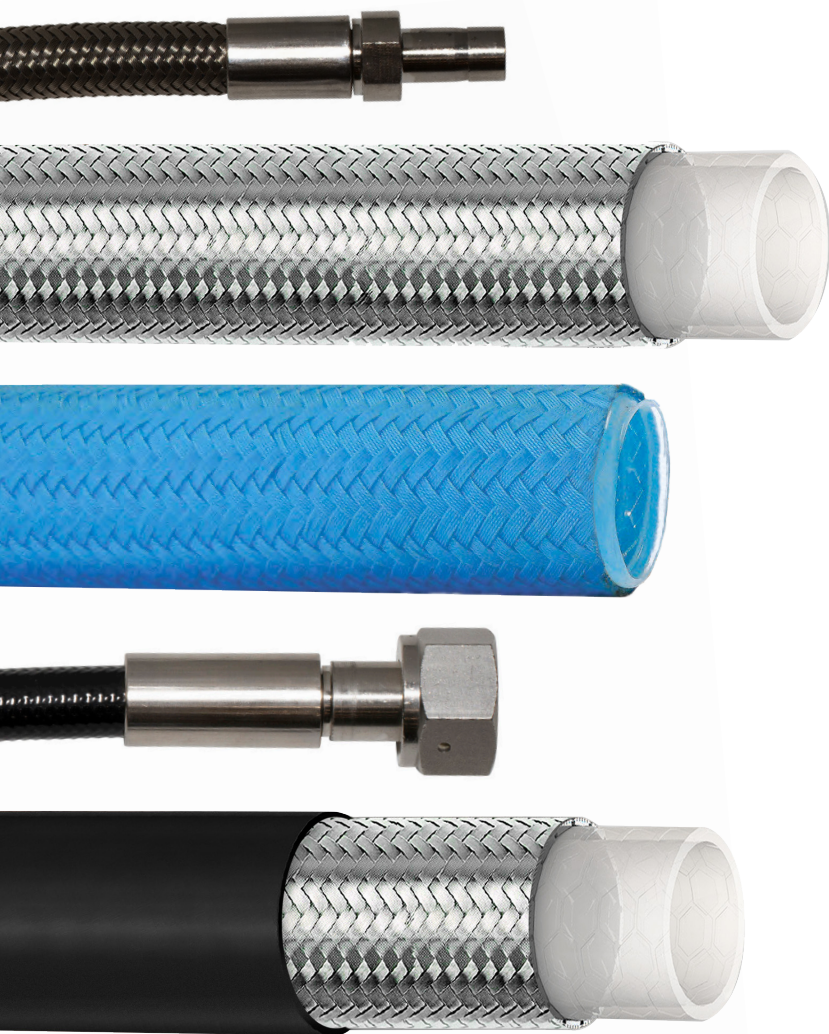




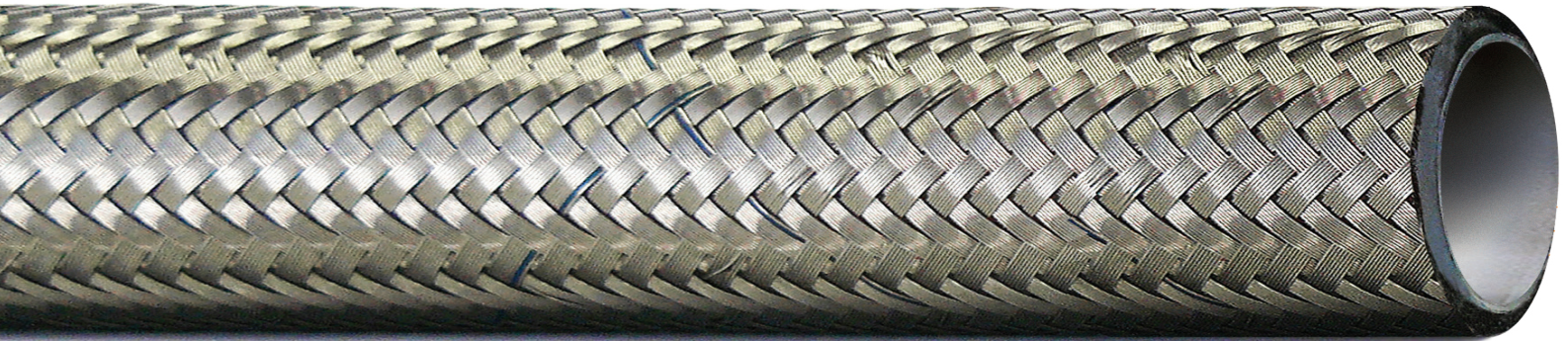
Instrumentation Hoses & Fittings

Built for Critical Applications in Utilities
and Process Fluid Transfer Services



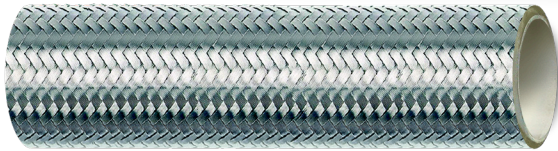
Flex-Rite™

TSB-H
"SMOOTH BORE"
TSB-HC
PTFE CONDUCTIVE

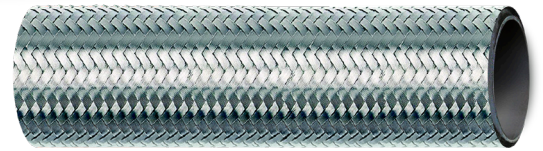


HEAVY WALL PTFE HOSE WITH LONGER LIFE CYCLE

TSB-H "Smooth Bore"



TSB-HC PTFE Conductive



Optional Conductive Tube Available (special order consult factory)

MODEL	I.D.	O.D.	WORKING PRESSURE	MIN. BEND RADIUS	WEIGHT PER FT.	VACUUM INCH HG
TSB-H012/B-FLEX-02	0.125"	.25"	3500 PSI	1.5"	.05 lbs	30"
TSB-H025/B-FLEX-04	0.25"	.41"	3200 PSI	1.5"	.10 lbs	30"
TSB-H037/B-FLEX-06	0.37"	.53"	2500 PSI	2.0"	.12 lbs	30"
TSB-H050/B-FLEX-08	0.50"	.67"	2000 PSI	3.0"	.16 lbs	30"
TSB-H062	0.62"	.74"	1400 PSI	8.0"	.17 lbs	30"
TSB-H075/B-FLEX-12	0.75"	.87"	1000 PSI	8.2"	.20 lbs	30"
TSB-H100/B-FLEX-16	1.0"	1.19"	1000 PSI	12.0"	.53 lbs	30"

