NEW for 2026:

Flare-Thru PTFE Hose Assemblies

Engineered and Manufactured in Stone Mountain, Georgia

PRECISION
HOSE & EXPANSION JOINTS

PTFE HOSE & ASSEMBLIES

A LONG LEGACY OF PRECISION PRODUCTS

Precision Hose & Expansion Joints is one of a very few American companies that manufacture a complete line of metal hose, wire braid, metal hose assemblies, PTFE hose and PTFE hose assemblies, round metal expansion joints, metallic flue duct expansion joints, non-metallic flue duct expansion joints and rubber pressure piping expansion joints.

With over 65 years in the metal hose and expansion joint business–dating back to the early 1950's–the owners of Precision Hose & Expansion Joints have over 130 years combined experience in this industry.

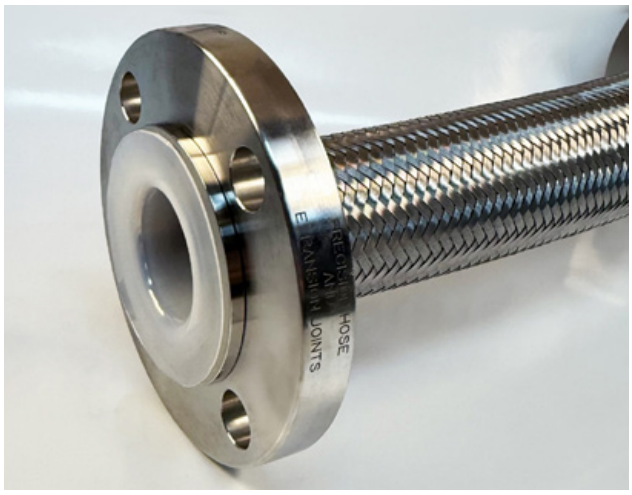
Our 105,000 square foot manufacturing facility is located on 6 acres in Stone Mountain, Georgia. The plant was designed totally for the state of the art manufacturing of metal hose and expansion joints. We would certainly welcome you to visit our company on your next visit to the Atlanta area.

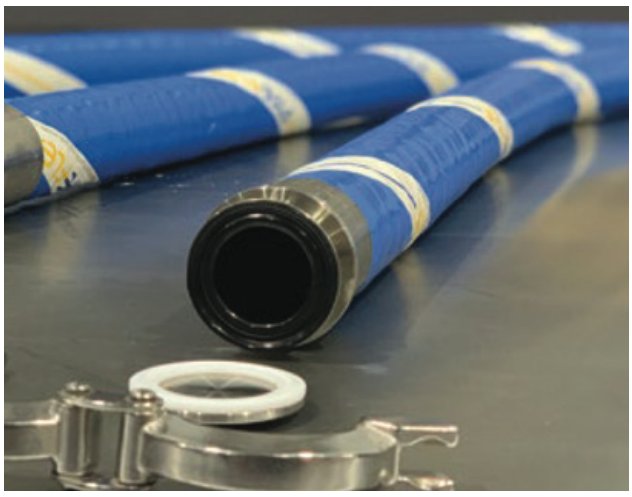
Quality, service and fair pricing is the basis on how we operate our business.

ANNOUNCEMENT

Precision Hose & Expansion Joints is proud to announce the expansion of our manufacturing capabilities with in-house flare-thru PTFE hose assemblies—engineered and manufactured in Stone Mountain, Georgia. This advanced flaring process across our HC and SC convoluted PTFE hose lines eliminates the need for separate sealing components while improving performance and reliability in demanding applications.

By bringing flare-thru production in-house, Precision enhances quality control, traceability, and lead times while expanding our range of custom-engineered solutions. This investment reinforces our commitment to vertical integration and technical innovation, delivering high-performance PTFE hose assemblies for critical industrial applications.



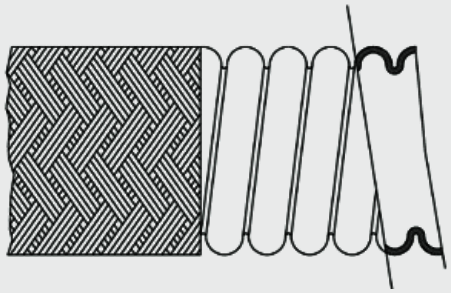


Heavy Wall PTFE Engineered Assemblies
Series HC Convoluted PTFE Hose

Product Description

Series HC is a heavy-wall convoluted PTFE hose with 304/316 stainless steel braid. Designed for high-purity process applications, it offers superior flexibility, chemical resistance and cleanability. The lined-through construction protects fittings against corrosion, making it ideal for demanding processes and plant operations.

TO – Tube Only
VW/TO – Vacuum Wire, Tube Only
SS – Stainless Steel Braid
VW/SS – Vacuum Wire, Stainless Steel Braid
VW/SS/RC – Vacuum Wire, Stainless Steel Braid, Rubber Cover
VW/SS/SI – Vacuum Wire, Stainless Steel Braid, Silicone Cover
PB – Polypropylene Braid
VW/PB – Vacuum Wire, Polypropylene Braid
KB – Kynar Braid



Properties

Design	Heavy wall convoluted PTFE Tube with 304SS/316SS Single Braid
Inner Layer	Natural (GP) or Anti-Static (AS) helically convoluted heavy wall PTFE Tube
Outer Layer	304SS/316SS Braid, Kynar Braid, Polypropylene Braid
Temperature Min	-60°F
Temperature Max	500°F

NOTE: All dimensions and pressure ratings on this chart assume SS braid. Consult Engineering for dimensions and pressures when utilizing Kynar or Polypropylene braid.

Pressure ratings listed are for hose & braid only. Assembly pressures are dependent on specific end fittings, please consult Engineering for more information on these products.

HCV – Heavy Wall Convoluted non-conductive virgin PTFE tubing, over braided with 300 series stainless steel wire
HCC – Heavy Wall Convoluted conductive lined virgin PTFE tubing, over braided with 300 series stainless steel wire

Virgin Part Number	Conductive Part Number	Hose Size	ID Nominal	OD Nominal	Wall Thickness	MBR	MAWP PSI	Burst Pressure PSI	Vac IN/HG	Weight LBS/FT
HCV-02	HCC-02	1/4"	0.28"	0.50"	0.03"	0.75"	870	2611	22.0	0.05
HCV-04	HCC-04	3/8"	0.38"	0.63"	0.03"	1.00"	725	2176	22.0	0.08
HCV-06	HCC-06	1/2"	0.51"	0.74"	0.04"	1.50"	653	1958	26.2	0.09
HCV-08	HCC-08	5/8"	0.63"	0.90"	0.04"	2.00"	580	1740	26.2	0.11
HCV-12	HCC-12	3/4"	0.75"	1.08"	0.04"	2.50"	580	1740	26.2	0.26
HCV-16	HCC-16	1.00"	1.00"	1.42"	0.05"	3.25"	508	1523	26.2	0.36
HCV-20	HCC-20	1-1/4"	1.22"	1.65"	0.05"	4.00"	508	1523	26.2	0.46
HCV-24	HCC-24	1-1/2"	1.40"	1.81"	0.06"	4.75"	508	1523	26.2	0.75
HCV-28	HCC-28	1-3/4"	1.73"	2.20"	0.06"	5.25"	363	1088	26.2	1.11
HCV-32	HCC-32	2"	1.87"	2.34"	0.06"	6.50"	363	1088	26.2	1.15
HCV-40	HCC-40	2-1/2"	2.37"	3.04"	0.06"	9.00"	203	609	26.2	1.44
HCV-48	HCC-48	3"	2.91"	3.66"	0.06"	10.25"	174	522	26.2	2.22
HCV-64	HCC-64	4"	3.86"	4.81"	0.07"	11.75"	145	435	26.2	2.72
HCV-96	HCC-96	6"	5.98"	7.17"	0.10"	20.50"	87	261	13.4	4.03

