

# Victaulic FireLock™ Innovative Groove System | IGS™ for 1"/DN25 Sprinkler Pipe



No. 142  
Welded Outlet



Style 922  
Outlet-T



Style 920N  
Mechanical-T Outlet



No. 101  
Installation-Ready™  
90° Elbow



Style 108  
Installation-Ready™  
Rigid Coupling



No. 102  
Installation-Ready™  
Tee



Style 115  
OGS x IGS™  
Reducing Coupling



No. 148 Sprinkler  
Reducer, NPT or  
BSPT sprinkler outlet



No. 65  
Grooved End  
of Run Fitting



No. 144  
OGS x IGS™ Grooved  
Concentric Reducer



No. 145 Female NPT  
or BSPT Threaded x  
Groove 90° Elbow



No. 143  
Close Nipple



No. 140  
Male NPT or BSPT  
Threaded x Groove  
Adapter



No. 141  
Female NPT or BSPT  
Threaded x Groove  
Adapter



No. 146 Cap



RG2100 Roll  
Grooving Tool



VicFlex™ Series  
AH2-CC Braided  
Flexible Hose  
with Captured  
Coupling (Refer to  
[publication 10,85](#))



VicFlex™ Series  
AH1-CC Braided  
Flexible Hose  
with Captured  
Coupling (Refer to  
[publication 10,95](#))

## 1.0 PRODUCT DESCRIPTION

### Pipe Material

- Carbon steel, Schedule 10, Schedule 40. For use with alternative materials please contact Victaulic.

### Maximum Working Pressure

- Up to 365 psi/2517 kPa/25 bar

### Pipe Preparation

- Cut (Sch. 40) or roll (Sch. 10 or Sch. 40) grooved in accordance with [publication 25.14](#): Victaulic /IGS Groove Specifications.

### RG2100 Grooving Capability

- 1"/DN25
- Workstation designed to cut, ream and form a roll groove on carbon steel, Sch. 10 or Sch. 40 pipe.
- This tool has a minimum pipe length requirement of 4 ½"/114 mm.

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	

## 2.0 CERTIFICATION/LISTINGS



### NOTES

- Approvals listed above do not apply to the RG2100 Roll Grooving Tool.

## 3.0 SPECIFICATIONS – MATERIAL

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

### Housing Coating:

- ☐ Orange enamel
- ☐ Red enamel (Europe)
- ☐ Optional: Hot dipped galvanized

### Gasket:

#### ☐ Grade “E” EPDM (Type A) Vic-Plus™ Pre-lubricated Gasket

EPDM (Violet Color Code). Applicable for wet and dry (oil-free air) fire protection systems only. Listed/Approved for continuous use in wet and dry systems. Listed/Approved for dry systems at -40°F/-40°C and above. NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES OR STEAM SERVICES.

### NOTES:

- Reference should always be made to [publication I-100](#), Victaulic Field Installation Handbook for gasket lubrication instructions.
- Services listed are General Service Guidelines only. It should be noted that there are services for which these gaskets are not compatible. Reference should always be made to [publication 05.01](#), Victaulic Gasket Selection Guide for specific gasket service guidelines and for a listing of services which are not compatible.

### Bolts/Nuts:

- ☐ Carbon steel oval neck track bolts meeting the mechanical property requirements of ASTM A449 (imperial) and ISO 898-1 Class 9.8 (M10-M16) Class 8.8 (M20 and greater). Carbon steel hex nuts meeting the mechanical property requirements of ASTM A563 Grade B (imperial - heavy hex nuts) and ASTM A563M Class 9 (metric - hex nuts). Track bolts and hex nuts are zinc electroplated per ASTM B633 Fe/Zn 5, finish Type III (imperial) or Type II (metric).

**Coupling Linkage:** High Strength Steel with comparable physical properties to that of the Track Bolt (ASTM A449). Linkage is zinc electroplated per ASTM B633 Fe/Zn 5, Type III Finish

**No. 140, 141, 142, 143, 144, 148:** Carbon steel meeting the chemical and mechanical property requirements of ASTM A53 Grade A

**No. 65, 145, 146:** Ductile iron conforming to ASTM A536, Grade 65-45-12

### RG2100 Roll Grooving Tool:

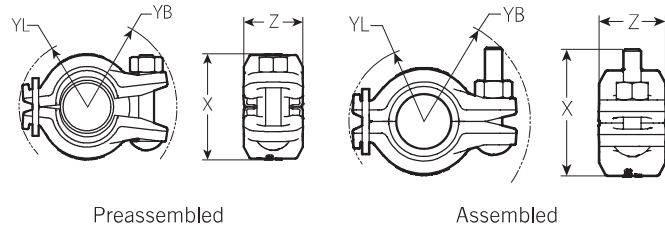
**Required Power Supply:** Power Drive with Foot Switch (½ HP, Universal reversible motor, single-phase, 25-60 HZ)

### Accessories/Components:

- ☐ Tool head assembly
- ☐ Carriage assembly - accepts RG2100 tool head assembly, Standard Cutter, Standard Reamer and Standard Lever

