



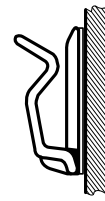
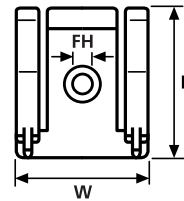
### Self Adhesive Clips Types TY8H1S, RA, RB, SAC

#### Features and Benefits

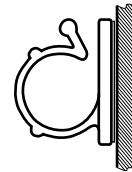
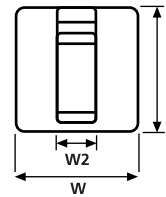
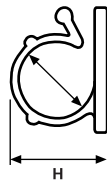
Wires, cables or hoses can be quickly and easily installed using these one piece fixing clips.

#### Application

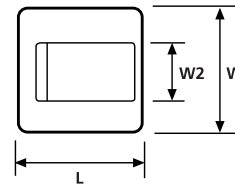
These clips are ideal for use in applications which are difficult to access, or for areas where a self adhesive is the only possible fixing method (for example where fixing 'holes' would be unacceptable).



TY8H1S Self Adhesive Clip



RA3-18 Self Adhesive Clip



RB5-8 Self Adhesive Clip

For more information on the types of adhesive used please turn to page 120.

#### Material Data

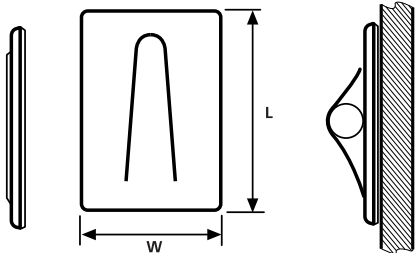
|                       |  |
|-----------------------|--|
| Material              | Polyamide 6.6 (PA66)                             |
| Operating Temperature | -40 °C to +85 °C Continuous, (+105 °C for 500 h) |
| Flammability          | UL94 V2 (excluding adhesive)                     |



#### Technical Table

| Article-No. | Type   | Length (L) | Width (W) | Width (W2) | Height (H) | Fixing Hole Ø (FH) | Bundle Ø max. | Material | Colour       | Adhesive         |
|-------------|--------|------------|-----------|------------|------------|--------------------|---------------|----------|--------------|------------------|
| 151-22819   | TY8H1  | 26.0       | 23.0      | –          | 6.5        | 3.2                | –             | PA66     | Natural (NA) | –                |
| 151-12819   | TY8H1S | 26.0       | 23.0      | –          | 6.5        | 3.2                | –             | PA66     | Natural (NA) | Acrylate         |
| 151-13018   | RA3    | 13.0       | 13.0      | 5.0        | 5.0        | –                  | 3.0           | PA66     | Natural (NA) | Synthetic rubber |
| 151-13019   | RA6    | 19.0       | 19.0      | 5.0        | 9.0        | –                  | 6.0           | PA66     | Natural (NA) | Synthetic rubber |
| 151-13020   | RA9    | 19.0       | 19.0      | 7.5        | 12.5       | –                  | 9.0           | PA66     | Natural (NA) | Synthetic rubber |
| 151-13021   | RA13   | 25.0       | 25.0      | 10.0       | 16.5       | –                  | 13.0          | PA66     | Natural (NA) | Synthetic rubber |
| 151-13119   | RA18   | 28.5       | 28.5      | 10.0       | 23.0       | –                  | 18.0          | PA66     | Natural (NA) | Synthetic rubber |
| 151-14059   | RB5    | 19.0       | 19.0      | 9.7        | 6.0        | –                  | 5.0           | PA66     | Natural (NA) | Synthetic rubber |
| 151-14000   | RB5    | 19.0       | 19.0      | 9.7        | 6.0        | –                  | 5.0           | PA66     | Black (BK)   | Synthetic rubber |
| 151-13606   | RB8    | 25.0       | 25.0      | 12.7       | 11.5       | –                  | 8.0           | PA66     | Natural (NA) | Synthetic rubber |
| 151-13601   | RB8    | 25.0       | 25.0      | 12.7       | 11.5       | –                  | 8.0           | PA66     | Black (BK)   | Synthetic rubber |
| 151-00505   | RB14   | 33.2       | 27.4      | 23         | 16.0       | –                  | 14.0          | PA66     | Natural (NA) | Synthetic rubber |
| 151-00502   | RB14   | 33.2       | 27.4      | 23         | 16.0       | –                  | 14.0          | PA66     | Black (BK)   | Synthetic rubber |

All dimensions in mm. Subject to technical changes.



