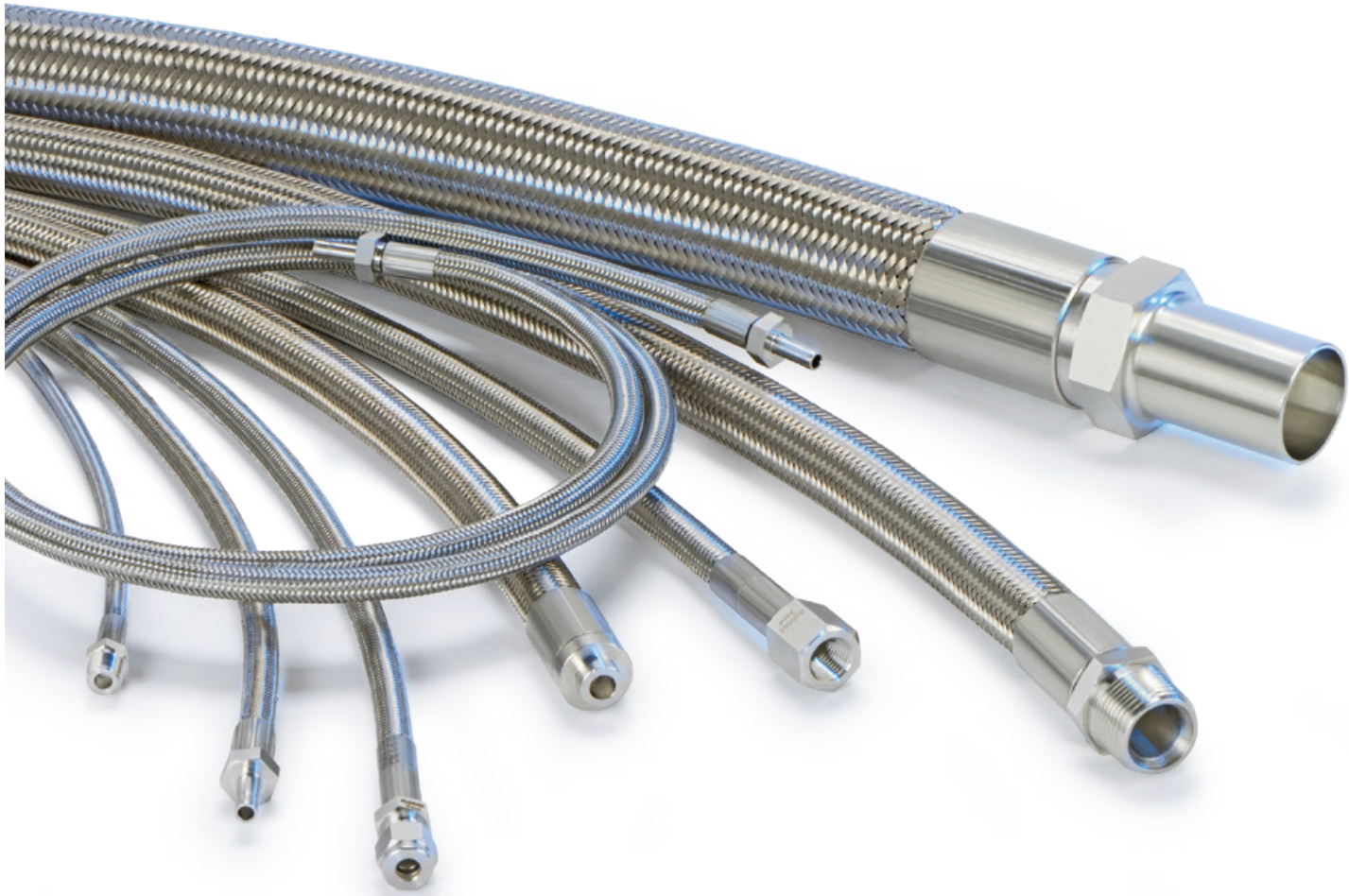


HAM-LET PTFE HOSES



HAM-LET PTFE Hoses

General

PTFE stainless steel braided hose is an ideal solution for permanent or temporary connections for liquids. It makes fabrication easier, and it facilitates connect/disconnect and cleaning. Variable length, high flexibility, high pressure and broad chemical compatibility are among the features that make this hose the preferred solution for many applications.

