

EF X BF ADAPTER (EF)

COSMOIND's HDPE Molded EF x BF Adapters are the result of our in-house manufacturing expertise, which includes mold design, production and extensive testing. Made from High-Density Polyethylene (HDPE, PE4710/PE2708, PE100/PE80), these EF x BF Adapters are engineered to be fully pressure-rated, ensuring superior quality and exceptional performance



ADVANTAGE OF HDPE

HDPE offers high strength, chemical and water resistance, lightweight and impact durability, is environmentally friendly, and performs well within a specific temperature range, making it suitable for various long-term applications.

MANUFACTURED IN ACCORDANCE WITH:

- AWWA C901** Polyethylene (PE) Pressure Pipe and Tubing, 3/4 In. Through 3 In. for Water Service
- AWWA C906** Polyethylene (PE) Pressure Pipe and Fittings, 4 In. Through 65 In. for Waterworks
- ASTM D2513** Standard Specification for Polyethylene (PE) Gas Pressure Pipe, Tubing, Fittings
- ASTM D3350** Standard Specification for Polyethylene Plastics Pipe and Fittings Materials
- ASTM F1055** Standard Specification for Electrofusion Type Polyethylene Fittings
- ISO 4427-1** Plastics piping systems for water supply and for drainage and sewerage under pressure - Part 1 : General
- ISO 4427-3** Plastics piping systems for water supply and for drainage and sewerage under pressure - Part 3 : Fittings
- ISO 4437-1** Plastics piping systems for the supply of gaseous fuels - Part 1 : General
- ISO 4437-3** Plastics piping systems for the supply of gaseous fuels - Part 3 : Fittings

TESTED IN ACCORDANCE WITH:

- ASTM D638** Standard Test Method for Tensile Properties of Plastics
- ASTM D1598** Standard Test Method for Time-to-Failure of Plastic Pipe Under Constant Internal Pressure
- ASTM D1599** Standard Test Method for Resistance to Short-Time Hydraulic Pressure of Plastic Pipe, Tubing, and Fittings
- ASTM D2513** Standard Specification for Polyethylene (PE) Gas Pressure Pipe, Tubing, Fittings
- ASTM F1055** Standard Test Method for Electrofusion Type Polyethylene Fittings
- ISO 1167-1** Determination of the resistance to internal pressure - Part 1 : General method
- ISO 1167-4** Determination of the resistance to internal pressure - Part 4 : Preparation of assemblies
- ISO 13950** Plastics pipes and fittings - Automatic recognition systems for electrofusion joints
- ISO 13951** Test method for the resistance of plastic pipe/pipe or pipe/fitting assemblies to tensile loading
- ISO 13954** Peel decohesion test for polyethylene electrofusion assemblies
- ISO 13955** Crushing decohesion test for polyethylene electrofusion assemblies
- ISO 11357-6** Determination of oxidation induction time and oxidation induction temperature
- ISO 1133-1** Determination of the melt mass-flow rate and melt volume-flow rate of thermoplastics - Part 1 : Standard method



COSMOIND USA

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RAW MATERIALS

COSMOIND's EF x BF Adapters are produced utilizing a bimodal high-density polyethylene (HDPE) compound. This advanced material formulation not only delivers exceptional performance in aspects such as strength, toughness, processability, durability, impact resistance and stability but also exhibits superior mechanical properties and environmental resilience, thereby guaranteeing long-term reliability and performance.

PRODUCTION RANGE (SIZE / SDR)

SIZE 3/4" IPS to 1-1/4" IPS // 25mm to 40mm

SDR 11 (Other SDR's is available upon request.)

PRESSURE CLASS

| SDR | PE4710 for Industrial | | | | PE4710 for Gas |
|-----|-----------------------|---------|---------|---------|----------------|
| | 73.4°F | 100°F | 120°F | 140°F | 73.4°F |
| 11 | 200 psi | 156 psi | 126 psi | 100 psi | 125 psi |
| 17 | 125 psi | 98 psi | 79 psi | 63 psi | 80 psi |

| SDR | PE2708 for Industrial | | | | PE2708 for Gas |
|-----|-----------------------|---------|---------|--------|----------------|
| | 73.4°F | 100°F | 120°F | 140°F | 73.4°F |
| 11 | 160 psi | 124 psi | 100 psi | 80 psi | 100 psi |
| 17 | 100 psi | 78 psi | 63 psi | 50 psi | 62.5 psi |

| SDR | PE100 for Industrial | | | | PE100 for Gas |
|-----|----------------------|----------|-----------|-----------|---------------|
| | 20°C | 30°C | 40°C | 50°C | 20°C |
| 11 | 16 bar | 13.6 bar | 11.68 bar | 10.08 bar | 10 bar |
| 17 | 10 bar | 8.5 bar | 7.3 bar | 6.3 bar | 6.25 bar |

| SDR | PE80 for Industrial | | | | PE80 for Gas |
|-----|---------------------|-----------|----------|----------|--------------|
| | 20°C | 30°C | 40°C | 50°C | 20°C |
| 11 | 12.5 bar | 10.62 bar | 9.12 bar | 7.87 bar | 8 bar |
| 17 | 8 bar | 6.8 bar | 5.84 bar | 5.04 bar | 5 bar |

APPLICATIONS

| | | |
|----------------------------|------------------|-----------------------|
| Water Supply | Gas Distribution | Sewerage and Drainage |
| Irrigation | Industrial | Geothermal |
| Landscaping | Mining | Renewable Energy |
| Chemical and Petrochemical | Construction | Marine and Offshore |
| Waste Management | Telecom Conduit | Electrical Cable |