TUBE: PTFE unpigmented, USP Class VI & FDA Criteria
REINFORCEMENT: 1" & 3/4" double braided
RECOMMENDED CLEANING: CIP, SIP, Autoclave

COVER: Stainless Steel braid
TEMP. RANGE: -100 to 450° F

MODEL	I.D.	O.D.	WORKING PRESSURE	MIN. BEND RADIUS	WEIGHT PER FT.	VACUUM INCH HG
TSB-HC012/B-FLEX-B-02	0.125"	.25"	3500 PSI	1.5"	.05 lbs	30"
TSB-HC025/B-FLEX-B-04	0.25"	.41"	3200 PSI	1.5"	.10 lbs	30"
TSB-HC037/B-FLEX-B-06	0.37"	.53"	2500 PSI	2.0"	.12 lbs	30"
TSB-HC050/B-FLEX-B-08	0.50"	.67"	2000 PSI	3.0"	.16 lbs	30"
TSB-HC062	0.62"	.74"	1400 PSI	8.0"	.17 lbs	30"
TSB-HC075/B-FLEX-12	0.75"	.86"	1000 PSI	8.2"	.32 lbs	30"
TSB-HC100/B-FLEX-16	1.0"	1.19"	1000 PSI	12.0"	.53 lbs	30"

TUBE: PTFE unpigmented, FDA Criteria
REINFORCEMENT: 1" & 3/4" double braided
RECOMMENDED CLEANING: CIP, SIP, Autoclave

COVER: Stainless Steel braid
TEMP. RANGE: -100 to 450° F

TSB-H has a Smooth PTFE Core that is reinforced with stainless steel wire braid. This hose has a heavy wall PTFE Core that provides a lower permeation when dealing with gases and it extends life of hose. Our 3/4" and 1" has a double braided design that is more flexible than most standard smoothbore PTFE hoses. These hoses have a 4 to 1 safety factor and can handle temperatures from -100F to 450F.

Hose cover options available.

Features: Smooth Bore / Higher Working Temps / Full Vacuum Rated / Heavy-Wall PTFE Design / Easily Drains / Chemical Resistant / Autoclavable / Double Braided 3/4" and 1" for improved flexibility

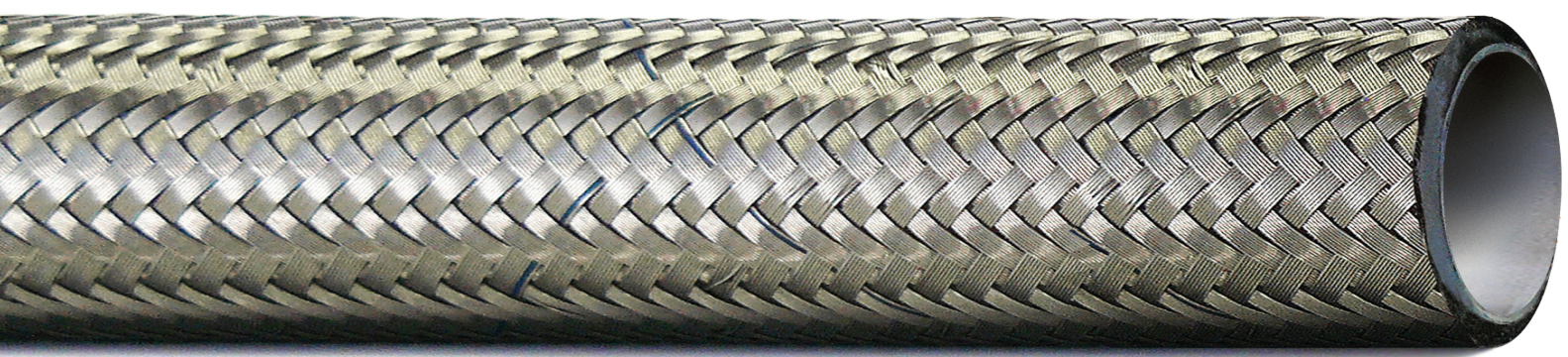
Applications: Product Transfer / Load Cells / Gas Transfer / Bulk Transfer / Steam Transfer / Process Lines / Acid Transfers / Sampling Systems

Additional Protective Cover Options: * Fire Sleeve / * Spiral Guard / * Spring Guard / * Armor Guard

WARNING: Working pressure ratings for all Flex-Rite™ brand hoses are based on 70° F (ambient temperature). Working pressure and vacuum ratings will decrease as temperatures increase. For "T" series applications that exceed 250° F contact manufacturer for suggestions. At temperatures below -40F, failures could occur if there is vibration or movement.

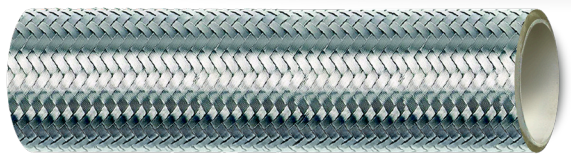
Flex-Rite™

TSB-L
"SMOOTH BORE"
TSB-LC
PTFE CONDUCTIVE



EXCELLENT FOR FIXED APPLICATIONS!

TSB-L
"Smooth Bore"

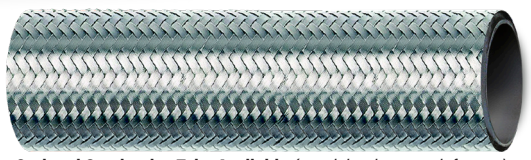


TSB-L is excellent for fixed applications where minimal abuse, handling or flexing exist. Available for "Flared through" applications.
Hose cover options available.