HAM-LET PTFE hoses are available in smooth, convoluted or conductive carbon lined core with stainless-steel braid or silicon covered stainless-steel braided.

Testing & Packing

All HAM-LET hose assemblies are 100% tested

All Hoses are Hydrostatically tested at 1.5xMAWP.

All Hoses packed individually in a plastic bag, end connections are capped.

Features

- PTFE core with all stainless steel braid and connections
- Non-contaminating, Non-absorbent, will not impart taste or odor
- Non-aging & non-stick surface
- Easy to clean, drain easily
- True I.D., Low friction
- LET-LOK®, ONE-LOK®, Male & Female NPT, Mini Sanitary Flange
- ID Sizes: 1/8" up to 2"
- Max. pressure 3250 psi (224 bar), safety factor 1 to 4
- Working temperature: -100° ~ +500° F (-73° ~ + 260°C)
- Packed and Validated for high purity service with corresponding fittings:
 1. Compatible DIN EN 16643 standard
 2. Approved Food and Drug Administration (FDA) 21CFR177.1550

Working pressure de-rating factor

Temp °C	De-rating
150	0
190	0.85
210	0.75
260	0.5

Chemical Compatibility:

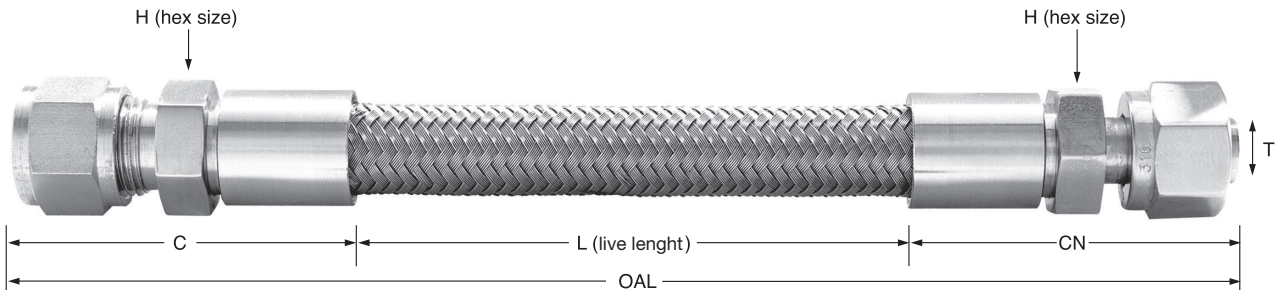
PTFE has one of the highest levels of chemical compatibility. Following is the list of materials that require some level of consideration:

The following materials **are not recommended** for use with PTFE hosing:

- Elemental Sodium
- Elemental Potassium
- Elemental Lithium

The materials listed below are only questionable if conveyed in conjunction with high temperature and pressure and/or a combination thereof:

- Fluorine (F2)
- Iodine Pentafluoride
- 80% and over Sodium Hydroxide
- Aluminum Chloride (at elevated temps)
- Ammonia (NH3)
- Temperature
- 70% Nitric Acid



THT Series - Smooth PTFE Core SS Braided Hose

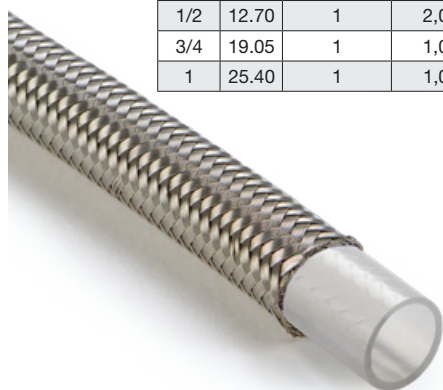
General

General use smooth PTFE core hoses.

