



Cable Ties Polyamide 6.6 standard

T-Series in PA66 natural and black

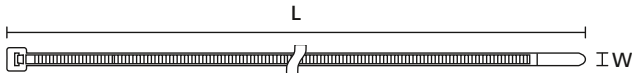
T-Series cable ties for bundling and securing cables, pipes and hoses. These cable ties can be used for almost any type of application.

Features and Benefits

- Natural and black 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



Material specification
please see page 24.

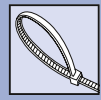
| TYPE | Width (W) | Length (L) | Bundle Ø max. | N | Material | Colour | Pack Cont. | Tools | Article-No. |
|-------|-----------|------------|---------------|-----|----------|--------------|------------|-------|-------------|
| T18S | 2.3 | 83.0 | 16.0 | 80 | PA66 | Natural (NA) | 1,000 pcs. | 2;4-6 | 111-02809 |
| T18R | 2.5 | 100.0 | 22.0 | 80 | PA66 | Natural (NA) | 100 pcs. | 2;4-6 | 111-01919 |
| | 2.5 | 100.0 | 22.0 | 80 | PA66 | Black (BK) | 100 pcs. | 2;4-6 | 111-01910 |
| T18I | 2.5 | 145.0 | 35.0 | 80 | PA66 | Black (BK) | 100 pcs. | 2;4-6 | 111-02370 |
| | 2.5 | 145.0 | 35.0 | 80 | PA66 | Natural (NA) | 100 pcs. | 2;4-6 | 111-02319 |
| T18L | 2.5 | 205.0 | 55.0 | 80 | PA66 | Natural (NA) | 100 pcs. | 2;4-6 | 111-02119 |
| | 2.5 | 205.0 | 55.0 | 80 | PA66 | Black (BK) | 100 pcs. | 2;4-6 | 111-02110 |
| T25L | 2.8 | 240.0 | 65.0 | 110 | PA66 | Black (BK) | 100 pcs. | 2;4-6 | 111-02500 |
| | 2.8 | 240.0 | 65.0 | 110 | PA66 | Natural (NA) | 100 pcs. | 2;4-6 | 111-02519 |
| T25LL | 2.8 | 330.0 | 95.0 | 110 | PA66 | Natural (NA) | 100 pcs. | 2;4-6 | 111-02619 |
| T30R | 3.5 | 150.0 | 35.0 | 135 | PA66 | Natural (NA) | 100 pcs. | 2;4-6 | 111-03219 |
| | 3.5 | 150.0 | 35.0 | 135 | PA66 | Black (BK) | 100 pcs. | 2;4-6 | 111-03210 |
| T30L | 3.5 | 198.0 | 50.0 | 135 | PA66 | Natural (NA) | 100 pcs. | 2;4-6 | 111-03419 |
| | 3.5 | 198.0 | 50.0 | 135 | PA66 | Black (BK) | 100 pcs. | 2;4-6 | 111-03410 |
| T30LL | 3.5 | 290.0 | 80.0 | 135 | PA66 | Black (BK) | 100 pcs. | 2;4-6 | 111-03500 |
| | 3.5 | 290.0 | 80.0 | 135 | PA66 | Natural (NA) | 100 pcs. | 2;4-6 | 111-03529 |
| T40R | 4.0 | 175.0 | 40.0 | 180 | PA66 | Natural (NA) | 100 pcs. | 2;4-8 | 111-01626 |
| T50S | 4.6 | 150.0 | 35.0 | 225 | PA66 | Black (BK) | 100 pcs. | 2-10 | 111-05810 |
| | 4.6 | 150.0 | 35.0 | 225 | PA66 | Natural (NA) | 100 pcs. | 2-10 | 111-05819 |
| T50R | 4.6 | 200.0 | 50.0 | 225 | PA66 | Black (BK) | 100 pcs. | 2-10 | 111-05000 |
| | 4.6 | 200.0 | 50.0 | 225 | PA66 | Natural (NA) | 100 pcs. | 2-10 | 111-05013 |
| T50M | 4.6 | 245.0 | 65.0 | 225 | PA66 | Natural (NA) | 100 pcs. | 2-10 | 111-06201 |
| | 4.6 | 245.0 | 65.0 | 225 | PA66 | Black (BK) | 100 pcs. | 2-10 | 111-06200 |
| T50I | 4.6 | 300.0 | 85.0 | 225 | PA66 | Black (BK) | 100 pcs. | 2-10 | 111-05210 |
| | 4.6 | 300.0 | 85.0 | 225 | PA66 | Natural (NA) | 100 pcs. | 2-10 | 111-05219 |
| T50L | 4.6 | 390.0 | 110.0 | 225 | PA66 | Natural (NA) | 100 pcs. | 2-10 | 111-05409 |
| | 4.6 | 390.0 | 110.0 | 225 | PA66 | Black (BK) | 100 pcs. | 2-10 | 111-05400 |
| T50LL | 4.6 | 445.0 | 130.0 | 225 | PA66 | Black (BK) | 500 pcs. | 2-10 | 111-06002 |
| T80R | 4.7 | 210.0 | 55.0 | 355 | PA66 | Natural (NA) | 100 pcs. | 2-12 | 111-05019 |
| | 4.7 | 210.0 | 55.0 | 355 | PA66 | Black (BK) | 100 pcs. | 2-12 | 111-08010 |

All dimensions in mm. Subject to technical changes.

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

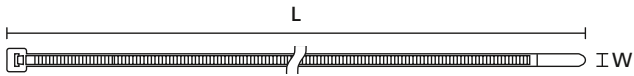


For product specific approvals and specifications please refer to the Appendix.



