## Polyethylene Tubing

### Series E: Instrument Grade – FDA, NSF Listed
### Series EB: Ultraviolet Light Resistant

### Features
- Made from 100% virgin resin material
- Chemically resistant and flexible
- High molecular weight resin provides increased dimensional stability, uniformity and long-term strength
- Economical system solution

### Certifications
- FDA compliant for food contact
- ASTM D-1693 (10% IGEPAL) for stress crack resistance
- NSF – 51
- NSF – 61

### Applications/Markets
- Potable water
- Chemical transfer
- Low-pressure pneumatics

### Polyethylene Tubing Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Tube O.D.</th>
<th>Tube I.D.</th>
<th>Average Wall Thickness</th>
<th>Working Pressure at 73°F /23°C</th>
<th>Minimum Burst at 73°F /23°C</th>
<th>Package Quantity</th>
<th>Minimum Bend Radius</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural</td>
<td>Black</td>
<td>inch</td>
<td>mm</td>
<td>inch</td>
<td>mm</td>
<td>psi bar</td>
<td>psi bar</td>
<td>lbs./ft.</td>
</tr>
<tr>
<td>E-43-XXXX</td>
<td>1/4</td>
<td>.170</td>
<td>.40</td>
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<td>120</td>
<td>8.3</td>
<td>480</td>
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<td>.46</td>
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<td>145</td>
<td>10.0</td>
<td>580</td>
<td>28.7</td>
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<tr>
<td>E-64-XXXX</td>
<td>3/8</td>
<td>.250</td>
<td>.62</td>
<td>1.6</td>
<td>125</td>
<td>8.6</td>
<td>500</td>
<td>31.8</td>
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<tr>
<td>E-86-XXXX</td>
<td>1/2</td>
<td>.375</td>
<td>.95</td>
<td>1.6</td>
<td>90</td>
<td>6.2</td>
<td>360</td>
<td>63.5</td>
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<tr>
<td>E-108-XXXX</td>
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<td>.500</td>
<td>1.6</td>
<td>1.6</td>
<td>70</td>
<td>4.8</td>
<td>280</td>
<td>101.6</td>
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Package quantities vary by size and color.

<table>
<thead>
<tr>
<th>Standards</th>
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<tbody>
<tr>
<td>Natural</td>
<td>.011</td>
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<tr>
<td>Black</td>
<td>.016</td>
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<tr>
<td>E-43-XXXX</td>
<td>.020</td>
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<tr>
<td>E-53-XXXX</td>
<td>.030</td>
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<tr>
<td>E-64-XXXX</td>
<td>.025</td>
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<tr>
<td>E-86-XXXX</td>
<td>.037</td>
</tr>
<tr>
<td>E-108-XXXX</td>
<td>.034</td>
</tr>
<tr>
<td>Natural</td>
<td>.051</td>
</tr>
</tbody>
</table>

Standard black is not NSF approved.

For detailed ordering information, please consult price list or contact Parflex® Division.
Order Information

Example: E-64-Y-0500

E-64-Y-0500 – Polyethylene
E-64-Y-0500 – Tube O.D. in sixteenths of an inch (3/8")
E-64-Y-0500 – Tube I.D. in sixteenths of an inch (.250")
E-64-Y-0500 – Color, i.e. Yellow (Omit for Natural and Black)
E-64-Y-0500 – Natural Polyethylene
EB-64-0500 – Black Polyethylene
E-64-Y-0500 – Package Quantity in feet (500')

Available in black as well as nine other colors, as recommended by the Instrument Society of America

<table>
<thead>
<tr>
<th>Color Code</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>Natural</td>
</tr>
<tr>
<td>•</td>
<td>Black</td>
</tr>
<tr>
<td>●</td>
<td>B Blue</td>
</tr>
<tr>
<td>▲</td>
<td>G Green</td>
</tr>
<tr>
<td>◆</td>
<td>O Orange</td>
</tr>
<tr>
<td>▼</td>
<td>P Purple</td>
</tr>
<tr>
<td>◊</td>
<td>R Red</td>
</tr>
<tr>
<td>⌑</td>
<td>GRA Gray</td>
</tr>
<tr>
<td>●</td>
<td>Y Yellow</td>
</tr>
<tr>
<td>○</td>
<td>WHT White</td>
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</table>

Polyethylene Tubing (Series E)
Maximum Working Pressure (psig)

