



## 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.

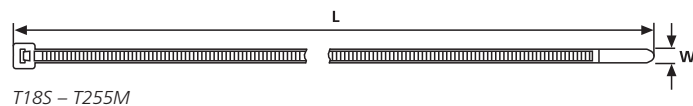
### Application

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.*

| Application Tool                              | Registration Numbers |
|-----------------------------------------------|----------------------|
| <b>MK3SP</b>                                  | 1                    |
| <b>MK3PNSP2, MK7P</b>                         | 2                    |
| <b>MK7</b>                                    | 3                    |
| <b>MK7HT</b>                                  | 4                    |
| <b>MK20</b>                                   | 5                    |
| <b>MK6</b>                                    | 6                    |
| <b>MK9P, MK6PN</b>                            | 7                    |
| <b>MK9</b>                                    | 8                    |
| <b>MK9HT</b>                                  | 9                    |
| <b>MK21</b>                                   | 10                   |
| <b>Autotool 2000</b>                          | 11                   |
| For more information please turn to page 404. |                      |



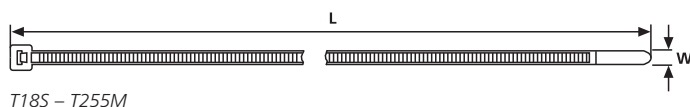
*T18S – T255M*



Please Note for Product Specific Approvals please refer to the Appendix



### T Series, Polyamide 6.6 (PA66) – Standard



#### Material Data

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



#### 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            | <b>T18S</b>  | 83         | 2.3       | 16.0          | 80                        | PA66     | Natural (NA) | 1–3, 5           |
| 111-02811            | <b>T18S</b>  | 83         | 2.3       | 16.0          | 80                        | PA66     | Black (BK)   | 1–3, 5           |
| 111-01910            | <b>T18R</b>  | 100        | 2.5       | 22.0          | 80                        | PA66     | Black (BK)   | 1–3, 5           |
| 111-01919            | <b>T18R</b>  | 100        | 2.5       | 22.0          | 80                        | PA66     | Natural (NA) | 1–3, 5           |
| 111-02319            | <b>T18I</b>  | 140        | 2.5       | 35.0          | 80                        | PA66     | Natural (NA) | 1–3, 5           |
| 111-02370            | <b>T18I</b>  | 140        | 2.5       | 35.0          | 80                        | PA66     | Black (BK)   | 1–3, 5           |
| 111-02010            | <b>T18L</b>  | 205        | 2.5       | 55.0          | 80                        | PA66     | Black (BK)   | 1–3, 5           |
| 111-02019            | <b>T18L</b>  | 205        | 2.5       | 55.0          | 80                        | PA66     | Natural (NA) | 1–3, 5           |
| 111-02519            | <b>T25L</b>  | 240        | 2.8       | 65.0          | 110                       | PA66     | Natural (NA) | 1–3, 5           |
| 111-02500            | <b>T25L</b>  | 240        | 2.8       | 65.0          | 110                       | PA66     | Black (BK)   | 1–3, 5           |
| 111-02619            | <b>T25LL</b> | 330        | 2.8       | 95.0          | 110                       | PA66     | Natural (NA) | 1–3, 5           |
| 111-02601            | <b>T25LL</b> | 330        | 2.8       | 95.0          | 110                       | PA66     | Black (BK)   | 1–3, 5           |
| 111-03009            | <b>T30R</b>  | 150        | 3.5       | 35.0          | 135                       | PA66     | Natural (NA) | 1–3, 5           |
| 111-03011            | <b>T30R</b>  | 150        | 3.5       | 35.0          | 135                       | PA66     | Black (BK)   | 1–3, 5           |
| 111-03410            | <b>T30L</b>  | 190        | 3.5       | 50.0          | 135                       | PA66     | Black (BK)   | 1–3, 5           |
| 111-03419            | <b>T30L</b>  | 190        | 3.5       | 50.0          | 135                       | PA66     | Natural (NA) | 1–3, 5           |
| 111-04400            | <b>T30LR</b> | 260        | 3.3       | 65.0          | 180                       | PA66     | Natural (NA) | 1–5              |
| 111-03500            | <b>T30LL</b> | 290        | 3.5       | 80.0          | 135                       | PA66     | Black (BK)   | 1–3, 5           |
| 111-03529            | <b>T30LL</b> | 290        | 3.5       | 80.0          | 135                       | PA66     | Natural (NA) | 1–3, 5           |
| 111-02900            | <b>T30XL</b> | 365        | 3.5       | 105           | 135                       | PA66     | Natural (NA) | 1–3, 5           |
| 111-02901            | <b>T30XL</b> | 365        | 3.5       | 105           | 135                       | PA66     | Black (BK)   | 1–3, 5           |
| 111-03819            | <b>T40R</b>  | 175        | 4.0       | 40.0          | 180                       | PA66     | Natural (NA) | 1–5              |
| 111-03801            | <b>T40R</b>  | 175        | 4.0       | 40.0          | 180                       | PA66     | Black (BK)   | 1–5              |
| 111-04600            | <b>T40I</b>  | 290        | 4.0       | 80.0          | 180                       | PA66     | Black (BK)   | 1–5              |
| 111-04609            | <b>T40I</b>  | 290        | 4.0       | 80.0          | 180                       | PA66     | Natural (NA) | 1–5              |
| 111-04300            | <b>T40L</b>  | 365        | 4.0       | 105           | 180                       | PA66     | Natural (NA) | 1–5              |
| 111-04301            | <b>T40L</b>  | 365        | 4.0       | 105           | 180                       | PA66     | Black (BK)   | 1–5              |

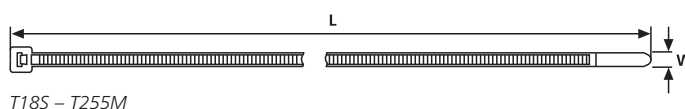
All dimensions in mm. Subject to technical changes.