Cable Ties Polyamide 6.6 standard

T-Series in PA66 natural and black



T-Series

| TYPE | Width (W) | Length (L) | Bundle Ø max. | N | Material | Colour | Pack Cont. | Tools | Article-No. |
|----------|-----------|------------|---------------|-------|----------|--------------|------------|--------|-------------|
| T80I | 4.7 | 300.0 | 85.0 | 355 | PA66 | Natural (NA) | 100 pcs. | 2-12 | 111-08229 |
| | 4.7 | 300.0 | 85.0 | 355 | PA66 | Black (BK) | 100 pcs. | 2-12 | 111-08210 |
| T80L | 4.7 | 390.0 | 110.0 | 355 | PA66 | Black (BK) | 100 pcs. | 2-12 | 111-05410 |
| | 4.7 | 390.0 | 110.0 | 355 | PA66 | Natural (NA) | 100 pcs. | 2-12 | 111-05419 |
| T120S | 7.6 | 225.0 | 55.0 | 535 | PA66 | Natural (NA) | 50 pcs. | 3;9-12 | 111-12829 |
| T120I | 7.6 | 300.0 | 80.0 | 535 | PA66 | Black (BK) | 100 pcs. | 3;9-12 | 111-12210 |
| | 7.6 | 300.0 | 80.0 | 535 | PA66 | Natural (NA) | 100 pcs. | 3;9-12 | 111-12219 |
| T150R | 7.6 | 365.0 | 100.0 | 670 | PA66 | Black (BK) | 100 pcs. | 3;9-12 | 111-14810 |
| | 7.6 | 365.0 | 100.0 | 670 | PA66 | Natural (NA) | 100 pcs. | 3;9-12 | 111-14819 |
| T120R(E) | 7.6 | 387.0 | 100.0 | 535 | PA66 | Black (BK) | 100 pcs. | 3;9-12 | 111-12010 |
| | 7.6 | 387.0 | 100.0 | 535 | PA66 | Natural (NA) | 100 pcs. | 3;9-12 | 111-12019 |
| T120M | 7.6 | 460.0 | 125.0 | 535 | PA66 | Black (BK) | 100 pcs. | 3;9-12 | 111-12610 |
| | 7.6 | 460.0 | 125.0 | 535 | PA66 | Natural (NA) | 100 pcs. | 3;9-12 | 111-12619 |
| T120XM | 7.6 | 600.0 | 175.0 | 535 | PA66 | Black (BK) | 50 pcs. | 3;9-12 | 111-12701 |
| | 7.6 | 600.0 | 175.0 | 535 | PA66 | Natural (NA) | 50 pcs. | 3;9-12 | 111-12704 |
| T120L | 7.6 | 760.0 | 225.0 | 535 | PA66 | Black (BK) | 50 pcs. | 3;9-12 | 111-12403 |
| | 7.6 | 760.0 | 225.0 | 535 | PA66 | Natural (NA) | 50 pcs. | 3;9-12 | 111-12429 |
| T150L | 8.8 | 820.0 | 245.0 | 780 | PA66 | Black (BK) | 25 pcs. | 9-12 | 111-15405 |
| | 8.8 | 820.0 | 245.0 | 780 | PA66 | Natural (NA) | 25 pcs. | 9-12 | 111-15419 |
| T150M | 8.9 | 530.0 | 150.0 | 780 | PA66 | Black (BK) | 25 pcs. | 9-12 | 111-00124 |
| | 8.9 | 530.0 | 150.0 | 780 | PA66 | Natural (NA) | 25 pcs. | 9-12 | 111-15619 |
| T150XL | 8.9 | 1,095.0 | 330.0 | 780 | PA66 | Black (BK) | 25 pcs. | 9-12 | 111-15500 |
| | 8.9 | 1,095.0 | 330.0 | 780 | PA66 | Natural (NA) | 25 pcs. | 9-12 | 111-15519 |
| T150XLL | 8.9 | 1,325.0 | 405.0 | 780 | PA66 | Black (BK) | 25 pcs. | 9-12 | 111-15300 |
| | 8.9 | 1,325.0 | 405.0 | 780 | PA66 | Natural (NA) | 25 pcs. | 9-12 | 111-15304 |
| T250S | 12.5 | 225.0 | 55.0 | 1,115 | PA66 | Natural (NA) | 100 pcs. | 11-12 | 111-24705 |
| T250X | 12.5 | 370.0 | 100.0 | 1,115 | PA66 | Black (BK) | 100 pcs. | 11-12 | 111-25102 |
| T250R | 12.5 | 515.0 | 125.0 | 1,115 | PA66 | Natural (NA) | 25 pcs. | 11-12 | 111-24803 |
| T250M | 12.5 | 565.3 | 150.0 | 1,115 | PA66 | Black (BK) | 25 pcs. | 11-12 | 111-25001 |
| | 12.5 | 565.3 | 150.0 | 1,115 | PA66 | Natural (NA) | 25 pcs. | 11-12 | 111-25002 |
| T250I | 12.5 | 730.0 | 203.0 | 1,115 | PA66 | Natural (NA) | 25 pcs. | 11-12 | 111-25219 |
| T250L | 12.5 | 880.0 | 254.0 | 1,115 | PA66 | Black (BK) | 25 pcs. | 11-12 | 111-24601 |
| T250XL | 12.5 | 1,030.0 | 305.0 | 1,115 | PA66 | Black (BK) | 25 pcs. | 11-12 | 111-25200 |
| | 12.5 | 1,030.0 | 305.0 | 1,115 | PA66 | Natural (NA) | 25 pcs. | 11-12 | 111-00466 |

All dimensions in mm. Subject to technical changes.

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

| Recommended Tools | | | | | | | | | | |
|-------------------|------|-------|----------|------|-------|------|-----|-----|-------|------|
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| MK20 | MK21 | MK3SP | MK3PNSP2 | EVO7 | MK7HT | MK7P | MK6 | MK9 | MK9HT | MK9P |

For more information on toolings please refer to the Application Tooling chapter.



For product specific approvals and specifications please refer to the Appendix.



Cable Ties Polyamide 6.6 standard

T-Series in PA66 coloured

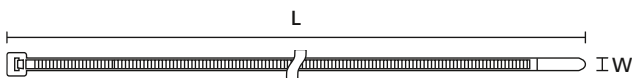
T-Series cable ties for bundling and securing cables, pipes and hoses. These cable ties can be used for almost any type of application.

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
- Simply to insert due to the ergonomically bent tail
- Other colours are available on request



T-Series.



