drip Leg Diameter inches mm	Approx. (Each) Sch. 80 lb kg	
2 DN50	2.375 60.3	26.13 664	3.19 81	4.38 111	7.70 196	4.00 102	2.375 60.3	32.6 14.8	
2½	2.875 73.0	27.38 695	3.69 94	5.13 130	7.95 202	4.00 102	2.875 73.0	41.4 18.8	
3 DN80	3.500 88.9	28.69 729	4.13 105	5.88 149	8.26 210	4.00 102	3.500 88.9	50.4 22.9	
4 DN100	4.500 114.3	31.31 795	5.25 133	7.50 191	8.76 223	4.00 102	4.500 114.3	82.4 37.4	
6 DN150	6.625 168.3	43.62 1108	7.44 189	10.75 273	8.76 223	4.00 102	4.500 114.3	162.9 73.9	
8 DN200	8.625 219.1	50.12 1273	9.94 252	14.25 362	8.67 220	4.00 102	4.500 114.3	276.1 125.2	

4.2 DIMENSIONS

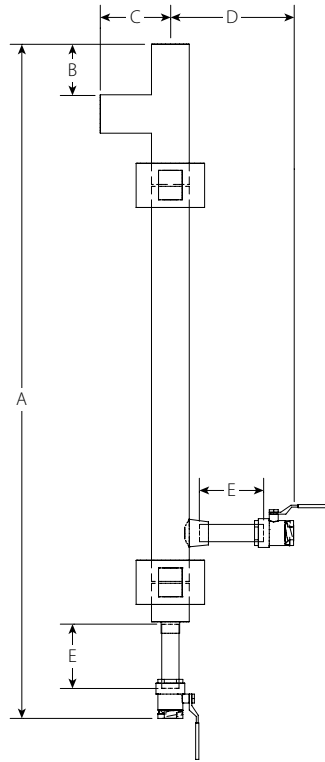
No. 894C Schedule 40 Automatic Warm Up Riser Drip Leg



Size		Dimensions						Weight	
Nominal inches DN	Actual Outside Diameter inches mm	A inches mm	B inches mm	C inches mm	D inches mm	E inches mm	Drip Leg Diameter inches mm	Approx. (Each) Sch. 40 lb kg	
2 DN50	2.375 60.3	42.13 1070	3.19 81	4.38 111	7.70 196	4.00 102	2.375 60.3	37.4 17.0	
2½	2.875 73.0	43.38 1102	3.69 94	5.13 130	7.95 202	4.00 102	2.875 73.0	50.2 22.8	
3 DN80	3.500 88.9	44.69 1135	4.13 105	5.88 149	8.26 210	4.00 102	3.500 88.9	62.9 28.5	
4 DN100	4.500 114.3	47.31 1202	5.25 133	7.50 191	8.76 223	4.00 102	4.500 114.3	80.5 36.5	
6 DN150	6.625 168.3	51.62 1311	7.44 189	10.75 273	8.76 223	4.00 102	4.500 114.3	153.6 69.7	
8 DN 200	8.625 219.1	56.12 1425	9.94 252	14.25 362	8.67 220	4.00 102	4.500 114.3	243.1 110.2	

4.3 DIMENSIONS

No. 894H Schedule 80 Automatic Warm Up Riser Drip Leg



Size		Dimensions					Weight	
Nominal inches DN	Actual Outside Diameter inches mm	A inches mm	B inches mm	C inches mm	D inches mm	E inches mm	Drip Leg Diameter inches mm	Approx. (Each) Sch. 80 lb kg
2 DN50	2.375 60.3	42.13 1070	3.19 81	4.38 111	7.70 196	4.00 102	2.375 60.3	41.9 19.0
2½	2.875 73.0	43.38 1102	3.69 94	5.13 130	7.95 202	4.00 102	2.875 73.0	55.6 25.2
3 DN80	3.500 88.9	44.69 1135	4.13 105	5.88 149	8.26 210	4.00 102	3.500 88.9	70.7 32.1
4 DN100	4.500 114.3	47.31 1202	5.25 133	7.50 191	8.76 223	4.00 102	4.500 114.3	90.8 41.2
6 DN150	6.625 168.3	51.62 1311	7.44 189	10.75 273	8.76 223	4.00 102	4.500 114.3	177.9 80.7
8 DN200	8.625 219.1	56.12 1425	9.94 252	14.25 362	8.67 220	4.00 102	4.500 114.3	285.5 129.5

