No other company in the industry rivals PureFlex’s product integration. Using the most advanced manufacturing techniques, PureFlex integrates design, hose and fitting manufacturing, testing and assembly—all under one roof. Add the largest selection of end fittings and it’s easy to see why PureFlex is the company of choice for those with demanding transfer processes.

**FLEXCHEM HOSE**

FlexChem is one of the industry’s most versatile, rubber covered FEP-lined transfer hoses. It is designed for full flow applications that require maximum flexibility, minimum weight high purity. This smooth bore FEP hose with its EPDM rubber cover is easy to handle and resists abrasion and chemical attack while it facilitates easy cleanability. The smooth, rubber cover makes it easy for operators to safely grip and handle the hose.

FlexChem hose incorporates a FEP, smooth bore design which gives it superior flexibility. Through a proprietary process, the FEP liner is bonded, covered and reinforced with multi-layered rubber, spiral-wound polyester cords and a double helix wire which gives it superior flexibility. Grounding is possible via its internal wires.

This wire helix “back bone” also supports full vacuum service. FlexChem series hose is available in white FEP or a PTFE conductive black liner where electrostatic dissipation is required. To ensure continuous fluid contact with FEP throughout the hose assembly, the FEP liner can be factory flared through: flanges; sanitary fittings; male and female cams.

**FLEXCHEM ADVANTAGES**

- **Corrosion Resistant.** FEP & PTFE are fully resistant to the broadest range of industrial chemicals and have a zero corrosion rate and lower life cycle cost.
- **Cleanable.** Non-stick, low porosity tube does not trap bacteria and can be cleaned with steam, detergents, caustics or solvents.
- **Sanitary.** FDA-approved materials meet or exceed 3A requirements.
- **Compatible.** Will not contaminate or impart a taste, color or odor to any media.
- **Flexible.** The most flexible rubber covered hose in the industry. Does not fatigue or stress corrode like metal hose.
- **Durable.** Designed for extended use in hostile environments involving severe chemical, thermal, and mechanical stresses. Does not suffer aging or embrittlement, even with extreme thermal cycling.

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>I.D. NOMINAL (in)</th>
<th>O.D. NOMINAL</th>
<th>WORKING PRESSURE (psi)</th>
<th>MIN. BURST PRESSURE (psi)</th>
<th>VACUUM RATING (in. Hg)</th>
<th>MIN. BEND RADIUS (in)</th>
<th>WEIGHT PER FOOT (lbs)</th>
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</thead>
<tbody>
<tr>
<td>1/2</td>
<td>0.95</td>
<td>500</td>
<td>2000</td>
<td>29.9</td>
<td>2.65</td>
<td>0.34</td>
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<tr>
<td>3/4</td>
<td>1.25</td>
<td>500</td>
<td>2000</td>
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<td>3.50</td>
<td>0.51</td>
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<tr>
<td>1</td>
<td>1.55</td>
<td>450</td>
<td>1800</td>
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<td>4.00</td>
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<td>375</td>
<td>1500</td>
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<tr>
<td>1-1/2</td>
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<td>350</td>
<td>1400</td>
<td>29.9</td>
<td>10.50</td>
<td>0.99</td>
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<tr>
<td>2</td>
<td>2.68</td>
<td>300</td>
<td>1200</td>
<td>29.9</td>
<td>13.00</td>
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<tr>
<td>3</td>
<td>3.88</td>
<td>250</td>
<td>1000</td>
<td>29.9</td>
<td>21.00</td>
<td>2.46</td>
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<td>4</td>
<td>5.00</td>
<td>175</td>
<td>700</td>
<td>29.9</td>
<td>39.00</td>
<td>3.50</td>
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<tr>
<td>6</td>
<td>7.13</td>
<td>100</td>
<td>400</td>
<td>29.9</td>
<td>58.00</td>
<td>4.75</td>
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</tbody>
</table>

Temperature Range: -40 °F (-40 °C) to 350 °F (177 °C)
SCUFF SLEEVE
Protects hose exterior from damage when dragged over rough surfaces.

FIRE SLEEVE
Protects hose from extreme exterior temperatures. Used for insulating hose. Protects personnel who handle the hose from extreme interior temperatures.

POLYOLEFIN
Provides a smooth, cleanable covering over braided hose.

ARMOR GUARD
Protects hose from kinking by not allowing handler to exceed the bend radius.

SPRING GUARD
Provides kink resistance and protects hose exterior from scuffing and damage when dragged over rough surfaces.

HDPE ARMOR
Provides kink and wear protection during rough handling. Available in (8) colors for color coding and is the only protective cover that can be installed on an existing assembly.

HOSE END CONNECTIONS
Over 40 standard fitting styles are manufactured including: flanged, sanitary, JIC, NPT and Cam Lock. All fittings feature PureFlex’s exclusive high performance barb design (see page 5).