T-Series



**Material specification
please see page 24.**

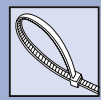
| TYPE | Width (W) | Length (L) | Bundle Ø max. | N | Material | Colour | Pack Cont. | Tools | Article-No. |
|------|-----------|------------|---------------|-----|----------|-------------|------------|-------|-------------|
| T18R | 2.5 | 100.0 | 22.0 | 80 | PA66 | Blue (BU) | 100 pcs. | 2;4-6 | 116-01816 |
| | 2.5 | 100.0 | 22.0 | 80 | PA66 | Green (GN) | 100 pcs. | 2;4-6 | 116-01815 |
| | 2.5 | 100.0 | 22.0 | 80 | PA66 | Red (RD) | 100 pcs. | 2;4-6 | 116-01812 |
| | 2.5 | 100.0 | 22.0 | 80 | PA66 | Yellow (YE) | 100 pcs. | 2;4-6 | 116-01814 |
| T30R | 3.5 | 150.0 | 35.0 | 135 | PA66 | Blue (BU) | 100 pcs. | 2;4-6 | 111-03008 |
| | 3.5 | 150.0 | 35.0 | 135 | PA66 | Green (GN) | 100 pcs. | 2;4-6 | 111-03014 |
| | 3.5 | 150.0 | 35.0 | 135 | PA66 | Red (RD) | 100 pcs. | 2;4-6 | 111-03004 |
| | 3.5 | 150.0 | 35.0 | 135 | PA66 | Yellow (YE) | 100 pcs. | 2;4-6 | 111-03006 |
| T50R | 4.6 | 200.0 | 50.0 | 225 | PA66 | Blue (BU) | 100 pcs. | 2-10 | 111-04800 |
| | 4.6 | 200.0 | 50.0 | 225 | PA66 | Green (GN) | 100 pcs. | 2-10 | 111-04801 |
| | 4.6 | 200.0 | 50.0 | 225 | PA66 | Red (RD) | 100 pcs. | 2-10 | 111-04804 |
| | 4.6 | 200.0 | 50.0 | 225 | PA66 | Yellow (YE) | 100 pcs. | 2-10 | 111-04805 |
| T50L | 4.6 | 390.0 | 110.0 | 225 | PA66 | Blue (BU) | 100 pcs. | 2-10 | 111-05404 |
| | 4.6 | 390.0 | 110.0 | 225 | PA66 | Green (GN) | 100 pcs. | 2-10 | 111-05402 |
| | 4.6 | 390.0 | 110.0 | 225 | PA66 | Red (RD) | 100 pcs. | 2-10 | 111-05406 |
| | 4.6 | 390.0 | 110.0 | 225 | PA66 | Yellow (YE) | 100 pcs. | 2-10 | 111-05428 |
| T80R | 4.7 | 210.0 | 55.0 | 355 | PA66 | Blue (BU) | 100 pcs. | 2-12 | 116-08016 |
| | 4.7 | 210.0 | 55.0 | 355 | PA66 | Green (GN) | 100 pcs. | 2-12 | 116-08015 |
| | 4.7 | 210.0 | 55.0 | 355 | PA66 | Red (RD) | 100 pcs. | 2-12 | 116-08012 |
| | 4.7 | 210.0 | 55.0 | 355 | PA66 | Yellow (YE) | 100 pcs. | 2-12 | 116-08014 |

All dimensions in mm. Subject to technical changes.

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

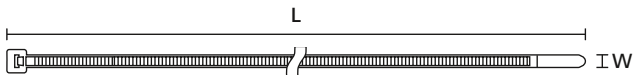


For product specific approvals and specifications please refer to the Appendix.



Cable Ties Polyamide 6.6 standard

T-Series in PA66 coloured



T-Series

| TYPE | Width (W) | Length (L) | Bundle Ø max. | | Material | Colour | Pack Cont. | Tools | Article-No. |
|-----------------|-----------|------------|---------------|-----|----------|-------------|------------|--------|-------------|
| T80L | 4.7 | 390.0 | 110.0 | 355 | PA66 | Blue (BU) | 100 pcs. | 2-12 | 116-05416 |
| | 4.7 | 390.0 | 110.0 | 355 | PA66 | Green (GN) | 100 pcs. | 2-12 | 116-05415 |
| | 4.7 | 390.0 | 110.0 | 355 | PA66 | Red (RD) | 100 pcs. | 2-12 | 116-05412 |
| | 4.7 | 390.0 | 110.0 | 355 | PA66 | Yellow (YE) | 100 pcs. | 2-12 | 116-05414 |
| T150R(H) | 7.6 | 365.0 | 100.0 | 670 | PA66 | Blue (BU) | 100 pcs. | 3;9-12 | 116-15016 |
| | 7.6 | 365.0 | 100.0 | 670 | PA66 | Red (RD) | 100 pcs. | 3;9-12 | 116-15012 |
| | 7.6 | 365.0 | 100.0 | 670 | PA66 | Yellow (YE) | 100 pcs. | 3;9-12 | 116-15014 |
| T120R(E) | 7.6 | 387.0 | 100.0 | 535 | PA66 | Green (GN) | 100 pcs. | 3;9-12 | 111-12001 |
| | 7.6 | 387.0 | 100.0 | 535 | PA66 | Red (RD) | 100 pcs. | 3;9-12 | 111-12002 |

All dimensions in mm. Subject to technical changes.

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

Recommended Tools

| | | | | | | | | | | |
|------|------|-------|----------|------|-------|------|-----|-----|-------|------|
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| MK20 | MK21 | MK3SP | MK3PNSP2 | EVO7 | MK7HT | MK7P | MK6 | MK9 | MK9HT | MK9P |

For more information on toolings please refer to the Application Tooling chapter.



For product specific approvals and specifications please refer to the Appendix.



Cable Ties for outdoor use (UV-resistant)

T-Series in PA66W black

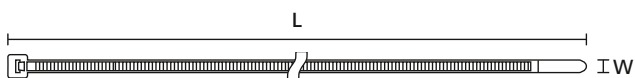
T-Series cable ties for bundling and securing cables, pipes and hoses. These cable ties can be used for almost any type of application.

Features and Benefits

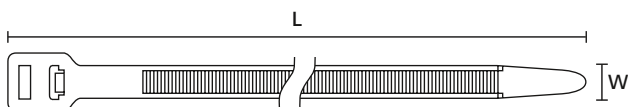
- Weather-resistant black cable tie available in a wide range of sizes
- Made from 100 % high quality plastic, allows for good recycling
- Inside serration for a strong hold around bundles
- Easy application either manually or with a processing tool
- Simply to insert due to the ergonomically bent tail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



T-Series.




T-Series



T250-series



Material specification
please see page 24.

