



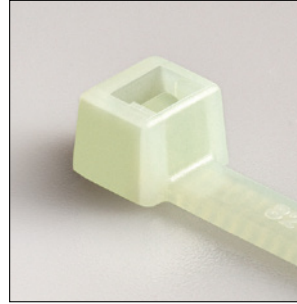
### Cable Ties Polyamide 6.6 standard

#### • T-Series in PA66 natural

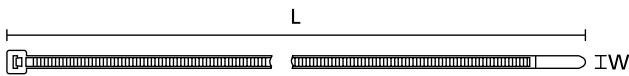
These cable ties are used for routing, bundling and securing cables, pipes and hoses.

#### Features and Benefits

- Standard natural cable tie available in a wide range of sizes
- Made from 100% high quality plastic, allows for good recycling
- Inside serration for a strong hold around bundles
- Easy application either manually or with a processing tool
- Simple to insert due to the ergonomically bent tail



T-Series.



T-Series

Application tools  
please see page 442.

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
T18S	2.3	83.0	16.0	80	PA66	Natural (NA)	1,000	111-02809
T18R	2.5	100.0	22.0	80	PA66	Natural (NA)	100	111-01919
T18I	2.5	145.0	35.0	80	PA66	Natural (NA)	100	111-02319
T18L	2.5	205.0	55.0	80	PA66	Natural (NA)	100	111-02119
T25L	2.8	240.0	65.0	110	PA66	Natural (NA)	100	111-02519
T25LL	2.8	330.0	95.0	110	PA66	Natural (NA)	100	111-02619
T30R	3.5	150.0	35.0	135	PA66	Natural (NA)	100	111-03219
T30L	3.5	198.0	50.0	135	PA66	Natural (NA)	100	111-03419
T30LL	3.5	290.0	80.0	135	PA66	Natural (NA)	100	111-03529
T40R	4.0	175.0	40.0	180	PA66	Natural (NA)	100	111-03819
T50S	4.6	150.0	35.0	225	PA66	Natural (NA)	100	111-05819
T50R	4.6	200.0	50.0	225	PA66	Natural (NA)	100	111-05013
T50M	4.6	245.0	65.0	225	PA66	Natural (NA)	100	111-06201
T50I	4.6	300.0	85.0	225	PA66	Natural (NA)	100	111-05219
T50L	4.6	390.0	110.0	225	PA66	Natural (NA)	100	111-05409
T80R	4.7	210.0	55.0	355	PA66	Natural (NA)	100	111-05019
T80I	4.7	300.0	85.0	355	PA66	Natural (NA)	100	111-08229
T80L	4.7	390.0	110.0	355	PA66	Natural (NA)	100	111-05419
T120S	7.6	225.0	55.0	535	PA66	Natural (NA)	50	111-12829
T120I	7.6	300.0	80.0	535	PA66	Natural (NA)	100	111-12219
T150R	7.6	365.0	100.0	670	PA66	Natural (NA)	100	111-14819
T120R(E)	7.6	387.0	100.0	535	PA66	Natural (NA)	100	111-12019
T120M	7.6	460.0	125.0	535	PA66	Natural (NA)	100	111-12619
T120XM	7.6	600.0	175.0	535	PA66	Natural (NA)	50	111-12704
T120L	7.6	760.0	225.0	535	PA66	Natural (NA)	50	111-12429
T150L	8.8	820.0	245.0	780	PA66	Natural (NA)	25	111-15419
T150M	8.9	530.0	150.0	780	PA66	Natural (NA)	25	111-15619

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



### Cable Ties Polyamide 6.6 standard

- T-Series in PA66 natural

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
T150XL	8.9	1,095.0	330.0	780	PA66	Natural (NA)	25	111-15519
T150XLL	8.9	1,325.0	405.0	780	PA66	Natural (NA)	25	111-15304
T250S	12.5	225.0	55.0	1,115	PA66	Natural (NA)	100	111-24705
T250R	12.5	515.0	125.0	1,115	PA66	Natural (NA)	25	111-24803
T250M	12.5	565.3	150.0	1,115	PA66	Natural (NA)	25	111-25002
T250I	12.5	730.0	203.0	1,115	PA66	Natural (NA)	25	111-25219
T250XL	12.5	1,030.0	305.0	1,115	PA66	Natural (NA)	25	111-00466

All dimensions in mm. Subject to technical changes.

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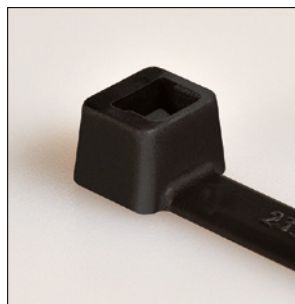
### Cable Ties for outdoor use (UV-resistant)

- T-Series in PA66W black

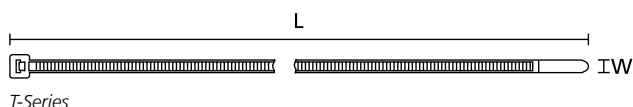
These cable ties are used for routing, bundling and securing of cables, pipes and hoses.