SAC-Series Self Adhesive Clip



Malleable tongue allows for a variety of sizes per clip.

For more information on the types of adhesive used please turn to page 120.

Material Data

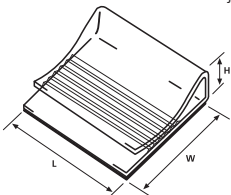
|                       |   |
|-----------------------|---|
| Material              | Electroplated mild steel (ST)           |
| Adhesive              | Acrylate with base of polyethylene foam |
| Operating Temperature | -40 °C to +70 °C                        |



Technical Table

| Article-No. | Type | Length (L) | Width (W) | Bundle Ø max. | Material | Colour     | Adhesive |
|-------------|------|------------|-----------|---------------|----------|------------|----------|
| 151-00033   | SAC0 | 20.0       | 15.0      | 3.0           | ST       | White (WH) | Acrylate |
| 151-00100   | SAC1 | 32.0       | 22.0      | 4.0           | ST       | White (WH) | Acrylate |
| 151-00200   | SAC2 | 38.0       | 25.0      | 8.0           | ST       | White (WH) | Acrylate |
| 151-00300   | SAC3 | 44.0       | 33.0      | 12.0          | ST       | White (WH) | Acrylate |
| 151-00400   | SAC4 | 54.0       | 38.0      | 16.0          | ST       | White (WH) | Acrylate |

All dimensions in mm. Subject to technical changes.



130100 Self Adhesive Clip

Material Data

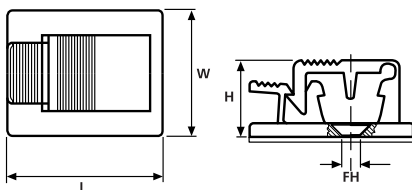
|                       |                         |
|-----------------------|-------------------------|
| Material              | Polyvinylchloride (PVC) |
| Operating Temperature | -25 °C to +65 °C        |



Technical Table

| Article-No. | Type   | Length (L) | Width (W) | Height (H) | Material | Colour     | Adhesive |
|-------------|--------|------------|-----------|------------|----------|------------|----------|
| 154-01119   | 130100 | 25.0       | 25.0      | 9.1        | PVC      | White (WH) | Acrylate |

All dimensions in mm. Subject to technical changes.



ASI-Clip Self Adhesive Clip

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 (excluding adhesive)                     |



Technical Table

| Article-No. | Type     | Length (L) | Width (W) | Height (H) | Fixing Hole Ø (FH) | Material | Colour       | Adhesive |
|-------------|----------|------------|-----------|------------|--------------------|----------|--------------|----------|
| 150-11294   | ASI-Clip | 25.0       | 20.0      | 11.7       | 3.3                | PA66HIR  | Natural (NA) | Acrylate |

All dimensions in mm. Subject to technical changes.



### Flat Ribbon Cables FKH Series

#### Features and Benefits

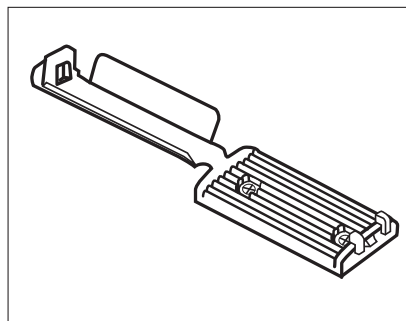
Flat Ribbon cables can be quickly and easily installed using these one piece fixing clips. They offer the benefits of being easily releasable and re-usable for additional or replacement of cables.

#### Application

These clips are ideal for use in applications which are difficult to access, or for areas where a self adhesive is the only possible fixing method (for example "holes" would be unacceptable). The FKH clips are designed to retain flat ribbon cables – ideal for use in computer equipment, gaming machines and domestic appliances. Available in self-adhesive mount or screw mount.



