

HosecraftUSA Product Integration

DEMAND HOSECRAFTUSA QUALITY



FLEXCHEM®
RUBBER COVERED, FEP & PTFE
LINED TRANSFER HOSES



HOSE CRAFT USA INNOVATION

No other company in the industry rivals Hosecraft's product integration. Using the most advanced manufacturing techniques, Hosecraft 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 Hosecraft 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

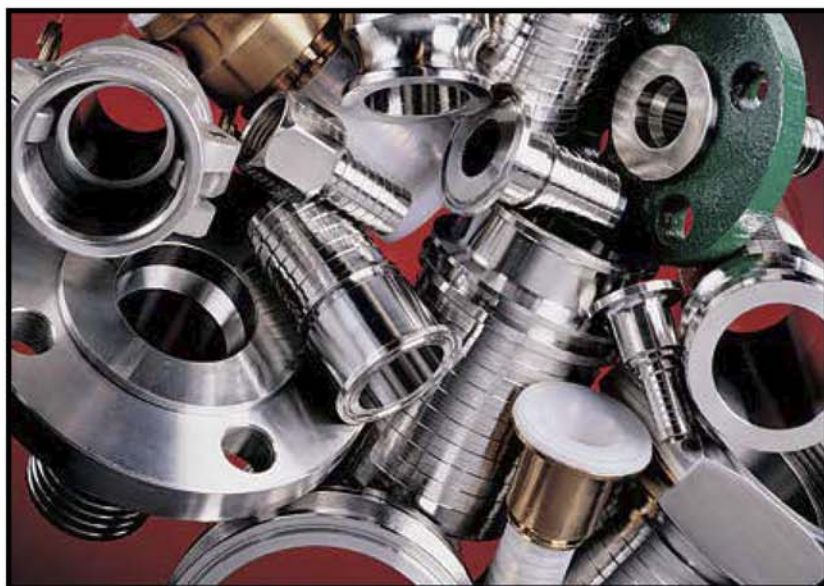
Temperature Range: -40 °F (-40 °C) to 350 °F (177 °C)

I.D. NOMINAL (in)	O.D. NOMINAL	WORKING PRESSURE (psi)	MIN. BURST PRESSURE (psi)	VACUUM RATING (in. Hg)	MIN. BEND RADIUS (in)	WEIGHT PER FOOT (lbs)
1/2	0.95	350	1000	29.9	2.65	0.34
3/4	1.25	350	1000	29.9	3.50	0.51
1	1.55	450	1800	29.9	4.00	0.72
1-1/4	1.75	375	1500	29.9	8.50	0.89
1-1/2	2.13	350	1400	29.9	10.50	0.99
2	2.68	300	1200	29.9	13.00	1.38
3	3.88	250	1000	29.9	21.00	2.46
4	5.00	175	700	29.9	39.00	3.50
6	7.13	100	400	29.9	58.00	4.75



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.
- 6 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

Hosecraft 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, Hosecraft 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.

THREADED FITTINGS



STYLE 03 Male Pipe NPT Hex



STYLE 04 Male Pipe NPT



STYLE 06 Female Pipe NPT



STYLE 30 JIC Female Swivel



STYLE 33 Male Union (NPT)



STYLE 36 Female Union (NPT)



STYLE 37 Female Swivel NPSH



JIC Adapter with PTFE Seal

CAM LOCK



STYLE 07 Female CAM Lock 'D'



STYLE 17 Female CAM Lock 'D' Reducer



STYLE 27 Female CAM Lock 'D' (PFA Encapsulated)



STYLE 08 Male CAM Lock 'E'



STYLE 28 Male CAM Lock 'E' (PFA Encapsulated)



STYLE 20 Male Flange Adapter (PFA Encapsulated)



STYLE 21 Female Flange Adapter (PFA Encapsulated)



STYLE 02 CAM Spool Adapter



STYLE 22 CAM Spool Adapter (PFA Encapsulated)

COMPRESSION, SPICE, BUTTWELD

SANITARY

FLANGES



STYLE 31 O-Ring Female Swivel 'D'



STYLE 40 Sanitary (Tri-Clamp)



STYLE 45 Bevel Seat Female



STYLE 05 Flange Retainer
STYLE 15 P Series Flange Retainer



STYLE 38 Compression Adapter



STYLE 40F Sanitary Flare Thru (FlexChem hose only)



STYLE 46 Bevel Seat Male



STYLE 25 Flange Retainer (PFA Encapsulated)



STYLE 39 Compression Connector with Nut and Ferrule



STYLE 40U Sanitary Flare Thru (UltraFlex hose only)



STYLE 48 I-Line Male



STYLE 29 Flare Thru Flange (UltraFlex hose only)



STYLE 18 Tube Butt weld



STYLE 41 Sanitary Step-up



STYLE 49 I-Line Female



STYLE 29F Flare Thru Flange (FlexChem hose only)



