



TR FLEX®

Restrained Joint Ductile Iron Pipe and Fittings - International

Flexibility is key in infrastructure and the U.S. Pipe TR FLEX® is designed to provide that needed flexibility. The TR FLEX is a restrained push-on joint for DN 100 through DN 1200 pipe and fittings. Providing a maximum of 5° of deflection the TR FLEX is suited for a variety of applications including open trench projects and Horizontal Directional Drilling (HDD). The design provides an easily assembled and disassembled joint.

The TR FLEX Restrained Joint has a working pressure rating is 40 bar for

DN 100 through DN 300 diameter pipe, 30 bar for DN 400 through DN 600, and 20 bar for DN 700 through DN 1200 diameters. Higher working pressures are available using higher K Class pipe.

TR FLEX Pipe and Fittings utilize the conventional TYTON® Gasket for DN 100 through DN 900 sizes. Ductile Iron locking segments, inserted through an opening (or openings) in the bell face, provide a positive axial lock between the bell interior surface and a retainer weldment on

the spigot end of the pipe.

Various coatings and linings are available for the TR FLEX, including Protecto-401, and more. The standard cement-mortar lining complies with ISO 4179, "Ductile Iron pipe and fittings for pressure and non-pressure pipelines".

FEATURES & BENEFITS

- Restrained Joint Pipe with Easy Assembly / Disassembly
- Flexible Restraint
- DN 100 - DN 300 is rated up to 40 Bar, DN 350 - DN 600 is rated up to 30 bar, and DN 700 - DN 1200 rated up to 20 Bar for K9 wall thickness in accordance with ISO 10804
- Large selection of joints and fittings available
- Zinc Metallic Coating

- PIPE
- FABRICATION
- RESTRAINED JOINTS
- FITTINGS
- GASKETS

COATINGS & LININGS <

GENERAL SPECIFICATIONS - K9

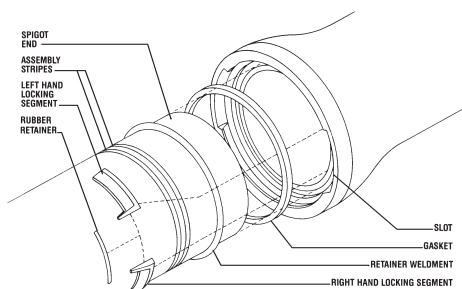
DIAMETER	BAR		DEGREE	MM
	WORKING PRESSURE (PFA)*	NO. OF D.I. LOCKING SEGMENTS	MAX. DEFLECTION ANGLE	PULLOUT
				FL
DN 100	40 Bar	2	5°	10
DN 150	40 Bar	2	5°	12
DN 200	40 Bar	2	5°	12
DN 250	40 Bar	2	5°	16
DN 300	40 Bar	4	5°	16
DN 350	30 Bar	4	3.25	16
DN 400	30 Bar	4	3.25°	16
DN 450	30 Bar	4	3°	16
DN 500	30 Bar	4	2.75°	16
DN 600	30 Bar	8	2.25°	16
DN 700	20 Bar	8	2.25°	16
DN 800	20 Bar	8	1.75°	16
DN 900	20 Bar	8	1.5°	20
DN 1000	20 Bar	11	0.5°	20
DN 1200	20 Bar	11	0.5°	20

* Higher pressure ratings than K9 available upon request

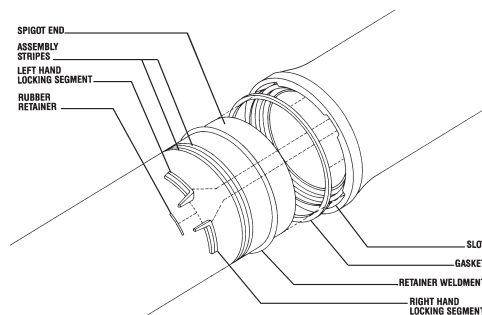
STANDARDS

- ISO 2531 Ductile iron pipes, fittings, accessories and their joints for water or gas applications
- ISO 4179 Ductile iron pipes and fittings for pressure and non-pressure pipelines - Cement mortar lining
- ISO 4633 Rubber seals - Joint rings for water supply, drainage and sewerage pipelines - Specification for material
- ISO 8179-1 Ductile iron pipes - External zinc-based coating - Part 1: Metallic zinc with finishing layer
- ISO 8179-2 Ductile iron pipes - External zinc-based coating - Part 2: Zinc rich paint with finishing layer
- ISO 8180 Ductile iron pipes - Polyethylene sleeving for site application
- ISO 10803 Design Method for Ductile Iron Pipes
- ISO 10804 Restrained Joint Systems for Ductile Iron Pipelines - Design roles and type testing
- BS EN 545 Ductile Iron Pipes, Fittings, Accessories and their Joints for Water Pipelines - Requirements and Test Methods
- ANSI/AWWA C150/A21.50-02 American National Standard for Thickness Design of Ductile-Iron Pipe
- ANSI/AWWA C151/A21.51-02 American National Standard for Ductile Iron Pipe, Centrifugally Cast for Water.
- ANSI/AWWA C153/A21.53-06 American National Standard for Ductile-Iron Compact Fittings for Water Service
- ANSI/AWWA C104/A21.4-03 American National Standard for Cement-Mortar Lining for Ductile-Iron Pipe and Fittings for Water.
- ANSI/AWWA C105/A21.5-05 American National Standard for Polyethylene Encasement for Ductile-Iron Pipe Systems.
- ANSI/AWWA C110/A21.10-03 American National Standard for Ductile-Iron and Gray-Iron Fittings for Water
- ANSI/AWWA C111/A21.11-07 American National Standard for Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.

ASSEMBLY



DN 100 through DN 500



DN 600 through DN 900

© 2017 U.S. Pipe. All rights reserved. USP-SS-TR FLEX Rev. 1117

U.S. Pipe has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice.

www.construtec.com

For the European market and Spanish speaking countries take contact with :



CONSTRUTEC

Headquarter
Alameda Recalde nº27 - 2º Of. 2
48009 Bilbao, Spain

Tel. (+34) 946 612 640
info@construtec.com
www.construtec.com



A Forterra Company