

GE Oil & Gas

Dresser* Pipeline Solutions

Repair products for water, wastewater
and industrial piping systems



imagination at work

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NOTE: Never install any GE products before reading the installation instructions and warnings.

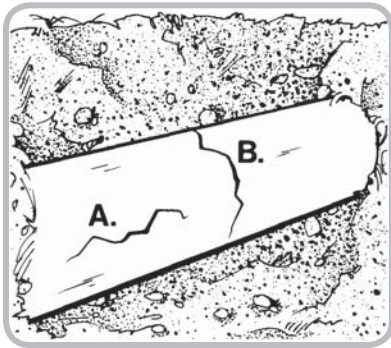


Dresser Pipeline Solutions from GE Oil & Gas include more than a dozen types of products, that consistently meet your water, wastewater, and industrial piping system needs. We provide a one-stop shop of integrated repair products to help you solve problems wherever they occur along your pipeline distribution system.

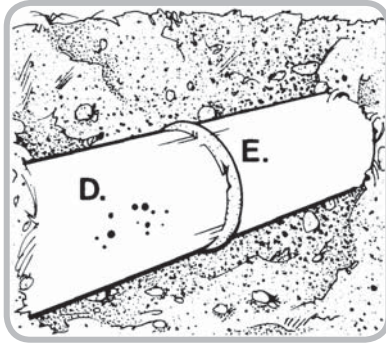
The many repair applications for these durable, dependable products include pinhole leaks, splits, corrosion cracks, broken welds, joint leaks and line breaks. Our products are designed for simple installation and quick, economical, permanent repairs that help you avoid service interruptions.

Precision engineering and manufacturing, along with innovative technologies and painstaking quality control, assure that you receive a proven Dresser piping repair solution. And GE backs it all up with a global force of sales and service specialists who are attuned to your needs and fully versed in the design and performance qualities and installations of every product.

Dresser Repair Products for Cast Iron and Ductile Iron Pipe



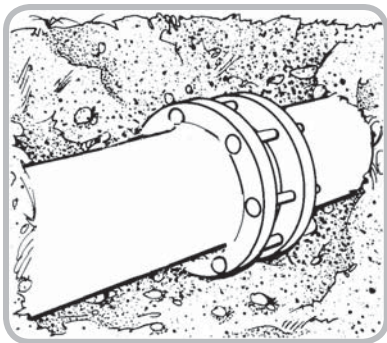
A. Longitudinal Breaks up to 8"
B. Circumferential Breaks



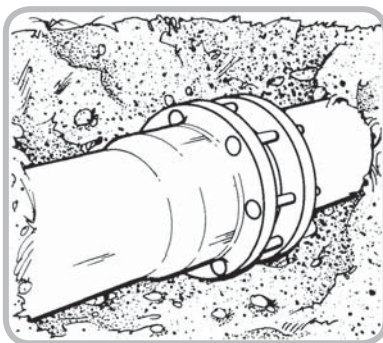
D. Small Pinhole Leaks, Splits and Corrosion Cracks
E. Broken Weld

Product	Size	Page
Style 80 Split Sleeve	3" - 8"	12
Style 126 Split Sleeve	3" - 24"	15
Style 360 Clamp ¹	2" - 30"	9

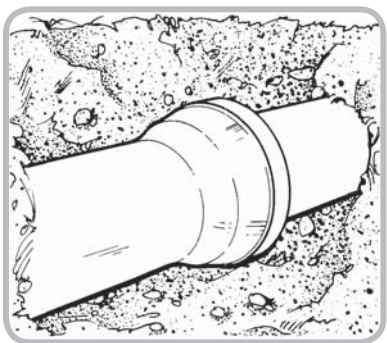
¹ (A, B, & D)



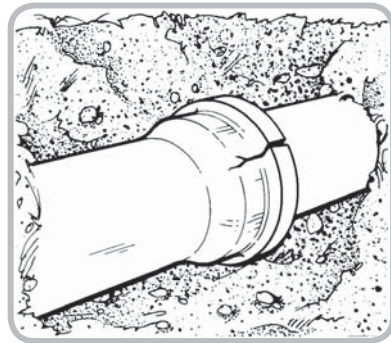
Leaking Coupled Joints or Mechanical Joints



Product	Size	Page
Style 126 Split Sleeve	3" - 24"	15

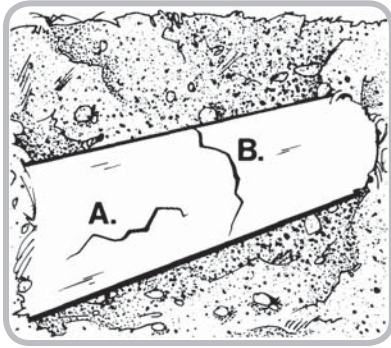


Leaking Bell or Spigot Joints, Broken or Cracked Bell Joints, Leaking or Cracked Stab-Joint

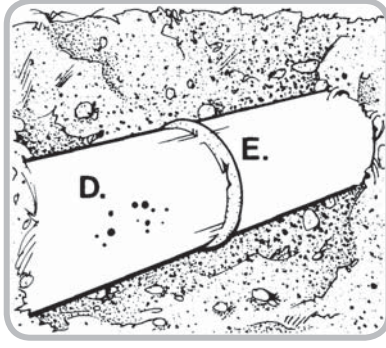


Product	Size	Page
Leaking Bell:		
Style 60/160 Bell Clamp	3" - 48"	10
60-S	4" - 24"	8
Cracked Bell:		
Style 126 Split Sleeve	3" - 24"	15

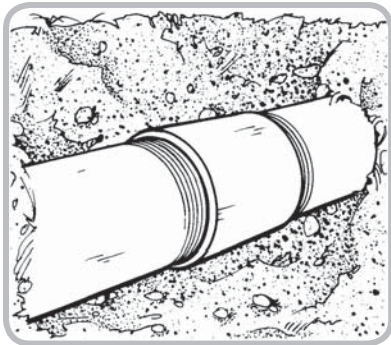
Dresser Repair Products for Water and Industrial Steel Pipe



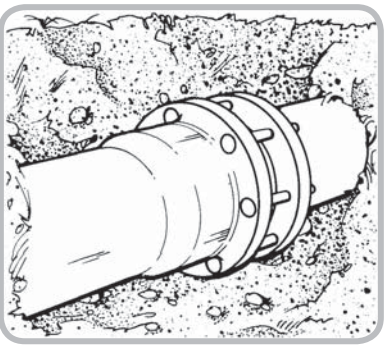
A. Longitudinal Breaks up to 8"
B. Circumferential Breaks



D. Small Pinhole Leaks, Splits and Corrosion Cracks
E. Broken Weld



Leaking Threaded Joints or Leaking Mechanical Joints



Product	Size	Page
Style 96 Split Sleeve	6" - 30"	13
Style 97 Split Sleeve	3" - 16"	14
Style 110 Weld Sleeve	4" - 30"	16
Style 220 Weld Sleeve	2" - 26"	17
Style 77 Band Clamp	2" - 24"	4
Style 118 Clamp ¹	1/2" - 8"	5
Style 360 Clamp ¹	2" - 30"	6

¹ (A, B, & D)

Product	Size	Page
Threaded Joints:	2" - 4"	
Style 4 Collar Clamp		6
Style 41 Collar Clamp	6" - 12"	6
Mechanical Joints:	6" - 30"	
Style 96 Split Sleeve		13
Style 220 Weld Sleeve	6" - 26"	18

Style 4 and 41 Collar Clamps

Stops all leaks through screw collars

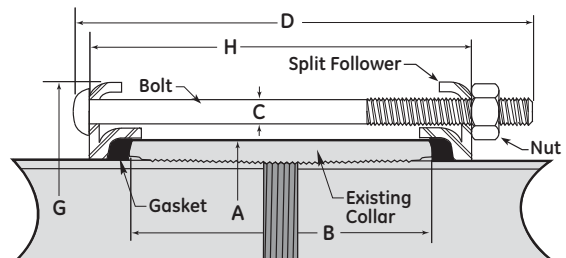
Dresser Style 4 and 41 clamps quickly and inexpensively stop leaks through the threads of screw collars (threaded couplings), solvent weld couplings (collars) and stab-type PVC joints. Repairs are permanent and normally made without interrupting service or dismantling the line.