Heavy Wall PTFE Engineered Assemblies

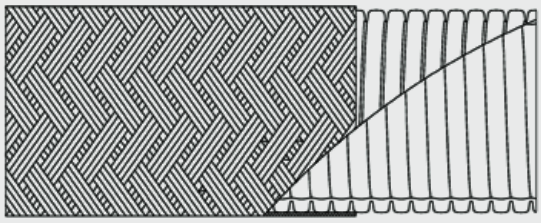
Series SC Smoothbore Convoluted PTFE Hose

Product Description

Series SC is a super flexible convoluted PTFE hose with 304/316 stainless steel braid. When space and flexibility are an issue but a smoothbore is a must for uninterrupted flow and ease of cleaning, it is the ultimate problem solver.

Used in applications that require the utmost cleanliness and with its smoothbore convoluted liner and heavier wall, it is more suited to the critical applications found in process plant industries - Pharmaceutical, Bio-pharm, Chemical, Food & Beverage and Clean environments.

SS – Stainless Steel Braid
SS/RC – Stainless Steel Braid, Rubber Cover
SS/SI – Stainless Steel Braid, Silicone Cover
PB – Polypropylene Braid



Properties

Design	Smoothbore convoluted PTFE tube with 304SS/316SS Single Braid
Inner Layer	Natural (GP) or Anti-Static (AS) helically convoluted OD heavy wall PTFE Tube
Outer Layer	304SS/316SS Braid, Kynar Braid, Polypropylene Braid
Temperature Min	-60°F
Temperature Max	500°F

NOTE: All dimensions and pressure ratings on this chart assume SS braid. Consult Engineering for dimensions and pressures when utilizing Kynar or Polypropylene braid.

Pressure ratings listed are for hose & braid only. Assembly pressures are dependent on specific end fittings, please consult Engineering for more information on these products.

SCV – Super Flexible Convoluted non-conductive virgin PTFE tubing, over braided with 300 series stainless steel wire
SCC – Super Flexible Convoluted conductive lined virgin PTFE tubing, over braided with 300 series stainless steel wire

Virgin Part Number	Conductive Part Number	Hose Size	ID Nominal	OD Nominal	Wall Thickness	MBR	MAWP PSI	Burst Pressure PSI	Vac IN/HG	Weight LBS/FT
SCV-08	SCC-08	1/2"	0.53"	0.71"	0.06"	1.50"	870	3481	26.2	0.17
SCV-12	SCC-12	3/4"	0.75"	0.95"	0.07"	1.97"	870	3481	26.2	0.28
SCV-14	SCC-14	7/8"	0.83"	1.06"	0.08"	2.17"	798	3191	26.2	0.34
SCV-16	SCC-16	1.00"	1.00"	1.24"	0.09"	2.76"	725	2901	26.2	0.43
SCV-20	SCC-20	1-1/4"	1.25"	1.55"	0.10"	3.94"	653	2611	26.2	0.6
SCV-24	SCC-24	1-1/2"	1.50"	1.81"	0.12"	5.51"	580	2321	26.2	0.79
SCV-32	SCC-32	2"	1.95"	2.29"	0.16"	11.02"	435	1741	26.2	1.16

Series HC & Series SC are available with the following fittings

Flare-Thru Options
- Flanges
- Camlocks
- Sanitary Tri-Clover

Non-Flared Options
- Flanges
- Camlocks
- Sanitary Tri-Clover
- Rigid Female NPT
- Male NPT
- JICs

Additional fittings may be available upon request.
Talk to one of our PTFE specialists about your applicaiton.

Medium Pressure Smooth Bore Hose

Product Description

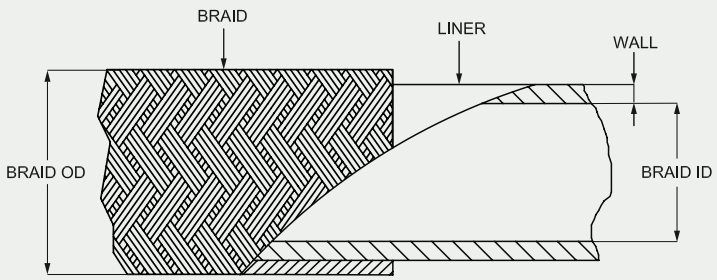
The SAE 100R14 range is a smoothbore PTFE lined hose made to meet or exceed the SAE 100R14 specification. The SAE 100R14 type B range is a smoothbore Antistatic PTFE lined hose that is made to meet or exceed the SAE 100R14 specification. This product should be used when electrically resistive fluids are being transferred at high flow rates.

SB3V – .030 tube wall, non-conductive virgin PTFE tubing, over braided with 300 series stainless steel wire.

SB3C – .030 tube wall, conductive lined, virgin PTFE tubing, over braided with 300 series stainless steel wire steel wire.

SB4V – .040 tube wall, non-conductive virgin PTFE tubing, over braided with 300 series stainless steel wire.

SB4C – .040 tube wall, conductive lined, virgin PTFE tubing, over braided with 300 series stainless steel wire.



Properties

Application	Used in stringent applications that need the protection of a hose that meets or exceeds SAE 100 R14 standard.
Design	Smoothbore PTFE tube with high tensile SS 304 braid to the antistatic SAE 100 R14 Standard
Inner Layer	Medium wall smoothbore antistatic PTFE tube
Outer Layer	High tensile 304 maypole wound Stainless Steel braid
Temperature Min	-60°C
Temperature Max	+260°C
Material	PTFE according to "ISO12086, Part 1. PTFE-E.P.D.M 1.61.C.E.4_12"

Also Available: SBBV and SBBC – .030 tube wall, conductive and non-conductive virgin PTFE tubing, over braided with 80/20 bronze wire.

SB3V – .030 tube wall, non-conductive virgin PTFE tubing, over braided with 300 series stainless steel wire.
SB3C – .030 tube wall, conductive lined, virgin PTFE tubing, over braided with 300 series stainless steel wire.