Based on extremely soft wings any flat cable is gently fastened.



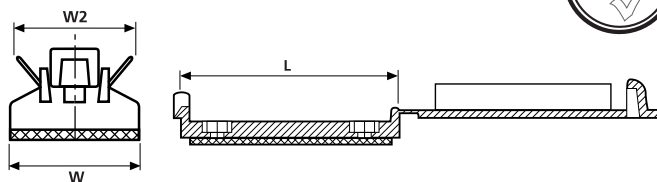
Fixation can be realised with M3 screws or acrylic adhesive backing.



The flat ribbon cables are available in 4 different sizes.

For more information on the types of adhesive used please turn to page 120.

| Material Data         |   |
|-----------------------|---|
| Material              | <b>Polyamide 6.6 High Impact Modified (PA66HIR)</b> |
| Operating Temperature | <b>-40 °C to +80 °C</b>                             |
| Flammability          | <b>UL94 HB (excluding adhesive)</b>                 |



Technical Table

| Article-No. | Type          | Length (L) | Width (W) | Width (W2) | Fixing Hole Ø (FH) | Adhesive | Material | Colour     |
|-------------|---------------|------------|-----------|------------|--------------------|----------|----------|------------|
| 151-15250   | <b>FKH25A</b> | 31.0       | 25.0      | 22.0       | 3.1                | Acrylate | PA66HIR  | Black (BK) |
| 151-15300   | <b>FKH30A</b> | 35.0       | 25.0      | 22.0       | 3.1                | Acrylate | PA66HIR  | Black (BK) |
| 151-15500   | <b>FKH50A</b> | 56.6       | 25.0      | 22.0       | 3.1                | Acrylate | PA66HIR  | Black (BK) |
| 151-15800   | <b>FKH80A</b> | 86.0       | 25.0      | 22.0       | 3.1                | Acrylate | PA66HIR  | Black (BK) |
| 151-16250   | <b>FKH25</b>  | 31.0       | 25.0      | 22.0       | 3.1                | –        | PA66HIR  | Black (BK) |
| 151-16300   | <b>FKH30</b>  | 35.0       | 25.0      | 22.0       | 3.1                | –        | PA66HIR  | Black (BK) |
| 151-16500   | <b>FKH50</b>  | 56.6       | 25.0      | 22.0       | 3.1                | –        | PA66HIR  | Black (BK) |
| 151-16800   | <b>FKH80</b>  | 86.0       | 25.0      | 22.0       | 3.1                | –        | PA66HIR  | Black (BK) |

All dimensions in mm. Subject to technical changes.



## WPC – Wire Push In Clips

### Features and Benefits

The shape of the clips ensures that they can accept either single or multiple cables, whilst the design of the cable entry allows cables to be simply pushed into place.

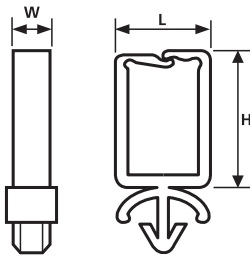
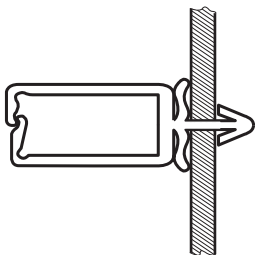
The self-locking feature ensures that once inside the clip the wires cannot be removed accidentally. The arrowhead fixing design ensures simple and secure installation and only needs access to the panel from one side.

### Application

With the increased complexity of electronic and electrical installations the use of the WPC clips enable cables to be installed using the minimum amount of space, a typical application would be in the frames/ rails of control cabinets.



WPC – Wire Push In Clip.