#### Features and Benefits

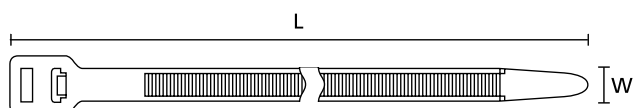
- Weather-resistant black cable tie available in a wide range of sizes
- Made from 100% high quality plastic, allows for good recycling
- Inside serration for a strong hold onto bundles
- Easy application either manually or with a processing tool
- Simple to insert due to the ergonomically bent tail
- UV-resistant



T-Series.



T-Series



T250-series

**Material specification please see page 30.**

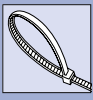
TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
T18R	2.5	100.0	22.0	80	PA66W	Black (BK)	100	111-01960
T18I	2.5	145.0	35.0	80	PA66W	Black (BK)	100	111-02360
T18L	2.5	205.0	55.0	80	PA66W	Black (BK)	100	111-02160

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.




Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



## Cable Ties for outdoor use (UV-resistant)

- T-Series in PA66W black

Application tools  
please see page 442.

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
T25LL	2.8	330.0	95.0	110	PA66W	Black (BK)	100	111-02660
T30R	3.5	150.0	35.0	135	PA66W	Black (BK)	100	111-03260
T30L	3.5	198.0	50.0	135	PA66W	Black (BK)	100	111-03460
T30LL	3.5	290.0	80.0	135	PA66W	Black (BK)	100	111-03570
T40R	4.0	175.0	40.0	180	PA66W	Black (BK)	100	111-03860
T50S	4.6	150.0	35.0	225	PA66W	Black (BK)	100	111-05860
T50R	4.6	200.0	50.0	225	PA66W	Black (BK)	100	111-04889
T50M	4.6	245.0	65.0	225	PA66W	Black (BK)	100	111-06206
T50I	4.6	300.0	85.0	225	PA66W	Black (BK)	100	111-05260
T50L	4.6	390.0	110.0	225	PA66W	Black (BK)	100	111-05440
T50LL	4.6	445.0	130.0	225	PA66W	Black (BK)	100	111-06000
T80R	4.7	210.0	55.0	355	PA66W	Black (BK)	100	111-05060
T80I	4.7	300.0	85.0	355	PA66W	Black (BK)	100	111-08290
T80L	4.7	390.0	110.0	355	PA66W	Black (BK)	100	111-05460
T120S	7.6	225.0	55.0	535	PA66W	Black (BK)	50	111-12830
T120I	7.6	300.0	80.0	535	PA66W	Black (BK)	100	111-12230
T150R(H)	7.6	365.0	100.0	670	PA66W	Black (BK)	100	111-14860
T120R(E)	7.6	387.0	100.0	535	PA66W	Black (BK)	100	111-12060
T120M	7.6	460.0	125.0	535	PA66W	Black (BK)	100	111-12660
T120L	7.6	760.0	225.0	535	PA66W	Black (BK)	50	111-12430
T150L	8.8	820.0	245.0	780	PA66W	Black (BK)	25	111-15460
T150M	8.9	530.0	150.0	780	PA66W	Black (BK)	25	111-15660
T150XL	8.9	1,095.0	330.0	780	PA66W	Black (BK)	25	111-15502
T150XLL	8.9	1,325.0	405.0	780	PA66W	Black (BK)	25	111-15305
T250R	12.5	515.0	125.0	1,115	PA66HIRHSUV	Black (BK)	25	111-24805

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



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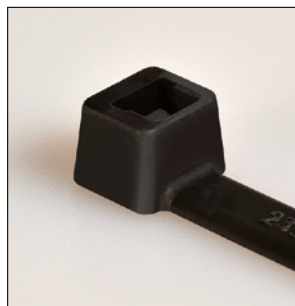
### Cable Ties Polyamide 6.6 standard

- T-Series in PA66 black

These cable ties are used for routing, bundling and securing cables, pipes and hoses.

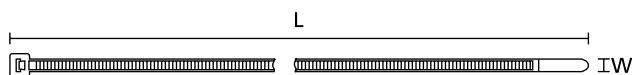
#### Features and Benefits

- Standard black cable tie available in a wide range of sizes
- Made from 100% high quality plastic, allows for good recycling
- Inside serration for a strong hold around bundles
- Easy application either manually or with a processing tool
- Simple to insert due to the ergonomically bent tail

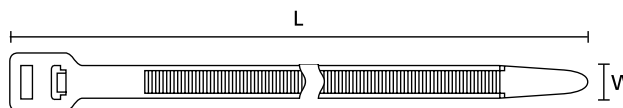


T-Series.

