

DRESSER GAS PRODUCTS DOT MANUAL

MARKING OF DRESSER GAS PRODUCTS

Dresser Products, being of a proprietary nature, are marked to conform to DOT Regulation 192.63, as follows:

FOR PRODUCTS FABRICATED FROM METALLIC MATERIALS:

1. At a pressure rating of 150 PSIG, and a temperature rating of -20 to +150° F., the product is marked with the Dresser name or trademark only.
2. At pressure ratings other than 150 PSI or temperature ratings beyond +150° F, the product is marked with the Dresser name or trademark, body material, temperature rating, pressure rating, size and style. This marking will be applied to the products or installation instructions or packaging. The gasket materials specified determine the maximum operating temperature.

FOR PRODUCTS FABRICATED FROM PLASTIC MATERIALS:

1. At a pressure rating of 125 PSIG and a temperature rating of -20 to +100°F., the product is marked with a Dresser name or trademark, size and style.
2. At pressure and temperature ratings other than 125 Psig and -20 to +100°F., the product is marked with the Dresser name or trademark, size, style, and the applicable temperature rating is marked on the product or its individual packaging instructions.

**FOR QUESTIONS AND PRODUCT ASSISTANCE
PLEASE CALL INSIDE SALES AT:
1-800-458-2393**

Dresser Manufacturing Standard

For Rubber-Gasketed Compression Fittings

Used On Pipelines Transporting Natural Gas

1. SCOPE

- 1.1 This Manufacturing Standard covers the following products manufactured by Dresser Pipeline Solutions: Styles 88, 90 & 700. (For products used on plastic pipe, see Section "Products For Plastic Pipe".)
- 1.2 Products shall form a gas-tight seal on steel, brass (copper), plastic pipe or tubing when used in accordance with manufacturer's recommendations. See Table 1 of "Pressure Ratings" Section for applicable pressure ratings.

2. MARKING

- 2.1 Each product shall be marked with manufacturer's name or trademark.

3. DIMENSIONS

- 3.1 Dimensions shall be as shown in the latest Dresser catalog, or shall be furnished to the purchaser upon request.

4. MATERIAL

4.1 Bodies

- 4.1.1 Tubing - AISI C1006 or ASTM A513 or AISI C1010 or AISI C1025 Steel.
- 4.1.2 Bar - AISI C1212 or AISI C1015 Steel.
- 4.1.3 Bar - ASTM B140 Type B Brass. (Style 88)
- 4.1.4 Castings - ASTM A197 Malleable Iron, ASTM A536 Ductile or ASTM A216 Steel
- 4.1.5 Castings - ASTM B62 Brass. (Style 88)
- 4.1.6 Plate - AISI C1006, AISI C1026 and ASTM A570.

4.2 Follower Nuts

- 4.2.1 Bar - AISI C1212 Steel.
- 4.2.2 Bar - ASTM B140 Type B Brass. (Style 88)
- 4.2.3 Casting - ASTM A 197 Malleable Iron or ASTM A536 Ductile Iron.
- 4.2.4 Casting - ASTM B62 Brass. (Style 88)

4.3 Retainer Cups

- 4.3.1 Strip - Cold-Rolled Carbon Steel or Brass ASTM B36.

Dresser Manufacturing Standard

For Rubber-Gasketed Compression Fittings

Used On Pipelines Transporting Natural Gas

4. MATERIAL (Continued from previous page)

4.4 Gaskets

- 4.4.1 Gaskets shall be rubber-compounded material that will not deteriorate from age or exposure to air under normal storage or use conditions. The rubber in the gasket shall meet the following specifications:

Color - Jet Black
Surface - Nonblooming
Durometer Hardness - 75 (\pm 5)
Tensile Strength - 1500 PSI Minimum
Elongation - 150% Minimum

The gasket shall be immune to attack by impurities normally found in natural gas such as odorants, liquid hydrocarbons, carbon dioxide and water. All gaskets shall meet the requirements of ASTM D2000.

Durometer Hardness - 82 (\pm 4)
Tensile Strength - 1000 PSI minimum
Elongation - 175% Minimum

4.4.2 Plastic Insulators

Plastic Insulators have a high dielectric strength and shall be made of a tough inert plastic material which is resistant to attack from acids, alkalis, drip oils, water and sunlight.

