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10.54



						
No. 142 Welded Outlet	Style 922 Outlet-T	Style 920N Mechanical-T Outlet	No. 101 Installation-Ready™ 90° Elbow	No. 102 Installation-Ready™ Tee	Style 108 Installation-Ready™ Rigid Coupling	Style 115 OGS x IGS Reducing Coupling
						
Style 118 1" Outlet Coupling	No. 65 OGS x IGS Grooved End of Run Fitting	No. 111 IGS Grooved End Elbow	No. 113 OGS x IGS x IGS Reduce on the Run and Outlet Tee	No. 114 IGS x IGS x IGS Grooved Tee	No. 117 IGS 45° Elbow	No. 143 Close Nipple
						
No. 144 OGS x IGS Grooved Concentric Reducer	No. 145 Female NPT or BSPT Threaded x Groove 90° Elbow	No. 147 Back-To-Back sprinkler tee	No. 148 Sprinkler Reducer, NPT or BSPT sprinkler outlet	No. 140 Male NPT or BSPT Threaded x Groove Adapter	No. 141 Female NPT or BSPT Threaded x Groove Adapter	No. 116 CPVC Female Socket x Brass IGS Groove Adapter (Refer to <a href="#">publication 10.85</a> and <a href="#">10.95</a> )
						
No. 146 Cap	WB-1 IGS Weld Plunger Cone	NAP-1 IGS Weld Plunger Cone	RG2100 Roll Grooving Tool	RG1 Manual Roll Grooving Tool (Refer to <a href="#">publication 24.01</a> )	VicFlex™ Series AH2-CC Braided Flexible Hose with Captured Coupling (Refer to <a href="#">publication 10.85</a> )	VicFlex™ Series AH1-CC Braided Flexible Hose with Captured Coupling (Refer to <a href="#">publication 10.95</a> )

ALWAYS REFER TO ANY NOTIFICATIONS AT THE END OF THIS DOCUMENT REGARDING PRODUCT INSTALLATION, MAINTENANCE OR SUPPORT.



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## 1.0 PRODUCT DESCRIPTION

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### Pipe Material

- Carbon steel, Sch. 40, Sch. 10, light-wall/specialty pipe. For use with alternative materials please contact Victaulic.
- For exceptions reference section 6.0 Notifications

### Maximum Working Pressure

- Up to 365 psi/2517 kPa/25 bar

### Pipe Preparation

- Cut (Sch. 40) or roll (Sch. 40, Sch. 10, light-wall) 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 40, Sch 10, and light-wall pipe
- This tool has a minimum pipe length requirement of 4 ½"/114 mm

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## 2.0 CERTIFICATION/LISTINGS

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LPS 1219: Issue 3.1

Cert/LPCB Ref. 104-1a/39, 104-1a/41, 104-1a/42, 104-1b/03, 104-1b/04, 104-1b/05, 104-1b/06, 104-1b/07, 104-1b/08, 104-1b/09, 104-1b/10, 104-1b/11

### NOTES

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

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## 3.0 SPECIFICATIONS – MATERIAL

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

### Housing Coating: (specify choice)

- Orange coating.
- Red coating (standard for EMEA-I and Asia Pacific).
- 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:

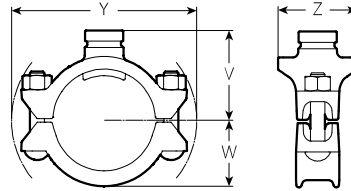
- Reference should always be made to [publication I-100](#), Victaulic Field Installation Handbook for gasket lubrication instructions.
- Services listed are General Service Guidelines only. It should be noted that there are services for which these gaskets are not compatible. Reference should always 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).

