



Cable Ties inside serrated

• T-Series

Features and Benefits






Available in a wide range of materials, these cable ties all feature internal serrations allowing for a positive hold onto cable, hose and pipe bundles. The design of the head guarantees a high tensile strength whilst allowing a very low insertion force, this, combined with the bent tail design of many of the ties, ensures a simple and quick installation. Whilst easily installed by hand, manual and pneumatic (for high volume applications) tensioning tools are available to ensure a consistent and safe installation.

Application

For the routing, bundling and securing of cables, pipes and hoses.



T Series for bundling and securing of cables for a wide range of applications, available in various colours and materials.

| | Material | Page Number | Material | Page Number |
|---|--|----------------|--|-------------|
|  | Polyamide 6.6 (PA66) Polyamide 6.6 Heat Stabilised (PA66HS) Polyamide 6.6 High Imp. Mod. scan black (PA66HIR(S)) | 70 73 74 | Polyamide 6.6 UV Resistant (PA66W) Polypropylene (PP) | 69 76 |
|  | Polyamide 6.6 (PA66) Polyamide 4.6 (PA46) | 68 75 | Polyamide 6.6 Heat Stabilised (PA66HS) Polypropylene (PP) | 72 76 |
|  | Polyamide 6.6 (PA66) | 71 | Ethylenterafluorineethylen - E/TFE (Tefzel®) | 76 |
|  | Polyamide 6.6 V0 (PA66V0) | 75 | | |
|  | Polyamide 4.6 (PA46) | 75 | | |

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.



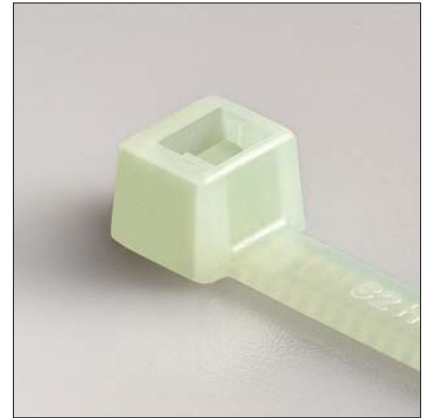
Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



Cable Ties Polyamide 6.6 standard

- T-Series in PA66 natural

| Material Data | |
|-----------------------|---|
| Material | Polyamide 6.6 (PA66) |
| Operating Temperature | -40 °C to +85 °C Continuous, (+105 °C for 500 h) |
| Flammability | UL94 V2 |



Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour | Application Tool |
|----------------------|-----------------|------------|-----------|---------------|---------------------------|----------|--------------|------------------|
| Polyamide 6.6 (PA66) | | | | | | | | |
| 111-02809 | T18S | 83 | 2.3 | 16.0 | 80 | PA66 | Natural (NA) | 1-3, 5 |
| 111-01919 | T18R | 100 | 2.5 | 22 | 80 | PA66 | Natural (NA) | 1-3, 5 |
| 111-02319 | T18I | 145 | 2.5 | 35.0 | 80 | PA66 | Natural (NA) | 1-3, 5 |
| 111-02119 | T18L | 205 | 2.5 | 55 | 80 | PA66 | Natural (NA) | 1-3, 5 |
| 111-02519 | T25L | 240 | 2.8 | 65.0 | 110 | PA66 | Natural (NA) | 1-3, 5 |
| 111-02619 | T25LL | 330 | 2.8 | 95.0 | 110 | PA66 | Natural (NA) | 1-3, 5 |
| 111-03219 | T30R | 150 | 3.5 | 35 | 135 | PA66 | Natural (NA) | 1-3, 5 |
| 111-03419 | T30L | 198 | 3.5 | 50 | 135 | PA66 | Natural (NA) | 1-3, 5 |
| 111-03549 | T30LL | 290 | 3.5 | 80.0 | 135 | PA66 | Natural (NA) | 1-3, 5 |
| 111-03819 | T40R | 175 | 4.0 | 40.0 | 180 | PA66 | Natural (NA) | 1-5 |
| 111-05819 | T50S | 150.0 | 4.6 | 35.0 | 225 | PA66 | Natural (NA) | 1-10 |
| 111-05013 | T50R | 200 | 4.6 | 50.0 | 225 | PA66 | Natural (NA) | 1-10 |
| 111-06201 | T50M | 245 | 4.6 | 65.0 | 225 | PA66 | Natural (NA) | 1-10 |
| 111-05219 | T50I | 300 | 4.6 | 85.0 | 225 | PA66 | Natural (NA) | 1-10 |
| 111-05409 | T50L | 390 | 4.6 | 110 | 225 | PA66 | Natural (NA) | 1-10 |
| 111-05019 | T80R | 210 | 4.7 | 55 | 355 | PA66 | Natural (NA) | 1-10 |
| 111-08229 | T80I | 300 | 4.7 | 85 | 355 | PA66 | Natural (NA) | 1-10 |
| 111-05419 | T80L | 390 | 4.7 | 110 | 355 | PA66 | Natural (NA) | 1-10 |
| 111-12829 | T120S | 225.0 | 7.6 | 55.0 | 535 | PA66 | Natural (NA) | 6-10 |
| 111-12219 | T120I | 300 | 7.6 | 80.0 | 535 | PA66 | Natural (NA) | 6-10 |
| 111-12019 | T120R(E) | 387 | 7.6 | 100 | 535 | PA66 | Natural (NA) | 6-10 |
| 111-12619 | T120M | 460 | 7.6 | 130 | 535 | PA66 | Natural (NA) | 6-10 |
| 111-12704 | T120XM | 600 | 7.6 | 175 | 535 | PA66 | Natural (NA) | 6-10 |
| 111-12429 | T120L | 760 | 7.6 | 225 | 535 | PA66 | Natural (NA) | 6-10 |
| 111-14819 | T150R | 365 | 7.6 | 100 | 670 | PA66 | Natural (NA) | 6-10 |
| 111-15619 | T150M | 525 | 8.9 | 150 | 780 | PA66 | Natural (NA) | 6-9 |
| 111-15419 | T150L | 820 | 8.9 | 245 | 780 | PA66 | Natural (NA) | 6-9 |
| 111-15519 | T150XL | 1095 | 8.9 | 330 | 780 | PA66 | Natural (NA) | 6-9 |
| 111-15304 | T150XLL | 1325 | 8.9 | 405 | 780 | PA66 | Natural (NA) | 6-9 |
| 111-24705 | T250S | 225 | 12.5 | 55.0 | 1115 | PA66 | Natural (NA) | 7-9 |
| 111-25103 | T250X | 370 | 12.5 | 100 | 1115 | PA66 | Natural (NA) | 7-9 |
| 111-24803 | T250R | 520 | 12.5 | 145 | 1115 | PA66 | Natural (NA) | 7-9 |
| 111-25002 | T250M | 565 | 12.5 | 150 | 1115 | PA66 | Natural (NA) | 7-9 |
| 111-25219 | T250I | 725 | 12.5 | 203 | 1115 | PA66 | Natural (NA) | 7-9 |
| 111-00466 | T250XL | 1030 | 12.5 | 305 | 1115 | PA66 | Natural (NA) | 7-9 |

All dimensions in mm. Subject to technical changes.

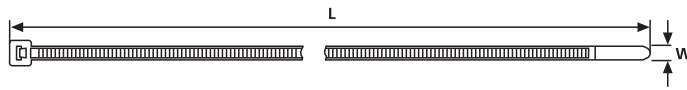


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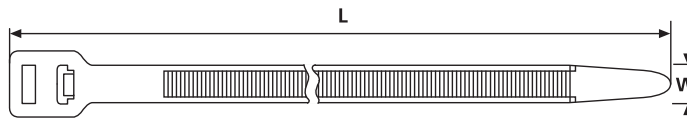


Cable Ties for outdoor use (UV-resistant)

• T-Series in PA66W black



T18S – T255M



T250-Series



Material Data

| | |
|-----------------------|---|
| Material | Polyamide 6.6 UV Resistant (PA66W) |
| Operating Temperature | -40 °C to +85 °C Continuous, (+105 °C for 500 h) |
| Flammability | UL94 V2 |



Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour | Application Tool |
|-----------------------------|-----------------|------------|-----------|---------------|---------------------------|----------|------------|------------------|
| Polyamide 6.6 UV Stabilised | | | | | | | | |
| 111-01960 | T18R | 100 | 2.5 | 22 | 80 | PA66W | Black (BK) | 1–3, 5 |
| 111-02360 | T18I | 145 | 2.5 | 35.0 | 80 | PA66W | Black (BK) | 1–3, 5 |
| 111-02160 | T18L | 205 | 2.5 | 55 | 80 | PA66W | Black (BK) | 1–3, 5 |
| 111-02660 | T25LL | 330 | 2.8 | 95.0 | 110 | PA66W | Black (BK) | 1–3, 5 |
| 111-03260 | T30R | 150 | 3.5 | 35 | 135 | PA66W | Black (BK) | 1–3, 5 |
| 111-03460 | T30L | 198 | 3.5 | 50 | 135 | PA66W | Black (BK) | 1–3, 5 |
| 111-03580 | T30LL | 290 | 3.5 | 80.0 | 135 | PA66W | Black (BK) | 1–3, 5 |
| 111-03860 | T40R | 175 | 4.0 | 40.0 | 180 | PA66W | Black (BK) | 1–5 |
| 111-05860 | T50S | 150 | 4.6 | 35.0 | 225 | PA66W | Black (BK) | 1–10 |
| 111-04889 | T50R | 200 | 4.6 | 50.0 | 225 | PA66W | Black (BK) | 1–10 |
| 111-06206 | T50M | 245 | 4.6 | 65.0 | 225 | PA66W | Black (BK) | 1–10 |
| 111-05260 | T50I | 300 | 4.6 | 85.0 | 225 | PA66W | Black (BK) | 1–10 |
| 111-05440 | T50L | 390 | 4.6 | 110 | 225 | PA66W | Black (BK) | 1–10 |
| 111-06000 | T50LL | 445 | 4.6 | 130 | 225 | PA66W | Black (BK) | 1–10 |
| 111-05060 | T80R | 210 | 4.7 | 55 | 355 | PA66W | Black (BK) | 1–10 |
| 111-08290 | T80I | 300 | 4.7 | 85 | 355 | PA66W | Black (BK) | 1–10 |
| 111-05460 | T80L | 390 | 4.7 | 110 | 355 | PA66W | Black (BK) | 1–10 |
| 111-12830 | T120S | 225 | 7.6 | 55.0 | 535 | PA66W | Black (BK) | 6–10 |
| 111-12230 | T120I | 300 | 7.6 | 80.0 | 535 | PA66W | Black (BK) | 6–10 |
| 111-12060 | T120R(E) | 387 | 7.6 | 100 | 535 | PA66W | Black (BK) | 6–10 |
| 111-12660 | T120M | 460 | 7.6 | 130 | 535 | PA66W | Black (BK) | 6–10 |
| 111-12430 | T120L | 760 | 7.6 | 225 | 535 | PA66W | Black (BK) | 6–10 |
| 111-14860 | T150R(H) | 365 | 7.6 | 100 | 670 | PA66W | Black (BK) | 6–10 |
| 111-15660 | T150M | 525 | 8.9 | 150 | 780 | PA66W | Black (BK) | 6–9 |
| 111-15460 | T150L | 820 | 8.8 | 245 | 780 | PA66W | Black (BK) | 6–9 |
| 111-15502 | T150XL | 1095 | 8.9 | 330 | 780 | PA66W | Black (BK) | 6–9 |
| 111-15305 | T150XLL | 1325 | 8.9 | 405 | 780 | PA66W | Black (BK) | 6–9 |
| 111-25100 | T250X | 370 | 12.5 | 100 | 1115 | PA66W | Black (BK) | 7–9 |
| 111-24805 | T250R | 520 | 12.5 | 145 | 1115 | PA66W | Black (BK) | 7–9 |

All dimensions in mm. Subject to technical changes.