Style 4 clamps consist of two malleable split follower rings with interlocking ends on each section, two resilient split Dresser gaskets, and bolts as required for pipe sizes up to 4”.

Style 41 clamps consist of the same parts except the split follower rings are steel and are connected by steel lock links.



Material of Construction	
Followers	Style 4 Malleable Iron, 41 Steel
Bolts & Nuts	Alloy to AWWA C111/ANSI A21.11
Gasket	Grade 27 BUNA S
Coating	Fusion-Bonded Epoxy



Style 4 Clamp (Malleable) – Size Specifications for 3/4” – 4”

Nominal Size Steel (ID)	Outside Diameter (OD)	Collar Dimensions		Bolts Number Diameter & Length (C & D)	Clamp Dimensions		Gasket Section Dimensions	Approximate Shipping Weight Ea. (lbs)
		Overall Dimensions (A)	Overall Length (B)		Overall Diameter (G)	Overall Length (H)		
2	2.375	2.841	3.625	4 - 5/8 x 6-1/2	6-5/16	7	9/32 X 5/8	8
3	3.500	4.014	4.125	4 - 5/8 x 7-1/2	7-1/2	8	11/32 X 3/4	9
4	4.500	5.233	4.625	4 - 5/8 x 7-1/2	8-1/2	8	23/64 X 3/4	11

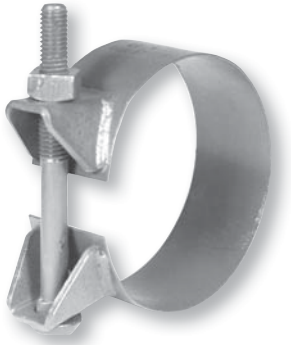
Style 41 Clamp (Steel) – Size Specifications for 6” – 12”

Nominal Size Steel (ID)	Outside Diameter (OD)	Collar Dimensions		Bolts Number Diameter & Length (C & D)	Clamp Dimensions		Gasket Section Dimensions	Approximate Shipping Weight Ea. (lbs)
		Overall Dimensions (A)	Overall Length (B)		Overall Diameter (G)	Overall Length (H)		
6	6.625	7.482	5.125	6 - 5/8 x 8-1/2	10-3/4	9-1/2	7/16 X 3/4	23
8	8.625	9.596	6.125	6 - 5/8 x 9-1/2	12-7/8	10-1/2	1/2 X 3/4	28
10	10.750	11.958	6.625	8 - 5/8 x 10.0	15-3/8	11	5/8 X 23/32	44
12	12.750	13.958	6.625	8 - 5/8 x 10.0	17-3/8	11	5/8 X 23/32	50

Dimensions are inches unless otherwise noted.

Style 77 Band Clamp

For repair of pinhole leaks



Dresser Style 77 band clamps are specifically designed to provide a low cost repair for small pinholes, leaks, corroded areas and pits in straight runs of steel piping. They are suitable for practically all working pressures and line contents.

Each clamp consists of a flexible, one-piece carbon steel circular band that is sprung apart to fit over the pipe, and a high-strength carbon steel bolt and nut of sufficient diameter to provide both a safety factor and protection against corrosion. The Style 77 clamp is available in standard steel pipe sizes from 2" thru 24" with 2" or 3" bands. Cone gaskets must be specified when ordering the Style 77 clamp with three different size cone gaskets available (See chart).

NOTE: Cone gaskets are NOT an integral part of the clamp and must be specified when ordering. The Style 77 clamp is available with three different size cone gaskets (See chart below).

Material of Construction	
Band/Lugs	AISI C1008/1010 Carbon Steel
Bolt & Nut	SAE Grade 5 Carbon Steel
Gasket	BUNA N Grade 30
Coating	Fusion-Bonded Epoxy



Cone Gasket Style 3077	
Gasket Number	Gasket Size
216	1-5/8
217	2
218	2-1/2

Style 77 Clamp – Size Specifications 2" – 24"

Pipe (Steel) Nominal Size (ID)	Outside Diameter (OD)	Band Thickness & Width	Bolt Diameter & Length	Approximate Ship Weight Ea. (lbs.)
2	2.375	1/16 x 2	1/2 x 4	0.84
3	3.500	1/16 x 2	1/2 x 4	0.96
4	4.500	1/16 x 2	1/2 x 5-1/2	1.3
5	5.563	1/16 x 2	1/2 x 5-1/2	1.4
6	6.625	3/32 x 3	5/8 x 6	2.8
6-5/8 CAS	7.000	3/32 x 3	5/8 x 6	2.9
8	8.625	3/32 x 3	5/8 x 6	3.4
10	10.750	3/32 x 3	5/8 x 7	4.0
12	12.750	3/32 x 3	5/8 x 7	4.5

Dimensions are inches unless otherwise noted.

Style 118 Handiband Clamp

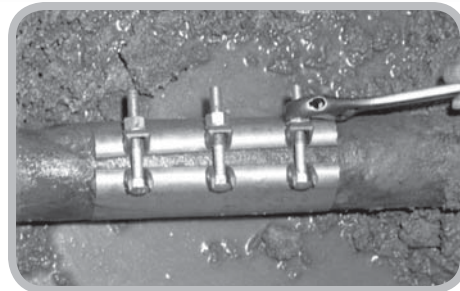
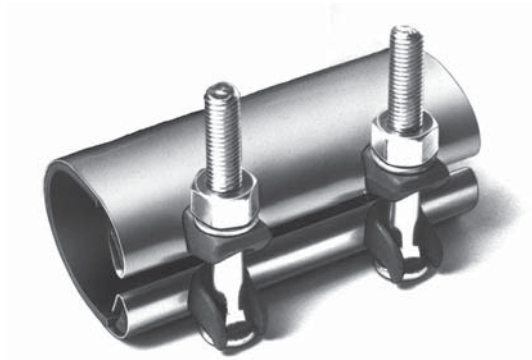
For quick, permanent repair of small holes in steel pipe

The Dresser Style 118 handiband clamp is a field-proven, low cost band-type repair clamp for quick repair of small leaks and holes in steel piping.

Installation is fast, easy and foolproof. Simply wrap the clamp around the pipe, drop the bolts through the slotted lugs and tighten the nuts. Compression of the large size gasket seals the leak completely and permanently.

The Handiband clamp is made of stainless steel for corrosion resistance. The Dresser Buna S gasket offers superior resistance to oils, aromatic and aliphatic hydrocarbons, gasoline and condensates.

Individual components of the Style 118 clamp are carefully engineered and constructed with lugs of ductile iron and bolts plated for long-life and durability. Style 118's come fully assembled and ready to install so there are no loose parts to misplace. The 118 clamp is available for pipe sizes 1/2" through 8" in 3, 6 and 12" lengths to cover a variety of leaks.



NOTE: The Style 118 clamp does not provide a full 360-degree seal on the pipe. For full circle seal and repair applications, see the Style 360 repair clamp on page 9.

