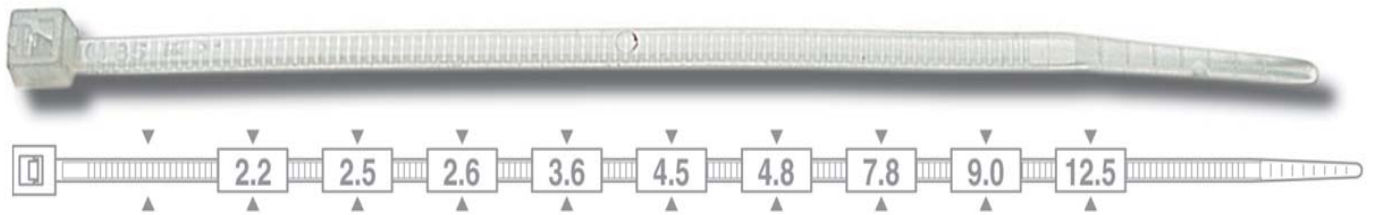


STANDARD CABLE TIES



Characteristics:

Material: Polyamide 6.6
 Humidity absorption: 2,7% (50% relative humidity)

- Working temperature: $-40^{\circ}\text{C} \div 85^{\circ}\text{C}$
- Tightening temperature: $-10^{\circ}\text{C} \div 60^{\circ}\text{C}$
- Max admissible point: $+110^{\circ}\text{C}$ for short time
- Melting temperature: $+256^{\circ}\text{C}$

Limit Oxygen Index (LOI): 27%
 Flammability rating: UL 94 class V2.

Tested according to EN 50146

- High resistance to bases, oils, greases, oil derivatives.
- Limited resistance to acids.
- Not resistant to phenols and to chloride solvents.
- Halogen-free resins.
- UV resistance (black color).

EC Directives:

The raw material used to produce our cable ties is compliant with EC Directives:

- 2000/53/EC (ELV)
- 2002/95/EC (RoHS)
- 2002/96/EC (WEEE)
- 2003/11/EC

Applications

- Electrical installations.
- Industrial Wiring.
- Automotive.
- Panel building.
- Special applications.

Characteristics

- Our Cable Ties are made exclusively of polyamide 6.6 so that they do not cause issues of material separation during recycling or interferences in electronic equipments.
- In the black cable ties the added carbon black gives an UV resistance according to ISO 4892 (QUV-B 150 hours), compared to 3 years of outdoor exposure under the sunlight and UV action.

Benefits

- Smooth rounded edges make them easier to be handled and safer to be installed.
- Bent rounded tip allows easier insertion through the head of the cable ties.
- Low friction coefficient of the material.



Tools for cable ties, see pages 120-121.

Our cable ties are constantly tested in our laboratories following important international standards. Particular extreme cable ties uses, weather conditions or even unsuitable applications might nevertheless vary some of the data we declare. Therefore, in case of specific enquiries or problems, do not hesitate to contact us. We will be pleased to share our experience with You.