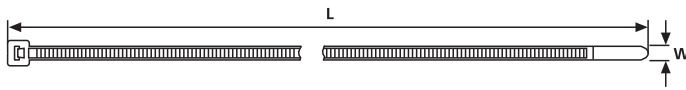


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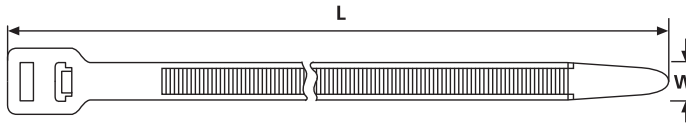


Cable Ties Polyamide 6.6 standard

• T-Series in PA66 black



T18S – T255M



T250-Series



| Material Data | |
|-----------------------|---|
| Material | Polyamide 6.6 (PA66) |
| Operating Temperature | -40 °C to +85 °C Continuous, (+105 °C for 500 h) |
| Flammability | UL94 V2 |



Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour | Application Tool |
|----------------------|-----------------|------------|-----------|---------------|---------------------------|----------|------------|------------------|
| Polyamide 6.6 (PA66) | | | | | | | | |
| 111-01910 | T18R | 100 | 2.5 | 22.0 | 80 | PA66 | Black (BK) | 1–3, 5 |
| 111-02370 | T18I | 145 | 2.5 | 35.0 | 80 | PA66 | Black (BK) | 1–3, 5 |
| 111-02110 | T18L | 205 | 2.5 | 55.0 | 80 | PA66 | Black (BK) | 1–3, 5 |
| 111-02500 | T25L | 240 | 2.8 | 65.0 | 110 | PA66 | Black (BK) | 1–3, 5 |
| 111-03210 | T30R | 150 | 3.5 | 35.0 | 135 | PA66 | Black (BK) | 1–3, 5 |
| 111-03410 | T30L | 198 | 3.5 | 50.0 | 135 | PA66 | Black (BK) | 1–3, 5 |
| 111-03500 | T30LL | 290.0 | 3.5 | 80.0 | 135 | PA66 | Black (BK) | 1–3, 5 |
| 111-05810 | T50S | 150.0 | 4.6 | 35.0 | 225 | PA66 | Black (BK) | 1–10 |
| 111-05000 | T50R | 200 | 4.6 | 50.0 | 225 | PA66 | Black (BK) | 1–10 |
| 111-06200 | T50M | 245.0 | 4.6 | 65.0 | 225 | PA66 | Black (BK) | 1–10 |
| 111-05210 | T50I | 300 | 4.6 | 85.0 | 225 | PA66 | Black (BK) | 1–10 |
| 111-05400 | T50L | 390.0 | 4.6 | 110 | 225 | PA66 | Black (BK) | 1–10 |
| 111-06002 | T50LL | 445 | 4.6 | 130 | 225 | PA66 | Black (BK) | 1–10 |
| 111-08010 | T80R | 210 | 4.7 | 55.0 | 355 | PA66 | Black (BK) | 1–10 |
| 111-08210 | T80I | 300 | 4.7 | 85.0 | 355 | PA66 | Black (BK) | 1–10 |
| 111-05410 | T80L | 390 | 4.7 | 110 | 355 | PA66 | Black (BK) | 1–10 |
| 111-12210 | T120I | 300 | 7.6 | 80.0 | 535 | PA66 | Black (BK) | 6–10 |
| 111-12010 | T120R(E) | 387 | 7.6 | 100 | 535 | PA66 | Black (BK) | 6–10 |
| 111-12610 | T120M | 460 | 7.6 | 130 | 535 | PA66 | Black (BK) | 6–10 |
| 111-12701 | T120XM | 600 | 7.6 | 175 | 535 | PA66 | Black (BK) | 6–10 |
| 111-12403 | T120L | 760 | 7.6 | 225 | 535 | PA66 | Black (BK) | 6–10 |
| 111-14810 | T150R | 365 | 7.6 | 100 | 670 | PA66 | Black (BK) | 6–10 |
| 111-00124 | T150M | 525 | 8.9 | 150 | 780 | PA66 | Black (BK) | 6–9 |
| 111-15405 | T150L | 820 | 8.9 | 245 | 780 | PA66 | Black (BK) | 6–9 |
| 111-15500 | T150XL | 1095 | 8.9 | 330 | 780 | PA66 | Black (BK) | 6–9 |
| 111-15300 | T150XLL | 1325 | 8.9 | 405 | 780 | PA66 | Black (BK) | 6–9 |
| 111-25102 | T250X | 370 | 12.5 | 100 | 1115 | PA66 | Black (BK) | 7–9 |
| 111-25001 | T250M | 565 | 12.5 | 150 | 1115 | PA66 | Black (BK) | 7–9 |
| 111-24601 | T250L | 880 | 12.5 | 254 | 1115 | PA66 | Black (BK) | 7–9 |
| 111-25200 | T250XL | 1030 | 12.5 | 305 | 1115 | PA66 | Black (BK) | 7–9 |

All dimensions in mm. Subject to technical changes.





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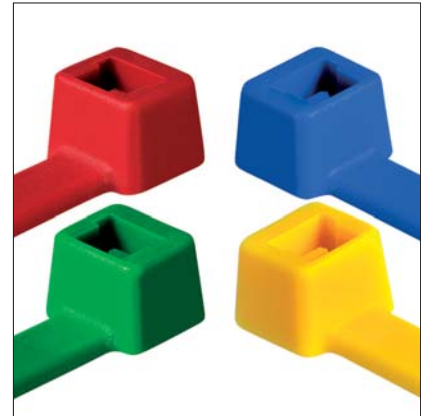


Cable Ties Polyamide 6.6 standard

• T-Series in PA66 coloured

| Material Data | |
|-----------------------|---|
| Material | Polyamide 6.6 (PA66) |
| Operating Temperature | -40 °C to +85 °C Continuous, (+105 °C for 500 h) |
| Flammability | UL94 V2 |



Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour | Application Tool |
|-----------------------|-----------------|------------|-----------|---------------|---------------------------|----------|-------------|------------------|
| Polyamide 6.6 Colours | | | | | | | | |
| 116-01816 | T18R | 100 | 2.5 | 22.0 | 80 | PA66 | Blue (BU) | 1-3, 5 |
| 111-03008 | T30R | 150 | 3.5 | 35.0 | 135 | PA66 | Blue (BU) | 1-3, 5 |
| 111-04800 | T50R | 200 | 4.6 | 50.0 | 225 | PA66 | Blue (BU) | 1-10 |
| 111-05404 | T50L | 390 | 4.6 | 110 | 225 | PA66 | Blue (BU) | 1-10 |
| 116-08016 | T80R | 210 | 4.7 | 55.0 | 355 | PA66 | Blue (BU) | 1-10 |
| 116-05416 | T80L | 390 | 4.7 | 110 | 355 | PA66 | Blue (BU) | 1-10 |
| 116-01815 | T18R | 100 | 2.5 | 22.0 | 80 | PA66 | Green (GN) | 1-3, 5 |
| 111-03014 | T30R | 150 | 3.5 | 35.0 | 135 | PA66 | Green (GN) | 1-3, 5 |
| 111-05402 | T50L | 390 | 4.6 | 110 | 225 | PA66 | Green (GN) | 1-10 |
| 116-08015 | T80R | 210 | 4.7 | 55.0 | 355 | PA66 | Green (GN) | 1-10 |
| 116-05415 | T80L | 390 | 4.7 | 110 | 355 | PA66 | Green (GN) | 1-10 |
| 111-12001 | T120R(E) | 387 | 7.6 | 100 | 535 | PA66 | Green (GN) | 6-10 |
| 116-01812 | T18R | 100 | 2.5 | 22.0 | 80 | PA66 | Red (RD) | 1-3, 5 |
| 111-03004 | T30R | 150 | 3.5 | 35.0 | 135 | PA66 | Red (RD) | 1-3, 5 |
| 111-04804 | T50R | 200 | 4.6 | 50.0 | 225 | PA66 | Red (RD) | 1-10 |
| 111-05406 | T50L | 390 | 4.6 | 110 | 225 | PA66 | Red (RD) | 1-10 |
| 116-08012 | T80R | 210 | 4.7 | 55.0 | 355 | PA66 | Red (RD) | 1-10 |
| 116-05412 | T80L | 390 | 4.7 | 110 | 355 | PA66 | Red (RD) | 1-10 |
| 111-12002 | T120R(E) | 387 | 7.6 | 100 | 535 | PA66 | Red (RD) | 6-10 |
| 116-01814 | T18R | 100 | 2.5 | 22.0 | 80 | PA66 | Yellow (YE) | 1-3, 5 |
| 111-03006 | T30R | 150 | 3.5 | 35.0 | 135 | PA66 | Yellow (YE) | 1-3, 5 |
| 111-04805 | T50R | 200 | 4.6 | 50.0 | 225 | PA66 | Yellow (YE) | 1-10 |
| 111-05428 | T50L | 390 | 4.6 | 110 | 225 | PA66 | Yellow (YE) | 1-10 |
| 116-08014 | T80R | 210 | 4.7 | 55.0 | 355 | PA66 | Yellow (YE) | 1-10 |
| 116-05414 | T80L | 390 | 4.7 | 110 | 355 | PA66 | Yellow (YE) | 1-10 |
| 116-15014 | T150R(H) | 365 | 7.6 | 100 | 670 | PA66 | Yellow (YE) | 6-10 |

All dimensions in mm. Subject to technical changes.