WPC5-20 Wire Push In Clip

### 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) | Height (H) | Fixing Hole Ø (FH) | Panel Thickness min. | Panel Thickness max. | Material | Colour       |
|-------------|--------------|------------|-----------|------------|--------------------|----------------------|----------------------|----------|--------------|
| 151-75059   | <b>WPC5</b>  | 15.0       | 5.25      | 12.7       | 4.7                | 0.8                  | 4.0                  | PA66     | Natural (NA) |
| 151-75109   | <b>WPC10</b> | 15.0       | 5.25      | 17.7       | 4.7                | 0.8                  | 4.0                  | PA66     | Natural (NA) |
| 151-75159   | <b>WPC15</b> | 15.0       | 5.25      | 22.7       | 4.7                | 0.8                  | 4.0                  | PA66     | Natural (NA) |
| 151-75209   | <b>WPC20</b> | 15.0       | 5.25      | 27.7       | 4.7                | 0.8                  | 4.0                  | PA66     | Natural (NA) |

All dimensions in mm. Subject to technical changes.



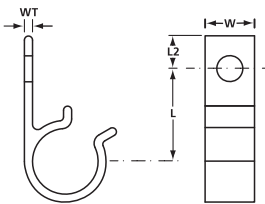
## Screw Mount D-Clip

### Features and Benefits

Screwed D-clips are available in 3 sizes and guarantee time and cost saving by simply pressing the cable into the holder. The flexible grip means that later removal or replacement of cables and pipes is possible. 3 different bore diameters for fixing the holder are available



The clip is held in place by a screw and the bundled cable or pipe is guided securely.



D-Clip

### Material Data

|                       |   |
|-----------------------|---|
| Material              | <b>Polyacetal (POM)</b>                                 |
| Operating Temperature | <b>-40 °C to +90 °C Continuous, (+110 °C for 500 h)</b> |
| Flammability          | <b>UL94 HB</b>  |



### Technical Table

| Article-No. | Type        | Length (L) | Length (L2) | Width (W) | Wall (WT) | Fixing Hole Ø (FH) | Bundle Ø max. | Material | Colour     |
|-------------|-------------|------------|-------------|-----------|-----------|--------------------|---------------|----------|------------|
| 211-70000   | <b>4D10</b> | 17.0       | 8.0         | 15.0      | 2.0       | 4.0                | 10.0          | POM      | Black (BK) |
| 211-70001   | <b>4D15</b> | 25.0       | 10.0        | 15.0      | 2.0       | 4.0                | 15.0          | POM      | Black (BK) |
| 211-70002   | <b>4D20</b> | 28.0       | 10.0        | 15.0      | 2.5       | 4.0                | 20.0          | POM      | Black (BK) |
| 211-70100   | <b>6D10</b> | 17.0       | 8.0         | 15.0      | 2.0       | 6.0                | 10.0          | POM      | Black (BK) |
| 211-70101   | <b>6D15</b> | 25.0       | 10.0        | 15.0      | 2.0       | 6.0                | 15.0          | POM      | Black (BK) |
| 211-70104   | <b>6D20</b> | 28.0       | 10.0        | 15.0      | 2.5       | 6.0                | 20.0          | POM      | Black (BK) |
| 211-70200   | <b>8D10</b> | 17.0       | 8.0         | 15.0      | 2.0       | 8.0                | 10.0          | POM      | Black (BK) |
| 211-70203   | <b>8D15</b> | 25.0       | 10.0        | 15.0      | 2.0       | 8.0                | 15.0          | POM      | Black (BK) |
| 211-70204   | <b>8D20</b> | 28.0       | 10.0        | 15.0      | 2.5       | 8.0                | 20.0          | POM      | Black (BK) |

All dimensions in mm. Subject to technical changes.



### CTC Convoluting Tubing Clamp

#### Features and Benefits

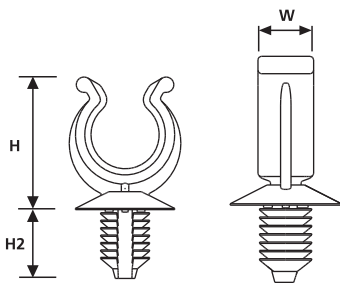
The clamps for corrugated tubing are available in various nominal diameters and have a base in the shape of a fir tree for inserting in a drilled hole. Due to the individual fins, the clamp can be inserted into blind holes with threading. The corrugated tubing is snapped into the clamp where it is securely held. The rib on the inside of the bracket fits into the profile of the tubing and prevents the tubing from slipping.

#### Application

CTC clamps are used for example in the automobile, harness making, electrical industry and wherever corrugated tubing has to be quickly and firmly fixed.

