

### Pipe Restrainers series 1200

1200C Restrainers for PVC Pipe and PVC Pressure Fittings w/Ductile Iron Pipe OD



### **INFORMATION**

PVC Restrainers for restraining AWWA C900 PVC pipe and AWWA C907 PVC fitting bell joints. These restraints work in any type of soil for a guaranteed joint restraint pressure rating of 150 PSI.

PVC restrainers can be installed on new or existing systems, totally eliminating the use of thrust blocks. These restrainers have internal serrations that lock onto the pipe and give 360° contact and support the pipe wall.

# Can be Installed on New or Existing Systems

#### **FEATURES & ADVANTAGES**

- 360° contact, no pipe distortion or point loading
- Made of Ductile Iron ASTM Grade 536, Grade 65-45-12
- Restrainers work with PVC Pressure Fittings per ANSI/AWWA C907.
- All restrainers are machined to exact tolerances.
- Rated at 150 PSI with a 2:1 safety factor
- Supports wall of pipe with 360 degree contact
- Can be installed outside the trench, to ease installation
- T-Bolts/Rods/Hex Nuts: low alloy steel per ANSI/AWWA C111/A21.11
- Clamping Bolts: SAE J429 Grade5
- Standard gland color is Graphite Black (RAL 9011).



### SAMPLE SPECIFICATIONS

PVC restraint devices shall be manufactured of high strength ductile iron in accordance to ASTM A536 Grade 65-45-12 for all sizes. Internal serrations will be machined to provide exact tolerances to provide 360° contact and support of the pipe wall. PVC Restraint devices shall have a safety factor of 2:1 over the pressure rating.

JRCAIT4.01

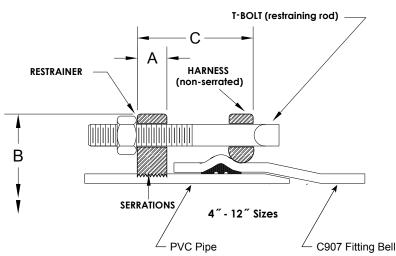
® REGISTERED TRADEMARK OF STAR PIPE PRODUCTS



## Pipe Restrainers series 1200

1200C Restrainers for PVC Pipe and PVC Pressure Fittings w/Ductile Iron Pipe OD

#### **TECHNICAL INFORMATION**



(TABLE B) CLAMPING BOLTS RECOMMENDED TORQUE								
PIPE SIZE	RANGE OF TORQUE							
(IN)	(FT-LBS)							
4-12	90-110							

PIPE RESTRAINERS 1200 SPECIFICATIONS*										
NOM. SIZE <sup>1</sup>	PVC PIPE WITH DUCTILE IRON PIPE O.D. STYLE 1200C	A	B APPROX.	C MAX.	RESTRAINT BOLTS/ RODS		CLAMPING BOLTS		APPROX WT.	
	O.D.				QTY	SIZE	QTY	SIZE	(LBS)	
4	4.80	1.12	9.12	6.00	2	3/4 x 9	4	5/8 x 3-1/2	13.8	
6	6.90	1.15	11.12	6.00	2	3/4 x 9	4	5/8 x 3-1/2	17.0	
8	9.05	1.47	14.75	8.00	2	3/4 x 12	4	3/4 x 4	30.0	
10	11.10	1.38	16.82	8.00	4	3/4 x 12	4	7/8 x 5	46.4	
12	13.20	1.42	19.46	8.00	4	3/4 x 12	4	7/8 x 5	50.0	

<sup>\*</sup>All dimensions in inches except where indicated.

### **INSTALLATION INSTRUCTIONS (SERIES 1200 4"- 12")**



STEP 1

Insert the pipe into the Push-On fitting according to standard procedure. Assemble serrated restrainer on pipe using the provided restraining rods (or T-Bolts if applicable) as a guide to position the restraint. Tighten restrainer clamp bolts to recommended torque (see Table B).



STEP 2

Assemble harness behind the bell of fitting (or pipe) and restrainer on spigot end of pipe using restraining T-Head bolt/rod as an alignment guide. Evenly tighten harness clamp bolts and nuts to recommended torque (see Table B).



STEP 3

Insert the restraining rods (or T-bolts) through the restrainers as shown. Snug tighten the remaining nuts so that the spigot end is secured into the

Caution: Do not over-tighten the restrainer nuts. Turn nut to hand tight plus half turn.

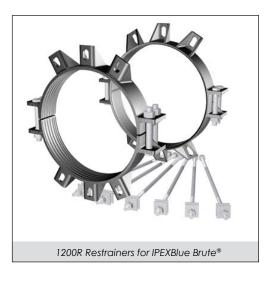
IRCAT14 01



® REGISTERED TRADEMARK OF STAR PIPE PRODUCTS

### Pipe Restrainers series 1200R

1200R Restrainer only for 14"-24" IPEX / Blue Brute® PVC Pressure Fittings



### **INFORMATION**

1200R Restrainers are for restraining IPEX Blue Brute® PVC Pressure Fittings to C905 PVC Pressure Pipe. These restraints work in any type of soil for a guaranteed joint restraint pressure rating of 235 PSI.

PVC restrainers can be installed on new or existing systems, totally eliminating the use of thrust blocks. These restrainers have internal serrations that lock onto the pipe and give 360° contact and support the pipe wall.

# Can be Installed on New or Existing Systems

#### **FEATURES & ADVANTAGES**

- 360° contact, no pipe distortion or point loading
- Made of Ductile Iron ASTM A 536, Grade 65-45-12
- Restrainers work with IPEX Blue Brute® PVC Pressure Fittings and C905 PVC Pressure Pipe.
- All restrainers are machined to exact tolerances.
- Rated at the full rated pressure of IPEX PVC Pipe fitting or the C905 pipe being installed, whichever is less with a 2:1 Safety Factor
- Supports wall of pipe with 360 degree contact
- Can be installed outside the trench, to ease installation
- Rods/Hex Nuts: Low Alloy Steel Per ANSI/AWWA C111/A21.11
- Clamping Bolts: SAE J429 Grade5
- Standard gland color is Graphite Black (RAL 9011).



### SAMPLE SPECIFICATIONS

PVC restraint devices shall be manufactured of high strength ductile iron in accordance to ASTM A536 Grade 65-45-12 for all sizes. Internal serrations will be machined to provide exact tolerances to provide 360° contact and support of the pipe wall. PVC Restraint devices shall possess a pressure rating equal that of the fitting on which it is used with a 2:1 safety factor.



<sup>\*</sup> Blue Brute® is a trademark of IPEX Branding, Inc.