



Convoluted Tubing and Accessories

Flexible Protection for Cables and Wires





## Everything you need to protect wires and cables

With a wide range of slit and unslit convoluted tubing options, fittings and accessories, HellermannTyton answers the market's call for a complete, lightweight solution to route and protect wire and cable.

### This catalog is more than a catalog

Protecting wire runs requires important considerations in regard to environment, serviceability and application type. So, not only do we offer every solution you could need to route and protect your connections ... we provide essential selection information, too.

Inside, you will find selection guides for both convoluted tubing and accessories needed to complete the install. Need slit tubing with a specific flame rating and operating temperature? Need help selecting your fittings? We make it easy.

Of course, you'll also find all the classic catalog content here to help you order exactly what you need for the job. Keep this all-in-one reference handy, and let us know if you have any questions to ensure the best outcome for your installation.



# Routing, Protection and Insulation

## Convoluted Tubing

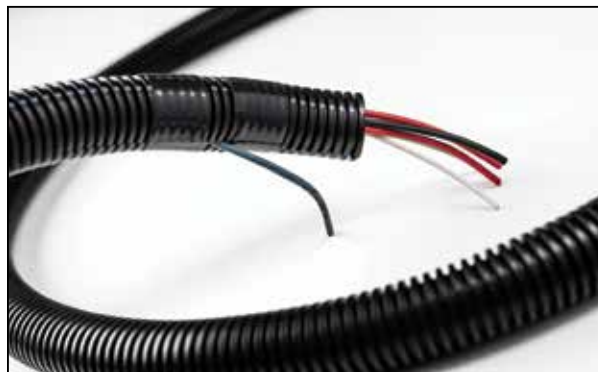
### Convolute Tubing

#### PA6 - Standard Protection

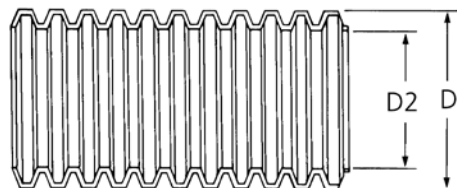
HellermannTyton's Convoluted Tubing provides an efficient method of routing and protecting wire harness assemblies while reducing the chance of installation damage. It also protects valuable hoses and cables. Available in slit or unslit, and standard, bulk and dispenser box packaging.

#### Features and Benefits

- Protects wire harness from fluids, friction, vibration, fraying and puncture.
- Convoluted profile provides flexibility and resistance to crushing, impact and abrasion.
- Material withstands snow, ice, water and the effects of heat, cold and sunlight.
- Lateral slit option allows for fast and easy insertion of wires, breakouts, maintenance and the addition of wires post assembly.



<b>MATERIAL</b>	Polyamide 6 (PA6)
<b>Operating Temperature</b>	-40°F to +257°F (-40°C to +125°C)
<b>Flammability</b>	UL 94 HB



**Need help choosing?  
See pages 13 and 14.**

PART NO.	TYPE	Nominal Dia. in. (mm)	Outside Diameter (D) in. (mm)	Inner Diameter (D2) in. (mm)	Wall Thickness in. (mm)	Color	Pkg. Qty. Feet
<b>Slit</b>							
CTN140STD	CTN140	1/4 (6.4)	0.398 (10.1)	0.276 (7.0)	0.004 (0.1)	Black with Gray Stripe	3200
CTN140		1/4 (6.4)	0.398 (10.1)	0.276 (7.0)	0.004 (0.1)	Black with Gray Stripe	28000
CTN380STD	CTN380	3/8 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	Black with Gray Stripe	1900
CTN380		3/8 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	Black with Gray Stripe	15000
CTN120STD	CTN120	1/2 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	Black with Gray Stripe	1100
CTN120		1/2 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	Black with Gray Stripe	8500

*Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes.*

### Convuluted Tubing

#### PA6 - Standard Protection

PART NO.	TYPE	Nominal Dia. in. (mm)	Outside Diameter (D) in. (mm)	Inner Diameter (D2) in. (mm)	Wall Thickness in. (mm)	Color	Pkg. Qty. Feet
CTN580STD	CTN580	5/8 (16.0)	0.837 (21.3)	0.639 (16.2)	0.005 (0.1)	Black with Gray Stripe	800
CTN340STD	CTN340	3/4 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	Black with Gray Stripe	550
CTN340		3/4 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	Black with Gray Stripe	4200
CTN10STD	CTN10	1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	Black with Gray Stripe	300
CTN10		1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	Black with Gray Stripe	2250
CTN1140STD	CTN1140	1-1/4 (31.8)	1.50 (38.1)	1.257 (31.9)	0.006 (0.2)	Black with Gray Stripe	250
CTN1140		1-1/4 (31.8)	1.50 (38.1)	1.257 (31.9)	0.006 (0.2)	Black with Gray Stripe	1800
CTN1120STD	CTN1120	1-1/2 (38.1)	1.947 (49.5)	1.647 (41.8)	0.006 (0.2)	Black with Gray Stripe	150
CTN1120		1-1/2 (38.1)	1.947 (49.5)	1.647 (41.8)	0.006 (0.2)	Black with Gray Stripe	1000
CTN20STD	CTN20	2 (50.8)	2.388 (60.7)	2.038 (51.8)	0.011 (0.3)	Black with Gray Stripe	100
<b>Unslit</b>							
CTN140STDUNSLIT	CTN140UNSLIT	1/4 (6.4)	0.398 (10.1)	0.276 (7.0)	0.004 (0.1)	Black with Gray Stripe	2500
169-60023	CTN380UNSLIT	3/8 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	Black with Gray Stripe	1500
CTN120STDUNSLIT	CTN120UNSLIT	1/2 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	Black with Gray Stripe	1000
169-60024	CTN580UNSLIT	5/8 (16.0)	0.837 (21.3)	0.639 (16.2)	0.005 (0.1)	Black with Gray Stripe	700
CTN340STDUNSLIT	CTN340UNSLIT	3/4 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	Black with Gray Stripe	450
CTN10STDUNSLIT	CTN10UNSLIT	1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	Black with Gray Stripe	250
CTN1140UNSLIT	CTN1140UNSLIT	1-1/4 (31.8)	1.50 (38.1)	1.257 (31.9)	0.006 (0.2)	Black with Gray Stripe	200

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes.