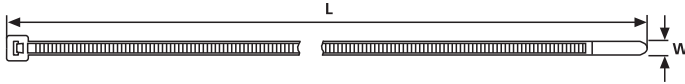


Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



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

• T-Series in PA66HS natural



T18S – T255M

| Material Data | |
|-----------------------|--|
| Material | Polyamide 6.6 Heat Stabilised (PA66HS) |
| Operating Temperature | -40 °C to +105 °C Continuous, (+145 °C for 500 h) |
| Flammability | UL94 V2 |



Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour | Application Tool |
|-------------------------------|-----------------|------------|-----------|---------------|---------------------------|----------|--------------|------------------|
| Polyamide 6.6 Heat Stabilised | | | | | | | | |
| 111-01959 | T18R | 100 | 2.5 | 22.0 | 80 | PA66HS | Natural (NA) | 1–3, 5 |
| 111-02359 | T18I | 145 | 2.5 | 35.0 | 80 | PA66HS | Natural (NA) | 1–3, 5 |
| 111-02159 | T18L | 205 | 2.5 | 55.0 | 80 | PA66HS | Natural (NA) | 1–3, 5 |
| 111-03259 | T30R | 150 | 3.5 | 35.0 | 135 | PA66HS | Natural (NA) | 1–3, 5 |
| 111-03459 | T30L | 190.0 | 3.5 | 50.0 | 135 | PA66HS | Natural (NA) | 1–3, 5 |
| 111-03569 | T30LL | 290 | 3.5 | 80.0 | 135 | PA66HS | Natural (NA) | 1–3, 5 |
| 111-03859 | T40R | 175 | 4.0 | 40.0 | 180 | PA66HS | Natural (NA) | 1–5 |
| 111-05859 | T50S | 150 | 4.6 | 35.0 | 225 | PA66HS | Natural (NA) | 1–10 |
| 111-04882 | T50R | 200 | 4.6 | 50.0 | 225 | PA66HS | Natural (NA) | 1–10 |
| 111-05259 | T50I | 300 | 4.6 | 85.0 | 225 | PA66HS | Natural (NA) | 1–10 |
| 111-05436 | T50L | 390 | 4.6 | 110 | 225 | PA66HS | Natural (NA) | 1–10 |
| 111-05059 | T80R | 210 | 4.7 | 55.0 | 355 | PA66HS | Natural (NA) | 1–10 |
| 111-08259 | T80I | 300 | 4.7 | 85.0 | 355 | PA66HS | Natural (NA) | 1–10 |
| 111-05459 | T80L | 390 | 4.7 | 110 | 355 | PA66HS | Natural (NA) | 1–10 |
| 111-12824 | T120S | 225 | 7.6 | 55.0 | 535 | PA66HS | Natural (NA) | 6–10 |
| 111-12249 | T120I | 300 | 7.6 | 80.0 | 535 | PA66HS | Natural (NA) | 6–10 |
| 111-12059 | T120R(E) | 387 | 7.6 | 100 | 535 | PA66HS | Natural (NA) | 6–10 |
| 111-12719 | T120XM | 600 | 7.6 | 175 | 535 | PA66HS | Natural (NA) | 6–10 |
| 111-12449 | T120L | 760 | 7.6 | 225 | 535 | PA66HS | Natural (NA) | 6–10 |
| 111-15069 | T150R(H) | 365 | 7.6 | 100 | 670 | PA66HS | Natural (NA) | 6–10 |

All dimensions in mm. Subject to technical changes.



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 temperatures up to + 105°C (heat stabilised)

• T-Series in PA66HS black

| Material Data | |
|-----------------------|--|
| Material | Polyamide 6.6 Heat Stabilised (PA66HS) |
| Operating Temperature | -40 °C to +105 °C Continuous, (+145 °C for 500 h) |
| Flammability | UL94 V2 |



Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour | Application Tool |
|-------------------------------|-----------------|------------|-----------|---------------|---------------------------|----------|------------|------------------|
| Polyamide 6.6 Heat Stabilised | | | | | | | | |
| 111-01950 | T18R | 100 | 2.5 | 22.0 | 80 | PA66HS | Black (BK) | 1–3, 5 |
| 111-02358 | T18I | 145 | | 35.0 | 80 | PA66HS | Black (BK) | 1–3, 5 |
| 111-02049 | T18L | 205 | | 55.0 | 80 | PA66HS | Black (BK) | 1–3, 5 |
| 111-03050 | T30R | 150.0 | 3.5 | 35.0 | 135 | PA66HS | Black (BK) | 1–3, 5 |
| 111-03450 | T30L | 190.0 | | 50.0 | 135 | PA66HS | Black (BK) | 1–3, 5 |
| 111-03640 | T30LL | 290 | 3.5 | 80.0 | 135 | PA66HS | Black (BK) | 1–3, 5 |
| 111-03970 | T40R | 175 | 4.0 | 40.0 | 180 | PA66HS | Black (BK) | 1–5 |
| 111-05850 | T50S | 150.0 | 4.6 | 35.0 | 225 | PA66HS | Black (BK) | 1–10 |
| 111-04940 | T50R | 200.0 | | 50.0 | 225 | PA66HS | Black (BK) | 1–10 |
| 117-05250 | T50I | 300 | 4.6 | 85.0 | 225 | PA66HS | Black (BK) | 1–10 |
| 111-05450 | T50L | 390 | 4.6 | 110 | 225 | PA66HS | Black (BK) | 1–10 |
| 117-08070 | T80R | 210.0 | 4.7 | 55.0 | 355 | PA66HS | Black (BK) | 1–10 |
| 111-08250 | T80I | 300 | | 85.0 | 355 | PA66HS | Black (BK) | 1–10 |
| 111-00388 | T80L | 390 | 4.7 | 110 | 355 | PA66HS | Black (BK) | 1–10 |
| 111-12850 | T120S | 225 | 7.6 | 55.0 | 535 | PA66HS | Black (BK) | 6–10 |
| 111-12240 | T120I | 300 | | 80.0 | 535 | PA66HS | Black (BK) | 6–10 |
| 111-12050 | T120R(E) | 387 | 7.6 | 100 | 535 | PA66HS | Black (BK) | 6–10 |
| 111-00153 | T120M | 460 | 7.6 | 130 | 535 | PA66HS | Black (BK) | 6–10 |
| 111-12700 | T120XM | 600 | 7.6 | 175 | 535 | PA66HS | Black (BK) | 6–10 |
| 111-12440 | T120L | 760 | 7.6 | 225 | 535 | PA66HS | Black (BK) | 6–10 |
| 111-15050 | T150R(H) | 365 | 7.6 | 100 | 670 | PA66HS | Black (BK) | 6–10 |
| 111-15609 | T150M | 525 | 8.9 | 150 | 780 | PA66HS | Black (BK) | 6–9 |
| 111-15410 | T150L | 820 | | 245 | 780 | PA66HS | Black (BK) | 6–9 |
| 111-15510 | T150XL | 1095 | 8.9 | 330 | 780 | PA66HS | Black (BK) | 6–9 |

All dimensions in mm. Subject to technical changes.

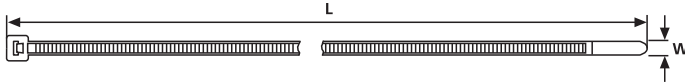


Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



Cable Ties for higher impact resistant Polyamide 6.6 ScanBlack

• T-Series in PA66HIR(S)



T18S – T255M

Material Data

| | |
|-----------------------|--|
| Material | kPolyamide 6.6 High Imp. Mod. scan black (PA66HIR(S)) |
| Operating Temperature | -40 °C to +80 °C Continuous, (+105 °C for 500 h) |
| Flammability | UL94 HB |



Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour | Application Tool |
|--|-----------------|------------|-----------|---------------|---------------------------|------------|------------|------------------|
| Polyamide 6.6 High Imp. Mod. scan black (PA66HIR(S)) | | | | | | | | |
| 111-04890 | T50R | 200 | 4.6 | 50.0 | 225 | PA66HIR(S) | Black (BK) | 1–10 |
| 111-00222 | T50I | 300 | 4.6 | 85.0 | 225 | PA66HIR(S) | Black (BK) | 1–10 |
| 111-05441 | T50L | 390 | 4.6 | 110 | 225 | PA66HIR(S) | Black (BK) | 1–10 |
| 111-12203 | T120I | 300 | 7.6 | 80.0 | 535 | PA66HIR(S) | Black (BK) | 6–10 |
| 111-00168 | T120R(E) | 387 | 7.6 | 100 | 535 | PA66HIR(S) | Black (BK) | 6–10 |
| 111-12402 | T120L | 760 | 7.6 | 225 | 535 | PA66HIR(S) | Black (BK) | 6–10 |

All dimensions in mm. Subject to technical changes.



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

| Material Data | |
|-----------------------|---|
| Material | Polyamide 6.6 V0 (PA66V0) |
| Operating Temperature | -40 °C to +85 °C Continuous, (+105 °C for 500 h) |
| Flammability | UL94 V0 |



Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour | Application Tool |
|------------------------|-----------------|------------|-----------|---------------|---------------------------|----------|------------|------------------|
| Polyamide 6.6 V0 rated | | | | | | | | |
| 111-91819 | T18R | 100 | 2.5 | 22.0 | 80 | PA66V0 | White (WH) | 1–3, 5 |
| 111-02043 | T18L | 205 | 2.5 | 55.0 | 80 | PA66V0 | White (WH) | 1–3, 5 |
| 111-93019 | T30R | 150 | 3.5 | 35.0 | 135 | PA66V0 | White (WH) | 1–3, 5 |
| 111-00317 | T50I | 300 | 4.6 | 85.0 | 225 | PA66V0 | White (WH) | 1–10 |
| 111-95019 | T50R | 200 | 4.6 | 50.0 | 225 | PA66V0 | White (WH) | 1–10 |
| 111-91210 | T120R(E) | 387 | 7.6 | 100 | 535 | PA66V0 | White (WH) | 6–10 |

All dimensions in mm. Subject to technical changes.