Please Note for Product Specific Approvals please refer to the Appendix



## T Series, Polyamide 6.6 (PA66) – Standard



### Material Data

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



### Technical Table

| Article-No.          | Type            | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour       | Application Tool |
|----------------------|-----------------|------------|-----------|---------------|---------------------------|----------|--------------|------------------|
| Polyamide 6.6 (PA66) |                 |            |           |               |                           |          |              |                  |
| 111-05819            | <b>T50S</b>     | 150        | 4.6       | 35.0          | 225                       | PA66     | Natural (NA) | 1–10             |
| 111-05810            | <b>T50S</b>     | 150        | 4.6       | 35.0          | 225                       | PA66     | Black (BK)   | 1–10             |
| 111-05000            | <b>T50R</b>     | 200        | 4.6       | 50.0          | 225                       | PA66     | Black (BK)   | 1–10             |
| 111-05013            | <b>T50R</b>     | 200        | 4.6       | 50.0          | 225                       | PA66     | Natural (NA) | 1–10             |
| 111-06200            | <b>T50M</b>     | 245        | 4.6       | 65.0          | 225                       | PA66     | Black (BK)   | 1–10             |
| 111-06201            | <b>T50M</b>     | 245        | 4.6       | 65.0          | 225                       | PA66     | Natural (NA) | 1–10             |
| 111-05210            | <b>T50I</b>     | 300        | 4.6       | 85.0          | 225                       | PA66     | Black (BK)   | 1–10             |
| 111-05219            | <b>T50I</b>     | 300        | 4.6       | 85.0          | 225                       | PA66     | Natural (NA) | 1–10             |
| 111-05409            | <b>T50L</b>     | 390        | 4.6       | 110           | 225                       | PA66     | Natural (NA) | 1–10             |
| 111-05400            | <b>T50L</b>     | 390        | 4.6       | 110           | 225                       | PA66     | Black (BK)   | 1–10             |
| 111-00268            | <b>T50LL</b>    | 445        | 4.6       | 130           | 225                       | PA66     | Black (BK)   | 1–10             |
| 111-06002            | <b>T50LL</b>    | 445        | 4.6       | 130           | 225                       | PA66     | Natural (NA) | 1–10             |
| 111-05019            | <b>T80R</b>     | 210        | 4.7       | 55.0          | 355                       | PA66     | Natural (NA) | 1–10             |
| 111-08010            | <b>T80R</b>     | 210        | 4.7       | 55.0          | 355                       | PA66     | Black (BK)   | 1–10             |
| 111-08210            | <b>T80I</b>     | 300        | 4.7       | 85.0          | 355                       | PA66     | Black (BK)   | 1–10             |
| 111-08229            | <b>T80I</b>     | 300        | 4.7       | 85.0          | 355                       | PA66     | Natural (NA) | 1–10             |
| 111-05410            | <b>T80L</b>     | 390        | 4.7       | 110           | 355                       | PA66     | Black (BK)   | 1–10             |
| 111-05419            | <b>T80L</b>     | 390        | 4.7       | 110           | 355                       | PA66     | Natural (NA) | 1–10             |
| 111-12829            | <b>T120S</b>    | 225        | 7.6       | 55.0          | 535                       | PA66     | Natural (NA) | 6–10             |
| 111-00179            | <b>T120S</b>    | 225        | 7.6       | 55.0          | 535                       | PA66     | Black (BK)   | 6–10             |
| 111-12210            | <b>T120I</b>    | 300        | 7.6       | 80.0          | 535                       | PA66     | Black (BK)   | 6–10             |
| 111-12219            | <b>T120I</b>    | 300        | 7.6       | 80.0          | 535                       | PA66     | Natural (NA) | 6–10             |
| 111-12010            | <b>T120R(E)</b> | 380        | 7.6       | 100           | 535                       | PA66     | Black (BK)   | 6–10             |
| 111-12019            | <b>T120R(E)</b> | 380        | 7.6       | 100           | 535                       | PA66     | Natural (NA) | 6–10             |
| 111-12610            | <b>T120M</b>    | 460        | 7.6       | 130           | 535                       | PA66     | Black (BK)   | 6–10             |
| 111-12619            | <b>T120M</b>    | 460        | 7.6       | 130           | 535                       | PA66     | Natural (NA) | 6–10             |
| 111-12701            | <b>T120XM</b>   | 600        | 7.6       | 175           | 535                       | PA66     | Black (BK)   | 6–10             |
| 111-12704            | <b>T120XM</b>   | 600        | 7.6       | 175           | 535                       | PA66     | Natural (NA) | 6–10             |
| 111-12429            | <b>T120L</b>    | 760        | 7.6       | 225           | 535                       | PA66     | Natural (NA) | 6–10             |
| 111-12403            | <b>T120L</b>    | 760        | 7.6       | 225           | 535                       | PA66     | Black (BK)   | 6–10             |

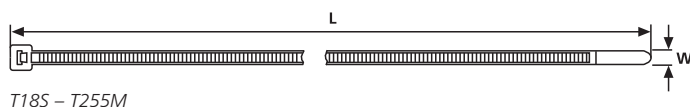
All dimensions in mm. Subject to technical changes.



