Victaulic®
An ISO 9001 certified company

Style 78A Snap-Joint® Aluminum Coupling

PRODUCT DESCRIPTION

2" (50 mm) Size

Style 78A Snap-Joint coupling provides a quick disconnect joint. Mated housings are hinged with an attached locking handle for assembly.

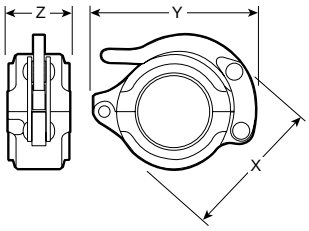
Providing a flexible connection, Style 78A is cast of an aluminum alloy prepared for strength and durability with minimum weight, and is available in 2" (50 mm) and 10" (250 mm) sizes only.

The 2" (50 mm) size is supplied with a cast handle (steel link-type handle available on request). The 10" (250 mm) size is supplied with a cast handle only.

When aluminum alloys 6061-T4 or 6063-T4 are used, Schedule 80 must be cut grooved, Schedule 40 may be cut or roll grooved, Schedule 30 (8, 10, and 12"/200, 250, and 300 mm) may be cut or roll grooved. Aluminum pipe ratings are based on: alloy 6061-T4/6063-T4 – Schedule 80 cut grooved, Schedule 40 roll or cut grooved, Schedule 30 – 8, 10 & 12" roll or cut grooved, Schedule 5, 10 & 20 roll grooved ONLY; or alloy 6061-T6/6063-T6 – Schedule 40/80 cut groove ONLY, Schedule 30 – 8, 10 & 12" cut groove ONLY, Schedule 5, 10 & 20 grooving is NOT RECOMMENDED.

Often pipe in the T6 tempered state will crack when roll grooved, depending upon the pipe's mechanical properties, which vary from pipe to pipe. Victaulic has no control over these varying properties and cannot assure that the T6 tempered grades can be successfully roll grooved. However, many aluminum pipe manufacturers, (extruders) roll groove these alloys at the point of manufacture. The roll grooving is done successfully prior to the final T6 tempering of the pipe.

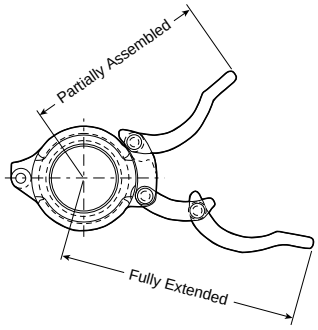
DIMENSIONS



21.02-1A

Pipe Inches/mm		Max. Work. Press.* PSI kPa	Max. End Load Lbs.* N	Allow. Pipe End Sep. † In./mm	Deflect. Fr. C_L †		Dimensions Inches/millimeters			Aprx. Weight Each Lbs. kg
Nom. Size	Actual Size				Per. Cplg. Deg.	Pipe In./Ft. mm/m	X	Y	Z	
2 50	2.375 60.3	300 2065	6330 28170	0 - 0.06 0 - 1.6	1° - 31´	0.32 26	4.00 102	4.88 124	1.84 47	1.2 0.5
10 250	10.750 273.0	50 345	4535 20180	0 - 0.13 0 - 3.2	0° - 40´	0.12 9	13.06 332	15.60 396	2.50 64	9.9 4.5