| TYPE | Width (W) | Length (L) | Bundle Ø max. |  | Material | Colour | Pack Cont. | Tools | Article-No. |
|----------|-----------|------------|---------------|---|----------|------------|------------|--------|-------------|
| T18R | 2.5 | 100.0 | 22.0 | 80 | PA66W | Black (BK) | 100 pcs. | 2;4-6 | 111-01960 |
| T18I | 2.5 | 145.0 | 35.0 | 80 | PA66W | Black (BK) | 100 pcs. | 2;4-6 | 111-02360 |
| T18L | 2.5 | 205.0 | 55.0 | 80 | PA66W | Black (BK) | 100 pcs. | 2;4-6 | 111-02160 |
| T25LL | 2.8 | 330.0 | 95.0 | 110 | PA66W | Black (BK) | 100 pcs. | 2;4-6 | 111-02660 |
| T30R | 3.5 | 150.0 | 35.0 | 135 | PA66W | Black (BK) | 100 pcs. | 2;4-6 | 111-03260 |
| T30L | 3.5 | 198.0 | 50.0 | 135 | PA66W | Black (BK) | 100 pcs. | 2;4-6 | 111-03460 |
| T30LL | 3.5 | 290.0 | 80.0 | 135 | PA66W | Black (BK) | 100 pcs. | 2;4-6 | 111-03570 |
| T40R | 4.0 | 175.0 | 40.0 | 180 | PA66W | Black (BK) | 100 pcs. | 2;4-8 | 111-01625 |
| T50S | 4.6 | 150.0 | 35.0 | 225 | PA66W | Black (BK) | 100 pcs. | 2-10 | 111-05860 |
| T50R | 4.6 | 200.0 | 50.0 | 225 | PA66W | Black (BK) | 100 pcs. | 2-10 | 111-04889 |
| T50M | 4.6 | 245.0 | 65.0 | 225 | PA66W | Black (BK) | 100 pcs. | 2-10 | 111-06206 |
| T50I | 4.6 | 300.0 | 85.0 | 225 | PA66W | Black (BK) | 100 pcs. | 2-10 | 111-05260 |
| T50L | 4.6 | 390.0 | 110.0 | 225 | PA66W | Black (BK) | 100 pcs. | 2-10 | 111-05440 |
| T50LL | 4.6 | 445.0 | 130.0 | 225 | PA66W | Black (BK) | 100 pcs. | 2-10 | 111-06000 |
| T80R | 4.7 | 210.0 | 55.0 | 355 | PA66W | Black (BK) | 100 pcs. | 2-12 | 111-05060 |
| T80I | 4.7 | 300.0 | 85.0 | 355 | PA66W | Black (BK) | 100 pcs. | 2-12 | 111-08290 |
| T80L | 4.7 | 390.0 | 110.0 | 355 | PA66W | Black (BK) | 100 pcs. | 2-12 | 111-05460 |
| T120S | 7.6 | 225.0 | 55.0 | 535 | PA66W | Black (BK) | 50 pcs. | 3;9-12 | 111-12830 |
| T120I | 7.6 | 300.0 | 80.0 | 535 | PA66W | Black (BK) | 100 pcs. | 3;9-12 | 111-12230 |
| T150R(H) | 7.6 | 365.0 | 100.0 | 670 | PA66W | Black (BK) | 100 pcs. | 3;9-12 | 111-14860 |
| T120R(E) | 7.6 | 387.0 | 100.0 | 535 | PA66W | Black (BK) | 100 pcs. | 3;9-12 | 111-12060 |
| T120M | 7.6 | 460.0 | 125.0 | 535 | PA66W | Black (BK) | 100 pcs. | 3;9-12 | 111-12660 |

All dimensions in mm. Subject to technical changes.

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

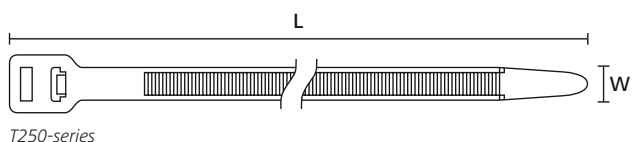
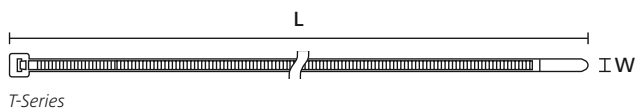


For product specific approvals and specifications please refer to the Appendix.



Cable Ties for outdoor use (UV-resistant)

T-Series in PA66W black



| TYPE | Width (W) | Length (L) | Bundle Ø max. | N | Material | Colour | Pack Cont. | Tools | Article-No. |
|---------|-----------|------------|---------------|-------|-------------|------------|------------|--------|-------------|
| T120L | 7.6 | 760.0 | 225.0 | 535 | PA66W | Black (BK) | 50 pcs. | 3;9-12 | 111-12430 |
| T150L | 8.8 | 820.0 | 245.0 | 780 | PA66W | Black (BK) | 25 pcs. | 9-12 | 111-15460 |
| T150M | 8.9 | 530.0 | 150.0 | 780 | PA66W | Black (BK) | 25 pcs. | 9-12 | 111-15660 |
| T150XL | 8.9 | 1,095.0 | 330.0 | 780 | PA66W | Black (BK) | 25 pcs. | 9-12 | 111-15502 |
| T150XLL | 8.9 | 1,325.0 | 405.0 | 780 | PA66W | Black (BK) | 25 pcs. | 9-12 | 111-15305 |
| T250R | 12.5 | 515.0 | 125.0 | 1,115 | PA66HIRHSUV | Black (BK) | 25 pcs. | 11-12 | 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.

Recommended Tools

| | | | | | | | | | | |
|------|------|-------|----------|------|-------|------|-----|-----|-------|------|
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| MK20 | MK21 | MK3SP | MK3PNSP2 | EVO7 | MK7HT | MK7P | MK6 | MK9 | MK9HT | MK9P |

For more information on toolings please refer to the Application Tooling chapter.



For product specific approvals and specifications please refer to the Appendix.



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

T-Series in PA66HS natural and black

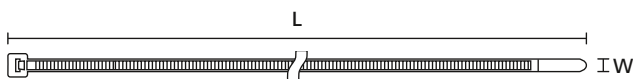
T-Series cable ties for bundling and securing cables, pipes and hoses. These cable ties can be used for almost any type of application.

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 24.

| TYPE | Width (W) | Length (L) | Bundle Ø max. | N | Material | Colour | Pack Cont. | Tools | Article-No. |
|-------|-----------|------------|---------------|-----|----------|--------------|------------|-------|-------------|
| T18R | 2.5 | 100.0 | 22.0 | 80 | PA66HS | Black (BK) | 100 pcs. | 2;4-6 | 111-01950 |
| | 2.5 | 100.0 | 22.0 | 80 | PA66HS | Natural (NA) | 100 pcs. | 2;4-6 | 111-01959 |
| T18I | 2.5 | 145.0 | 35.0 | 80 | PA66HS | Black (BK) | 100 pcs. | 2;4-6 | 111-02358 |
| | 2.5 | 145.0 | 35.0 | 80 | PA66HS | Natural (NA) | 1,000 pcs. | 2;4-6 | 111-02359 |
| T18L | 2.5 | 205.0 | 55.0 | 80 | PA66HS | Black (BK) | 100 pcs. | 2;4-6 | 111-02049 |
| | 2.5 | 205.0 | 55.0 | 80 | PA66HS | Natural (NA) | 100 pcs. | 2;4-6 | 111-02159 |
| T30R | 3.5 | 150.0 | 35.0 | 135 | PA66HS | Natural (NA) | 100 pcs. | 2;4-6 | 111-03259 |
| | 3.5 | 150.0 | 35.0 | 135 | PA66HS | Black (BK) | 100 pcs. | 2;4-6 | 111-03050 |
| T30L | 3.5 | 198.0 | 50.0 | 135 | PA66HS | Black (BK) | 100 pcs. | 2;4-6 | 111-03450 |
| | 3.5 | 198.0 | 50.0 | 135 | PA66HS | Natural (NA) | 100 pcs. | 2;4-6 | 111-03459 |
| T30LL | 3.5 | 290.0 | 80.0 | 135 | PA66HS | Black (BK) | 1,000 pcs. | 2;4-6 | 111-03660 |
| | 3.5 | 290.0 | 80.0 | 135 | PA66HS | Natural (NA) | 100 pcs. | 2;4-6 | 111-03569 |
| T40R | 4.0 | 175.0 | 40.0 | 180 | PA66HS | Black (BK) | 100 pcs. | 2;4-8 | 111-01623 |
| | 4.0 | 175.0 | 40.0 | 180 | PA66HS | Natural (NA) | 100 pcs. | 2;4-8 | 111-01627 |
| T50S | 4.6 | 150.0 | 35.0 | 225 | PA66HS | Natural (NA) | 100 pcs. | 2-10 | 111-05859 |
| | 4.6 | 150.0 | 35.0 | 225 | PA66HS | Black (BK) | 100 pcs. | 2-10 | 111-05850 |
| T50R | 4.6 | 200.0 | 50.0 | 225 | PA66HS | Black (BK) | 100 pcs. | 2-10 | 111-04950 |
| T50I | 4.6 | 300.0 | 85.0 | 225 | PA66HS | Black (BK) | 100 pcs. | 2-10 | 111-05250 |
| | 4.6 | 300.0 | 85.0 | 225 | PA66HS | Natural (NA) | 100 pcs. | 2-10 | 111-05259 |
| T50L | 4.6 | 390.0 | 110.0 | 225 | PA66HS | Black (BK) | 100 pcs. | 2-10 | 111-05450 |
| | 4.6 | 390.0 | 110.0 | 225 | PA66HS | Natural (NA) | 100 pcs. | 2-10 | 111-05436 |
| T80R | 4.7 | 210.0 | 55.0 | 355 | PA66HS | Black (BK) | 1,000 pcs. | 2-12 | 117-08070 |
| | 4.7 | 210.0 | 55.0 | 355 | PA66HS | Natural (NA) | 100 pcs. | 2-12 | 111-05059 |
| T80I | 4.7 | 300.0 | 85.0 | 355 | PA66HS | Black (BK) | 100 pcs. | 2-12 | 111-08250 |
| | 4.7 | 300.0 | 85.0 | 355 | PA66HS | Natural (NA) | 100 pcs. | 2-12 | 111-08259 |