Please Note for Product Specific Approvals please refer to the Appendix



### T Series, Polyamide 6.6 (PA66) – Standard



#### Material Data

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



#### Technical Table

| Article-No.          | Type            | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material | Colour       | Application Tool |
|----------------------|-----------------|------------|-----------|---------------|---------------------------|----------|--------------|------------------|
| Polyamide 6.6 (PA66) |                 |            |           |               |                           |          |              |                  |
| 111-15200            | <b>T150R(U)</b> | 390        | 8.8       | 105           | 780                       | PA66     | Black (BK)   | 6–10             |
| 111-15203            | <b>T150R(U)</b> | 390        | 8.8       | 105           | 780                       | PA66     | Natural (NA) | 6–10             |
| 111-15619            | <b>T150M</b>    | 530        | 8.9       | 150           | 780                       | PA66     | Natural (NA) | 6–9              |
| 111-00124            | <b>T150M</b>    | 530        | 8.9       | 150           | 780                       | PA66     | Black (BK)   | 6–9              |
| 111-15419            | <b>T150L</b>    | 820        | 8.9       | 245           | 780                       | PA66     | Natural (NA) | 6–9              |
| 111-15405            | <b>T150L</b>    | 820        | 8.9       | 245           | 780                       | PA66     | Black (BK)   | 6–9              |
| 111-15719            | <b>T150LL</b>   | 925        | 8.9       | 275           | 780                       | PA66     | Natural (NA) | 6–9              |
| 111-15700            | <b>T150LL</b>   | 925        | 8.9       | 275           | 780                       | PA66     | Black (BK)   | 6–9              |
| 111-15519            | <b>T150XL</b>   | 1095       | 8.9       | 330           | 780                       | PA66     | Natural (NA) | 6–9              |
| 111-15500            | <b>T150XL</b>   | 1095       | 8.9       | 330           | 780                       | PA66     | Black (BK)   | 6–9              |
| 111-15300            | <b>T150XLL</b>  | 1325       | 8.9       | 405           | 780                       | PA66     | Black (BK)   | 6–9              |
| 111-15304            | <b>T150XLL</b>  | 1325       | 8.9       | 405           | 780                       | PA66     | Natural (NA) | 6–9              |
| 111-24704            | <b>T250S</b>    | 225        | 12.5      | 55.0          | 1115                      | PA66     | Black (BK)   | 7-9              |
| 111-24705            | <b>T250S</b>    | 225        | 12.5      | 55.0          | 1115                      | PA66     | Natural (NA) | 7-9              |
| 111-25102            | <b>T250X</b>    | 370        | 12.5      | 100           | 1115                      | PA66     | Black (BK)   | 7-9              |
| 111-25103            | <b>T250X</b>    | 370        | 12.5      | 100           | 1115                      | PA66     | Natural (NA) | 7-9              |
| 111-24801            | <b>T250R</b>    | 520        | 12.5      | 145           | 1115                      | PA66     | Black (BK)   | 7-9              |
| 111-24803            | <b>T250R</b>    | 520        | 12.5      | 145           | 1115                      | PA66     | Natural (NA) | 7-9              |
| 111-25001            | <b>T250M</b>    | 565        | 12.5      | 150           | 1115                      | PA66     | Black (BK)   | 7-9              |
| 111-25002            | <b>T250M</b>    | 565        | 12.5      | 150           | 1115                      | PA66     | Natural (NA) | 7-9              |
| 111-25219            | <b>T250I</b>    | 725        | 12.5      | 203           | 1115                      | PA66     | Natural (NA) | 7-9              |
| 111-24600            | <b>T250L</b>    | 880        | 12.5      | 254           | 1115                      | PA66     | Natural (NA) | 7-9              |
| 111-24601            | <b>T250L</b>    | 880        | 12.5      | 254           | 1115                      | PA66     | Black (BK)   | 7-9              |
| 111-25200            | <b>T250XL</b>   | 1030       | 12.5      | 305           | 1115                      | PA66     | Black (BK)   | 7-9              |
| 111-00466            | <b>T250XL</b>   | 1030       | 12.5      | 305           | 1115                      | PA66     | Natural (NA) | 7-9              |

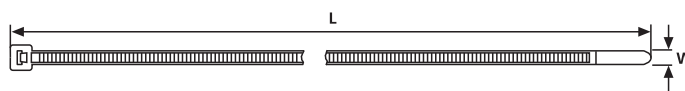
All dimensions in mm. Subject to technical changes.



Please Note for Product Specific Approvals please refer to the Appendix



## T Series, Polyamide 6.6 – UV Stabilised



T18S – T255M

| Application Tool | Registration Numbers |
|------------------|----------------------|
| MK3SP            | 1                    |
| MK3PNSP2, MK7P   | 2                    |
| MK7              | 3                    |
| MK7HT            | 4                    |
| MK20             | 5                    |
| MK6              | 6                    |
| MK9P, MK6PN      | 7                    |
| MK9              | 8                    |
| MK9HT            | 9                    |
| MK21             | 10                   |
| Autotool 2000    | 11                   |

For more information please turn to page 404.

| 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 |       |            |           |               |                           |          |            |                  |
| 111-02860                   | T18S  | 83         | 2.3       | 16.0          | 80                        | PA66W    | Black (BK) | 1–3, 5           |
| 111-01960                   | T18R  | 100        | 2.5       | 22.0          | 80                        | PA66W    | Black (BK) | 1–3, 5           |
| 111-02360                   | T18I  | 140        | 2.5       | 35.0          | 80                        | PA66W    | Black (BK) | 1–3, 5           |
| 111-02012                   | T18L  | 205        | 2.5       | 55.0          | 80                        | PA66W    | Black (BK) | 1–3, 5           |
| 111-02560                   | T25L  | 240        | 2.8       | 65.0          | 110                       | PA66W    | Black (BK) | 1–3, 5           |
| 111-02660                   | T25LL | 330        | 2.8       | 95.0          | 110                       | PA66W    | Black (BK) | 1–3, 5           |
| 111-03030                   | T30R  | 150        | 3.5       | 35.0          | 135                       | PA66W    | Black (BK) | 1–3, 5           |
| 111-03460                   | T30L  | 190        | 3.5       | 50.0          | 135                       | PA66W    | Black (BK) | 1–3, 5           |
| 111-04402                   | T30LR | 260        | 3.3       | 65.0          | 135                       | PA66W    | Black (BK) | 1–5              |
| 111-03570                   | 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             |

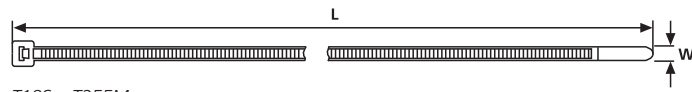
All dimensions in mm. Subject to technical changes.



