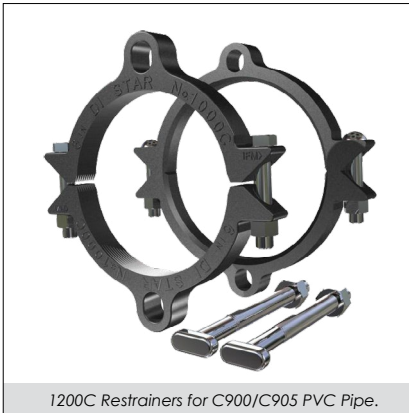




Pipe Restrainers series 1200

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



1200C Restrainers for C900/C905 PVC Pipe.

SUBMITTAL INFORMATION

PROJECT NAME:

ENGINEER:

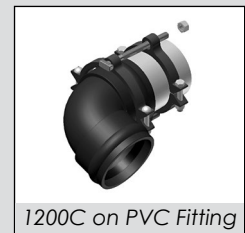
CONTRACTOR:

SPEC. SECTION:



FEATURES & ADVANTAGES

- 360° contact, no pipe distortion or point loading
- Restrainers work with either
 - PC235 psi molded AWWA C907 PVC pressure fittings or
 - PR235 psi fabricated PVC pressure fittings.
- All restrainers are manufactured 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
- Clamping Bolts: SAE J429 Grade5



1200C on PVC Fitting

MATERIAL SPECIFICATIONS:

- Restrainer Castings: Ductile Iron per ASTM A536, Grade 65-45-12

PIPE RESTRAINER:

SERIES 1200C

(Bell Restrainers for AWWA C900 PVC Pipe to PVC Pressure Fitting)

RESTRAINER CASTINGS FINISH OPTIONS (Please check one):

Standard: alkyd enamel coating

Optional: Starbond™ TGIC polyester powder coating applied by an electrostatic spray process

Optional: Other (specify) _____

COUNTRY OF ORIGIN:

Import only

HARDWARE OPTIONS (Please check one):

STANDARD:

- Clamp Bolt: SAE J429 Grade 5
- Clamp Nut: SAE J995 Grade 2 or ASTM A563 Grade "A" or "B"
- Restraint Bolt/Rod/Nut: High strength low alloy steel per ANSI/AWWA C111/A21.11
- Washer: carbon steel per ASTM F844

OPTIONAL SS ALLOY 304:

- Clamp Bolt: SS alloy 304 per ASTM A193 Grade B8, Class 2
- Clamp Nut: SS alloy 304 per ASTM A194 Grade 8, S1
- Restraint Bolt/Rod: SS alloy 304 per ASTM F593 CW
- Restraint Nut: SS alloy 304 per ASTM F594 CW
- Washer: SS alloy 304

OPTIONAL SS ALLOY 316:

- Clamp Bolt: SS alloy 316 per ASTM A193 Grade B8M, Class 2
- Clamp Nut: SS alloy 316 per ASTM A194 Grade 8M, S1
- Restraint Bolt/Rod/Nut: SS alloy 316 per ASTM F593 CW
- Restraint Nut: SS alloy 316 per ASTM A194 Grade 8M
- Washer: SS alloy 316

OPTIONAL STAR BLUE:

- Clamp Bolt: Fluoropolymer Star Blue coated SAE J429 Grade 5
- Clamp Nut: Fluoropolymer Star Blue coated SAE J995 Grade 2 or ASTM A563 Grade "A" or "B"
- Restraint Bolt/Rod/Nut: Fluoropolymer Star Blue coated high strength low alloy steel per ANSI/AWWA C111/A21.11
- Washer: Fluoropolymer Star Blue coated carbon steel per ASTM F844

STAR® PIPE PRODUCTS

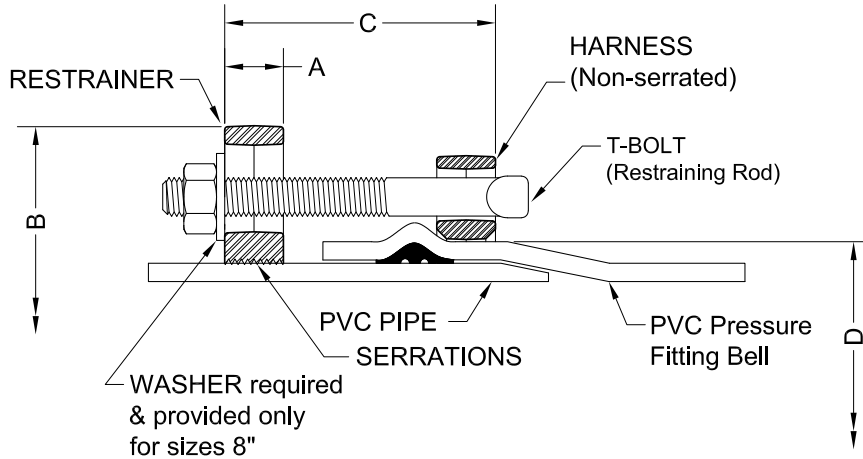


Pipe Restrainers series 1200

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

TECHNICAL INFORMATION

TABLE B) CLAMPING BOLTS RECOMMENDED TORQUE	
PIPE SIZE (IN)	RANGE OF TORQUE (FT-LBS)
4-8	90-110



4" - 8" Sizes

PIPE RESTRAINERS 1200 SPECIFICATIONS*											
NOM. SIZE ¹	PVC PIPE WITH DUCTILE IRON PIPE O.D. STYLE 1200C O.D.	PVC FITTING BELL OD "D"		A	B APPROX.	C MAX.	RESTRAINT BOLTS/ RODS		CLAMPING BOLTS		APPROX WT. (LBS)
		MIN	MAX				QTY	SIZE	QTY	SIZE	
4	4.80	5.44	5.61	1.12	9.29	6.00	2	3/4 x 9	4	5/8 x 3-1/2	13.8
6	6.90	7.84	8.03	1.15	11.13	6.00	2	3/4 x 9	4	5/8 x 3-1/2	17.0
8	9.05	10.29	10.55	1.47	14.76	8.00	2	3/4 x 12	4	3/4 x 4	30.0

Please check sizes:

*All dimensions in inches except where indicated.

NOM. SIZE (IN.)	Pressure Rating (PSI) For PVC Pipe To PVC Pressure Fitting Connections								
	AWWA C900 (CIOD)								
	DR14	DR17	DR18	DR21	DR25	DR27.5	DR32.5	DR41	DR51
4	200	-	150	-	100	-	-	-	-
6	200	-	150	-	100	-	-	-	-
8	200	-	150	-	100	-	-	-	-

STAR® PIPE PRODUCTS