5. INSULATING COMPONENTS (When Insulating Components are specified)

5.1 Insulating Gaskets

- 5.1.1 Insulating gaskets shall be rubber-compounded material that will not deteriorate from age or exposure to air under normal storage or use conditions.

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Dresser Manufacturing Standard For Rubber-Gasketed Compression Fittings Used On Pipelines Transporting Natural Gas

5. INSULATING COMPONENTS (Continued from previous page)

5.1 Insulating Gaskets

5.1.1 The rubber in the gasket shall meet the following specifications:

- Color - Jet Black
- Surface - Nonblooming
- Durometer Hardness - 75 (\pm 5)
- Tensile Strength - 1500 PSI Minimum
- Elongation - 175% Minimum
- Electrical Resistance - 10,000 Megohms

The gasket shall be immune to attack by impurities normally found in natural gas such as odorants, liquid hydrocarbons, carbon dioxide and water. All gaskets shall meet the requirements of ASTM D2000.

5.2 Follower Insulators and Pipe End Separators

5.2.1 All insulators shall be dielectric materials that will not deteriorate from age or exposure to moisture, air and soil under normal storage or use conditions. The material in insulators shall meet the following specifications:

- Color - Green, White or Black
- Water Absorption - 6.7% Maximum
- Tensile Strength - 3,000 PSI Minimum
- Electrical Resistance - 10,000 Megohms

6. OPTIONAL AL-CLAD[®] COATINGS

6.1 E-Coat: Heat curable thermosetting epoxy, applied by electrophoretic deposition. (Style 90)

- Color - Black
- Thickness - 0.5 to 1.0 mils.

6.2 Plastisol: Hot-dip Plastisol type thermoplastic polyvinyl chloride. (Optional for Style 90)

- Color - Black
- Thickness - 35 mils minimum.

Dresser Manufacturing Standard

For Rubber-Gasketed Bolted Coupling Products

For 150 PSI Used On Pipelines Transporting Natural Gas and Other Gases

1. SCOPE

- 1.1 This Manufacturing Standard covers the following products manufactured by Dresser Pipeline Solutions: Styles 31, 38, 39, 39-40, Stab 38, Stab 39, Stab 39-40, Stab 40, Styles 39-62, 62, 63, 128, 167 & 711. (For products used on plastic pipe, see Section "Products for Plastic Pipe".)
- 1.2 Products shall form a gas-tight seal on steel, cast iron or plastic pipe when used in accordance with manufacturer's recommendations.

2. MARKING

- 2.1 Products shall be marked for identification with manufacturer's name or trademark.

3. DIMENSIONS

- 3.1 Dimensions shall be as shown in the latest Dresser catalog, or shall be furnished to the purchaser upon request.

4. MATERIAL

4.1 Middle Rings & Bodies

- 4.1.1 Tubing - AISI C1006, C1010, C1025 or ASTM A513 (30,000 psi min. yield)
- 4.1.2 Plate or Bar - AISI C1015 (30,000 psi min. yield)
- 4.1.3 Bar - ASME SA675
- 4.1.4 Castings - Ductile Iron, ASTM A536 or Malleable Iron, ASTM A197

4.2 Followers

- 4.2.1 Sheet, Plate or Bar - AISI C1012, ASTM A20 or A36 Steel
- 4.2.2 Bar - AISI C1021 Steel
- 4.2.3 Castings - Ductile Iron ASTM A395, A536 or Malleable Iron, ASTM A197

4.3 Bolts

- 4.3.1 Meet the minimum physical properties of ANSI/AWWA C111/A21.11

4.4 Gaskets

- 4.4.1 Gaskets shall be rubber-compounded material that will not deteriorate from age or exposure to air under normal storage or use conditions.

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Dresser Manufacturing Standard

For Rubber-Gasketed Bolted Coupling Products

For 150 PSI Used On Pipelines Transporting Natural Gas and Other Gases

4. MATERIAL (Continued from previous page)

4.4 Gaskets

4.4.1 The rubber in the gasket shall meet the following specifications:

Color - Jet Black	Surface - Nonblooming
Durometer Hardness - 75 (\pm 5)	Tensile Strength - 1500 PSI Min.
Elongation - 150% Min.	