Features: Higher Working Temps / Full Vacuum Capabilities / Autoclaveable Smooth Bore / Chemical Resistant

Applications: Product Transfer / Load Cells / Gas Transfer / Compressed Air Concentrated CIP Chemicals / Food, Flavor, and Fragrances / Drain and Sample / Corrosive Environments / Vibration Isolation

TSB-LC
"PTFE Conductive"



Optional Conductive Tube Available (special order consult factory)

TSB-LC addresses *Static Electric* concerns. A PTFE conductive liner with a carbon rich inner contact surface capable of conducting 1,000 microamps of current (1 milliamp) when 1000 volts (DC) or less is applied to the surface. The carbon is a **high purity furnace black and meets FDA 21CFR 178.3297.**

All "T-Series" hose meet **USP Class VI & FDA Criteria.**
Hose cover and Anti-static tube options available.

MODEL	I.D.	O.D.	WORKING PRESSURE	BURST PRESSURE	MIN. BEND RADIUS	WEIGHT PER FT.	LENGTH
TSB-L012	0.125"	0.240"	3,260 PSI	13,040 PSI	1.6"	0.047 lbs.	50'
TSB-L018	0.1875"	0.300"	3,000 PSI	12,000 PSI	2.0"	0.077 lbs.	50'
TSB-L025	0.250"	0.375"	3,000 PSI	12,000 PSI	3.0"	0.098 lbs.	50'
TSB-L031	0.3125"	0.430"	2,540 PSI	10,160 PSI	4.0"	0.110 lbs.	50'
TSB-L037	0.375"	0.480"	2,500 PSI	10,000 PSI	5.0"	0.124 lbs.	50'
TSB-L040	0.405"	0.540"	2,250 PSI	9,000 PSI	5.4"	0.134 lbs.	50'
TSB-L050	0.500"	0.640"	2,000 PSI	8,000 PSI	6.6"	0.154 lbs.	50'
TSB-L062	0.625"	0.740"	1,500 PSI	6,000 PSI	8.0"	0.170 lbs.	50'
TSB-L075	0.750"	0.910"	1,100 PSI	4,400 PSI	9.2"	0.198 lbs.	50'
TSB-L087	0.875"	1.03"	1,000 PSI	4,000 PSI	9.2"	0.273 lbs.	50'

TUBE: PTFE unpigmented, USP Class VI & FDA Criteria
COVER: Stainless Steel braid
TEMP. RANGE: -20 to 425° F
RECOMMENDED CLEANING: CIP, SIP, Autoclave

MODEL	I.D.	O.D.	WORKING PRESSURE	BURST PRESSURE	MIN. BEND RADIUS	WEIGHT PER FT.	LENGTH
TSB-LC012	0.125"	0.240"	3,260 PSI	13,040 PSI	1.6"	0.047 lbs.	50'
TSB-LC018	0.1875"	0.300"	3,000 PSI	12,000 PSI	2.0"	0.077 lbs.	50'
TSB-LC025	0.250"	0.375"	3,000 PSI	12,000 PSI	3.0"	0.098 lbs.	50'
TSB-LC031	0.3125"	0.430"	2,540 PSI	10,160 PSI	4.0"	0.110 lbs.	50'
TSB-LC037	0.375"	0.480"	2,500 PSI	10,000 PSI	5.0"	0.124 lbs.	50'
TSB-LC040	0.405"	0.540"	2,250 PSI	9,000 PSI	5.4"	0.134 lbs.	50'
TSB-LC050	0.500"	0.640"	2,000 PSI	8,000 PSI	6.6"	0.154 lbs.	50'
TSB-LC062	0.625"	0.740"	1,500 PSI	6,000 PSI	8.0"	0.170 lbs.	50'
TSB-LC075	0.750"	0.910"	1,100 PSI	4,400 PSI	9.2"	0.198 lbs.	50'
TSB-LC087	0.875"	1.03"	1,000 PSI	4,000 PSI	9.2"	0.273 lbs.	50'

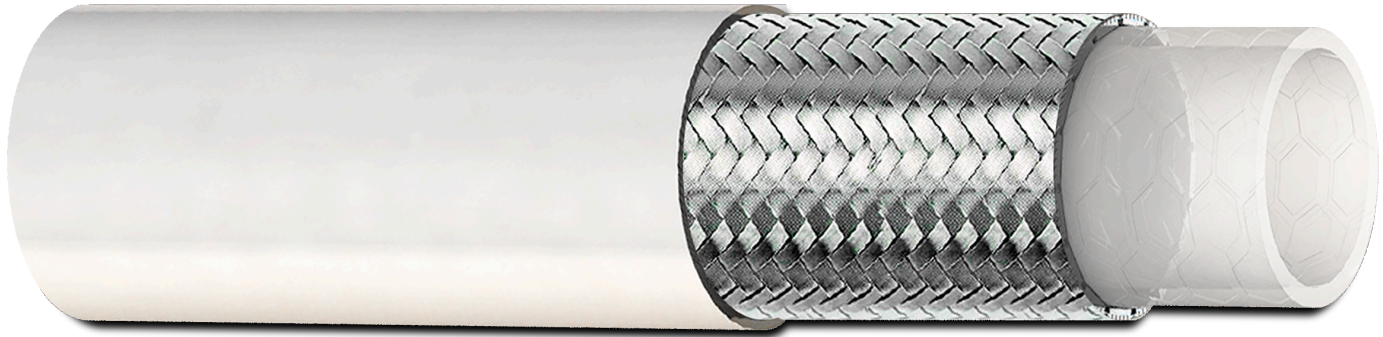
TUBE: PTFE unpigmented, FDA Criteria
COVER: Stainless Steel braid
TEMP. RANGE: -20 to 425° F
RECOMMENDED CLEANING: CIP, SIP, Autoclave

WARNING: Working pressure ratings for all Flex-Rite™ brand hoses are based on 70° F (ambient temperature). Working pressure and vacuum ratings will decrease as temperatures increase. For "T" series applications that exceed 250° F contact manufacturer for suggestions.

Flex-Rite™

TSB-SI
"SMOOTH BORE"

TSB-SI-C
PTFE CONDUCTIVE



HEAVY WALL PTFE HOSE WITH SMOOTH OUTER COVER

TSB-SI "Smooth Bore"



TSB-SI has a Smooth PTFE Core that is reinforced with stainless steel wire braid and an extruded Silicone Cover. This hose has a smooth silicone extruded cover that provides a layer of insulation and improves flexibility than a traditional smooth bore stainless braided PTFE hose.

