



One Piece Fixing Ties

One Piece Fixing Ties bring together a solution for the need to bundle a product whilst at the same time providing a fixing solution. HellermannTyton's one piece fixing ties offer the ideal combination of high specification materials and superior design to give the perfect solution for both bundling and installation of cable bundles, hoses or pipes. Long acknowledged as the market leader for innovative fixings, HellermannTyton has now met the challenges set by the automotive, aviation, domestic appliance and electrical industries by combining the best "fixing design" with the best "cable tie design" – to produce the new One Piece Fixing Ties.



The additional seal protects against the ingress of moisture or dirt.

One Piece Fixing Ties with Arrowhead and Disc

Features and Benefits

A simple one piece bundling and fixing tie with an arrowhead mount. When inserted into the hole the arrowhead locks into place and the "disc", between the fixing and the head of the cable tie, covers the hole and minimises the ingress of dust, dirt and water, whilst adjusting for variations in panel thickness thereby ensuring a secure fixing at all times.

The RT versions are releasable and reusable, ideal for the removal or addition of cables after the initial installation is complete.

The T50SST type has a small "tab" placed below the head which gives additional protection against axial forces and is particularly useful to assist retention on convoluted tubing.

Application

With a diverse range of fixing possibilities this range of fixing ties are ideal for use in many different industries, for example: automotive, aerospace, white goods manufacture and panel building.



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

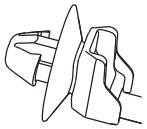




One Piece Fixing Ties with Arrowhead and Disc



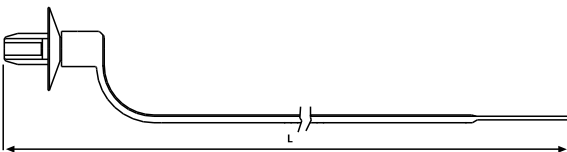
The flexible 'discs' adjust to take up variations in panel thickness – ensuring a firm fixing at all times.



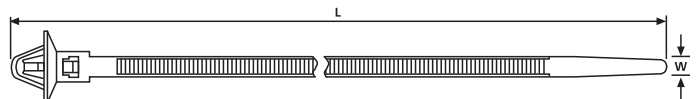
Common headfixing design.

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, Limited Fire Hazard, Halogen free, Low smoke generation, Low generation of toxic gases and corrosive acid |



Special design without a gap between head and bundle; T50MD7.



One piece fixing tie with arrowhead and disc, standard design.

Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Disc Ø | Min. Tensile Strength (N) | Hole Ø | Panel Thickness min. | Panel Thickness max. | Material | Colour |
|-------------|------------------|------------|-----------|---------------|--------|---------------------------|----------|----------------------|----------------------|----------|--------------|
| 126-01401 | T50SD6 | 160 | 5.0 | 31.0 | 18.0 | 180 | 6.3-7.5 | 0.6 | 1.8 | PA66 | Natural (NA) |
| 111-85350 | T50SD6 | 160 | 5.1 | 31.0 | 18.0 | 225 | 6.3-7.5 | 0.6 | 1.2 | PA66HS | Black (BK) |
| 126-00015 | T50SDOP* | 160 | 5.0 | 30 | 22.0 | 225 | 6.2x12.2 | 0.7 | 2.0 | PA66HS | Black (BK) |
| 126-01601 | T50SDOR* | 160 | 5.0 | 30 | 22.0 | 225 | 6.2x12.2 | 0.5 | 1.5 | PA66HS | Black (BK) |
| 126-02300 | T50SST5 | 170 | 4.6 | 31.0 | 16.2 | 225 | 6.1-6.5 | 0.7 | 1.5 | PA66 | Natural (NA) |
| 126-00017 | T50SST5 | 170 | 4.6 | 31.0 | 16.2 | 225 | 6.1-6.5 | 0.7 | 1.5 | PA66HS | Black (BK) |
| 150-35395 | T50SST5 | 170 | 4.6 | 31.0 | 16.2 | 225 | 6.1-6.5 | 0.7 | 1.5 | PA46 | Grey (GY) |
| 111-85850 | T50MD7 | 225 | 5.0 | 59.0 | 16.0 | 225 | 6.8-7.2 | 0.8 | 2.0 | PA66HS | Black (BK) |
| 126-03100 | T50SOSSFT6.5E-MD | 160 | 4.6 | 35.0 | 16.0 | 225 | 6.3-6.7 | 0.6 | 1.8 | PA66HS | Green (GN) |
| 156-00264 | T50SOSSFT6.5E-MD | 160 | 4.6 | 35.0 | 16.0 | 225 | 6.3-6.7 | 0.6 | 1.8 | PA66HS | Black (BK) |
| 126-03102 | T50SOSSFT6.5E | 160 | 4.6 | 35.0 | 16.0 | 225 | 6.3-6.7 | 1.9 | 2.5 | PA66HS | Black (BK) |
| Releasable | | | | | | | | | | | |
| 111-85480 | RT50SD6 | 160 | 5.0 | 31.0 | 18.0 | 180 | 6.3-7.5 | 0.6 | 1.8 | PA66HS | Black (BK) |

All dimensions in mm. Subject to technical changes.

* for oval hole



One Piece Fixing Tie with Arrowhead

Features and Benefits

The arrowhead is simply pushed through the panel and locks into place, the design of the arrowhead (without "legs") ensures that the minimum amount of space is used, and yet offers a firm, secure fixing.

Application

The arrowhead design allows these ties to be used in areas with limited space.



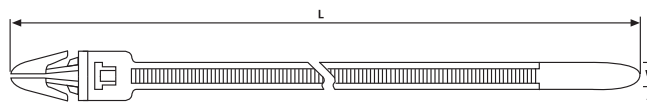
The arrowhead design allows these ties to be used in areas with limited space.

| 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 |

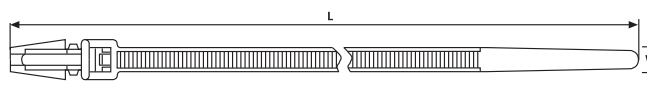
For more information, please turn to page 410.