STYLE 19 Pipe Butt weld



STYLE 42 Sanitary Mini



STYLE 44 Sanitary X Male CAM Adapter



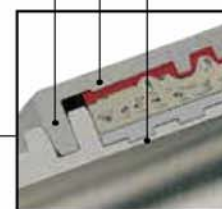
STYLE 11 Splice

HOSECRAFTUSA "HIGH PERFORMANCE" FITTING BARB DESIGN

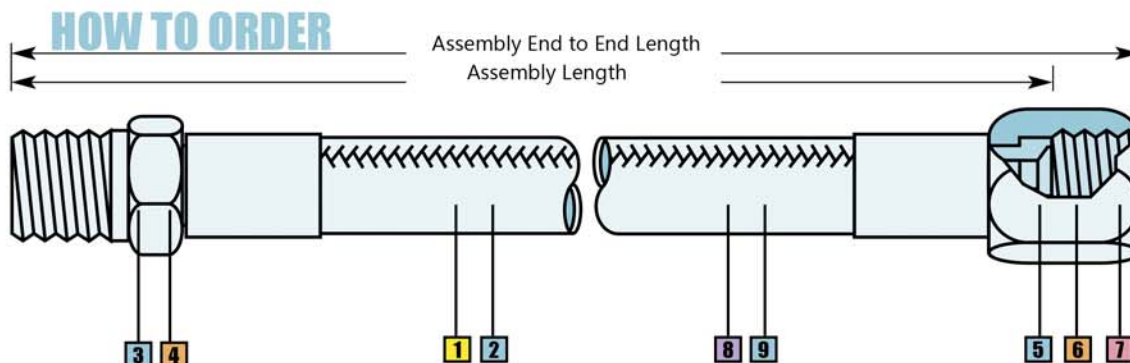
- Double-sided, patent pending barb design locks fittings securely into hose.
- Fitting barb height and angles are tightly controlled to eliminate tearing and splitting of plastic hose during assembly, fabrication, and operation.
- Optimizes pressure and sealing capabilities.
- Eliminates: cold flowing 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



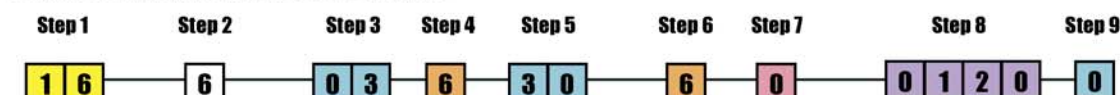
FlexChem hose shown above.



HOSECRAFTUSA 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 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: 6

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

Threaded

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

Flanges

05 = Flange retainer
15 = Flange retainer P-series
25 = Enc. flange retainer
29F = Flare thru flange

Camlock

07 = Female cam lock "D"
27 = Enc. Female cam lock "D"
08 = Male cam lock "E"
28 = Enc. male cam lock "E"

Compression

31 = O-ring female swivel "D"
38 = Compression adapter
39 = Compression connector w/
nut & ferrule

Buttweld

18 = Tube buttweld
19 = Pipe buttweld

Sanitary

40 = Sanitary tri-clamp
40F = Sanitary flare thru
41 = Sanitary step-up
42 = Sanitary mini
48 = I-line male
49 = I-line female
45 = Bevel seat female
46 = Bevel seat male

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

Threaded

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

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K = Kynar
P = Polypropylene

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 Overall Length of SmoothFlex hose in inches: 0120 = 12"

Last digit in 1/8th in. increments.

Step 9 Determine Options: 0 = None

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



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



PVC
Crystal clear
FDA approved
hose and
tubing.

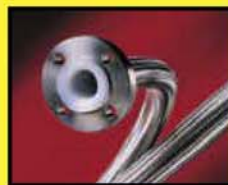


**Heated
Hoses**
Electrically
heat any
PureFlex hose
up to 450 °F.



BlueLine
Flexible
couplings,
expansion
joints and
bellows.

**THE MOST ADVANCED
FLUOROPOLYMER HOSE
SYSTEM AVAILABLE**



UltraFlex™
Ultra flexible
heavy duty con-
volute hose.



MultiFlex™
Superior
flexibility for
higher pressure
applications.



**MTH™
(Metal PTFE Lined
Hose)**
Ultra flexible
heavy duty con-
volute hose.



FlexChem®
Rubber
covered smooth
bore FEP lined
hose.



ProFlex™
Industrial
grade, high
quality low
priced
convolute PFA
hose.



PureSite™
Unbreakable
translucent FEP
sight gages.



**TASK-LINE®
Gaskets**
PTFE gaskets
with encapsu-
lated stainless
steel insert.



**TASK-LINE®
Grounding
Paddles**
Pipe static
dissipating
paddles.

MARKETS

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

APPLICATIONS

Acid Transfer
Pickling
Reverse Osmosis
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Air Actuation
Sanitary Transfer
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Centrifuges
Extrusion Presses
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