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

• T-Series in PA46

| Material Data | |
|-----------------------|--|
| Material | Polyamide 4.6 (PA46) |
| Operating Temperature | -40 °C to +150 °C for 5000 h, (+195 °C for 500 h) |
| Flammability | UL94 V2 |



Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour | Application Tool |
|--------------------------|-----------------|------------|-----------|---------------|---------------------------|----------|--------------|------------------|
| Polyamide 4.6 High Temp. | | | | | | | | |
| 114-01879 | T18R | 100 | 2.5 | 22.0 | 80 | PA46 | Natural (NA) | 1–3, 5 |
| 114-03079 | T30R | 150 | 3.5 | 35.0 | 135 | PA46 | Natural (NA) | 1–3, 5 |
| 111-00264 | T30R | 150 | 3.5 | 35.0 | 135 | PA46 | Grey (GY) | 1–3, 5 |
| 111-00525 | T50R | 200 | 4.6 | 50.0 | 225 | PA46 | Natural (NA) | 1–10 |
| 111-00824 | T50R | 200 | 4.6 | 50.0 | 225 | PA46 | Grey (GY) | 1–10 |
| 111-05220 | T50I | 300 | 4.6 | 85.0 | 225 | PA46 | Natural (NA) | 1–10 |
| 111-00526 | T50L | 390 | 4.6 | 110 | 225 | PA46 | Natural (NA) | 1–10 |
| 114-12179 | T120R(E) | 387 | 7.6 | 100 | 535 | PA46 | Natural (NA) | 6–10 |

All dimensions in mm. Subject to technical changes.



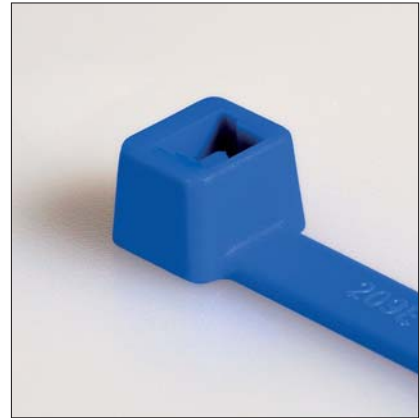
Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



Cable Ties for higher chemical resistance for temperatures up to +150°C in Ethylentetrafluorineethylen

- T-Series in E/TFE

For more information on E/TFE sockets please refer to KR-Series on page 169.



| Material Data | |
|-----------------------|--|
| Material | Ethylentetrafluorineethylen - E/TFE (Tefzel®) |
| Operating Temperature | -80 °C to +150 °C continuous |
| Flammability | UL94 V0 |



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.

Technical Table

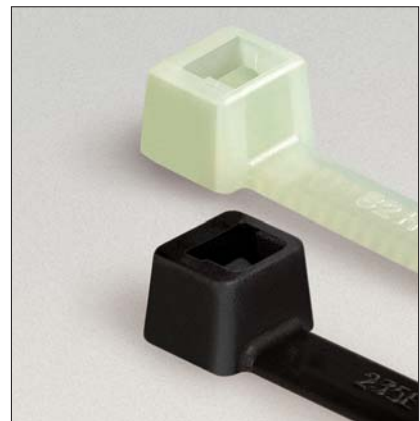
| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour | Application Tool |
|-----------------|--------------|------------|-----------|---------------|---------------------------|----------|-----------|------------------|
| E/TFE (Tefzel®) | | | | | | | | |
| 111-00659 | T18R | 100 | 2.5 | 22.0 | 80 | E/TFE | Blue (BU) | 1-3, 5 |
| 111-00698 | T30R | 150 | 3.5 | 36.0 | 133.3 | E/TFE | Blue (BU) | 1-3, 5 |
| 111-00732 | T50R | 201 | 4.7 | 50.0 | 222.3 | E/TFE | Blue (BU) | 1-10 |
| 111-00718 | T50L | 382 | 4.7 | 105 | 222.3 | E/TFE | Blue (BU) | 1-10 |
| 111-01125 | T120R | 387 | 7.4 | 105 | 535 | E/TFE | Blue (BU) | 6-10 |

All dimensions in mm. Subject to technical changes.

Cable Ties for higher chemical resistance for temperatures up to +85°C in Polypropylene

- T-Series in PP

| Material Data | |
|-----------------------|---|
| Material | Polypropylene (PP) |
| Operating Temperature | -40 °C to +85 °C Continuous, (+105 °C for 500 h) |
| Flammability | UL94 HB |



Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour | Application Tool |
|--------------------|--------------|------------|-----------|---------------|---------------------------|----------|--------------|------------------|
| Polypropylene (PP) | | | | | | | | |
| 111-01917 | T18R | 100 | 2.5 | 19.0 | 49 | PP | Black (BK) | 1-3, 5 |
| 111-01922 | T18R | 100 | 2.5 | 19.0 | 49 | PP | Natural (NA) | 1-3, 5 |
| 111-03017 | T30R | 148 | 3.6 | 32.0 | 89 | PP | Natural (NA) | 1-3, 5 |
| 111-04928 | T50R | 200 | 4.6 | 50.0 | 110 | PP | Black (BK) | 1-10 |
| 111-04931 | T50R | 200 | 4.6 | 50.0 | 110 | PP | Natural (NA) | 1-10 |
| 111-12827 | T120S | 225 | 7.6 | 55.0 | 267 | PP | Black (BK) | 6-10 |
| 111-12066 | T120R | 387 | 7.6 | 100 | 267 | PP | Black (BK) | 6-10 |

All dimensions in mm. Subject to technical changes.



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 food industry, detectable

• MCT-Series

HACCP (Hazard Analysis of Critical Control Points) is a directive of the EU, developed by the Codex Alimentarius of the World Health Organisation. This demands that effective food safety systems are established through the application of systematic approaches to hazard and risk analysis.

Features and Benefits

The MCT ties have metal content dispersed throughout the head and strap of the cable tie. These ties can be used as part of the HACCP process. The 'unique' blue colour assists in the visual detection and greatly reduces the risk of contamination.

Application

The Metal Content Tie is a cable tie specifically designed for use in the food & pharmaceutical processing industries. A unique manufacturing process, involving the inclusion of a metallic pigment, enables even small 'cut-off' sections of the tie to be detected by standard metal detecting equipment. Ideally suited for the installation of cabling in and around the manufacturing process.

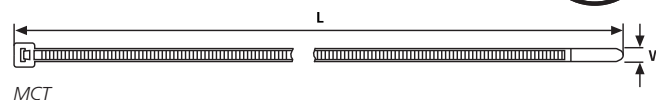


The MCT with metal content.



A safe and contamination free production process with MCT.

| Material Data | |
|-----------------------|---|
| Material | Polyamide 6.6 with metal particles (PA66MP) |
| Colour | Blue (BU) |
| Operating Temperature | -40 °C to +85 °C Continuous, (+105 °C for 500 h) |
| Flammability | UL94 HB |



MCT

| Technical Table | | | | | | |
|-----------------|------------------|------------|-----------|---------------|---------------------------|------------------|
| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Application Tool |
| 111-01225 | MCT18R | 100 | 2.5 | 22 | 80 | 1-3, 5 |
| 111-00829 | MCT30R | 150 | 3.5 | 35 | 135 | 1-10 |
| 111-00830 | MCT50R | 200 | 4.6 | 50 | 225 | 1-10 |
| 111-00831 | MCT50L | 390 | 4.7 | 110 | 225 | 1-10 |
| 111-01136 | MCT120R | 380 | 7.6 | 100 | 535 | 6-10 |
| Releasable | | | | | | |
| 111-00937 | MCTRELK2M | 250 | 4.6 | 65 | 225 | 1-10 |

All dimensions in mm. Subject to technical changes.

*HACCP = Hazard Analysis Critical Control Points HACCP stands for Hazard Analysis Critical Control Points. It is a method of identifying and eliminating potential hazards in food production. Those hazards that cannot be eliminated are controlled in such a way that the consumer is protected. These controls are known as Critical Control Points (CCPs). They are CRITICAL because if they fail or are not carried out, the risk of the product harming the customer, increases.



Cable Ties in-between size to T-Series

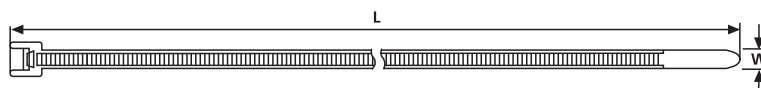
• LK-Series

Features and Benefits

Available in a wide range of materials, these cable ties all feature internal serrations allowing for a positive hold onto cable, hose and pipe bundles. The design of the head guarantees a high tensile strength whilst allowing a very low insertion force, this, combined with the bent tail design of many of the ties ensures a simple and quick installation. Whilst easily installed by hand manual, and pneumatic (for high volume applications) tensioning tools are available to ensure a consistent and safe installation.

Application

For routing, bundling and securing of cables, pipes and hoses.



LK Series Industrial Ties

| Material Data | |
|-----------------------|---|
| Material | Polyamide 6.6 UV Resistant (PA66W) |
| Operating Temperature | -40 °C to +85 °C Continuous, (+105 °C for 500 h) |
| Flammability | UL94 V2 |



| Material Data | |
|-----------------------|--|
| Material | Polyamide 6.6 Heat Stabilised (PA66HS) |
| Operating Temperature | -40 °C to +105 °C Continuous, (+145 °C for 500 h) |
| Flammability | UL94 V2 |



| Material Data | |
|-----------------------|---|
| Material | Polyamide 6.6 High Imp. Mod. scan black (PA66HIR(S)) |
| Operating Temperature | -40 °C to +80 °C Continuous, (+105 °C for 500 h) |
| Flammability | UL94 HB |



| Material Data | |
|-----------------------|---|
| Material | Polyamide 6.6 (PA66) |
| Operating Temperature | -40 °C to +85 °C Continuous, (+105 °C for 500 h) |
| Flammability | UL94 V2 |



Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour | Application Tool |
|-------------|------|------------|-----------|---------------|---------------------------|------------|--------------|------------------|
| LK2 | | | | | | | | |
| 111-60219 | LK2 | 120 | 4.8 | 28.0 | 135 | PA66 | Natural (NA) | 1-10 |
| 111-60210 | LK2 | 120 | 4.8 | 28.0 | 135 | PA66 | Black (BK) | 1-10 |
| LK2A | | | | | | | | |
| 111-60119 | LK2A | 270 | 4.6 | 73.0 | 225 | PA66 | Natural (NA) | 1-10 |
| 111-60110 | LK2A | 270.0 | 4.6 | 73.0 | 225 | PA66 | Black (BK) | 1-10 |
| 111-60160 | LK2A | 270 | 4.6 | 73.0 | 225 | PA66W | Black (BK) | 1-10 |
| 111-60159 | LK2A | 270 | 4.6 | 73.0 | 225 | PA66HS | Natural (NA) | 1-10 |
| 111-60150 | LK2A | 270.0 | 4.6 | 73.0 | 225 | PA66HS | Black (BK) | 1-10 |
| 111-00127 | LK2A | 270 | 4.6 | 73.0 | 225 | PA66HIR(S) | Black (BK) | 1-10 |
| LK5 | | | | | | | | |
| 111-60519 | LK5 | 535 | 13.2 | 150 | 1115 | PA66 | Natural (NA) | 8, 9 |
| 111-60510 | LK5 | 535 | 13.2 | 150 | 1115 | PA66 | Black (BK) | 8, 9 |
| 111-60560 | LK5 | 535 | 13.2 | 150 | 1115 | PA66W | Black (BK) | 8, 9 |
| 111-60559 | LK5 | 535 | 13.2 | 150 | 1115 | PA66HS | Natural (NA) | 8, 9 |
| 111-60501 | LK5 | 535 | 13.2 | 150 | 1115 | PA66HIR(S) | Black (BK) | 8, 9 |

All dimensions in mm. Subject to technical changes.



