DEMAND PureFlex™ QUALITY

FLEXCHEM™ SERIES

RUBBER COVERED, FEP & PTFE LINED TRANSFER HOSES

Phone: (616) 554-1100 • Fax: (616) 554-3633
Web site: www.pureflex.com
PUREFLEX INNOVATION
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 has a zero corrosion rate and lower life cycle costs.
- **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.

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>Temperature Range: -40°F (-40°C) to +300°F (150°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2</td>
<td>0.95</td>
</tr>
<tr>
<td>3/4</td>
<td>1.25</td>
</tr>
<tr>
<td>1</td>
<td>1.55</td>
</tr>
<tr>
<td>1-1/4</td>
<td>1.75</td>
</tr>
<tr>
<td>1-1/2</td>
<td>2.13</td>
</tr>
<tr>
<td>2</td>
<td>2.68</td>
</tr>
<tr>
<td>3</td>
<td>3.88</td>
</tr>
<tr>
<td>4</td>
<td>5.00</td>
</tr>
<tr>
<td>6</td>
<td>7.13</td>
</tr>
</tbody>
</table>

Operating pressure ratings are one fourth the minimum burst pressure at +70°F (21°C).
Pressure and vacuum ratings are based at +70°F (21°C).
**HOSE COVER OPTIONS**

1. **SCUFF SLEEVE**
   - Protects hose exterior from damage when dragged over rough surfaces.

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

3. **POLYOLEFIN**
   - Provides a smooth, cleanable covering over braided hose.

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

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

---

**HOSE END CONNECTIONS**

Over 40 standard fitting styles are manufactured including: flanged, sanitary, JIC, NPT, 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: 6 Sanitary, 7 Flanged, 8 Female Cam, and Male Cam (not pictured).
FITTINGS
PureFlex fittings and collars are manufactured specifically for PTFE and plastic-lined hoses. Applying the highest quality standards, they are designed for compatibility with most manufacturers' true-bore plastic hoses including smooth bore, convoluted, 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**

1. Dog lock
2. Barbed collar
3. Double sided barbs

FlexChem hose shown above.
### HOW TO ORDER

**Step 1**
Determine size:
- 16 = 1”
- 08 = 1/2”
- 12 = 3/4”
- 16 = 1”
- 20 = 1-1/4”
- 24 = 1-1/2”
- 32 = 2”
- 48 = 3”
- 64 = 4”
- 96 = 6”

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

<table>
<thead>
<tr>
<th>FlexChem Color Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>Green (standard)</td>
</tr>
<tr>
<td>Y</td>
<td>Gray</td>
</tr>
<tr>
<td>W</td>
<td>Yellow</td>
</tr>
<tr>
<td>B</td>
<td>Black</td>
</tr>
<tr>
<td>L</td>
<td>Blue</td>
</tr>
<tr>
<td>A</td>
<td>Purple</td>
</tr>
</tbody>
</table>

Other colors available upon request.

**Step 3**
Determine fitting style of 1st end:
- 03 = Male NPT
- 04 = Male pipe NPT
- 05 = Female pipe NPT
- 30 = JIC female swivel
- 33 = Male union (NPT)
- 36 = Female union (NPT)
- 37 = Female swivel NPSH
- 05 = Flange retainer
- 15 = Flange retainer P-series
- 20 = Flare thru flange
- 07 = Female cam lock “D”
- 27 = Enc. female cam lock “D”
- 08 = Male cam lock “E”
- 28 = Enc. male cam lock “E”
- 31 = O-ring female swivel “D”
- 23 = Compression adapter
- 39 = Compression connector w/nut & ferrule
- 18 = Tube butt weld
- 19 = Pipe butt weld
- 40 = Sanitary tri-clamp
- 40F = Sanitary flare thru
- 41 = Sanitary step-up
- 42 = Sanitary mini
- 43 = I-line male
- 49 = I-line female
- 45 = Bevel seat female
- 46 = Bevel seat male