**Material specification  
please see page 30.**



T-Series



T250-series

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
T18R	2.5	100.0	22.0	80	PA66	Black (BK)	100	111-01910
T18I	2.5	145.0	35.0	80	PA66	Black (BK)	100	111-02370
T18L	2.5	205.0	55.0	80	PA66	Black (BK)	100	111-02110
T25L	2.8	240.0	65.0	110	PA66	Black (BK)	100	111-02500
T30R	3.5	150.0	35.0	135	PA66	Black (BK)	100	111-03210
T30L	3.5	198.0	50.0	135	PA66	Black (BK)	100	111-03410
T30LL	3.5	290.0	80.0	135	PA66	Black (BK)	100	111-03500
T50S	4.6	150.0	35.0	225	PA66	Black (BK)	100	111-05810
T50R	4.6	200.0	50.0	225	PA66	Black (BK)	100	111-05000
T50M	4.6	245.0	65.0	225	PA66	Black (BK)	100	111-06200
T50I	4.6	300.0	85.0	225	PA66	Black (BK)	100	111-05210
T50L	4.6	390.0	110.0	225	PA66	Black (BK)	100	111-05400
T50LL	4.6	445.0	130.0	225	PA66	Black (BK)	500	111-06002
T80R	4.7	210.0	55.0	355	PA66	Black (BK)	100	111-08010
T80I	4.7	300.0	85.0	355	PA66	Black (BK)	100	111-08210
T80L	4.7	390.0	110.0	355	PA66	Black (BK)	100	111-05410
T120I	7.6	300.0	80.0	535	PA66	Black (BK)	100	111-12210
T150R	7.6	365.0	100.0	670	PA66	Black (BK)	100	111-14810
T120R(E)	7.6	387.0	100.0	535	PA66	Black (BK)	100	111-12010
T120M	7.6	460.0	125.0	535	PA66	Black (BK)	100	111-12610
T120XM	7.6	600.0	175.0	535	PA66	Black (BK)	50	111-12701
T120L	7.6	760.0	225.0	535	PA66	Black (BK)	50	111-12403
T150L	8.8	820.0	245.0	780	PA66	Black (BK)	25	111-15405
T150XL	8.9	1,095.0	330.0	780	PA66	Black (BK)	25	111-15500
T150XLL	8.9	1,325.0	405.0	780	PA66	Black (BK)	25	111-15300

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



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### Cable Ties Polyamide 6.6 standard

#### • T-Series in PA66 black

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
T250X	12.5	370.0	100.0	1,115	PA66	Black (BK)	100	111-25102
T250M	12.5	565.3	150.0	1,115	PA66	Black (BK)	25	111-25001
T250L	12.5	880.0	254.0	1,115	PA66	Black (BK)	25	111-24601
T250XL	12.5	1,030.0	305.0	1,115	PA66	Black (BK)	25	111-25200

All dimensions in mm. Subject to technical changes.

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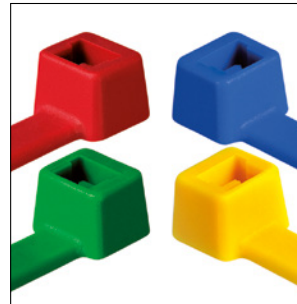
### Cable Ties Polyamide 6.6 standard

#### • T-Series in PA66 coloured

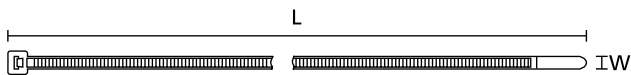
These cable ties are used for routing, bundling and securing cables, pipes and hoses.

#### Features and Benefits

- Coloured cable ties available in a wide range of sizes
- Made from 100% high quality plastic, allows for good recycling
- Inside serration for a strong hold around bundles
- Easy application either manually or with a processing tool
- Simple to insert due to the ergonomically bent tail



T-Series.



T-Series

**Application tools  
please see page 442.**

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
T30R	3.5	150.0	35.0	135	PA66	Blue (BU)	100	111-03008
	3.5	150.0	35.0	135	PA66	Green (GN)	100	111-03014
	3.5	150.0	35.0	135	PA66	Red (RD)	100	111-03004
	3.5	150.0	35.0	135	PA66	Yellow (YE)	100	111-03006
T50R	4.6	200.0	50.0	225	PA66	Blue (BU)	100	111-04800
	4.6	200.0	50.0	225	PA66	Green (GN)	100	111-04801
	4.6	200.0	50.0	225	PA66	Red (RD)	100	111-04804
	4.6	200.0	50.0	225	PA66	Yellow (YE)	100	111-04805
T50L	4.6	390.0	110.0	225	PA66	Blue (BU)	100	111-05404
	4.6	390.0	110.0	225	PA66	Green (GN)	100	111-05402
	4.6	390.0	110.0	225	PA66	Red (RD)	100	111-05406
	4.6	390.0	110.0	225	PA66	Yellow (YE)	100	111-05428
T120R(E)	7.6	387.0	100.0	535	PA66	Green (GN)	100	111-12001
	7.6	387.0	100.0	535	PA66	Red (RD)	100	111-12002

All dimensions in mm. Subject to technical changes.

