

AGS Rigid Coupling



STYLE W89 (FOR STAINLESS STEEL PIPE)

Style W89 AGS (Advanced Groove System) couplings are designed with heavy ductile iron housings for pressures up to 300psi/2065kPa on Schedule 10S and higher stainless steel pipe. The wedge-shaped coupling housing keys fully engage the grooves to provide a rigid joint. To achieve this rigidity, it is necessary to torque the nuts to the values shown in the table on page 3.

Style W89 AGS couplings will greatly reduce linear or angular movement and are useful for valve connections and other points where rigidity is required. The couplings are provided with plated bolts and nuts and FlushSeal® gaskets for a variety of services. Please specify gasket grade when ordering. Please refer to publication 05.01 for gasket service ratings.

Style W89 AGS couplings are suitable for use on stainless steel piping where the corrosion resistant properties of stainless steel are not required for the external environment.



PATENT PENDING



WARNING

WARNING

- Victaulic AGS products use a patent-pending groove profile that requires the use of special AGS rolls. AGS products must not be used on pipe that has been grooved using standard grooving rolls.

Failure to use AGS products on AGS grooved pipe could result in serious personal injury, property damage, joint leakage or joint separation.

When preparing pipe for AGS products, please refer to groove specification section 25.09 for AGS groove dimensions.

*Please refer to Victaulic publication 26.01 for complete pipe support information.

JOB/OWNER

System No. _____

Location _____

CONTRACTOR

Submitted By _____

Date _____

ENGINEER

Spec Sect _____ Para _____

Approved _____

Date _____

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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: Hot dipped galvanized

- **Optional:** Orange enamel and others

Coupling Gasket:

*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 (05.01) for specific gasket service recommendations and for a listing of services which are not recommended.

- **Grade "E" EPDM**

EPDM (Green color code). Temperature range -30°F to +230°F/-34°C to +110°C.

Recommended 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 to ANSI/NSF 61 for cold +86°F/+30°C and hot +180°F/+82°C potable water service. NOT RECOMMENDED FOR PETROLEUM SERVICES.

- **Grade "T" nitrile**

Nitrile (Orange color code). Temperature range -20°F to +180°F/-29°C to +82°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°F/+66°C or for hot dry air over +140°F/+60°C.

- **Grade "L" silicone**

Silicone (Red color code). Temperature range -30°F to +350°F/-34°C to +177°C.

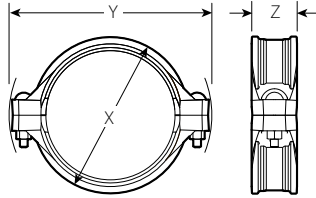
Recommended for dry heat, air without hydrocarbons to +350°F/+177°C and certain chemical services.

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

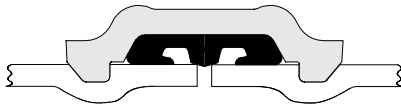
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DIMENSIONS



TYPICAL 14 – 24”/350 – 600MM



Exaggerated for clarity

Size		Allow. Pipe End Sep. #	Bolt/Nut No.-Size @	Nut Torque	Dimensions – Inches/mm			Approx. Wgt. Each
Nominal Size Inches mm	Actual Out. Dia. Inches mm	Inches mm	Inches mm	ft-lbs N•m	X	Y	Z	Lbs. kg
14 350	14.000 355.6	0.25 6.4	2 – 1½ x 5½	375 500	16.50 419	21.38 543	4.81 122	65.0 29.5
16 400	16.000 406.4	0.25 6.4	2 – 1½ x 5½	375 500	18.88 480	23.50 597	4.81 122	80.0 36.4
18 450	18.000 457.0	0.25 6.4	2 – 1½ x 5½	375 500	21.00 533	25.63 651	4.81 122	93.0 42.3
20 500	20.000 508.0	0.25 6.4	2 – 1½ x 5½	375 500	23.75 603	27.63 702	4.81 122	114.0 51.8
24 600	24.000 610.0	0.25 6.4	2 – 1½ x 5½	375 500	30.00 762	32.00 813	4.81 122	182.0 82.6

For field installation only. Style W89 couplings are essentially rigid and do not permit expansion/contraction.

@ Metric thread size bolts are available (color coded gold) for all coupling sizes upon request. Contact Victaulic for details.

TORQUE REQUIREMENTS

Size		Recommended Torque
Nominal Size Inches mm	Actual Outside Dia. Inches mm	ft. lbs. N•m
14, 16 & 18 350, 400, 450	14.000, 16.000, 18.000 355.6, 406.4 & 457.0	375 500
20 & 24 500, 600	20.000, 24.000 508.0, 610.0	375 500

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PERFORMANCE

Size		Schedule 10S		
Nominal Size Inches mm	Actual Out. Dia. Inches mm	Max. Joint Working Pressure * psi kPa	Maximum Permissible End Load Lbs. N	Nominal Wall Thickness Inches mm
14 350	14.000 355.6	300 2065	46200 205590	0.188 4.8
16 400	16.000 406.4	300 2065	60320 268424	0.188 4.8
18 450	18.000 457.0	300 2065	76350 339758	0.188 4.8
20 500	20.000 508.0	300 2065	94250 419413	0.218 5.5
24 600	24.000 610.0	300 2065	135700 603865	0.250 6.4

* Working Pressure and End Load are total, from all internal and external loads, based on stainless steel pipe, roll grooved with Victaulic rolls in accordance with Victaulic specifications. "RWX" rolls must be used for Schedule 10S. Contact Victaulic for performance on other pipe.

WARNING: FOR ONE TIME FIELD TEST ONLY, the Maximum Joint Working Pressure may be increased to 1½ times the figures shown.

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

Reference should always be made to the I-100 Victaulic Field Installation Handbook for the product you are installing. Handbooks are included with each shipment of Victaulic products for complete installation and assembly data, and are available in PDF format on our website at www.victaulic.com.



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For complete contact information, visit www.victaulic.com

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