Virgin Part Number	Conductive Part Number	Hose Size	Inside Diameter	Outside Diameter	Operating Pressure PSI	Burst Pressure PSI	Bend Radius (Inches)	Weight LBS/FT
SB3V-03	SB3C-03	3/16	0.125	0.250	3,000	12,000	2	0.047
SB3V-04	SB3C-04	1/4	0.187	0.312	3,000	12,000	2	0.077
SB3V-05	SB3C-05	5/16	0.250	0.375	3,000	12,000	3	0.098
SB3V-06	SB3C-06	3/8	0.312	0.445	2,500	10,000	4	0.110
SB3V-07	SB3C-07	7/16	0.375	0.503	2,250	9,000	4.5	0.124
SB3V-08	SB3C-08	1/2	0.405	0.549	2,000	8,000	5.2	0.124
SB3V-10	SB3C-10	5/8	0.500	0.648	1,500	6,000	6.5	0.154
SB3V-12	SB3C-12	3/4	0.625	0.778	1,200	4,800	7.7	0.170
SB3V-14	SB3C-14	7/8	0.750	0.885	1,100	4,400	8.2	0.198
SB3V-16	SB3C-16	1	0.875	1.030	1,000	4,000	9	0.273
SB3V-18	SB3C-18	1-1/8	1.000	1.135	900	3,600	10	0.305
SB3V-20	SB3C-20	1-1/4	1.125	1.290	750	3,000	16	0.350

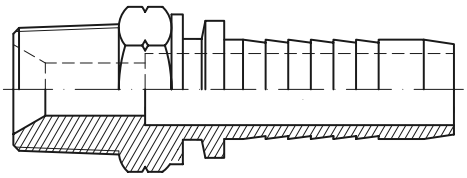
SB4V – .040 tube wall, non-conductive virgin PTFE tubing, over braided with 300 series stainless steel wire.
SB4C – .040 tube wall, conductive lined, virgin PTFE tubing, over braided with 300 series stainless steel wire.

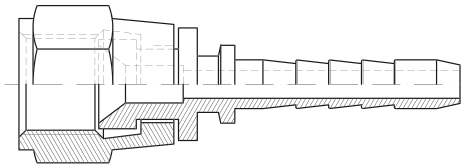
Virgin Part Number	Conductive Part Number	Hose Size	Inside Diameter	Outside Diameter	Operating Pressure PSI	Burst Pressure PSI	Bend Radius (Inches)	Weight LBS/FT
SB4V-04	SB4C-04	1/4	0.188	0.323	3,000	12,000	2	0.077
SB4V-05	SB4C-05	5/16	0.250	0.386	3,000	12,000	3	0.098
SB4V-06	SB4C-06	3/8	0.313	0.447	2,500	10,000	4	0.114
SB4V-07	SB4C-07	7/16	0.381	0.513	2,250	9,000	1.5	0.122
SB4V-08	SB4C-08	1/2	0.406	0.565	2,000	8,000	5	0.141
SB4V-10	SB4C-10	5/8	0.500	0.664	1,500	6,000	6.5	0.174
SB4V-12	SB4C-12	3/4	0.630	0.789	1,250	5,000	7.5	0.255
SB4V-16	SB4C-16	1	0.878	1.050	1,000	4,000	9	0.299
SB4V-20	SB4C-20	1-1/4	1.128	1.310	750	3,000	16	0.468

Also Available: SBBV and SBBC – .030 tube wall, conductive and non-conductive virgin PTFE tubing, over braided with 80/20 bronze wire.

Medium Pressure Smooth Bore Hose Fittings

Fittings are uniquely designed to accommodate either swaging or crimping with the same insert and collar, eliminating the need for double inventory. Either attachment method provides for the full rated catalog performance of the finished assembly. Standard fitting materials are 300 series stainless steel, CA360 brass or low carbon steel. We maintain an inventory of popular fitting styles in most of these materials.





Stainless, Brass & CS – Male NPT

Stainless	Brass	Carbon		
Part Number	Part Number	Part Number	Hose Size	Thread
SBM03S02	SBM03B02	SBM03C02	-03	1/8"-27
SBM04S02	SBM04B02	SBM04C02	-04	1/8"-27
SBM04S04	SBM04B04	SBM04C04	-04	1/4"-18
SBM05S04	SBM05B04	SBM05C04	-05	1/4"-18
SBM06S04	SBM06B04	SBM06C04	-06	1/4"-18
SBM06S06	SBM06B06	SBM06C06	-06	3/8"-18
SBM08S06	SBM08B06	SBM08C06	-08	3/8"-18
SBM08S08	SBM08B08	SBM08C08	-08	1/2"-14
SBM10S08	SBM10B08	SBM10C08	-10	1/2"-14
SBM12S12	SBM12B12	SBM12C12	-12	3/4"-12
SBM16S16	SBM16B16	SBM16C16	-16	1"-11 1/2

Stainless, Brass & CS – Female JIC

Stainless	Brass	Carbon		
Part Number	Part Number	Part Number	Hose Size	Thread
SBJ03S	SBJ03B	SBJ03C	-03	3/8"-24
SBJ04S	SBJ04B	SBJ04C	-04	7/16"-20
SBJ05S	SBJ05B	SBJ05C	-05	1/2"-20
SBJ06S	SBJ06B	SBJ06C	-06	9/16"-18
SBJ08S	SBJ08B	SBJ08C	-08	3/4"-16
SBJ10S	SBJ10B	SBJ10C	-10	7/8"-14
SBJ12S	SBJ12B	SBJ12C	-12	1 1/16"-12
SBJ16S	SBJ16B	SBJ16C	-16	1 5/16"-12

Additional fittings are available upon request. Please contact us for more information.

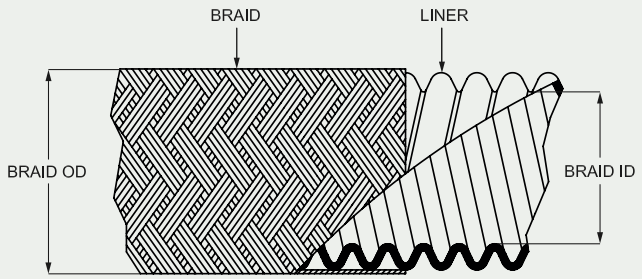
Convoluted PTFE Hose

Product Description

Originally designed for easy assembly by re-sellers looking to extend their product portfolio. Our convoluted PTFE Hose has a 'true' I/D and eliminates the need to de-convolute the hose when using standard hydraulic inserts. Used in applications where constant flexing, high temperatures or chemical resistance is paramount this hose offers a cost effective solution over the full life of the hose.

CV – Helically convoluted tube wall, non-conductive virgin PTFE tubing, over braided with 300 series stainless steel wire.

CC – Helically convoluted tube wall, conductive lined, virgin PTFE tubing, over braided with 300 series stainless steel wire.



Properties

Application	Used globally in low to medium pressure premium applications that require more flexibility or tighter bend radius whilst still requiring the high temperature and impeccable chemical resistance of the standard PTFE hose.
Design	Helically convoluted PTFE tube with high tensile SS 304 braid
Inner Layer	Helically convoluted PTFE tube
Outer Layer	High tensile 304 maypole wound Stainless Steel braid
Temperature Min	-60°C
Temperature Max	+260°C
Material	PTFE according to "ISO12086, Part1. PTFE-E.P.D.M 1.61.C.E.4_12"

CV – Helically convoluted tube wall, virgin PTFE tubing, over braided with 300 series stainless steel wire.
CC – Helically convoluted tube wall, conductive lined, virgin PTFE tubing, over braided with 300 series stainless steel wire.