Material Data

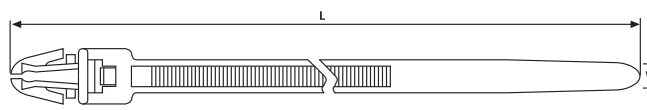
| | |
|-----------------------|--|
| Material | Polyamide 6.6 Heat Stabilised (PA66HS) |
| Operating Temperature | -40 °C to +105 °C Continuous, (+145 °C for 500 h) |
| Flammability | UL94 V2 |



T30RSF



T50RSF



T50RSF(U)

Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Hole Ø | Panel Thickness min. | Panel Thickness max. | Material | Colour | Application Tool |
|-------------|-----------|------------|-----------|---------------|---------------------------|---------|----------------------|----------------------|----------|--------------|------------------|
| 111-85603 | T30RSF(U) | 161 | 3.6 | 31.0 | 135 | 4.8-5.6 | 0.9 | 2.36 | PA66 | Natural (NA) | 1-3, 5 |
| 111-85610 | T30RSF(U) | 161 | 3.6 | 31.0 | 135 | 4.8-5.6 | 0.9 | 2.3 | PA66HS | Black (BK) | 1-3, 5 |
| 111-85789 | T50RSF(U) | 210 | 4.7 | 44.0 | 225 | 6.4-7.1 | 1.0 | 3.56 | PA66 | Natural (NA) | 1-3, 5 |
| 111-85799 | T50RSF(E) | 210 | 4.6 | 50.0 | 225 | 6.2-6.4 | 2.9 | 3.1 | PA66 | Natural (NA) | 1-3, 5 |
| 126-01001 | T50RSF(E) | 210 | 4.6 | 50.0 | 225 | 6.2-6.4 | 2.9 | 3.1 | PA66 | Black (BK) | 1-3, 5 |

All dimensions in mm. Subject to technical changes.



Please Note for Product Specific Approvals please refer to the Appendix



One Piece Fixing Ties with Arrowhead

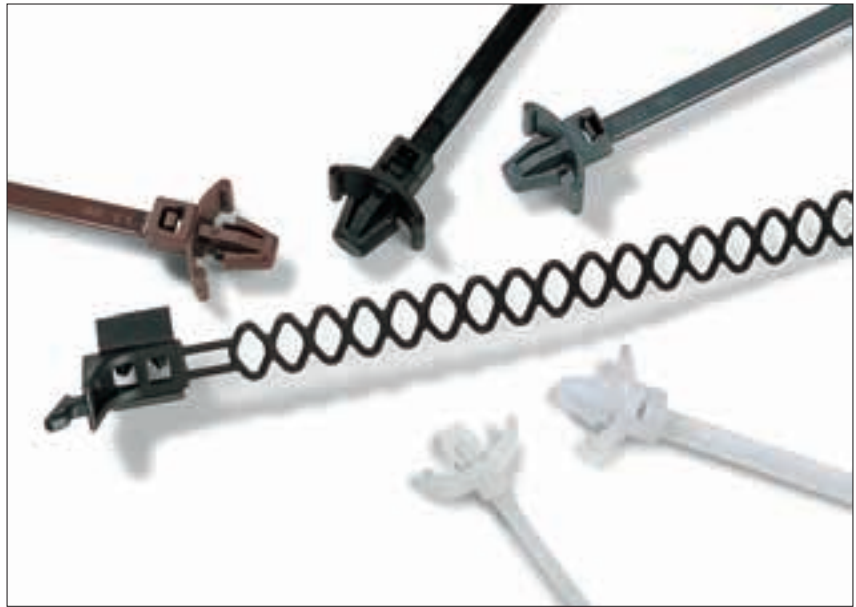
Features and Benefits

The arrowhead design, in conjunction with the supporting “legs”, ensures a firm and secure fixing. The “legs” take up any variation in panel thickness enabling one part to suit many applications.

Both the RT and FBS versions are releasable and reusable, with the FBS type having the added feature of a ladder type strap as opposed to the conventional serrated strap – this ladder type strap has the benefit of being very flexible.

Application

For the bundling and fixing of cable harnesses, pipes and hoses in the automotive, aerospace, white goods industries and panel building.





A wide range of arrowhead fixing ties which are suitable for panel thicknesses of 0.5 mm to 4.5 mm and hole diameters of 4.4 mm to 8.0 mm.



| 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 |

For more information, please turn to page 410.



| 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 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 UV Resistant (PA66W) |
| Operating Temperature | -40 °C to +85 °C Continuous, (+105 °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, Limited Fire Hazard, Halogen free, Low smoke generation, Low generation of toxic gases and corrosive acid |