Features: Easy to Flex / Easy to Clean Cover / Pressures up to 3,500 PSI / Insulation from extruded cover

Applications: Product Transfer / Acid Transfer / Mold Press / Solvent Transfer / Steam Transfer / Oil Supply Line

MODEL	WORKING PRESSURE	BURST PRESSURE	I.D.	O.D.	Bend Radius	WEIGHT PER FT.
TSB-SI012	3,500 PSI	15,000 PSI	0.125 IN	0.43 IN	1.5 IN	0.11 LBS/FT
TSB-SI025	3,250 PSI	13,000 PSI	0.25 IN	0.50 IN	1.5 IN	0.13 LBS/FT
TSB-SI037	2,500 PSI	10,000 PSI	0.375 IN	0.65 IN	2.0 IN	0.15 LBS/FT
TSB-SI050	2,000 PSI	8,000 PSI	0.50 IN	0.81 IN	3.0 IN	0.18 LBS/FT
TSB-SI075	1,000 PSI	4,500 PSI	0.75 IN	1.02 IN	8.2 IN	0.35 LBS/FT
TSB-SI100	1,000 PSI	4,000 PSI	1.00 IN	1.36 IN	12.0 IN	0.68 LBS/FT

TEMP. RANGE: -100F to 400F

TSB-SI-C PTFE CONDUCTIVE



TSB-SI-C has a Smooth Static Dissipative PTFE Core that is reinforced with stainless steel wire braid and an extruded Silicone Cover. This hose has a smooth silicone extruded cover that provides a layer of insulation and improves flexibility than a traditional smooth bore stainless braided PTFE hose.

Features: Easy to Flex / Easy to Clean Cover / Pressures up to 3,500 PSI / Insulation from extruded cover

Applications: Product Transfer / Acid Transfer / Mold Press / Solvent Transfer / Steam Transfer / Oil Supply Line

MODEL	WORKING PRESSURE	BURST PRESSURE	I.D.	O.D.	Bend Radius	WEIGHT PER FT.
TSB-SI-C012	3,500 PSI	15,000 PSI	0.125 IN	0.43 IN	1.5 IN	0.11 LBS/FT
TSB-SI-C025	3,250 PSI	13,000 PSI	0.25 IN	0.50 IN	1.5 IN	0.13 LBS/FT
TSB-SI-C037	2,500 PSI	10,000 PSI	0.375 IN	0.65 IN	2.0 IN	0.15 LBS/FT
TSB-SI-C050	2,000 PSI	8,000 PSI	0.50 IN	0.81 IN	3.0 IN	0.18 LBS/FT
TSB-SI-C075	1,000 PSI	4,500 PSI	0.75 IN	1.02 IN	8.2 IN	0.35 LBS/FT
TSB-SI-C100	1,000 PSI	4,000 PSI	1.00 IN	1.36 IN	12.0 IN	0.68 LBS/FT

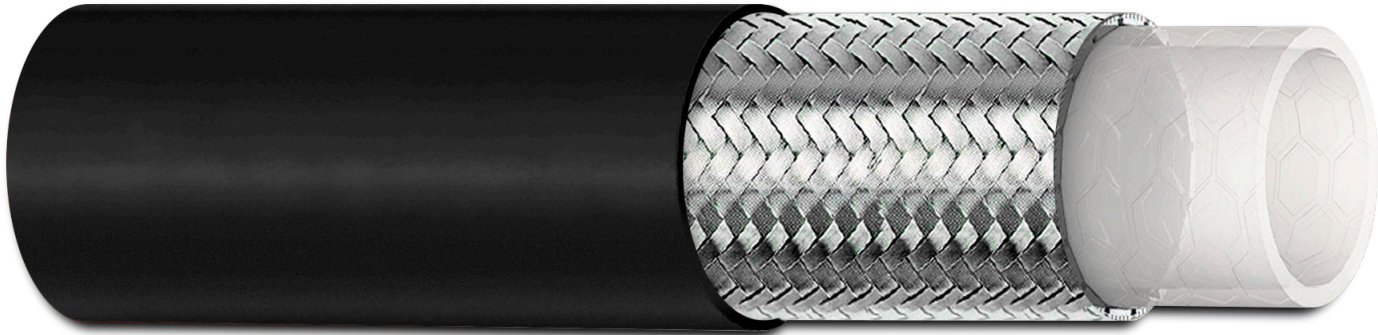
TEMP. RANGE: -100F to 400F

WARNING: Working pressure ratings for all Flex-Rite™ brand hoses are based on 70° F (ambient temperature). Working pressure and vacuum ratings will decrease as temperatures increase. For "T" series applications that exceed 250° F contact manufacturer for suggestions. At temperatures below -40F, failures could occur if there is vibration or movement.

Flex-Rite™

TSB-HY
"SMOOTH BORE"

TSB-HY-C
PTFE CONDUCTIVE



HOSE WITH CHEMICAL RESISTANT DURABLE COVER

TSB-HY

"Smooth Bore"



TSB-HY has a Smooth PTFE Core that is reinforced with stainless steel wire braid and an extruded Hytrel cover. This hose has a smooth abrasion resistant black cover that extends life of hose in corrosive conditions.

Features: Corrosion Resistant / Easy to Flex / Easy to Clean Cover / Abrasion Resistant Cover

Applications: Oil Supply Lines / Paint Sprays / Acid Transfers / Mold Press / Solvent Transfers

MODEL	WORKING PRESSURE	BURST PRESSURE	I.D.	O.D.	Bend Radius	WEIGHT PER FT.
TSB-HY012	3,000 PSI	12,000 PSI	0.125 IN	0.324 IN	2.00 IN	0.07 LBS/FT
TSB-HY025	3,000 PSI	12,000 PSI	0.250 IN	0.375 IN	3.00 IN	0.12 LBS/FT
TSB-HY037	2,250 PSI	9,000 PSI	0.375 IN	0.526 IN	4.50 IN	0.15 LBS/FT
TSB-HY050	1,500 PSI	6,000 PSI	0.500 IN	0.693 IN	6.50 IN	0.18 LBS/FT

TEMP. RANGE: -100F to 300F

TSB-HY-C

PTFE CONDUCTIVE



TSB-HY-C has a Smooth static disipative PTFE Core that is reinforced with stainless steel wire braid and an extruded Hytrel cover. This hose has a smooth abrasion resistant black cover that extends life of hose in corrosive conditions with a static disipative liner.