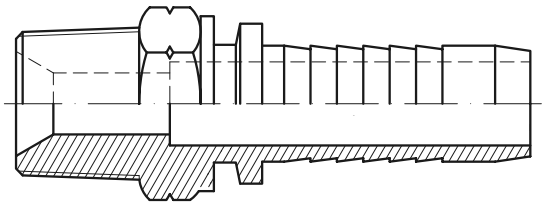
Virgin Part Number	Conductive Part Number	Hose Size	Inside Diameter	Outside Diameter	Operating Pressure PSI	Burst Pressure PSI	Bend Radius (Inches)
CV-04	CC-04	1/4	0.25	0.484	2,500	7,500	0.7
CV-06	CC-06	3/8	0.375	0.600	2,000	6,000	0.8
CV-08	CC-08	1/2	0.500	0.740	1,500	4,500	1
CV-10	CC-10	5/8	0.625	0.870	1,200	3,600	2
CV-12	CC-12	3/4	0.750	0.970	1,000	3,000	2.5
CV-16	CC-16	1	1	1.29	670	2,000	3.5
CV-20	CC-20	1-1/4	1.25	1.603	500	1,500	5
CV-24	CC-24	1-1/2	1.5	1.90	440	1,300	6
CV-32	CC-32	2	2	2.421	335	1,000	7.5

Convoluted PTFE Hose Fittings

Fittings for convoluted hoses are available in a wide variety of configurations and material options. The positive lock design is uniquely engineered to accommodate both swaging and crimping with no duplication of inventory. The collar-to-insert lock insures a leak-proof seal on the hose. Male pipe fittings and female swivel inserts are available in carbon steel and type 316 stainless steel. Collars are either carbon steel or 304 stainless steel. When only wetted surfaces require corrosion resistance, carbon steel collars may be specified with stainless steel inserts.

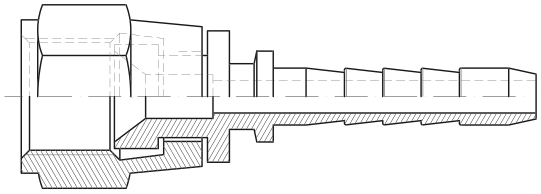
Stainless, Brass & CS – Male NPT

316 Stainless	Brass	Carbon		
Part Number	**Part Number**	**Part Number**	**Hose Size**	**Thread**
CM08S	CM08B	CM08C	-08	1/2"-14
CM12S	CM12B	CM12C	-12	3/4"-14
CM16S	CM16B	CM16C	-16	1"-11-1/2
CM20S	CM20B	CM20C	-20	1-1/4"-11 1/2
CM24S	CM24B	CM24C	-24	1-1/2" -11 1/2
CM32S	CM32B	CM32C	-32	2"-11 1/2



Stainless, Brass & CS – Female JIC

316 Stainless	Brass	Carbon		
Part Number	**Part Number**	**Part Number**	**Hose Size**	**Thread**
CJ08S	CJ08B	CJ08C	-08	3/4"-16
CJ12S	CJ12B	CJ12C	-12	1 1/16"-12
CJ16S	CJ16B	CJ16C	-16	1 5/16"-12
CJ20S	CJ20B	CJ20C	-20	1 5/8"-12
CJ24S	CJ24B	CJ24C	-24	1 7/8"-12
CJ32S	CJ32B	CJ32C	-32	2 1/2"-12



Additional fittings are available upon request. Please contact us for more information.

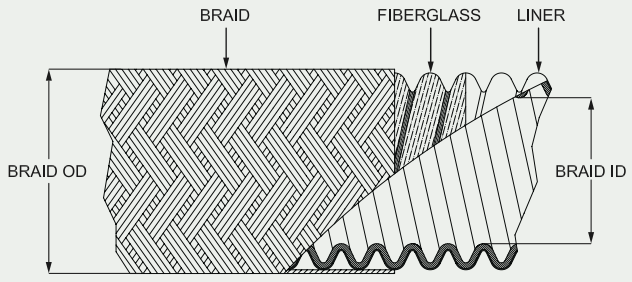
Medium Pressure Tape Wrap Convoluted Hose

Product Description

Helically convoluted strip wound PTFE and fiberglass tape combine to give extreme flexibility, corrosion resistance, long term durability and chemical inertness, this hose can be used in many diverse applications, from thermal cycling to injection molding. The addition of Antistatic PTFE inner layer allows any static build up from electrically resistive fluids to dissipate to the end fittings.

CTV – Non-conductive, PTFE lined, fiberglass reinforced inner core, over braided with 300 series stainless steel wire.

CTC – Conductive (carbon impregnated), PTFE lined, fiberglass reinforced inner core, over braided with 300 series stainless steel wire.



Properties

Application	Used globally in applications that require a tighter bend radius whilst still requiring the unparalleled qualities of a PTFE hose. Not suitable for steam -cold water cycling applications.
Design	Convoluted tape wrapped antistatic PTFE tube with high tensile SS 304 braid
Inner Layer	Helically convoluted antistatic PTFE tube with glass fiber outer layer
Outer Layer	High tensile 304 maypole wound Stainless Steel braid
Temperature Min	-54°C
Temperature Max	+204°C
Material	PTFE according to "ISO12086, Part1. PTFE-E.P.D.M 1.61.C.E.4_12"

CTV – Non-conductive, PTFE lined, fiberglass reinforced inner core, over braided with 300 series stainless steel wire.
CTC – Conductive (carbon impregnated), PTFE lined, fiberglass reinforced inner core, over braided with 300 series stainless steel wire.

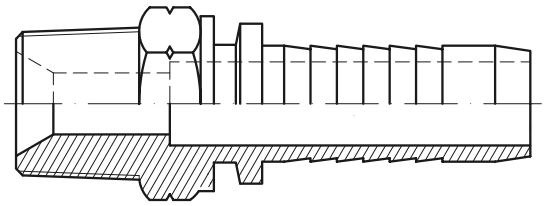
Virgin Part Number	Conductive Part Number	Inside Diameter	Outside Diameter	Operating Pressure PSI	Burst Pressure PSI	Bend Radius (Inches)	Weight LBS/FT
CTV-08	CTC-08	0.50	0.76	1,250	5,000	1.5	0.20
CTV-12	CTC-12	0.75	1.07	1,100	4,400	2.5	0.33
CTV-16	CTC-16	1	1.34	1,000	4,000	3	0.43
CTV-20	CTC-20	1.25	1.57	1,000	4,000	3.5	0.53
CTV-24	CTC-24	1.50	1.81	750	3,000	4.5	0.65
CTV-32	CTC-32	2	2.32	500	2,000	5.25	0.73

Tape Wrap Convoluted Hose Fittings

Fittings for convoluted hoses are available in a wide variety of configurations and material options. The positive lock design is uniquely engineered to accommodate both swaging and crimping with no duplication of inventory. The collar-to-insert lock insures a leak-proof seal on the hose. Male pipe fittings and female swivel inserts are available in carbon steel and type 316 stainless steel. Collars are either carbon steel or 304 stainless steel. When only wetted surfaces require corrosion resistance, carbon steel collars may be specified with stainless steel inserts.