# Routing, Protection and Insulation

## Convoluted Tubing

### Convoluted Tubing

#### PA6 - Slit Dispenser Box

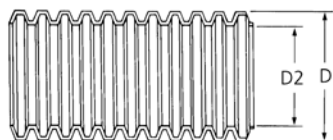
HellermannTyton's Slit Convoluted Tubing provides an efficient method of routing and protecting wire harness assemblies while reducing the chance of installation damage. It also protects valuable hoses and cables. Tubing is slit and comes in a dispenser box package.

#### Features and Benefits

- Protects wire harness from fluids, friction, vibration, fraying and puncture.
- Convoluted profile provides flexibility and resistance to crushing, impact and abrasion.
- Material withstands snow, ice, water and the effects of heat, cold and sunlight.
- Lateral slit allows for fast and easy insertion of wires, breakouts, maintenance and the addition of wires post assembly.



<b>MATERIAL</b>	Polyamide 6 (PA6)
<b>Operating Temperature</b>	-40°F to +257°F (-40°C to +125°C)
<b>Flammability</b>	UL 94 HB



PART NO.	TYPE	Nominal Dia. in. (mm)	Outside Diameter (D) in. (mm)	Inner Diameter (D2) in. (mm)	Wall Thickness in. (mm)	Color	Pkg. Qty. Feet
<b>Slit Dispenser Box</b>							
169-60022	CTN140	1/4 (6.4)	0.398 (10.1)	0.276 (7.0)	0.004 (0.1)	Black with Gray Stripe	100
169-60018	CTN380	3/8 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	Black with Gray Stripe	100
169-60019	CTN120	1/2 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	Black with Gray Stripe	100
169-60020	CTN340	3/4 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	Black with Gray Stripe	100
169-60021	CTN10	1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	Black with Gray Stripe	50

*Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes.*

### Convoluted Tubing

#### PEUV - UV Resistant

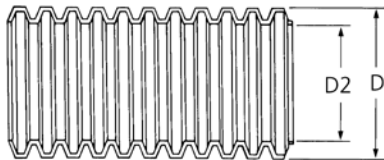
HellermannTyton's Polyethylene Ultraviolet Convoluted Tubing provides added protection against UV radiation for long-term outdoor use. The tubing is an efficient method of routing and protecting wire harness assemblies while reducing the chance of installation damage. It also protects valuable hoses and cables. Tubing is slit and comes in bulk packaging.

#### Features and Benefits

- Added UV radiation protection makes it ideal for solar applications.
- Protects wire harness from fluids, friction, vibration, fraying and puncture.
- Convoluted profile provides flexibility and resistance to crushing, impact and abrasion.
- Material withstands snow, ice, water and the effects of heat, cold and sunlight.
- Lateral slit allows for fast and easy insertion of wires, breakouts, maintenance and the addition of wires post assembly.



<b>MATERIAL</b>	Polyethylene, UV-resistant (PEUV)
<b>Operating Temperature</b>	-40°F to +185°F (-40°C to +85°C)
<b>Flammability</b>	Not Flame Retardant



**Need help choosing?  
See pages 13 and 14.**

PART NO.	TYPE	Nominal Dia. in. (mm)	Outside Diameter (D) in. (mm)	Inner Diameter (D2) in. (mm)	Wall Thickness in. (mm)	Color	Pkg. Qty. Feet
<b>Slit</b>							
904-00358	CTPUV340	3/4 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	Black with Orange Stripe	4200
904-00359	CTPUV10	1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	Black with Orange Stripe	2250
904-00933	CTPUV1140	1-1/4 (31.8)	1.50 (38.1)	1.257 (31.9)	0.006 (0.2)	Black with Orange Stripe	1800
904-00357	CTPUV120	1-1/2 (38.1)	1.947 (49.5)	1.647 (41.8)	0.006 (0.2)	Black with Orange Stripe	1000
904-00921	CTPUV20	2 (50.8)	2.388 (60.7)	2.038 (51.8)	0.011 (0.3)	Black with Orange Stripe	800

*Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes.*

# Routing, Protection and Insulation

## Convoluting Tubing

### Convoluting Tubing

#### PE - Superior Flexibility

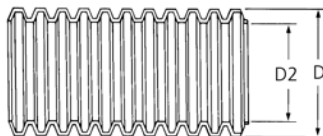
HellermannTyton's Convoluting Tubing provides an efficient method of routing and protecting wire harness assemblies while reducing the chance of installation damage. It also protects valuable hoses and cables. Available in slit or unslit, and standard, bulk and box reel packaging. Also available in colors.

#### Features and Benefits

- Protects wire harness from fluids, friction, vibration, fraying and puncture.
- Convoluting profile provides flexibility and resistance to crushing, impact and abrasion.
- Material withstands snow, ice, water and the effects of heat and cold.
- Lateral slit option allows for fast and easy insertion of wires, breakouts, maintenance and the addition of wires post assembly.