## 4.2 DIMENSIONS

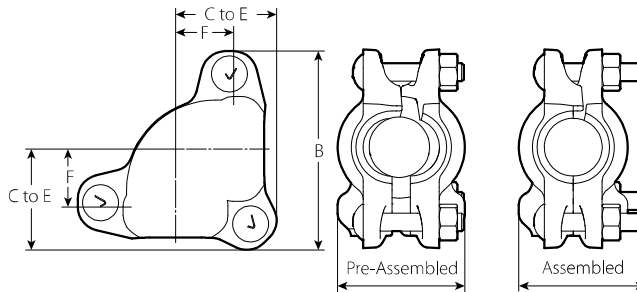
### Style 920N Mechanical-T Outlet



Size		Bolt/Nut		Dimensions						Weight	
Nominal inches DN	Actual Outside Diameter inches mm	Qty.	Size inches mm	Minimum Hole Diameter/Hole Saw Size inches mm	Maximum Hole Diameter/ Hole Saw Size inches mm	Y inches mm	V inches mm	W inches mm	Z inches mm	Approximate (Each) lb kg	
3 DN80	3.500 88.9	1	2 3/4	1 1/2 38.1	1 5/8 41.0	6.42 163.0	3.12 79.2	2.28 57.9	2.75 69.9	2.7	1.2
4 DN100	4.500 114.3			1.315 33.7	1 1/2 38.1	1 5/8 41.0	186.6 7.35	3.62 91.9	2.69 68.3	2.75 69.10	3.0

## 4.3 DIMENSIONS

### No. 101 Installation-Ready 90° Elbow



Size		Bolt/Nut		Dimensions					Weight	
Nominal inches DN	Actual Outside Diameter inches mm	Qty.	Size inches mm	F Take Out inches mm	C to E inches mm	B inches mm	Pre-Assembled inches mm	Assembled inches mm	Approximate (Each) lb kg	
1 DN25	1.315 33.7	3	3/8 x 2 M10 x 50	1.25 32	2.13 54	4.25 108	2.75 70	2.75 70	2.2	1.0

#### NOTES

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

## 5.0 PERFORMANCE

### Friction Flow Data

Style/No	Size	Equivalent Length of 1" Sch. 40 Pipe (C=120)		
	Nominal inches DN	feet meters	Branch feet meters	Run feet meters
922		See <a href="#">publication 10.52</a>	–	–
920N		See <a href="#">publication 11.02</a>	–	–
101	1 DN25	2.0 0.61	–	–
102	1 DN25	–	5.0 1.52	2.7 0.82
115	1 ¼ x 1 DN32 x DN25	5.7 1.74	–	–
	1 ½ x 1 DN40 x DN25	5.0 1.52	–	–
118	1 x 1 x 1 DN25 x DN25 x DN25	–	4.2 1.3	1.1 0.3
111	1 DN25	5.0 1.52	–	–
113	1 ¼ x 1 x 1 DN32 x DN25 x DN25	–	5.8 1.8	4.6 1.4
	1 ½ x 1 x 1 DN40 x DN25 x DN25	–	5.3 1.6	4.9 1.5
114	1 DN25	–	6.2 1.9	3.3 1.0
117	1 DN25	3.5 1.1	–	–
144	1 ¼ x 1 x 1 DN32 x DN25 x DN25	3.9 1.19	–	–
	1 ½ x 1 x 1 DN40 x DN25 x DN25	4.3 1.31	–	–
148		See Note	–	–

- In accordance with NFPA 13, friction loss shall be excluded for fittings directly connected to a sprinkler. For hydraulic calculations, Victaulic recommends using the installed length (E-E or cut length) of the No. 148 Sprinkler Reducer as the equivalent length of 1"/DN25 Sch. 40 pipe.

Victaulic No. 148		
Length	½" DN15 outlet	¾" DN20 outlet
E to E inches mm	Equivalent Length of 1" Sched. 40 Pipe (C=120) feet meters	
≤6	6.6	3.8
152	2.0	1.2
6 – 12	5.5	3.8
152 – 305	1.7	1.2
12 – 18	6.2	4.3
305 – 457	1.9	1.3
18 – 24	6.7	4.7
457 – 610	2.0	1.4
24 – 30	7.1	5.2
610 – 762	2.2	1.6
30 – 36	7.4	5.4
762 – 914	2.3	1.6

**NOTE**

- When installed in pipe to pipe connections or it is required by the authority having jurisdiction, the equivalent length data in the table (left) may apply.