Fittings
Parker fittings available from:
Fluid System Connectors Division
Otsego, MI
(269) 692-6555
(269) 694-4614 FAX

FSC Product Families:
- Compression
- Compress-Align®
- Poly-Tite
- Hi-Duty
- Fast & Tite
- Flow Control
- Prestolok Brass
- Prestolok Composite
- Liquifit
- TrueSeal™
- Dubl-Barb®
- Prestomatic
- SAE Cartridge

A tube support should be used with this tubing for maximum holding power where end loading, vibration or pressure spikes may occur. Reference Tubing/Fitting Compatibility Chart (pg. B-6)

Notes
- FDA, NSF-51 and NSF-61 compliant black polyethylene tubing is also available. Add -NSF suffix to the EB part number (ie. EB-64-0500-NSF)
- E series natural and colored tubing meet FDA, NSF-51 requirements for food contact applications and NSF-61 for potable water
- Resistant to environmental stress cracking exceeding that of ordinary polyethylene tubing as measured by ASTM D-1693 (10% IGEPAL)
- Black (EB) tubing contains an ultraviolet inhibitor which is recommended for use in sunlit areas and in close proximity to high ultraviolet light sources
- All tubing conforms to ASTM D-1248, Type I, Class A, Category 4, Grade E5
- The recommended operating temperature range for service at rated pressures with compatible fluids is -80°F to +150°F (-62°C to +66°C)

Colors
- See Color Code Table
Metric Polyethylene Tubing
Series E: Instrument Grade – FDA, NSF Listed
Series EB: Ultraviolet Light Resistant

Features
- Made from 100% virgin resin material
- Chemically resistant and flexible
- High molecular weight resin provides increased dimensional stability, uniformity and long-term strength
- Economical system solution

Certifications
- FDA compliant for food contact
- ASTM D-1693 (10% IGEPAL) for stress crack resistance
- NSF – 51
- NSF – 61

Applications/Markets
- Potable water
- Chemical transfer
- Low-pressure pneumatics

<table>
<thead>
<tr>
<th>Part Number</th>
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<th>Average Wall Thickness</th>
<th>Working Pressure at 73°F /23°C</th>
<th>Minimum Burst at 73°F /23°C</th>
<th>Package Quantity</th>
<th>Minimum Bend Radius</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-6X1-0100</td>
<td>EB-6X1-0100</td>
<td>.236</td>
<td>.157</td>
<td>.039</td>
<td>8.6 125</td>
<td>34.5 500</td>
<td>0100</td>
<td>25</td>
<td>.019</td>
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<td>E-8X1-0100</td>
<td>EB-8X1-0100</td>
<td>.315</td>
<td>.236</td>
<td>.039</td>
<td>6.9 100</td>
<td>27.6 400</td>
<td>0100</td>
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<td>.021</td>
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<td>E-10X1.5-0100</td>
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<td>.276</td>
<td>.059</td>
<td>8.6 125</td>
<td>34.5 500</td>
<td>0100</td>
<td>38</td>
<td>.039</td>
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<td>E-12X1.5-0100</td>
<td>EB-12X1.5-0100</td>
<td>.472</td>
<td>.354</td>
<td>.059</td>
<td>6.2 100</td>
<td>24.8 400</td>
<td>0100</td>
<td>63</td>
<td>.048</td>
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</tbody>
</table>

Standard black is not NSF approved.
**Fitting Recommendations**

Parker fittings available from:
Fluid System Connectors Division
Otsego, MI
(269) 692-6555
(269) 694-4614 FAX

FSC Product Families:
- Metru-Lok™
- Flow Control
- Prestolok Brass
- Prestolok Composite
- Prestomatic

A tube support should be used with this tubing for maximum holding power where end loading, vibration or pressure spikes may occur. Reference Tubing/Fitting Compatibility Chart (pg. B-6)

**Notes**

- E series natural and colored tubing listed below meet FDA, NSF-51 requirements for food contact applications and NSF-61 for potable water
- Resistant to environmental stress cracking exceeding that of ordinary polyethylene tubing as measured by ASTM D-1693 (10% IGEPAL)
- Black (EB) tubing contains an ultraviolet inhibitor which is recommended for use in sunlit areas and in close proximity to high ultraviolet light sources
- All tubing conforms to ASTM D-1248, Type I, Class A, Category 4, Grade E5
- The recommended operating temperature range for service at rated pressures with compatible fluids is -80°F to +150°F (-62°C to +66°C)