One Piece Fixing Ties with Arrowhead

Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Hole Ø | Panel Thickness min. | Panel Thickness max. | Material | Colour | Application Tool |
|-------------|--------------------|------------|-----------|---------------|---------------------------|----------|----------------------|----------------------|-----------|--------------|------------------|
| | | | | | | | | | | | |
| 111-85519 | T18RSF | 100 | 2.5 | 16.0 | 80 | 4.6-4.8 | 1.0 | 3.0 | PA66 | Natural (NA) | 1-3, 5 |
| 111-85560 | T18RSF | 100 | 2.5 | 16.0 | 80 | 4.6-4.8 | 1.0 | 3.0 | PA66W | Black (BK) | 1-3, 5 |
| | | | | | | | | | | | |
| 111-85719 | T50SSF | 160 | 4.7 | 25.0 | 225 | 6.0-6.4 | 1.0 | 3.0 | PA66 | Natural (NA) | 1-3, 5 |
| 126-01104 | T50SSF | 160 | 4.7 | 25.0 | 225 | 6.0-6.4 | 1.0 | 3.0 | PA66HS | Natural (NA) | 1-3, 5 |
| 126-00032 | T50SSF | 160 | 4.7 | 25.0 | 225 | 6.0-6.4 | 1.0 | 3.0 | PA66HS | Black (BK) | 1-3, 5 |
| 111-85729 | T50RSF | 200 | 4.7 | 45.0 | 225 | 6.0-6.4 | 1.0 | 3.0 | PA66 | Natural (NA) | 1-3, 5 |
| | | | | | | | | | | | |
| 111-85329 | T50VSL5 | 100 | 4.6 | 16.0 | 225 | 6.1-6.3 | 1.0 | 2.6 | PA66 | Natural (NA) | 1-3, 5 |
| 111-85339 | T50SSL5 | 135 | 4.6 | 27.0 | 225 | 6.1-6.5 | 0.8 | 2.7 | PA66 | Natural (NA) | 1-3, 5 |
| 111-85349 | T50SSL5 | 135 | 4.6 | 27.0 | 225 | 6.1-6.5 | 0.8 | 2.7 | PA66 | Natural (NA) | 1-3, 5 |
| 126-02207 | T50SSL5 | 135 | 4.6 | 27.0 | 225 | 6.1-6.5 | 0.8 | 2.7 | PA66HS | Black (BK) | 1-3, 5 |
| 111-85395 | T50SSL5 | 135 | 4.6 | 27.0 | 225 | 6.1-6.5 | 0.8 | 2.7 | PA46 | Grey (GY) | 1-3, 5 |
| 126-00005 | T50SL5 | 165 | 4.6 | 34.0 | 225 | 6.1-6.3 | 0.8 | 2.7 | PA66HIRHS | Black (BK) | 1-3, 5 |
| 111-85369 | T50SL5 | 165 | 4.6 | 34.0 | 225 | 6.1-6.3 | 0.8 | 2.7 | PA66 | Natural (NA) | 1-3, 5 |
| 126-00001 | T50SL5 | 165 | 4.6 | 34.0 | 225 | 6.1-6.3 | 0.8 | 2.7 | PA66HS | Black (BK) | 1-3, 5 |
| 111-85469 | T50SL6 | 165 | 4.6 | 34.0 | 225 | 6.3-7.5 | 0.5 | 2.5 | PA66 | Natural (NA) | 1-3, 5 |
| 111-85460 | T50SL6 | 165 | 4.6 | 34.0 | 225 | 6.3-7.5 | 0.5 | 2.5 | PA66 | Black (BK) | 1-3, 5 |
| 111-85479 | T50SL7 | 165 | 4.6 | 34.0 | 225 | 6.9-7.1 | 0.8 | 2.5 | PA66 | Natural (NA) | 1-3, 5 |
| 126-00027 | T50SL7 | 165 | 4.6 | 34.0 | 225 | 6.9-7.1 | 0.8 | 2.5 | PA66 | Black (BK) | 1-3, 5 |
| | | | | | | | | | | | |
| 111-85781 | YQR10050 | 165 | 4.6 | 34.0 | 225 | 6.9-7.1 | 1.6 | 4.0 | PA66 | Brown (BN) | 1-3, 5 |
| 150-48396 | T80RFT6X12* | 228 | 4.6 | 45.0 | 225 | 6.3x12.3 | 0.6 | 3.0 | PA66 | Black (BK) | 1-3, 5 |
| 150-48397 | T80RFT6X12* | 228 | 4.6 | 45.0 | 225 | 6.3x12.3 | 0.6 | 3.0 | PA46 | Grey (GY) | 1-3, 5 |

All dimensions in mm. Subject to technical changes.

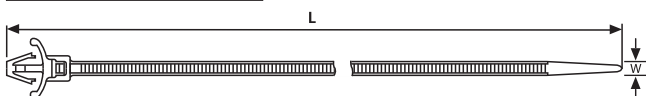
* for slotted hole drilling



One Piece Fixing Ties with Arrowhead

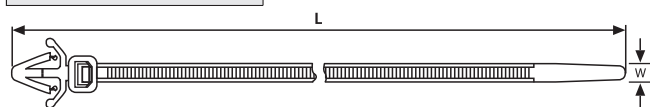
Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Hole Ø | Panel Thickness min. | Panel Thickness max. | Material | Colour |
|-------------|------|------------|-----------|---------------|---------------------------|--------|----------------------|----------------------|----------|--------|
| Releasable | | | | | | | | | | |



| | | | | | | | | | | |
|-----------|-----------------|-----|-----|------|-----|---------|-----|-----|------|------------|
| 126-03001 | YQR10016 | 165 | 4.6 | 34.0 | 225 | 6.9-7.1 | 1.6 | 4.0 | PA66 | Black (BK) |
| 126-03000 | YQR10016 | 165 | 4.6 | 34.0 | 225 | 6.9-7.1 | 1.6 | 4.0 | PA66 | Grey (GY) |
| 115-07010 | RT50RSF | 215 | 4.6 | 50.0 | 225 | 7.8-8.2 | 0.6 | 2.5 | PA66 | Black (BK) |
| 126-00011 | RT50SL7 | 165 | 4.6 | 34.0 | 225 | 7.0 | – | 2.5 | PA66 | Black (BK) |

Releasable



| | | | | | | | | | | |
|-----------|----------------|-----|-----|------|-----|---------|-----|-----|--------|--------------|
| 115-01900 | RT18RSF | 132 | 3.0 | 27.0 | 80 | 3.8-4.2 | – | 2.3 | PA66 | Natural (NA) |
| 115-06960 | RT50SFK | 225 | 5.0 | 50.0 | 225 | 6.4-7.0 | 0.8 | 3.0 | PA66 | Black (BK) |
| 115-00024 | RT50SFK | 225 | 5.0 | 50.0 | 225 | 6.4-7.0 | 0.8 | 3.0 | PA66HS | Black (BK) |

Releasable



| | | | | | | | | | | |
|-----------|---------------|-----|------|------|---|---------|-----|-----|------|------------|
| 150-26100 | FBS100 | 115 | 10.0 | 27.0 | – | 6.3-6.7 | 0.7 | 3.9 | PA66 | Black (BK) |
| 150-26140 | FBS140 | 160 | 10.0 | 42.0 | – | 6.3-6.7 | 0.7 | 3.9 | PA66 | Black (BK) |
| 150-26180 | FBS185 | 200 | 10.0 | 53.0 | – | 6.3-6.7 | 0.7 | 3.9 | PA66 | Black (BK) |

All dimensions in mm. Subject to technical changes.



