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

IGS™


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
publication 10.85
and 10.95)


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
publication 24.01)


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)

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

1.0 PRODUCT DESCRIPTION

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

2.0 CERTIFICATION/LISTINGS

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.

3.0 SPECIFICATIONS – MATERIAL

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).

3.0 SPECIFICATIONS – MATERIAL (CONTINUED)

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, Type E or S

No. 65, 111, 113, 114, 117, 145, 146, 147: Ductile iron conforming to ASTM A536, Grade 65-45-12

No. WB-1: Steel Alloy

No. NAP-1: Aluminum Alloy

RG2100 Roll Grooving Tool:

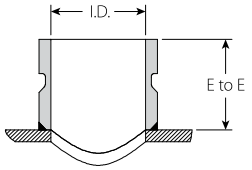
Required Power Supply: Power Drive with Foot Switch (½ HP, Universal reversible motor, single-phase, 25-60 HZ)

Accessories/Components:

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

4.0 DIMENSIONS

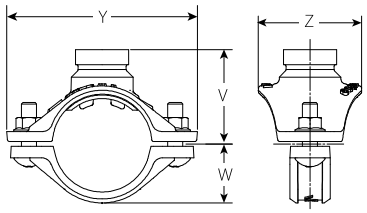
No. 142 Welded Outlet



Nominal			Actual Outside Diameter			Inside Diameter		Weight
inches DN Run x Branch			inches mm Run x Branch			**I.D.** inches mm	**E to E** inches mm	**Approximate (Each)** lb kg
1 ¼ – 1 ½ DN32 – DN40			1.660 – 1.900 42.4 – 48.3			1.049 26.6	1.00 25.4	0.2 0.1
1½ – 2 DN40 – DN50			1.900 – 2.375 48.3 – 60.3			1.049 26.6	1.00 25.4	0.2 0.1
2 – 2½ DN50 – DN65	x	1 DN25	2.375 – 3.000 60.3 – 76.1	x	1.315 33.7	1.049 26.6	1.00 25.4	0.2 0.1
2½ – 3 DN65 – DN80			2.875 – 3.500 73.0 – 88.9			1.049 26.6	1.00 25.4	0.2 0.1
3 – 4 DN80 – DN100			3.500 – 4.500 88.9 – 114.3			1.049 26.6	1.00 25.4	0.2 0.1

4.1 DIMENSIONS

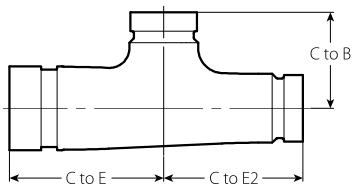
Style 922 Outlet-T



Size					Bolt/Nut		Dimensions						Weight
Nominal inches DN Run x Branch			**Actual Outside Diameter** inches mm Run x Branch		**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
1 ¼ DN32			1.660 42.4		2	⅜ x 1 ⅜	1 3⁄16 30.0	1 ¼ 32.0	4.13 105.0	1.98 50.3	1.10 27.9	2.70 68.6	1.1 0.5
1 ½ DN40			1.900 48.3		2	⅜ x 1 ⅜	1 3⁄16 30.0	1 ¼ 32.0	4.25 108.0	2.11 53.6	1.22 31.0	2.70 68.7	1.2 0.5
2 DN50	x	1 DN25	2.375 60.3	x	2	⅜ x 1 ⅜	1 3⁄16 30.0	1 ¼ 32.0	4.75 120.6	2.34 59.4	1.46 37.1	2.56 65.1	1.2 0.5
2 ½			2.875 73.0		2	⅜ x 1 ⅜	1 3⁄16 30.0	1 ¼ 32.0	5.50 139.7	2.67 67.8	1.71 43.4	2.56 65.1	1.6 0.7
DN65			3.000 76.1		2	⅜ x 1 ⅜	1 3⁄16 30.0	1 ¼ 32.0	5.52 140.3	2.75 69.8	1.71 43.4	2.56 65.1	1.7 0.8

4.10 DIMENSIONS

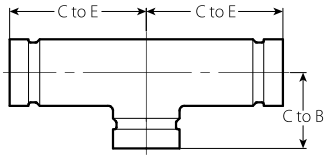
No. 113 OGS x *IGS* x *IGS* Reduce on the Run and Outlet Tee



Size					Dimensions			Weight
Nominal inches DN					C to E inches mm	C to E2 inches mm	C to B inches mm	Approx. (Each) Lbs. kg
1 ¼ DN32	x	1 DN25	x	1 DN25	3.05 77	2.75 70	1.90 48	1.3 0.6
1 ½ DN40	x	1 DN25	x	1 DN25	3.05 77	2.75 70	2.03 52	1.3 0.6

4.11 DIMENSIONS

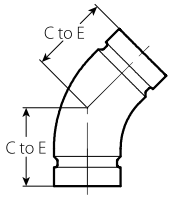
No. 114 *IGS* x *IGS* x *IGS* Grooved Tee



Size		Dimensions		Weight
Nominal inches DN	Actual Outside Diameter inches mm	C to E inches mm	C to B inches mm	Approx. (Each) lb kg
1 DN25	1.315 33.7	2.70 69	1.50 38	0.92 0.4

4.12 DIMENSIONS

No. 117 *IGS* 45° Elbow



Size		Dimensions	Weight
Nominal inches DN	Actual Outside Diameter inches mm	C to E inches mm	Approx. (Each) lb kg
1 DN25	1.315 33.7	1.55 39	0.45 0.2