All dimensions in mm. Subject to technical changes.

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



For product specific approvals and specifications please refer to the Appendix.



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

T-Series in PA66HS natural and black



T-Series

| TYPE | Width (W) | Length (L) | Bundle Ø max. | N | Material | Colour | Pack Cont. | Tools | Article-No. |
|----------|-----------|------------|---------------|-----|----------|--------------|------------|--------|-------------|
| T80L | 4.7 | 390.0 | 110.0 | 355 | PA66HS | Black (BK) | 100 pcs. | 2-12 | 111-00388 |
| | 4.7 | 390.0 | 110.0 | 355 | PA66HS | Natural (NA) | 100 pcs. | 2-12 | 111-05459 |
| T120S | 7.6 | 225.0 | 55.0 | 535 | PA66HS | Black (BK) | 50 pcs. | 3;9-12 | 111-12850 |
| | 7.6 | 225.0 | 55.0 | 535 | PA66HS | Natural (NA) | 50 pcs. | 3;9-12 | 111-12824 |
| T150R(H) | 7.6 | 365.0 | 100.0 | 670 | PA66HS | Black (BK) | 100 pcs. | 3;9-12 | 111-15050 |
| | 7.6 | 365.0 | 100.0 | 670 | PA66HS | Natural (NA) | 100 pcs. | 3;9-12 | 111-15069 |
| T120R(E) | 7.6 | 387.0 | 100.0 | 535 | PA66HS | Black (BK) | 100 pcs. | 3;9-12 | 111-12050 |
| | 7.6 | 387.0 | 100.0 | 535 | PA66HS | Natural (NA) | 100 pcs. | 3;9-12 | 111-12059 |
| T120M | 7.6 | 460.0 | 125.0 | 535 | PA66HS | Black (BK) | 100 pcs. | 3;9-12 | 111-00153 |
| T120XM | 7.6 | 600.0 | 175.0 | 535 | PA66HS | Black (BK) | 50 pcs. | 3;9-12 | 111-12700 |
| | 7.6 | 600.0 | 175.0 | 535 | PA66HS | Natural (NA) | 50 pcs. | 3;9-12 | 111-12719 |
| T120L | 7.6 | 760.0 | 225.0 | 535 | PA66HS | Black (BK) | 50 pcs. | 3;9-12 | 111-12440 |
| | 7.6 | 760.0 | 225.0 | 535 | PA66HS | Natural (NA) | 50 pcs. | 3;9-12 | 111-12449 |
| T150L | 8.8 | 820.0 | 245.0 | 780 | PA66HS | Black (BK) | 25 pcs. | 9-12 | 111-15410 |
| T150M | 8.9 | 530.0 | 150.0 | 780 | PA66HS | Black (BK) | 25 pcs. | 9-12 | 111-15609 |
| T150XL | 8.9 | 1,095.0 | 330.0 | 780 | PA66HS | Black (BK) | 25 pcs. | 9-12 | 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.

Recommended Tools

| | | | | | | | | | | |
|------|------|-------|----------|------|-------|------|-----|-----|-------|------|
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| MK20 | MK21 | MK3SP | MK3PNSP2 | EVO7 | MK7HT | MK7P | MK6 | MK9 | MK9HT | MK9P |

For more information on toolings please refer to the Application Tooling chapter.



For product specific approvals and specifications please refer to the Appendix.



Cable Ties for higher impact resistant Polyamide 6.6 ScanBlack

T-Series in PA66HIR(S) black

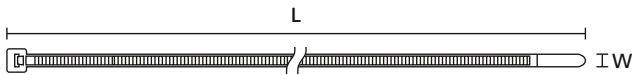
T-Series cable ties for bundling and securing cables, pipes and hoses. These cable ties can be used for almost any type of application.

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.



T-Series



Material specification please see page 24.

| TYPE | Width (W) | Length (L) | Bundle Ø max. | N | Material | Colour | Pack Cont. | Tools | Article-No. |
|----------|-----------|------------|---------------|-----|------------|------------|------------|--------|-------------|
| T50R | 4.6 | 200.0 | 50.0 | 225 | PA66HIR(S) | Black (BK) | 100 pcs. | 2-10 | 111-04890 |
| T50I | 4.6 | 300.0 | 85.0 | 225 | PA66HIR(S) | Black (BK) | 100 pcs. | 2-10 | 111-00222 |
| T50L | 4.6 | 390.0 | 110.0 | 225 | PA66HIR(S) | Black (BK) | 100 pcs. | 2-10 | 111-05441 |
| T120I | 7.6 | 300.0 | 80.0 | 535 | PA66HIR(S) | Black (BK) | 100 pcs. | 3;9-12 | 111-12203 |
| T120R(E) | 7.6 | 387.0 | 100.0 | 535 | PA66HIR(S) | Black (BK) | 100 pcs. | 3;9-12 | 111-12032 |
| T120L | 7.6 | 760.0 | 225.0 | 535 | PA66HIR(S) | Black (BK) | 50 pcs. | 3;9-12 | 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.