One Piece Fixing Ties with Arrowhead in the Strap

Features and Benefits

The arrowhead fixing is located in the mid-section of the strap of the cable tie which ensures that the cable bundle sits directly above the fixing point, minimising the space taken.

The head of the T8ORSF tie is moulded in a raised position to ease assembly when the fixing is already in place in the panel.

The T5OSSF type has specially moulded retainers to hold battery cables parallel and firmly in place



Application

This range of fixing ties are ideal for use in many different industries, for example: automotive, aerospace, rail and panel building.






Designed to secure battery cables the T5OSSF6.5 offers a simple and secure fixing.

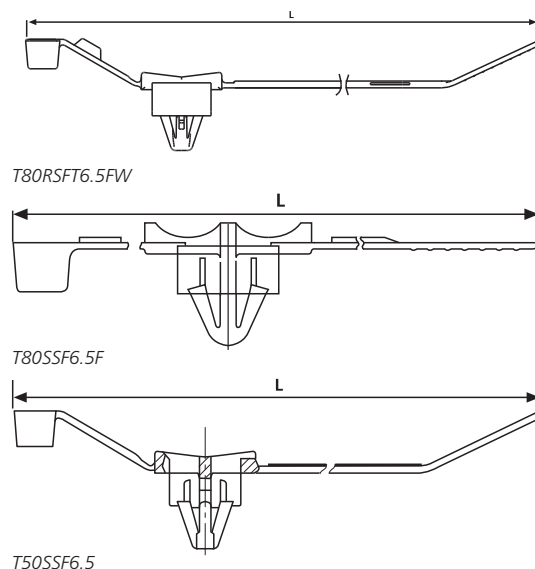
| Material Data | |
|-----------------------|--|
| Material | Polyamide 6.6 Heat Stabilised (PA66HS) |
| Operating Temperature | -40 °C to +105 °C Continuous, (+145 °C for 500 h) |
| Flammability | UL94 V2 |

| 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 |

 **Material specification please see page 40.**



Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Hole Ø | Panel Thickness min. | Panel Thickness max. | Material | Colour | Application Tool |
|-------------|--------------------|------------|-----------|---------------|---------------------------|---------|----------------------|----------------------|----------|------------|------------------|
| 150-39396 | T8ORSF6.5F | 209 | 4.6 | 45.0 | 300 | 6.3-6.5 | 0.6 | 3.0 | PA66 | Black (BK) | 1-3, 5 |
| 150-39393 | T8OSSF6.5F | 179 | 4.6 | 43.0 | 300 | 6.3-6.5 | 0.6 | 3.0 | PA66HS | Black (BK) | 1-3, 5 |
| 126-02600 | T8ORSF6.5F | 209 | 4.6 | 45.0 | 300 | 6.3-6.5 | 0.6 | 3.0 | PA66HS | Black (BK) | 1-3, 5 |
| 150-39385 | T8ORSF6.5FW | 209 | 4.6 | 45.0 | 300 | 6.3-6.5 | 0.6 | 3.0 | PA66HS | Black (BK) | 1-3, 5 |
| 150-39392 | T8OSSF6.5F | 179 | 4.6 | 43.0 | 225 | 6.3-6.5 | 0.6 | 3.0 | PA46 | Grey (GY) | 1-3, 5 |
| 150-39395 | T8ORSF6.5F | 209 | 4.6 | 45 | 300 | 6.3-6.5 | 0.6 | 3.0 | PA46 | Grey (GY) | 1-3, 5 |

All dimensions in mm. Subject to technical changes.



One Piece Fixing Ties with Arrowhead and Disc in the strap

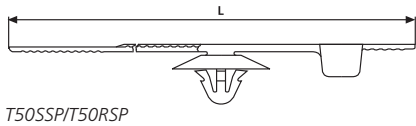
Features and Benefits

The arrowhead fixing is located in the mid-section of the strap of the cable tie which ensures that the cable bundle sits directly above the fixing point, minimising the space taken.

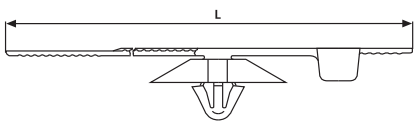
The 'disc' on types T50SSP and T50RSP completely covers the hole in the panel minimising the ingress of dust, dirt and water. The 'discs' on all three types flex to suit variations in panel thickness, ensuring a firm but secure fixing. A particular design feature of these ties is the 'tab' on the end of the head - this is to facilitate easy location and orientation of the head for assembly.

Application

With a diverse range of fixing possibilities (from 5.7 mm to 6.5 mm hole diameters and 0.7 mm to 3.5 mm panel thickness) this range of fixing ties are ideal for use in many different industries, for example: automotive, aerospace, rail, and panel building.



T50SSP/T50RSP



T80RSFT



The "tab" on the head of the tie makes it easy to locate and lift the head for assembly.