Material of Construction	
Band	Stainless Steel 18-8, Type 304
Lugs	Ductile Iron ASTM 536
Bolts & Nuts	Alloy to ANSI A21.11
Gaskets	Gridded to GE Specs/Buna S

Style 118 Clamp – Size Specifications for 1/2" – 8"

Nominal Size (ID)	Outside Diameter (OD)	Overall Length	Quantity per Package	Weight Approx. Ea. (lbs)
1/2	.840	3	20	.50
1/2	.840	6	10	1.00
3/4	1.050	3	16	.60
3/4	1.050	6	8	1.10
1	1.315	3	16	.60
1	1.315	6	8	1.20
1-1/4	1.660	3	12	.90
1-1/4	1.660	6	6	1.70
1-1/2	1.900	3	12	.90
1-1/2	1.900	6	6	1.80
2	2.375	3	8	1.11
2	2.375	6	4	2.30
2	2.375	12	2	4.50
2-1/2	2.875	3	8	1.20
2-1/2	2.875	6	2	2.30

Maximum 150 psi 1/2" - 4"
Maximum 100 psi 5" - 8"

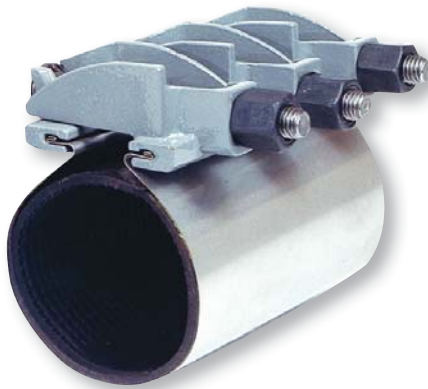
Nominal Size (ID)	Outside Diameter (OD)	Overall Length	Quantity per Package	Weight Approx. Ea. (lbs)
3	3.500	3	6	1.20
3	3.500	6	4	2.40
3	3.500	12	2	4.80
3-1/2	4.000	3	6	1.50
3-1/2	4.000	6	4	3.00
4	4.500	3	6	1.50
4	4.500	6	4	3.10
4	4.500	12	2	6.30
5	5.563	3	6	1.60
5	5.563	6	4	3.21
6	6.625	3	6	1.80
6	6.625	6	4	3.60
6	6.625	12	1	7.20
8	8.625	3	6	2.00
8	8.625	6	4	2.00
8	8.625	12	1	2.00

Dimensions are inches unless otherwise noted.

NOTE: All orders for unpackaged sizes and for broken carton quantities will be random packaged.

Style 360* Repair Clamps

For fast repair of leaks in cast/ductile and steel mains



The Dresser Style 360 repair clamp offers simplicity and ease of installation. Just wrap the clamp around the pipe, drop the bolts in place and tighten. It's that simple! Moreover, special one-inch long nuts allow the use of a standard deep socket wrench for complete tightening. In the popular 7.5" clamp width, there is also a third bolt so the middle bolt and nut can be used to pre-tighten the clamp. Additionally, the smaller sized clamps feature a flexible band which means less holding force is required while tightening.

With the Style 360 clamp you can repair holes, breaks and splits in the pipeline. You can use it where pipe ends are separated, or where ends are deflected up to 4 degrees or 1/8 inch. Or you can join two pipes with a variation of 1/4 inch outside diameter. Clamp features include a tapered gasket with a gridded design and the spanner is molded flush with the gasket to prevent "hang up." The Style 360 has a stainless band, lugs of rugged ductile iron and bolts of corrosion-resistant Dresserloy.

- **One-Inch Long Nuts** allow tightening with standard deep socket wrench
- **Drop-In Bolts** - No need to remove bolts in the ditch. No loose parts to misplace
- **Multi-Band Clamp** - Features a multi-band design in the 14" through 24" sizes. Clamp is packaged and shipped "in

the flat" meaning the bands are not formed to the radius of the pipe. Reduces storage space and installation time, and has twice the adjustment range of the single-band clamp

- **Stainless Steel Bolts and Nuts** available upon request

Material of Construction	
Band	AISI Type 304 Stainless Steel
Lugs	Ductile Iron
Nuts	Dresserloy
Bolts	Dresserloy
Spanner	AISI Type 304 Stainless Steel
Gasket	Gridded Surface to Dresser Specs

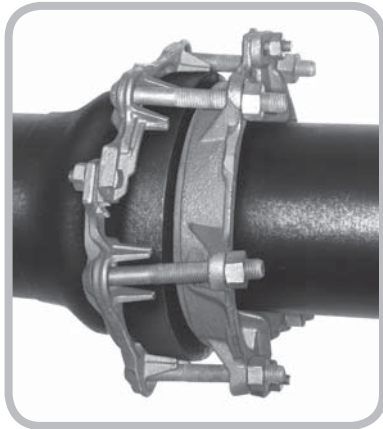
Style 360 Clamp – Specifications for Sizes 2" - 30"

Nom. Size (in)	Range to Fit (OD)	Clamp Widths (in)	Max. psi	Nom. Size (in)	Range to Fit (OD)	Clamp Widths (in)	Max. psi	
2	2.35 - 2.63	7-1/2, 12-1/2	250	10	11.04 - 11.44	7-1/2, 12-1/2, 20, 30	90	
	2.70 - 3.00	0.024" Thick Band			11.34 - 11.74			
3	2.97 - 3.25	7-1/2 or 12-1/2	250	12	11.75 - 12.15	7-1/2 or 12-1/2, 20, 30	90	
	3.46 - 3.70	7-1/2 or 12-1/2, 20	220		12.62 - 13.02			
	3.73 - 4.00	0.024" Thick Band			13.10 - 13.50			
	3.96 - 4.25				13.40 - 13.80			
4	4.45 - 4.86	7-1/2 or 12-1/2	170	2-Band Sizes	13.70 - 14.10	20, 30	130	
	4.74 - 5.14	7-1/2, 12-1/2, 20			14.00 - 14.40			14.38 - 15.13
	4.95 - 5.35	0.024" Thick Band						15.07 - 15.82
								15.92 - 16.67
4-5	5.22 - 5.62	7-1/2 or 12-1/2	200	6	16.56 - 17.31	7-1/2, 12-1/2, 20, 30	200	
		7-1/2, 12-1/2, 20, 30			17.15 - 17.90			
6	5.95 - 6.35	7-1/2, 12-1/2, 20, 30	200	8	17.82 - 18.57	0.036" Thick Band	110	
	6.56 - 6.96				18.46 - 19.21			
8	6.84 - 7.24	7-1/2, 12-1/2, 20, 30	160	10	17.82 - 18.57	0.048" Thick Band	85	
	7.05 - 7.45				18.46 - 19.21			
	7.45 - 7.85				19.23 - 19.98			
					19.90 - 20.65			
					20.70 - 21.45			
					21.52 - 22.27			
10	7.95 - 8.35	7-1/2, 12-1/2, 20, 30	120	3-Band Sizes	22.12 - 22.87	20, 30	60	
	8.54 - 8.94				22.90 - 23.65			
	8.99 - 9.39	7-1/2, 12-1/2, 20, 30	90		23.28 - 24.38	0.048" Thick Band	45	
	9.27 - 9.67				29.62 - 30.72			
	9.68 - 10.08							
	9.70 - 10.10							

Dimensions are inches unless otherwise noted.

Style 60 & 160 Bell Joint Clamps

For repair of cast iron bell & spigot joints

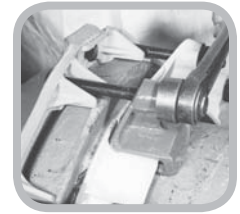


Dresser Style 60 and 160 bell joint clamps permanently stop or prevent leaks through the jointing materials of cast iron bell-and-spigot joints. Completely adjustable to provide a close fit on both the pipe bell and spigot, one standard clamp fits virtually all the various makes of pipe within a nominal size.

Style 60 and 160 clamps can be quickly installed with no interruption of service. A large, special rubber compound gasket shuts off the leak when compressed as the spigot ring is drawn up and, in turn, by bolts connected to the bell ring (anchored on the bell).

Style 60 Clamps

The spigot ring of the Style 60 clamp offers a wide range of adjustment made possible by the use of clips having fillers with the same cross section of the spigot ring. Serrated ends on the bell ring sections offer a simple and effective means of adjustment, providing a positive fit for varying outside bell diameters.



Style 160 Clamps

The Style 160 clamp features a wrap around design of the spigot ring that hinge together. There are no clips and the spigot sections have serrated ends that bolt together.

Gasket Tongs

Dresser gasket tongs help simplify the installation of bell joint clamps. The tongs hold the gasket in place while the clamp is being bolted-up, assuring full, uniform gasket compression. Consult factory for product details.