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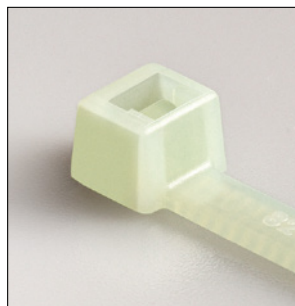
### Cable Ties for temperatures up to + 105°C (heat stabilised)

- T-Series in PA66HS natural

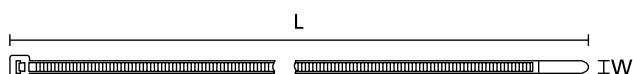
These cable ties are used for routing, bundling and securing cables, pipes and hoses.

#### Features and Benefits

- Heat stabilised cable tie available in a wide range of sizes
- Made from 100% high quality plastic, allows for good recycling
- Inside serration for a strong hold around bundles
- Easy application either manually or with a processing tool
- Simple to insert due to the ergonomically bent tail
- Higher temperature resistance up to +105 °C



T-Series.



T-Series

**Material specification please see page 30.**

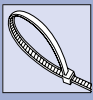
TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
T18R	2.5	100.0	22.0	80	PA66HS	Natural (NA)	100	111-01959
T18I	2.5	145.0	35.0	80	PA66HS	Natural (NA)	1,000	111-02359
T18L	2.5	205.0	55.0	80	PA66HS	Natural (NA)	100	111-02159
T30R	3.5	150.0	35.0	135	PA66HS	Natural (NA)	100	111-03259
T30L	3.5	198.0	50.0	135	PA66HS	Natural (NA)	100	111-03459
T30LL	3.5	290.0	80.0	135	PA66HS	Natural (NA)	100	111-03569
T40R	4.0	175.0	40.0	180	PA66HS	Natural (NA)	100	111-03859
T50S	4.6	150.0	35.0	225	PA66HS	Natural (NA)	100	111-05859
T50I	4.6	300.0	85.0	225	PA66HS	Natural (NA)	100	111-05259
T50L	4.6	390.0	110.0	225	PA66HS	Natural (NA)	100	111-05436
T80R	4.7	210.0	55.0	355	PA66HS	Natural (NA)	100	111-05059
T80I	4.7	300.0	85.0	355	PA66HS	Natural (NA)	100	111-08259
T80L	4.7	390.0	110.0	355	PA66HS	Natural (NA)	100	111-05459
T120S	7.6	225.0	55.0	535	PA66HS	Natural (NA)	50	111-12824
T150R(H)	7.6	365.0	100.0	670	PA66HS	Natural (NA)	100	111-15069
T120R(E)	7.6	387.0	100.0	535	PA66HS	Natural (NA)	100	111-12059
T120XM	7.6	600.0	175.0	535	PA66HS	Natural (NA)	50	111-12719
T120L	7.6	760.0	225.0	535	PA66HS	Natural (NA)	50	111-12449

All dimensions in mm. Subject to technical changes.

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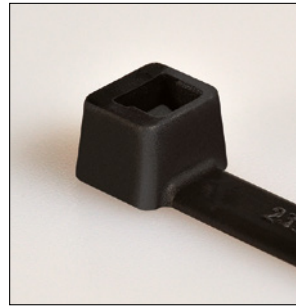
### Cable Ties for temperatures up to + 105°C (heat stabilised)

- T-Series in PA66HS black

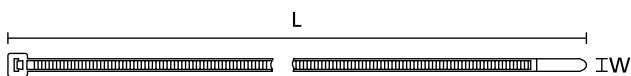
These cable ties are used for routing, bundling and securing cables, pipes and hoses.

#### Features and Benefits

- Heat stabilised black cable tie available in a wide range of sizes
- Made from 100% high quality plastic, allows for good recycling
- Inside serration for a strong hold around bundles
- Easy application either manually or with a processing tool
- Simple to insert due to the ergonomically bent tail
- Higher temperature resistance up to +105 °C



T-Series.