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, Limited Fire Hazard, Halogen free, Low smoke generation, Low generation of toxic gases and corrosive acid |



Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Disc Ø | Min. Tensile Strength (N) | Hole Ø | Panel Thickness min. | Panel Thickness max. | Material | Colour | Application Tool |
|-------------|---------|------------|-----------|---------------|--------|---------------------------|---------|----------------------|----------------------|----------|--------------|------------------|
| 150-35932 | T50SSP | 120 | 4.6 | 24 | 18.0 | 225 | 6.0-6.5 | 0.7 | 1.3 | PA66 | Black (BK) | 1-3, 5 |
| 150-35930 | T50RSP | 190 | 4.6 | 45.0 | 18.0 | 225 | 6.0-6.5 | 0.75 | 1.3 | PA66 | Black (BK) | 1-3, 5 |
| 150-15493 | T80RSFT | 190 | 4.6 | 45.0 | 24.4 | 355 | 5.7-6.3 | 1.0 | 3.5 | PA66 | Black (BK) | 1-3, 5 |
| 150-15492 | T80RSFT | 190 | 4.6 | 45.0 | 24.4 | 355 | 5.7-6.3 | 1.0 | 3.5 | PA66HS | Natural (NA) | 1-3, 5 |
| 126-02500 | T80RSFT | 190 | 4.6 | 45.0 | 24.4 | 355 | 5.7-6.3 | 1.0 | 3.5 | PA66HS | Black (BK) | 1-3, 5 |
| 150-15498 | T80RSFT | 190 | 4.6 | 45.0 | 24.4 | 355 | 5.7-6.3 | 1.0 | 3.5 | PA46 | Grey (GY) | 1-3, 5 |

All dimensions in mm. Subject to technical changes.



Cable Tie and Arrowhead Mount Assemblies

Features and Benefits

These two piece fixing ties are supplied ready assembled and offer a simple and versatile method of bundling and fixing cables, pipes and hoses.

The arrowhead base will easily push into pre-punched holes in panels and offers a very secure fixing. The two piece design enables the head of the tie to be orientated to the required position to ease assembly, whilst the 'disc' on the top of the arrowhead takes up variation in panel thickness ensuring a stable fixing at all times.

Available as either inside serrated or outside serrated 'standard' cable ties or 'double headed' ties.

Application

Primarily designed for fixing cable harnesses in the automotive industry, their simplicity and ease of use has resulted in these parts being used in other industries, for example: aviation, switch-gear manufacturers, white goods manufacturers.

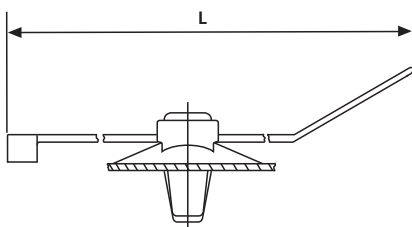


Being a two piece assembly allows the tie head to be located in the most convenient position.

Other dimensions available, please contact us for further information.

Material Data

| | |
|-----------------------|--|
| Material | Polyamide 6.6 High Impact Modified, Heat Stabilised (PA66HIRHS) |
| Colour | Black (BK) |
| Operating Temperature | -40 °C to +105 °C |
| Flammability | UL94 HB |



Two piece fixing tie with moveable arrowhead.

Material Data

| | |
|-----------------------|--|
| Material | Polyamide 6.6 Heat Stabilised (PA66HS) |
| Colour | 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. | Disc Ø | Min. Tensile Strength (N) | Hole Ø | Panel Thickness min. | Panel Thickness max. | Material | |
|-------------|----------------------|------------|-----------|---------------|--------|---------------------------|---------|----------------------|----------------------|-----------|-----------|
| | | | | | | | | | | Cable Tie | Foot Part |
| 150-13593 | T50SSFT6.5 | 150 | 4.6 | 31.0 | 22.4 | 225 | 6.3-6.7 | 0.7 | 2.0 | PA66HS | PA66HS |
| 150-13591 | T50RSFT6.5 | 200 | 4.6 | 45.0 | 22.4 | 225 | 6.3-6.7 | 0.9 | 2.0 | PA66HS | PA66HS |
| 150-37691 | T50RSFT6.5D18 | 200 | 4.6 | 45.0 | 18.0 | 225 | 6.5-6.8 | 0.4 | 1.6 | PA66HS | PA66HIRHS |
| 117-05160 | T50RDHSFT6.5 | 210 | 4.7 | 45 | 22.4 | 225 | 6.3-6.7 | 0.7 | 2.0 | PA66HS | PA66HS |
| 150-13596 | T80ISFT6.5 | 300 | 4.6 | 81.0 | 22.4 | 355 | 6.3-6.7 | 0.7 | 2.0 | PA66HS | PA66HS |

All dimensions in mm. Subject to technical changes.



Rivet Fixing Ties

Features and Benefits

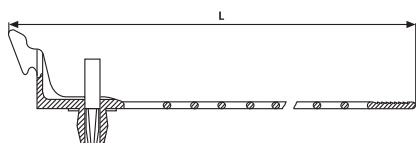
These ties are simply installed by pushing the rivet part of the tie into a hole and firmly tapping the rivet pin until flush to the surface. The pin expands the wings of the rivet and the tie is firmly locked in place.

All three versions listed are releasable and reusable allowing for the removal or addition of cables after installation.

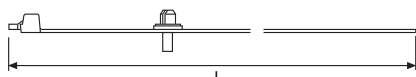
The RELF and RI ranges are conventional 'serrated' cable ties, whilst the FBR range have a 'ladder-type' design which is locked by stretching the strap over the head of the tie. The design of the FBR gives a very flexible strap.



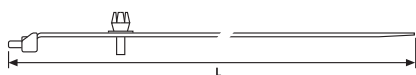
FBR cable ties have a flexible 'ladder' design of strap - Ideal for secure fixing into thin panels (up to 2.5 mm thick).



