



## Convoluted Tubing and Accessories

Flexible Protection for Cables and Wires

**MADE FOR REAL** 



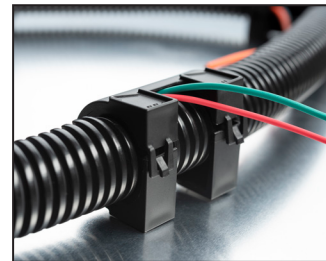
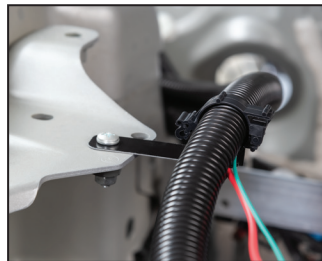
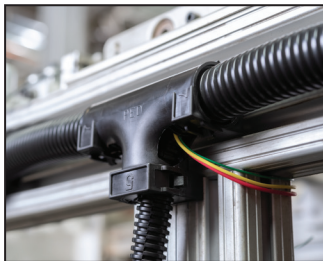
# Everything you need to protect wires and cables

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.



# Routing, Protection and Insulation

## Convoluted Tubing and Accessories

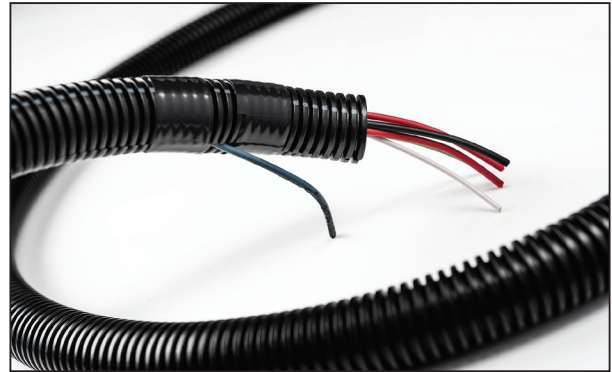
### Convoluted Tubing

#### PA6 - Standard Protection

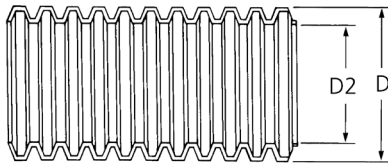
HellermannTyton's Convoluted Tubing provides an efficient method of routing and protecting wire harness assemblies while reducing the chance of installation damage. It also protects valuable hoses and cables. Available in slit or unslit, and standard, bulk and dispenser box packaging.

#### 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>Color</b>	Black with Gray Stripe (BKSTGY)
<b>Flammability</b>	UL 94 HB



**RoHS** ✓

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

PART NO.	TYPE	Nominal Dia. in. (mm)	Outside Diameter (D) in. (mm)	Inner Diameter (D2) in. (mm)	Wall Thickness in. (mm)	Pkg. Qty. Feet
<b>Slit</b>						
CTN1405TD	CTN140	0.25 (6.4)	0.398 (10.1)	0.276 (7.0)	0.004 (0.1)	3200
CTN140		0.25 (6.4)	0.398 (10.1)	0.276 (7.0)	0.004 (0.1)	28000
CTN3805TD	CTN380	0.38 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	1900
CTN380		0.38 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	15,000
CTN1205TD	CTN120	0.5 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	1100
CTN120		0.5 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	8500
CTN5805TD	CTN580	0.63 (16.0)	0.837 (21.3)	0.639 (16.2)	0.005 (0.1)	800
CTN3405TD	CTN340	0.75 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	550
CTN340		0.75 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	4200
CTN105TD	CTN10	1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	300
CTN10		1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	2250
CTN11405TD	CTN1140	1.25 (31.8)	1.50 (38.1)	1.257 (31.9)	0.006 (0.2)	250
169-60004		1.25 (31.8)	1.50 (38.1)	1.257 (31.9)	0.006 (0.2)	1800
CTN11205TD	CTN1120	1.5 (38.1)	1.947 (49.5)	1.647 (41.8)	0.006 (0.2)	150
CTN1120		1.5 (38.1)	1.947 (49.5)	1.647 (41.8)	0.006 (0.2)	1000
CTN205TD	CTN20	2 (50.8)	2.388 (60.7)	2.038 (51.8)	0.011 (0.3)	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 and Accessories

### Convolute 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)	Pkg. Qty. Feet
<b>Unslit</b>						
CTN140STDUNSLIT	CTN140UNSLIT	0.25 (6.4)	0.398 (10.1)	0.276 (7.0)	0.004 (0.1)	2500
169-60023	CTN380UNSLIT	0.38 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	1500
CTN120STDUNSLIT	CTN120UNSLIT	0.5 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	1000
169-60024	CTN580UNSLIT	0.63 (16.0)	0.837 (21.3)	0.639 (16.2)	0.005 (0.1)	700
CTN340STDUNSLIT	CTN340UNSLIT	0.75 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	450
CTN10STDUNSLIT	CTN10UNSLIT	1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	250
CTN1140UNSLIT	CTN1140UNSLIT	1.25 (31.8)	1.50 (38.1)	1.257 (31.9)	0.006 (0.2)	200

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



### Convoluted Tubing

#### PA6 - Slit Dispenser Box

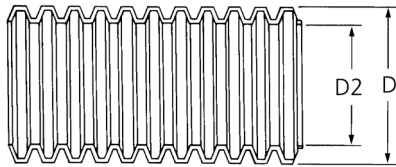
HellermannTyton's Slit Convoluted Tubing provides an efficient method of routing and protecting wire harness assemblies while reducing the chance of installation damage. It also protects valuable hoses and cables. Tubing is slit and comes in a dispenser box package.