Features

- Tube I.D. 1/8" up to 1"
- Pressure rating: Vacuum to 3,500 psi (241 bar)
- Min Bend radius 1.5 inch (38.1mm)
- Conductive inner lining available

Inside Diameter		Number of Braids	Maximum Working Pressure		Minimum Bend Radius		Outside Diameter		Burst Pressure		Weight Per Foot	Weight Per Meter
(inch)	(mm)		(psi)	(bar)	(inch)	(mm)	(inch)	(mm)	(psi)	(bar)		
1/8	3.18	1	3,000	207	1.5	38	0.25	6.35	12,000	827	0.05	0.07
1/4	6.35	1	3,200	221	3.0	76	0.38	9.65	12,800	822	0.1	0.15
3/8	9.53	1	2,500	172	5.0	127	0.50	12.70	10,000	688	0.12	0.18
1/2	12.70	1	2,000	138	6.5	165	0.65	16.51	8,000	552	0.16	0.24
3/4	19.05	1	1,000	69	9.0	229	0.89	22.61	4,000	276	0.22	0.33
1	25.40	1	1,000	69	12.0	305	1.14	28.96	4,000	276	0.51	0.76



Materials of Construction

Part	Material
Tube	PTFE
Braid	SS 304
End Connections	SS 316L

THS Series - Silicon Covered Smooth PTFE Core SS Braided Hose

General

Special design for pharmaceutical, food & beverages and biotech applications. Silicon cover protect the braid from particles or other external contamination and distend high temperatures.

Features

- Tube I.D. 1/8" up to 1"
- Pressure rating: Vacuum to 3250psi (224bar)
- Min Bend radius 1.5 inch (38.1mm)

Inside Diameter		Number of Braids	Maximum Working Pressure		Minimum Bend Radius		Outside Diameter		Burst Pressure		Weight Per Foot	Weight Per Meter
(inch)	(mm)		(psi)	(bar)	(inch)	(mm)	(inch)	(mm)	(psi)	(bar)		
1/8	3.18	1	3,000	207	1.5	38	0.43	10.9	12,000	827	0.11	0.16
1/4	6.35	1	3,250	224	3.0	76	0.50	12.7	12,800	896	0.13	0.19
3/8	9.53	1	2,500	172	5.0	127	0.65	16.5	10,000	688	0.15	0.22
1/2	12.70	1	1,500	103	6.5	165	0.81	20.6	6,000	414	0.18	0.27
3/4	19.05	1	1,100	76	9.0	229	1.02	25.9	4,400	303	0.34	0.51
1	25.40	1	1,000	69	12.0	305	1.36	34.5	4,000	276	0.57	0.85



Materials of Construction

Color Code	Hose Cover Color
Blank	Black
V1	Red
V2	Blue
V6	White

Part	Material
Tube	PTFE
Braid	SS 304
External cover	Silicon
End Connections	SS 316L

THC Series - Convoluted PTFE Core SS Braided Hose

General

Convoluted PTFE core for extra flexibility with larger IDs. Completely drainable hose. Durable for high pressures and high temperatures with lower profile.

Features

- Tube I.D. 1/4" up to 2"
- Pressure rating: up to 1500psi (103bar)
- Min Bend radius 2.5 inch (63.5mm)
- Conductive inner lining available

Inside Diameter		Number of Braids	Maximum Working Pressure		Minimum Bend Radius		Outside Diameter		Burst Pressure		Weight Per Foot	Weight Per Meter
inch	mm		psi	bar	inch	mm	inch	mm	psi	bar	lbs	kg
1/4	6.35	1	2,500	172	0.71	18	0.48	12.3	7,500	517	-	-
3/8	9.53	1	2,000	136	0.79	20	0.60	14.75	6,000	414	-	-
1/2	12.70	1	1,500	103	0.98	25	0.74	18.80	6,000	414	0.19	0.28
3/4	19.05	1	1,100	76	2.52	64	0.97	24.64	4,400	303	0.27	0.40
1	25.40	1	750	52	3.50	89	1.29	32.77	3,000	207	0.39	0.58
1 1/2	38.10	1	700	48	5.98	152	1.90	48.26	2,800	193	0.75	1.12
2	50.80	1	525	36	7.87	200	2.42	61.47	2,100	145	0.89	1.32

*Pressure rating: 3 to 1 safety factory

Materials of Construction

Part	Material
Tube	PTFE
Braid	SS 304
End Connections	SS 316L

General

Nonmetal smooth PTFE core hoses with fiberglass braid.