<b>MATERIAL</b>	Polyethylene (PE)
<b>Operating Temperature</b>	-40°F to +185°F (-40°C to +85°C)
<b>Flammability</b>	Not Flame Retardant



PART NO.	TYPE	Nominal Dia. in. (mm)	Outside Diameter (D) in. (mm)	Inner Diameter (D2) in. (mm)	Wall Thickness in. (mm)	Color	Pkg. Qty. Feet
<b>Slit</b>							
CTP140	CTP140	1/4 (6.4)	0.398 (10.1)	0.276 (7.0)	0.004 (0.1)	Black	100
CTP140STD		1/4 (6.4)	0.398 (10.1)	0.276 (7.0)	0.004 (0.1)	Black	3200
CTP380C	CTP380	3/8 (9.0)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	Black	100
CTP380STD		3/8 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	Black	1900
CTP380		3/8 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	Black	15000
CTP120C	CTP120	1/2 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	Black	100
CTP120STD		1/2 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	Black	1100
CTP120		1/2 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	Black	8500
CTP580STD	CTP580	5/8 (16.0)	0.837 (21.3)	0.639 (16.2)	0.005 (0.1)	Black	800
CTP580		5/8 (16.0)	0.837 (21.3)	0.639 (16.2)	0.005 (0.1)	Black	5500
CTP340C	CTP340	3/4 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	Black	100
CTP340STD		3/4 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	Black	550
CTP340		3/4 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	Black	4200

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes.



### Convuluted Tubing

PE - Superior Flexibility

PART NO.	TYPE	Nominal Dia. in. (mm)	Outside Diameter (D) in. (mm)	Inner Diameter (D2) in. (mm)	Wall Thickness in. (mm)	Color	Pkg. Qty. Feet
169-60534	CTP10	1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	Black	50
CTP10STD		1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.1)	Black	300
CTP10		1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.1)	Black	2250
CTP1140STD	CTP1140	1-1/4 (31.8)	1.50 (38.1)	1.257 (31.9)	0.006 (0.2)	Black	250
CTP1140		1-1/4 (31.8)	1.50 (38.1)	1.257 (31.9)	0.006 (0.2)	Black	1800
CTP1120STD	CTP1120	1-1/2 (38.1)	1.947 (49.5)	1.647 (41.8)	0.006 (0.2)	Black	150
CTP1120		1-1/2 (38.1)	1.947 (49.5)	1.647 (41.8)	0.006 (0.2)	Black	1000
CTP20STD	CTP20	2 (50.8)	2.388 (60.7)	2.038 (51.8)	0.011 (0.3)	Black	100
<b>Unslit</b>							
CTP140STDUNSLIT	CTP140UNSLIT	1/4 (6.4)	0.398 (10.1)	0.276 (7.0)	0.004 (0.1)	Black	2500
169-60526	CTP380UNSLIT	3/8 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	Black	1500
CTP120STDUNSLIT	CTP120UNSLIT	1/2 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	Black	1000
CTP580STDUNSLIT	CTP580UNSLIT	5/8 (16.0)	0.837 (21.3)	0.639 (16.2)	0.005 (0.1)	Black	700
CTP340STDUNSLIT	CTP340UNSLIT	3/4 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	Black	450
CTP10STDUNSLIT	CTP10UNSLIT	1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	Black	250
CTP10UNSLIT		1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	Black	1800
CTP1140STDUNSLI	CTP1140UNSLIT	1-1/4 (31.8)	1.50 (38.1)	1.257 (31.9)	0.006 (0.2)	Black	200
CTP1120STDUNSLI	CTP1120UNSLIT	1-1/2 (38.1)	1.947 (49.5)	1.647 (41.8)	0.006 (0.2)	Black	100

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes.

**Need help choosing?  
See pages 13 and 14.**

# Routing, Protection and Insulation

## Convoluted Tubing

### Convoluted Tubing

#### PEFR - Flame Retardant

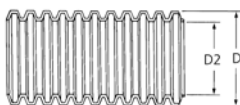
HellermannTyton's Polyethylene Flame Retardant Convoluted Tubing is made of a self-extinguishing material and complies with UL 94 V2 standards. The tubing is an efficient method of routing and protecting wire harness assemblies while reducing the chance of installation damage. It also protects valuable hoses and cables. Available in slit or unslit, and comes in bulk packaging.

#### Features and Benefits

- Flame resistance makes product ideal for regulated industries that require it.
- Protects wire harness from fluids, friction, vibration, fraying and puncture.
- Convoluted profile provides flexibility and resistance to crushing, impact and abrasion.
- Material withstands snow, ice, water and the effects of heat and cold.
- Lateral slit option allows for fast and easy insertion of wires, breakouts, maintenance and the addition of wires post assembly.



<b>MATERIAL</b>	Polyethylene, flame retardant (PEFR)
<b>Operating Temperature</b>	-40°F to +185°F (-40°C to +85°C)
<b>Flammability</b>	UL 94 V2



PART NO.	TYPE	Nominal Dia. in. (mm)	Outside Diameter (D) in. (mm)	Inner Diameter (D2) in. (mm)	Wall Thickness in. (mm)	Color	Pkg. Qty. Feet
<b>Slit</b>							
169-60302	CTPFR140	1/4 (6.4)	0.398 (10.1)	0.276 (7.0)	0.004 (0.1)	Gray	3200
169-60304	CTPFR380	3/8 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	Gray	1900
169-60301	CTPFR120	1/2 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	Gray	1100
169-60303	CTPFR340	3/4 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	Gray	550
169-60300	CTPFR10	1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	Gray	300
169-60310	CTPFR1140	1-1/4 (31.8)	1.50 (38.1)	1.257 (31.9)	0.006 (0.2)	Gray	250
169-60311	CTPFR1120	1-1/2 (38.1)	1.947 (49.5)	1.647 (41.8)	0.006 (0.2)	Gray	150
<b>Unslit</b>							
169-60307	CTPFR140UNSLIT	1/4 (6.4)	0.398 (10.1)	0.276 (7.0)	0.004 (0.1)	Gray	2500
169-60309	CTPFR380UNSLIT	3/8 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	Gray	1500
169-60306	CTPFR120UNSLIT	1/2 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	Gray	1000
169-60308	CTPFR340UNSLIT	3/4 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	Gray	450
169-60305	CTPFR10UNSLIT	1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	Gray	250

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes.