Fixing ties type FBR



Fixing ties type RELF



Fixing ties type RI

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 12 (PA12) |
| Operating Temperature | -40 °C to +85 °C Continuous, (+105 °C for 500 h) |
| Flammability | UL94 HB |



Material Data

| | |
|-----------------------|---|
| Material | Polyamide 6.6 High Impact Modified (PA66HIR) |
| 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) | Hole Ø | Panel Thickness min. | Panel Thickness max. | Material | Colour |
|-------------|-----------------|------------|-----------|---------------|---------------------------|---------|----------------------|----------------------|----------|------------|
| 150-27100 | FBR6/100 | 115 | 10.0 | 27.0 | – | 6.2-6.5 | 0.8 | 2.4 | PA66 | Black (BK) |
| 150-27140 | FBR6/140 | 160 | 10.0 | 42.0 | – | 6.2-6.5 | 0.8 | 2.4 | PA66 | Black (BK) |
| 150-27180 | FBR6/185 | 200 | 10.0 | 53.0 | – | 6.2-6.5 | 0.8 | 2.4 | PA66 | Black (BK) |
| 150-27110 | FBR7/100 | 115 | 10.0 | 27.0 | – | 7.2-7.5 | 0.8 | 2.4 | PA66 | Black (BK) |
| 150-27150 | FBR7/140 | 160 | 10.0 | 42.0 | – | 7.2-7.5 | 0.8 | 2.4 | PA66 | Black (BK) |
| 150-27190 | FBR7/185 | 200 | 10.0 | 53.0 | – | 7.2-7.5 | 0.8 | 2.4 | PA66 | Black (BK) |
| 131-31710 | RELF170 | 180 | 8.0 | 44.0 | 180 | 6.5 | 2.5 | 2.5 | PA66 | Black (BK) |
| 115-40902 | RELF170 | 180 | 8.0 | 44.0 | 180 | 6.3 | 2.5 | 2.5 | PA66HIR | Black (BK) |
| 131-14080 | RI 80 | 80 | 7.0 | 16.0 | 265 | 6.9-7.1 | 0.8 | 2.2 | PA12 | Black (BK) |
| 131-14120 | RI 120 | 120 | 9.0 | 28.0 | 265 | 6.9-7.1 | 0.8 | 2.2 | PA12 | Black (BK) |
| 131-14160 | RI 160 | 160 | 9.0 | 41.0 | 265 | 6.9-7.1 | 0.8 | 2.2 | PA12 | Black (BK) |

All dimensions in mm. Subject to technical changes.



One Piece Fixing Ties with Fir Tree Mount

Features and Benefits

This one piece cable tie with fir tree fixing offers a simple and easy to use method of bundling and fixing cables, pipes and hoses. The design of the fir tree ensures a positive and secure fixing into panels from 0.8mm to 7.0 mm deep or threaded blind holes.

The "disc" on the top of the fir tree covers the hole and minimises the ingress of dust, dirt and water.

Type REL are releasable and reusable and are ideal for the removal or addition of cables after the initial installation is completed.

Application

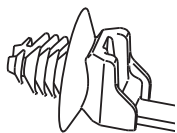
Primarily designed for fixing cable harnesses in the automotive industry their simplicity and ease of use has resulted in these parts being used in many other industries, for example: aviation, switch-gear manufacture and white goods.



Ideal for use in deep panels and threaded, blind holes.

Material Data

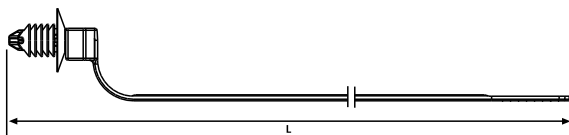
| | |
|-----------------------|---|
| Material | Polyamide 6.6 (PA66) |
| Operating Temperature | -40 °C to +85 °C Continuous, (+105 °C for 500 h) |
| Flammability | UL94 V2 |



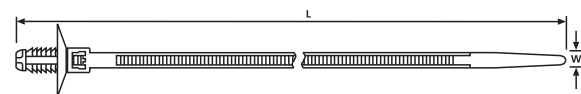
Common headfixing design.

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 |



Special design without a gap between head and bundle; FT220DP7.



One piece fixing tie with fir tree mount, standard design.

Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Disc Ø | Min. Tensile Strength (N) | Hole Ø | Panel Thickness min. | Panel Thickness max. | Material | Colour |
|-------------|-------------------|------------|-----------|---------------|--------|---------------------------|---------|----------------------|----------------------|--------------|--------------|
| 150-55610 | T18RDP5 | 110 | 2.5 | 20.0 | 13.0 | 80 | 4.9-5.1 | 3.0 | 4.0 | PA66 | Black (BK) |
| 155-05800 | T50SOSFT6E | 160 | 4.6 | 35.0 | – | 150 | 6.5-7.0 | 0.75 | 3.0 | PA66HIRHS | Black (BK) |
| 157-01104 | T50SDP6 | 170 | 5.0 | 31 | 22.0 | 225 | 6.3-7.1 | 0.8 | 7.0 | PA66 | Natural (NA) |
| 150-55550 | T50SDP6 | 170 | 5.0 | 31 | 22.0 | 225 | 6.3-7.1 | 0.8 | 7.0 | PA66HIRHS(S) | Black (BK) |
| 150-01700 | FT220DP7 | 230 | 4.7 | 40.0 | 16.0 | 225 | 6.8-7.2 | 0.8 | 5.0 | PA66 | Black (BK) |
| Releasable | | | | | | | | | | | |
| 150-55500 | REL30SDP6 | 170 | 5.0 | 31.0 | 22.0 | 135 | 6.3-7.0 | 3.0 | 7.0 | PA66 | Black (BK) |

All dimensions in mm. Subject to technical changes.



Cable Tie and Fir Tree Mount Assemblies

Features and Benefits

These two piece fixings are supplied ready assembled and offer a simple and versatile method of bundling and fixing cables.

The fir tree base will easily push into pre-punched holes in panels or threaded, blind holes, and offers a very secure fixing.

The two piece design enables the head of the tie to be orientated to the required position to ease assembly, whilst the "disc" on the top of the fir tree covers the hole and minimises the ingress of dust, dirt and water.

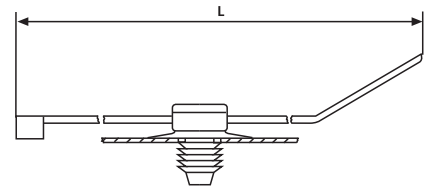
Application

Primarily designed for fixing cable harnesses in the automotive industry their simplicity and ease of use, has resulted in these parts being used in many industries, for example: aviation, switch gear manufacture and white goods.



These Fir Tree fixings can also be used in threaded, blind holes.

Other dimensions available on request. Please contact us.



