

HellermannTyton use only the highest quality materials from acclaimed suppliers recognised for their expertise and capabilities in materials development. This ensures that our products are engineered and manufactured for maximum performance and quality.

Whatever your application, please refer to the easy to use cable tie guide below for the correct material.

### Cable Tie Guide

	Standard Nylon 6.6	Weather Resistant Nylon 6.6	Flame Retardant Nylon 6.6	Heat Stabilised Nylon 6.6	Hi-Temp Nylon 4.6	Stainless Steel
Order Suffix	N/A	- W	- V0	- HS	- HR	N/A
Ultra Violet Resistant	Poor	Good	Poor	Low	Poor	V. Good
Low Temperature	- 40°C	- 40°C	- 40°C	- 40°C	- 40°C	- 80°C
High Temperature	+ 85°C	+ 85°C	+ 85°C	+ 105°C	+ 135°C	+ 538°C
Flammability Rating (UL 94)	V2	V2	V0	V2	V2	VTM - V0 (Coating)
Melting Point	265°C	265°C	265°C	265°C	295°C	N/A

### Nylon 66

- Nylon 66 has excellent resistance to impact, chemicals, oils and withstands high voltages and temperatures. It has a high surface hardness and a small coefficient of friction, is self-lubricating and self-extinguishing.

### Nylon 46

- Nylon 46 has a higher resistance to heat, wear and impact, than Nylon 66. Nylon 46 also has excellent chemical and oil resistance, withstands high voltages, and is self-extinguishing.

### Fluorocarbon resin

- Fluorocarbon resin has excellent chemical resistance, heat stability, and weather resistance, and withstands low temperatures. It is non-adhesive, and has a low coefficient of friction. It also withstands high voltages, and is non-flammable.

### Polypropylene

- Polypropylene has low specific gravity and high rigidity. It has excellent wear resistance, chemical resistance and withstands high voltages. It is also impact-resistant at normal temperatures.

### Polypropylene (weather resistant type)

- This material has high weather resistance in addition to the other properties of polypropylene.

### Polyacetal (homopolymer)

- Polyacetal has high mechanical strength and rigidity, excellent fatigue resistance and solvent resistance, and does not creep. The molecular chains of the homopolymer are highly condensed.

### TPU (Thermoplastic Polyurethane)

- TPUs are characterised by a high degree of flexibility - even at low temperatures - and a high resistance to abrasion. They are also noted for their adhesive properties and are extremely versatile.

### 316 Marine Grade Stainless Steel

- This material is suitable for any application where high strength, high quality, corrosive resistant or fire retardant properties are required.

For further information on the above please call :- 0161 945 4181

## Limited Fire Hazard

LFH is better described as Limited Fire Hazard, a relative classification rather than Low Fire Hazard, which is often used and can be misleading.

### What do we mean by Limited Fire Hazard?

There is currently no single test that can assess a materials performance in fire.

We at HellermannTyton use the following main aspects of a fire situation.

#### TOXIC FUME GENERATION

This is a measure of toxic fumes evolved on combustion of the material. Common terminology such as Zero Halogen does not necessarily equate to zero toxicity.

#### SMOKE GENERATION

This is a measure of the density of smoke evolved on combustion of the material. Common terminology is Low Smoke.

#### FLAMMABILITY

This is a measurement of a materials resistance to burning. Test methods and standards used include BS6853: Appendix A, flame temperature index, glow wire and limiting oxygen index.


#### FLAME PROPAGATION

This is a measurement of a materials resistance to the spread of fire. Common terminology is Self-Extinguishing.

It is important to note that any one, or combination, of these aspects could be a preference for a specific requirement, or that all are required.

To use LFH as a definition, it is critical that this must be supported with the measurements and methods of test to avoid misunderstandings.

*HellermannTyton products consistently meet and exceed the requirements of our customers throughout the world. Listed below are some of our company approvals as well as those of independent testing authorities as at February 1998.*

	Organisation	Registration No. and Details	Date of Original Registration
	BS EN ISO 9002	Q5676	May 1998
	M.O.D	4SHB02	1990
	U.S. Military Specification	Mil-S-23190E	1968
	British Airways	N/A	1990
	Ford Motor Co.	Q1	1990
	Bureau Veritas	(France)	1988
	Peugeot Talbot	'A' Rating	1996
	Augusta Aircraft (Italy)	A/576	Dec. 1996
	British Aerospace	BAE/AG/3071/CHD	Oct. 1996
	Det Norske Veritas	E4428 (MBT Ties)	1997
	Det Norske Veritas	E4587 Mil Spec. Cable Ties (accommodation areas of ships)	1998