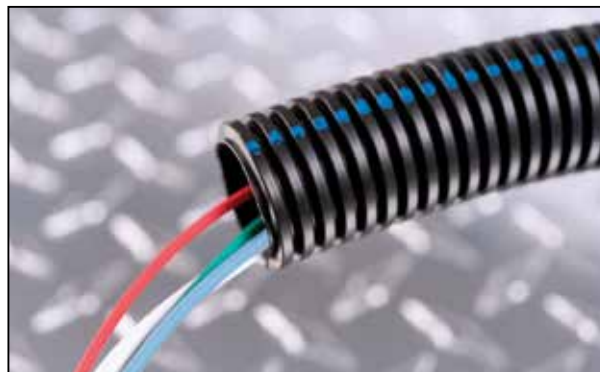
### Convoluted Tubing

#### PPFR - High Temperature, Flame Retardant

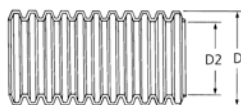
HellermannTyton's Polypropylene Flame Retardant Convoluted Tubing is made of a self-extinguishing material and complies with UL 94 V2 standards. The tubing is an efficient method of routing and protecting wire harness assemblies while reducing the chance of installation damage. It also protects valuable hoses and cables. Available in slit or unslit, and comes in bulk packaging.

#### Features and Benefits

- Flame resistance makes product ideal for regulated industries that require it.
- Protects wire harness from fluids, friction, vibration, fraying and puncture.
- Convoluted profile provides flexibility and resistance to crushing, impact and abrasion.
- Material withstands snow, ice, water and the effects of heat and cold.
- Lateral slit option allows for fast and easy insertion of wires, breakouts, maintenance and the addition of wires post assembly.



<b>MATERIAL</b>	Polypropylene, flame retardant (PPFR)
<b>Operating Temperature</b>	-40°F to +257°F (-40°C to +125°C)
<b>Flammability</b>	UL 94 V2



**Need help choosing?  
See pages 13 and 14.**

PART NO.	TYPE	Nominal Dia. in. (mm)	Outside Diameter (D) in. (mm)	Inner Diameter (D2) in. (mm)	Wall Thickness in. (mm)	Color	Pkg. Qty. Feet
<b>Slit</b>							
169-60103	CTPPFR140	1/4 (6.4)	0.398 (10.1)	0.276 (7.0)	0.004 (0.1)	Black with Blue Stripe	3200
169-60105	CTPPFR380	3/8 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	Black with Blue Stripe	1800
169-60102	CTPPFR120	1/2 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	Black with Blue Stripe	1100
169-60106	CTPPFR580	5/8 (16.0)	0.837 (21.3)	0.639 (16.2)	0.005 (0.1)	Black with Blue Stripe	750
169-60104	CTPPFR340	3/4 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	Black with Blue Stripe	500
169-60101	CTPPFR10	1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	Black with Blue Stripe	300
169-60100	CTPPFR1120	1-1/4 (31.8)	1.50 (38.1)	1.257 (31.9)	0.006 (0.2)	Black with Blue Stripe	100
<b>Unslit</b>							
169-60110	CTPPFR140UNSLIT	1/4 (6.4)	0.398 (10.1)	0.276 (7.0)	0.004 (0.1)	Black with Blue Stripe	2500
169-60112	CTPPFR380UNSLIT	3/8 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	Black with Blue Stripe	1500
169-60109	CTPPFR120UNSLIT	1/2 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	Black with Blue Stripe	1000
169-60113	CTPPFR580UNSLIT	5/8 (16.0)	0.837 (21.3)	0.639 (16.2)	0.005 (0.1)	Black with Blue Stripe	700
169-60111	CTPPFR340UNSLIT	3/4 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	Black with Blue Stripe	450
169-60107	CTPPFR10UNSLIT	1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	Black with Blue Stripe	250
169-60108	CTPPFR1120UNSLIT	1-1/2 (38.1)	1.947 (49.5)	1.647 (41.8)	0.006 (0.2)	Black with Blue Stripe	100

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes.

# Routing, Protection and Insulation

## Convoluted Tubing

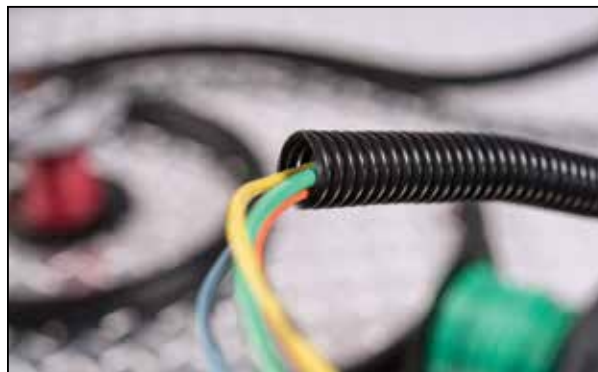
### Convoluted Tubing

#### PTFE - Extreme Environments

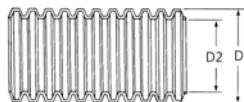
HellermannTyton's Polytetrafluoroethylene Convoluted Tubing provides an efficient method of routing and protecting wire harness assemblies while reducing the chance of installation damage. It also protects valuable hoses and cables. It is used in industries with demanding environments including aviation, aerospace, chemical, pharmaceutical, ship building, food processing and electrical.

#### Features and Benefits

- Excellent resistance to almost all chemicals.
- Protects cables from extreme temperatures, fire, moisture, corrosion, vibration and abrasion.
- Combination of high tensile strength and fatigue life make it resistant to wear.
- Superior dielectric strength and anti-adhesive properties.