One piece fixing tie with fir tree mount

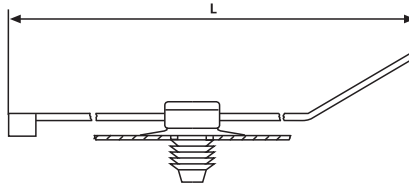
Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Disc Ø | Min. Tensile Strength (N) | Hole Ø | Panel Thickness min. | Panel Thickness max. | Colour | Material | |
|-------------|-----------|------------|-----------|---------------|--------|---------------------------|---------|----------------------|----------------------|-------------------------|-----------|-----------|
| | | | | | | | | | | | Cable Tie | Foot Part |
| 150-55940 | T30RFT5 | 150 | 3.6 | 34.0 | 16.0 | 135 | 4.5-5.0 | 0.7 | 3.0 | Black (BK), Grey (GY) | PA66HS | PA66 |
| 150-55850 | T30RFT5 | 148 | 3.6 | 34.0 | 16.0 | 135 | 4.5-5.0 | 0.7 | 3.0 | Black (BK) | PA66HS | PA66HIRHS |
| 150-55948 | T30RFT5 | 150 | 3.6 | 34.0 | 16.0 | 135 | 4.5-5.0 | 0.7 | 3.0 | Natural (NA), Grey (GY) | PA46 | PA46 |
| 150-55942 | T30LRFT5 | 260 | 3.3 | 61.0 | 16.0 | 180 | 4.5-5.0 | 0.7 | 3.0 | Black (BK), Grey (GY) | PA66HS | PA66 |
| 150-55941 | T50RFT5 | 200 | 4.6 | 45.0 | 16.0 | 225 | 4.5-5.0 | 0.7 | 3.0 | Black (BK), Grey (GY) | PA66HS | PA66 |
| 156-00025 | T50RFT5 | 200 | 4.6 | 45.0 | 16.0 | 225 | 4.5-5.0 | 0.7 | 3.0 | Black (BK) | PA66HS | PA66HIRHS |
| 150-55943 | T50SFT5 | 150 | 4.6 | 34.0 | 16.0 | 225 | 4.5-5.0 | 0.7 | 3.0 | Black (BK), Grey (GY) | PA66HS | PA66 |
| 150-09110 | T18RFT6 | 100 | 2.5 | 20.0 | 16.0 | 80 | 6.4-7.1 | 0.75 | 3.0 | Black (BK) | PA66 | PA66 |
| 150-77935 | T18RFT6 | 100 | 2.5 | 20.0 | 16.0 | 80 | 6.4-7.1 | 0.75 | 3.0 | Black (BK) | PA66W | PA66 |
| 150-31097 | T30LFT6LG | 190 | 3.6 | 45.0 | 16.0 | 135 | 6.4-7.1 | 0.75 | 6.0 | Black (BK) | PA66 | PA66HIRHS |
| 150-77932 | T30LRFT6 | 260 | 3.3 | 65.0 | 16.0 | 180 | 6.4-7.1 | 0.75 | 3.0 | Black (BK) | PA66HS | PA66HIRHS |
| 150-77950 | T30RFT6 | 150 | 3.6 | 34.0 | 16.0 | 135 | 6.4-7.1 | 0.75 | 3.0 | Black (BK) | PA66HS | PA66HIRHS |
| 150-31090 | T30RFT6LG | 148 | 3.6 | 35.0 | 16.0 | 135 | 6.4-7.1 | 0.75 | 6.0 | Black (BK) | PA66HS | PA66HIRHS |
| 150-77936 | T50RDHFT6 | 210 | 4.7 | 19.0 | 16.0 | 225 | 6.4-7.1 | 0.75 | 3.0 | Black (BK) | PA66HS | PA66HIRHS |
| 156-05308 | T50RFT6 | 200 | 4.6 | 45.0 | 16.0 | 225 | 6.4-7.1 | 0.75 | 3.0 | Black (BK) | PA66 | PA66 |
| 150-77938 | T50RFT6 | 200 | 4.6 | 45.0 | 16.0 | 225 | 6.4-7.1 | 0.75 | 3.0 | Grey (GY) | PA46 | PA46 |
| 150-77941 | T50RFT6 | 200 | 4.6 | 45.0 | 16.0 | 225 | 6.4-7.1 | 0.75 | 3.0 | Black (BK) | PA66HS | PA66 |
| 156-05300 | T50RFT6 | 200 | 4.6 | 45.0 | 16.0 | 225 | 6.4-7.1 | 0.75 | 3.0 | Black (BK) | PA66HS | PA66HS |
| 150-31091 | T50RFT6LG | 200 | 4.6 | 44.0 | 16.0 | 225 | 6.4-7.1 | 0.75 | 6.0 | Black (BK) | PA66HS | PA66HIRHS |
| 156-00076 | T50ROSFT6 | 200 | 4.6 | 45.0 | 16.0 | 225 | 6.4-7.1 | 0.75 | 3.0 | Black (BK) | PA66HS | PA66HIRHS |
| 156-01500 | T50SFT6 | 150 | 4.6 | 31.0 | 16.0 | 225 | 6.4-7.1 | 0.75 | 3.0 | Black (BK) | PA66 | PA66 |

All dimensions in mm. Subject to technical changes.



Cable Tie and Fir Tree Mount Assemblies



One piece fixing tie with fir tree mount

Other dimensions available on request. Please contact us for further information.