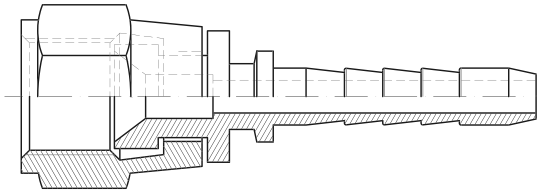
316 Stainless and Carbon — 2 Piece Male NPT

316 Stainless	Carbon		
Part Number	**Part Number**	**Hose Size**	**Thread**
CTM08S	CTM08C	-08	1/2"-14
CTM12S	CTM12C	-12	3/4"-14
CTM16S	CTM16C	-16	1"-11-1/2
CTM20S	CTM20C	-20	1-1/4"-11 1/2
CTM24S	CTM24C	-24	1-1/2" -11 1/2
CTM32S	CTM32C	-32	2"-11 1/2



Stainless and Carbon — 4 Piece FJIC

316 Stainless	Carbon		
Part Number	**Part Number**	**Hose Size**	**Thread**
CTJ08S	CTJ08C	-08	3/4"-16
CTJ12S	CTJ12C	-12	1 1/16"-12
CTJ16S	CTJ16C	-16	1 5/16"-12
CTJ20S	CTJ20C	-20	1 5/8"-12
CTJ24S	CTJ24C	-24	1 7/8"-12
CTJ32S	CTJ32C	-32	2 1/2"-12



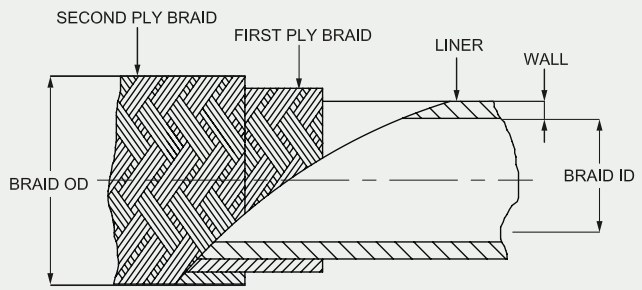
Additional fittings are available upon request. Please contact us for more information.

High Pressure Hose

Product Description

The high pressure hose with and antistatic PTFE liner, performs well above it's weight for hydraulic applications. Ideal for applications requiring strength, reliability and long term performance.

The HPP hose has a post sintered antistatic PTFE liner for gas applications.



Properties

Application	High pressure applications that require strong, lightweight, long performing reliable hoses.
Design	High pressure antistatic smoothbore PTFE tube with maypole and spiral wound high tensile 304 stainless steel braids
Inner Layer	Medium wall antistatic smoothbore PTFE tube
Outer Layer	High tensile 304 maypole wound Stainless Steel bunch braid
Temperature Min	-60°C
Temperature Max	+260°C
Material	PTFE according to "ISO12086, Part1. PTFE-E.P.D.M 1.61.C.E.4_12"

NOTE: HPP has a post sintered PTFE liner for gas applications. Please contact our sales team for more information on these products.

HP – High pressure, antistatic smoothbore PTFE lined, reinforced with high tensile 304 stainless steel braids.
HPP – High pressure, post sintered antistatic smoothbore PTFE lined, reinforced with high tensile 304 stainless steel braids.

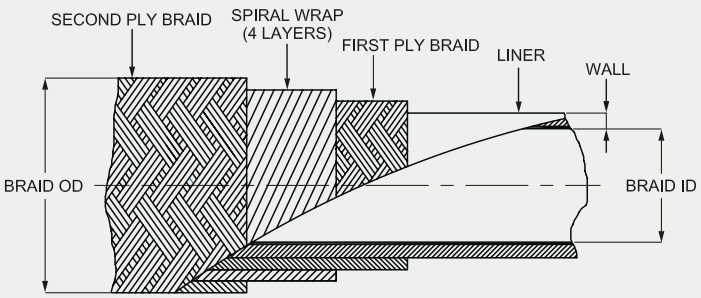
Part Number		Description	Tube Wall Thickness Nominal	Braid OD Nominal	Tolerance + / -	Braid ID Nominal	Tolerance + / -	Maximum Working Pressure	Minimum Burst Pressure	Minimum Bend Radius
Non-post Sintered	*Post Sintered*		*(in)*	*(in)*	*(in)*	*(in)*	*(in)*	*(psi)*	*(psi)*	*(psi)*
HP-04	HPP-04	1/4"	0.041	0.375	0.015	0.222	0.01	5,000	16,000	38
HP-06	HPP-06	3/8"	0.041	0.473	0.015	0.308	0.01	5,000	16,000	64
HP-08	HPP-08	1/2"	0.046	0.6	0.018	0.401	0.01	5,000	16,000	74
HP-10	HPP-10	5/8"	0.051	0.71	0.018	0.495	0.01	5,000	16,000	84
HP-12	HPP-12	3/4"	0.051	0.97	0.02	0.617	0.015	5,000	16,000	102
HP-16	HPP-16	1"	0.051	1.25	0.02	0.867	0.015	5,000	16,000	127
HP-20	HPP-20	1-1/4"	0.071	1.6	0.04	1.125	0.025	4,000	16,000	305
HP-24	HPP-24	1-1/2"	0.071	1.92	0.04	1.375	0.025	4,000	12,000	356

Heavy Duty High Pressure Hose

Product Description

The heavy weight high pressure hose, ideal for impulse and cycling applications, with a smoothbore conductive liner and multiple spiral braids—this hose passes where most hoses fail.

The HDP hose has a post sintered antistatic PTFE liner for gas applications.



Properties

Application	High shock/vibration applications, ideal for pressure impulses and cycling such as reaction injection moulding.
Design	High pressure antistatic smoothbore PTFE tube with bunch braided high tensile 304 stainless steel
Inner Layer	Medium wall antistatic smoothbore PTFE tube
Outer Layer	High tensile 304 maypole wound Stainless
Temperature Min	-60°C
Temperature Max	+260°C
Material	PTFE according to "ISO12086, Part1. PTFE-E.P.D.M 1.61.C.E.4_12"

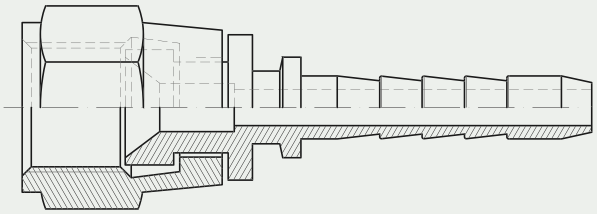
NOTE: HDP has a post sintered PTFE liner for gas applications. Please contact our sales team for more information on these products.

HD – Heavy duty high pressure, PTFE lined, antistatic smoothbore conductive, reinforced with high tensile 304 stainless steel braids.
HDP – Heavy duty high pressure, post sintered PTFE lined, antistatic smoothbore conductive, reinforced with high tensile 304 stainless steel braids.