The gaskets shall be immune to attack by impurities normally found in natural gas such as odorants, liquid hydrocarbons, carbon dioxide and water. All gaskets shall meet the requirements of ASTM D2000.

5. INSULATING COMPONENTS (When Insulating Components are specified)

5.1 Insulating Gaskets

5.1.1 Insulating gaskets shall be rubber-compounded material that will not deteriorate from age or exposure to air under normal storage or use conditions. The rubber in the gasket shall meet the following specifications:

Color - Jet Black
Surface - Nonblooming
Durometer Hardness - 75 (\pm 5)
Tensile Strength - 1500 psi Minimum
Elongation - 175% Minimum
Electrical Resistance - 10,000 Megohms

The gasket shall be immune to attack by impurities normally found in natural gas such as odorants, liquid hydrocarbons, carbon dioxide and water. All gaskets shall meet the requirements of ASTM D2000.

5.2 Follower Insulators and Pipe End Separators

5.2.1 All insulators shall be dielectric materials that will not deteriorate from age or exposure to moisture, air and soil under normal storage or use conditions.

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Dresser Manufacturing Standard

For Rubber-Gasketed Bolted Coupling Products

For 150 PSI Used On Pipelines Transporting Natural Gas and Other Gases

5. INSULATING COMPONENTS (Continued from previous page)

5.2 Follower Insulators and Pipe End Separators

5.2.1 The material in insulators shall meet the following specifications:

Color - Green, White or Black

Water Absorption - 6.7% Maximum

Tensile Strength - 3,000 PSI Minimum

Electrical Resistance - 10,000 Megohms

6. OPTIONAL COATINGS

6.1 E-Coat: Heat curable thermosetting epoxy, applied by electrophoretic deposition.

Color - Black

Thickness - 0.5 to 1.0 mils.

6.2 Shop-Coat: Sprayed or dipped water base primer.

Color - Red

6.3 Epoxy Powder Coat: Heat cured, fusion bonded, thermosetting epoxy powder.

Color - Light Gray

Thickness - 5 mils minimum.

7. TESTING

7.1 Products shall meet the applicable requirements of Federal Register Title 49, DOT Part 192

Dresser Manufacturing Standard

Clamps and Saddles

Used On Pipelines Transporting Natural Gas

1. SCOPE

- 1.1 This Manufacturing Standard covers the following products manufactured by Dresser Pipeline Solutions: Styles 77, 79, 91, 118, 360, 364, 8360, and 8364.
- 1.2 Products shall form a gas-tight seal on steel or cast iron pipe when used in accordance with manufacturer's recommendations. See Table 1 of "Pressure Ratings" Section for applicable pressure ratings.

2. MARKING

- 2.1 Each product shall be marked for identification with the manufacturer's name or trademark.

3. DIMENSIONS

- 3.1 Dimensions shall be as shown in the latest Dresser catalog, or shall be furnished to the purchaser upon request.

4. MATERIAL

4.1 Body

- 4.1.1 AISI C 1012 Steel Strip. (Styles 77 & 79)
- 4.1.2 ASTM A536 Ductile Iron or ASTM A197 Malleable Iron. (Style 91)
- 4.1.3 18-8 Stainless Steel. (Styles 118, 360, 364, 8360 and 8364)

4.2 Bolts & Stirrups

- 4.2.1 Meet the minimum physical properties of ANSI/AWWA C111/A21.11.

4.3 Gaskets (Rubber)

- 4.3.1 Styles 77, 79 and 91 gaskets shall be rubber-compounded material that will not deteriorate from age or exposure to air under normal storage or use conditions. The rubber in the gasket shall meet the following specifications:

Color - Jet Black	Tensile Strength - 1500 PSI Min.
Surface - Nonblooming	Elongation - 150% Min.
Durometer Hardness - 75 (±5)	

The gaskets shall be immune to attack by impurities normally found in natural gas such as odorants, liquid hydrocarbons, carbon dioxide and water. All gaskets shall meet the requirements of ASTM D2000.