4.4 DIMENSIONS

Style 108 *Installation-Ready Rigid Coupling*



Size		Pipe End Separation <sup>1</sup>	Bolt/Nut		Dimensions								Weight
Nominal inches DN	Actual Outside Diameter inches mm	Allowable inches mm	Qty.	Size inches mm	Pre-Assembled				Assembled				Approx (Each) lb kg
					YL inches mm	YB inches mm	X inches mm	Z inches mm	YL inches mm	YB inches mm	X inches mm	Z inches mm	
1 DN25	1.315 33.7	0.14 3.6	1	<sup>3</sup> / <sub>8</sub> x 2 M10 x 50	1.66 42.2	2.17 55.2	2.58 65.5	1.43 36.3	1.61 41.0	2.29 58.2	2.27 57.5	1.43 36.3	1.5 0.7

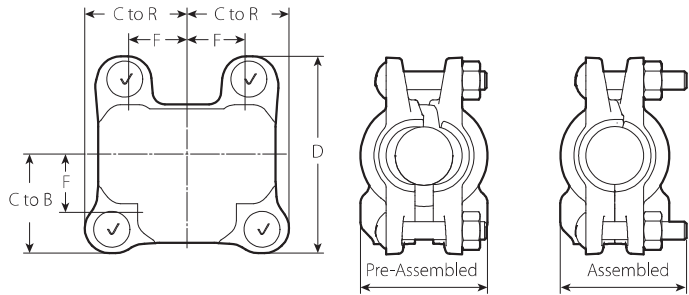
<sup>1</sup> The allowable pipe end separation dimension shown is for system layout purposes only. FireLock™ Style 108 rigid couplings are considered rigid connections and will not accommodate expansion or contraction of the piping system.

NOTE

- Not for use with grooved sprinklers, for grooved sprinkler connections please refer to [publication 10.65](#) for the Style V9 sprinkler coupling.

4.5 DIMENSIONS

No. 102 *Installation-Ready Tee*



Size		Bolt/Nut		Dimensions					Weight
Nominal inches DN	Actual Outside Diameter inches mm	Qty.	Size inches mm	F Take Out inches mm	C to B inches mm	D inches mm	Pre-Assembled inches mm	Assembled inches mm	Approximate (Each) lb kg
1 DN25	1.315 33.7	4	<sup>3</sup> / <sub>8</sub> x 2 M10 x 50	1.25 32	2.13 54	4.13 105	2.75 70	2.75 70	3.0 1.4

NOTE

- Not for use with grooved sprinklers, for grooved sprinkler connections please refer to [publication 10.65](#) for the Style V9 sprinkler coupling.

## 5.0 PERFORMANCE (CONTINUED)

### Maximum Working Pressure

Style/No.	cULus psi kPa bar	FM psi kPa bar	LPCB psi kPa bar	VdS psi kPa bar
142 <sup>4</sup>	365 2517 25	365 2517 25	365 2517 25	232 1600 16
922 <sup>4</sup>	300 2100 21	300 2100 21	365 2517 25	232 1600 16
920N <sup>4</sup>	365 2517 25	300 2100 21	365 2517 25	232 1600 16
101 <sup>5</sup>	365 2517 25	365 2517 25	365 2517 25	232 1600 16
108 <sup>5</sup>	365 2517 25	365 2517 25	365 2517 25	232 1600 16
102 <sup>5</sup>	365 2517 25	365 2517 25	365 2517 25	232 1600 16
115 <sup>4</sup>	365 2517 25	365 2517 25	365 2517 25	232 1600 16
148	365 2517 25	365 2517 25	365 2517 25	232 1600 16
65	365 2517 25	365 2517 25	365 2517 25	232 1600 16
144	365 2517 25	365 2517 25	365 2517 25	232 1600 16
145	365 2517 25	365 2517 25	365 2517 25	232 1600 16
143	365 2517 25	365 2517 25	365 2517 25	232 1600 16
140	365 2517 25	365 2517 25	365 2517 25	232 1600 16
141	365 2517 25	365 2517 25	365 2517 25	232 1600 16
146	365 2517 25	365 2517 25	365 2517 25	232 1600 16

<sup>4</sup> Maximum pressure rating is 300 psi/21 bar when installed on lightwall steel pipe, as follows:

Mega-Flow and Mega-Flow-GF steel pipe manufactured by Wheatland Tube Co.  
Mega-Thread steel pipe manufactured by Wheatland Tube Co.  
MLT steel pipe manufactured by Wheatland Tube Co.  
WLS steel pipe manufactured by Wheatland Tube Co.  
Eddy Flow steel pipe manufactured by Bull Moose Tube Co.  
Eddythread steel pipe manufactured by Bull Moose Tube Co.  
EZ-Thread steel pipe manufactured by Youngstown Tube Co.  
Fire-Flo steel pipe manufactured by Youngstown Tube Co.  
Easy-Flow pipe manufactured by Borusan Mannesmann

<sup>5</sup> Maximum pressure rating is 300 psi / 21 bar when installed on lightwall steel pipe, as follows:

Mega-Thread steel pipe manufactured by Wheatland Tube Co.  
MLT steel pipe manufactured by Wheatland Tube Co.  
WLS steel pipe manufactured by Wheatland Tube Co.  
Eddythread steel pipe manufactured by Bull Moose Tube Co.  
EZ-Thread steel pipe manufactured by Youngstown Tube Co.