Part Number		Description	Tube Wall Thickness Nominal	Braid OD Nominal	Tolerance + / -	Braid ID Nominal	Tolerance + / -	Maximum Working Pressure	Minimum Burst Pressure	Minimum Bend Radius
Non-post Sintered	*Post Sintered*		*(in)*	*(in)*	*(in)*	*(in)*	*(in)*	*(psi)*	*(psi)*	*(psi)*
HD-04	HDP-04	1/4"	0.041	0.485	0.01	0.23	0.005	6,000	24,000	76
HD-06	HDP-06	3/8"	0.041	0.594	0.012	0.303	0.008	6,000	24,000	127
HD-08	HDP-08	1/2"	0.051	0.733	0.013	0.4	0.01	6,000	24,000	146
HD-10	HDP-10	5/8"	0.051	0.91	0.02	0.53	0.01	4,000	12,000	159
HD-12	HDP-12	3/4"	0.051	1.055	0.02	0.655	0.01	4,000	12,000	197
HD-16	HDP-16	1"	0.051	1.325	0.025	0.888	0.018	4,000	12,000	245

High Pressure and Heavy Duty High Pressure Hose Fitting are shown on page 12.

High Pressure Hose Fittings
Heavy Duty High Pressure Hose Fittings



High Pressure Hose Fittings

HP/HPP Crimp Style fittings are uniquely designed for optimum performance. A positive, metal-to-metal lock insures the integrity of the attachment throughout the pressure range to beyond minimum specified burst. The fitting material is 300 series stainless steel and the inside diameters are minimum diameters after crimping.

Part Number	Hose Size	Thread
HPJ04S	-04	7/16-20
HPJ06S	-06	9/16-18
HPJ08S	-08	3/4-16
HPJ10S	-10	7/8-14
HPJ12S	-12	1-1/16-12
HPJ16S	-16	1-5/16-12
HPJ20S	-20	1-5/8-12
HPJ24S	-24	1-7/8-12

Heavy Duty High Pressure Hose Fittings

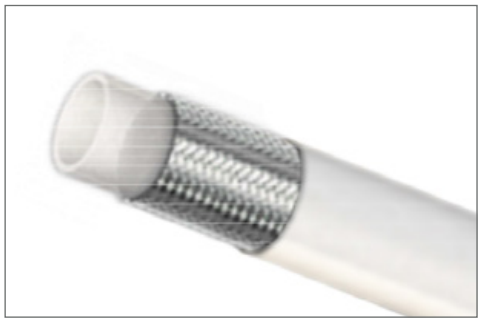
Permanently attached fittings for this hose are designed to be swaged. HD/HDP hose fittings also utilize the unique metal-to-metal lock for complete fitting integrity and performance. The material for these fittings is 300 series stainless steel. The inside diameters shown are minimum dimensions obtained after swaging or crimping.

Part Number	Hose Size	Thread
HDJ04S	-04	7/16-20
HDJ06S	-06	9/16-18
HDJ08S	-08	3/4-16
HDJ10S	-10	7/8-14
HDJ12S	-12	1-1/16-12
HDJ16S	-16	1-5/16-12

Extruded Sleeving

Silicone

- Provides heat protection in critical applications—automotive, industrial and high temperature chemical
- Designed to handles temperatures up to 400ºF
- Provides additional hoop strength and kink resistance
- Multiple color options are available



Hytrel

- High durometer cover provides superior abrasion resistance
- Increases hoop strength and kink resistance
- Greatly increases average hose life

PVC

- Endless color options including clear
- Easily cleaned for aesthetic appearance
- Print options available

Testing Policy

Our testing policy ensures that every assembly undergoes testing before leaving our facility. We adhere to industry standards and provide a test certification with a unique serial number for full traceability.

Certification

All PTFE tubing used in our assemblies complies with FDA 21:177:1550, EU Food regulations, USP Class VI, and 3A Sanitary standards. A Certificate of Conformity is available upon request.

- A wide operating temperature range (-60 C to +260 C/-100 F - +500 F)
- Inert to virtually all chemicals
- Resistance to weathering/ageing unaffected by UV light, resistant to oxidation, surface fouling and discoloration.
- Non-flammable
- Lightweight
- Superior flex fatigue life
- Low permeability
- Lowest coefficient of friction of any solid material known to man
- Unlimited shelf life
- Solvent resistant

Hose Configuration Requirements for Bend Radius

Hose Assemblies are usually connected at both ends in service and remain in a fixed (static) configuration or a flexing (dynamic) configuration. Proper Hose Configuration Requirements are listed below.

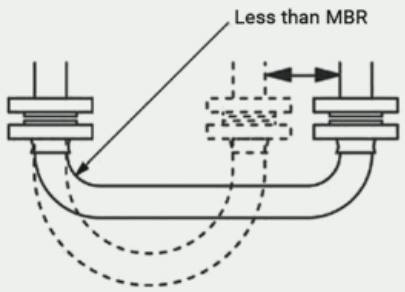
Bend Radius
Whether static or dynamic, the bend radius of the hose must never be less than the Minimum Bend Radius (MBR) for the hose as listed in the relevant hose brochure.

The most common situation when this is likely to occur is—when the hose is flexed at the end fitting, with stress being applied to the hose at an angle to the axis of the end fitting. This happens, either because the length of the hose is too short, or because the weight of the hose, plus contents, creates a stress at an angle to the end fitting.

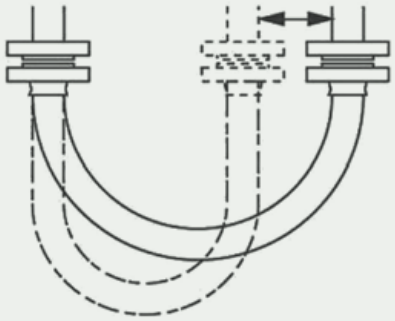
When possible, design the configuration to ensure that any flexing in the hose takes place away from the end fittings.

(DYNAMIC) CONFIGURATION

✗ INCORRECT – Hose too short

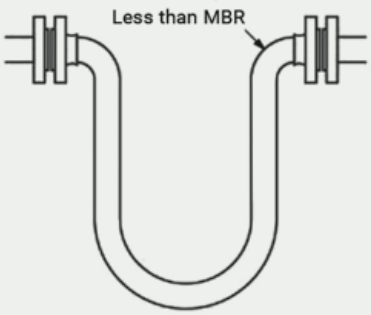


✓ CORRECT – No flex at end fittings

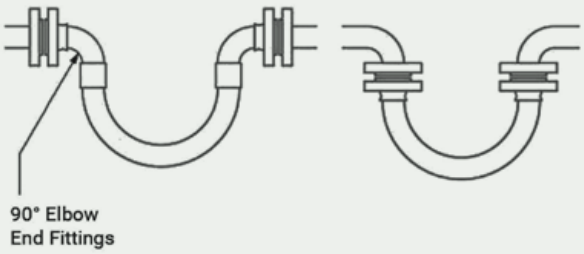


(STATIC) CONFIGURATION

✗ INCORRECT – Weight of hose is at 90° to axis of end fittings



✓ CORRECT – No flex at end fittings

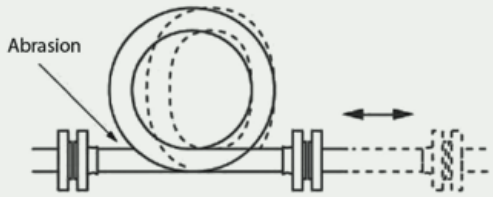


Abrasion & Torque

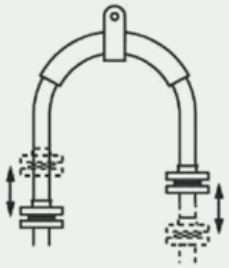
Support

The hose configuration should always be designed, and supported, to avoid any possibility of external abrasion. In some cases, the length, configuration and angle of the hose can be designed to avoid abrasion. In others, static, moving support frames, or support wheels are required.