Features: Corrosion Resistant / Easy to Flex / Easy to Clean Cover / Abrasion Resistant Cover

Applications: Oil Supply Lines / Paint Sprays / Acid Transfers / Mold Press / Solvent Transfers

MODEL	WORKING PRESSURE	BURST PRESSURE	I.D.	O.D.	Bend Radius	WEIGHT PER FT.
TSB-HY-C012	3,000 PSI	12,000 PSI	0.125 IN	0.324 IN	2.00 IN	0.07 LBS/FT
TSB-HY-C025	3,000 PSI	12,000 PSI	0.250 IN	0.375 IN	3.00 IN	0.12 LBS/FT
TSB-HY-C037	2,250 PSI	9,000 PSI	0.375 IN	0.526 IN	4.50 IN	0.15 LBS/FT
TSB-HY-C050	1,500 PSI	6,000 PSI	0.500 IN	0.693 IN	6.50 IN	0.18 LBS/FT

TEMP. RANGE: -100F to 300F

WARNING: Working pressure ratings for all Flex-Rite™ brand hoses are based on 70° F (ambient temperature). Working pressure and vacuum ratings will decrease as temperatures increase. For "T" series applications that exceed 250° F contact manufacturer for suggestions. At temperatures below -40F, failures could occur if there is vibration or movement.

Flex-Rite™

TSB-F
"SMOOTH BORE"
TSB-FC
PTFE CONDUCTIVE



SMOOTH BORE PTFE HOSE WITH NON-METALLIC BRAID

TSB-F "Smooth Bore"



TSB-F has a Smooth PTFE Core that is reinforced with Fiberglass braid. This hose is ideal for applications that require a non-metallic braid for chemical compatibility or require a non-conductive braid.

Hose cover options available.

Features: Easy to Flex / Pressures up to 800 PSI / Insulation from fiberglass braid / Light weight

Applications: Product Transfer / Acid Transfer / Mold Press / Solvent Transfer / Steam Transfer / Oil Supply Line

MODEL	WORKING PRESSURE	BURST PRESSURE	I.D.	O.D.	Bend Radius	WEIGHT PER FT.
TSB-F025	800 PSI	3,200 PSI	0.250 IN	0.415 IN	2.75 IN	0.07 LBS/FT
TSB-F037	800 PSI	3,200 PSI	0.375 IN	0.550 IN	3.25 IN	0.10 LBS/FT
TSB-F050	800 PSI	3,200 PSI	0.500 IN	0.710 IN	5.25 IN	0.13 LBS/FT
TSB-F075	325 PSI	1,300 PSI	0.750 IN	0.945 IN	6.50 IN	0.20 LBS/FT

TEMP. RANGE: -100F to 400F

TSB-FC PTFE CONDUCTIVE



TSB-FC has a Smooth Static Disapative PTFE Core that is reinforced with Fiberglass braid. This hose is ideal for applications that a non-metallic braid with a static disapative liner with a non-conductive braid.

Hose cover options available.

Features: Easy to Flex / Pressures up to 800 PSI / Insulation from fiberglass braid / Light weight

Applications: Product Transfer / Acid Transfer / Mold Press / Solvent Transfer / Steam Transfer / Oil Supply Line

MODEL	WORKING PRESSURE	BURST PRESSURE	I.D.	O.D.	Bend Radius	WEIGHT PER FT.
TSB-FC025	800 PSI	3,200 PSI	0.250 IN	0.415 IN	2.75 IN	0.07 LBS/FT
TSB-FC037	800 PSI	3,200 PSI	0.375 IN	0.550 IN	3.25 IN	0.10 LBS/FT
TSB-FC050	800 PSI	3,200 PSI	0.500 IN	0.710 IN	5.25 IN	0.13 LBS/FT
TSB-FC075	325 PSI	1,300 PSI	0.750 IN	0.945 IN	6.50 IN	0.20 LBS/FT

TEMP. RANGE: -100F to 400F

WARNING: Working pressure ratings for all Flex-Rite™ brand hoses are based on 70° F (ambient temperature). Working pressure and vacuum ratings will decrease as temperatures increase. For "T" series applications that exceed 250° F contact manufacturer for suggestions. At temperatures below -40F, failures could occur if there is vibration or movement.

Flex-Rite™

TCB
"BRAIDED CONVOLUTED"
TCB-C
PTFE CONDUCTIVE



EXCELLENT FOR FIXED APPLICATIONS!

TCB is wrapped with stainless steel wire braid that provides a kink resistant hose. TCB is easy to flex and has a tighter bend radii than smooth bore. Seamless PTFE open-pitched, helical convolutions provide for easy cleaning and transport of chemicals, pharmaceuticals, food & beverages.

Features:

- Kink Resistant
- Corrosion Resistant
- Easy to Flex
- Steady Flow
- Easy Cleaning

Applications:

- Transport
 - Pharmaceuticals
 - Chemicals
 - Food
 - Beverages
 - Fragrances
 - Corrosive & Hazardous Media

TCB-C addresses **Static Electric** concerns. A PTFE conductive liner with a carbon rich inner contact surface capable of conducting 1,000 microamps of current (1 milliamp) when 1000 volts (DC) or less is applied to the surface. The carbon is a **high purity furnace black and meets FDA 21CFR 178.3297.**

WARNING Working pressure ratings for all Flex-Rite™ brand hoses are based on 70° F (ambient temperature). Working pressure and vacuum ratings will decrease as temperatures increase. For "T" series applications that exceed 250° F contact manufacturer for suggestions.