Polyamide 6.6 cable ties width 2,2 ÷ 12,5 mm



Code	Code	Dimensions	Ø Bundle	Tensile strength		Bag	Carton
Natural	Black	(mm)	max (mm)	(kg)	(N)	pcs	pcs
5201/CE	5301/CE	2,2x75	15	6,12	60	100	20.000
5201E	5301E	2,2x75	15	6,12	60	1.000	100.000
5203/CE	5303/CE	2,5x98	21	8,16	80	100	15.000
5203E	5303E	2,5x98	21	8,16	80	1.000	50.000
5203/B2	5303/B2	2,5x98	21	8,16	80	20.000	20.000
5205/CE	5305/CE	2,5x135	32	8,16	80	100	12.000
5205E	5305E	2,5x135	32	8,16	80	1.000	30.000
5206/CE	5306/CE	2,6x160	40	8,16	80	100	10.000
5206E	5306E	2,6x160	40	8,16	80	1.000	30.000
5207/CE	5307/CE	2,6x200	52	8,16	80	100	8.000
5207E	5307E	2,6x200	52	8,16	80	1.000	25.000
5209/CE	5309/CE	3,6x140	35	13,26	130	100	7.000
5209E	5309E	3,6x140	35	13,26	130	1.000	25.000
5214/CE	5314/CE	3,6x200	50	13,26	130	100	7.000
5214E	5314E	3,6x200	50	13,26	130	1.000	20.000
5210/CE	5310/CE	3,6x290	80	13,26	130	100	4.500
5210E	5310E	3,6x290	80	13,26	130	500	15.000
5208E	5308E	3,6x370	103	13,26	130	100	4.000
5212/CE	5312/CE	4,5x120	24	22,44	220	100	8.000
5212E	5312E	4,5x120	24	22,44	220	1.000	20.000
5211/CE	5311/CE	4,5x160	40	22,44	220	100	6.000
5211E	5311E	4,5x160	40	22,44	220	1.000	18.000
5213/CE	5313/CE	4,8x178	45	22,44	220	100	5.000
5213E	5313E	4,8x178	45	22,44	220	1.000	15.000
5215/CE	5315/CE	4,8x200	50	22,44	220	100	4.000
5215E	5315E	4,8x200	50	22,44	220	1.000	14.000
5216/CE	5316/CE	4,8x250	68	22,44	220	100	4.500
5217E	5317E	4,8x290	78	22,44	220	100	3.500
5219E	5319E	4,8x360	100	22,44	220	100	3.000
5218E	5318E	4,8x390	106	22,44	220	100	7.000
5220E	5320E	4,8x430	115	22,44	220	100	6.000
5221E	5321E	7,8x120	25	55,08	540	100	4.000
5223E	5323E	7,8x180	45	55,08	540	100	2.500
5225E	5325E	7,8x240	63	55,08	540	100	2.000
5226E	5326E	7,8x300	80	55,08	540	100	1.500
5227E	5327E	7,5x365	100	55,08	540	100	1.500
5229E	5329E	7,5x450	130	55,08	540	100	3.000
5231E	5331E	7,5x540	158	55,08	540	100	2.000
5233E	5333E	7,8x750	220	55,08	540	100	2.000
5234E	5334E	9,0x780	233	71,4	700	100	1.300
5235E	5335E	12,5x225	57	110	1.080	50	2.000
5237E	5337E	12,5x500	143	110	1.080	50	1.000
5239E	5339E	12,5x720	213	110	1.080	50	1.000
5241E	5341E	12,5x850	255	110	1.080	50	1.500
5243E	5343E	12,5x1000	302	110	1.080	50	1.000

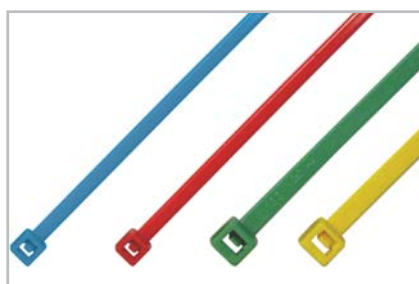
*The nominal dimensions can slightly change according to the utilized mould.

COLOURED CABLE TIES - polyamide 6.6 width 2,5 ÷ 4,8 mm

5203/C *E	2,5x98	21	8,16	80	100	15.000
5209/C *E	3,6x140	32	13,26	130	100	7.000
5214/C *E	3,6x200	50	13,26	130	100	7.000
5215/C *E	4,8x200	50	22,44	220	100	4.000
5217 *E	4,8x290	78	22,44	220	100	3.500

* ♦ R=Red, ♦ G=Yellow, ♦ V=Green, ♦ B=Blue

Minimum order quantity: 1 carton. Other colours and dimensions available on request.