Features

- Tube I.D. 1/4" up to 3/4"
- Pressure rating: up to 800psi (55bar)
- Min Bend radius 2.75 inch (70mm)

THB Series - Smooth PTFE Core Fiberglass Braided Hose

Inside Diameter		Number of Braids	Maximum Working Pressure		Minimum Bend Radius		Outside Diameter		Burst Pressure		Weight Per Foot	Weight Per Meter
inch	mm		psi	bar	inch	mm	inch	mm	psi	bar	lbs	kg
1/4	6.35	1	800	55	2.75	70	0.43	11	3,200	220	0.06	0.09
3/8	9.53	1	800	55	3.25	83	0.58	15	3,200	220	0.12	0.18
1/2	12.7	1	800	55	5.25	133	0.73	19	3,200	220	0.13	0.19
3/4	19.05	1	400	27	6.50	165	0.98	25	1,600	110	0.20	0.30

Materials of Construction

Part	Material
Tube	PTFE
Braid	Fiberglass single braid
End Connections	SS 316L

* Only for liquid applications

THR Series - Smooth PTFE Core Fiberglass middle layer SS Braided Hose

General

Smooth PTFE core hose with additional fiberglass middle layer and external stainless steel braid for increased flexibility and insulation.

Features

- Tube I.D. 1/4" up to 1"
- Pressure rating Vacuum to 3,500 psi (241 bar)
- Min Bend radius 1.25 inch (32 mm)
- Conductive inner lining available

Inside Diameter		Number of Braids	Maximum Working Pressure		Minimum Bend Radius		Outside Diameter		Burst Pressure		Weight Per Foot	Weight Per Meter
inch	mm		psi	bar	inch	mm	inch	mm	psi	bar	lbs	kg
1/4	6.35	1	3,500	241	1.75	44	0.44	11.18	14,000	965	0.13	0.19
3/8	9.53	1	3,000	207	4.0	102	0.57	14.53	12,000	827	0.18	0.27
1/2	12.70	1	1,800	124	5.5	140	0.75	19.15	7,200	496	0.24	0.36
3/4	19.05	1	1,000	69	-	-	1.00	25.40	4,000	276	0.37	0.55
1	25.40	1	1,000	69	11.5	292	1.41	34.69	4,000	276	0.49	0.72



Materials of Construction

Part	Material
Tube	PTFE
Inner Braid	Fiberglass
Outer Braid	SS 304
End Connections	SS 316L

General

Nominal size PTFE core.

Special design for pharmaceutical, food and beverage as well as biotech applications. The red silicone cover protects the braid from particles, other external contamination and extended high temperatures.

Features

- Tube I.D. 3/16" up to 5/8"
- Pressure rating: Vacuum to 3000psi (207bar)
- Min Bend radius 1.5 inch (38.1mm)

THP Series - Red Silicon Covered Smooth PTFE Core SS Braided Hose

Inside Diameter		Number of Braids	Maximum Working Pressure		Minimum Bend Radius		Outside Diameter		Burst Pressure		Weight Per Foot	Weight Per Meter
inch	mm		psi	bar	inch	mm	inch	mm	psi	bar	lbs	kg
3/16	4.76	1	3000	207	2	50.8	0.42	10.67	12000	828	0.077	0.11
1/4	6.35	1	3000	207	3	76.2	0.49	12.45	12000	828	0.098	0.15
5/16	7.94	1	2500	172	4	101.6	0.55	14.05	10000	690	0.11	0.16
3/8	9.52	1	2250	155	4.5	114.3	0.62	15.75	9000	621	0.124	0.18
13/32	10.32	1	2000	138	5.2	132.08	0.66	16.76	8000	552	0.125	0.19
1/2	12.7	1	1500	103	6.5	165.1	0.75	19.05	6000	414	0.154	0.23
5/8	15.87	1	1200	83	7.7	195.58	0.88	22.35	4800	331	0.17	0.25



Materials of Construction

Part	Material
Tube	PTFE
Braid	SS 304
End Connections	SS 316L

* Only for liquid applications

THQ Series - Multiple Cover Hose, Silicon Covered ,SS Braided, Fiberglass supported, smooth PTFE

General

Smooth PTFE core hose with additional fiberglass middle layer and external stainless steel braid for increased flexibility and insulation. Silicon cover protect the braid from particles or other external contamination and distend high temperatures.