<b>MATERIAL</b>	Polytetrafluoroethylene (PTFE)
<b>Operating Temperature</b>	-85°F to +500°F (-65°C to +260°C)
<b>Flammability</b>	FAR 25






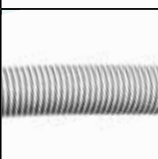

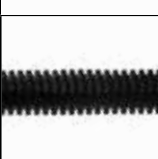
PART NO.	TYPE	Nominal Dia. in. (mm)	Outside Diameter (D) in. (mm)	Inner Diameter (D2) in. (mm)	Color	Pkg. Qty. Feet
<b>Unslit</b>						
169-23006	CTT-06 NSA935805-06	0.24 (6.0)	0.32 (8.1)	0.18 (4.6)	Black	164
169-23009	CTT-09 NSA935805-09	0.35 (9.0)	0.42 (10.6)	0.28 (7.0)	Black	164
169-23010	CTT-10 NSA935805-10	0.375 (9.7)	0.526 (13.4)	0.38 (9.7)	Black	164
169-23012	CTT-12 NSA935805-12	0.47 (12.0)	0.51 (13.0)	0.36 (9.2)	Black	164
169-23014	CTT-14 NSA935805-14	0.55 (14.0)	0.57 (14.6)	0.43 (10.8)	Black	164
169-23016	CTT-16 NSA935805-16	0.625 (16.0)	0.837 (21.3)	0.639 (16.2)	Black	82
169-23020	CTT-20 NSA935805-20	0.79 (20.0)	0.77 (19.5)	0.61 (15.6)	Black	82
169-23024	CTT-24 NSA935805-24	0.94 (24.0)	0.93 (23.5)	0.75 (19.0)	Black	82
169-23032	CTT-32 NSA935805-32	1.26 (32.0)	1.23 (31.3)	0.96 (24.5)	Black	65.6

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes.



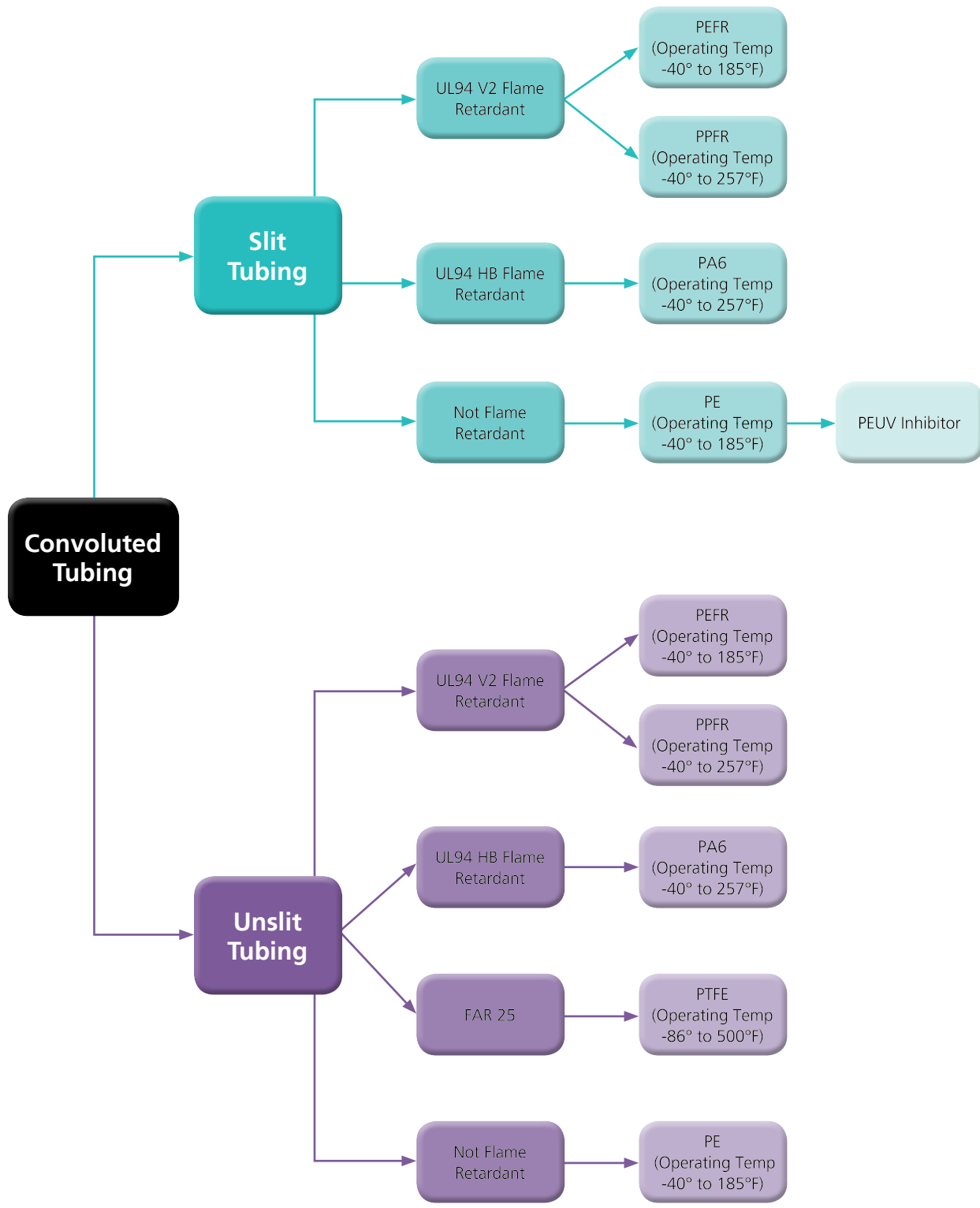
Please note - not all products listed on this page may have this approval. Please see [www.Hellermann.Tyton.com](http://www.Hellermann.Tyton.com) for the latest approvals.