Please Note for Product Specific Approvals please refer to the Appendix



### T Series, Polyamide 6.6 – UV Stabilised



T185 – T255M

| Application Tool      | Registration Numbers |
|-----------------------|----------------------|
| <b>MK3SP</b>          | 1                    |
| <b>MK3PNSP2, MK7P</b> | 2                    |
| <b>MK7</b>            | 3                    |
| <b>MK7HT</b>          | 4                    |
| <b>MK20</b>           | 5                    |
| <b>MK6</b>            | 6                    |
| <b>MK9P, MK6PN</b>    | 7                    |
| <b>MK9</b>            | 8                    |
| <b>MK9HT</b>          | 9                    |
| <b>MK21</b>           | 10                   |
| <b>Autotool 2000</b>  | 11                   |

For more information please turn to page 404.

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



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 |                 |            |           |               |                           |          |            |                  |
| 111-05060                   | <b>T80R</b>     | 210        | 4.7       | 55.0          | 355                       | PA66W    | Black (BK) | 1–10             |
| 111-08290                   | <b>T80I</b>     | 300        | 4.7       | 85.0          | 355                       | PA66W    | Black (BK) | 1–10             |
| 111-05460                   | <b>T80L</b>     | 390        | 4.7       | 110           | 355                       | PA66W    | Black (BK) | 1–10             |
| 111-12830                   | <b>T120S</b>    | 225        | 7.6       | 55.0          | 535                       | PA66W    | Black (BK) | 6–10             |
| 111-12230                   | <b>T120I</b>    | 300        | 7.6       | 80.0          | 535                       | PA66W    | Black (BK) | 6–10             |
| 111-12060                   | <b>T120R(E)</b> | 380        | 7.6       | 100           | 535                       | PA66W    | Black (BK) | 6–10             |
| 111-12660                   | <b>T120M</b>    | 460        | 7.6       | 130           | 535                       | PA66W    | Black (BK) | 6–10             |
| 111-00171                   | <b>T120XM</b>   | 600        | 7.6       | 175           | 535                       | PA66W    | Black (BK) | 6–10             |
| 111-12430                   | <b>T120L</b>    | 760        | 7.6       | 225           | 535                       | PA66W    | Black (BK) | 6–10             |
| 111-15206                   | <b>T150R(U)</b> | 390        | 8.9       | 105           | 780                       | PA66W    | Black (BK) | 6–10             |
| 111-15660                   | <b>T150M</b>    | 530        | 8.9       | 150           | 780                       | PA66W    | Black (BK) | 6–9              |
| 111-15460                   | <b>T150L</b>    | 820        | 8.8       | 245           | 780                       | PA66W    | Black (BK) | 6–9              |
| 111-15704                   | <b>T150LL</b>   | 925        | 8.9       | 275           | 780                       | PA66W    | Black (BK) | 6–9              |
| 111-15502                   | <b>T150XL</b>   | 1095       | 8.9       | 330           | 780                       | PA66W    | Black (BK) | 6–9              |
| 111-15305                   | <b>T150XLL</b>  | 1325       | 8.9       | 405           | 780                       | PA66W    | Black (BK) | 6–9              |
| 111-25100                   | <b>T250X</b>    | 370        | 12.5      | 100           | 1115                      | PA66W    | Black (BK) | 7–9              |
| 111-24805                   | <b>T250R</b>    | 520        | 12.5      | 145           | 1115                      | PA66W    | Black (BK) | 7–9              |

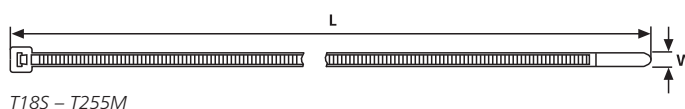
All dimensions in mm. Subject to technical changes.