#### 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>Color</b>	Black with Gray Stripe (BKSTGY)
<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)	Pkg. Qty. Feet
<b>Slit Dispenser Box</b>						
169-60022	CTN140	0.25 (6.4)	0.398 (10.1)	0.276 (7.0)	0.004 (0.1)	100
169-60018	CTN380	0.38 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	100
169-60019	CTN120	0.5 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	100
169-60020	CTN340	0.75 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	100
169-60021	CTN10	1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	50

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

# Routing, Protection and Insulation

## Convolved Tubing and Accessories

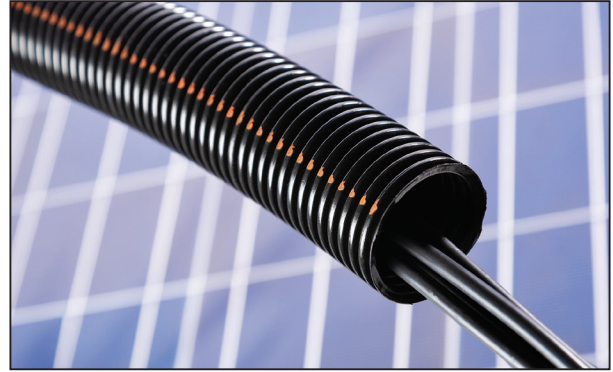
### Convolved Tubing

#### PEUV - UV Resistant

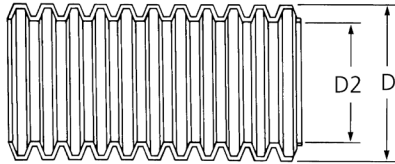
HellermannTyton's Polyethylene Ultraviolet Convolved Tubing provides added protection against UV radiation for long-term outdoor use. The tubing is an efficient method of routing and protecting wire harness assemblies while reducing the chance of installation damage. It also protects valuable hoses and 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.
- Convolved 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>Color</b>	Black with Orange Stripe (BKSTOG)
<b>Flammability</b>	<b>Not Flame Retardant</b>



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

PART NO.	TYPE	Nominal Dia. in. (mm)	Outside Diameter (D) in. (mm)	Inner Diameter (D2) in. (mm)	Wall Thickness in. (mm)	Pkg. Qty. Feet
<b>Slit</b>						
904-00358	CTPUV340	0.75 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	4200
904-00359	CTPUV10	1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	2250
904-00933	CTPUV1140	1.25 (31.8)	1.50 (38.1)	1.257 (31.9)	0.006 (0.2)	1800
904-00357	CTPUV1120	1.5 (38.1)	1.947 (49.5)	1.647 (41.8)	0.006 (0.2)	1000
904-00921	CTPUV20	2 (50.8)	2.388 (60.7)	2.038 (51.8)	0.011 (0.3)	800
904-02500	CPTUV2120	2.5 (63.5)	2.874 (73.0)	2.516 (63.9)	0.011 (0.3)	500

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

# Routing, Protection and Insulation

## Convoluted Tubing and Accessories

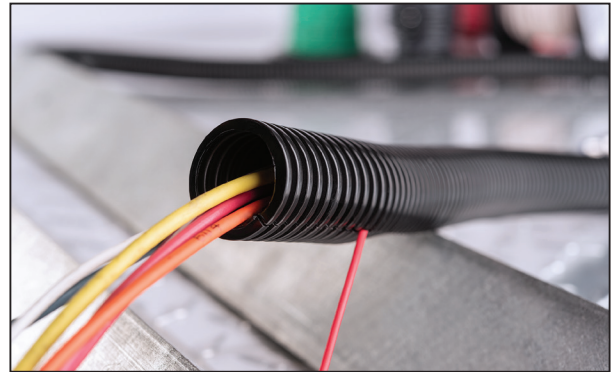
### Convoluted Tubing

#### PE - Superior Flexibility

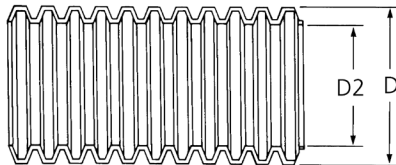
HellermannTyton's Convoluted Tubing provides an efficient method of routing and protecting wire harness assemblies while reducing the chance of installation damage. It also protects valuable hoses and cables. Available in slit or unslit, and standard, bulk and box reel packaging. Also available in colors.

