

Coupling for Fiberglass Reinforced Plastic Pipe

STYLE 296-A

A revolutionary new technology for joining fiberglass reinforced plastic (FRP/GRP), vinyl ester and epoxy resin pipe. The Style 296-A is designed to create a rigid pipe joint without any special tools while maintaining existing support requirements. There is no torque requirement for tightening the bolts when installing Style 296-A. The coupling housings must be in metal-to-metal contact at the bolt pads for visual verification of joint integrity.

The Style 296-A joins FRP/GRP systems in inclement weather conditions including rain, wind, humidity, cold, heat and in shade or direct sunlight.

The Style 296-A engages into the patent pending Advanced Groove System (AGS) grooved built-up ends on the pipe to provide a secure connection for pressures up to 150 psi / 1035 kPa.

Light, two-piece aluminum housings for 1-12" systems. Testing shows that the light weight and rigid nature of the coupling allows support requirements to be similar to other joining methods for FRP/GRP pipe. Consult the pipe manufacturer for specific support requirements and Style 296-A groove requirements. Visit www.victaulic.com/FRPpipe.



1 - 6" SIZES
PATENT PENDING



8 - 12" SIZES

MATERIAL SPECIFICATIONS

Housing: Aluminum ASTM B-26, grade 356-T6

Housing Coating: Standard Bare

Optional: Customer specified coatings. Contact Victaulic for details.

Gasket/Seal: (specify choice*)

- **FlushSeal Grade "E" EPDM**
EPDM (Green Stripe) Temperature range -30°F to +230°F / -34°C to +110°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°F/+30°C potable water service. **NOT RECOMMENDED FOR PETROLEUM SERVICES.**
- **FlushSeal Grade "S" Nitrile**
Nitrile (Orange color code). Temperature range -20°F to +180°F / -29°C to +82°C. Recommended for petroleum products, hydrocarbons, air with oil vapors, vegetable and mineral oils within the specified temperature range; not recommended for hot dry air over +140°F/+60°C and water over +150°F/+66°C. **NOT RECOMMENDED FOR HOT WATER SERVICES.**
- **FlushSeal Grade "O" Fluoroelastomer (Viton)**
Fluoroelastomer (Blue color code) Temperature range +20°F to +300°F/ -7°C to +149°C, Recommended for many oxidizing acids, petroleum oils, halogenated hydrocarbons, lubricants, hydraulic fluids, organic liquids and air with hydrocarbons to +300°F / +149°C. **NOT RECOMMENDED FOR HOT WATER SERVICES.**

Track Bolts/Nuts: Plated carbon steel (heat treated). Track head conforming to physical properties of ASTM A-183.

Optional: Type 316 stainless steel.

* 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.

JOB/OWNER

System No. _____
Location _____

CONTRACTOR

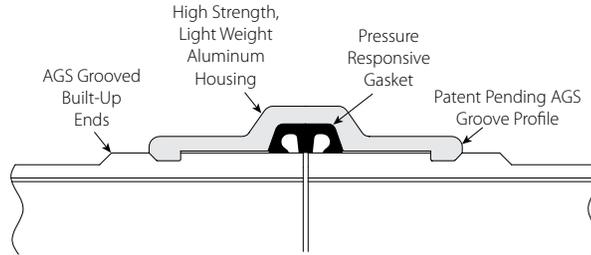
Submitted By _____
Date _____

ENGINEER

Spec Sect _____ Para _____
Approved _____
Date _____

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DIMENSIONS AND PERFORMANCE

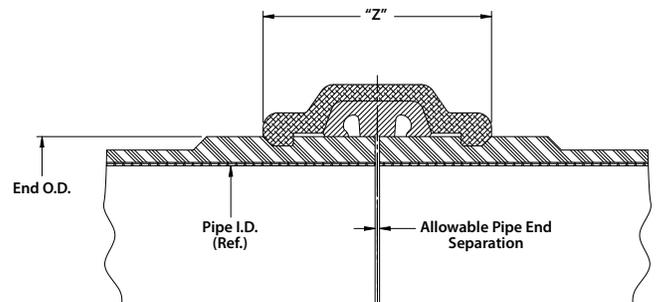
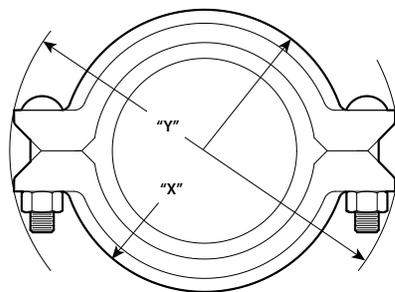
Size		Max. Work Pressure†	Max. End Load§+	Bolts	Housings	Allowable Pipe End Separation	X	Y	Z	Approx. Wgt. Each
Nominal Size (I.D.)	Actual Out. Dia.	PSI	Lbs.	No.	No.	Inches	Inches	Inches	Inches	Lbs.
Inches	mm	kPa	N			mm	mm	mm	mm	kg
1	1.66 42.2	150 1035	325 1446	2	2	0.06 1.52	2.25 57.2	4.51 114.5	2.04 51.8	0.8 0.38
2	2.75 68.7	150 1035	891 3963	2	2	0.06 1.52	3.96 100.6	6.62 168.1	2.13 54.1	1.8 0.82
3	3.94 100.0	150 1035	1829 8135	2	2	0.06 1.52	5.18 131.6	7.75 196.1	2.43 61.7	2.5 1.1
4	4.87 123.7	150 1035	2714 12072	2	2	0.06 1.52	6.18 157.0	8.13 206.5	2.81 71.4	3.5 1.6
6	7.00 177.8	150 1035	5609 24949	2	2	0.06 1.52	8.38 212.9	10.88 276.4	3.87 98.3	6.3 2.9
8	9.17 232.9	150 1035	9649 42919	4	2	0.06 1.52	10.62 269.7	13.25 336.6	4.75 120.7	10.7 4.9
10	11.31 287.2	150 1035	14515 64563	4	2	0.0 X6 1.52	12.73 323.3	15.88 403.4	5.75 146.1	14.4 6.5
12	13.34 338.8	150 1035	20527 91304	4	2	0.06 1.52	14.83 376.7	18.00 457.2	6.50 165.1	20.0 9.1