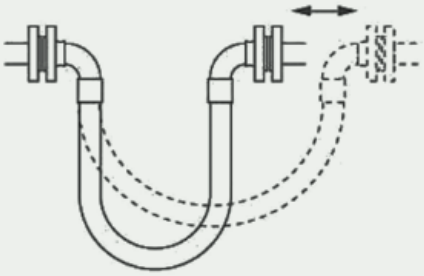
✗ INCORRECT – Abrasion against hose



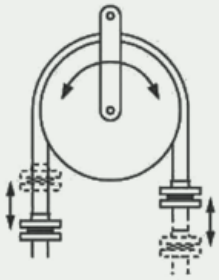
✗ INCORRECT – Abrasion inside support



✓ CORRECT – No hose abrasion

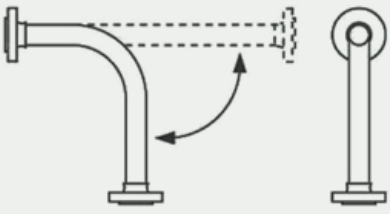


✓ CORRECT – No abrasion over support

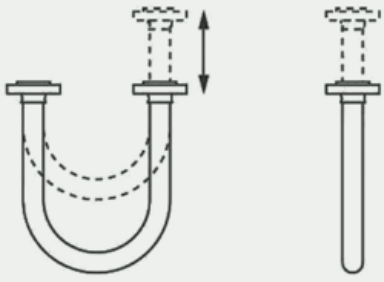


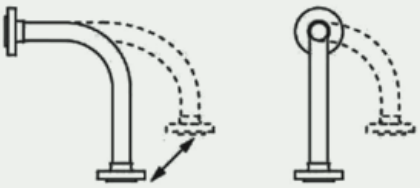
No Torque

The hose must not be subjected to torque (twist), either during connection or as a result of the flexing cycle. Torque can occur during connection, if the hose is accidentally twisted, or if the second end being connected is a screwed connection, the hose is subjected to torque during final tightening. In a flexing application, if any flexing cycle of the hose occurs in 3 dimensions instead of 2, then torque will also occur.

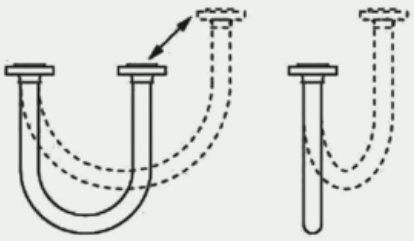


✓ CORRECT – Flexing movement takes PLACE





✗ INCORRECT – Flexing movement takes place in 3 dimensions so torque is applied



PTFE Hose Assembly Part Numbers

Fitting #1 Fitting #2

HCV - 32 - AH - 0244 - F15S32F - TC32F

Hose Series

Code	Description
SB3V	.030 Smooth Bore GP
SB4V	.040 Smooth Bore GP
CV	Convoluted GP
CTV	Convoluted Tape Wrap GP
HP	High Pressure AS
HPP	High Pressure AS Post Sintered
SB3C	.030 Smooth Bore AS
SB4C	.040 Smooth Bore AS
CC	Convoluted AS
CTC	Convoluted Tape Wrap AS
HD	Heavy Duty HP AS
HDP	Heavy Duty HP AS Post Sintered
HCV	Helical Convoluted GP
HCC	Helical Convoluted AS
SCV	Smooth Bore Convoluted GP
SCC	Smooth Bore Convoluted AS

Diameter

Code	Hose ID
03	3/16
04	1/4
05	5/16
06	3/8
07	7/16
08	1/2
10	5/8
12	3/4
14	7/8
16	1
18	1-1/8
20	1-1/4
24	1-1/2
32	2
48	3
64	4

Braid/Cover

Code	Description
A	304SS Braid
B	316SS Braid
C	Kynar Braid
D	Polypropylene Braid
E	SS Casing
F	EPDM Cover
G	Silicone Cover
H	Vacuum Wire
J	HDPE Spiral Guard
K	SS Spring Guard
L	Polyolefin Heat Shrink
M	Fire Sleeve

Hose Length

1 = 1/8
2 = 1/4
3 = 3/8
4 = 1/2
5 = 5/8
6 = 3/4
7 = 7/8

Length (OAL)
- First 3 positions in inches.
- Last position in eights. "

End Fittings

Code	Description
SBM##S	SS Male NPT R14 Smooth Bore
SBJ##S	SS Female JIC R14 Smooth Bore
SBM##C	CS Male NPT R14 Smooth Bore
SBJ##C	CS Female JIC R14 Smooth Bore
CM##S	SS Male NPT R14 Convoluted
CM##C	CS Male NPT R14 Convoluted
CJ##S	SS Female JIC R14 Convoluted
C##C	SS Female JIC R14 Convoluted
HPJ##S	SS High Pressure JIC
KC##F	SS Female Camlock Flare-Thru
KC##	SS Female Camlock
KE##F	SS Male Camlock Flare-Thru
KE##	SS Male Camlock
TC##F	SS Tri-Clamp Flare-Thru
TC##	SS Tri-Clamp
FL15S##	316SS 150# Floating Flange
FL30S##	316SS 300# Floating Flange
FL15C##	CS 150# Floating Flange
FL30C##	CS 300# Floating Flange
FL15S##F	316SS 150# Floating Flange Flare-Thru
FL30S##F	316SS 300# Floating Flange Flare-Thru
FL15C##F	CS 150# Floating Flange Flare-Thru
FL30C##F	CS 300# Floating Flange Flare-Thru

Example above:

HCV	Series HC Helically Convoluted Tube, Non-Conductive (GP)
32	2" Diameter (ID)
AH	304SS Braid and Vacuum Wire Construction
0244	Assembly length, 24-1/2" OAL
F15S32F	2" Class 150 316SS Flare-Thru Floating Flange
TC32F	2" 316SS Flare-Thru Tri-Clover

Check out our other products

Precision Hose & Expansion Joints is one of very few American companies that manufactures a complete line of products designed to meet almost every industrial and commercial hose or expansion joint needs.