Material of Construction	
Bell Ring	Ductile or Malleable Iron
Bolts & Nuts	Dresserloy Carbon Steel
Spigot Ring	Ductile or Malleable Iron
Clips	ASTM A-307
Gasket	Grade 27 BUNA S
Coating	Fusion-Bonded Epoxy

Style 60/160 Clamp – Size Specifications for 3” – 16”

Nominal Size (CIP)	Gasket Thickness x Length	Bolt Number Dia. x Length	Weight App. Ship. Ea. (lbs)
3	1-1/8 x 1	4 – 5/8 x 5	13
4 ¹	1-1/8 x 1	4 – 5/8 x 6	15
6 ¹	1-1/8 x 1	6 – 5/8 x 5-1/2	21
8 ¹	1-1/8 x 1	6 – 5/8 x 5-1/2	24
10	1-1/8 x 1	8 – 5/8 x 5-1/2	35
12 ¹	1-1/8 x 1	9 – 5/8 x 5-1/2	38
14	1-1/8 x 1	9 – 5/8 x 6	46
16 ¹	1-1/8 x 1	9 – 5/8 x 6	50

Style 60/160 Clamp – Size Specifications for 18” – 48”

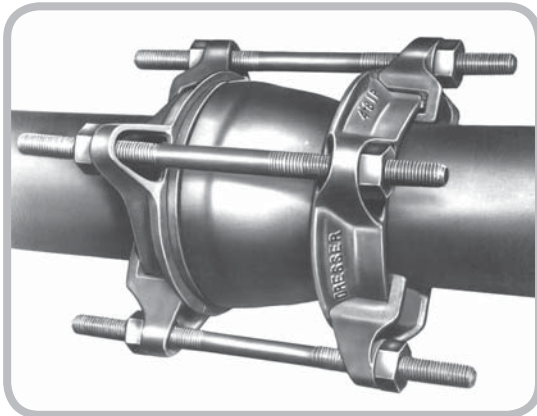
Nominal Size (CIP)	Gasket Thickness x Length	Bolt Number Dia. x Length	Weight App. Ship. Ea. (lbs)
18	1-1/8 x 1	12 – 5/8 x 6-1/2	73
20	1-1/8 x 1	12 – 5/8 x 6-1/2	74
24	1-1/8 x 1	12 – 5/8 x 7	86
30	1-1/8 x 1	16 – 5/8 x 7	113
36	1-1/8 x 1	20 – 5/8 x 7	148
42	1-1/8 x 1	24 – 5/8 x 7-1/2	199
48	1-1/8 x 1	24 – 5/8 x 7-1/2	227

Dimensions are inches unless otherwise noted.

¹NOTE: Style 160 Clamps may be furnished in these sizes.

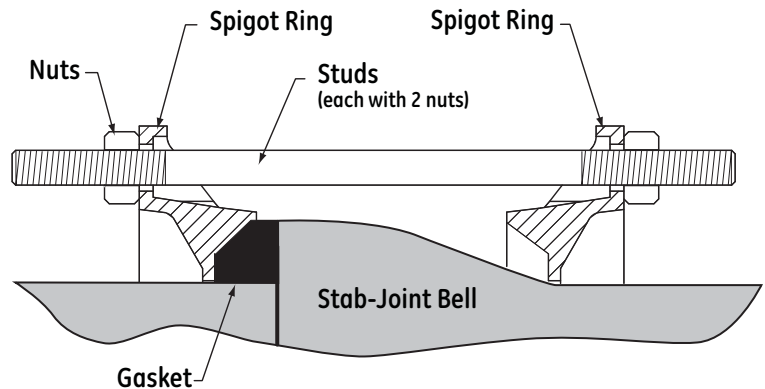
Style 60-S Bell Joint Clamps

For repair of stab-type bell joints



Dresser Style 60-S bell joint clamps are similar to the standard Style 60 clamp, but consists of two spigot rings rather than one spigot and one bell ring. This difference in design is necessary since most stab-type joints, including cast-iron pipe, have a long, tapered bell which has no shoulder for anchoring a bell ring.

Long studs are provided for adjustability to provide a close fit on both pipe bell and spigot ends. A large, special rubber compound gasket shuts off the leak when compressed as the spigot rings are drawn up and the studs are tightened against the bell. Style 60-S clamps can be quickly installed with no interruption of service.



Material of Construction	
Bell Ring	Ductile or Malleable Iron
Studs & Nuts	Dresserloy Carbon Steel
Spigot Ring	Ductile or Malleable Iron
Gaskets	Grade 27 Buna S
Coating	Fusion-Bonded Epoxy

Style 60-S Clamp – Size specifications 4” – 36”

Nominal Size (CIP)	Spigot Ring Number (2 per clamp)	Studs Number Diameter x Length	Approximate Ship Weight Ea. (lbs.)
4	160A0480	4 - 5/8 x 13	18
6	160A0690	6 - 5/8 x 13	27
8	160A0905	6 - 5/8 x 13	33
10	60B1110	8 - 5/8 x 13	43
12	160A1320	8 - 5/8 x 13	48
14	60A1530	9 - 5/8 x 13	71
16	60B1740	9 - 5/8 x 16	74
18	60A1950	12 - 5/8 x 16	91
20	60A2160	12 - 5/8 x 16	100
24	60D2580	12 - 5/8 x 16	115
30	60A3174	16 - 5/8 x 16	171
36	60B3830	20 - 5/8 x 16	247

Dimensions are inches unless otherwise noted.

NOTE: Style 60-S Clamps can be used on caulked cast iron pipe joints for Class A, B, C and D C900 pipe sizes through 24”; Same pipe for Class A, B, and C in sizes 30” and 36”.

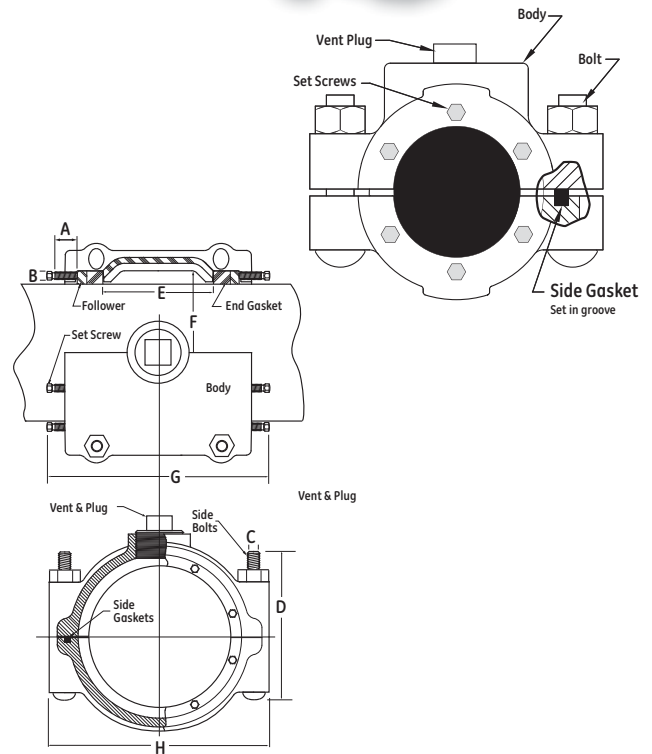
Style 80 “Ready-Pack” Split Sleeve

For repairs on cast iron pipe

Dresser Style 80 “ready-pack” split sleeve is used to enclose and permanently repair breaks, splits and holes in cast iron pipe. Style 80 sleeves can also be used as an efficient, low-cost tapping sleeve for branch service connections.

Style 80 sleeve bodies are cast from close-grained gray iron (malleable iron in 2” size). Steel follower rings on each end are completely enclosed in the sleeve body. Carbon steel set screws are drawn up against the follower ring to compress the gasket creating total circumferential sealing on the pipe. Side bolts, which are fully enclosed within the sleeve body to prevent corrosion, are tightened to compress side gaskets providing a complete leakproof seal.

Style 80 sleeves are also available in a long pattern design for a larger sealing area. Dresser Style 80 sleeves are recommended for all customary pressures where pipe wall thickness is in conformity with specifications for standard cast iron pipe.