# Convuluted Tubing Selection Guide

Material	Flame Retardancy	Operating Temperature	UV Protection	Economical Routing Option	Chemical Resistance	Abrasion Protection	Flexibility	Product Image
Nylon (PA6) Slit & Unslit Tubing	UL-94 HB	-40° to 257°F -40° to 125°C	-	★★★★	★★	★★★★	★★	
Polyethylene (PE) Slit & Unslit Tubing	-	-40° to 185°F -40° to 85°C	-	★★★★	★★	★★	★★★★	
Polyethylene UV (PEUV) Slit Tubing	-	-40° to 185°F -40° to 85°C	Yes	★	★★	★★	★★★★	
Polyethylene Flame Retardant (PEFR) Slit & Unslit Tubing	UL-94 V2	-40° to 185°F -40° to 85°C	-	★★	★★	★★	★★★★	
Polypropylene Flame Retardant (PPFR) Slit & Unslit Tubing	UL-94 V2	-40° to 257°F -40° to 125°C	-	★★	★★	★★	★★	
Polytetrafluoroethylene (PTFE) High Temperature Unslit Tubing	FAR 25	-85° to 500°F -65° to 260°C	-	★	★★★★	★★★★	★★	

KEY	
★★★★	Best
★★	Better
★	Good

# Convoluting Tubing Decision Tree



### Convoluted Tubing - Accessories

#### Hinged Fittings

Convoluted Loom Fittings are one-piece hinged connectors that simply snap on over slit and unslit loom tubing to secure wire breakouts or connect different tubing diameters. The unique wraparound design makes installation easier and more efficient. Unique junction points facilitate breakouts to keep wires from sliding out of the tubing, eliminating the need for a secondary taping operation. The polypropylene material creates a sleek assembly and improves the appearance of the entire wiring assembly.

#### Features and Benefits

- Living hinge allows harness serviceability and reduces assembly time.
- Internal ribs affix to exterior of tubing to prevent slipping during tension or movement.
- Snap-on connection makes installations quick and easy and increases efficiencies in harness assembly.
- Junction point outlets offer additional areas to break out wires and prevent wires from sliding or accidental removal from tubing.
- Improves aesthetics of assembled wire harness.
- No tools required to disassemble.



For more information on material properties, go to: [www.hellermann.tyton.com](http://www.hellermann.tyton.com)

<b>MATERIAL</b>	Polypropylene (PP)
<b>Operating Temperature</b>	-4°F to +194°F (-20°C to +90°C)
<b>Flammability</b>	UL 94 HB



PART NO.	TYPE	Diameter (D) (Left) in. (mm)	Diameter (D3) (Center) in. (mm)	Diameter (D2) (Right) in. (mm)	Color	Pkg. Qty.	
<b>Hinged T-Fittings</b>							
167-00200	CTHC-T737	0.75 (19.1)	0.38 (9.5)	0.75 (19.1)	Black	200	
167-00201	CTHC-T555	0.50 (12.7)	0.50 (12.7)	0.50 (12.7)	Black	425	
167-00225	CTHC-T557	0.5 (12.7)	0.5 (12.7)	0.75 (12.7)	Black	180	
167-00202	CTHC-T757	0.75 (19.1)	0.50 (12.7)	0.75 (19.1)	Black	175	
167-00219	CTHC-T767	0.75 (19.1)	0.63 (16.0)	0.75 (19.1)	Black	200	
167-00220	CTHC-T777	0.75 (19.1)	0.75 (19.1)	0.75 (19.1)	Black	200	
167-00206	CTHC-T101010	1.00 (25.4)	1.00 (25.4)	1.00 (25.4)	Black	132	
<b>Hinged Breakouts</b>							
167-00223	CTHC-B33	0.38 (9.6)	-	0.38 (9.6)	Black	2000	
167-00203	CTHC-B55	0.50 (12.7)	-	0.50 (12.7)	Black	1100	
167-00222	CTHC-B77	0.75 (19.1)	-	0.75 (19.1)	Black	400	
167-00218	CTHC-B78	0.75 (19.1)	-	0.88 (22.4)	Black	600	
<b>Hinged End Clamps</b>							
167-00224	CTHC-EC3	0.38 (9.5)	-	-	Black	2500	
167-00217	CTHC-EC4	0.44 (11.2)	-	-	Black	5000	
167-00204	CTHC-EC5	0.50 (12.7)	-	-	Black	3000	
167-00205	CTHC-EC7	0.75 (19.1)	-	-	Black	2200	

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes.

For specific product information, see pages 18 and 19.

# Routing, Protection and Insulation

## Convoluted Tubing

### Convoluted Tubing - Accessories

#### Mounts, Clips, Clamps and Separators

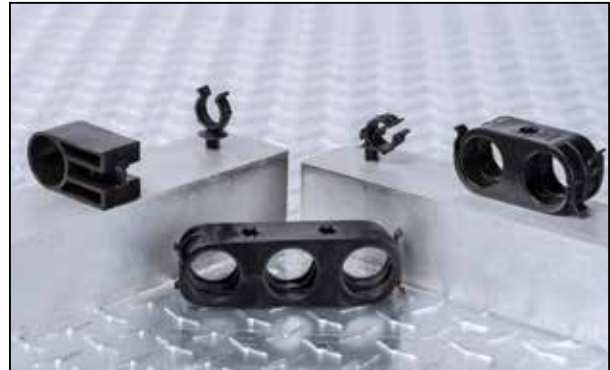
Convoluted Tubing Clips provide a quick and easy method for firmly securing corrugated covered cables and wires to a surface.

HC Clamps separate multiple bundles and secure them to brackets or frame rails.

The Cable Guide Standoff, combined with a button head tie, provides clearance from bolts and other protrusions for protection against abrasion.

#### Features and Benefits

- Clip includes an internal rib that fits securely into the profile of the tubing to prevent lateral movement and slipping.
- HC Clamp mount has two pawls for easy pre-installation on a threaded fastener prior to securing with a mechanical fastener.
- Standoff secures convoluted tubing up to 26 mm in diameter.