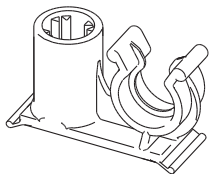


The tubing is clicked into the CTC clamp and is held firmly.



CTC10FT6LG

| 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   |



There are many clamps with other base shapes available on request. One example would be mounts weld studs.

Technical Table

| Article-No. | Type        | Width (W) | Height (H) | Height (H2) | Nominal Ø | Disc Ø | Fixing Hole Ø (FH) | Panel Thickness min. | Panel Thickness max. |
|-------------|-------------|-----------|------------|-------------|-----------|--------|--------------------|----------------------|----------------------|
| 151-14314   | CTC4.5FT6LG | 8.0       | 16.1       | 11.1        | 4.5       | 16.0   | 6.5-7.0            | 0.75                 | 6.0                  |
| 151-14313   | CTC7.5FT6LG | 8.0       | 18.6       | 11.1        | 7.5       | 16.0   | 6.5-7.0            | 0.75                 | 6.0                  |
| 155-31602   | CTC7.5FT9   | 8.0       | 19.9       | 12.2        | 7.5       | 23.0   | 8.7-9.0            | 3.0                  | 5.0                  |
| 151-14311   | CTC10FT6    | 8.0       | 21.4       | 7.5         | 10.0      | 16.0   | 6.5-7.0            | 0.75                 | 3.0                  |
| 151-00018   | CTC10FT6LG  | 8.0       | 21.4       | 11.1        | 10.0      | 16.0   | 6.5-7.0            | 0.75                 | 6.0                  |
| 155-17801   | CTC10FT9    | 8.0       | 22.7       | 12.2        | 10.0      | 23.0   | 8.7-9.0            | 3.0                  | 5.0                  |
| 151-14312   | CTC13FT6    | 8.0       | 25.2       | 7.5         | 13.0      | 16.0   | 6.5-7.0            | 0.75                 | 3.0                  |
| 151-00019   | CTC13FT6LG  | 8.0       | 25.2       | 11.1        | 13.0      | 16.0   | 6.5-7.0            | 0.75                 | 6.0                  |
| 155-25201   | CTC22FT9    | 8.0       | 37.7       | 12.2        | 22.0      | 23.0   | 8.7-9.0            | 3.0                  | 5.0                  |

All dimensions in mm. Subject to technical changes.



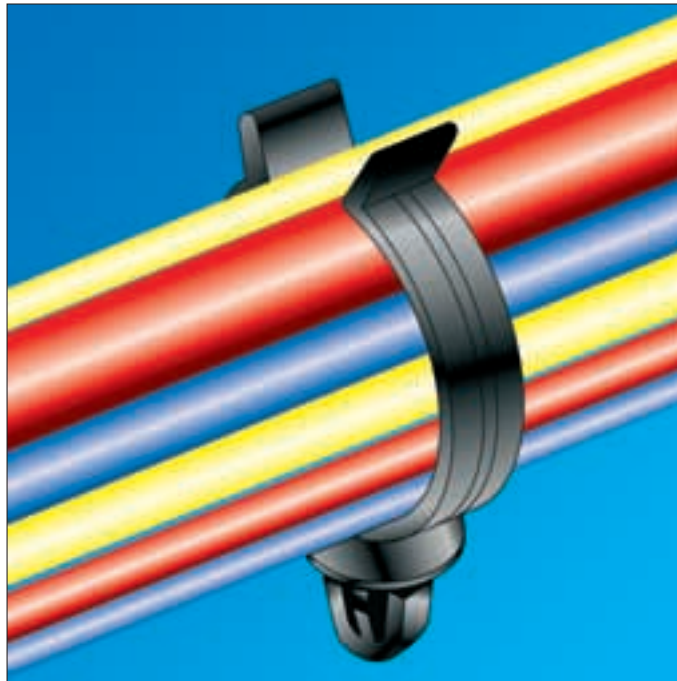
### Pipe and Hose Clips, PC Series

#### Features and Benefits

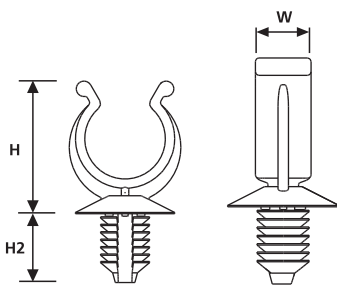
These clips can be attached to the panel prior to installing the pipe or hose, simply push the pipe into the clip for a firm and secure fixing.