*Many aluminum pipe manufacturers (extruders) roll groove alloys 6061-T6 and 6063-T6 at the point of manufacture. Roll grooving is done successfully prior to the final T6 tempering of the pipe. Often pipe in the T6 tempered state cracks when roll grooved, depending upon the pipe's mechanical properties, which vary from pipe to pipe. Victaulic has no control over these varying properties and cannot assure that the T6 tempered grades can be successfully roll grooved.
Pressure Ratings and End Loads for cut grooved pipe are based upon tests on pipe prepared in accordance with Victaulic specifications.
Pressure Ratings and End Loads for roll grooved pipe are based upon tests on pipe prepared in accordance with Victaulic specifications using Victaulic Vic-Easy® Roll Grooving Tools. Use of other equipment may adversely affect joint performance.
Aluminum pipe ratings are based on: alloy 6061-T4/6063-T4 – Schedule 80 cut grooved, Schedule 40 roll or cut grooved, Schedule 30 – 8, 10 & 12" roll or cut grooved, Schedule 5, 10 & 20 roll grooved ONLY; or alloy 6061-T6/6063-T6 – Schedule 40/80 cut groove ONLY, Schedule 30 – 8, 10 & 12" cut groove ONLY, Schedule 5, 10 & 20 grooving is NOT RECOMMENDED.
† Allowable Pipe End Separation and Deflection figures show the maximum nominal range of movement available at each joint for standard roll grooved pipe. Figures for standard cut grooved pipe may be doubled. These figures are maximums; for design and installation purposes these figures should be reduced by: 50% for 2" (50 mm); 25% for 10" (250 mm).



21.02-2A

Nominal Size	Partially Assembled	Fully Extended
2 50	3.22 82	4.06 103
10 250	21.00 533	23.00 584

PERFORMANCE

⚠ WARNING

SAFETY CAUTION CONCRETE PUMPING SERVICE

When used in concrete pumping, Style 78A couplings must be used within the design parameters listed. It is important to note that Maximum Joint Working Pressure must include shockload. Style 78A couplings and pipe used in concrete pumping must always be in functional condition and be free of concrete and foreign material in the pipe grooves and the keys and gasket cavity of the couplings. It should never be necessary to close coupling by hammering. If this is necessary, the coupling and grooved pipe ends should be reinspected for damage or dirty components which stop normal closure.

COUPLINGS ARE NOT DESIGNED FOR ECCENTRIC LOADINGS

Style 78A couplings are not recommended for use at the end of concrete pumping booms, or on vertical risers above 30 feet. Sound anchoring and lashing practices should always be employed.

MATERIAL SPECIFICATIONS

Housing: Aluminum ASTM B-26, alloy 356-T6.

Housing Coating: None

Standard Gaskets: (Specify choice*)

❑ **Grade "E" EPDM**
EPDM (Green color code). 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) 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).

Optional Gaskets: (specify choice*)

❑ **Grade "O" fluoroelastomer**
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).

❑ **Grade "V" neoprene**
Neoprene (Yellow color code). Temperature range +30°F to +180°F (–1°C to +82°C). Recommended for hot lubricating oils and certain chemicals. Good oxidation resistance. Will not support combustion.

❑ **Grade "L" silicone**
Silicone (Red gasket). Temperature range –30°F to +350°F (–34°C to +177°C) air (without hydrocarbons) and certain chemical services. NOT RECOMMENDED FOR HOT WATER.

❑ **Grade "A" white nitrile**
White nitrile (White gasket). Temperature range +20°F to +180°F (–7°C to +82°C). No carbon black content. May be used for food services. Meets FDA requirements and conforms to CFR Title 21, Part 177.2600.

❑ **Grade "M-2" epichlorohydrin**
Epichlorohydrin (White color code). Temperature range -40°F to +160°F (–40°C to +71°C). Specially compounded to provide superior service for common aromatic fuels at low temperatures. Also suitable for certain ambient temperature water services.

*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.

Locking Handle:

❑ **2" (50 mm) Size** – Electroplated, ductile iron conforming to ASTM A-536.

❑ **10" (250 mm) Size** – Painted ductile iron conforming to ASTM A-536.

Toggle Links: Electroplated, hot-rolled carbon steel conforming to AISI-1010 or 1020.

Eye Bolt Assembly: 10" (250 mm) Electroplated, heat treated carbon steel conforming to AISI C-1040.

Hinge Pin: Cold drawn, case hardened steel conforming to AISI C-1212.

Rivets: Cold drawn steel conforming to AISI C-1010.