Please note! Not all products listed on this page may have this approval.

For product specific approvals please refer to the Appendix.

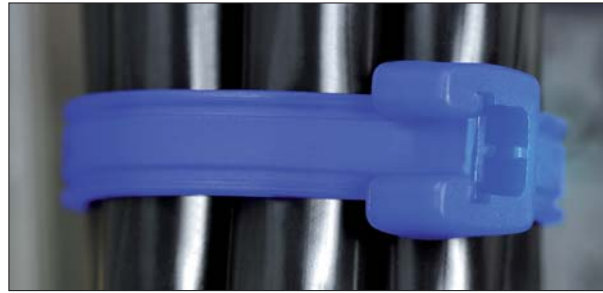


Q-tie Cable Tie

Innovative – Effective – Safe!

The new Q-tie has not only an innovative but also a revolutionary design. The open head of the cable tie enables a simple and quick installation. Just insert the ergonomically bent tail into the open side of the head and tighten the cable tie.

With Q-ties you can save time and money!



The head design makes the difference.

Easy application for every situation!

Q-tie is the perfect product solution for applications under difficult working conditions. It is designed for use in applications where working with gloves is necessary or for blind applications with a limited view of the work.

The new Q-tie allows a quick and simple installation even with work gloves and restricted view.

Features for quick and easy application:

- Curved and large ribbed tail
- Open head with easy detectable slot

This saves time and trouble!



Even under difficult circumstances the Q-ties are very fast and easy to apply.

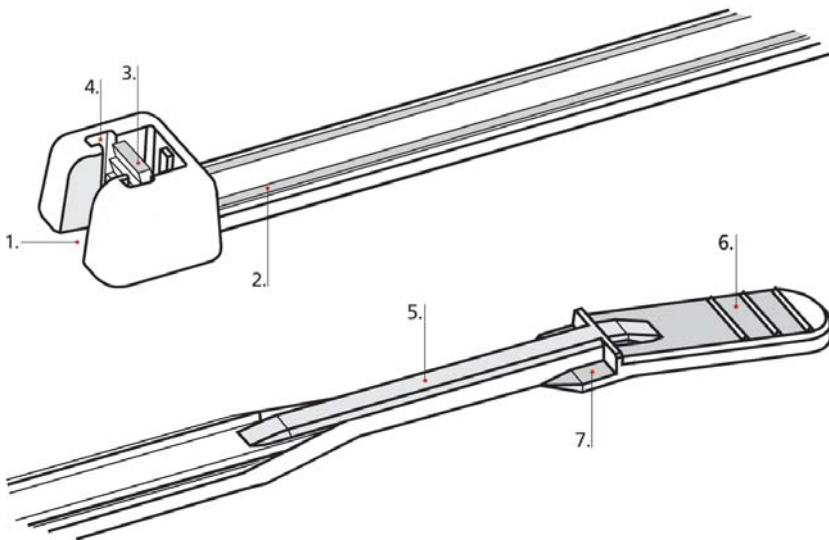
Integrated Pre-Locking Functionality!

Due to several simultaneous working processes, it is not always possible to install all cables and conduits in one single step. Thus, working with standard cable ties means either destroying the cable tie of the first installation or applying additional cable ties. The integrated pre-locking function of the Q-tie offers the ability of a temporary and final cable fastening solution.

This saves material and time!



Without additional effort only Q-ties can be used for temporary and final cable bundling.

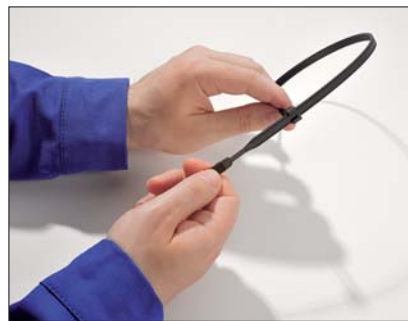


1. Open lock head for quick and easy insertion.
2. Two rails on the strap ensure a perfect guidance for the tracks in the head.
3. The locking device interacts safely with the serration of the cable tie.
4. The tracks prevent a deformation of the head under load.
5. The thin part of the cable tie can be simply placed into the open lock head.
6. The large ribbed tail allows a safe and ergonomic installation.
7. Integrated pre locking feature (starts with type Q30).

Application Method:



1. Insert the thin part of the cable tie into the open lock head.



2. Pull the tie through the head until the bundle is fixed.
3. Cut off the remaining part of the tie with an application tool.

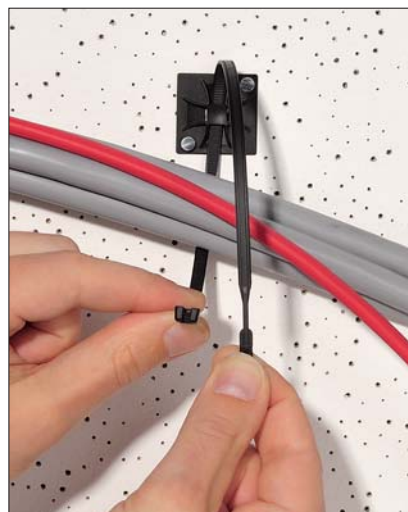


Please find more Q-Series products for your system solution on page 166 and 508.

Pre-locking Function of the Q-tie:



1. Insert tail into lock head and push tail partly in the head.



2. To release the tie push tail end slightly out of head.



3. If installation is finished, Q-tie can be tightened and cut off - either manually or with an application tool.



Cable ties with open head

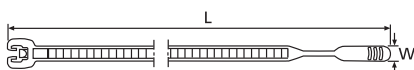
- Q-ties, Polyamide 6.6 (PA66), natural and black

| Application Tool | Registration Numbers |
|------------------|----------------------|
| MK3SP | 1 |
| MK3PNSP2, MK7P | 2 |
| MK7 | 3 |
| MK7HT | 4 |
| MK20 | 5 |
| MK6 | 6 |
| MK9P | 7 |
| MK9 | 8 |
| MK9HT | 9 |
| MK21 | 10 |

For detailed information on Application Tools please refer to page 561.



Q-tie cable ties: choose from a wide product range in different materials.



Q-tie cable tie

| Material Data | |
|-----------------------|---|
| Material | Polyamide 6.6 (PA66) |
| Colour | Natural (NA), Black (BK) |
| Operating Temperature | -40 °C to +85 °C Continuous, (+105 °C for 500 h) |
| Flammability | UL94 V2 |



Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour | Application Tool |
|----------------------|-------|------------|-----------|---------------|---------------------------|----------|--------------|------------------|
| Polyamide 6.6 (PA66) | | | | | | | | |
| 109-00001 | Q18R | 105 | 2.6 | 24.0 | 80 | PA66 | Natural (NA) | 1-5 |
| 109-00004 | Q18I | 155 | 2.6 | 40.0 | 80 | PA66 | Natural (NA) | 1-5 |
| 109-00007 | Q18L | 195 | 2.6 | 50.0 | 80 | PA66 | Natural (NA) | 1-5 |
| 109-00010 | Q30R | 160 | 3.6 | 38.0 | 130 | PA66 | Natural (NA) | 1-5 |
| 109-00012 | Q30L | 200 | 3.6 | 50.0 | 130 | PA66 | Natural (NA) | 1-5 |
| 109-00014 | Q30LR | 250 | 3.6 | 65.0 | 130 | PA66 | Natural (NA) | 1-5 |
| 109-00018 | Q50R | 210 | 4.7 | 50.0 | 220 | PA66 | Natural (NA) | 1-10 |
| 109-00020 | Q50I | 290 | 4.7 | 75.0 | 220 | PA66 | Natural (NA) | 1-10 |
| 109-00022 | Q50L | 410 | 4.7 | 110.0 | 220 | PA66 | Natural (NA) | 1-10 |
| 109-00024 | Q120I | 300 | 7.7 | 70.0 | 530 | PA66 | Natural (NA) | 6-10 |
| 109-00026 | Q120R | 420 | 7.7 | 110.0 | 530 | PA66 | Natural (NA) | 6-10 |
| 109-00028 | Q120M | 520 | 7.7 | 145.0 | 530 | PA66 | Natural (NA) | 6-10 |
| 109-00030 | Q18R | 105 | 2.6 | 24.0 | 80 | PA66 | Black (BK) | 1-5 |
| 109-00033 | Q18I | 155 | 2.6 | 40.0 | 80 | PA66 | Black (BK) | 1-5 |
| 109-00036 | Q18L | 195 | 2.6 | 50.0 | 80 | PA66 | Black (BK) | 1-5 |
| 109-00039 | Q30R | 160 | 3.6 | 38.0 | 130 | PA66 | Black (BK) | 1-5 |
| 109-00041 | Q30L | 200 | 3.6 | 50.0 | 130 | PA66 | Black (BK) | 1-5 |
| 109-00043 | Q30LR | 250 | 3.6 | 65.0 | 130 | PA66 | Black (BK) | 1-5 |
| 109-00047 | Q50R | 210 | 4.7 | 50.0 | 220 | PA66 | Black (BK) | 1-10 |
| 109-00049 | Q50I | 290 | 4.7 | 75.0 | 220 | PA66 | Black (BK) | 1-10 |
| 109-00051 | Q50L | 410 | 4.7 | 110.0 | 220 | PA66 | Black (BK) | 1-10 |
| 109-00053 | Q120I | 300 | 7.7 | 70.0 | 530 | PA66 | Black (BK) | 6-10 |
| 109-00055 | Q120R | 420 | 7.7 | 110.0 | 530 | PA66 | Black (BK) | 6-10 |
| 109-00057 | Q120M | 520 | 7.7 | 145.0 | 530 | PA66 | Black (BK) | 6-10 |

All dimensions in mm. Subject to technical changes.