T-Series

**Application tools  
please see page 442.**

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
T18R	2.5	100.0	22.0	80	PA66HS	Black (BK)	100	111-01950
T18I	2.5	145.0	35.0	80	PA66HS	Black (BK)	100	111-02358
T18L	2.5	205.0	55.0	80	PA66HS	Black (BK)	100	111-02049
T30R	3.5	150.0	35.0	135	PA66HS	Black (BK)	100	111-03050
T30L	3.5	198.0	50.0	135	PA66HS	Black (BK)	100	111-03450
T30LL	3.5	290.0	80.0	135	PA66HS	Black (BK)	1,000	111-03660
T40R	4.0	175.0	40.0	180	PA66HS	Black (BK)	100	111-03970
T50S	4.6	150.0	35.0	225	PA66HS	Black (BK)	100	111-05850
T50R	4.6	200.0	50.0	225	PA66HS	Black (BK)	100	111-04950
T50I	4.6	300.0	85.0	225	PA66HS	Black (BK)	100	111-05250
T50L	4.6	390.0	110.0	225	PA66HS	Black (BK)	100	111-05450
T80R	4.7	210.0	55.0	355	PA66HS	Black (BK)	1,000	117-08070
T80I	4.7	300.0	85.0	355	PA66HS	Black (BK)	100	111-08250
T80L	4.7	390.0	110.0	355	PA66HS	Black (BK)	100	111-00388
T120S	7.6	225.0	55.0	535	PA66HS	Black (BK)	50	111-12850
T150R(H)	7.6	365.0	100.0	670	PA66HS	Black (BK)	100	111-15050
T120R(E)	7.6	387.0	100.0	535	PA66HS	Black (BK)	100	111-12050
T120M	7.6	460.0	125.0	535	PA66HS	Black (BK)	100	111-00153
T120XM	7.6	600.0	175.0	535	PA66HS	Black (BK)	50	111-12700
T120L	7.6	760.0	225.0	535	PA66HS	Black (BK)	50	111-12440
T150L	8.8	820.0	245.0	780	PA66HS	Black (BK)	100	111-15410
T150M	8.9	530.0	150.0	780	PA66HS	Black (BK)	25	111-15609
T150XL	8.9	1,095.0	330.0	780	PA66HS	Black (BK)	25	111-15510

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



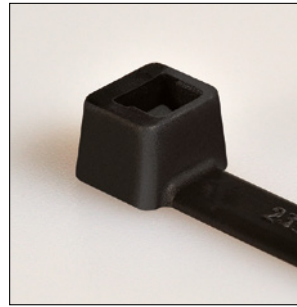
### Cable Ties for higher impact resistant Polyamide 6.6 ScanBlack

- T-Series in PA66HIR(S)

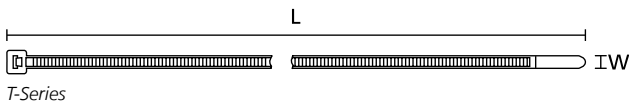
These cable ties are used for routing, bundling and securing cables, pipes and hoses.

#### Features and Benefits

- Impact resistant black cable tie available in a wide range of sizes
- Made from 100% high quality plastic, allows for good recycling
- Inside serration for a strong hold around bundles
- Easy application either manually or with a processing tool
- Simple to insert due to the ergonomically bent tail
- Higher flexibility in cold environments



T-Series.



**Material specification please see page 30.**

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
T50R	4.6	200.0	50.0	225	PA66HIR(S)	Black (BK)	100	111-04890
T50I	4.6	300.0	85.0	225	PA66HIR(S)	Black (BK)	100	111-00222
T50L	4.6	390.0	110.0	225	PA66HIR(S)	Black (BK)	100	111-05441
T120I	7.6	300.0	80.0	535	PA66HIR(S)	Black (BK)	100	111-12203
T120R(E)	7.6	387.0	100.0	535	PA66HIR(S)	Black (BK)	100	111-12032
T120L	7.6	760.0	225.0	535	PA66HIR(S)	Black (BK)	50	111-12402

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.





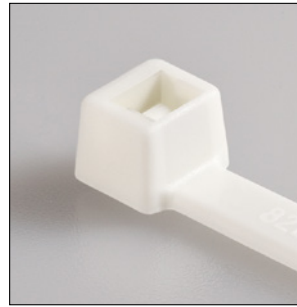
## Cable Ties for higher fire-protection

### • T-Series in PA66V0

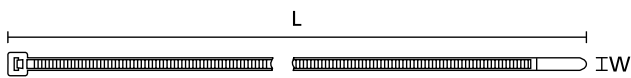
T-Series cable ties for bundling and securing of cables, pipes and hoses. These cable ties can be used for nearly all kinds of applications, especially where safety regulations are high, e.g. the reduction of smoke and dangerous gases.

### Features and Benefits

- White cable tie for higher fire-protection, available in a wide range of sizes
- Made from 100% high quality plastic, allows for good recycling
- Inside serration for a strong hold around bundles
- Easy application either manually or with a processing tool
- Simple to insert due to the ergonomically bent tail
- High safety rating due to low fire hazard




T-Series.



T-Series

Application tools  
please see page 442.