#### Features and Benefits

- Tubing provides full coverage where spiral wrap or other coverings may not be suitable.
- Protects wire harness from fluids, friction, vibration, fraying and puncture.
- Convoluted profile provides resistance to crushing, impact and abrasion for performance in harsh applications.
- 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>Color</b>	Black (BK)
<b>Flammability</b>	<b>Not Flame Retardant</b>



PART NO.	TYPE	Nominal Dia. in. (mm)	Outside Diameter (D) in. (mm)	Inner Diameter (D2) in. (mm)	Wall Thickness in. (mm)	Pkg. Qty. Feet
<b>Slit</b>						
CTP140STD	CTP140	0.25 (6.4)	0.398 (10.1)	0.276 (7.0)	0.004 (0.1)	3200
CTP380C	CTP380	0.38 (9.0)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	100
CTP380STD		0.38 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	1900
CTP380		0.38 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	15,000
CTP120C	CTP120	0.5 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	100
CTP120STD		0.5 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	1100
CTP120		0.5 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	8500
CTP580STD	CTP580	5/8 (16.0)	0.837 (21.3)	0.639 (16.2)	0.005 (0.1)	800
CTP580		0.63 (16.0)	0.837 (21.3)	0.639 (16.2)	0.005 (0.1)	5500
CTP340C	CTP340	0.75 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	100
CTP340STD		0.75 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	550
CTP340		0.75 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	4200

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



# Routing, Protection and Insulation

## Convolved Tubing and Accessories

### Convolved 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)	Pkg. Qty. Feet
CTP10K	CTP10	1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	50
CTP10STD		1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	300
CTP10		1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	2250
CTP1140STD	CTP1140	1.25 (31.8)	1.50 (38.1)	1.257 (31.9)	0.006 (0.2)	250
CTP1140		1.25 (31.8)	1.50 (38.1)	1.257 (31.9)	0.006 (0.2)	1800
CTP1120STD	CTP1120	1.5 (38.1)	1.947 (49.5)	1.647 (41.8)	0.006 (0.2)	150.0
CTP1120		1.5 (38.1)	1.947 (49.5)	1.647 (41.8)	0.006 (0.2)	1000
CTP20STD	CTP20	2 (50.8)	2.388 (60.7)	2.038 (51.8)	0.011 (0.3)	100
<b>Unslit</b>						
CTP140STDUNSLIT	CTP140UNSLIT	0.25 (6.4)	0.398 (10.1)	0.276 (7.0)	0.004 (0.1)	2500
169-60526	CTP380UNSLIT	0.38 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	1500
CTP120STDUNSLIT	CTP120UNSLIT	0.5 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	1000
CTP580STDUNSLIT	CTP580UNSLIT	0.63 (16.0)	0.837 (21.3)	0.639 (16.2)	0.005 (0.1)	700
CTP340STDUNSLIT	CTP340UNSLIT	0.75 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	450
CTP10STDUNSLIT	CTP10UNSLIT	1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	250
CTP10UNSLIT		1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	1800
CTP1140STDUNSLI	CTP1140UNSLIT	1.25 (31.8)	1.50 (38.1)	1.257 (31.9)	0.006 (0.2)	200
CTP1120STDUNSLI	CTP1120UNSLIT	1.5 (38.1)	1.947 (49.5)	1.647 (41.8)	0.006 (0.2)	100

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

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

### Convoluted Tubing

#### PE-FR - Flame Retardant

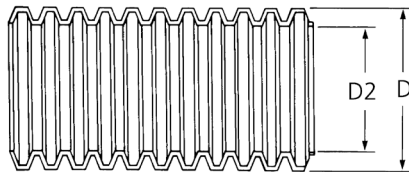
HellermannTyton's Polyethylene Flame Retardant Convoluted Tubing is made of a self-extinguishing material and complies with UL 94 V2 standards. The tubing is an efficient method of routing and protecting wire harness assemblies while reducing the chance of installation damage. It also protects valuable 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 (PE-FR)
<b>Operating Temperature</b>	-40°F to +185°F (-40°C to +85°C)
<b>Color</b>	Gray (GY)
<b>Flammability</b>	UL 94 V-2



PART NO.	TYPE	Nominal Dia. in. (mm)	Outside Diameter (D) in. (mm)	Inner Diameter (D2) in. (mm)	Wall Thickness in. (mm)	Pkg. Qty. Feet
<b>Slit</b>						
169-60302	CTPFR140	0.25 (6.4)	0.398 (10.1)	0.276 (7.0)	0.004 (0.1)	3200
169-60304	CTPFR380	0.38 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	1900
169-60301	CTPFR120	0.5 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	1100
169-60303	CTPFR340	0.75 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	550
169-60300	CTPFR10	1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	300
169-60310	CTPFR1140	1.25 (31.8)	1.50 (38.1)	1.257 (31.9)	0.006 (0.2)	250
169-60311	CTPFR1120	1.5 (38.1)	1.947 (49.5)	1.647 (41.8)	0.006 (0.2)	150.0
<b>Unslit</b>						
169-60307	CTPFR140UNSLIT	0.25 (6.4)	0.398 (10.1)	0.276 (7.0)	0.004 (0.1)	2500
169-60309	CTPFR380UNSLIT	0.38 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	1500
169-60306	CTPFR120UNSLIT	0.5 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	1000
169-60308	CTPFR340UNSLIT	0.75 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	450
169-60305	CTPFR10UNSLIT	1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	250

