



SMOOTHFLEX™
PTFE SMOOTH-BORE HOSES



SmoothFlex™

SmoothFlex™ Hose

SmoothFlex™ is a flexible smoothbore PTFE hose with stainless steel braided reinforcement that is designed for long trouble free service in a wide range of applications that may involve pressure, temperature and chemical extremes. The hose is available in virgin PTFE for high purity applications and anti-static conductive black PTFE where electrostatic dissipation is required. SmoothFlex™ is an excellent choice for pharmaceuticals, food and beverage applications, the transfer of viscous media such as paints and adhesives, fluid transfer of corrosive chemicals, and high temperature hydraulic or pneumatic applications.

- Zero Corrosion Rate
- Non-Stick Properties
- FDA Approved
- Meets Pharmacopoeia Class VI DIP & CIP
- -65 °F to 450 °F Temp. Range
- Long Life Cycles

SmoothFlex™ Nominal Bore (SN) Dash Size

DASH SIZE	NOMINAL I.D. (in)	NOMINAL O.D. (in)	WORKING PRESSURE (psi)	MINIMUM BURST (psi)	MINIMUM BEND RADIUS (in)	WEIGHT (lbs / ft)
-3	.125	.24	3,260	13,040	1.6	.047
-4	.187	.30	2,750	11,000	2.0	.077
-5	.250	.35	2,610	10,440	3.0	.098
-6	.312	.43	2,540	10,160	4.0	.110
-7	.375	.48	2,390	9,560	5.0	.124
-8	.405	.54	2,030	8,120	5.4	.124
-10	.500	.64	1,740	6,960	6.6	.154
-12	.625	.74	1,270	5,080	8.0	.170
-14	.750	.91	1,010	4,040	9.2	.198
-16	.875	1.03	870	3,480	9.2	.273
-18	1.000	1.15	870	3,480	12.0	.305
-20	1.125	1.30	630	2,520	16.4	.350

Ratings are based at 70 °F (21 °C)
Temperature range -65 °F (-54 °C) to 450 °F (232 °C)

SmoothFlex™ True Bore (ST) Full I.D. Size

ACTUAL I.D. (in)	NOMINAL O.D. (in)	WORKING PRESSURE (psi)	MINIMUM BURST (psi)	VACUUM RATING (in hg)	MINIMUM BEND RADIUS (in)	WEIGHT (lbs / ft)
1/4	.35	2,610	10,440	29.9	3.0	.098
3/8	.48	2,390	9,560	29.9	5.0	.124
1/2	.64	1,740	6,960	29.9	6.6	.154
3/4	.91	1,010	4,040	20.0	9.2	.198
1	1.15	870	3,480	14.0	12.0	.305

Ratings are based at 70 °F (21 °C)
Temperature range -65 °F (-54 °C) to 450 °F (232 °C)

Hose Cover Options



Electrically Heated Option



- ① Silicone Cover
- ② Anti Suff Sock
- ③ Fire Sleeve
- ④ Polyolefin Heat Shrink (other colors available)
- ⑤ Anti Kink Guard
- ⑥ Spring Guard
- ⑦ HDPE Armor

SmoothFlex™ High Pressure (SH)

SIZE	ACTUAL I.D. (in)	NOMINAL O.D. (in)	WORKING PRESSURE (psi)	MINIMUM BURST (psi)	MINIMUM BEND RADIUS	WEIGHT (lbs / ft)
1/4	.222	.375	5,000	16,000	1.5	.108
3/8	.308	.473	5,000	16,000	2.5	.180
1/2	.401	.600	5,000	16,000	2.9	.240
5/8	.459	.710	5,000	16,000	3.3	.324
3/4	.617	.970	5,000	16,000	4.0	.660
1	.867	1.250	5,000	16,000	5.0	1.020
1 1/4	1.125	1.600	4,000	16,000	12.0	1.680
1 1/2	1.375	1.920	4,000	12,000	14.0	2.280

Ratings are based at 70 °F (21 °C)
 Temperature range -65 °F (-54 °C) to 400 °F (204 °C)
 Reduce working pressure on all sizes to maximum of 3,000psi @ 400 °F (204 °C)
 For impulse services reduce working pressures by 1,000psi

SmoothFlex™ Ultra High Pressure (SU)

SIZE	ACTUAL I.D. (in)	NOMINAL O.D. (in)	WORKING PRESSURE (psi)	MINIMUM BURST (psi)	MINIMUM BEND RADIUS	WEIGHT (lbs / ft)
1/4	.229	.495	6,000	24,000	3.0	.24
3/8	.300	.615	6,000	24,000	5.00	.40
1/2	.395	.725	6,000	24,000	5.75	.49
5/8	.525	.885	4,000*	12,000	6.25	.67
3/4	.650	1.060	4,000*	12,000	7.75	.93
1	.875	1.370	4,000*	12,000	9.63	1.45

Ratings are based at 70 °F (21 °C)
 Temperature range -65 °F (-54 °C) to 400 °F (204 °C)
 *Reduce working pressure to maximum of 3,000psi @ 400 °F (204 °C)

FITTINGS

Hosecraft fittings and collars are manufactured specifically for plastic lined hoses. Applying the highest quality standards, they are designed for compatability 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 Hosecraft 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



STYLE 07 Female
CAM Lock 'D'



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



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



STYLE 21 Female Flange
Adapter (PFA
Encapsulated)



STYLE 22 CAM Spool
Adapter (PFA
Encapsulated)