MODEL	I.D.	O.D.	WORKING PRESSURE	MIN. BEND RADIUS	WEIGHT PER FT.	VAC. IN HG.	LENGTH
TCB050	1/2"	.75"	1425 PSI	2.0"	.19 lbs.	29"	50'
TCB075	3/4"	1.05"	1300 PSI	2.7"	.29 lbs.	29"	50'
TCB100	1"	1.35"	1100 PSI	4.0"	.51 lbs.	29"	50'
TCB150	1 1/2"	2.03"	700 PSI	6.0"	.81 lbs.	29"	50'
TCB200	2"	2.46"	525 PSI	7.5"	1.00 lbs.	29"	50'
TCB300	3"	3.70"	350 PSI	14.0"	1.26 lbs.	29"	50'
TCB400	4"	5.00"	275 PSI	16.0"	2.64 lbs.	29"	50'

TUBE PTFE unpigmented, USP Class VI & FDA Criteria
RECOMMENDED CLEANING CIP, SIP, Autoclave

COVER Stainless Steel braid
TEMP. RANGE -20 to 425° F



TCB

TCB-C



MODEL	I.D.	O.D.	WORKING PRESSURE	MIN. BEND RADIUS	WEIGHT PER FT.	VAC. IN HG.	LENGTH
TCB-C050	1/2"	.75"	1425 PSI	2.0"	.19 lbs.	29"	50'
TCB-C075	3/4"	1.05"	1300 PSI	2.7"	.29 lbs.	29"	50'
TCB-C100	1"	1.35"	1100 PSI	4.0"	.51 lbs.	29"	50'
TCB-C150	1 1/2"	2.03"	700 PSI	6.0"	.81 lbs.	29"	50'
TCB-C200	2"	2.46"	525 PSI	7.5"	1.00 lbs.	29"	50'
TCB-C300	3"	3.70"	350 PSI	14.0"	1.26 lbs.	29"	50'
TCB-C400	4"	5.00"	275 PSI	16.0"	2.64 lbs.	29"	50'

TUBE PTFE, FDA Criteria
RECOMMENDED CLEANING CIP, SIP, Autoclave

COVER Stainless Steel braid
TEMP. RANGE -20 to 425° F

HOSE COVER OPTIONS AVAILABLE

FlexRite™

TCP
"POLY BRAID CONVOLUTED"
TCP-C
PTFE CONDUCTIVE



EXCELLENT FOR FIXED APPLICATIONS!

TCP provides better abrasion resistance than metal braids, it's easy to flex and has a tighter bend radii than smooth bore. Kink resistant with seamless **PTFE** open-pitched, helical convolutions provide for easy cleaning and transport of pharmaceuticals, chemicals, food and beverages.

Features:

- Helical Convolutions - Easy Cleaning
- Crush Resistant, Easy Flex
- Tighter Bend Radii vs Smooth Bore
- Abrasion Resistant Braid
- Hand Friendly vs Metal Braid
- Medium & Full Vacuum

Applications:

- Transport
 - Pharmaceuticals
 - Chemicals
 - Food & Beverages
 - Fragrances
 - Corrosive & Hazardous Media

TCP-C addresses **Static Electric** concerns. A **PTFE** conductive liner with a carbon rich inner contact surface capable of conducting 1,000 microamps of current (1 milliamp) when 1000 volts (DC) or less is applied to the surface. The carbon is a high purity furnace black and meets FDA 21CFR 178.3297.

MODEL	I.D.	O.D.	WORKING PRESSURE	MIN. BEND RADIUS	WEIGHT PER FT.	VAC. IN HG.	LENGTH
TCP050	1/2"	.86"	475 PSI	2.0"	.12 lbs.	29"	50'
TCP075	3/4"	1.16"	425 PSI	2.7"	.18 lbs.	29"	50'
TCP100	1"	1.44"	375 PSI	4.0"	.26 lbs.	29"	50'
TCP150	1 1/2"	2.16"	325 PSI	6.0"	.47 lbs.	29"	50'
TCP200	2"	2.56"	275 PSI	7.5"	.54 lbs.	29"	50'
TCP300	3"	3.92"	225 PSI	14.0"	-	29"	50'
TCP400	4"	5.22"	100 PSI	16.0"	-	29"	50'

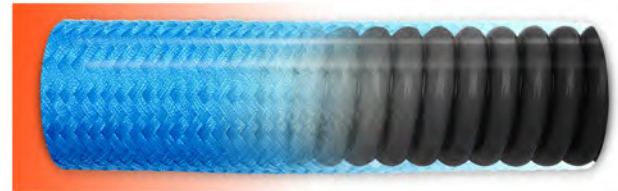
TUBE PTFE unpigmented, USP Class VI & FDA Criteria
RECOMMENDED CLEANING CIP, SIP, Autoclave

COVER Blue polypropylene
TEMP. RANGE -20 to 250° F



TCP

TCP-C



MODEL	I.D.	O.D.	WORKING PRESSURE	MIN. BEND RADIUS	WEIGHT PER FT.	VAC. IN HG.	LENGTH
TCP-C050	1/2"	.86"	475 PSI	2.0"	.12 lbs.	29"	50'
TCP-C075	3/4"	1.16"	425 PSI	2.7"	.18 lbs.	29"	50'
TCP-C100	1"	1.44"	375 PSI	4.0"	.26 lbs.	29"	50'
TCP-C150	1 1/2"	2.16"	325 PSI	6.0"	.47 lbs.	29"	50'
TCP-C200	2"	2.56"	275 PSI	7.5"	.54 lbs.	29"	50'
TCP-C300	3"	3.92"	225 PSI	14.0"	-	29"	50'
TCP-C400	4"	5.22"	100 PSI	16.0"	-	29"	50'

TUBE PTFE unpigmented, USP Class VI & FDA Criteria
RECOMMENDED CLEANING CIP, SIP, Autoclave

COVER Blue polypropylene
TEMP. RANGE -20 to 250° F

HOSE COVER OPTIONS AVAILABLE

WARNING Working pressure ratings for all Flex-Rite™ brand hoses are based on 70° F (ambient temperature). Working pressure and vacuum ratings will decrease as temperatures increase. TCP is not recommended for applications that exceed 250°.

Flex-Rite™

IR-T7
Series Nylon Hose

IR-T8
Series Nylon Hose



100R7 AND 100R8 SERIES NYLON HOSE

IR-T7 NYLON HOSE



Features: SAE general-purpose, hydraulic, nylon hose / Smooth-bore nylon core / Size range of 1/4 to 1/2 in. and working pressures up to 2,750 psig / Nylon tube reinforced 1 braid of synthetic yarn / Seamless nylon tube that easily handles a broad range of hydraulic fluids.