For more information on material properties, go to: [www.hellermann.tyton.com](http://www.hellermann.tyton.com)

**For specific product information, see pages 18 and 19.**

PART NO.	TYPE	Nominal Dia. in. (mm)	Mounting Hole Dia. in. (mm)	Material	Color	Pkg. Qty.	
<b>Tubing Mounts, Clips &amp; Clamps</b>							
151-00018	CTC10FT6LG	3/8 (10.0)	0.26 - 0.28 (6.5 - 7.0)	PA66HIRHS	Black	500	
155-17801	CTC10FT9	3/8 (10.0)	0.34 - 0.35 (8.7 - 9.0)	PA66HIRHS	Black	500	
151-14312	CTC13FT6	1/2 (13.0)	0.26 - 0.28 (6.5 - 7.0)	PA66HIRHS	Black	500	
151-00019	CTC13FT6LG	1/2 (13.0)	0.26 - 0.28 (6.5 - 7.0)	PA66HIRHS	Black	500	
151-00783	CTCFT6	1-9/16 (15.0)	0.25 - 0.28 (6.3 - 6.7)	PA66HIRHS	Black	5000	
151-00621	CTCL16FT6LG	5/8 (16.0)	0.25 - 0.28 (6.3 - 7.0)	PA66HIRHS	Black	1500	
<b>Separators</b>							
133-00993	HC2A	-	0.32 (8.1)	PA66HIRGF13	Black	500	
133-00998	HC3A	-	0.32 (8.1)	PA66HIRGF13	Black	500	
<b>Standoff Guides</b>							
151-00006	CGS1	-	0.50 (12.7)	PA66HIRHSUV	Black	250	
133-00285	CGS2	-	0.50 (12.7)	PA66HIRHS	Black	150	

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes.



### Convoluted Tubing - Accessories

#### Bracket-Style Clamps

The Convoluted Tubing Clamp provides a quick method for securing and routing convoluted tubing. The clamp has an internal rib that prevents rattling and movement. Living hinge allows placement and positioning of tubing before locking in place. Clamps are available in various tubing diameters.

#### Features and Benefits

- Easily installs onto convoluted tubing for reliable hold.
- Internal rib prevents movement or rattling.
- Multiple bracket configurations mount to a variety of surfaces.
- Releasable to allow for maintenance.












For more information on material properties, go to: [www.hellermann.tyton.com](http://www.hellermann.tyton.com)

For specific product information, see pages 18 and 19.

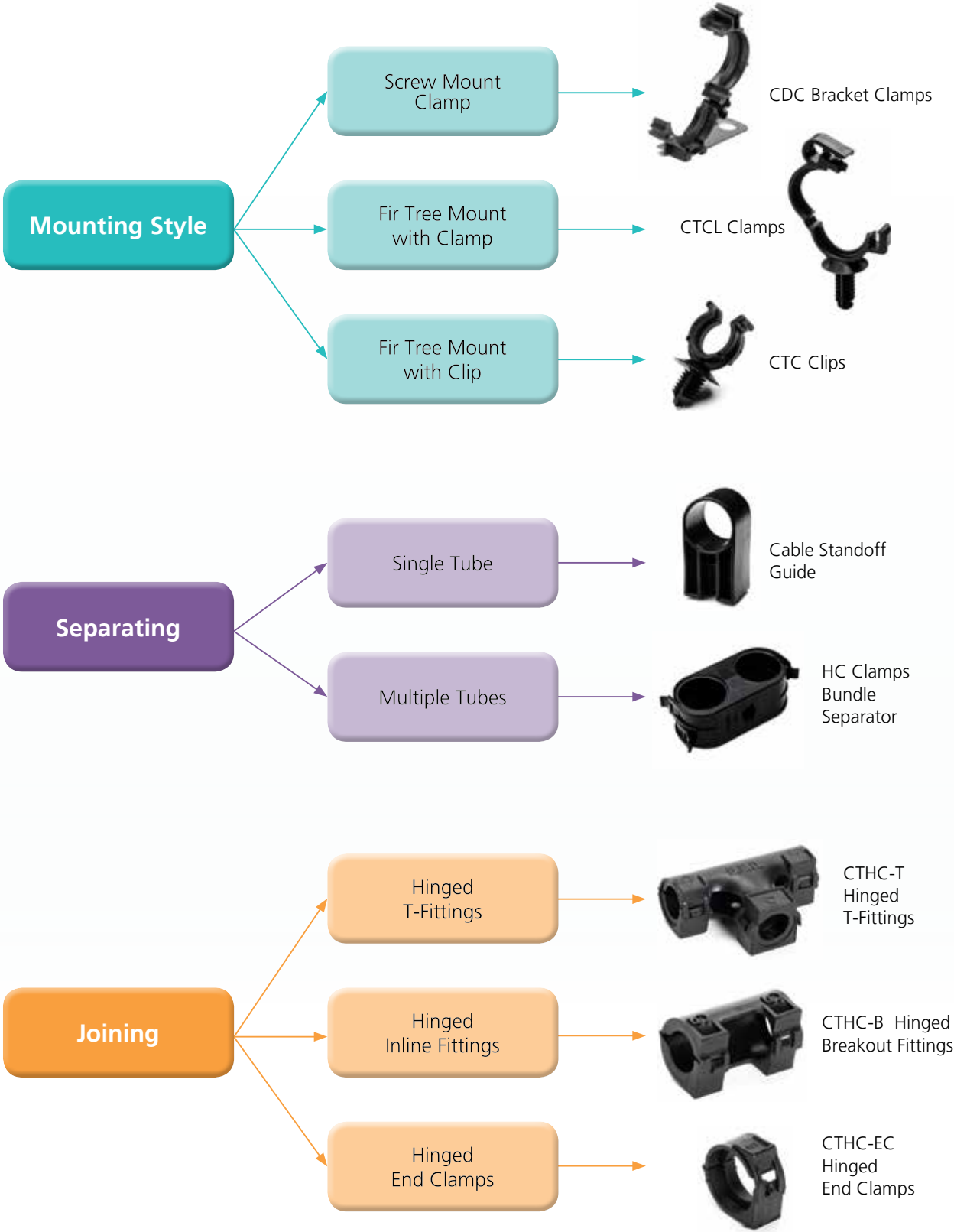
PART NO.	TYPE	Nominal Dia. in. (mm)	Mounting Hole Dia. in. (mm)	Material	Color	Pkg. Qty.	
<b>Bracket-Style Clamps - Straight</b>							
151-02979	CDC10S40.5M6	3/8 (10.0)	0.26 (6.5)	PA66	Black	50	
151-02980	CDC13S40.5M6	1/2 (13.0)	0.26 (6.5)	PA66	Black	50	
151-02981	CDC16S60.5M6	5/8 (16.0)	0.26 (6.5)	PA66HIRHS	Black	50	
151-02982	CDC19S40.5M6	3/4 (19.0)	0.26 (6.5)	PA66HIRHS	Black	50	
151-02983	CDC30S40.5M6	1-1/4 (30.0)	0.26 (6.5)	PA66HIRHS	Black	25	
<b>Bracket-Style Clamps - Elbows</b>							
151-02984	CDC13B90O550M10	1/2 (13.0)	0.42 (10.6)	PA66	Black	50	
151-02985	CDC19B90O550M10	3/4 (19.0)	0.42 (10.6)	PA66HIRHS	Black	50	
151-02986	CDC25B90O550M10	1 (25.0)	0.42 (10.6)	PA66HIRHS	Black	50	

*Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes.*

# Convolved Tubing Accessories

	Option	Where/When Used	Advantages
	Hinged T-Fittings	Allows joining of convoluted tubing and redirect of wire and cable into multiple directions.	<ul style="list-style-type: none"> <li>• Living hinge for repeated access to wires.</li> <li>• Easy-access breakout areas to boost productivity.</li> <li>• Internal rib secures tubing and eliminates slipping.</li> <li>• Connect same or varying diameter tubings for protecting breakouts.</li> <li>• Eliminates taping operation for improved aesthetics and faster assembly.</li> <li>• No tools required to open and close.</li> </ul>
	Hinged Inline Breakout Fittings	Enables breakouts along a single length of convoluted tubing or when joining two lengths of tubing.	<ul style="list-style-type: none"> <li>• Living hinge for repeated access to wires.</li> <li>• Quickly and easily adjust location of breakout areas to boost productivity.</li> <li>• Internal rib secures tubing and eliminates slipping.</li> <li>• Eliminates taping operation for improved aesthetics and faster assembly.</li> <li>• No tools required to open and close.</li> </ul>
	Hinged End Clamps	Prevents wires from slipping out of convoluted tubing when mounting to a surface is not required.	<ul style="list-style-type: none"> <li>• Living hinge allows repeated access to wires.</li> <li>• Internal rib secures tubing and eliminates slipping.</li> <li>• Eliminates taping operation for improved aesthetics and faster assembly.</li> <li>• Quickly and easily adjust location of breakout areas to boost productivity.</li> <li>• No tools required to open and close.</li> </ul>
	Convoluted Tubing Bracket-Style Clamps - Straight	Holds convoluted tubing firmly in place and eliminates rattling and noise during vibration or repetitive motion.	<ul style="list-style-type: none"> <li>• Bracket firmly secures clamp and tubing to panel surface.</li> <li>• Internal rib prevents convoluted tubing from slipping.</li> <li>• Releasable and adjustable latch/hinge design allows repositioning of tubing prior to snapping clamp in place.</li> </ul>
	Convoluted Tubing Bracket-Style Clamps - Elbows	Fastens convoluted tubing at a distance from panel surface, holding firmly in place to eliminate rattling and noise during vibration or repetitive motion.	<ul style="list-style-type: none"> <li>• Bracket firmly secures clamp and tubing to panel surface.</li> <li>• Internal rib prevents convoluted tubing from slipping.</li> <li>• Releasable and adjustable latch/hinge design allows repositioning of tubing prior to snapping clamp in place.</li> <li>• Offset bracket allows positioning around obstacles.</li> </ul>
	Convoluted Tubing Fir Tree Mount with Clamp	Provides high retention of convoluted tubing to a panel surface and eliminates accidental removal of tubing during motion or vibration.	<ul style="list-style-type: none"> <li>• Fir tree design provides low insertion and high extraction forces.</li> <li>• Internal rib prevents lateral movement of convoluted tubing.</li> <li>• Latch prevents unintentional separation of tubing from clamping device yet allows future access to convoluted tubing.</li> </ul>
	Convoluted Tubing Fir Tree Mount with Clip	Attaches convoluted tubing to panel surface. Clip style allows quick insertion and removal of tubing.	<ul style="list-style-type: none"> <li>• Fir tree design provides low insertion and high extraction forces.</li> <li>• Internal rib prevents lateral movement of convoluted tubing.</li> <li>• Open clip design allows easy access and assembly of tubing to clip.</li> </ul>
	HC Clamps/ Bundle Separators	Separates parallel tubing runs to avoid abrasion or noise. Secures tubing to brackets or frame rails.	<ul style="list-style-type: none"> <li>• Secures parallel runs of tubing, eliminating noise and abrasion.</li> <li>• Internal rib prevents convoluted tubing from slipping.</li> </ul>
	Standoff Guides	Maintains assembly of tubing at defined distance from surface.	<ul style="list-style-type: none"> <li>• Easy attachment using a button head cable tie.</li> <li>• Extended height offers clearance from bolts and other protrusions on the panel surface.</li> <li>• Rib feature prevents convoluted tubing from sliding laterally.</li> </ul>

# Convolved Tubing Accessories Decision Tree





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