Features

- Tube I.D. 1/4" up to 1"
- Pressure rating Vacuum up to 4,000psi (276 bar)
- Min Bend radius 1.25 inch (32 mm)
- Conductive inner lining available

Inside Diameter		Maximum Working Presser		Minimum Bend Radius		Outside Diameter		Burst Pressure		Weight Per Foot	Weight Per Meter
inch	mm	psi	bar	inch	mm	inch	mm	psi	bar	LBS	KG
1/4	6.4	4000	276	1.75	44.45	0.57	14.48	16000	1103.14	N/A	N/A
3/8	8.63	3000	207	2.75	69.85	0.69	17.53	12000	827.35	N/A	N/A
1/2	12.7	1800	124	4.25	107.95	0.85	21.59	7200	496.41	N/A	N/A
3/4	19.05	1250	86	7	177.80	1.12	28.45	5000	344.73	N/A	N/A
1	25.4	1000	69	7	177.80	1.53	38.86	4000	275.78	N/A	N/A

Materials of Construction

Color Code	Hose Cover Color
Blank	Black
V1	Red
V2	Blue
V6	White

Part	Material
Tube	PTFE
Inner Braid	Fiberglass
outer Braid	SS 304
External Cover	Silicon
End Connectors	SS 316L

THV Series - Multiple Layered Conductive PTFE core

General

Silicon Covered Smooth Carbon PTFE Core Fiberglass middle Insulating Layer Ceramic wrap SS Braided Hose layer SS Braided Hose. Silicon cover protect the braid from particles or other external contamination and distend high temperatures.

Features

- Tube I.D. 3/8" up to 3/4"
- Pressure rating Vacuum up to 750 psi (51.72 bar)
- Min Bend radius 0.79 inch (19.99 mm)
- Carbon black PTFE core tube

Inside Diameter		Num-ber of Braids	Maximum Working Pressure		Static Minimum Bend Radius		Outside Diameter		Burst Pressure		Weight Per Foot	Weight Per Meter
inch	mm	(#)	psi	bar	inch	mm	inch	mm	psi	bar	LBS	KG
3/8	9.1	1	750	51.72	0.79	19.99	0.787	19.99	3000	206.90	0.29	0.43
1/2	12.7	1	750	51.72	0.96	24.38	0.96	24.38	3000	206.90	0.35	0.52
3/4	19.05	1	500	34.48	1.27	32.13	1.265	32.13	2000	137.93	0.5	0.74

Materials of Construction

Color Code	Hose Cover Color
Blank	Black
V1	Red
V2	Blue
V6	White

Part	Material
Tube	Carbon black PTFE
Inner Braid	Fiberglass
Insulating Layer	Ceramic wrap
outer Braid	SS 304
External Cover	Silicon
End Connectors	SS 3016L