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

# Routing, Protection and Insulation

## Convolved Tubing and Accessories

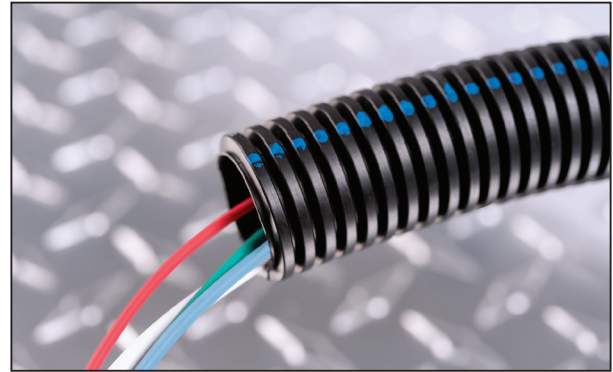
### Convolved Tubing

#### PPFR - High Temperature, Flame Retardant

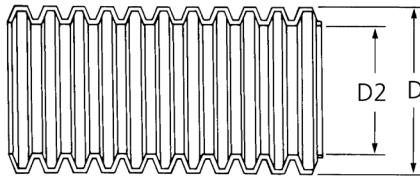
HellermannTyton's Polypropylene Flame Retardant Convolved Tubing is made of a self-extinguishing material and complies with UL 94 V2 standards. The tubing is an efficient method of routing and protecting wire harness assemblies while reducing the chance of installation damage. It also protects valuable 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.
- Convolved 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>Color</b>	Black with Blue Stripe (BKSTBL)
<b>Flammability</b>	UL 94 V-2



**Need help choosing?  
See pages 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	0.25 (6.4)	0.400 (10.2)	0.266 (6.8)	0.004 (0.1)	Black with Blue Stripe (BKSTBL)	3200
169-60105	CTPPFR380	0.38 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	Black with Blue Stripe (BKSTBL)	1800
169-60102	CTPPFR120	0.5 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	Black with Blue Stripe (BKSTBL)	1100
169-60106	CTPPFR580	0.63 (16.0)	0.837 (21.3)	0.639 (16.2)	0.005 (0.1)	Black with Blue Stripe (BKSTBL)	750
169-60104	CTPPFR340	0.75 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	Black with Blue Stripe (BKSTBL)	500
169-60101	CTPPFR10	1.0 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	Black with Blue Stripe (BKSTBL)	300
169-60100	CTPPFR1120	1.50 (38.1)	1.50 (38.1)	1.647 (41.8)	0.006 (0.2)	Black with Blue Stripe (BKSTBL)	100
<b>Unslit</b>							
169-60110	CTPPFR140UNSLIT	0.25 (6.4)	0.400 (10.2)	0.266 (6.8)	0.004 (0.1)	Black with Blue Stripe (BKSTBL)	2500
169-60112	CTPPFR380UNSLIT	0.38 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	Black with Blue Stripe (BKSTBL)	1500
169-60109	CTPPFR120UNSLIT	0.5 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	Black with Blue Stripe (BKSTBL)	1000
169-60113	CTPPFR580UNSLIT	0.63 (16.0)	0.837 (21.3)	0.639 (16.2)	0.005 (0.1)	Black with Blue Stripe (BKSTBL)	700
169-60111	CTPPFR340UNSLIT	0.75 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	Black with Blue Stripe (BKSTBL)	450
169-60107	CTPPFR10UNSLIT	1.0 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	Black with Blue Stripe (BKSTBL)	250
169-60108	CTPPFR1120UNSLIT	1.5 (38.1)	1.50 (38.1)	1.647 (41.8)	0.006 (0.2)	Black with Blue Stripe (BKSTBL)	100

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



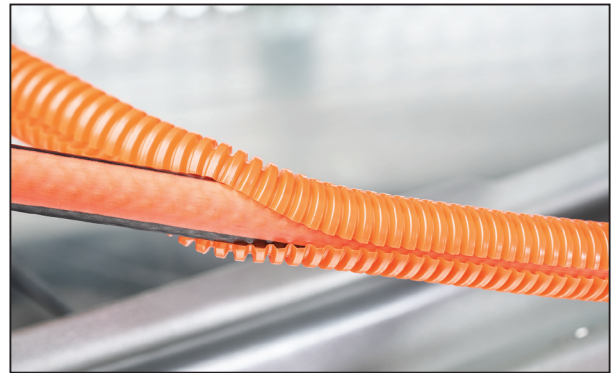
### Convolved Tubing

#### Convolved Tubing in PE

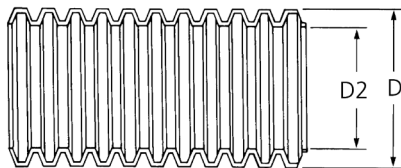
HellermannTyton's Convolved Tubing, also known as split loom tubing, provides an efficient method of routing and protecting wire harness assemblies, while reducing the chance of installation damage. With a split down the side where a wire harness can be inserted, convolved tubing can be easily installed without removal of the entire assembly. It can also protect valuable hoses and cables. Convolved tubing offers excellent protection against vibration wear, water, snow, ice and the effects of heat, cold and sunlight on cables and wires.