#### Application

Originally designed for the automotive industry they are finding a wide and time saving variety of applications in all industries and where the use of a cable is not possible.



Simple and secure installation of pipes or hoses to panels.



PC Clip with Fir Tree Mount

| 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>  |



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



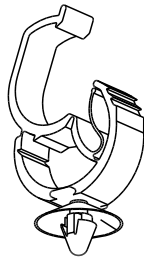
| Material Data         |  |
|-----------------------|--|
| Material              | <b>Polyamide 6.6 High Impact Modified, Heat Stabilised (PA66HIRHS)</b> |
| Operating Temperature | <b>-40 °C to +105 °C</b>   |
| Flammability          | <b>UL94 HB</b>   |





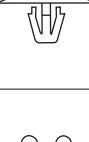









## Pipe and Hose Clips, PC Series

Self-locking PC Clips are available on request. Please contact us!



Technical Table

| Article-No. | Type    | Width (W) | Height (H) | Height (H2) | Disc Ø | Bundle Ø max. | Fixing Hole Ø (FH) | Panel Thickness min. | Panel Thickness max. | Material  | Colour       | Drawing   |
|-------------|---------|-----------|------------|-------------|--------|---------------|--------------------|----------------------|----------------------|-----------|--------------|---|
| 151-14700   | PC35LAH | 8.0       | 10.5       | 5.0         | -      | 3.5           | 4.7                | 0.8                  | 2.0                  | PA66      | Black (BK)   |   |
| 151-14900   | PC5LAH  | 8.0       | 12.0       | 5.9         | -      | 5.0           | 5.4                | 0.65                 | 1.5                  | PA66      | Black (BK)   |  |
| 151-15100   | PC14AH  | 10.0      | 20.6       | 8.8         | 22.0   | 14.2          | 6.1-6.4            | 2.7                  | 3.3                  | PA66      | Grey (GY)    |  |
| 151-14300   | PC23    | 10.0      | 36.0       | 6.5         | 22.0   | 24.0          | 6.3                | 0.6                  | 1.6                  | PA66      | Black (BK)   |  |
| 151-14302   | PC23    | 10.0      | 36.0       | 6.5         | 22.0   | 24.0          | 6.3                | 0.6                  | 1.6                  | PA66      | Natural (NA) |  |
| 151-00119   | PC5DP7S | -         | 9.5        | 8.1         | 16.0   | 5.0           | 7.0                | 0.8                  | 3.0                  | PA66      | Black (BK)   |  |
| 151-14800   | PC5DP7L | -         | 9.5        | 12.6        | 16.0   | 5.0           | 7.0                | 0.8                  | 7.0                  | PA66      | Black (BK)   |  |
| 151-14801   | PC5DP7L | -         | 9.5        | 12.6        | 16.0   | 5.0           | 7.0                | 0.8                  | 7.0                  | PA46      | Black (BK)   |  |
| 151-15101   | PC14PT  | 10.0      | 20.6       | 7.6         | 22.0   | 14.2          | 6.1-6.4            | 2.7                  | 3.3                  | PA66      | Black (BK)   |  |
| 151-14303   | PC15FT7 | 12.0      | 27.1       | 11.1        | 21.6   | 15.7          | 6.4-6.8            | 1.0                  | 6.0                  | PA66HIRHS | Black (BK)   |  |

All dimensions in mm. Subject to technical changes.



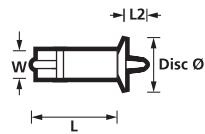
## Automatic Harness Clips

### Features and Benefits

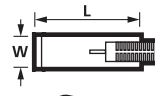
These clips can be attached to the panel prior to installing the cables. Simply pushing the cable into place, closes the clip which activates the automatic locking feature. The parts prefixed with an "I" can be interlocked giving a greater choice of installation options.