**Step 4**
Determine fitting material: 6 = 316SS

- 4 = 304SS
- 6 = 316SS
- 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
- 05 = Flange retainer
- 15 = Flange retainer P-series
- 20 = Flare thru flange
- 07 = Female cam lock “D”
- 27 = Enc. female cam lock “D”
- 08 = Male cam lock “E”
- 28 = Enc. male cam lock “E”
- 31 = O-ring female swivel “D”
- 23 = Compression adapter
- 39 = Compression connector w/nut & ferrule
- 18 = Tube butt weld
- 19 = Pipe butt weld
- 40 = Sanitary tri-clamp
- 40F = Sanitary flare thru
- 41 = Sanitary step-up
- 42 = Sanitary mini
- 43 = I-line male
- 49 = I-line female
- 45 = Bevel seat female
- 46 = Bevel seat male

**Step 6**
Determine fitting material: 6 = 316SS

- 4 = 304SS
- 6 = 316SS
- C = Carbon steel
- T = TFE encapsulated
- H = Hastelloy
- M = Monel
- A = Alloy 20
- K = Kynar
- P = Polypropylene

**Step 7**
Determine flange material: 0 = None

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

**Step 8**
Determine overall length of UltraFlex hose in inches:

<table>
<thead>
<tr>
<th>Last digit in 1/8th increments.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0120 = 12”</td>
</tr>
</tbody>
</table>

**Step 9**
Determine options:

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

### Sample part number: 16G036306001200
THE MOST ADVANCED FLUOROPOLYMER HOSE SYSTEM AVAILABLE

Silicone
Ultra-Pure Valved 
Platinum cured 
Silicone hose & tubing.

PVC
Crystal clear 
FDA approved 
hose and tubing.

Heated Hoses
Electrically 
heat any 
PureFlex 
hose up to 450°F

UltraFlex™
Ultra-flexible heavy duty convoluted hose.

MultiFlex™
Superior flexibility 
for higher pressure 
applications.

MTB™ (Metal 
PTFE Lined Hose)
Flexible metal 
hose with smooth 
bore PTFE liner.

FlexChem™
Rubber covered 
smooth bore FEP 
Lined hose.

ProFlex™
Industrial grade, 
high quality, low 
pressure convoluted 
PFA hose.

SmoothFlex™
Smooth bore 
PTFE hose with 
stainless steel braid.

PureSite™
Unbreakable 
translucent FEP 
sight gages.

Task-Line® Gaskets
PTFE gaskets 
with encapsulated 
stainless steel insert.

Task-Line® Grounding Paddles
Pipe static 
dissipating paddles.

In-house integration of design, hose manufacturing, fitting manufacturing, assembly and testing from a single company.
MARKETS

Chemical Process
Pharmaceutical
Steel
Food Processing
Automotive
Agriculture
Pulp and Paper
Petroleum
Mining
Railroad
Dairy
Textile
Semiconductor

APPLICATIONS

Acid Transfer
Pickling
Reverse Osmosis
Steam Transfer
Molding Equipment
Adhesives
Air Actuation
Sanitary Transfer
Purification Systems
Centrifuges
Extrusion Presses
Caustic Wash
High Purity

PureFlex™ Inc. information is based on technical data and testing that PureFlex™ Inc. believes to be reliable. It is intended for use by persons having technical skill, at their own discretion and risk. Since conditions of product are outside PureFlex™ Inc. control, PureFlex™ Inc. makes no warranties, express or implied, and assumes no liability in connection with any use of this information. PureFlex™ and FlexChem™ are trademarks of PureFlex™ Inc. Kynar® is a registered trademark of ELF Atochem. Monel® is a registered trademark of Huntington Alloys. Hastelloy® is a registered trademark of Cabot Corporation. All products are made in U.S.A.

4617 East Paris S.E.
Kentwood, MI 49512
Phone: (616) 554-1100
Fax: (616) 554-3633
Web: www.pureflex.com