#### Features and Benefits

- Split side is ideal for applications where braided tubing or spiral wrap may be difficult to install.
- Provides resistance to crushing, impact and abrasion for performance in harsh applications.



<b>MATERIAL</b>	Polyethylene (PE)
<b>Operating Temperature</b>	-40°F to +185°F (-40°C to +85°C)
<b>Color</b>	Orange (OG), High Voltage (HV)
<b>Flammability</b>	<b>Not Flame Retardant</b>



PART NO.	TYPE	Nominal Dia. in. (mm)	Outside Diameter (D) in. (mm)	Inner Diameter (D2) in. (mm)	Wall Thickness in. (mm)	Pkg. Qty. Feet
<b>Slit</b>						
169-60550	CTP140	1/4 (6.4)	0.398 (10.1)	0.276 (7.0)	0.004 (0.1)	3200
169-60553	CTP380	3/8 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	1900
169-60549	CTP120	1/2 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	1100
169-60552	CTP340	3/4 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	550
169-60547	CTP10	1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	300
169-60555	CTP1140	1-1/4 (31.8)	1.50 (38.1)	1.257 (31.9)	0.006 (0.2)	250
169-60548	CTP1120	1-1/2 (38.1)	1.947 (49.5)	1.647 (41.8)	0.006 (0.2)	150
169-60551	CTP20	2 (50.8)	2.388 (60.7)	2.038 (51.8)	0.011 (0.3)	100

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

# Routing, Protection and Insulation

## Convolute Tubing and Accessories

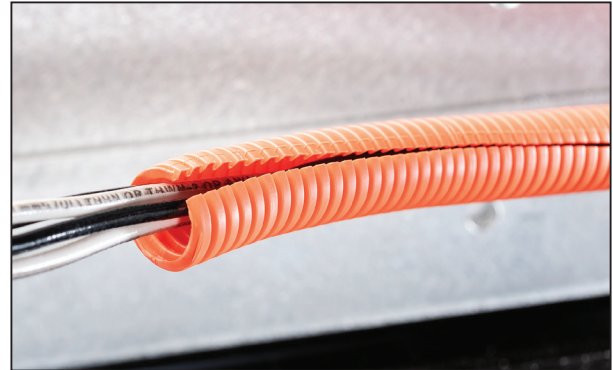
### Convolute Tubing

#### Convolute Tubing in PPFR - Orange

HellermannTyton's Polypropylene Flame Retardant Convolute 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.
- Convolute 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>Color</b>	Orange (OG), High Voltage (HV)
<b>Flammability</b>	<b>UL 94 V-2</b>



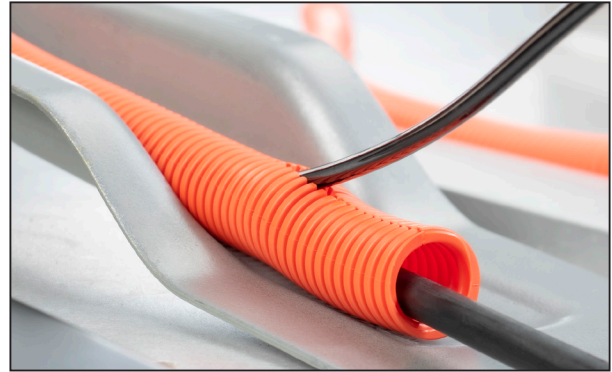
PART NO.	TYPE	Nominal Dia. in. (mm)	Outside Diameter (D) in. (mm)	Inner Diameter (D2) in. (mm)	Wall Thickness in. (mm)	Pkg. Qty. Feet
<b>Split</b>						
169-60120	CTPPFR140	1/4 (6.4)	0.40 (10.2)	0.266 (6.8)	0.004 (0.1)	3200
169-60121	CTPPFR380	3/8 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	1800
169-60122	CTPPFR716	7/16 (11.1)	0.597 (15.2)	0.437 (11.1)	0.005 (0.1)	1400
169-60123	CTPPFR120	1/2 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	1100
169-60124	CTPPFR580	5/8 (16.0)	0.837 (21.3)	0.639 (16.2)	0.005 (0.1)	750
169-60125	CTPPFR340	3/4 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	500
169-60126	CTPPFR10	1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	300
169-60127	CTPPFR1140	1-1/4 (31.8)	1.50 (38.1)	1.257 (31.9)	0.006 (0.2)	200
169-60128	CTPPFR1120	1-1/2 (38.1)	1.947 (49.5)	1.647 (41.8)	0.006 (0.2)	100