Please call the factory or visit us online to request a catalog for any of the following products:

- Corrugated Metal Hose & Braid
- Stripwound Metal Hose
- Weld Fittings & Braid Sleeves
- Metal Expansion Joints
- Rubber Expansion Joints
- Fabric Expansion Joints

Warranty

1. DEFINITION: "Document" shall refer to these General Terms and Conditions and the Purchase Order, Invoice, or Delivery Ticket, as the case may be, printed on the face hereof.

2. DELIVERY: Time is of the essence in this transaction, and if delivery of conforming Product(s) or performance of conforming services is not completed by the time(s) promised, Buyer reserves the right, in addition to its other rights and remedies, to cancel this order, to reject such Product(s) or services in whole or part on reasonable notice to Seller, and/or to purchase substitute Products or services elsewhere and charge Seller with any loss incurred. Shipments sent C.O.D. without Buyer's written consent will not be accepted and will be at Seller's risk.

3. PRICE: Buyer shall not be billed at prices higher than stated herein unless authorized in writing by Buyer. Seller agrees to notify Buyer of any price reduction made in Products or services covered by this Document subsequent to the date hereof and prior to delivery or performance and agrees that any such reduction will be applicable to this Document.

4. TERMS: This sale is limited of these terms and conditions. Any additional or different terms or conditions proposed by you are rejected unless we expressly agree there to in writing. A contract embodying all and only these terms and conditions shall be formed by (i) delivery of materials or goods ("Product(s)") or performance of services and (ii) acceptance of such Product(s) or services by buyer. References to this document shall, unless the context otherwise requires, include any contract resulting from this Document. No modification of this document shall be effective without our written consent. No course of prior dealings, no usage of trade, and no course of performance shall be used to modify, supplement, or explain any terms used in this Document.

5. PAYMENT: All payments are due pursuant to the payment term on the face of this Document.

6. TERMINATION: Buyer expressly reserves the right, in the event that this Document is issued pursuant to a prime contact with the Government or to a subcontract thereunder, to terminate the work under this Document at any time by written or telegraphic notice to Seller stating the extent and effective date of such termination, in which event the rights and obligations of the parties hereto shall be determined in accordance with the termination provisions applicable to such Government contract.

7. CONTINGENCIES: Failure of either party to perform hereunder, except for the payment of money, in whole or in part, occasioned by act of God, act of the public enemy, fire, explosion, perils of sea, flood, drought, war, riot, sabotage, terrorism, accident, embargo, government priority, requisition or allocation, or any circumstance of like or different character beyond the reasonable control of the party so failing to perform, shall not subject said party to any liability to the other party for such period of time and to the extent that such contingency precludes performance.

8. WARRANTIES:

(a) Seller makes NO WARRANTY WHATSOEVER, except as to title, with respect to any Product(s) manufactured and/or designed to Buyer's own specifications (other than mere dimensions), and Buyer shall, at its own expense, indemnify, defend and hold Seller harmless from and against any claim, suit, or expense which shall be asserted or brought against Seller by reason of its manufacture or sale of such Product(s).

(b) Seller makes NO WARRANTY WHATSOEVER concerning any Product(s) manufactured by others, but will extend to Buyer any warranties respecting such Product(s) as made by the manufacturer of such Product(s). Seller will repair or replace any Product(s) manufactured by Seller which prove defective within one (1) year from the date of shipment if such defects are due to defective workmanship of Seller's employees, provided that the Product(s) has or has been (i) properly assembled and utilized in accordance with Seller's design thereof and instructions relating thereto AND (ii) returned to the Seller at Buyer's expense. This warranty shall be voided by any changes made in the Product(s) prior to or in connection with their assembly or use.

(c) EXCEPT FOR THE EXPRESS WARRANTY DESCRIBED ABOVE THERE ARE NO WARRANTIES INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, WHICH EXTEND BEYOND THE DESCRIPTION OF THE PRODUCT(S) ON THE FACE HEREOF NO WARRANTIES OF REPRESENTATIONS AT ANY TIME MADE BY ANY REPRESENTATIVE OF SELLER SHALL BE EFFECTIVE TO VARY OR EXTEND THE ABOVE REFERENCED EXPRESS WARRANTIES OR ANY OTHER TERMS HEREOF.

(d) In no event shall Seller be liable for consequential, incidental, or special damages resulting from or in any matter related to the Product(s), the design, use, or any inability to use the Product(s), including without limitation, damages arising out of or in any manner relating to the delivery of the Product(s), or any delay with respect to delivery of the Product(s). The sole and exclusive remedy with respect to any defective Product(s) manufactured by Seller shall be repair, correction, or replacement thereof pursuant to the "WARRANTY" provisions above. Should the Product(s) prove so defective, however, as to preclude the remedying of warranted defects by repair or replacement. Buyer's sole and exclusive remedy shall be the refund of the purchase price of the defective Product(s) involved, upon return of the Product(s) to Seller.

(e) Seller warrants that the use or sale of any Product(s) delivered hereunder, or any part thereof, except any Product(s) produced to Buyer's drawings or specifications, does not infringe any adverse valid existing patent. Seller shall indemnify, defend, and hold harmless Buyer, Buyer's customers, users of the Product(s), and any of their successors and assigns, from and against any and all liability, damage, loss, cost, or expense incurred in connection with any claim, suit, or action for actual or alleged infringement of any such patent, arising out of or in connection with the use or sale of such Product(s).

9. LOSS IN TRANSIT: Title and risk of loss in transit shall pass to Buyer upon delivery to (i) Buyer or (ii) a carrier, where shipment is made F.O.B. Seller's shipping point.

10. ASSIGNMENT: Either party's assignment of this Document, of any interest herein, or of any money due or to become due hereunder without the prior written consent of the other party shall be void, unless such assignment is made to an affiliate of the assigning party.

11. INDEPENDENT CONTRACTOR: In performing any services hereunder, each party is and undertakes performance hereof as an independent contractor, with sole responsibility for all persons employed in connection therewith, including without limitation, exclusive liability for the payment of all Federal, State, and local Unemployment and Disability Insurance and all Social Security and/or other taxes and contributions payable in respect of such persons from and against which liability each party agrees to indemnify, defend, and hold harmless the other part.

12. MANNER OF PERFORMANCE:

(a) Each party shall comply with all laws, regulations, and/or other requirements of local, state, and federal governments in connection with its manufacture or delivery of any Product(s) or performance of any services hereunder, including without limitation, those pertaining to financial capability responsibility and security for pollution damage and the price production sale, or delivery of the Product(s) or services. Specifically, but not by way of limitation, each party agrees to comply with Executive Order 11246 regarding equal employment opportunity, the Rehabilitation Act of 1973, the Vietnam Era Veterans Readjustment Act of 1972, the Occupational Safety and Health Act, the Fair Labor Standards Act. the Americans with Disabilities Act, and all regulations promulgated pursuant to any of the above.

(b) If this order involves the presence of either party on the other party's premises, such party comply with all safety, health, and security laws, regulations, and the other party's policies and shall take all necessary precautions to prevent injury or damage to persons or property while so engaged.

PRECISION
HOSE & EXPANSION JOINTS

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