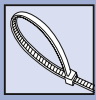
Recommended Tools

| | | | | | | | | | | |
|------|------|-------|----------|------|-------|------|-----|-----|-------|------|
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| MK20 | MK21 | MK3SP | MK3PNSP2 | EVO7 | MK7HT | MK7P | MK6 | MK9 | MK9HT | MK9P |

For more information on toolings please refer to the Application Tooling chapter.



For product specific approvals and specifications please refer to the Appendix.



Cable Ties for higher fire-protection

T-Series in PA66V0 white

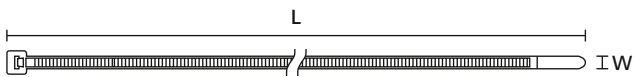
T-Series cable ties for bundling and securing cables, pipes and hoses. These cable ties can be used for almost any type of applications, especially where safety regulations are high, e.g. the reduction of smoke and dangerous gases.

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

| TYPE | Width (W) | Length (L) | Bundle Ø max. | N | Material | Colour | Pack Cont. | Tools | Article-No. |
|----------|-----------|------------|---------------|-----|----------|------------|------------|--------|-------------|
| T18R | 2.5 | 100.0 | 22.0 | 80 | PA66V0 | White (WH) | 100 pcs. | 2;4-6 | 111-91819 |
| T18L | 2.5 | 205.0 | 55.0 | 80 | PA66V0 | White (WH) | 1,000 pcs. | 2;4-6 | 111-02043 |
| T30R | 3.5 | 150.0 | 35.0 | 135 | PA66V0 | White (WH) | 100 pcs. | 2;4-6 | 111-93019 |
| T50R | 4.6 | 200.0 | 50.0 | 225 | PA66V0 | White (WH) | 100 pcs. | 2-10 | 111-95019 |
| T50I | 4.6 | 300.0 | 85.0 | 225 | PA66V0 | White (WH) | 100 pcs. | 2-10 | 111-00317 |
| T120R(E) | 7.6 | 387.0 | 100.0 | 535 | PA66V0 | White (WH) | 100 pcs. | 3;9-12 | 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.

| Recommended Tools | | | | | | | | | | |
|-------------------|------|-------|----------|------|-------|------|-----|-----|-------|------|
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| MK20 | MK21 | MK3SP | MK3PNSP2 | EVO7 | MK7HT | MK7P | MK6 | MK9 | MK9HT | MK9P |

For more information on toolings please refer to the Application Tooling chapter.



For product specific approvals and specifications please refer to the Appendix.



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

T-Series in PA46 natural and grey

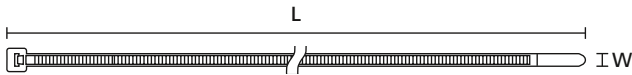
T-Series cable ties for bundling and securing cables, pipes and hoses. These cable ties can be used for almost any type of application.

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 24.

| TYPE | Width (W) | Length (L) | Bundle Ø max. | N | Material | Colour | Pack Cont. | Tools | Article-No. |
|----------|-----------|------------|---------------|-----|----------|--------------|------------|--------|-------------|
| T18R | 2.5 | 100.0 | 22.0 | 80 | PA46 | Natural (NA) | 1,000 pcs. | 2;4-6 | 114-01879 |
| T30R | 3.5 | 150.0 | 35.0 | 135 | PA46 | Natural (NA) | 100 pcs. | 2;4-6 | 114-03079 |
| T50R | 4.6 | 200.0 | 50.0 | 225 | PA46 | Grey (GY) | 100 pcs. | 2-10 | 111-00824 |
| | 4.6 | 200.0 | 50.0 | 225 | PA46 | Natural (NA) | 100 pcs. | 2-10 | 111-00525 |
| T50I | 4.6 | 300.0 | 85.0 | 225 | PA46 | Natural (NA) | 100 pcs. | 2-10 | 111-05220 |
| T50L | 4.6 | 390.0 | 110.0 | 225 | PA46 | Natural (NA) | 100 pcs. | 2-10 | 111-00526 |
| T120R(E) | 7.6 | 387.0 | 100.0 | 535 | PA46 | Natural (NA) | 100 pcs. | 3;9-12 | 114-12179 |

All dimensions in mm. Subject to technical changes.

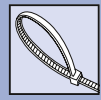
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

| Recommended Tools | | | | | | | | | | |
|-------------------|------|-------|----------|------|-------|------|-----|-----|-------|------|
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| MK20 | MK21 | MK3SP | MK3PNSP2 | EVO7 | MK7HT | MK7P | MK6 | MK9 | MK9HT | MK9P |

For more information on toolings please refer to the Application Tooling chapter.



For product specific approvals and specifications please refer to the Appendix.



Cable Ties for higher chemical resistance and for temperatures up to +170 °C in Ethylene Tetrafluoroethylene

T-Series in E/TFE (Tefzel®) blue

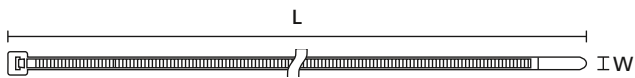
T-Series cable ties for bundling and securing cables, pipes and hoses. These cable ties can be used for almost any type of application, especially when a high chemical resistance is required.

Features and Benefits

- High 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.



T-Series



For more information on E/TFE mounts please refer to KR-Series on page 138.

| TYPE | Width (W) | Length (L) | Bundle Ø max. | N | Material | Colour | Pack Cont. | Tools | Article-No. |
|-------|-----------|------------|---------------|-----|----------|-----------|------------|--------|-------------|
| T18R | 2.5 | 100.0 | 22.0 | 80 | E/TFE | Blue (BU) | 100 pcs. | 2;4-6 | 111-00659 |
| T30R | 3.5 | 150.0 | 36.0 | 133 | E/TFE | Blue (BU) | 100 pcs. | 2;4-6 | 111-00698 |
| T50R | 4.7 | 201.0 | 50.0 | 222 | E/TFE | Blue (BU) | 100 pcs. | 2-10 | 111-00732 |
| T50L | 4.7 | 382.0 | 105.0 | 222 | E/TFE | Blue (BU) | 100 pcs. | 2-10 | 111-00718 |
| T120R | 7.4 | 387.0 | 105.0 | 535 | E/TFE | Blue (BU) | 50 pcs. | 3;9-12 | 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. 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.

| Recommended Tools | | | | | | | | | | |
|-------------------|------|-------|----------|------|-------|------|-----|-----|-------|------|
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| MK20 | MK21 | MK3SP | MK3PNSP2 | EVO7 | MK7HT | MK7P | MK6 | MK9 | MK9HT | MK9P |

For more information on toolings please refer to the Application Tooling chapter.



For product specific approvals and specifications please refer to the Appendix.