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

### Convoluted Tubing

#### Flame-Retardant Slit Tubing with UV Inhibitor (PP+V2+UV)

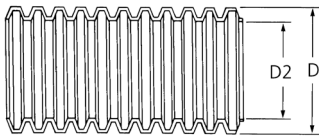
HellermannTyton's Orange Flame-Retardant Polypropylene with UV Inhibitor Convoluted Slit Tubing provides high visibility, is self-extinguishing and offers elevated protection against UV radiation for long-term outdoor use. Convoluted tubing efficiently protects wire harness assemblies, hoses and cables against vibration wear, water, snow, ice and the effects of heat, cold and sunlight on cables and wires while reducing the chance of installation damage. Its unique blend of flame-retardant polypropylene is suitable for applications requiring self-extinguishing materials and complies with UL 94 V-2 standards.



#### Features and Benefits

- Excellent flame-resistant properties with higher operating temperature ranges for a wider range of application environments.
- High-visibility orange color offers safe identification of high-voltage cabling.
- Lateral slit allows for fast and easy insertion, inspection and future access to cabling.
- The UV additive prevents damage and discoloration caused by long-term exposure to sunlight.

<b>MATERIAL</b>	Polypropylene, flame retardant, UV-stabilized (PPFRUV)
<b>Operating Temperature</b>	-40°F to +257°F (-40°C to +125°C)
<b>Color</b>	Orange (OG), High Voltage (HV)
<b>Flammability</b>	<b>UL 94 V-2</b>






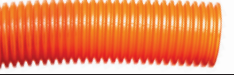




PART NO.	TYPE	Nominal Diameter in. (mm)	Outside Diameter (D) in. (mm)	Inner Diameter (D2) in. (mm)	Wall Thickness in. (mm)	Pkg. Qty. Feet
<b>Slit</b>						
169-60132	CTPPFRUV380STD	3/8 (9.7)	0.526 (13.4)	0.380 (9.7)	0.005 (0.1)	1800
169-60130	CTPPFRUV120	1/2 (12.7)	0.70 (17.8)	0.516 (13.1)	0.005 (0.1)	1100
169-60133	CTPPFRUV580STD	5/8 (16.0)	0.837 (21.3)	0.639 (16.2)	0.005 (0.1)	750
169-60131	CTPPFRUV340STD	3/4 (19.1)	0.989 (25.1)	0.759 (19.3)	0.005 (0.1)	500
169-60129	CTPPFRUV10	1 (25.4)	1.304 (33.1)	1.069 (27.2)	0.006 (0.2)	300