Dresser Manufacturing Standard

Clamps and Saddles

Used On Pipelines Transporting Natural Gas

4. MATERIAL (Continued from previous page)

4.3.2 Style 118, 360, 364, 8360 and 8364 gaskets shall be rubber-compounded material that will not deteriorate from age or exposure to air under normal storage or use conditions. Rubber in the gasket shall meet the following specifications:

Color - Jet Black	Tensile Strength - 1000 PSI Min.
Surface - Nonblooming	Elongation - 400% Min.
Durometer Hardness - 50 (± 5)	

Style 118, 360, 364, 8360 and 8364 gaskets shall be immune to attack by impurities normally found in natural gas such as odorants, liquid hydrocarbons, carbon dioxide and water.

4.4 Lugs

4.4.1 AISI C1012 Steel

4.4.2 ASTM A197 Malleable Iron, ASTM A536 Ductile Iron, or ASTM A216, ASTM A351 Cast Steel.

5. OPTIONAL COATINGS

5.1 E-Coat: Heat curable thermosetting epoxy, applied by electrophoretic deposition.
Color - Black
Thickness - 0.5 to 1.0 mils.

5.2 Shop-Coat: Sprayed or dipped water base primer.
Color - Red

5.3 Epoxy Powder Coat: Heat cured, fusion bonded, thermosetting epoxy powder.
Color - Light Gray
Thickness - 5 mils minimum.

6. TESTING

6.1 All castings exposed to line content shall be air-tested to insure that the casting is gas-tight.

Dresser Manufacturing Standard

For Rubber-Gasketed Split Tapping and Repair Sleeves Used On Pipelines Transporting Natural Gas

4. MATERIAL (Continued from previous page)

4.5 Gaskets

4.5.1 Gaskets shall be rubber-compounded material that will not deteriorate from age or exposure to air under normal storage or use conditions. The rubber in the gasket shall meet the following specifications:

Durometer Hardness - 70 plus or minus 5
Tensile Strength - 1000 psi Minimum
Elongation- 200% minimum

The gaskets shall be immune to attack by impurities normally found in natural gas such as odorants, liquid hydrocarbons, carbon dioxide and water.

5. INSULATING COMPONENTS (when insulating components are specified)

5.1 Insulating Gaskets

5.1.1. Insulating gaskets shall be rubber compounded material that will not deteriorate from age or exposure to air under normal storage or use conditions. The rubber in the gasket shall meet the following specifications:

Color - Jet Black
Surface - Nonblooming
Durometer Hardness - 75 plus or minus 5
Tensile Strength - 1500 psi Minimum
Elongation - 175% Minimum
Electrical Resistance - 10,000 Megohms

The gasket shall be immune to attack by impurities normally found in natural gas such as odorants, liquid hydrocarbons, carbon dioxide and water. All gaskets shall meet the requirements of ASTM D2000.

5.2 Follower Insulators and Pipe End Separators

5.2.1 All insulators shall be dielectric materials that will not deteriorate from age or exposure to moisture, air and soil under normal storage or use conditions. The material in insulators shall meet the following specifications:

Color - Green, White or Black
Water Absorption - 6.7% Maximum
Tensile Strength - 3,000 psi Minimum
Electrical Resistance - 10,000 Megohms

Dresser Manufacturing Standard

For Rubber-Gasketed Split Tapping and Repair Sleeves

Used On Pipelines Transporting Natural Gas

6. OPTIONAL COATINGS

- 6.1 E-Coat: Heat curable thermosetting epoxy, applied by electrophoretic deposition.
Color - Black
Thickness - 0.5 to 1.0 mils.
- 6.2 Shop-Coat: Sprayed or dipped water-base primer.
Color - Red
- 6.3 Epoxy Powder Coat: Heat cured, fusion bonded, thermosetting epoxy powder.
Color - Light Gray
Thickness - 5 mils minimum.

7. TESTING

- 7.1 Sleeve shall be air-tested to ensure that castings are porosity-free.
- 7.2 Products shall meet the applicable requirements of Federal Register Title 49, Department of Transportation Part 192.
- 7.3 Sleeves shall be hydro-tested to 2x the rated pressure in Table 1:
"Pressure Ratings" Section.