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

T-Series in PP natural and black

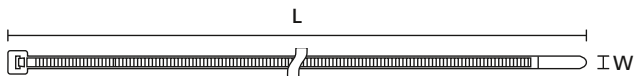
T-Series cable ties for bundling and securing cables, pipes and hoses. These cable ties can be used for almost any type of application.

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 24.

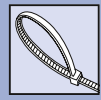
| TYPE | Width (W) | Length (L) | Bundle Ø max. | N | Material | Colour | Pack Cont. | Tools | Article-No. |
|-------|-----------|------------|---------------|-----|----------|--------------|------------|--------|-------------|
| T18R | 2.5 | 100.0 | 22.0 | 36 | PP | Black (BK) | 100 pcs. | 2;4-6 | 111-01917 |
| | 2.5 | 100.0 | 22.0 | 36 | PP | Natural (NA) | 1,000 pcs. | 2;4-6 | 111-01922 |
| T30R | 3.6 | 148.0 | 32.0 | 89 | PP | Natural (NA) | 100 pcs. | 2;4-6 | 111-03017 |
| T50R | 4.8 | 202.0 | 44.5 | 111 | PP | Black (BK) | 100 pcs. | 2-10 | 111-04928 |
| | 4.8 | 202.0 | 44.5 | 111 | PP | Natural (NA) | 100 pcs. | 2-10 | 111-04931 |
| T120S | 7.6 | 225.0 | 55.0 | 267 | PP | Black (BK) | 500 pcs. | 3;9-12 | 111-12827 |
| T120R | 7.6 | 390.0 | 105.0 | 267 | PP | Black (BK) | 500 pcs. | 3;9-12 | 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.

| Recommended Tools | | | | | | | | | | |
|-------------------|------|-------|---------|------|-------|------|-----|-----|-------|------|
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| MK20 | MK21 | MK3SP | MK3PNP2 | EVO7 | MK7HT | MK7P | MK6 | MK9 | MK9HT | MK9P |

For more information on toolings please refer to the Application Tooling chapter.



Cable Ties made from sustainable bioplastic in Polyamide 11

T-Series in PA11 black

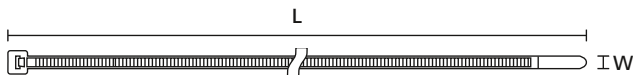
T-Series cable ties for bundling and securing cables, pipes and hoses. These cable ties can be used for almost all types of applications.

Features and Benefits

- Made of polyamide 11, a completely sustainable bioplastic derived from vegetable oil
- Inside serration for a strong hold around bundles
- Easy application either manually or with a processing tool
- High UV- resistance for long-term outdoor application
- Stable technical performance even at very low temperatures
- High resistance to chemicals, including chlorides
- Low water absorption rate for consistent technical performance and high durability



T-Series.



T-Series

| TYPE | Width (W) | Length (L) | Bundle Ø max. | N | Material | Colour | Pack Cont. | Tools | Article-No. |
|------|-----------|------------|---------------|-----|----------|------------|------------|-------|-------------|
| T18R | 2.5 | 100.0 | 22.0 | 80 | PA11 | Black (BK) | 100 pcs. | 2;4-6 | 111-01718 |
| T30R | 3.5 | 150.0 | 35.0 | 130 | PA11 | Black (BK) | 100 pcs. | 2;4-6 | 111-01719 |
| T50S | 4.6 | 150.0 | 35.0 | 170 | PA11 | Black (BK) | 100 pcs. | 2-10 | 111-01720 |
| T50R | 4.6 | 200.0 | 50.0 | 170 | PA11 | Black (BK) | 100 pcs. | 2-10 | 111-01721 |

All dimensions in mm. Subject to technical changes.

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

| Recommended Tools | | | | | | | | | |
|-------------------|------|-------|----------|------|-------|------|-----|-----|--|
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| MK20 | MK21 | MK3SP | MK3PNSP2 | EVO7 | MK7HT | MK7P | MK6 | MK9 | |

For more information on toolings please refer to the Application Tooling chapter.



For product specific approvals and specifications please refer to the Appendix.

Material Specification Overview

| MATERIAL | Material Shortcut | Operating Temperature | Colour** | Flammability | Material Properties* | Material Specifications |
|---|--------------------|---|--------------------------|--------------|---|-------------------------|
| Aluminium-alloy | AL | -40 °C to +180 °C | Natural (NA) | | <ul style="list-style-type: none"> Corrosion resistant Antimagnetic | RoHS |
| Chloroprene | CR | -20 °C to +80 °C | Black (BK) | | <ul style="list-style-type: none"> Weather-resistant High yield strength | RoHS |
| Ethylene Tetrafluoroethylene | E/TFE | -80 °C to +170 °C | Blue (BU) | UL94 V0 | <ul style="list-style-type: none"> Resistance to radioactivity UV-resistant, not moisture sensitive Good chemical resistance to: acids, bases, oxidizing agents | RoHS |
| Polyacetal | POM | -40 °C to +90 °C, (+110 °C, 500 h) | Natural (NA) | UL94 HB | <ul style="list-style-type: none"> Limited brittleness sensitivity Flexible at low temperature Not moisture sensitive Robust on impacts | RoHS |
| Polyamide 11 | PA11 | -40 °C to +85 °C, (+105 °C, 500 h) | Black (BK) | UL94 HB | <ul style="list-style-type: none"> Bio-plastic, derived from vegetable oil Strong impact resistance at low temperature Very low moisture absorption Weather-resistant Good chemical resistance | HF RoHS |
| Polyamide 12 | PA12 | -40 °C to +85 °C, (+105 °C, 500 h) | Black (BK) | UL94 HB | <ul style="list-style-type: none"> Good chemical resistance to: acids, bases, oxidizing agents UV-resistant | HF RoHS |
| 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"> Resistance to high temperatures Very moisture sensitive Low smoke sensitive | HF LFH RoHS |
| Polyamide 6 | PA6 | -40 °C to +80 °C | Black (BK) | UL94 V2 | <ul style="list-style-type: none"> High yield strength | RoHS |
| Polyamide 6, high impact modified | PA6HIR | -40 °C to +80 °C | Black (BK) | UL94 HB | <ul style="list-style-type: none"> Limited brittleness sensitivity Higher flexibility at low temperature | 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"> High yield strength | HF RoHS |
| Polyamide 6.6, glass-fibre reinforced | PA66GF13, PA66GF15 | -40 °C to +105 °C | Black (BK) | UL94 HB | <ul style="list-style-type: none"> Good resistance to: lubricants, vehicle fuel, salt water and many solvents | HF RoHS |
| Polyamide 6.6, heat and UV stabilised | PA66HSW | -40 °C to +105 °C | Black (BK) | UL94 V2 | <ul style="list-style-type: none"> High yield strength Modified elevated max. temperature UV-resistant | HF RoHS |
| Polyamide 6.6, heat stabilised | PA66HS | -40 °C to +105 °C | Black (BK), Natural (NA) | UL94 V2 | <ul style="list-style-type: none"> High yield strength Modified elevated max. temperature | HF RoHS |
| 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"> Limited brittleness sensitivity Higher flexibility at low temperature | RoHS |
| Polyamide 6.6, high impact modified, heat and UV stabilised | PA66HIRHSW | -40 °C to +110 °C | Black (BK) | UL94 HB | <ul style="list-style-type: none"> Limited brittleness sensitivity Higher flexibility at low temperature Modified elevated max. temperature High yield strength, UV-resistant | HF RoHS |
| Polyamide 6.6, high impact modified, heat stabilised | PA66HIRHS | -40 °C to +105 °C | Black (BK) | UL94 HB | <ul style="list-style-type: none"> Limited brittleness sensitivity Higher flexibility at low temperature Modified elevated max. temperature | RoHS |
| Polyamide 6.6, high impact modified, scan black | PA66HIR(S) | -40 °C to +80 °C, (+105 °C, 500 h) | Black (BK) | UL94 HB | <ul style="list-style-type: none"> Limited brittleness sensitivity Higher flexibility at low temperature | HF RoHS |
| Polyamide 6.6, UV-resistant | PA66W | -40 °C to +85 °C, (+105 °C, 500 h) | Black (BK) | UL94 V2 | <ul style="list-style-type: none"> High yield strength UV-resistant | HF RoHS |