Cable ties with open head

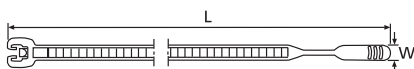
- Q-ties, Polyamide 6.6 UV-resistant (PA66W), black

| Application Tool | Registration Numbers |
|------------------|----------------------|
| MK3SP | 1 |
| MK3PNSP2, MK7P | 2 |
| MK7 | 3 |
| MK7HT | 4 |
| MK20 | 5 |
| MK6 | 6 |
| MK9P | 7 |
| MK9 | 8 |
| MK9HT | 9 |
| MK21 | 10 |

For detailed information on Application Tools please refer to page 561.



Q-tie cable ties: choose from a wide product range in different materials.



Q-tie cable tie

| Material Data | |
|-----------------------|--|
| Material | Polyamide 6.6 UV Resistant (PA66W) |
| Colour | Black (BK) |
| Operating Temperature | -40 °C to +85 °C Continuous, (+105 °C for 500 h) |
| Flammability | UL94 V2 |



Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour | Application Tool |
|-----------------------------|-------|------------|-----------|---------------|---------------------------|----------|------------|------------------|
| Polyamide 6.6 UV Stabilised | | | | | | | | |
| 109-00059 | Q18R | 105 | 2.6 | 24.0 | 80 | PA66W | Black (BK) | 1-5 |
| 109-00062 | Q18I | 155 | 2.6 | 40.0 | 80 | PA66W | Black (BK) | 1-5 |
| 109-00065 | Q18L | 195 | 2.6 | 50.0 | 80 | PA66W | Black (BK) | 1-5 |
| 109-00068 | Q30R | 160 | 3.6 | 38.0 | 130 | PA66W | Black (BK) | 1-5 |
| 109-00070 | Q30L | 200 | 3.6 | 50.0 | 130 | PA66W | Black (BK) | 1-5 |
| 109-00072 | Q30LR | 250 | 3.6 | 65.0 | 130 | PA66W | Black (BK) | 1-5 |
| 109-00076 | Q50R | 210 | 4.7 | 50.0 | 220 | PA66W | Black (BK) | 1-10 |
| 109-00078 | Q50I | 290 | 4.7 | 75.0 | 220 | PA66W | Black (BK) | 1-10 |
| 109-00080 | Q50L | 410 | 4.7 | 110.0 | 220 | PA66W | Black (BK) | 1-10 |
| 109-00082 | Q120I | 300 | 7.7 | 70.0 | 530 | PA66W | Black (BK) | 6-10 |
| 109-00084 | Q120R | 420 | 7.7 | 110.0 | 530 | PA66W | Black (BK) | 6-10 |
| 109-00086 | Q120M | 520 | 7.7 | 145.0 | 530 | PA66W | Black (BK) | 6-10 |

All dimensions in mm. Subject to technical changes.



Please find more Q-Series products for your system solution on page 166 and 508.



Cable ties with open head

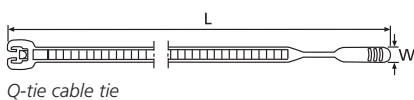
- Q-ties, Polyamide 6.6 heat stabilised (PA66HS), natural and black

| Application Tool | Registration Numbers |
|------------------|----------------------|
| MK3SP | 1 |
| MK3PNSP2, MK7P | 2 |
| MK7 | 3 |
| MK7HT | 4 |
| MK20 | 5 |
| MK6 | 6 |
| MK9P | 7 |
| MK9 | 8 |
| MK9HT | 9 |
| MK21 | 10 |

For detailed information on Application Tools please refer to page 561.



Q-tie cable ties: choose from a wide product range in different materials.



Q-tie cable tie

| Material Data | |
|-----------------------|---|
| Material | Polyamide 6.6 Heat Stabilised (PA66HS) |
| Colour | Natural (NA), Black (BK) |
| Operating Temperature | -40 °C to +105 °C Continuous, (+145 °C for 500 h) |
| Flammability | UL94 V2 |



Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour | Application Tool |
|-------------------------------|-------|------------|-----------|---------------|---------------------------|----------|--------------|------------------|
| Polyamide 6.6 Heat Stabilised | | | | | | | | |
| 109-00088 | Q18R | 105 | 2.6 | 24.0 | 80 | PA66HS | Black (BK) | 1-5 |
| 109-00091 | Q18I | 155 | 2.6 | 40.0 | 80 | PA66HS | Black (BK) | 1-5 |
| 109-00094 | Q18L | 195 | 2.6 | 50.0 | 80 | PA66HS | Black (BK) | 1-5 |
| 109-00097 | Q30R | 160 | 3.6 | 38.0 | 130 | PA66HS | Black (BK) | 1-5 |
| 109-00099 | Q30L | 200 | 3.6 | 50.0 | 130 | PA66HS | Black (BK) | 1-5 |
| 109-00101 | Q30LR | 250 | 3.6 | 65.0 | 130 | PA66HS | Black (BK) | 1-5 |
| 109-00105 | Q50R | 210 | 4.7 | 50.0 | 220 | PA66HS | Black (BK) | 1-10 |
| 109-00107 | Q50I | 290 | 4.7 | 75.0 | 220 | PA66HS | Black (BK) | 1-10 |
| 109-00109 | Q50L | 410 | 4.7 | 110.0 | 220 | PA66HS | Black (BK) | 1-10 |
| 109-00111 | Q120I | 300 | 7.7 | 70.0 | 530 | PA66HS | Black (BK) | 6-10 |
| 109-00113 | Q120R | 420 | 7.7 | 110.0 | 530 | PA66HS | Black (BK) | 6-10 |
| 109-00115 | Q120M | 520 | 7.7 | 145.0 | 530 | PA66HS | Black (BK) | 6-10 |
| 109-00117 | Q18R | 105 | 2.6 | 24.0 | 80 | PA66HS | Natural (NA) | 1-5 |
| 109-00120 | Q18I | 155 | 2.6 | 40.0 | 80 | PA66HS | Natural (NA) | 1-5 |
| 109-00123 | Q18L | 195 | 2.6 | 50.0 | 80 | PA66HS | Natural (NA) | 1-5 |
| 109-00126 | Q30R | 160 | 3.6 | 38.0 | 130 | PA66HS | Natural (NA) | 1-5 |
| 109-00128 | Q30L | 200 | 3.6 | 50.0 | 130 | PA66HS | Natural (NA) | 1-5 |
| 109-00130 | Q30LR | 250 | 3.6 | 65.0 | 130 | PA66HS | Natural (NA) | 1-5 |
| 109-00134 | Q50R | 210 | 4.7 | 50.0 | 220 | PA66HS | Natural (NA) | 1-10 |
| 109-00136 | Q50I | 290 | 4.7 | 75.0 | 220 | PA66HS | Natural (NA) | 1-10 |
| 109-00138 | Q50L | 410 | 4.7 | 110.0 | 220 | PA66HS | Natural (NA) | 1-10 |
| 109-00140 | Q120I | 300 | 7.7 | 70.0 | 530 | PA66HS | Natural (NA) | 6-10 |
| 109-00142 | Q120R | 420 | 7.7 | 110.0 | 530 | PA66HS | Natural (NA) | 6-10 |
| 109-00144 | Q120M | 520 | 7.7 | 145.0 | 530 | PA66HS | Natural (NA) | 6-10 |

All dimensions in mm. Subject to technical changes.

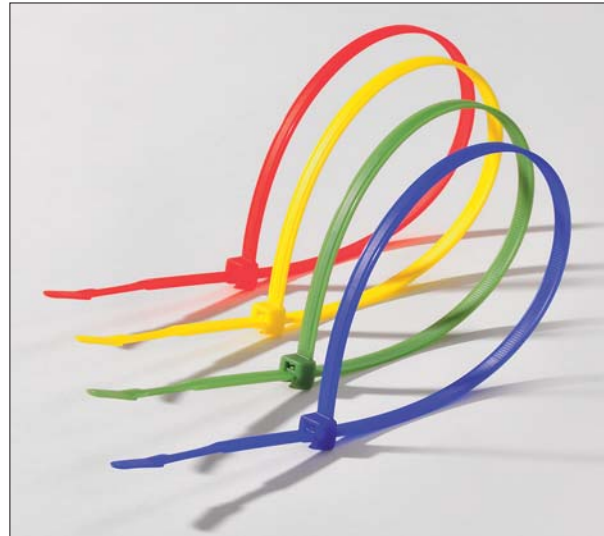


Cable ties with open head

- Q-ties, Polyamide 6.6 (PA66), coloured

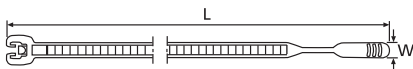
| Application Tool | Registration Numbers |
|------------------|----------------------|
| MK3SP | 1 |
| MK3PNSP2, MK7P | 2 |
| MK7 | 3 |
| MK7HT | 4 |
| MK20 | 5 |
| MK6 | 6 |
| MK9P | 7 |
| MK9 | 8 |
| MK9HT | 9 |
| MK21 | 10 |

For detailed information on Application Tools please refer to page 561.



Q-ties in different colours are ideal for marking and bundling in one step.

Please find more Q-Series products for your system solution on page 166 and 508.