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

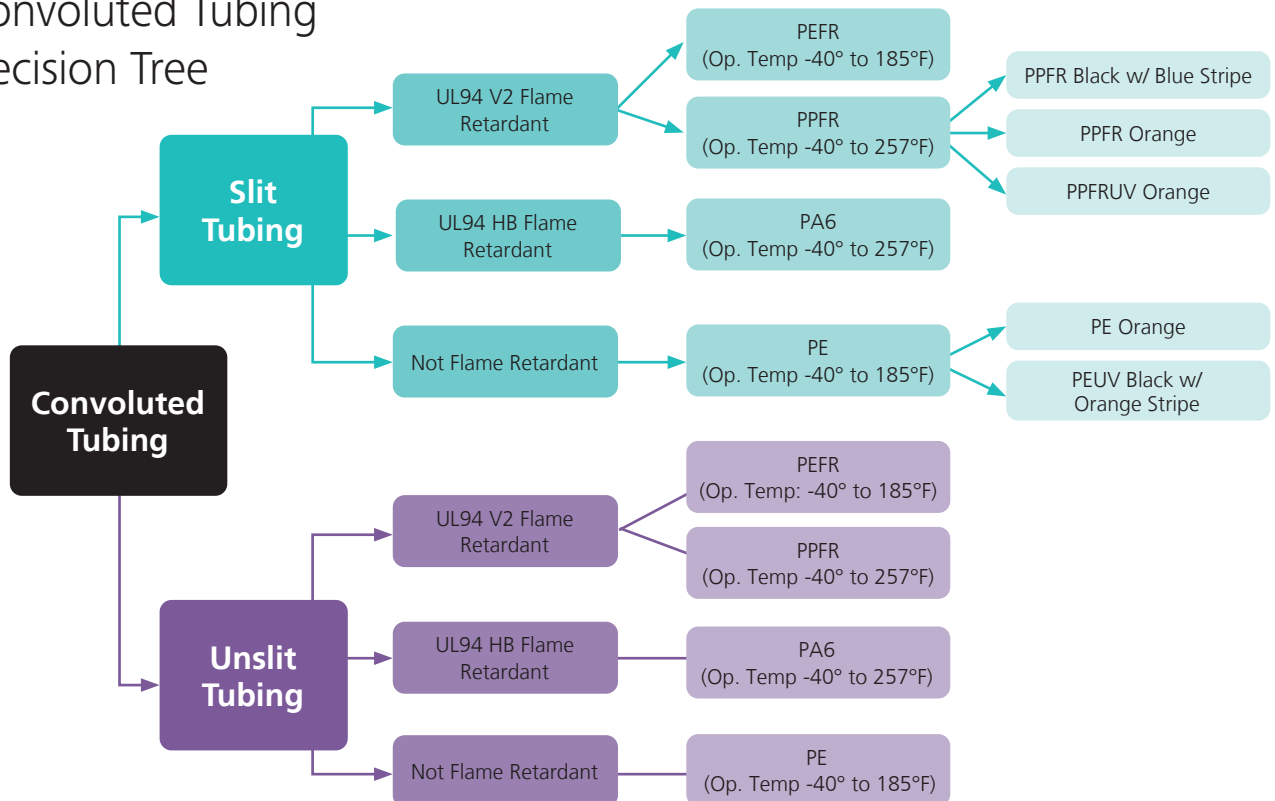


# Convolved Tubing Selection Guide

Material	Flame Retardancy	Operating Temperature	UV Protection	Chemical Resistance	Abrasion Protection	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	-	★★	★★	
Orange Polyethylene (PE) Slit Tubing	-	-40°Fto 185°F -40° to 85°C	-	★★	★★	
Orange Polypropylene Flame Retardant (PPFR) Slit Tubing	UL-94 V2	-40°Fto 257°F -40° to 125°C	-	★★	★★	
Orange Polypropylene Flame Retardant UV (PPFRUV) Slit Tubing	UL-94 V2	-40°Fto 257°F -40° to 125°C	YES	★★	★★	

<b>KEY</b>	★★★★ Best	★★ Better	★ Good
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## Convolved 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>Color</b>	Black (BK)



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

## Convolved Tubing and Accessories

### Convolved Tubing - Accessories

#### Mounts, Clips, Clamps and Separators

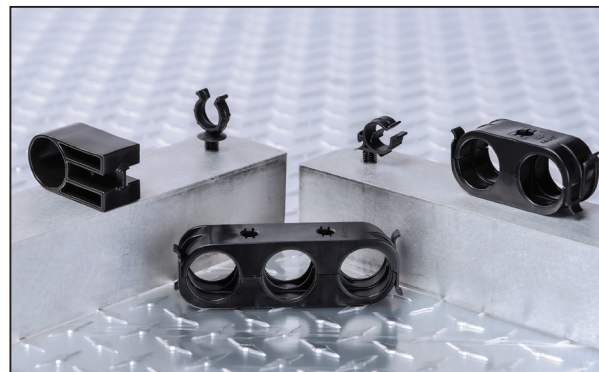
Convolved Tubing Clips provide a quick and easy method for firmly securing corrugated covered cables and wires to a surface.

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 convolved 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	0.38 (10.0)	0.26 - 0.28 (6.5 - 7.0)	PA66HIRHS	Black	500	
155-17801	CTC10FT9	0.38 (10.0)	0.34 - 0.35 (8.7 - 9.0)	PA66HIRHS	Black	500	
151-14312	CTC13FT6	0.5 (13.0)	0.26 - 0.28 (6.5 - 7.0)	PA66HIRHS	Black	500	
151-00019	CTC13FT6LG	0.5 (13.0)	0.26 - 0.28 (6.5 - 7.0)	PA66HIRHS	Black	500	
151-00783	CTCFT6	1.56 (15.0)	0.25 - 0.26 (6.3 - 6.7)	PA66HIRHS	Black	5003	
151-00621	CTCL16FT6LG	0.63 (16.0)	0.25 - 0.28 (6.3 - 7.0)	PA66HIRHSUV	Black	1500	
<b>Separators</b>							
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.*



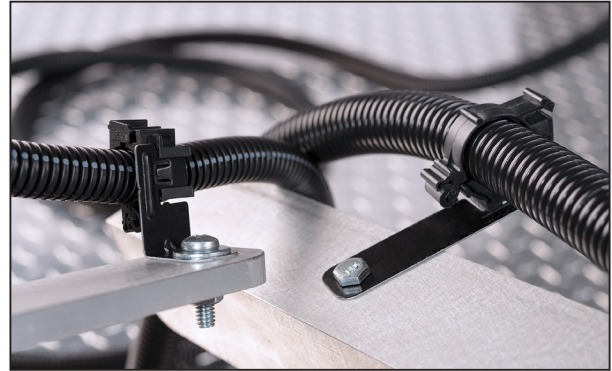
### Convuluted Tubing - Accessories

#### Bracket-Style Clamps

The Convuluted Tubing Clamp provides a quick method for securing and routing convuluted 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 convuluted 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)