Smoothbore nylon core hose is the perfect solution for applications that require a smooth abrasion resistant cover. This hose is also ideal for applications that require higher pressures up to 5,000 PSI. This hose has a pin pricked cover that is good for gas applications such as nitrogen. This hose can be provided with instrumentation tube adapter ends, female JIC or Male NPT ends.

SERIES	NOMINAL HOSE SIZE in. (mm)	INSIDE DIAMETER	OUTSIDE DIAMETER	MINIMUM INSIDE BLEND RADIUS	TEMPERATURE RANGE °F (°C)	WORKING PRESSURE AT 70°F (20°C) psig (bar)	MIN. BURST PRESSURE AT 70°F (20°C) psig (bar)	BULK HOSE WEIGHT lb/ft. (kg/m)
SAE J517	1/4 (6.4)	0.25 (6.4)	0.52 (13.2)	1.25 (31.8)	-40 to 200 (-40 to 93)	2750 (189)	11 000 (757)	0.07 (0.10)
100R7	3/8 (9.6)	0.38 (9.8)	0.67 (17.0)	2.00 (5.08)		2250 (155)	9 000 (620)	0.10 (0.15)
(7R series)	1/2 (12.7)	0.50 (12.7)	0.82 (20.8)	3.00 (7.62)		2000 (137)	8 000 (551)	0.14 (0.21)

IR-T8 NYLON HOSE



Features: SAE general-purpose, hydraulic, nylon hose / Smooth-bore nylon core / Size range of 1/4 to 1 in. and working pressures up to 5000 psig / Nylon tube reinforced 1 braid of synthetic yarn / Seamless nylon tube that easily handles a broad range of hydraulic fluids.

Smoothbore nylon core hose is the perfect solution for applications that require a smooth abrasion resistant cover. This hose is also ideal for applications that require higher pressures up to 5,000 PSI. This hose has a pin pricked cover that is good for gas applications such as nitrogen. This hose can be provided with instrumentation tube adapter ends, female JIC or Male NPT ends.

SERIES	NOMINAL HOSE SIZE in. (mm)	INSIDE DIAMETER	OUTSIDE DIAMETER	MINIMUM INSIDE BLEND RADIUS	TEMPERATURE RANGE °F (°C)	WORKING PRESSURE AT 70°F (20°C) psig (bar)	MIN. BURST PRESSURE AT 70°F (20°C) psig (bar)	BULK HOSE WEIGHT lb/ft. (kg/m)
SAE J517 100R8 (8R series)	1/4 (6.4)	0.25 (6.4)	0.52 (13.2)	1.25 (3.18)	-40 to 200 (-40 to 93)	5000 (344)	20 000 (1378)	0.08 (0.12)
	3/8 (9.6)	0.38 (9.8)	0.67 (17.0)	2.00 (5.08)		4000 (275)	16 000 (1102)	0.11 (0.16)
	1/2 (12.7)	0.50 (12.7)	0.82 (20.8)	3.00 (7.62)		3500 (241)	14 000 (964)	0.15 (0.22)
	3/4 (19.0)	0.75 (19.0)	1.15 (29.2)	6.50 (16.5)		2250 (155)	9 000 (620)	0.26 (0.39)
	1 (25.4)	1.00 (25.4)	1.48 (37.6)	10.00 (25.4)		2000 (137)	8 000 (551)	0.39 (0.58)

WARNING: Working pressure ratings for all Flex-Rite™ brand hoses are based on 70° F (ambient temperature). Working pressure and vacuum ratings will decrease as temperatures increase. For "T" series applications that exceed 250° F contact manufacturer for suggestions. At temperatures below -40F, failures could occur if there is vibration or movement.



PHTHALATE FREE

APF is a Phthalate (DEHP) FREE vinyl tubing. Designed to be softer for use with laboratory equipment and vacuum lines. It also addresses the concerns of REACH compliance and meets USP Class VI testing.

Features:

- Softness and Excellent Flexibility
- Superior Biocompatibility
- Phthalate (DEHP) FREE

Applications:

- Biopharmaceutical
- General Laboratory
- Incubators
- Vacuum Pumps
- Condensers
- Desiccators
- Drain Lines
- Gas Lines

Packaging:

- Continuous Coils
- Pre-cut Lengths
- Custom Assemblies

Certification:

- USP Class VI
- BSE/TSE Compliant
- RoHS, REACH, 3-A* Compliant

MODEL	TEST METHOD	VALUE
Specific Gravity	ASTM D792	1.16
Color	Clear	
Hardness	ASTM D2240	58 Shore A
Tensile Strength	ASTM D412	1700 psi
Ultimate Elongation %	ASTM D412	420%
Melt Temperature		320°F
Brittle Temperature, Degrees	ASTM D746	-127° F
Water Absorbion, 24 Hours @72°F	ASTM D570	0.11% Wt. Gain

MODEL	I.D.	O.D.	Std. Length
APF032X093	1/32"	3/32"	50/100'
APF063X125	1/16"	1/8"	50/100'
APF062X187	1/16"	3/16"	50/100'
APF093X156	3/32"	5/32"	50/100'
APF093X218	3/32"	7/32"	50/100'
APF125X187	1/8"	3/16"	50/100'
APF125X250	1/8"	1/4"	50/100'
APF156X281	5/32"	9/32"	50/100'
APF187X312	3/16"	5/16"	50/100'
APF187X375	3/16"	3/8"	50/100'
APF187X437	3/16"	7/16"	50/100'
APF187X562	3/16"	9/16"	50/100'
APF250X375	1/4"	3/8"	50/100'
APF250X500	1/4"	1/2"	50/100'
APF250X437	1/4"	7/16"	50/100'
APF250X625	1/4"	5/8"	50/100'
APF312X500	5/16"	1/2"	50/100'
APF312X562	5/16"	9/16"	50/100'
APF312X625	5/16"	5/8"	50/100'
APF375X500	3/8"	1/2"	50/100'
APF375X625	3/8"	5/8"	50/100'
APF375X875	3/8"	7/8"	50/100'
APF437X625	7/16"	5/8"	50/100'
APF437X687	7/16"	11/16"	50/100'
APF500X625	1/2"	5/8"	50/100'
APF500X750	1/2"	3/4"	50/100'
APF500X1125	1/2"	1-1/8"	50/100'
APF625X1375	5/8"	1-3/8"	50/100'
APF750X1000	3/4"	1"	50/100'
APF750X1500	3/4"	1-1/2"	50/100'