PTFE Hoses - Ordering Information

T

H

T

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04

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LK 1/4

TS 6M

-

123.4

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OPTIONAL

Line		Series		Tube ID		End Connection 1		End Connection 2		Overall length (OAL)		Options																																													
T	PTFE	T	Smooth PTFE Core	02	1/8	<div style="display: flex; justify-content: space-between;"> <div> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #ff0000; color: white;"> <th colspan="2">End Type</th> </tr> </thead> <tbody> <tr><td style="background-color: #d3d3d3;">LK</td><td>LET-LOK®</td></tr> <tr><td style="background-color: #d3d3d3;">TS</td><td>Tube Adapter</td></tr> <tr><td style="background-color: #d3d3d3;">TP</td><td>Tube Adapter Preswaged</td></tr> <tr><td style="background-color: #d3d3d3;">GF</td><td>Face Seal Female Swivel</td></tr> <tr><td style="background-color: #d3d3d3;">FP</td><td>Female Pipe NPT</td></tr> <tr><td style="background-color: #d3d3d3;">MP</td><td>Male Pipe NPT</td></tr> <tr><td style="background-color: #d3d3d3;">FG</td><td>Female BSP-P</td></tr> <tr><td style="background-color: #d3d3d3;">MG</td><td>Male BSP-P</td></tr> <tr><td style="background-color: #d3d3d3;">MR</td><td>Male BSP-T</td></tr> <tr><td style="background-color: #d3d3d3;">BW</td><td>Butt Weld Adapter</td></tr> <tr><td style="background-color: #d3d3d3;">MF</td><td>Male Flare 37°</td></tr> <tr><td style="background-color: #d3d3d3;">LF</td><td>Mini Sanitary Flange</td></tr> <tr><td style="background-color: #d3d3d3;">FH</td><td>Female Flare 37° swivel</td></tr> </tbody> </table> </div> <div> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #ff0000; color: white;"> <th colspan="2">End Size</th> </tr> </thead> <tbody> <tr><td style="background-color: #d3d3d3;">inch</td><td></td></tr> <tr><td style="background-color: #d3d3d3;">1/4, 3/8, 1/2, 3/4, 1, 1 1/2, 2</td><td></td></tr> <tr><td style="background-color: #d3d3d3;">mm</td><td></td></tr> <tr><td style="background-color: #d3d3d3;">6M, 8M, 10M, 12M, 18M, 25M, 38M</td><td></td></tr> </tbody> </table> </div> </div>		End Type		LK	LET-LOK®	TS	Tube Adapter	TP	Tube Adapter Preswaged	GF	Face Seal Female Swivel	FP	Female Pipe NPT	MP	Male Pipe NPT	FG	Female BSP-P	MG	Male BSP-P	MR	Male BSP-T	BW	Butt Weld Adapter	MF	Male Flare 37°	LF	Mini Sanitary Flange	FH	Female Flare 37° swivel	End Size		inch		1/4, 3/8, 1/2, 3/4, 1, 1 1/2, 2		mm		6M, 8M, 10M, 12M, 18M, 25M, 38M		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #ff0000; color: white;"> <th colspan="2">Overall length (OAL)</th> </tr> </thead> <tbody> <tr><td style="background-color: #d3d3d3;">XXX</td><td>Inch</td></tr> <tr><td style="background-color: #d3d3d3;">XXXC</td><td>Centimeter</td></tr> <tr><td style="background-color: #d3d3d3;">XXXM</td><td>Meters</td></tr> </tbody> </table>		Overall length (OAL)		XXX	Inch	XXXC	Centimeter	XXXM	Meters	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div>	
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H	C	Convuluted PTFE Core	04	1/4																																																					
	B	Smooth core fiber braid	05*	5/16																																																					
	R	Smooth core additional fiber braid	06	3/8																																																					
	P	Silicon cover smooth core	07*	13/32																																																					
	Q	Multiple Cover Hose, Silicon Covered, SS Braided, Fiberglass supported, smooth PTFE	08	1/2																																																					
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		0	Without braid																																																						
		1	SS 316 single braid																																																						
		2	SS 304 double braid																																																						

* Only for: THP Series

** Only for: THC Series

Hose Cover Color*

Blank

V1

V2

V6

Certification

EC

ECE R110**

**** Only for:**

THT08-TS12MTS12M-XXX-ECC

Internal lamina

C

Conductive Carbon Lining

Outer cover

J

Insulating Jacket

R

Protective Cover

See details in page 31

Tagging

M	Metal Tag	None	On one end
P	Plastic Tag	B	Both ends

* Only for THS, THQ and THV

Warning!

The system designer and user have the sole responsibility for selecting products suitable for their special application requirements, ensuring their safe and trouble-free installation, operation, and maintenance. Application details, material compatibility and product ratings should all be considered for each selected product. Improper selection, installation or use of products can cause property damage or personal injury.