Material of Construction	
Body	Cast or malleable iron
Vent Plug	Forged Steel to ASTM A105 or Cast to ASTM A126-42 Class A
Follower Rings	Cold-formed carbon steel
Bolts & Nuts	Alloy to AWWA C111/ANSI A21.11
Gaskets	Dresser Spec 328 Kevlar™ Reinforced rubber
Set Screws	Heat treated carbon steel, cadmium plated
Coatings	Dresser shopcoat as standard; Fusion-bonded Epoxy optional

Style 80 Sleeve – Specifications for Sizes 3” - 8” (Regular pattern body for 3, 4 and 6” sizes)

Nom. Pipe Size (CIP)	Range of Fit Outside Dia. (OD)	End Screws Number Dia. x Length A & B	Side Bolts Number Dia. x Length C & D	End Gasket Section Dimension	Side Gasket Section Dimensions	Inside Dimension ¹		Overall Dimension		Vent Size (Dia.)	Weight Shipping Each (lbs)
						Dia. (E)	Length (F)	Dia. (G)	Length (H)		
3	3.750 - 4.000	12-3/8 x 1	4-5/8 x 5-1/2	5/8 x 3/4	5/16 x 1/2	5-5/32	4	7-15/16	9-3/8	3/4-2-1/2	40
4 ² 4 Long	4.740 - 4.990	12-3/8 x 1	4-5/8 x 5-1/2 2-5/8 x 5-1/2	5/8 x 3/4	5/16 x 1/2	6-5/32	4	8-15/16 12-1/2	9-3/8	3/4-3	45 52
6 ² 4 Long	6.840 - 7.090	16-3/8 x 1	4-5/8 x 6-1/2 2-5/8 x 5-1/2	5/8 x 3/4	5/16 x 1/2	8-1/4	4	11-1/16 12-1/2	9-5/16	3/4-3	60 74
8 ³ 8 Long	8.990 - 9.240	20-3/8 x 1	2-5/8 x 5-1/2 2-5/8 x 5-1/2	5/8 x 3/16	5/16 x 1/2	10-13/32	7	14-3/8 12-1/2	12-1/2	3/4-3	100

Dimensions are in inches unless otherwise noted.

¹ Inside Dimension “F” as indicated in cross section drawing, is distance between inside of end gaskets. This length is equal to or greater than found between calking spaces in foundry “splits” as shown in AGA Standards Specifications for Service Sleeves.

² Also available in long pattern design with vent size up to 4”. Consult factory for specification details. Style 80 long body sleeves have six side bolts.

³ Size 8” sleeve is available in long pattern design only, with six side bolts and vents up to 4”.

Style 96 Split Repair Sleeve

Expanded body split sleeve for repairs on steel pipe

Dresser Style 96 split repair sleeves offer an expanded body for repair of coupled or mechanical joints on high pressure steel transmission piping systems. Style 96 sleeves are fabricated from high quality carbon steel and come completely factory-assembled for quick installation. Sleeves are also vented for installation under pressure.

- Designed to completely enclose and permanently repair leaking coupled joints or encase defective screw collars or butt-welded joints.
- End cap screws with encased follower ring design provides additional circumferential sealing around the pipe.



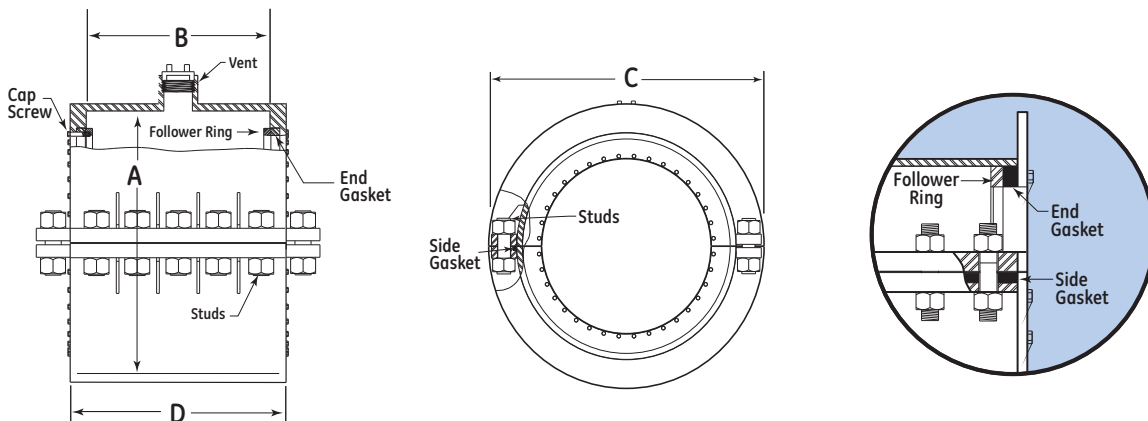
Style 96 Sleeve – Dimension Specifications for Sizes 6" - 30" Rated to 500 psi

Material of Construction	
Body Halves	Weldable steel suitable for the particular application to ASTM A36 or equivalent
Follower Ring	Carbon Steel AISI C1015
Cap Screws	Heat-treated Carbon Steel C1038 cadmium-plated
Bolts	Meet ASTM A193 Grade B7 and the strength requirements of the application
Gaskets	Grade 29 - Spec 328 Kevlar™ Reinforced Rubber
Coating	Dresser shopcoat standard; Fusion bonded epoxy optional
Temperature	-20° F to 150° F

Steel Pipe Nom. Size (in)	Outside Dia. (OD)	Inside Dim.		Overall Dim.		Vent Dia.
		(A)	(B)	(C)	(D)	
6	6.625	12-5/8	14	17-7/8	18-3/8	2
8	8.625	14-5/8	14	19-7/8	18-3/8	2
10	10.750	16-3/4	14-1/4	22	18-7/8	3
12	12.750	18-3/4	14-1/4	24-1/4	20-3/4	3
14	14	20	14-1/4	25-1/2	20-3/4	3
16	16	20	14-1/4	27-1/2	20-3/4	4
18	18	20	14-1/4	29-1/2	20-3/4	4
20	20	26	14-1/4	32-1/4	20-3/4	4
22	22	28	14-1/4	34-1/4	20-3/4	4
24	24	30	16	36-1/8	22-1/2	4
26	26	32	17-1/4	38-1/2	21-3/4	4
28	28	34	17-1/4	40-1/2	21-3/4	4
30	30	36	17-1/4	42-5/8	21-3/4	4

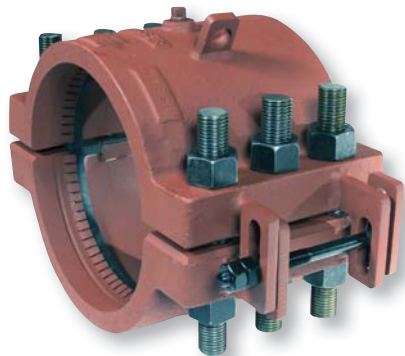
Dimensions are in inches unless otherwise noted.

NOTE: Larger sizes, metric size and higher pressures are available on request. Please consult factory with your particular application requirements.



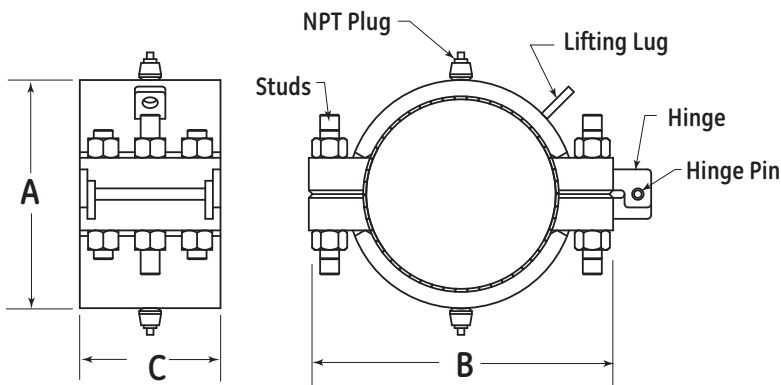
Style 97 Split Repair Sleeve

For repair on steel pipe



The Dresser Style 97 split repair sleeve is designed for fast, simple repair of pit holes, cracks or splits in high pressure steel pipelines up to 48" in diameter. Costing less than heavier sleeves now on the market, the Style 97 is also weldable offering your choice of a temporary or permanent repair. Stainless steel retainer rings and the lock-in gasket design ensures pressure-tight closure on the pipe with seal lengths of 5-inches (3-12") and 8-inches (14-48"). For ease of installation, a hinge and pin assembly and lifting lugs are standard on all clamps 6" and above. All clamps feature a 1/2" NPT relief plug.