TUBE: 3 A* Class VI, FDA PVC

RECOMMENDED CLEANING: Ethylene Oxide, Autoclave, Gamma

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Flex-Rite™

IR-PFA
ULTRA HIGH PURITY
PFA TUBING



ULTRA HIGH PURITY PFA TUBING

IR-PFA



PART NUMBER	I.D.	O.D.	WALL	BEND RADIUS	WORKING PRESSURE @ 73°F
IR4/PFA062X125X030	0.062	0.125	0.030	1/2"	451
IR4/PFA188X250X030	0.188	0.250	0.030	1"	226
IR4/PFA170X250X040	0.170	0.250	0.040	1"	301
IR4/PFA157X250X047	0.157	0.250	0.047	3/4"	353
IR4/PFA125X250X062	0.125	0.250	0.062	1/2"	466
IR4/PFA250X375X062	0.250	0.375	0.062	1"	311
IR4/PFA375X500X062	0.375	0.500	0.062	2"	233
IR4/PFA625X750X062	0.625	0.750	0.062	6"	155
IR4/PFA875X1.00X062	0.875	1.000	0.062	22"	117
IR4/PFA1.100X1.250X075	1.100	1.250	0.075	25"	75
IR4/PFA1.314X1.500X093	1.314	1.500	0.093	25"	105
METRIC SIZES	I.D.	O.D.	WALL	BEND RADIUS	WORKING PRESSURE @ 73°F
IRPFA2MMX4MMX1MM	0.079	0.157	0.040	1"	468
	2mm	4mm	1mm	1-3/4"	
IRPFA4MMX6MMX1MM	0.157	0.236	0.040	2-1/2"	313
	4mm	6mm	1mm	2-3/4"	
IRPFA6MMX8MMX1MM	0.236	0.315	0.040	4"	235
	6mm	8mm	1mm	0	
IRPEA8MMX10MMX1MM	0.315	0.394	0.040	0	188
	8mm	10mm	1mm	0	
IRPFA10MMX12MMX1MM	0.394	0.472	0.040	0	156
	10mm	12mm	1mm	0	

IR-PFA Features:

- This resin meets Semi F-57 and C-90
- 100% Virgin High Performance Grade resin used to resist stress cracking
- Chemically inert to nearly all industrial chemicals & solvents
- High thermal stability
- Low permeation
- Translucent
- Smooth surface finish resulting in less area of particle entrapment
- Moisture absorption nearly zero
- FDA compliant for food contact
- Non-Flammable
- Suitable for use with flare or conventional fittings
- Also available in pipe, coiled hose and convoluted constructions

Applications: Semiconductor / Chemical process / Heat Exchangers / Laboratory applications / Flow Monitoring / Pharmaceutical

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Instrumentation Fittings

Ace Sanitary offers a wide range of instrumentation fittings to suit any application. We're committed to making sanitary simple for you, which is why you can find stainless steel instrumentation fittings used in the production of everything from dairy products to injectable drugs to cosmetics. These durable stainless steel compression fittings provide an exact connection every time, ensuring a snug fit to prevent leakage. They're capable of withstanding temperatures ranging from -40° F all the way up to 225° F and comply with FDA and USDA standards.



Tube Adapter

Our highly popular tube adapter is machined with precision on fully automated CNC Swiss machines. Our notched tube adapter is constructed with a groove on the tube stub for customers preferring this traditional construction for an exact connection every time to the compression fitting. If a completely smooth tube adapter that still ensures an exact fit when connecting, then our annealed tube adaptor style 32 TR is available.

FEATURES

- Made with 316 Stainless Steel – other materials available
- Notch on tube adapter connects to other brands of nuts & ferrules
- Internal chamfering allows a smooth transition between hose and fittings
- Crimp ferrules for hose connection made with 304 stainless steel
- Electropolishing for tube adapters is available
- Tubing and connection have identical matching dimensions



Face Seal ICR

A high-quality O-ring end connection, face seal fittings provide faster connections for flexible hose and tubing systems in areas of manufacturing where reducing production downtime is critical.

FEATURES

- Ultra-Pure metal to metal seal for vacuum and positive pressure applications
- Compression seal of gasket between two beads
- Gasket Options: Silver Plated 316L Stainless Steel, Nickel Plated, Unplated Nickel



Face Seal ICO

A high-quality alternative to PTFE hose assemblies with conventional O-ring end connections, face seal fittings provide faster connections for flexible hose and tubing systems in areas of manufacturing where reducing production downtime is critical.

FEATURES

- For quick connections of hose and tubing systems
- Offers zero-clearance, providing ease of use in MRO
- Made with 316L Stainless Steel
- Electropolished fittings are available
- Tubing and connection has identical dimension match
- Designed for hose assemblies performing at high pressures and being used in critical vacuum applications over a wide range of temperatures



Compression Hose Fitting

Hose compression fittings come with nuts & ferrules that mate up to any other dual nut & ferrule compression fitting. They are designed to work excellently with all our other hose fittings as well as perfectly mating up with other brands for the most stringent applications. Compression fittings are used heavily for connecting hose assemblies to process and control instruments. These hose fittings are used for faster, simpler connections that also require periodic disconnecting for system maintenance; the tubing or hose system with which the compression fitting is connecting can remain intact.

FEATURES

- Hose fitting is designed to eliminate leaking at the hose connection
- Internal chamfering allows a smooth transition between the hose and compression fitting
- Compression fittings are made with 316L stainless steel – other materials are available
- Use hose fittings as ends on our PTFE hose assemblies
- Electropolishing for compression fittings are available
- Tubing and connection have identical matching dimensions

** A wide range of end fitting options are available with these hoses, please refer to our website or standard catalog.*

Coupling Expertise with Speed & Simplicity™

