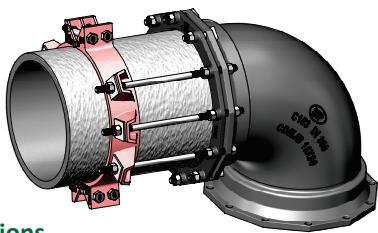


4" - 16" DI PIPE TO DI FITTING JOINT RESTRAINT

Submittal Information

Project Name / Location:	
Engineer:	
Referenced Specs:	
Distributor / Contractor:	



Optional Specifications

Coating:	EnviroShield, Direct To Metal (DTM) Alkyd Enamel (Red)
	EZ-Shield® Polyester Based Powder Coating (Red)
	Other - Specify:
Rods, Bolts: & Nuts	Standard High Strength Low Alloy Steel (HSLA) In Accordance With ANSI/AWWA C111/A21.11
	Fluoropolymer Corrosion Resistant Coating
	Stainless Steel: Type 304 Type 316
	Other - Specify:

General Specifications

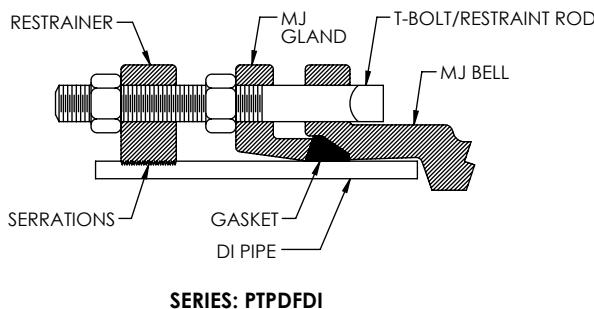
Material : Harness bodies are Ductile Iron per ASTM A536, Grade 65-45-12

Pressure : The grip of the 360° circumferential serrations increases as the hydrostatic pressure increases.

Dimensions : Restraint compatible with Ductile iron pipe manufactured in accordance with ANSI/AWWA C151/A21.51.

Installations : Install in accordance with SIP installation procedures and intent of AWWA C600 / M41
Pipe ends must be free from defects to allow proper gland engagement to the pipe ends
#an be used on 4"-12" push-on fittings provided all connecting bolts/rods are used. Pressure rating is reduced if not all connecting bolts/rods are used.
Note: There are no additional tools required for installation other than the tools required to install standard sizes of hex nuts from 5/8"-1 1/4". The hex head bolts and rods shall be designed to tighten clockwise. The hex head bolts and rods are manufactured to allow for disassembly and re-installation of the restraint.

Deflection : Restraint allows the full joint deflection dictated by pipe manufacturer's recommendation, and maintains the seal while under pressure, and while subjected to ground movements



T-BOLT TORQUE (AS PER AWWA C600)		
PIPE SIZE (IN)	BOLT SIZE (IN)	RANGE OF TORQUE (FT/LBS)
4-16	3/4	75-90

RECOMMENDED TORQUE (CLAMPING BOLTS)	
PIPE SIZE (IN)	RANGE OF TORQUE (FT/LBS)
4-8	110-120
10-12	110-120
14-16	200-210

Technical Specifications

Select Size	Size	O.D.	Series Number	Restraint Bolts/Rods		Clamping Bolts		Max Pressure Rating (PSI)	Approx. Weight (Lbs)
				Qty	Size	Qty	Size		
	4	4.80	PTPDFDI04	2	3/8 X 7	2	3/8 X 3 1/2	250	8
	6	6.90	PTPDFDI06	2	3/8 X 7	2	3/8 X 3 1/2	250	10
	8	9.05	PTPDFDI08	2	3/8 X 9	2	3/8 X 4	250	20
	10	11.10	PTPDFDI10	4	3/8 X 9	2	7/8 X 5	200	25
	12	13.20	PTPDFDI12	4	3/8 X 9	2	7/8 X 5	200	28
	14	15.30	PTPDFDI14	6	3/8 X 17	4	7/8 X 7	150	65
	16	17.40	PTPDFDI16	6	3/8 X 17	4	7/8 X 7	100	72

Supporting documentation for the above 'General Specifications' and 'Optional Specifications' are available upon request to review, in addition to Installation Instructions and any requested material samples

Please contact SIP for technical assistance of nonstandard applications

Please refer to our web page www.sipindustries.com for up to date product data and technical advisories

V 0524-01