SURFACE FINISHES
Ultra smooth internal surface finishes meet or exceed Pharmacopoeia Class VI, FDA. USDA and 3A standards.

FLARE-THRU
The thick, FEP tube can be passed through the end fitting and flared radially outward against the sealing face of the following fittings:

7 Sanitary 8 Flanged 9 Female Cam, and Male Cam (not picture.)
**Fittings and Materials**

PureFlex fittings and collars are manufactured specifically for plastic lined hoses. Applying the highest quality standards, they are designed for compatibility with most manufacturers' true-bore plastic hoses including smooth bore, concoluted, cuffed and rubber-covered plastic lined.

In addition, PureFlex has designed and manufactured the most diverse fitting and collar selection in the industry.

All fitting styles may not be available for all hose types.

**Fitting Materials**

A wide range of fitting materials include carbon steel, 304 S.S., 316 S.S., Monel®, Hastelloy®, solid Kynar® (PVDF), or solid polypropylene. Other materials available upon request.

To achieve maximum plastic hose performance, specify PureFlex encapsulated fittings available in PFA. Advantages include zero corrosion rates and lower lifecycle costs.
**PUREFLEX “HIGH PERFORMANCE” FITTING BARB DESIGN**

- Double-sided, patent pending barb design locks fittings securely into hose.
- Fitting barb height and angles are tightly controlled to eliminate tearing and splitting of plastic hose during assembly, fabrication, and operation.
- Optimizes pressure and sealing capabilities.
- Eliminates: cold flowing of the liner around fittings; hose shifting in both directions; fitting blow off.
- Smooth transition between fitting and hose eliminates product entrapment.
- Easy-to-assemble collar and fitting “dog lock” design.

**TRI-LOC™ ULTIMATE BLOW OFF PREVENTION**

- **Dog Lock**
- **Barbed Collar**
- **Double Sided Barbs**

*FlexChem hose shown above.*
**HOW TO ORDER**

**Assembly End to End Length**

**Assembly Length**

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**PUREFLEX® INC. HOSE ASSEMBLY NUMBERING SYSTEM**

Steps to order a 1” FlexChem Assembly with a length of 12”, 316 S.S. Male NPT one end, 316 S.S. JIC other end. No options.

Sample part number: 16G036309001200

### Step 1
**Determine Size**

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
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<tr>
<td>16</td>
<td>1”</td>
</tr>
<tr>
<td>08</td>
<td>1/2”</td>
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<tr>
<td>12</td>
<td>3/4”</td>
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<tr>
<td>20</td>
<td>1”</td>
</tr>
<tr>
<td>24</td>
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<tr>
<td>32</td>
<td>2”</td>
</tr>
<tr>
<td>48</td>
<td>4”</td>
</tr>
<tr>
<td>96</td>
<td>6”</td>
</tr>
</tbody>
</table>

### Step 2
**Determine hose product code: G**

- **FlexChem Color Code**
  - G = Green (standard)
  - Y = Gray
  - W = Yellow
  - B = Black
  - L = Blue
  - A = Purple
- **Other colors available upon request.**

### Step 3
**Determine Fitting Style of 1st End:**

- **03 = Male NPT**
- **04 = Male pipe NPT**
- **06 = Female pipe NPT**
- **30 = JIC female swivel**
- **33 = Male union (NPT)**
- **36 = Female union (NPT)**
- **37 = Female swivel NPSH**

### Step 4
**Determine Fitting Material: 6 = 316 S.S.**

- **4 = 304 S.S.**
- **6 = 316 S.S.**
- **C = Carbon Steel**
- **T = TFE encapsulated**
- **H = Hastelloy**
- **M = Monel**
- **A = Alloy 20**
- **K = Kynar**
- **P = Polypropylene**

### Step 5
**Determine Fitting Style of 2nd End:**

- **30 = JIC**
- **03 = Male pipe hex NPT**
- **04 = Male pipe NPT**
- **06 = Female pipe NPT**
- **30 = JIC female swivel**
- **33 = Male union (NPT)**
- **36 = Female union (NPT)**
- **37 = Female swivel NPSH**

### Step 6
**Determine Overall Length of SmoothFlex hose in inches:**

- **0120 = 12”**

### Step 7
**Determine Flange Material: 0 = None**

- **0 = None**
- **D = Ductile iron**
- **C = Carbon steel**
- **4 = 304 S.S.**
- **6 = 316 S.S.**
- **K = Kynar**
- **P = Polypropylene**

### Step 8
**Determine Options:**

- **0 = None**
- **B = Conductive**
- **Z = 300# Flg**
- **L = Locking female cam**
- **S = Spring guard**
- **A = Armor guard**
- **F = Firesleeve**
- **P = Polyolefin**
- **T = TFE shrink**
- **H = Hypalon**
- **N = Nylon scuff guard**

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**PureFlex     616.554-1100   Fax 616.554-3633   www.pureflex.com**