Q-tie cable tie

| Material Data | |
|-----------------------|--|
| Material | Polyamide 6.6 (PA66) |
| Colour | Brown (BN), Blue (BU), Green (GN), Red (RD), Yellow (YE) |
| Operating Temperature | -40 °C to +85 °C Continuous, (+105 °C for 500 h) |
| Flammability | UL94 V2 |



Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour | Application Tool |
|-----------------------|------|------------|-----------|---------------|---------------------------|----------|-------------|------------------|
| Polyamide 6.6 Colours | | | | | | | | |
| 109-00146 | Q18R | 105 | 2.6 | 24.0 | 80 | PA66 | Brown (BN) | 1-5 |
| 109-00147 | Q18R | 105 | 2.6 | 24.0 | 80 | PA66 | Blue (BU) | 1-5 |
| 109-00148 | Q18R | 105 | 2.6 | 24.0 | 80 | PA66 | Green (GN) | 1-5 |
| 109-00149 | Q18R | 105 | 2.6 | 24.0 | 80 | PA66 | Red (RD) | 1-5 |
| 109-00150 | Q18R | 105 | 2.6 | 24.0 | 80 | PA66 | Yellow (YE) | 1-5 |
| 109-00151 | Q18I | 155 | 2.6 | 40.0 | 80 | PA66 | Brown (BN) | 1-5 |
| 109-00152 | Q18I | 155 | 2.6 | 40.0 | 80 | PA66 | Blue (BU) | 1-5 |
| 109-00153 | Q18I | 155 | 2.6 | 40.0 | 80 | PA66 | Green (GN) | 1-5 |
| 109-00154 | Q18I | 155 | 2.6 | 40.0 | 80 | PA66 | Red (RD) | 1-5 |
| 109-00155 | Q18I | 155 | 2.6 | 40.0 | 80 | PA66 | Yellow (YE) | 1-5 |
| 109-00156 | Q18L | 195 | 2.6 | 50.0 | 80 | PA66 | Brown (BN) | 1-5 |
| 109-00157 | Q18L | 195 | 2.6 | 50.0 | 80 | PA66 | Blue (BU) | 1-5 |
| 109-00158 | Q18L | 195 | 2.6 | 50.0 | 80 | PA66 | Green (GN) | 1-5 |
| 109-00159 | Q18L | 195 | 2.6 | 50.0 | 80 | PA66 | Red (RD) | 1-5 |
| 109-00160 | Q18L | 195 | 2.6 | 50.0 | 80 | PA66 | Yellow (YE) | 1-5 |
| 109-00161 | Q30R | 160 | 3.6 | 38.0 | 130 | PA66 | Brown (BN) | 1-5 |
| 109-00162 | Q30R | 160 | 3.6 | 38.0 | 130 | PA66 | Blue (BU) | 1-5 |
| 109-00163 | Q30R | 160 | 3.6 | 38.0 | 130 | PA66 | Green (GN) | 1-5 |
| 109-00164 | Q30R | 160 | 3.6 | 38.0 | 130 | PA66 | Red (RD) | 1-5 |
| 109-00165 | Q30R | 160 | 3.6 | 38.0 | 130 | PA66 | Yellow (YE) | 1-5 |
| 109-00166 | Q30L | 200 | 3.6 | 50.0 | 130 | PA66 | Brown (BN) | 1-5 |
| 109-00167 | Q30L | 200 | 3.6 | 50.0 | 130 | PA66 | Blue (BU) | 1-5 |
| 109-00168 | Q30L | 200 | 3.6 | 50.0 | 130 | PA66 | Green (GN) | 1-5 |
| 109-00169 | Q30L | 200 | 3.6 | 50.0 | 130 | PA66 | Red (RD) | 1-5 |
| 109-00170 | Q30L | 200 | 3.6 | 50.0 | 130 | PA66 | Yellow (YE) | 1-5 |

All dimensions in mm. Subject to technical changes.

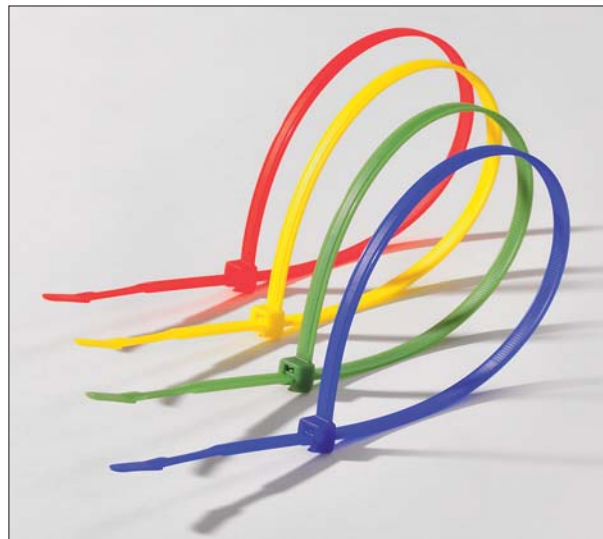


Cable ties with open head

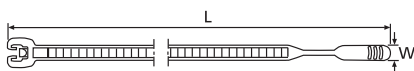
- Q-ties, Polyamide 6.6 (PA66), coloured

| Application Tool | Registration Numbers |
|------------------|----------------------|
| MK3SP | 1 |
| MK3PNSP2, MK7P | 2 |
| MK7 | 3 |
| MK7HT | 4 |
| MK20 | 5 |
| MK6 | 6 |
| MK9P | 7 |
| MK9 | 8 |
| MK9HT | 9 |
| MK21 | 10 |

For detailed information on Application Tools please refer to page 561.



Q-ties in different colours are ideal for marking and bundling in one step.



Q-tie cable tie

| Material Data | |
|-----------------------|---|
| Material | Polyamide 6.6 (PA66) |
| Colour | Brown (BN), Blue (BU), Green (GN), Red (RD), Yellow (YE) |
| Operating Temperature | -40 °C to +85 °C Continuous, (+105 °C for 500 h) |
| Flammability | UL94 V2 |



Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour | Application Tool |
|-----------------------|-------|------------|-----------|---------------|---------------------------|----------|-------------|------------------|
| Polyamide 6.6 Colours | | | | | | | | |
| 109-00171 | Q30LR | 250 | 3.6 | 65.0 | 130 | PA66 | Brown (BN) | 1-5 |
| 109-00172 | Q30LR | 250 | 3.6 | 65.0 | 130 | PA66 | Blue (BU) | 1-5 |
| 109-00173 | Q30LR | 250 | 3.6 | 65.0 | 130 | PA66 | Green (GN) | 1-5 |
| 109-00174 | Q30LR | 250 | 3.6 | 65.0 | 130 | PA66 | Red (RD) | 1-5 |
| 109-00175 | Q30LR | 250 | 3.6 | 65.0 | 130 | PA66 | Yellow (YE) | 1-5 |
| 109-00181 | Q50R | 210 | 4.7 | 50.0 | 220 | PA66 | Brown (BN) | 1-10 |
| 109-00182 | Q50R | 210 | 4.7 | 50.0 | 220 | PA66 | Blue (BU) | 1-10 |
| 109-00183 | Q50R | 210 | 4.7 | 50.0 | 220 | PA66 | Green (GN) | 1-10 |
| 109-00184 | Q50R | 210 | 4.7 | 50.0 | 220 | PA66 | Red (RD) | 1-10 |
| 109-00185 | Q50R | 210 | 4.7 | 50.0 | 220 | PA66 | Yellow (YE) | 1-10 |
| 109-00186 | Q50I | 290 | 4.7 | 75.0 | 220 | PA66 | Brown (BN) | 1-10 |
| 109-00187 | Q50I | 290 | 4.7 | 75.0 | 220 | PA66 | Blue (BU) | 1-10 |
| 109-00188 | Q50I | 290 | 4.7 | 75.0 | 220 | PA66 | Green (GN) | 1-10 |
| 109-00189 | Q50I | 290 | 4.7 | 75.0 | 220 | PA66 | Red (RD) | 1-10 |
| 109-00190 | Q50I | 290 | 4.7 | 75.0 | 220 | PA66 | Yellow (YE) | 1-10 |
| 109-00191 | Q50L | 410 | 4.7 | 110.0 | 220 | PA66 | Brown (BN) | 1-10 |
| 109-00192 | Q50L | 410 | 4.7 | 110.0 | 220 | PA66 | Blue (BU) | 1-10 |
| 109-00193 | Q50L | 410 | 4.7 | 110.0 | 220 | PA66 | Green (GN) | 1-10 |
| 109-00194 | Q50L | 410 | 4.7 | 110.0 | 220 | PA66 | Red (RD) | 1-10 |
| 109-00195 | Q50L | 410 | 4.7 | 110.0 | 220 | PA66 | Yellow (YE) | 1-10 |

All dimensions in mm. Subject to technical changes.

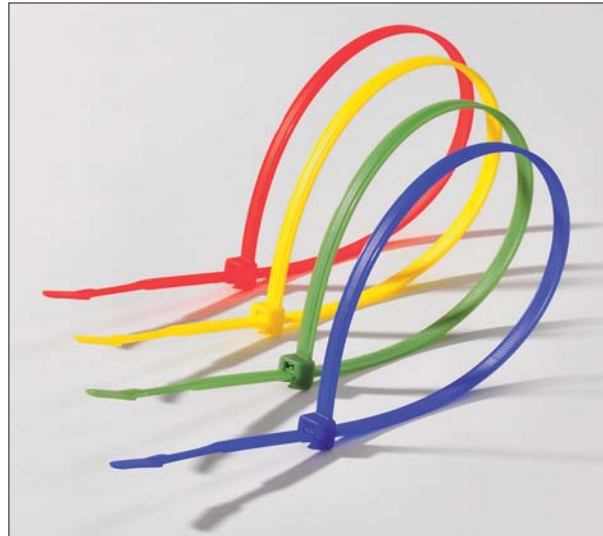


Cable ties with open head

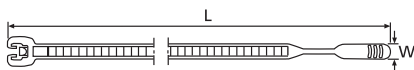
- Q-ties, Polyamide 6.6 (PA66), coloured

| Application Tool | Registration Numbers |
|------------------|----------------------|
| MK3SP | 1 |
| MK3PNSP2, MK7P | 2 |
| MK7 | 3 |
| MK7HT | 4 |
| MK20 | 5 |
| MK6 | 6 |
| MK9P | 7 |
| MK9 | 8 |
| MK9HT | 9 |
| MK21 | 10 |

For detailed information on Application Tools please refer to page 561.



Q-ties in different colours are ideal for marking and bundling in one step.



Q-tie cable tie

Material Data

| | |
|-----------------------|---|
| Material | Polyamide 6.6 (PA66) |
| Colour | Brown (BN), Blue (BU), Green (GN), Red (RD), Yellow (YE) |
| Operating Temperature | -40 °C to +85 °C Continuous, (+105 °C for 500 h) |
| Flammability | UL94 V2 |



Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour | Application Tool |
|-----------------------|-------|------------|-----------|---------------|---------------------------|----------|-------------|------------------|
| Polyamide 6.6 Colours | | | | | | | | |
| 109-00196 | Q120I | 300 | 7.7 | 70.0 | 530 | PA66 | Brown (BN) | 6-10 |
| 109-00197 | Q120I | 300 | 7.7 | 70.0 | 530 | PA66 | Blue (BU) | 6-10 |
| 109-00198 | Q120I | 300 | 7.7 | 70.0 | 530 | PA66 | Green (GN) | 6-10 |
| 109-00199 | Q120I | 300 | 7.7 | 70.0 | 530 | PA66 | Red (RD) | 6-10 |
| 109-00200 | Q120I | 300 | 7.7 | 70.0 | 530 | PA66 | Yellow (YE) | 6-10 |
| 109-00201 | Q120R | 420 | 7.7 | 110.0 | 530 | PA66 | Brown (BN) | 6-10 |
| 109-00202 | Q120R | 420 | 7.7 | 110.0 | 530 | PA66 | Blue (BU) | 6-10 |
| 109-00203 | Q120R | 420 | 7.7 | 110.0 | 530 | PA66 | Green (GN) | 6-10 |
| 109-00204 | Q120R | 420 | 7.7 | 110.0 | 530 | PA66 | Red (RD) | 6-10 |
| 109-00205 | Q120R | 420 | 7.7 | 110.0 | 530 | PA66 | Yellow (YE) | 6-10 |
| 109-00206 | Q120M | 520 | 7.7 | 145.0 | 530 | PA66 | Brown (BN) | 6-10 |
| 109-00207 | Q120M | 520 | 7.7 | 145.0 | 530 | PA66 | Blue (BU) | 6-10 |
| 109-00208 | Q120M | 520 | 7.7 | 145.0 | 530 | PA66 | Green (GN) | 6-10 |
| 109-00209 | Q120M | 520 | 7.7 | 145.0 | 530 | PA66 | Red (RD) | 6-10 |
| 109-00210 | Q120M | 520 | 7.7 | 145.0 | 530 | PA66 | Yellow (YE) | 6-10 |

All dimensions in mm. Subject to technical changes.