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
T18R	2.5	100.0	22.0	80	PA66V0	White (WH)	100	111-91819
T18L	2.5	205.0	55.0	80	PA66V0	White (WH)	1,000	111-02043
T30R	3.5	150.0	35.0	135	PA66V0	White (WH)	100	111-93019
T50R	4.6	200.0	50.0	225	PA66V0	White (WH)	100	111-95019
T50I	4.6	300.0	85.0	225	PA66V0	White (WH)	100	111-00317
T120R(E)	7.6	387.0	100.0	535	PA66V0	White (WH)	100	111-91210

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



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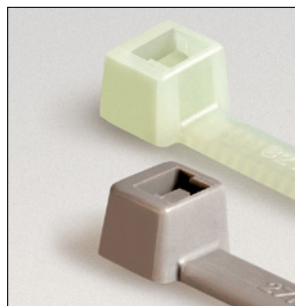
### Cable Ties for temperatures up to + 150°C in Polyamide 4.6

- **T-Series in PA46**

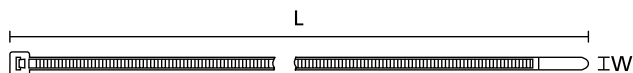
These cable ties are used for routing, bundling and securing cables, pipes and hoses.

#### Features and Benefits

- Higher temperature cable tie available in a wide range sizes
- Made from 100% high quality plastic, allows for good recycling
- Inside serration for a strong hold around bundles
- Easy application either manually or with a processing tool
- Simple to insert due to the ergonomically bent tail
- Higher temperature resistance up to +150 °C



T-Series.



T-Series

**Material specification please see page 30.**

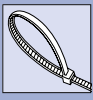
TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
T18R	2.5	100.0	22.0	80	PA46	Natural (NA)	1,000	114-01879
T30R	3.5	150.0	35.0	135	PA46	Natural (NA)	100	114-03079
T50R	4.6	200.0	50.0	225	PA46	Grey (GY)	100	111-00824
	4.6	200.0	50.0	225	PA46	Natural (NA)	100	111-00525
T50I	4.6	300.0	85.0	225	PA46	Natural (NA)	100	111-05220
T50L	4.6	390.0	110.0	225	PA46	Natural (NA)	100	111-00526
T120R(E)	7.6	387.0	100.0	535	PA46	Natural (NA)	100	114-12179

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



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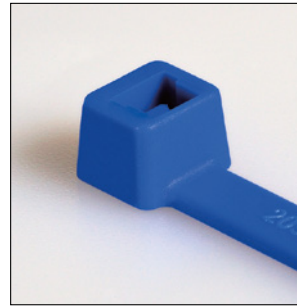
### Cable Ties for higher chemical resistance and for temperatures up to +170°C in Ethylentetrafluorineethylene

- T-Series in E/TFE

T-Series cable ties for bundling and securing cables, pipes and hoses. These cable ties can be used for nearly all kinds of applications, especially when a high chemical resistance is required.

#### Features and Benefits

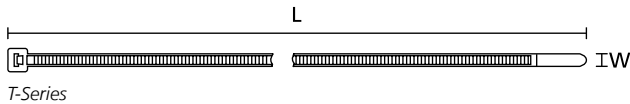
- Blue higher chemical resistance cable tie available in a wide range sizes
- Made from 100% high quality plastic, allows for good recycling
- Inside serration for a strong hold onto bundles
- Easy application either manually or with a processing tool
- Simple to insert due to bent tail
- High temperature resistance
- No moisture absorption




T-Series.

**Application tools  
please see page 442.**

**For more information on E/TFE sockets  
please refer to KR-Series on page 123.**



T-Series

TYPE	Width (W)	Length (L)	Bundle Ø max.		Material	Colour	Pack Cont.	Article-No.
T18R	2.5	100.0	22.0	80	E/TFE	Blue (BU)	100	111-00659
T30R	3.5	150.0	36.0	133	E/TFE	Blue (BU)	100	111-00698
T50R	4.7	201.0	50.0	222	E/TFE	Blue (BU)	100	111-00732
T50L	4.7	382.0	105.0	222	E/TFE	Blue (BU)	100	111-00718
T120R	7.4	387.0	105.0	535	E/TFE	Blue (BU)	50	111-01125

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix. General linguistic usage for cable ties made from raw material E/TFE is Tefzel®-Tie. In addition to Tefzel® from DuPont HellaermannTyton is also using equivalent E/TFE raw material from other suppliers. Tefzel® is a registered trademark of DuPont.



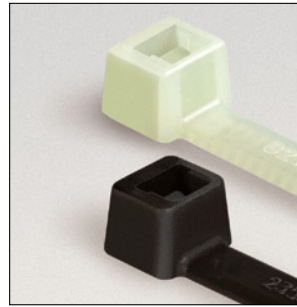
### Cable Ties for higher chemical resistance for temperatures up to +115°C in Polypropylene

- T-Series in PP

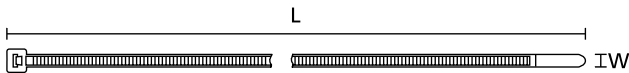
These cable ties are used for routing, bundling and securing cables, pipes and hoses.

#### Features and Benefits

- Higher chemical resistant cable tie available in a wide range sizes
- Made from 100% high quality plastic, allows for good recycling
- Inside serration for a strong hold around bundles
- Easy application either manually or with a processing tool
- Simple to insert due to the ergonomically bent tail
- Floats in water
- High chemical resistance



T-Series.