Please Note for Product Specific Approvals please refer to the Appendix



## T Series, Polyamide 6.6 – Heat Stabilised



### Material Data

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



### 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 |              |            |           |               |                           |          |              |                  |
| 111-02815                     | <b>T18S</b>  | 83         | 2.3       | 16.0          | 80                        | PA66HS   | Black (BK)   | 1–3, 5           |
| 111-01803                     | <b>T18R</b>  | 100        | 2.5       | 22.0          | 80                        | PA66HS   | Black (BK)   | 1–3, 5           |
| 111-01959                     | <b>T18R</b>  | 100        | 2.5       | 22.0          | 80                        | PA66HS   | Natural (NA) | 1–3, 5           |
| 111-02306                     | <b>T18I</b>  | 140        | 2.5       | 35.0          | 80                        | PA66HS   | Natural (NA) | 1–3, 5           |
| 111-02358                     | <b>T18I</b>  | 140        | 2.5       | 35.0          | 80                        | PA66HS   | Black (BK)   | 1–3, 5           |
| 111-02059                     | <b>T18L</b>  | 205        | 2.5       | 55.0          | 80                        | PA66HS   | Natural (NA) | 1–3, 5           |
| 111-02005                     | <b>T18L</b>  | 205        | 2.5       | 55.0          | 80                        | PA66HS   | Black (BK)   | 1–3, 5           |
| 111-02501                     | <b>T25L</b>  | 240        | 2.8       | 65.0          | 110                       | PA66HS   | Natural (NA) | 1–3, 5           |
| 111-02602                     | <b>T25LL</b> | 330        | 2.8       | 95.0          | 110                       | PA66HS   | Natural (NA) | 1–3, 5           |
| 111-03049                     | <b>T30R</b>  | 150        | 3.5       | 35.0          | 135                       | PA66HS   | Natural (NA) | 1–3, 5           |
| 111-03050                     | <b>T30R</b>  | 150        | 3.5       | 35.0          | 135                       | PA66HS   | Black (BK)   | 1–3, 5           |
| 111-03459                     | <b>T30L</b>  | 190        | 3.5       | 50.0          | 135                       | PA66HS   | Natural (NA) | 1–3, 5           |
| 111-03450                     | <b>T30L</b>  | 190        | 3.5       | 50.0          | 135                       | PA66HS   | Black (BK)   | 1–3, 5           |
| 111-04401                     | <b>T30LR</b> | 260        | 3.3       | 65.0          | 135                       | PA66HS   | Natural (NA) | 1–5              |
| 111-04404                     | <b>T30LR</b> | 260        | 3.3       | 65.0          | 135                       | PA66HS   | Black (BK)   | 1–5              |
| 111-03569                     | <b>T30LL</b> | 290        | 3.5       | 80.0          | 135                       | PA66HS   | Natural (NA) | 1–3, 5           |
| 111-00278                     | <b>T30LL</b> | 290        | 3.5       | 80.0          | 135                       | PA66HS   | Black (BK)   | 1–3, 5           |
| 111-03859                     | <b>T40R</b>  | 175        | 4.0       | 40.0          | 180                       | PA66HS   | Natural (NA) | 1–5              |
| 111-03970                     | <b>T40R</b>  | 175        | 4.0       | 40.0          | 180                       | PA66HS   | Black (BK)   | 1–5              |
| 111-04614                     | <b>T40I</b>  | 290        | 4.0       | 80.0          | 180                       | PA66HS   | Black (BK)   | 1–5              |
| 111-04314                     | <b>T40L</b>  | 365        | 4.0       | 105           | 180                       | PA66HS   | Black (BK)   | 1–5              |
| 111-05850                     | <b>T50S</b>  | 150        | 4.6       | 35.0          | 225                       | PA66HS   | Black (BK)   | 1–10             |
| 111-05859                     | <b>T50S</b>  | 150        | 4.6       | 35.0          | 225                       | PA66HS   | Natural (NA) | 1–10             |
| 111-04950                     | <b>T50R</b>  | 200        | 4.6       | 50.0          | 225                       | PA66HS   | Black (BK)   | 1–10             |
| 111-04882                     | <b>T50R</b>  | 200        | 4.6       | 50.0          | 225                       | PA66HS   | Natural (NA) | 1–10             |
| 111-06205                     | <b>T50M</b>  | 245        | 4.6       | 65.0          | 225                       | PA66HS   | Natural (NA) | 1–10             |

All dimensions in mm. Subject to technical changes.



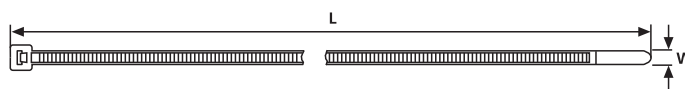
Please Note for Product Specific Approvals please refer to the Appendix

# 1.1 Cable Ties and Fixings

## Cable Ties



### T Series, Polyamide 6.6 – Heat Stabilised



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 |          |            |           |               |                           |          |              |                  |
| 111-05259                     | T50I     | 300        | 4.6       | 85.0          | 225                       | PA66HS   | Natural (NA) | 1–10             |
| 117-05250                     | T50I     | 300        | 4.6       | 85.0          | 225                       | PA66HS   | Black (BK)   | 1–10             |
| 111-05435                     | T50L     | 390        | 4.6       | 110           | 225                       | PA66HS   | Black (BK)   | 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             |
| 117-08070                     | T80R     | 210        | 4.7       | 55.0          | 355                       | PA66HS   | Black (BK)   | 1–10             |
| 111-08259                     | T80I     | 300        | 4.7       | 85.0          | 355                       | PA66HS   | Natural (NA) | 1–10             |
| 111-08250                     | T80I     | 300        | 4.7       | 85.0          | 355                       | PA66HS   | Black (BK)   | 1–10             |
| 111-05459                     | T80L     | 390        | 4.7       | 110           | 355                       | PA66HS   | Natural (NA) | 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             |
| 111-12824                     | T120S    | 225        | 7.6       | 55.0          | 535                       | PA66HS   | Natural (NA) | 6–10             |
| 111-12240                     | T120I    | 300        | 7.6       | 80.0          | 535                       | PA66HS   | Black (BK)   | 6–10             |
| 111-12249                     | T120I    | 300        | 7.6       | 80.0          | 535                       | PA66HS   | Natural (NA) | 6–10             |
| 111-12050                     | T120R(E) | 380        | 7.6       | 100           | 535                       | PA66HS   | Black (BK)   | 6–10             |
| 111-12059                     | T120R(E) | 380        | 7.6       | 100           | 535                       | PA66HS   | Natural (NA) | 6–10             |
| 111-00153                     | T120M    | 460        | 7.6       | 130           | 535                       | PA66HS   | Black (BK)   | 6–10             |
| 111-12719                     | T120XM   | 600        | 7.6       | 175           | 535                       | PA66HS   | Natural (NA) | 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             |
| 111-12449                     | T120L    | 760        | 7.6       | 225           | 535                       | PA66HS   | Natural (NA) | 6–10             |
| 111-15050                     | T150R(H) | 365        | 7.6       | 100           | 670                       | PA66HS   | Black (BK)   | 6–10             |
| 111-15069                     | T150R(H) | 365        | 7.6       | 100           | 670                       | PA66HS   | Natural (NA) | 6–10             |
| 111-15609                     | T150M    | 530        | 8.9       | 150           | 780                       | PA66HS   | Black (BK)   | 6–9              |
| 111-15410                     | T150L    | 820        | 8.8       | 245           | 780                       | PA66HS   | Black (BK)   | 6–9              |
| 111-15510                     | T150XL   | 1095       | 8.9       | 330           | 780                       | PA66HS   | Black (BK)   | 6–9              |

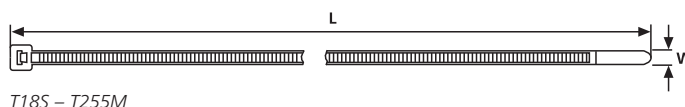
All dimensions in mm. Subject to technical changes.