Material Data

| | |
|-----------------------|--|
| Material | Polyamide 6.6 High Impact Modified, Heat Stabilised (PA66HIRHS) |
| Operating Temperature | -40 °C to +105 °C |
| Flammability | UL94 HB |



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



Technical Table

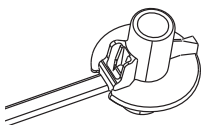
| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Disc Ø | Min. Tensile Strength (N) | Hole Ø | Panel Thickness min. | Panel Thickness max. | Colour | Material | |
|-------------|--------------------|------------|-----------|---------------|--------|---------------------------|----------|----------------------|----------------------|------------|------------|------------|
| | | | | | | | | | | | Cable Tie | Foot Part |
| 150-77933 | T50SFT6 | 150 | 4.6 | 31.0 | 16.0 | 225 | 6.4-7.1 | 0.75 | 3.0 | Black (BK) | PA66HS | PA66 |
| 150-31093 | T50SFT6LG | 160 | 4.6 | 35.0 | 16.0 | 225 | 6.4-7.1 | 0.75 | 6.0 | Black (BK) | PA66HS | PA66HIRHS |
| 156-05902 | T50ROSFT6SD | 200 | 4.6 | 46.0 | 16.0 | 225 | 6.4-7.1 | 0.75 | 3.0 | Black (BK) | PA66HS | PA66HIR |
| 150-77934 | T80LFT6 | 390 | 4.6 | 108 | 16.0 | 355 | 6.4-7.0 | 0.75 | 3.0 | Black (BK) | PA66HS | PA66HIRHS |
| 150-77937 | T80IFT6 | 300 | 4.6 | 81.0 | 16.0 | 355 | 6.4-7.1 | 0.75 | 3.0 | Black (BK) | PA66HS | PA66HIRHS |
| 150-31096 | T80IFT6LG | 300 | 4.6 | 81.0 | 16.0 | 355 | 6.4-7.1 | 0.75 | 6.0 | Black (BK) | PA66HS | PA66HIRHS |
| 156-01503 | T50SFT7 | 160 | 4.6 | 31.0 | 16.0 | 225 | 6.5-7.0 | 0.8 | 7.0 | Black (BK) | PA66 | PA66 |
| 111-85870 | T50RFT7 | 200 | 4.6 | 45.0 | 16.0 | 225 | 6.5-7.0 | 0.8 | 7.0 | Black (BK) | PA66HS | PA66HS |
| 156-05312 | T50RFT7 | 200 | 4.6 | 45.0 | 16.0 | 225 | 6.5-7.0 | 0.8 | 7.0 | Black (BK) | PA66 | PA66 |
| 156-05311 | T50RFT7 | 200 | 4.6 | 45.0 | 16.0 | 225 | 6.5-7.0 | 0.8 | 7.0 | Black (BK) | PA66HS | PA66HS |
| 111-05350 | T50IFT7 | 300 | 4.6 | 85.0 | 16.0 | 225 | 6.5-7.0 | 0.8 | 7.0 | Black (BK) | PA66 | PA66 |
| 156-00903 | T50IFT7 | 300 | 4.6 | 81.0 | 16.0 | 225 | 6.5-7.0 | 0.8 | 7.0 | Black (BK) | PA66 | PA66 |
| 150-00700 | T50IFT7 | 300 | 4.6 | 81.0 | 16.0 | 225 | 6.5-7.0 | 0.8 | 7.0 | Black (BK) | PA66HS | PA66HS |
| 156-05320 | T50RFT8 | 200 | 4.6 | 45.0 | 16.0 | 225 | 7.7-8.0 | 0.8 | 6.0 | Black (BK) | PA66 | PA66 |
| 111-85880 | T50RFT8 | 200 | 4.6 | 45.0 | 16.0 | 225 | 7.7-8.0 | 0.8 | 6.0 | Black (BK) | PA66HS | PA66HS |
| 156-00044 | T50RFT8 | 200 | 4.6 | 45.0 | 16.0 | 225 | 7.7-8.0 | 0.8 | 6.0 | Black (BK) | PA66HS | PA66HS |
| 156-00200 | T120IFT9 | 300 | 7.6 | 75.0 | 20.0 | 535 | 8.8-9.4 | 4.0 | 8.0 | Black (BK) | PA66HIR(S) | PA66HIR(S) |
| 156-05301 | T50RFT10 | 200 | 4.6 | 45.0 | 18.0 | 225 | 9.7-10.0 | 0.8 | 5.0 | Black (BK) | PA66 | PA66 |
| 111-85810 | T50RFT10 | 200 | 4.6 | 45.0 | 18.0 | 225 | 9.7-10.0 | 0.8 | 5.0 | Black (BK) | PA66HS | PA66HS |

All dimensions in mm. Subject to technical changes.



T50SOSSBH5E

This cable tie offers three distinct benefits to the user. Firstly it offers the opportunity to retain insulation material. Secondly, it allows cables, pipes or hoses to be bundled. Thirdly it has a simple “soft push” mechanism which allows it to be installed onto a weld stud without the use of any tools. The unique head design allows the cable tie to firmly hold bundles as small as 1.6 mm diameter.



T50SOSSBH5E



The new head design offers additional fixing of soft materials.

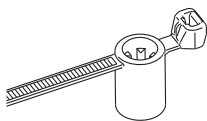
Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Stud Ø | Material | Colour |
|-------------|-------------|------------|-----------|---------------|---------------------------|--------|----------|------------|
| 155-05701 | T50SOSSBH5E | 165 | 4.6 | 35.0 | 225 | 5 | PA66HS | Black (BK) |

All dimensions in mm. Subject to technical changes.

T50SSBS50TE

Using the “soft push” technology, this inside serrated tie is mounted on the top of the stud. The additional height gained by this design gives a clear “stand off” from the panel. Ideal applications include mass transit industries, panel builders, and white goods manufacturers.



T50SSBS50TE



The T50SSBS50TE allows very precise routing of cable bundles.



**Material specification
please see page 40.**

Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Min. Tensile Strength (N) | Stud Ø | Material | Colour |
|-------------|--------------|------------|-----------|---------------|---------------------------|--------|----------|------------|
| 155-30602 | T50SSBS50TE* | 160 | 4.6 | 35.0 | 200 | 5 | PA66HS | Black (BK) |

All dimensions in mm. Subject to technical changes.

* Since the bundled cables lie directly above or on the weld stud, care must be taken to ensure that the length of the weld stud does not exceed the height of the sheath. To avoid damage, we recommend a maximum weld stud length of 16.5 mm.