Chemical Agent	Conc. %	Resist.
Acetaldehyde - aqueous solution	40	D
Acetamide - aqueous solution	50	G
Acetic acid - aqueous solution	10	P
Acetic acid - concentrated		P
Acetic anhydride - concentrated		S
Acetone	100	G
Acrylonitrile	100	G
Aluminium chloride - aqueous solution	10	G
Aluminium sulphate - aqueous solution	10	G
Ammonia	10	G
Ammonia - gaseous		L
Ammonium chloride - aqueous solution	10	G
Amyl acetate	100	G
Amyl alcohol	100	G
Aniline	100	D
Barium chloride - aqueous solution	10	G
Benzaldehyde	100	L
Benzoic acid - aqueous solution	saturated	D
Benzol	100	G
Benzyl alcohol	100	L
Bitumen		D
Boric acid - aqueous solution	10	D
Butane		G
Butyl acetate	100	G
Butyl alcohol	100	D
Butyric acid	100	D
Calcium chloride - aqueous solution	20	S
Calcium chloride - aqueous solution	10	G
Camphor	100	G
Chlorine - gaseous	100	P
Chlorine water		D
Chlorobenzene		G
Chlorobromomethane		D
Chloroform	100	P
Chromic acid - aqueous solution	10	P
Chromic acid - aqueous solution	1	D
Citric acid - aqueous solution	10	L
Cyclohexane	100	G
Cyclohexanol	100	G
Decaline		G
Diacetone alcohol		G
Ethyl acetate	100	G
Ethyl alcohol	96	D
Ethyl chloride	100	D
Butyl phthalate		G
Carbon sulphide	100	G
Carbon tetrachloride		G
Caustic potash - aqueous solution	5	G
Caustic potash - aqueous solution	50	D
Caustic potash - aqueous solution	10	G
Caustic soda - aqueous solution	5	G
Caustic soda - aqueous solution	50	D
Caustic soda - aqueous solution	10	G
Copper salts - aqueous solution	10	G
Copper sulphate - aqueous solution	10	G
Dichlorofluoroethylene		G
Diethanolamine		G
Dimethylformamide	100	G
Ethyl ether	100	G
Ethyl glycol		G
Formaldehyde - aqueous solution	30	G
Formamide		D
Heptane		G
Hexane		D
Hydrogen sulphide - aqueous solution saturated		P
Isooctane		G

G= Good resistance without noticeable variations in weight and/or volume
D= Discrete resistance with significant variations in weight and/or volume resulting from prolonged contact.

Chemical Agent	Conc. %	Resist.
Lead stearate	100	G
Magnesium hydroxide	10	G
Magnesium salts - aqueous solution	10	G
Mercury		G
Methylethylketon		G
Ferric Chloride - aqueous solution	10	G
Formic acid - aqueous solution	85	S
Formic acid - aqueous solution	10	P
Glycol butylene	100	D
Hydrochloric acid - aqueous solution	36	S
Hydrochloric acid - aqueous solution	10	P
Hydrochloric acid - aqueous solution	2	L
Hydrogen peroxide - aqueous solution	30	P
Hydrogen peroxide - aqueous solution	3	P
Hydrogen peroxide - aqueous solution	1	P
Hydrogen peroxide - aqueous solution	0,5	L
Isopropyl alcohol		D
Lactic Acid - aqueous solution	90	P
Lactic Acid - aqueous solution	10	D
Lead acetate - aqueous solution	10	D
Magnesium chloride - aqueous solution	10	G
Mercuric chloride - aqueous solution	6	P
Methyl acetate	100	G
Methyl alcohol	100	D
Methyl chloride	100	L
Nitric acid		P
Oleic acid	100	G
Oxalic acid - aqueous solution	10	D
Petrol		G
Phosphoric acid - aqueous solution	10	P
Phthalic acid - aqueous solution saturated		D
Potassium bichromate - aqueous solution	5	D
Potassium bromide - aqueous solution	10	D
Potassium carbonate	100	G
Propyl alcohol		D
Salicylic acid	100	G
Sodium bromide - aqueous solution	10	D
Sodium carbonate - aqueous solution	10	G
Sodium chloride - aqueous solution	10	G
Sodium disulphate - aqueous solution	10	G
Sulphuric acid - concentrated	98	S
Sulphuric acid - aqueous solution	10	P
Sulphuric acid - aqueous solution	2	L
Tartaric acid		D
Tartaric acid - aqueous solution	10	G
Thionyl chloride		P
Vinyl chloride	100	G
Water (sea, river, potable, distilled)		G
Zinc chloride	10	D
Methyl-isobutylketon		G
Mineral oil		G
Naphtha solvent		G
Nitrobenzol	100	D
Nitromethane	100	D
Octyl phthalate		G
Ozone		P
Perchloroethylene		P
Phenol - aqueous solution		S
Potassium nitrate - aqueous solution	10	G
Sodium hypochlorite - aqueous solution		G
Sodium nitrate - aqueous solution	5	P
Sodium nitrate - aqueous solution	10	G
Sodium phosphate - aqueous solution	10	G
Sodium sulphate - aqueous solution	10	G
Trichloroethylene		D
Zinc oxide		G

L= Limited resistance: It is possible to use the material in case of short contact.
P= Poor resistance; the material is strongly attacked.
S= Soluble