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	0.38 (10.0)	0.26 (6.5)	PA66	Black	50
151-02980	CDC13S40.5M6	0.5 (13.0)	0.26 (6.5)	PA66	Black	50
151-02981	CDC16S60.5M6	0.63 (16.0)	0.26 (6.5)	PA66HIRHS	Black	50
151-02982	CDC19S40.5M6	0.75 (19.0)	0.26 (6.5)	PA66HIRHS	Black	50
151-02983	CDC30S40.5M6	1.25 (30.0)	0.26 (6.5)	PA66HIRHS	Black	25
<b>Bracket-Style Clamps - Elbows</b>						
151-02984	CDC13B90OS50M10	0.5 (13.0)	0.42 (10.6)	PA66	Black	50
151-02985	CDC19B90OS50M10	0.75 (19.0)	0.42 (10.6)	PA66HIRHS	Black	50
151-02986	CDC25B90OS50M10	1 (25.4)	0.42 (10.6)	PA66HIRHS	Black	50

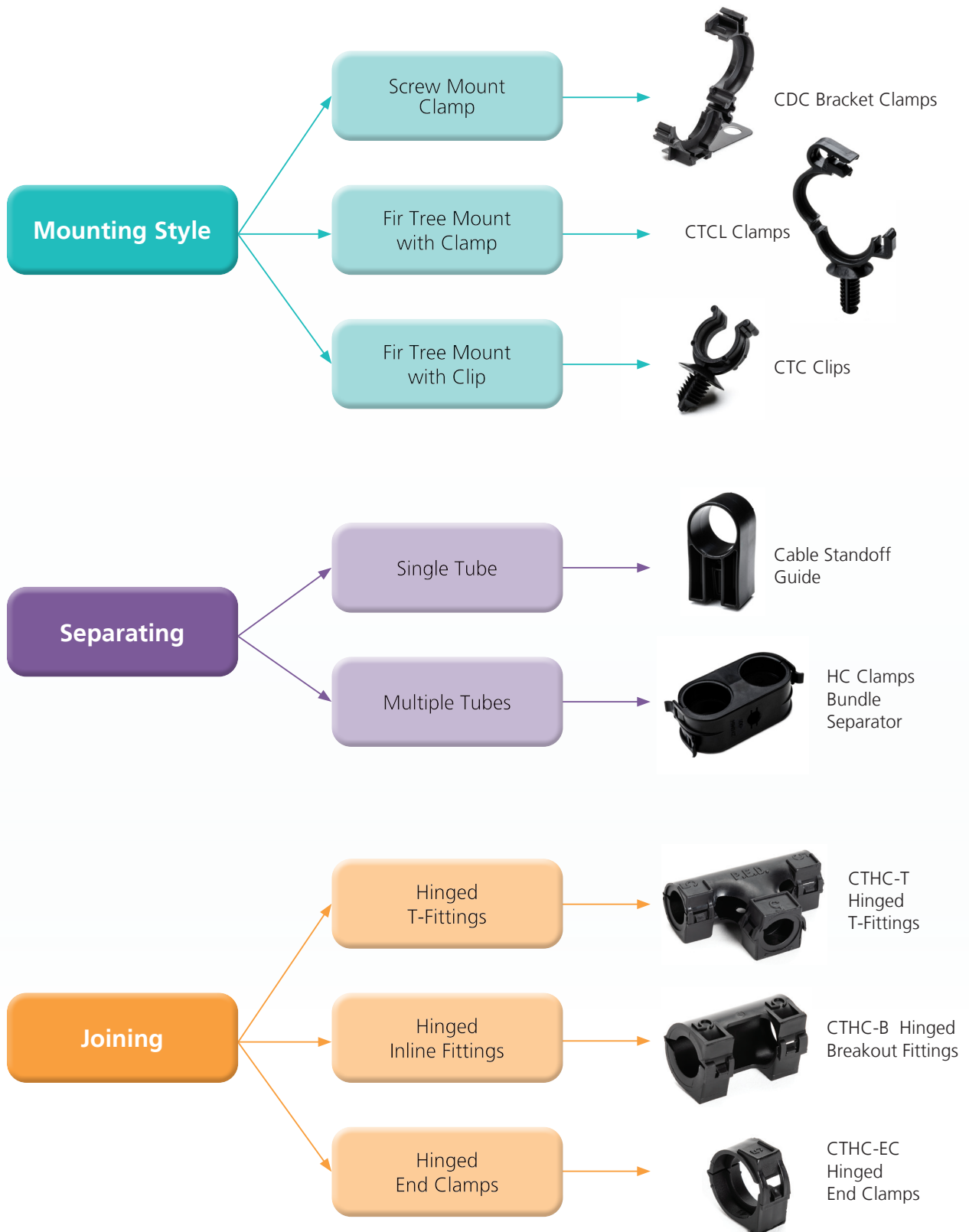
*Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes.*

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

# Convoluted 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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**ISO 9001 certified**

**Warranty Policy** – HellermannTyton products are warranted to be free from defects in material and workmanship at the time sold by us; but our obligation under this warranty and that of the seller is limited to the replacement of the product, and neither we nor the seller are bound by any other warranty, expressed, implied or statutory. Under no circumstances are we or the seller liable for any loss, damage, expenses or consequential damages of any kind arising out of the use or inability to use these products. All are sold with the understanding that the user will test them in actual use and determine their adaptability for the intended uses.