Please Note for Product Specific Approvals please refer to the Appendix



## T Series



## Material Data

|                       |                                                       |
|-----------------------|-------------------------------------------------------|
| Material              | <b>Polyamide 6.6 Heat and UV Stabilised (PA66HSW)</b> |
| Operating Temperature | <b>-40 °C to +105 °C continuous</b>                   |
| Flammability          | <b>UL94 V2</b>                                        |



## Material Data

|                       |                                                         |
|-----------------------|---------------------------------------------------------|
| Material              | <b>Polyamide 6.6 High Impact Modified (PA66HIR)</b>     |
| Operating Temperature | <b>-40 °C to +80 °C Continuous, (+105 °C for 500 h)</b> |
| Flammability          | <b>UL94 HB</b>                                          |



## Material Data

|                       |                                                                        |
|-----------------------|------------------------------------------------------------------------|
| Material              | <b>Polyamide 6.6 High Impact Modified, Heat Stabilised (PA66HIRHS)</b> |
| Operating Temperature | <b>-40 °C to +110 °C continuous</b>                                    |
| Flammability          | <b>UL94 HB</b>                                                         |



## Material Data

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



## 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, UV Stabilised |                 |            |           |               |                           |           |            |                  |
| 111-01916                                     | <b>T18R</b>     | 100        | 2.5       | 22.0          | 80                        | PA66HSW   | Black (BK) | 1–3, 5           |
| 111-03071                                     | <b>T30R</b>     | 150        | 3.5       | 35.0          | 135                       | PA66HSW   | Black (BK) | 1–3, 5           |
| 111-04907                                     | <b>T50R</b>     | 200        | 4.6       | 50.0          | 225                       | PA66HSW   | Black (BK) | 1–10             |
| 111-05253                                     | <b>T50I</b>     | 300        | 4.6       | 85.0          | 225                       | PA66HSW   | Black (BK) | 1–10             |
| 111-05472                                     | <b>T50L</b>     | 390        | 4.6       | 110           | 225                       | PA66HSW   | Black (BK) | 1–10             |
| 111-12822                                     | <b>T120S</b>    | 225        | 7.6       | 55.0          | 535                       | PA66HSW   | Black (BK) | 6–10             |
| Polyamide 6.6 High Impact Modified            |                 |            |           |               |                           |           |            |                  |
| 111-25500                                     | <b>T255S</b>    | 225        | 12.5      | 55.0          | 1115                      | PA66HIRHS | Black (BK) | 7-9              |
| 111-25400                                     | <b>T255R</b>    | 515        | 12.5      | 145           | 1115                      | PA66HIR   | Black (BK) | 7-9              |
| 111-25300                                     | <b>T255M</b>    | 560        | 12.5      | 160           | 1115                      | PA66HIR   | Black (BK) | 7-9              |
| Polyamide 6.6 V0 rated                        |                 |            |           |               |                           |           |            |                  |
| 111-91819                                     | <b>T18R</b>     | 100        | 2.5       | 22.0          | 80                        | PA66V0    | White (WH) | 1–3, 5           |
| 111-02043                                     | <b>T18L</b>     | 205        | 2.5       | 55.0          | 80                        | PA66V0    | White (WH) | 1–3, 5           |
| 111-93019                                     | <b>T30R</b>     | 150        | 3.5       | 35.0          | 135                       | PA66V0    | White (WH) | 1–3, 5           |
| 111-95019                                     | <b>T50R</b>     | 200        | 4.6       | 50.0          | 225                       | PA66V0    | White (WH) | 1–10             |
| 111-00317                                     | <b>T50I</b>     | 300        | 4.6       | 85.0          | 225                       | PA66V0    | White (WH) | 1–10             |
| 111-91210                                     | <b>T120R(E)</b> | 380        | 7.6       | 100           | 535                       | PA66V0    | White (WH) | 6–10             |

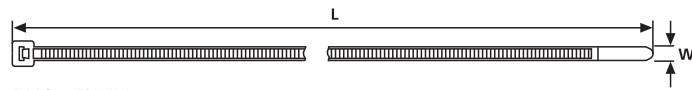
All dimensions in mm. Subject to technical changes.