Important Notes:

§ Total allowable end load from internal pressure and external loads

† The lesser of 150 psi/1035 kPa or the pressure rating of the pipe

+ Maximum end loads listed are for both tensile and compression



Sizes 1 - 12"

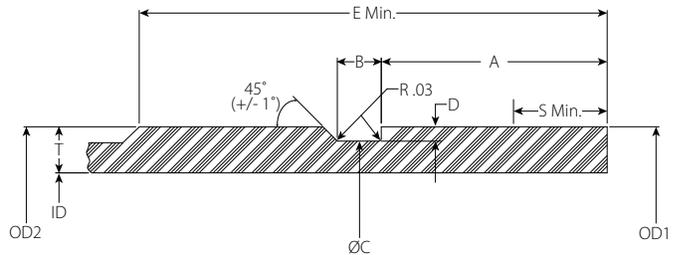
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DIMENSIONS AND PERFORMANCE

GROOVE SPECIFICATIONS/INSPECTION OF PIPE ENDS

Prior to installation, the pipe ends must be inspected to ensure the outside surface, between the groove and the pipe end, is smooth and free from indentations and projections to ensure a leak-tight seal (refer to the “s” minimum dimension). All oil, grease, and dirt must be removed. In addition, the groove and pipe dimensions must be verified to ensure they comply with the specifications listed in the table below. If any measurements do not comply with these specifications, the pipe must not be used.



Groove Specifications for ID-Based Fiberglass Reinforced Plastic Pipe

Nominal Size (ID) inches	Dimensions – inches/millimeters																		
	Pipe End Outside Diameter (OD1)				ØC											D Ref.	E Minimum	S Minimum	T Ref.
	Basic	Maximum	Minimum	OD2 +/- 0.04 / +/- 1.0	Basic	Maximum	Minimum	A		B		Maximum	Minimum						
1	1.660 42.2	1.680 42.7	1.640 41.7	1.66 42	0.620 15.7	0.630 16.0	0.590 15.0	0.280 7.1	0.250 6.4	1.480 37.6	1.440 36.6	0.090 2.3	1.50 38	0.50 13	0.330 8.4				
2	2.750 69.9	2.770 70.4	2.730 69.3	2.75 70	0.620 15.7	0.630 16.0	0.590 15.0	0.280 7.1	0.250 6.4	2.570 65.3	2.530 64.3	0.090 2.3	1.50 38	0.50 13	0.375 9.5				
3	3.940 100.1	3.960 100.6	3.920 99.6	3.94 100	0.780 19.8	0.790 20.1	0.750 19.1	0.280 7.1	0.250 6.4	3.740 95.0	3.700 94.0	0.100 2.5	1.81 46	0.50 13	0.470 11.9				
4	4.865 123.6	4.885 124.1	4.845 123.1	4.86 123	0.970 24.6	0.980 24.9	0.940 23.9	0.280 7.1	0.250 6.4	4.645 118.0	4.605 117.0	0.110 2.8	2.25 57	0.50 13	0.433 11.0				
6	7.000 177.8	7.020 178.3	6.980 177.3	7.00 178	1.370 34.8	1.380 35.1	1.340 34.0	0.400 10.2	0.370 9.4	6.765 171.8	6.725 170.8	0.118 3.0	3.15 80	0.75 19	0.500 12.7				
8	9.170 232.9	9.190 233.4	9.150 232.4	9.17 233	1.780 45.2	1.790 45.5	1.750 44.5	0.400 10.2	0.370 9.4	8.885 225.7	8.845 224.7	0.143 3.6	4.00 102	0.75 19	0.585 14.9				
10	11.310 287.3	11.335 287.9	11.285 286.6	11.31 287	2.190 55.6	2.205 56.0	2.155 54.7	0.530 13.5	0.500 12.7	11.015 279.8	10.975 278.8	0.148 3.8	5.00 127	0.75 19	0.655 16.6				
12	13.340 338.8	13.365 339.5	13.315 338.2	13.34 339	2.560 65.0	2.575 65.4	2.525 64.1	0.530 13.5	0.500 12.7	13.015 330.6	12.975 329.6	0.163 4.1	5.69 145	0.75 19	0.670 17.0				

NOTE: All dimensions are after resin coating is applied to exposed fibers, if applicable.

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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.

INSTALLATION

Refer to publication I-296A for complete installation instructions.

For complete contact information, visit www.victaulic.com

90.01 7486 REV A UPDATED 06/2013

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