### STYLE 78

Style 78 Snap-Joint couplings are designed for quick disconnect service. Mated housings are hinged with an attached locking handle for assembly. Housings through 4"/100 mm size have a smooth outer surface. Larger sizes have cross-ribbed design for added strength.

Sizes  $1 - \frac{1}{2}$ "/25 - 40 mm are supplied with steel link handles. Sizes  $2 - \frac{4}{50} - 100$  mm are supplied with a cast handle (steel linktype handle available on request). Sizes  $5 - \frac{8}{125} - 200$  mm are supplied with a cast handle only.

Performance data presented in this document is based on use with standard wall, carbon steel pipe. For use with stainless steel pipe, please reference document 17.09 for pressure ratings and end loads. When used on light wall stainless steel pipe, the Victaulic RX roll set must be used to roll groove the pipe. For further information regarding roll grooving stainless steel, refer to document 17.01.



#### MATERIAL SPECIFICATIONS

**Housing:** Ductile iron conforming to ASTM A-395, grade 65-45-15, and ASTM A-536, grade 65-45-12.

Housing Coating: Orange enamelOptional: Hot dipped galvanized.

# Gasket (specify choice\*):

• 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 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  $-20^{\circ}F$  to  $+180^{\circ}F/-29^{\circ}C$  to  $+82^{\circ}C$ . Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range. Not recommended for hot water services over  $+150^{\circ}F/+66^{\circ}C$  or for hot dry air over  $+140^{\circ}F/+60^{\circ}C$ .

\* 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.

### Handle:

#### Locking Handle:

- Sizes 1 1½"/25 40 mm
  Electroplated, heat treated carbon steel, conforming to ASTMA A-109.
- Sizes 2 4"/50 100 mm Electroplated, malleable iron conforming to ASTM A-47.
- Sizes 5 8"/125 200 mm
   Painted malleable iron conforming to ASTMA A-47.

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

Eye Bolt Assembly: E5 - 8"/125 - 200 mm Electroplated, heat treated carbon steel conforming to ASI C-1040.

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

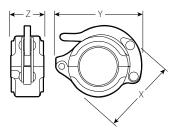
Rivets: Cold drawn steel conforming to AISI C-1010.

JOB/OWNER	CONTRACTOR	ENGINEER
System No	Submitted By	Spec Sect Para
Location	Date	Approved
		Date



#### STYLE 78

## **DIMENSION**



Si	ze	Max. Work Pressure*	Max. End Load*	Allow. Pipe End Sep. †	Deflec C∟		Dimensions – Inches/mm		Approx. Wgt. Each	
Nominal Size Inches mm	Actual Out. Dia. Inches mm	PSI kPa	Lbs. N	Inches mm	Per Cplg. Deg.	Pipe In./Ft. mm/m	X	Y	z	Lbs. kg
1	1.315	300	410	0 - 0.06	2° – 43	0.57	2.75	3.25	1.75	0.8
25	33.7	2065	1825	0 -1.6		48	70	83	44	0.4
1 ¼	1.660	300	650	0 - 0.06	2° – 10	0.45	3.13	3.75	1.88	1.1
32	42.2	2065	2890	0 -1.6		38	79	95	48	0.5
1 ½	1.900	300	850	0 - 0.06	1° – 56	0.40	3.50	4.50	1.88	1.7
40	48.3	2065	3780	0 -1.6		33	89	114	48	0.8
2	2.375	300	1,330	0 - 0.06	1° – 31	0.32	4.00	4.75	1.88	1.7
50	60.3	2065	5920	0 -1.6		26	102	121	48	0.8
2½	2.875	300	1,950	0 - 0.06	1° – 15	0.26	4.75	5.88	1.88	2.5
65	73.0	2065	8680	0 -1.6		22	121	149	48	1.1
3	3.500	300	2,885	0 - 0.06	1° – 2	0.22	5.38	6.25	1.88	2.8
80	88.9	2065	12840	0 -1.6		18	137	159	48	1.3
4	4.500	300	4,770	0 - 0.13	1° – 36	0.34	6.88	7.75	2.13	5.5
100	114.3	2065	21225	0 -3.2		28	175	197	54	2.5
5	5.563	300	7,290	0 - 0.13	1° – 18	0.27	8.75	9.50	2.13	9.8
125	141.3	2065	32440	0 -3.2		23	222	241	54	4.4
6	6.625	300	10,350	0 - 0.13	1° – 5	0.23	9.88	10.63	2.13	10.7
150	168.3	2065	46060	0 -3.2		18	251	270	54	4.9
8 §	8.625	300	17,500	0 - 0.13	0° – 50	0.18	12.25	13.00	2.38	15.3
200	219.1	2065	77875	0 -3.2		14	311	330	60	6.9

Refer to Victaulic Pocket Handbook I-100 for special safety precautions when used for concrete pumping.

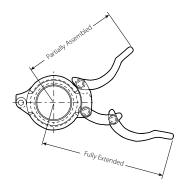
\* Working Pressure and End Load are total, from all internal and external loads, based on standard weight (ANSI steel pipe, standard roll or cut grooved in accordance with Victaulic specifications. Contact Victaulic for performance on other pipe. Maximum working pressure rating based on larger pipe size. Maximum End Load rating based on smaller pipe size. WARNING: FOR ONE TIME FIELD TEST ONLY, the Maximum Joint Working Pressure may be increased to 1½ times the figures shown.

† 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  $\frac{3}{4}$  -  $\frac{3}{4}$ /20 - 90 mm; 25% for 4"/100 mm and larger.

WARNING: Piping systems must always be depressurized and drained before attempting disassembly and removal of any Victaulic piping products.

STYLE 78

## **DESIGN CONSIDERATIONS**



## Couplings are not designed for eccentric loadings.

Style 78 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.

Size			Size		
Nominal Size Inches mm	Partially Assembled	Fully Extended	Nominal Size Inches mm	Partially Assembled	Fully Extended
1	3.38	4.50	3	7.88	10.25
25	85.6	114.3	80	200.1	260.4
1 ¼	3.80	4.88	4	10.63	12.88
32	96.5	123.9	100	270.0	327.2
1 ½	5.50	7.63	5	13.66	16.88
40	140.0	193.8	125	347.0	428.7
2	6.25	7.75	6	14.88	18.38
50	158.8	196.9	150	377.9	466.8
2½	7.16	10.72	8	15.38	18.91
65	181.9	272.3	200	390.6	480.3.



# **WARNING**

## SAFETY CAUTION CONCRETE PUMPING SERVICE

• When used in concrete pumping, Style 78 couplings must be used within the design parameters listed. It is important to note that Maximum Joint Working Pressure must include shockload. Style 78 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 reinspecte for damage or dirty components which stop normal closure.

Failure to do so could result in personal injury, property damage, improper installation, joint leakage or joint failure.

STYLE 78

INST	ΓΔΙ Ι	ΔΤΙ	OΝ

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.

#### 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.