### Application

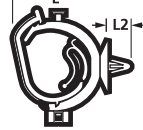
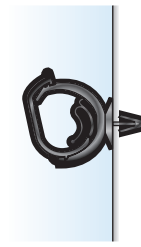
Offering a simple and secure method of attaching cables to panels. Originally designed for the automotive industry they are finding a wide variety of applications in all industries using sheet metal panels.



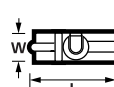
AHC 1AH - 2AH



AHC2 SS



IAHC\_AH



IAHC\_T



Elements AH and T connected.

#### Material Data

|                       |   |
|-----------------------|---|
| Material              | Polyamide 6 high impact modified (PA6HIR)         |
| Operating Temperature | -40 °C to +105 °C Continuous, (+105 °C for 500 h) |
| Flammability          | UL94 HB   |



#### Material Data

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



#### Technical Table

| Article-No. | Type    | Length (L) | Length (L2) | Width (W) | Disc Ø | Bundle Ø max. | Fixing Hole Ø (FH) | Panel Thickness min. | Panel Thickness max. | Material  | Colour     |
|-------------|---------|------------|-------------|-----------|--------|---------------|--------------------|----------------------|----------------------|-----------|------------|
| 151-00212   | AHC1AH  | 25.0       | 7.5         | 10.0      | 20.0   | 13.0          | 6.2-6.7            | 0.7                  | 3.0                  | PA66HIRHS | Black (BK) |
| 151-00210   | AHC2AH  | 29.0       | 7.5         | 10.0      | 20.0   | 20.0          | 6.2-6.7            | 0.7                  | 3.0                  | PA66HIRHS | Black (BK) |
| 151-00208   | AHC2BH  | 29.0       | 7.0         | 10.0      | 20.0   | 20.0          | 6.2x12.2           | 0.7                  | 3.0                  | PA66HIRHS | Black (BK) |
| 151-00206   | AHC2SS  | 31.5       | –           | 10.0      | –      | 20.0          | –                  | –                    | –                    | PA66HIRHS | Black (BK) |
| 151-00370   | AHC3BHR | 40.0       | 7.0         | 10.0      | 24.0   | 28.0          | 6.2x12.2           | 0.7                  | 3.0                  | PA66HIRHS | Black (BK) |
| 151-00371   | AHC3CHR | 40.0       | 7.0         | 10.0      | 24.0   | 28.0          | 6.2x12.2           | 0.7                  | 3.0                  | PA6HIR    | Black (BK) |
| 151-00373   | AHC3SB  | 41.0       | –           | 10.0      | 27.0   | 28.0          | –                  | –                    | –                    | PA66HIRHS | Black (BK) |
| 151-00374   | AHC4AH  | 58.0       | 7.5         | 13.5      | 24.0   | 36.0          | 6.2-6.7            | 0.7                  | 3.0                  | PA6HIR    | Black (BK) |
| 151-00223   | IAHC1T  | 23.0       | –           | 10.0      | –      | 13.0          | –                  | –                    | –                    | PA66HIRHS | Black (BK) |
| 151-00199   | IAHC2T  | 30.0       | –           | 10.0      | –      | 20.0          | –                  | –                    | –                    | PA66HIRHS | Black (BK) |
| 151-00197   | IAHC3AH | 40.0       | 7.5         | 13.5      | 24.0   | 28.0          | 6.2-6.7            | 0.7                  | 2.7                  | PA66HIRHS | Black (BK) |
| 151-00379   | IAHC3BH | 40.0       | 7.0         | 13.5      | 24.0   | 28.0          | 6.2x12.2           | 0.7                  | 2.7                  | PA66HIRHS | Black (BK) |
| 151-00381   | IAHC3CH | 40.0       | 7.0         | 13.5      | 24.0   | 28.0          | 6.2x12.2           | 0.7                  | 3.0                  | PA66HIRHS | Black (BK) |
| 151-00213   | IAHC3T  | 40.0       | –           | 10.0      | –      | 28.0          | –                  | –                    | –                    | PA66HIRHS | Black (BK) |
| 151-00211   | IAHC4AH | 46.0       | 7.0         | 13.0      | 24.0   | 36.0          | 6.2-6.7            | 0.5                  | 2.5                  | PA6HIRHS  | Black (BK) |
| 151-00383   | IAHC4CH | 47.0       | 7.0         | 13.5      | 24.0   | 36.0          | 6.2x12.2           | 0.7                  | 3.0                  | PA6HIRHS  | Black (BK) |
| 151-00207   | IAHC4T  | 47.0       | –           | 13.5      | –      | 36.0          | –                  | –                    | –                    | PA66HIRHS | Black (BK) |
| 151-00205   | IAHC5BH | 57.0       | 7.0         | 13.5      | 24.0   | 45.0          | 6.2x12.2           | 0.7                  | 2.7                  | PA66HIRHS | Black (BK) |
| 151-00195   | IAHC5T  | 57.0       | –           | 13.5      | –      | 45.0          | –                  | –                    | –                    | PA66HIRHS | Black (BK) |