Please Note for Product Specific Approvals please refer to the Appendix



## T Series



T18S – T255M

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

Tefzel® is a registered trademark of DuPont.



| 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 |
|--------------------------|-----------------|------------|-----------|---------------|---------------------------|----------|--------------|------------------|
| TEFZEL/ETFE              |                 |            |           |               |                           |          |              |                  |
| 111-01923                | <b>T18R(U)</b>  | 100        | 2.5       | 22.0          | 40                        | E / TFE  | Blue (BU)    | 1–3, 5           |
| 111-03343                | <b>T30L</b>     | 198        | 3.6       | 50.0          | 66                        | E / TFE  | Blue (BU)    | 1–3, 5           |
| 111-05026                | <b>T50R(U)</b>  | 200        | 4.6       | 50.0          | 158                       | E / TFE  | Blue (BU)    | 1–10             |
| 111-12826                | <b>T120S</b>    | 225        | 7.6       | 55.0          | 311                       | E / TFE  | Blue (BU)    | 6–10             |
| 111-12026                | <b>T120R</b>    | 380        | 7.6       | 100           | 311                       | E / TFE  | Blue (BU)    | 6–10             |
| Polyamide 4.6 High Temp. |                 |            |           |               |                           |          |              |                  |
| 111-01831                | <b>T18R</b>     | 100        | 2.5       | 22.0          | 80                        | PA46     | Natural (NA) | 1–3, 5           |
| 114-03379                | <b>T30R</b>     | 150        | 3.5       | 35.0          | 135                       | PA46     | Natural (NA) | 1–3, 5           |
| 111-00264                | <b>T30R</b>     | 150        | 3.5       | 35.0          | 135                       | PA46     | Grey (GY)    | 1–3, 5           |
| 114-04979                | <b>T50R</b>     | 200        | 4.6       | 50.0          | 225                       | PA46     | Natural (NA) | 1–10             |
| 111-05220                | <b>T50I</b>     | 300        | 4.6       | 85.0          | 225                       | PA46     | Natural (NA) | 1–10             |
| 114-05779                | <b>T50L</b>     | 390        | 4.6       | 110           | 225                       | PA46     | Natural (NA) | 1–10             |
| 114-12179                | <b>T120R(E)</b> | 380        | 7.6       | 100           | 535                       | PA46     | Natural (NA) | 6–10             |
| 111-12401                | <b>T120L</b>    | 760        | 7.6       | 225           | 535                       | PA46     | Black (BK)   | 6–10             |

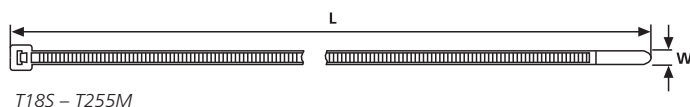
All dimensions in mm. Subject to technical changes.



Please Note for Product Specific Approvals please refer to the Appendix



## T Series



## Material Data

|                       |                                                                   |
|-----------------------|-------------------------------------------------------------------|
| Material              | <b>Polyamide 6.6 High Impact Modified scan black (PA66HIR(S))</b> |
| Operating Temperature | <b>-40 °C to +80 °C Continuous, (+105 °C for 500 h)</b>           |
| Flammability          | <b>UL94 HB</b>                                                    |



## Material Data

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



## Technical Table

| Article-No.                                                | Type            | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Material   | Colour       | Application Tool |
|------------------------------------------------------------|-----------------|------------|-----------|---------------|---------------------------|------------|--------------|------------------|
| Polyamide 6.6 High Impact Modified scan black (PA66HIR(S)) |                 |            |           |               |                           |            |              |                  |
| 111-04890                                                  | <b>T50R</b>     | 200        | 4.6       | 50.0          | 225                       | PA66HIR(S) | Black (BK)   | 1–10             |
| 111-00222                                                  | <b>T50I</b>     | 300        | 4.6       | 85.0          | 225                       | PA66HIR(S) | Black (BK)   | 1–10             |
| 111-05441                                                  | <b>T50L</b>     | 390        | 4.6       | 110           | 225                       | PA66HIR(S) | Black (BK)   | 1–10             |
| 111-12203                                                  | <b>T120I</b>    | 300        | 7.6       | 80.0          | 535                       | PA66HIR(S) | Black (BK)   | 6–10             |
| 111-12032                                                  | <b>T120R(E)</b> | 380        | 7.6       | 100           | 535                       | PA66HIR(S) | Black (BK)   | 6–10             |
| 111-12402                                                  | <b>T120L</b>    | 760        | 7.6       | 225           | 535                       | PA66HIR(S) | Black (BK)   | 6–10             |
| Polypropylene (PP)                                         |                 |            |           |               |                           |            |              |                  |
| 111-01918                                                  | <b>T18R</b>     | 100        | 2.5       | 19.0          | 49                        | PP         | Black (BK)   | 1–3, 5           |
| 111-01922                                                  | <b>T18R</b>     | 100        | 2.5       | 19.0          | 49                        | PP         | Natural (NA) | 1–3, 5           |
| 111-00471                                                  | <b>T30R</b>     | 150        | 3.5       | 35.0          | 89                        | PP         | Natural (NA) | 1–3, 5           |
| 111-00472                                                  | <b>T30R</b>     | 150        | 3.5       | 35.0          | 89                        | PP         | Black (BK)   | 1–3, 5           |
| 111-04928                                                  | <b>T50R</b>     | 200        | 4.6       | 50.0          | 133                       | PP         | Black (BK)   | 1–10             |
| 111-04931                                                  | <b>T50R</b>     | 200        | 4.6       | 50.0          | 133                       | PP         | Natural (NA) | 1–10             |
| 111-12827                                                  | <b>T120S</b>    | 225        | 7.6       | 55.0          | 267                       | PP         | Black (BK)   | 6–10             |
| 111-00475                                                  | <b>T120R</b>    | 380        | 7.6       | 100           | 267                       | PP         | Natural (NA) | 6–10             |
| 111-12066                                                  | <b>T120R</b>    | 380        | 7.6       | 100           | 267                       | PP         | Black (BK)   | 6–10             |

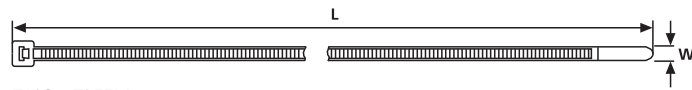
All dimensions in mm. Subject to technical changes.