T-Series

**Material specification please see page 30.**

TYPE	Width (W)	Length (L)	Bundle Ø max.	N	Material	Colour	Pack Cont.	Article-No.
T18R	2.5	100.0	22.0	36	PP	Black (BK)	100	111-01917
	2.5	100.0	22.0	36	PP	Natural (NA)	1,000	111-01922
T30R	3.6	148.0	32.0	89	PP	Natural (NA)	100	111-03017
T50R	4.8	202.0	44.5	111	PP	Black (BK)	100	111-04928
	4.8	202.0	44.5	111	PP	Natural (NA)	100	111-04931
T120S	7.6	225.0	55.0	267	PP	Black (BK)	500	111-12827
T120R	7.6	390.0	105.0	267	PP	Black (BK)	500	111-12066

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

## Material Specification Overview

Material	Shortcut	Operating Temperature	Colour**	Flammability	Material Properties*	
Aluminium-alloy	AL	-40 °C to +180 °C	Natural (NA)		<ul style="list-style-type: none"> <li>Corrosion resistant</li> <li>Antimagnetic</li> </ul>	RoHS
Chloroprene	CR	-20 °C to +80 °C	Black (BK)		<ul style="list-style-type: none"> <li>Weather-resistant</li> <li>High yield strength</li> </ul>	RoHS
Ethylenterafluorineethylen	E/TFE	-80 °C to +170 °C	Blue (BU)	UL94 V0	<ul style="list-style-type: none"> <li>Resistance to radioactivity</li> <li>UV-resistant, not moisture sensitive</li> <li>Good chemical resistance to: acids, bases, oxidizing agents</li> </ul>	RoHS
Polyacetal	POM	-40 °C to +90 °C, (+110 °C, 500 h)	Natural (NA)	UL94 HB	<ul style="list-style-type: none"> <li>Limited brittleness sensitivity</li> <li>Flexible at low temperature</li> <li>Not moisture sensitive</li> <li>Robust on impacts</li> </ul>	RoHS
Polyamide 11	PA11	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL94 HB	<ul style="list-style-type: none"> <li>Bio-plastic, derived from vegetable oil</li> <li>Strong impact resistance at low temperature</li> <li>Very low moisture absorption</li> <li>Weather-resistant</li> <li>Good chemical resistance</li> </ul>	RoHS HF
Polyamide 12	PA12	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL94 HB	<ul style="list-style-type: none"> <li>Good chemical resistance to: acids, bases, oxidizing agents</li> <li>UV-resistant</li> </ul>	RoHS HF
Polyamide 4.6	PA46	-40 °C to +150 °C (5000 h), +195 °C (500 h)	Natural (NA), Grey (GY)	UL94 V2	<ul style="list-style-type: none"> <li>Resistance to high temperatures</li> <li>Very moisture sensitive</li> <li>Low smoke sensitive</li> </ul>	RoHS HF LFH
Polyamide 6	PA6	-40 °C to +80 °C	Black (BK)	UL94 V2	<ul style="list-style-type: none"> <li>High yield strength</li> </ul>	RoHS
Polyamide 6.6	PA66	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK), Natural (NA)	UL94 V2	<ul style="list-style-type: none"> <li>High yield strength</li> </ul>	RoHS HF
Polyamide 6.6, Glassfibre reinforced	PA66GF13, PA66GF15	-40 °C to +105 °C	Black (BK)	UL94 HB	<ul style="list-style-type: none"> <li>Good resistance to: lubricants, vehicle fuel, salt water and many solvents</li> </ul>	RoHS HF
Polyamide 6.6 heat and UV stabilised	PA66HSW	-40 °C to +105 °C	Black (BK)	UL94 V2	<ul style="list-style-type: none"> <li>High yield strength</li> <li>Modified elevated max. temperature</li> <li>UV-resistant</li> </ul>	RoHS HF
Polyamide 6.6 Heat Stabilised	PA66HS	-40 °C to +105 °C	Black (BK), Natural (NA)	UL94 V2	<ul style="list-style-type: none"> <li>High yield strength</li> <li>Modified elevated max. temperature</li> </ul>	RoHS HF
Polyamide 6.6 High Imp. Mod., Heat Stab.	PA66HIRHS	-40 °C to +105 °C	Black (BK)	UL94 HB	<ul style="list-style-type: none"> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low temperature</li> <li>Modified elevated max. temperature</li> </ul>	RoHS
Polyamide 6.6 High Imp. Mod. scan black	PA66HIR(S)	-40 °C to +80 °C, (+105 °C, 500 h)	Black (BK)	UL94 HB	<ul style="list-style-type: none"> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low temperature</li> </ul>	RoHS HF
Polyamide 6.6 High Impact Modified	PA66HIR	-40 °C to +80 °C, (+105 °C, 500 h)	Black (BK)	UL94 HB	<ul style="list-style-type: none"> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low temperature</li> </ul>	RoHS
Polyamide 6.6 high impact modified, heat and UV stabilised	PA66-HIRHSW	-40 °C to +110 °C	Black (BK)	UL94 HB	<ul style="list-style-type: none"> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low temperature</li> <li>Modified elevated max. temperature</li> <li>High yield strength, UV-resistant</li> </ul>	RoHS HF

Tefzel® is a registered trademark of DuPont.  
General linguistic usage for cable ties made from raw material E/TFE is Tefzel®-Tie. In addition to Tefzel® from DuPont HellermannTyton is also using equivalent E/TFE raw material from other suppliers.