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**More colours on request.



N = Minimum Loop Tensile Strength for Cable Ties (Newton)

HF = Halogenfree
LFH = Limited Fire Hazard
RoHS = Restriction of Hazardous Substances

| MATERIAL | Material Shortcut | Operating Temperature | Colour** | Flammability | Material Properties* | Material Specifications |
|---|-------------------|---------------------------------------|-----------------------------|--------------|--|---|
| Polyamide 6.6 , with metal particles | PA66MP | -40 °C to +85 °C, (+105 °C, 500 h) | Blue (BU) | UL94 HB | <ul style="list-style-type: none"> High yield strength Metal and X-Ray detectable | <div style="border: 1px solid black; padding: 2px;">HF</div> <div style="border: 1px solid black; padding: 2px;">RoHS</div> |
| Polyamide 6.6 V0 | PA66V0 | -40 °C to +85 °C | White (WH) | UL94 V0 | <ul style="list-style-type: none"> High yield strength Low smoke emission | <div style="border: 1px solid black; padding: 2px;">HF</div> <div style="border: 1px solid black; padding: 2px;">LFH</div> <div style="border: 1px solid black; padding: 2px;">RoHS</div> |
| Polyamide 6.6 V0 , High Oxygen Index | PA66V0-HOI | -40 °C to +85 °C, (+105 °C, 500 h) | White (WH) | UL94 V0 | <ul style="list-style-type: none"> High yield strength Low smoke emissions | <div style="border: 1px solid black; padding: 2px;">HF</div> <div style="border: 1px solid black; padding: 2px;">LFH</div> <div style="border: 1px solid black; padding: 2px;">RoHS</div> |
| Polyester | SP | -50 °C to +150 °C | Black (BK) | Halogen free | <ul style="list-style-type: none"> UV-resistant Good chemical resistance to: most acids, alkalis and oils | <div style="border: 1px solid black; padding: 2px;">HF</div> <div style="border: 1px solid black; padding: 2px;">LFH</div> <div style="border: 1px solid black; padding: 2px;">RoHS</div> |
| Polyetheretherketone | PEEK | -55 °C to +240 °C | Beige (BGE) | UL94 V0 | <ul style="list-style-type: none"> Resistance to radioactivity Not moisture sensitive Good chemical resistance to: acids, bases, oxidizing agents | <div style="border: 1px solid black; padding: 2px;">HF</div> <div style="border: 1px solid black; padding: 2px;">LFH</div> <div style="border: 1px solid black; padding: 2px;">RoHS</div> |
| Polyethylene | PE | -40 °C to +50 °C | Black (BK), Grey (GY) | UL94 HB | <ul style="list-style-type: none"> Low moisture absorption Good chemical resistance to: most acids, alcohol and oils | <div style="border: 1px solid black; padding: 2px;">HF</div> <div style="border: 1px solid black; padding: 2px;">RoHS</div> |
| Polyolefin | PO | -40 °C to +90 °C | Black (BK) | UL94 V0 | <ul style="list-style-type: none"> Low smoke emissions | <div style="border: 1px solid black; padding: 2px;">HF</div> <div style="border: 1px solid black; padding: 2px;">LFH</div> <div style="border: 1px solid black; padding: 2px;">RoHS</div> |
| Polypropylene | PP | -40 °C to +115 °C | Black (BK), Natural (NA) | UL94 HB | <ul style="list-style-type: none"> Floats in water Moderate yield strength Good chemical resistance to: organic acids | <div style="border: 1px solid black; padding: 2px;">HF</div> <div style="border: 1px solid black; padding: 2px;">RoHS</div> |
| Polypropylene, Ethylene- Propylene-Dien- Terpolymere-rubber free of Nitrosamine | PP, EPDM | -20 °C to +95 °C | Black (BK) | UL94 HB | <ul style="list-style-type: none"> Good resistance to high temperatures Good chemical and abrasion resistance | <div style="border: 1px solid black; padding: 2px;">HF</div> <div style="border: 1px solid black; padding: 2px;">RoHS</div> |
| Polypropylene with metal particles | PPMP | -40 °C to +115 °C | Blue (BU) | UL94 HB | <ul style="list-style-type: none"> Floats in certain liquids Metal and X-Ray detectable Heat resistant Moderate yield strength Good chemical resistance | <div style="border: 1px solid black; padding: 2px;">RoHS</div> |
| Polyvinylchloride | PVC | -10 °C to +70 °C | Black (BK), Natural (NA) | UL94 V0 | <ul style="list-style-type: none"> Low moisture absorption Good chemical resistance to: acids, ethanol and oil | <div style="border: 1px solid black; padding: 2px;">RoHS</div> |
| Stainless Steel, Stainless Steel | SS304, SS316 | -80 °C to +538 °C | Natural (NA) | Non burning | <ul style="list-style-type: none"> Corrosion resistant Antimagnetic Weather resistant Outstanding chemical resistance | <div style="border: 1px solid black; padding: 2px;">HF</div> <div style="border: 1px solid black; padding: 2px;">LFH</div> <div style="border: 1px solid black; padding: 2px;">RoHS</div> |
| Thermoplastic Polyurethane | TPU | -40 °C to +85 °C | Black (BK) | UL94 HB | <ul style="list-style-type: none"> High elasticity Good chemical resistance to: acids, bases and oxidizing agents | <div style="border: 1px solid black; padding: 2px;">HF</div> <div style="border: 1px solid black; padding: 2px;">RoHS</div> |

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