5.0 COMPONENT PERFORMANCE

Schedule 40 Carbon Steel Pipe

Size		Victaulic Groove Profile	Allowable Pipe End Separation ²	Wall Thickness	Maximum Joint Working Pressure ³	Maximum Permissible End Load
Nominal inches DN	Actual Outside Diameter inches mm					
2 DN50	2.375 60.3	OGS-200	0.14 3.6	0.154 3.91	150 1034	665 2957
2½	2.875 73.0	OGS-200	0.14 3.6	0.203 5.16	150 1034	974 4332
3 DN80	3.500 88.9	OGS-200	0.14 3.6	0.216 5.49	150 1034	1443 6421
4 DN100	4.500 114.3	OGS-200	0.14 3.6	0.237 6.02	150 1034	2386 10617
6 DN150	6.625 168.3	OGS-200	0.14 3.6	0.280 7.11	150 1034	5171 23009
8 DN200	8.625 219.1	OGS-200	0.14 3.6	0.322 8.18	150 1034	8764 38999

Schedule 80 Carbon Steel Pipe

Size		Victaulic Groove Profile	Allowable Pipe End Separation ²	Wall Thickness	Maximum Joint Working Pressure ³	Maximum Permissible End Load
Nominal inches DN	Actual Outside Diameter inches mm					
2 DN50	2.375 60.3	OGS-200	0.14 3.6	0.218 5.54	150 1034	665 2957
2½	2.875 73.0	OGS-200	0.14 3.6	0.276 7.01	150 1034	974 4332
3 DN80	3.500 88.9	OGS-200	0.14 3.6	0.300 7.62	150 1034	1443 6421
4 DN100	4.500 114.3	OGS-200	0.14 3.6	0.337 8.56	150 1034	2386 10617
6 DN150	6.625 168.3	OGS-200	0.14 3.6	0.432 10.97	150 1034	5171 23009
8 DN200	8.625 219.1	OGS-200	0.14 3.6	0.500 12.70	150 1034	8764 38999






² For field installation only. Style 870 rigid couplings, when sufficiently pressurized, will allow pipe ends to separate to maximum point shown before joint acts in a fully restrained manner.

³ If the ball valves are removed and plugged, the maximum joint working pressure for steam and condensate service is 200 psi/1379 kPa.

NOTES

- Torque values can be found within the product's installation instructions and on the crown of the Style 870 housing.
- WARNING: FOR ONE-TIME FIELD TEST ONLY, the Maximum Joint Working Pressure may be increased to 1 ½ times the figures shown.

6.0 NOTIFICATIONS

⚠ WARNING		
	<ul style="list-style-type: none"> • 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. • When the Style 870 Coupling is considered suitable for use in saturated steam service, use extreme caution when working around steam systems. • DO NOT impact the coupling or pipe when the system is pressurized. • The Style 870 Coupling must be installed ONLY on carbon steel or stainless steel pipe that is prepared to Victaulic OGS-200 Specifications. DO NOT install the Style 870 Coupling on pipe that is prepared to any other groove specification. • DO NOT attempt to install the Style 870 Coupling on non-metallic pipe. <p>Failure to follow these instructions may cause joint failure, resulting in death or serious personal injury and property damage.</p>	
		
		

Tools, Materials or Other Processes Required For Proper Installation

- Victaulic R9S roll sets must be used when grooving Schedules 40 and 80 carbon steel pipe, metric carbon steel pipe of equivalent thickness, and thin wall metric carbon steel pipe to Victaulic OGS-200 groove specifications. Victaulic R9S roll sets must be ordered separately. They are identified by the designation "R9S" on the front of the roll set, as well as a red color stripe on both the upper and lower roll.
- Victaulic RXS roll sets must be used when grooving schedule 40 stainless steel pipe to Victaulic OGS-200 groove specifications. Victaulic RXS roll sets must be ordered separately. They are identified by the designation "RXS" on the front of the roll set, as well as a red color stripe on both the upper and lower roll.
- Proper installation requires the use of a torque wrench. Refer to markings on the Style 870 housing or installation instructions for torque requirement.
- A new seal must be installed any time the coupling is disassembled, even if the joint has not been in service.

7.0 REFERENCE MATERIALS

[05.10: Victaulic Chemical Compatibility Guide for the Style 870 High Performance Rigid Coupling Seal Assembly](#)

[24.01: Victaulic Pipe Preparation Tools](#)

[24.11: Victaulic In-Place OGS-200 Roll Grooving Tool Model RG1200](#)

[24.14: Victaulic OGS-200 Roll Grooving Tool Model RG1210](#)

[25.12: Victaulic OGS-200 Roll Groove Specifications](#)

[100.01: Victaulic OGS-200 Grooved End Fittings](#)

[100.02: Victaulic High Performance Rigid Coupling Style 870](#)

[100.12: Victaulic Gate Valve Series 871](#)

[100.13: Victaulic Flexible Loop for Steam Series 159](#)

[I-100: Victaulic Field Installation Handbook](#)

[I-870: Victaulic Installation Instructions Style 870 Rigid Coupling](#)

[I-ENDCAP: Victaulic End Cap Installation Safety Instructions](#)

[TM-RG1200: Victaulic Operating and Maintenance instructions Manual RG1200 Roll Grooving Tool](#)

[TM-RG1210: Victaulic Operating and Maintenance instructions Manual RG1210 Roll Grooving Tool](#)

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.

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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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