Please Note for Product Specific Approvals please refer to the Appendix



## T Series



T18S – T255M

| Material Data         |                                                     |
|-----------------------|-----------------------------------------------------|
| Material              | Polyamide 6.6 (PA66)                                |
| Operating Temperature | -40 °C to +85 °C Continuous,<br>(+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             | <b>T18R</b>     | 100        | 2.5       | 22.0          | 80                        | PA66     | Blue (BU)   | 1–3, 5           |
| 111-01815             | <b>T18R</b>     | 100        | 2.5       | 22.0          | 80                        | PA66     | Green (GN)  | 1–3, 5           |
| 111-01812             | <b>T18R</b>     | 100        | 2.5       | 22.0          | 80                        | PA66     | Red (RD)    | 1–3, 5           |
| 111-01810             | <b>T18R</b>     | 100        | 2.5       | 22.0          | 80                        | PA66     | Yellow (YE) | 1–3, 5           |
| 111-03008             | <b>T30R</b>     | 150        | 3.5       | 35.0          | 135                       | PA66     | Blue (BU)   | 1–3, 5           |
| 111-03014             | <b>T30R</b>     | 150        | 3.5       | 35.0          | 135                       | PA66     | Green (GN)  | 1–3, 5           |
| 111-03004             | <b>T30R</b>     | 150        | 3.5       | 35.0          | 135                       | PA66     | Red (RD)    | 1–3, 5           |
| 111-03006             | <b>T30R</b>     | 150        | 3.5       | 35.0          | 135                       | PA66     | Yellow (YE) | 1–3, 5           |
| 111-03312             | <b>T30L</b>     | 190        | 3.5       | 50.0          | 135                       | PA66     | Blue (BU)   | 1–3, 5           |
| 111-00193             | <b>T30L</b>     | 190        | 3.5       | 50.0          | 135                       | PA66     | Green (GN)  | 1–3, 5           |
| 111-00196             | <b>T30L</b>     | 190        | 3.5       | 50.0          | 135                       | PA66     | Red (RD)    | 1–3, 5           |
| 111-03309             | <b>T30L</b>     | 190        | 3.5       | 50.0          | 135                       | PA66     | Yellow (YE) | 1–3, 5           |
| 111-04800             | <b>T50R</b>     | 200        | 4.6       | 50.0          | 225                       | PA66     | Blue (BU)   | 1–10             |
| 111-04801             | <b>T50R</b>     | 200        | 4.6       | 50.0          | 225                       | PA66     | Green (GN)  | 1–10             |
| 111-04804             | <b>T50R</b>     | 200        | 4.6       | 50.0          | 225                       | PA66     | Red (RD)    | 1–10             |
| 111-04805             | <b>T50R</b>     | 200        | 4.6       | 50.0          | 225                       | PA66     | Yellow (YE) | 1–10             |
| 111-05202             | <b>T50I</b>     | 300        | 4.6       | 85.0          | 225                       | PA66     | Blue (BU)   | 1–10             |
| 111-00284             | <b>T50I</b>     | 300        | 4.6       | 85.0          | 225                       | PA66     | Green (GN)  | 1–10             |
| 111-05203             | <b>T50I</b>     | 300        | 4.6       | 85.0          | 225                       | PA66     | Red (RD)    | 1–10             |
| 111-05208             | <b>T50I</b>     | 300        | 4.6       | 85.0          | 225                       | PA66     | Yellow (YE) | 1–10             |
| 111-05404             | <b>T50L</b>     | 390        | 4.6       | 110           | 225                       | PA66     | Blue (BU)   | 1–10             |
| 111-05402             | <b>T50L</b>     | 390        | 4.6       | 110           | 225                       | PA66     | Green (GN)  | 1–10             |
| 111-05406             | <b>T50L</b>     | 390        | 4.6       | 110           | 225                       | PA66     | Red (RD)    | 1–10             |
| 111-05428             | <b>T50L</b>     | 390        | 4.6       | 110           | 225                       | PA66     | Yellow (YE) | 1–10             |
| 116-08016             | <b>T80R</b>     | 210        | 4.7       | 55.0          | 355                       | PA66     | Blue (BU)   | 1–10             |
| 116-08015             | <b>T80R</b>     | 210        | 4.7       | 55.0          | 355                       | PA66     | Green (GN)  | 1–10             |
| 116-08012             | <b>T80R</b>     | 210        | 4.7       | 55.0          | 355                       | PA66     | Red (RD)    | 1–10             |
| 116-08014             | <b>T80R</b>     | 210        | 4.7       | 55.0          | 355                       | PA66     | Yellow (YE) | 1–10             |
| 116-05416             | <b>T80L</b>     | 390        | 4.7       | 110           | 355                       | PA66     | Blue (BU)   | 1–10             |
| 116-05415             | <b>T80L</b>     | 390        | 4.7       | 110           | 355                       | PA66     | Green (GN)  | 1–10             |
| 116-05412             | <b>T80L</b>     | 390        | 4.7       | 110           | 355                       | PA66     | Red (RD)    | 1–10             |
| 116-05414             | <b>T80L</b>     | 390        | 4.7       | 110           | 355                       | PA66     | Yellow (YE) | 1–10             |
| 111-12004             | <b>T120R(E)</b> | 380        | 7.6       | 100           | 535                       | PA66     | Blue (BU)   | 6–10             |
| 111-12001             | <b>T120R(E)</b> | 380        | 7.6       | 100           | 535                       | PA66     | Green (GN)  | 6–10             |
| 111-12002             | <b>T120R(E)</b> | 380        | 7.6       | 100           | 535                       | PA66     | Red (RD)    | 6–10             |
| 111-12003             | <b>T120R(E)</b> | 380        | 7.6       | 100           | 535                       | PA66     | Yellow (YE) | 6–10             |

All dimensions in mm. Subject to technical changes.



Please Note for Product Specific Approvals please refer to the Appendix