

TOTAL PIPING SOLUTIONS, INC. *ULTRA-Sleeve®* Wide Range Bell Joint Repair Patent Pending

Technical Specifications

REV L 041521

ULTRA-Sleeve® Wide Range Bell Joint Repair Specifications Patent Pending

 1. <u>Pressure Rating:</u>
 ULTRA-SLEEVE® Bell Joint Repair Sleeves by Total Piping Solutions, Inc. when

 properly installed are capable of working pressures as shown on the chart below,

 for water and sewer applications.

Nominal Size	Range	Working Pressure	
		IPS Diameters	DI, PIT CAST, AC Diameters
4"	4.45-5.61	200	200
6"	6.55-7.65	200	200
8"	8.54-9.84	200	200
10"	10.64-11.46	175	200
10" OS	11.34-12.16	175	200
12″	12.62-13.56	175	200
12" OS	13.42-14.45	175	200
16"	17.32-17.45	-	150
16" OS	17.72-17.85	-	150
24"	25.72-25.85	-	150
24" OS	26.24-26.40	-	150

ULTRA-Sleeve[®] Bell joint Repair Sleeves are tested up to 300 psi for (1.5 Safety Factor)

Note: Pressure rating shall not exceed the pressure rating of the pipe on which the sleeve is installed. For any particular installation, the allowable working pressure will be determined by the size of pipe, type of pipe, condition of the pipe, service conditions, environmental conditions, and installation workmanship. Consult the factory for specific information regarding application and working pressure.

- 2. <u>Temperature Rating:</u> Maximum Continuous Working Temperature Range is 75° F for Standard NSF-61 compliant NBR Gasket
- 3. Sealing Gaskets:4" 12": ANSI/NSF 61 Approved NBR Rubber16"-24" : ANSI/NSF 61 Approved EPDM Rubber

ULTRA-Sleeve® Wide Range Bell Joint Repair Specifications Patent Pending

5. <u>Applications:</u> The Ultra-Sleeve[®] is ideal for the repair of a split bell or leaking joint. This sleeve eliminates the need to shut down the water main. The sleeve is relatively light weight and has east to install gaskets.

One sleeve covers CIP/DIP/ PVC Bells, most couplings and asbestos cement pipe collars/couplings.

Can be used as a coupling to joint pipe ends of same pipe OD's in buried applications.

The Ultra-Sleeve[®] is designed to work on a wide range of pipe materials including ductile iron, steel, pit cast, cast iron, asbestos cement, PVC, and HDPE.

Note: For HDPE Applications product must be used for Below Ground Installations only.

ULTRA-Sleeve[®] Bell Joint Repair Table of Pipeline Diameters

Nominal	Range		
Size	Overall	Lower	Upper
4"	4.45-5.61	4.45-5.10	5.12-5.61
6"	6.55-7.65	6.55-7.15	7.15-7.65
8"	8.54-9.84	8.54-9.22	9.25-9.84
10"	10.64-11.46	10.64-11.15	11.18-11.46
10" OS	11.34-12.16	11.34-11.71	11.71-12.16
12"	12.62-13.56	12.62-13.26	13.15-13.56
12" OS	13.42-14.45	13.42-13.92	14.00-14.45
16"	17.32-17.45	-	17.32-17.45
16" OS	17.72-17.85	-	17.72-17.85
24"	25.72-25.85	-	25.72-25.85
24" OS	26.24-26.40	-	26.24-26.40

ULTRA-Sleeve® Wide Range Bell Joint Repair Specifications

Patent Pending

Applicable Standards:

ANSI/AWWA C110: Ductile-Iron and Gray Iron Fittings
 ANSI/AWWA C111: Rubber Gasket Joints for Ductile-Iron Pressure Pipe and Fittings
 NSF/ANSI STANDARD 61 - Drinking Water System Components
 ASTM D2000 - 12 Standard Classification System for Rubber Products.
 ASTM A-36 Standard Specification for Carbon Structural Steel (For Fabricated Units)
 ASTM A-536 Standard Specification for Ductile Iron Castings (For Cast Units)
 NSF/ANSI STANDARD 61 - Drinking Water System Components
 ANSI/ASME B1.20.1 – Pipe threads, General Purpose, Inch





Sleeve Reuse:

Sleeves shall not be re-used until refurbished with new bolts and new gaskets at TPS.

APPLICATION NOTE:

ULTRA-Sleeves may be provided to meet custom application needs.

Contact TPS for custom application needs.

INDIVIDUAL PRODUCT LABELING WILL SPECIFIY PRODUCT CAPABILITY.

ULTRA-Sleeve® Wide Range Bell Joint Repair Specifications

Patent Pending



Materials of Construction

Body/Shell:	ASTM A-536 Gr 65-45-12 ASTM A-36	
Coating:	MIN 10 mil thick NSF-61 Approved Fusion Bonded Epoxy Coating	
Sealing Gaskets:	Nitrile Butadiene Rubber (NBR) Approved ANSI/NSF-61 (4"-12" Sizes) EPDM rubber Approved ANSI/NSF – 61 (16"-24" Sizes)	
Bolts:	Oval Neck track head per ANSI/ASME B18.10 5/8-11 UNC Rolled Thread 18-8 Type 304 Stainless Steel per ASTM A-193 Grade B8 Finish: Fluoroelastomer coating.	
Nuts:	Heavy Hex Nut 5/8-11 UNC Rolled Thread Type 316 High Temp Stainless Steel per ASTM A-194 Grade 8 Finish: Fluoroelastomer coating to prevent galling.	
Washers:	Heavy Duty 5/8 Inch Washer Material 18-8 Type 304 Stainless Steel Fluoroelastomer coating to prevent galling	

Application Note:

For bolt torque requirement, temperature rating, and pressure rating, always refer to product label and installation instructions.