\*These details are only rough guide values. They should be regarded as a material specification and are no substitute for a suitability test. Please see our datasheets for further details.

\*\*More colours on request.

 = Minimum Tensile Strength

## Material Specification Overview

Material	Shortcut	Operating Temperature	Colour**	Flammability	Material Properties*	
<b>Polyamide 6.6</b> UV Resistant	PA66W	-40 °C to +85 °C, (+105 °C, 500 h)	Black (BK)	UL94 V2	<ul style="list-style-type: none"> <li>High yield strength</li> <li>UV-resistant</li> </ul>	RoHS HF
<b>Polyamide 6.6 V0</b>	PA66V0	-40 °C to +85 °C	White (WH)	UL94 V0	<ul style="list-style-type: none"> <li>High yield strength</li> <li>Low smoke emission</li> </ul>	RoHS HF LFH
<b>Polyamide 6.6 V0</b> High Oxygen Index	PA66V0-HOI	-40 °C to +85 °C, (+105 °C, 500 h)	White (WH)	UL94 V0	<ul style="list-style-type: none"> <li>High yield strength</li> <li>Low smoke emissions</li> </ul>	RoHS HF LFH
<b>Polyamide 6.6</b> with metal particles	PA66MP	-40 °C to +85 °C, (+105 °C, 500 h)	Blue (BU)	UL94 HB	<ul style="list-style-type: none"> <li>High yield strength</li> </ul>	RoHS HF
<b>Polyamide 6</b> high impact modified	PA6HIR	-40 °C to +80 °C	Black (BK)	UL94 HB	<ul style="list-style-type: none"> <li>Limited brittleness sensitivity</li> <li>Higher flexibility at low temperature</li> </ul>	RoHS
<b>Polyester</b>	SP	-50 °C to +150 °C	Black (BK)		<ul style="list-style-type: none"> <li>UV-resistant</li> <li>Good chemical resistance to: most acids, alkalis and oils</li> </ul>	RoHS HF LFH
<b>Polyetheretherketone</b>	PEEK	-55 °C to +240 °C	Beige (BGE)	UL94 V0	<ul style="list-style-type: none"> <li>Resistance to radioactivity</li> <li>Not moisture sensitive</li> <li>Good chemical resistance to: acids, bases, oxidizing agents</li> </ul>	RoHS HF LFH
<b>Polyethylene</b>	PE	-40 °C to +50 °C	Black (BK), Grey (GY)	UL94 HB	<ul style="list-style-type: none"> <li>Low moisture absorption</li> <li>Good chemical resistance to: most acids, alcohol and oils</li> </ul>	RoHS HF
<b>Polyolefin</b>	PO	-40 °C to +90 °C	Black (BK)	UL94 V0	<ul style="list-style-type: none"> <li>Low smoke emissions</li> </ul>	RoHS HF LFH
<b>Polypropylene</b>	PP	-40 °C to +115 °C	Black (BK), Natural (NA)	UL94 HB	<ul style="list-style-type: none"> <li>Floats in water</li> <li>Moderate yield strength</li> <li>Good chemical resistance to: organic acids</li> </ul>	RoHS HF
<b>Polypropylene, Ethylene-Propylene-Dien-Terpolymer-free of Nitrosamine</b>	PP, EPDM	-20 °C to +95 °C	Black (BK)	UL94 HB	<ul style="list-style-type: none"> <li>Good resistance to high temperatures</li> <li>Good chemical and abrasion resistance</li> </ul>	RoHS HF
<b>Polyvinylchloride</b>	PVC	-10 °C to +70 °C	Black (BK), Natural (NA)	UL94 V0	<ul style="list-style-type: none"> <li>Low moisture absorption</li> <li>Good chemical resistance to: acids, ethanol, oil</li> </ul>	RoHS
<b>Stainless Steel</b>	SS304, SS316	-80 °C to +538 °C	Natural (NA)		<ul style="list-style-type: none"> <li>Corrosion resistant</li> <li>Antimagnetic</li> </ul>	RoHS HF LFH
<b>Thermoplastic Polyurethane</b>	TPU	-40 °C to +85 °C	Black (BK)	UL94 HB	<ul style="list-style-type: none"> <li>High elastic</li> <li>Good chemical resistance to: acids, bases, oxidizing agents</li> </ul>	RoHS HF

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