Please find more Q-Series products for your system solution on page 166 and 508.



Cable Ties for heavy duty application

• **Wide Strap Cable Ties**

Features and Benefits

The wide strap cable tie minimizes pinching on soft bundles and features a low profile head to provide compact bundling. A thinner strap provides increased flexibility for improved ergonomics.

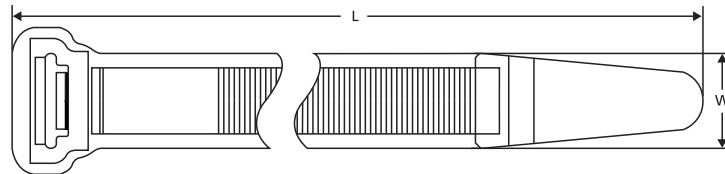
- Wide strap is designed to minimize pinching of soft hoses and convoluted tubing.
- Low profile head.
- Clamping rails on the bottom of head to increase grip on round bundles.
- Accommodates a large range of bundle diameters: 9.5mm - 104mm.
- Flexible strap.



The wide strap cable tie accommodates a large range of bundle diameters: 9.5mm - 104mm.

Application

The very flexible wide strap is used in heavy-duty application where limited room is offered for the application. It is therefore a valued product in all areas of the mass transit and construction industry.



Wide Strap Heavy Duty Cable Ties

| Application Tool | Registration Numbers |
|------------------|----------------------|
| MK3SP | 1 |
| MK3PNSP2, MK7P | 2 |
| MK7 | 3 |
| MK7HT | 4 |
| MK20 | 5 |
| MK6 | 6 |
| MK9P | 7 |
| MK9 | 8 |
| MK9HT | 9 |
| MK21 | 10 |

For detailed information on Application Tools please refer to page 561.

These cable ties can also be used with the new heavy duty mounts (up from page 175).

| Material Data | |
|-----------------------|--|
| Material | Polyamide 6.6 High Imp. Mod., Heat Stab. (PA66HIRHS) |
| Operating Temperature | -40 °C to +110 °C continuous |
| Flammability | UL94 HB |



Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour | Application Tool |
|-------------|------|------------|-----------|---------------|---------------------------|-----------|------------|------------------|
| 111-12300 | WSS | 230 | 12.7 | 55.0 | 534 | PA66HIRHS | Black (BK) | 7-9 |
| 111-12301 | WSI | 305 | 12.7 | 80.0 | 534 | PA66HIRHS | Black (BK) | 7-9 |
| 111-12302 | WSR | 380 | 12.7 | 100 | 534 | PA66HIRHS | Black (BK) | 7-9 |

All dimensions in mm. Subject to technical changes.



Cable Ties for hose and gaiter

- CTT-Series up to 265 N loop tensile strength
- HT-Series up to 535 N loop tensile strength

Features and Benefits

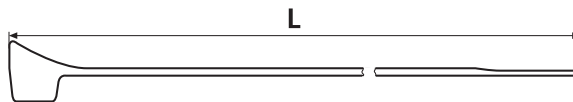
The curved design of the head ensures a seal around the full circumference of the hose/gaiter giving excellent protection against the ingress of water or dirt. For optimum sealing performance it is recommended that the correct HellermannTyton application tool is used. Both hand operated and pneumatic tools are available.

Application

Designed to secure pipes, hoses and gaiters, where low pressures are being secured. These ties can be used in many industries, including: automotive, white goods manufacturers and construction.





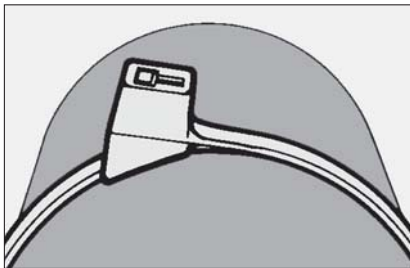
CTT ties installed on flexible gaiters.



CTT Hose Ties



| Material Data | |
|-----------------------|---|
| Material | Polyamide 6.6 (PA66) |
| Operating Temperature | -40 °C to +85 °C Continuous, (+105 °C for 500 h) |
| Flammability | UL94 V2 |





For secure fixing of round and solid shapes.

| Material Data | |
|-----------------------|--|
| Material | Polyamide 6.6 Heat and UV Stabilised (PA66HSW) |
| Operating Temperature | -40 °C to +105 °C Continuous, (+145 °C for 500 h) |
| Flammability | UL94 V2 |

| Material Data | |
|-----------------------|--|
| Material | Polyamide 6.6 Heat Stabilised (PA66HS) |
| Operating Temperature | -40 °C to +105 °C Continuous, (+145 °C for 500 h) |
| Flammability | UL94 V2 |

Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour | Application Tool |
|-------------|---------------|------------|-----------|---------------|---------------------------|----------|--------------|------------------|
| CTT20R | | | | | | | | |
| 112-51919 | CTT20R | 100 | 2.5 | 13.0 | 90 | PA66 | Natural (NA) | 1-3, 5 |
| 112-51960 | CTT20R | 100 | 2.5 | 13.0 | 90 | PA66HS | Black (BK) | 1-3, 5 |
| CTT60R | | | | | | | | |
| 112-56019 | CTT60R | 205 | 4.7 | 45.0 | 265 | PA66 | Natural (NA) | 1-10 |
| 112-56060 | CTT60R | 205 | 4.7 | 45.0 | 265 | PA66HSW | Black (BK) | 1-10 |
| HT120R | | | | | | | | |
| 112-00100 | HT120R | 340 | 7.6 | 90.0 | 535 | PA66HS | Black (BK) | 6-10 |

All dimensions in mm. Subject to technical changes.



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 parallel routing

• DH-Series

Features and Benefits

Designed with two heads, these ties can be assembled into a 'figure 8' for securing two cables. Its flexible adjustment means that the bundles can be of different sizes.

Application



Ideal for running two cables in parallel, that need to be separated. These ties allow for installation of a second cable run without the need for additional cable ties.

The DH ties are also widely used within the packaging industry - the first loop closes and secures the bag, whilst the second loop can be made into a carrying handle (subject to weight).





Bundling two cable runs using the DH ties.



| Material Data | |
|-----------------------|---|
| Material | Polyamide 6.6 (PA66) |
| Operating Temperature | -40 °C to +85 °C Continuous, (+105 °C for 500 h) |
| Flammability | UL94 V2 |



| Material Data | |
|-----------------------|---|
| Material | Polyamide 6.6 UV Resistant (PA66W) |
| Operating Temperature | -40 °C to +85 °C Continuous, (+105 °C for 500 h) |
| Flammability | UL94 V2 |

| Material Data | |
|-----------------------|--|
| Material | Polyamide 6.6 Heat Stabilised (PA66HS) |
| Operating Temperature | -40 °C to +105 °C Continuous, (+145 °C for 500 h) |
| Flammability | UL94 V2 |

| Material Data | |
|-----------------------|--|
| Material | Polyamide 4.6 (PA46) |
| Operating Temperature | -40 °C to +150 °C for 5000 h, (+195 °C for 500 h) |
| Flammability | UL94 V2 |

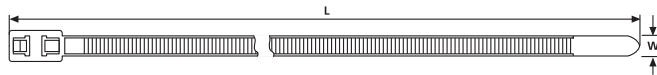


Cable Ties for parallel routing

• DH-Series

| Application Tool | Registration Numbers |
|------------------|----------------------|
| MK3SP | 1 |
| MK3PNSP2, MK7P | 2 |
| MK7 | 3 |
| MK7HT | 4 |
| MK20 | 5 |
| MK6 | 6 |
| MK9P | 7 |
| MK9 | 8 |
| MK9HT | 9 |
| MK21 | 10 |

For detailed information on Application Tools please refer to page 561.



DH Series

Technical Table

| Article-No. | Type | Length (L) | Width (W) | Ø per loop max. | Min. Tensile Strength (N) | Min. Tensile Strength (N) 2nd loop | Material | Colour | Application Tool |
|-------------|--------|------------|-----------|-----------------|---------------------------|------------------------------------|----------|--------------|------------------|
| 117-05002 | T50RDH | 210 | 4.7 | 19 | 225 | 180 | PA66 | Natural (NA) | 1-10 |
| 117-05000 | T50RDH | 210 | 4.7 | 19 | 225 | 180 | PA66 | Black (BK) | 1-10 |
| 117-05060 | T50RDH | 210 | 4.7 | 19 | 225 | 180 | PA66W | Black (BK) | 1-10 |
| 117-05050 | T50RDH | 210 | 4.7 | 19 | 225 | 180 | PA66HS | Black (BK) | 1-10 |
| 117-05168 | T50RDH | 210 | 4.7 | 19 | 225 | 180 | PA46 | Grey (GY) | 1-10 |
| 117-05303 | T50IDH | 305 | 4.7 | 38.1 | 225 | 180 | PA66 | Natural (NA) | 1-10 |
| 117-05360 | T50IDH | 305 | 4.7 | 38 | 225 | 180 | PA66W | Black (BK) | 1-10 |
| 117-05350 | T50IDH | 305 | 4.7 | 38 | 225 | 180 | PA66HS | Black (BK) | 1-10 |
| 117-05461 | T50LDH | 395 | 4.7 | 50.8 | 225 | 180 | PA66 | Natural (NA) | 1-10 |
| 117-00008 | T50LDH | 395 | 4.7 | 50 | 225 | 180 | PA66HS | Black (BK) | 1-10 |

All dimensions in mm. Subject to technical changes.



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