**Colors**

- Natural
- Black

**Metric Polyethylene Tubing (Series E)**

Maximum Working Pressure (bar)

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**Order Information**

**Example: E-8x1-0100**

- E-8x1-0100 – Metric Polyethylene (Natural)
- EB-8x1-0100 – Metric Polyethylene (Black)
- E-8x1-0100 – Tube O.D. in millimeters (8 mm)
- E-8x1-0100 – Tube Wall Thickness in millimeters (1 mm)
- E-8x1-0100 – Package Quantity in feet (100')
Polyethylene Tubing
Series PEFR: Flame Resistant

Features
- Excellent stress crack resistance

Certifications
- UL 94 V-2
- ASTM D-1693 (10% IGEPAL) for stress crack resistance

Applications/Markets
- Pneumatic controls in HVAC applications

### Polyethylene Tubing Series PEFR: Flame Resistant

**Features**
- Excellent stress crack resistance

**Certifications**
- UL 94 V-2
- ASTM D-1693 (10% IGEPAL) for stress crack resistance

### Part Number

<table>
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<tr>
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<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEFR-2.5-XXXX</td>
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<td>4.0</td>
<td>.096</td>
<td>.030</td>
<td>2.4</td>
<td>.076</td>
<td>185</td>
<td>12.8</td>
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<td>PEFR-4-XXXX</td>
<td>1/4</td>
<td>6.4</td>
<td>.170</td>
<td>.040</td>
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<tr>
<td>PEFR-6-XXXX</td>
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<td>.062</td>
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<tr>
<td>PEFR-8-XXXX</td>
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<td>.062</td>
<td>9.5</td>
<td>1.6</td>
<td>100</td>
<td>6.9</td>
</tr>
</tbody>
</table>

**Applications/Markets**
- Pneumatic controls in HVAC applications
**Flame Resistant Polyethylene Tubing**

**Order Information**

Example: PEFR-4-0500

- **PEFR-4-0500** – **Flame Resistant Polyethylene**
- **PEFR-4-0500** – **Tube O.D.** in sixteenths of an inch (1/4")
- **PEFR-4-0500** – **Package Quantity** in feet (500')

**Flame Resistant Polyethylene Tubing**

**(Series PEFR) Maximum Working Pressure (psig)**

-Fitted with reinforced polyethylene tubing for added flexibility.

**Fittings**

Parker fittings available from:
Fluid System Connectors Division
Otsego, MI
(269) 692-6555
(269) 694-4614 FAX

- FSC Product Families:
- Compression
- Compress-Align®
- Hi-Duty
- Fast & Tite
- Flow Control
- Prestolok Brass
- Dubl-Barb®

A tube support should be used with this tubing for maximum holding power where end loading, vibration or pressure spikes may occur. Reference Tubing/Fitting Compatibility Chart (pg. B-6)

**Notes**

Using the same base linear low-density polyethylene (LLDPE) as the E-Series tubing, Parker Hannifin, Parflex Division’s PEFR tubing has the following advantages:

- Resistant to environmental stress cracking exceeding that of ordinary polyethylene tubing as measured by ASTM D-1693 (10% IGEPAL)
- The recommended operating temperature range for service at rated pressures with compatible fluids is -85°F to +150°F (-65°C to +66°C)

**Colors**

- Black
Polyethylene Tubing
Series HDPE: High Density

Features
- Manufactured from high strength, high density polyethylene
- Semi-rigid tubing that is inherently resistant to most chemicals, less easily cut or damaged and has a higher burst pressure rating than Series E tubing
- Economical system solution

Applications/Markets
- Chemical transfer
- Low-pressure pneumatics

<table>
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<tr>
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<th>Package Quantity</th>
<th>Minimum Bend Radius</th>
<th>Weight</th>
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<tbody>
<tr>
<td>HDPE-43-XXXX</td>
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<td>6.4</td>
<td>.170</td>
<td>4.3</td>
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<tr>
<td>HDPE-64-XXXX</td>
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<td>6.4</td>
<td>.062</td>
<td>1.6</td>
<td>300</td>
<td>20.7</td>
</tr>
</tbody>
</table>

Only available in black.

For detailed ordering information, please consult price list or contact Parflex® Division.