Style 97 sleeves come completely factory-assembled for quick installation. Fabricated from high quality carbon steel or manufactured from cast steel, all Style 97 sleeves are factory-tested to 1.5 times rated pressure.



Ratings	
Pressure Ratings¹	Up to ANSI 600 to 1480 psi Size 3" - 16"
Temperature Ratings	-20° F to +120° F

¹ NOTE: All Dresser Style 97 sleeves are factory-tested to 1.5 times the pressure rating.

Style 97 Sleeve – Specifications for Sizes 3"- 16"

Nominal Size (in)	Overall Diameter (A)	Overall Width (B)	NPT Plugs	Overall Length (C)	Seal Length	Approximate Weight Per Sleeve (lbs.)
3	5.5	8.3	1/2	8.5	5	42
4	6.3	10.5	1/2	8.5	5	65
6	8.6	12.6	1/2	9	5	85
8	10.5	15	1/2	9	5	132
10	12.7	17.5	1/2	9	5	156
12	15	19.2	1/2	9	5	174
16	18.3	24.6	1/2	12	8	360

All dimensions are in inches unless otherwise noted.

NOTE: Large diameters, metric sizes and longer seal lengths are available on request. Please consult factory with your particular application requirements.

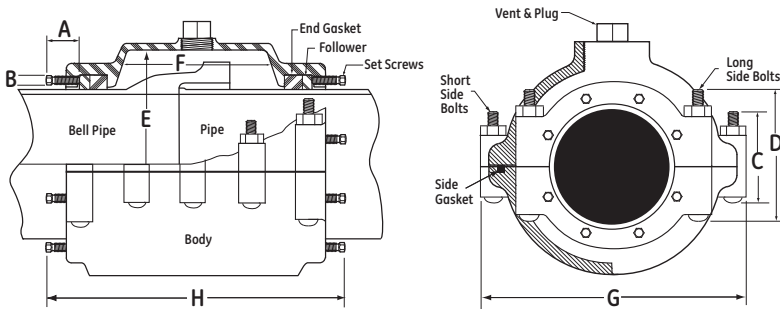
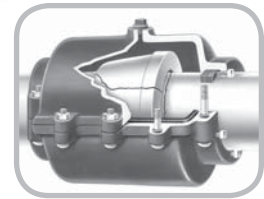
Material of Construction	
Body	Carbon Steel to ASTM A515/516; Cast to ASTM A216
Studs	Carbon Steel to ASTM A193 Gr B7
Hex Nuts	Carbon Steel to ASTM A194 Gr 2H
Seal Retainer	Stainless Steel
Gasket Seals	Grade 29 - Spec 328 Kevlar™ Reinforced Rubber
Hinge Bracket	AISI 1010 Steel
Hinge Pin	AISI 1018 Steel
NPT Plugs	Carbon Steel

Style 126 Repair Sleeve

For repair of broken cast iron bell and spigot joints

For repairing cast iron bell and spigot joints, Dresser Style 126 repair sleeves help avoid pipeline shutdowns offering a fast, economical and permanent repair. A sleeve of lighter weight and compact design, the Style 126 sleeve provides maximum inside dimension clearance for repairing split or broken cast iron bells and leaking mechanical or coupled joints.

Built to rigid GE specifications, Style 126 repair sleeves provide the time-proven features of the Dresser rubber-packed gasket sealing design. Side bolts, which are fully enclosed within the sleeve body to prevent corrosion, are tightened to compress side gaskets providing a complete, permanent leakproof seal. Carbon steel set screws are tightened against the enclosed follower ring, which compresses the end gaskets creating total circumferential sealing on the pipe.



Material of Construction

Body	Cast or malleable iron
Vent Plug	Forged Steel to ASTM A105 or Cast to ASTM A126-42 Class A
Followers	Cold-formed carbon steel
Bolts	Alloy to AWWA C111/ANSI A21.11
Gaskets	Grade 29 - Spec 328 Kevlar™ Reinforced Rubber
Set Screws	Carbon Steel, cadmium plated
Coating	Dresser shopcoat standard; Fusion bonded epoxy optional

Style 126 Sleeve – Specifications for Sizes 3"– 24"

Nominal Size (CIP)	Pipe Class AWWA	Outside Dia. (OD)	End Screws ¹ Dia. x Length (A) & (B)	Short Side Bolts ² Number Dia. x Length	Long Side Bolts Number Dia. x Length (D)	Inside Dimension		Overall Dimension		Vent ³ Size Dia.	Weight Approx. Ea. (lbs.)
						Dia. (E)	Length (F)	Dia. (G)	Length (H)		
3	A	3.800	12-3/8 x 1	6-5/8 x 4	4-5/8 x 5-1/2	8-1/2	12	13	19-1/16	1	123
3	B, C, D	3.960	12-3/8 x 1	6-5/8 x 4	4-5/8 x 5-1/2	8-1/2	12	13	19-1/16	1	123
4	A	4.800	12-3/8 x 1	6-5/8 x 4	4-5/8 x 6	10	12	14-1/2	19-1/16	1	136
4	B, C, D	5.000	12-3/8 x 1	6-5/8 x 4	4-5/8 x 6	10	12	14-1/2	19-1/16	1	136
6	A	6.900	16-3/8 x 1	6-5/8 x 5	4-5/8 x 7	12-1/2	12	17-1/8	19-1/16	1	185
6	B, C, D	7.100	16-3/8 x 1	6-5/8 x 7	4-5/8 x 7	12-1/2	12	17-1/8	19-1/16	1	185
8	A, B	9.050	20-3/8 x 1-1/4	6-5/8 x 5	4-5/8 x 7-1/2	15-1/2	12-3/8	20-1/4	19-3/16	1	265
8	C, D	9.300	20-3/8 x 1-1/4	6-5/8 x 5	4-5/8 x 7-1/2	15-1/2	12-3/8	20-1/4	19-3/16	1	265
10	A, B	11.100	24-7/16 x 2-1/4	12-3/4 x 4	—	16-5/8	13-1/2	22-3/8	18-5/8	1	300
10	C, D	11.400	24-7/16 x 2-1/4	12-3/4 x 4	—	16-5/8	13-1/2	22-3/8	18-5/8	1	300
12	A, B	13.200	28-7/16 x 2-1/4	12-7/8 x 4	—	18-3/4	13-1/2	24-1/2	18-5/8	1	335
12	C, D	13.500	28-7/16 x 2-1/4	12-7/8 x 4	—	18-3/4	13-1/2	24-1/2	18-5/8	1	335
16	A, B	17.400	32-7/16 x 2-1/4	14-7/8 x 4	—	24	16	30	21-1/8	2	554
16	C, D	17.800	32-7/16 x 2-1/4	14-7/8 x 4	—	24	16	30	21-1/8	2	554
20	A, B	21.600	40-7/16 x 2-1/4	14-1 x 4	—	30	17	36	22-1/8	3	770
20	C, D	22.060	40-7/16 x 2-1/4	14-1 x 4	—	30	17	36	22-1/8	3	770
24	A, B	25.800	48-7/16 x 2-1/4	14-1 x 4	—	33-7/8	18	39-7/8	23-1/8	3	853
24	C, D	26.320	48-7/16 x 2-1/4	14-1 x 4	—	33-7/8	18	39-7/8	23-1/8	3	853

All dimensions are in inches unless otherwise noted.