CAM LOCK



STYLE 17 Female CAM
Lock 'D'
Reducer



STYLE 08 Male CAM
Lock 'E'



STYLE 20 Male Flange
Adapter (PFA
Encapsulated)



STYLE 02 CAM Spool
Adapter

**COMPRESSION,
SPLICE, 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
Buttweld



STYLE 41 Sanitary
Step-up



STYLE 49 I-Line Female



STYLE 29 Flare Thru
Flange
(FlexChem hose only)



STYLE 19 Pipe
Buttweld



STYLE 42 Sanitary Mini



STYLE 44 Sanitary X
Male CAM
Adapter

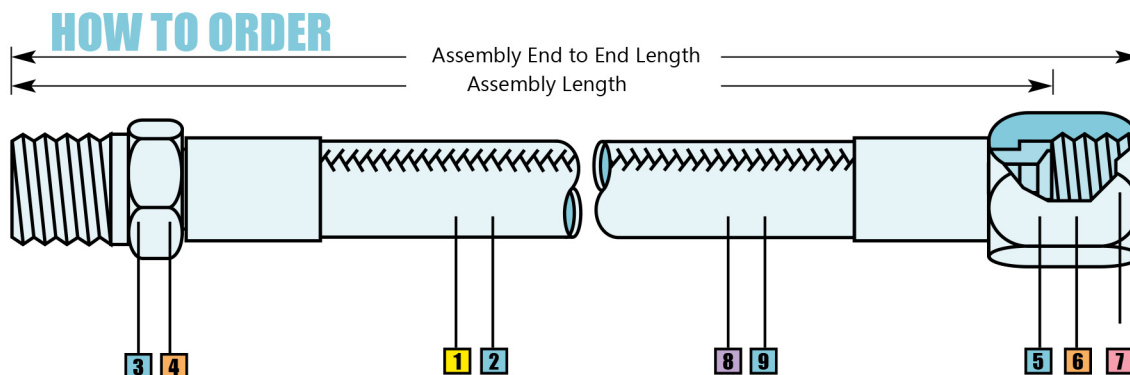


STYLE 11 Splice



Hosecraft world class fitting manufacturing





HOSECRAFTUSA HOSE ASSEMBLY NUMBERING SYSTEM

Steps to order a 1" SmoothFlex High Pressure Assembly with a length of 12", 316 S.S. Male NPT one end, 316 S.S. JIC other end. No options.

Sample part number: SH16036306001200



Step 1

Determine Product Code

SN = Nominal Bore (Dash Size)
ST = True Bore
SH = High Pressure
SU = Ultra-High Pressure

Step 2

Determine Size

SmoothFlex SN Nominal Dash Size Only

03 = -3
04 = -4
05 = -5
06 = -6
07 = -7
08 = -8
10 = -10
12 = -12
14 = -14
16 = -16
18 = -18
20 = -20

SmoothFlex ST, SH, SU

04 = 1/4"
06 = 3/8"
08 = 1/2"
10 = 5/8"
12 = 3/4"
16 = 1"
20 = 1 1/4"
24 = 1 1/2"

Actual I.D. may vary.

Check specifications on pages 2 & 3 for your hose choice.

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

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
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

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
41 = Sanitary step-up
42 = Sanitary mini
48 = I-line male
49 = I-line female
45 = Bevel seat female
46 = Bevel seat male

Step 6

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 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

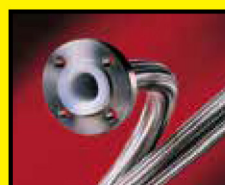
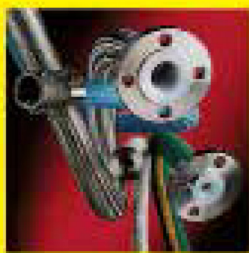
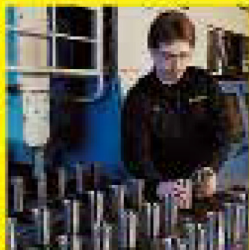
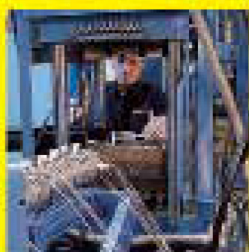
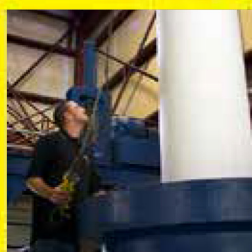
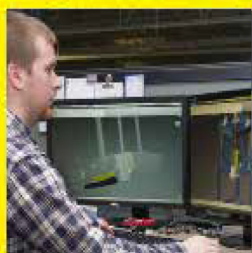
Electrically
heat any
PureFlex hose
up to 450 °F.



BlueLine

Flexible
couplings,
expansion
joints and
bellows.

**ONE SOURCE FOR
ALL YOUR NEEDS**



UltraFlex™

Ultra flexible
heavy duty con-
volut hose.



MultiFlex™

Superior
flexibility for
higher pressure
applications.



MTH™ (Metal PTFE Lined Hose)

Ultra flexible
heavy duty con-
volut hose.



FlexChem®

Rubber
covered smooth
bore FEP lined
hose.



ProFlex™

Industrial
grade, high
quality low
priced
convoluted 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
Steam Transfer
Molding Equipment
Adhesives
Air Actuation
Sanitary Transfer
Purification Systems
Centrifuges
Extrusion Presses
Caustic Wash
High Purity
Hydraulics



2315 W. Hubbard Street
Chicago, IL 60612
Phone: (800) 584 4168