¹ End Screws are cadmium-plated high-grade steel, and have square heads, 3/8" across flats.

² Side Bolts are cadmium-plated high-grade steel with track heads and rolled threads through 8" size. Larger sizes are supplied with galvanized machine bolts.

³ Vent supplied with iron pipe threads or corporation threads, if specified.

Style 110 Reinforcing Sleeve

Split reinforcing sleeve for repair of welded joints

Pipeline engineers assure the safety of field joints by installing Dresser Style 110 reinforcing sleeves on welded joints where special precautions are required. Style 110 sleeves can be used on defective 'trouble spots' on piping systems at highway, river and railroad crossings, at overbends, at tie-ins, in marshy ground, near buildings and other places where special precautions are necessary.

The Style 110 sleeve lends itself to field welding without preheating, using ordinary field welding procedures. All sleeves are factory prepared with standard welding bevel, machine flame cut for uniformity and ease of welding, and come with a drilled vent hole to preclude pressure build up between sleeve and pipe.

Built to rigid GE specifications, Style 110 sleeves have a minimum yield strength of 50,000 psi and an ultimate strength of 70,000 psi. Style 110 sleeves are supplied in all sizes, lengths and thicknesses as shown in charts. Larger sizes and lengths available upon request.



Material of Construction

Body High strength, low carbon steel meeting ASTM A572 GR 50/ASTM A588

Style 110 Sleeve¹ – Specifications for Sizes 4" - 30"

Nominal Size	Inside Diameter "A" & Pipe (OD)	Diameter "B"	Length "L"	Thickness "T"	Approx. Ship Wt. (lbs)
4	4-1/2	5-3/8	4	5/16	5-1/2
6	6-5/8	7-1/2	6	3/8	16-1/2
8	8-5/8	9-1/2	6	3/8	19
8	8-5/8	9-1/2	8	3/8	27
8	8-5/8	9-1/2	6	1/2	26
8	8-5/8	9-1/2	8	1/2	35
10	10-3/4	11-5/8	6	3/8	23
10	10-3/4	11-5/8	10	3/8	38
10	10-3/4	11-5/8	6	1/2	31
10	10-3/4	11-5/8	10	1/2	50
			6	3/8	27
			9	3/8	40-1/2
12	12-3/4	14-1/4	12	3/8	456
			6	1/2	36
			9	1/2	55
			12	1/2	74
			6	3/8	30
			9	3/8	45
14	14	15-1/2	14	3/8	70
			6	1/2	40
			9	1/2	60
			14	1/2	94
			6	3/8	35
			19	3/8	52
			12	3/8	68
16	16	17-1/2	16	3/8	90
			6	1/2	46
			9	1/2	70
			12	1/2	90
			16	1/2	120
			6	3/8	39
			9	3/8	58
			12	3/8	77
18	18	19-1/2	18	3/8	114
			6	1/2	51
			9	1/2	78
			12	1/2	101
			18	1/2	152
			6	3/8	43
			9	3/8	64
20	20	21-1/2	12	3/8	84
			20	3/8	139
			6	1/2	58

Nominal Size	Inside Diameter "A" & Pipe (OD)	Diameter "B"	Length "L"	Thickness "T"	Approx. Ship Wt. (lbs)
20	20	21-1/2	9	1/2	86
			12	1/2	112
			21	1/2	186
			6	3/8	47
			9	3/8	70
			12	3/8	92
22	22	23-1/3	22	3/8	166
			6	1/2	64
			9	1/2	94
			12	1/2	123
			22	1/2	230
			6	3/8	51
			9	3/8	76
			12	3/8	100
			16	3/8	133
24	24	25-1/2	24	3/8	198
			6	1/2	69
			9	1/2	101
			12	1/2	133
			16	1/2	177
			24	1/2	265
			6	3/8	56
			9	3/8	82
			12	3/8	109
			16	3/8	143
			26	3/8	232
			6	1/2	75
			9	1/2	110
			12	1/2	144
			16	1/2	190
			26	1/2	310
30	30	31-1/2	6	3/8	64
			9	3/8	95
			12	3/8	125
			16	3/8	164
			30	3/8	310
			6	1/2	85
			9	1/2	127
			12	1/2	166
			16	1/2	220
			30	1/2	410

All dimensions are in inches unless otherwise noted.

¹NOTE: Larger diameters, higher pressure and metric sizes may be furnished upon request. Please consult factory.

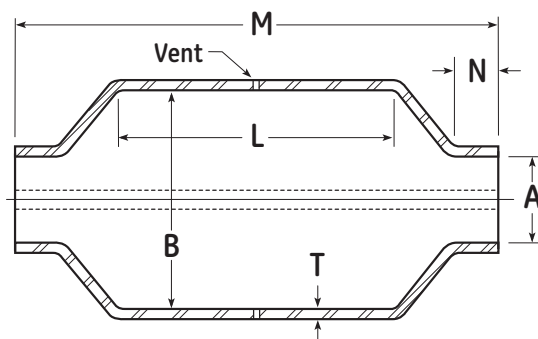
Style 220 Reinforcing Sleeve

For permanent reinforcement of coupled joints

Similar in design to the Style 110, Dresser Style 220 reinforcing sleeves encompass a “pumpkin” sleeve design and are commonly used to repair corrosion pits and stress cracks and offer a permanent repair over leaking couplings, flanges, valves or screw collars. The Style 220 sleeve also provides a means of being “double sure” of safety against pipe-end pullout when used to reinforce pipelines on high pressure piping systems.

The steel construction properties of the Style 220 sleeve lends itself to field welding without preheating, using ordinary field welding procedures. All sleeves are factory prepared with standard welding bevel, machine flame cut for uniformity and ease of welding, and come with a drilled vent hole to preclude pressure build up between sleeve and pipe.

Built to rigid GE specifications, Style 220 sleeves have a minimum yield strength of 50,000 psi and an ultimate strength of 70,000 psi. Style 120 sleeves are supplied in all sizes, lengths and thicknesses as shown in charts. Larger sizes and lengths available upon request.



Style 220 Sleeve – Specifications for Sizes 2”- 26” (With vent)

Nominal Size	Inside Diameter "A" & Pipe (OD)	Inside Diameter "B"	Inside Length "L"	Outlet Dim "N"	Overall Length "M"	Thickness "T"	Approx. Ship Wt. (lbs)
2**	2-3/8	8-3/8	10-1/2	1-1/4	23-1/4	5/16	45
3**	3-1/2	9-1/2	10-1/2	1-1/4	23-1/4	5/16	49
4	4-1/2	10-1/2	10	2	20-1/4	5/16	54
6	6-5/8	12-5/8	13-1/2	1-3/8	21-3/4	3/8	96
8	8-5/8	14-5/8	13-1/3	1-3/8	21-3/4	3/8	112
10	10-3/4	16-3/4	13-1/2	1-3/8	21-3/4	3/8	128
10	10-3/4	16-3/4	13-1/2	1-3/8	21-3/4	1/2	175
12	12-3/4	18-3/4	13-1/2	1-3/8	21-3/4	3/8	150
12	12-3/4	18-3/4	13-1/2	1-3/8	21-3/4	1/2	198
14	14	20	13-1/2	1-3/8	21-3/4	3/8	160
14	14	20	13-1/2	1-3/8	21-3/4	1/2	215
16	16	22	13-1/2	1-3/8	21-3/4	3/8	176
16	16	22	13-1/2	1-3/8	21-3/4	1/2	240
18	18	24	13-1/2	1-3/8	21-3/4	3/8	195
18	18	24	13-1/2	1-3/8	21-3/4	1/2	260
20	20	26	13-1/2	1-3/8	21-3/4	3/8	216
20	20	26	13-1/2	1-3/8	21-3/4	1/2	288
22	22	28	13-1/2	1-3/8	21-3/4	3/8	230
22	22	28	13-1/2	1-3/8	21-3/4	1/2	307
24	24	30	13-1/2	1-3/8	21-3/4	3/8	248
24	24	30	13-1/2	1-3/8	21-3/4	1/2	330
26	26	32	13-1/2	1-3/8	21-3/4	3/8	315
26	26	32	13-1/2	1-3/8	21-3/4	1/2	350

Dimensions are inches unless otherwise noted.

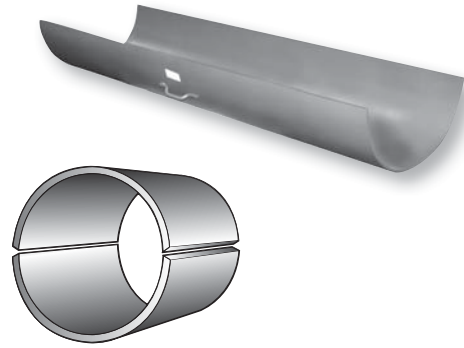
NOTE: Larger diameters available upon request. Please consult factory with your particular application requirements.

** 2" and 3" sizes have minimum yield strength of 35,000 psi.

Material of Construction	
Body	High strength, low carbon steel meeting ASTM A572 GR 50/ASTM A588
Yield Strength	50,000 psi min.
Temp Ratings	-20°F to +150°F

Style 115 Reinforcing Sleeves

Dresser Style 115 full-encirclement weld-over sleeves are available in 3/8" and 1/2" thicknesses for larger diameters and lengths up to 10 feet. Consult factory for your special project requirements.



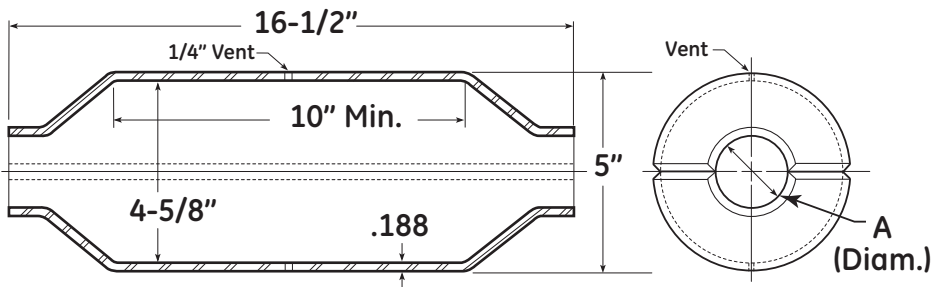
Style 220-S Reinforcing Sleeve

For smaller diameter repair from 3/4" to 2" I.D.

The Dresser Style 220-S sleeve is a weld-over sleeve for reinforcing threaded collars, welded joints or compression couplings on small diameter pipe from 3/4" I.D. through 2" I.D. sizes. The sleeves are made to rigid GE specifications meeting ASTM-A513, GR1015 specs, and have a yield strength of 35,000 psi, and an ultimate strength of 48,000 psi.



Style 220-S sleeves are furnished in matched halves and all longitudinal edges are factory bevelled for welding. A drilled vent hole precludes pressure buildup between sleeve and pipe during welding. Style 220-S sleeves are rated at 350 psi working pressure and meet the requirements applicable to DOT #192 codes.



Pipe Size (OD)	Nominal Size	Diameter (A)
1.050	3/4	1-1/8
1.315	1	1-3/8
1.660	1-1/4	1-3/4
1.990	1-1/2	2
2.375	2	2-7/16

All dimensions in inches unless otherwise noted.

Dresser Life-time Gaskets

Dresser compounded rubber gaskets

Pipe joints must be able to absorb pipe stress caused by natural forces and natural expansion, contraction, vibration and deflection while the line is in service. The sealing capabilities and the extreme flexibility of a Dresser coupled joint is made possible by the resilience of the rubber-compounded gaskets. Resiliency is the property that enables the gaskets to maintain pressure against the followers that confine it and, at the same time, allow for flexibility not found in rigid piping connections. Without it, a flexible joint is not possible!

Simply put, the absorption of pipeline stress permits each section of the pipeline to “float” in the joint ensuring a flexible piping system while reducing the chances of leakage, line breaks, costly repairs and service interruptions.

Buna S (Grade 27) Max. Temp. 212°F¹

The compound most generally used for plain gaskets is Buna S (Grade 27). This gasket has wide applications and is accepted as standard for most pipeline use. It is recommended for use on lines transporting both fresh water and salt water, natural and other gases, air, most acids, alkaline and sugar solutions and some refrigerants.

Buna N (Grade 42 - Nitrile) Max. Temp. 212°F¹

Buna N (Grade 42) gaskets are resistant to oil, most aromatic and aliphatic hydrocarbons, natural gas fogging oil, condensates and gasolines.

Armored® Gaskets

Armored gaskets can be used to great advantage where low electrical-resistant joints are desired. The armor “bites” into the pipe providing metal to metal contact allowing easy passage of current where cathodic protection is a necessity.

The armor—an elastic, practically indestructible brass coil or helix—is molded into the gasket tip becoming an integral part of the gasket. When used with the proper grade/compound rubber, the armor shields the gasket material from the line content without interfering with the sealing efficiency of the gasket.

Fluorocarbon - Max. Temp. 350°F

Fluorocarbon gaskets are resistant to hydrocarbons, aromatic hydrocarbons, alcohols, organic acids, nitrogen-containing compounds, vegetable oils and greases.

Butyl -Max. Temp. 250°F

Butyl gaskets are resistant to hot air service, steam, hot water and miscellaneous aqueous solutions. They are also suitable for vegetable oils, organic chemicals, oxidizing acids and alkalies.

EPDM - Max. Temp. 300°F

EPDM gaskets provide excellent resistance to aging factors such as ozone, oxygen and elevated temperatures. This includes service in hot water, steam and dry heat. They are also suitable for handling popular chemicals such as ketones, alcohols, phosphate ester hydraulic fluids, glycols, dilute acids and alkalies.

High Temperature - Max. Temp. 1200°F

These braided flexible gaskets are designed specifically for the high temperature and abrasive atmospheres associated with services such as fly ash handling systems. As a replacement for asbestos, these gaskets are manufactured of a pure homogenous graphite bonded to a fiberglass carrier for strength and thermal durability. The braid over braid construction is die-formed and cut to length to fit proper coupling configurations resulting in a uniform tolerance which has proven itself as a reliable asbestos replacement.

NOTE: The non-resilient characteristic of this particular gasket material may result in a non leak-proof seal. This should be taken into consideration for this application.

WARNING NOTE: Temperature recommendations are for reference purposes only. Please consult GE Engineering for specific recommendations, product style, line content, working pressure and temperature ranges.

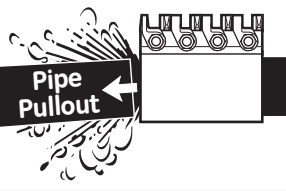
NOTE: For Severe Service conditions, see GE Gasket brochure for complete listing of corrosive content and gasket recommendations.

¹For Dresser Styles 65 and 88 fittings, the maximum temperature is 150° F

Applicable Warnings

WARNING

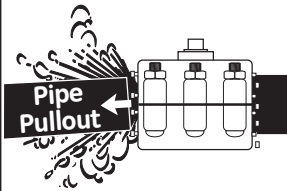
360 Clamps



When pipe pullout could occur, pipe joint **MUST** be anchored. Failure to anchor pipe joint could result in escaping line content that could ignite and cause property damage, serious injury or death.

WARNING

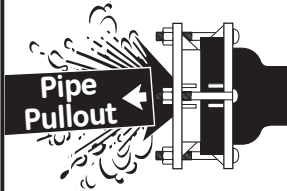
Repair Sleeves



When pipe pullout could occur, pipe joint **MUST** be anchored. Failure to anchor pipe joint could result in escaping line content that could ignite and cause property damage, serious injury or death.

WARNING

Bell Joint Clamps



When pipe pullout could occur, pipe joint **MUST** be anchored. Failure to anchor pipe joint could result in escaping line content that could ignite and cause property damage, serious injury or death.



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