All dimensions in mm. Subject to technical changes.



### Pipe and Hose Clips, IPC Series

#### Features and Benefits

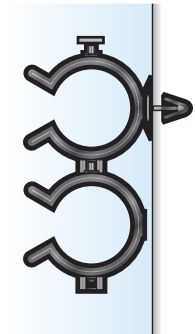
These clips can be attached to the panel prior to installing the pipe or hose, simply push the pipe into the clip for a firm and secure fixing. The parts prefixed with an "I" can be interlocked giving a greater choice of installation options.

#### Application

Originally designed for the automotive industry they are finding a wide and time saving variety of applications in all industries where the use of a cable tie is not suitable.

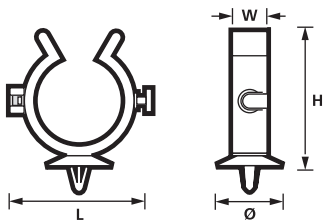


Simple and secure installation of pipes or hoses to panels.



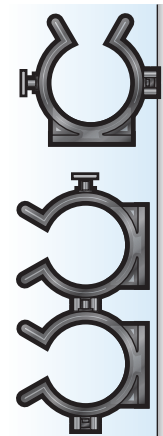
IPC P Clip connected.

| 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>  |



IPC Clip

| 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>  |



IPC AH Clip connected.

#### Technical Table

| Article-No.           | Type           | Height (H) | Width (W) | Disc Ø | Bundle Ø max. | Fixing Hole Ø (FH) | Panel Thickness max. | Material | Colour     |
|-----------------------|----------------|------------|-----------|--------|---------------|--------------------|----------------------|----------|------------|
| Connectable Arrowhead |                |            |           |        |               |                    |                      |          |            |
| 151-00096             | <b>IPC10AH</b> | 18.4       | 10.0      | 22.0   | 12.5          | 6.3                | 1.6                  | PA66HIR  | Black (BK) |
| 151-14130             | <b>IPC13AH</b> | 21.0       | 10.0      | 22.0   | 13.5          | 6.3                | 1.6                  | PA66     | Black (BK) |
| 151-14500             | <b>IPC15AH</b> | 23.0       | 10.0      | 22.0   | 14.7          | 6.3                | 1.6                  | PA66HIR  | Black (BK) |
| 151-14601             | <b>IPC23AH</b> | 34.0       | 10.0      | 22.0   | 25.0          | 6.3                | 1.6                  | PA66     | Black (BK) |
| Connectable           |                |            |           |        |               |                    |                      |          |            |
| 151-14400             | <b>IPC10P</b>  | 15.0       | 10.0      | -      | 12.5          | -                  | -                    | PA66HIR  | Black (BK) |
| 151-14132             | <b>IPC13P</b>  | 17.4       | 10.0      | -      | 13.5          | -                  | -                    | PA66     | Black (BK) |
| 151-14502             | <b>IPC15P</b>  | 19.5       | 10.0      | -      | 14.7          | -                  | -                    | PA66HIR  | Black (BK) |
| 151-14603             | <b>IPC23P</b>  | 30.5       | 10.0      | -      | 25.0          | -                  | -                    | PA66     | Black (BK) |

All dimensions in mm. Subject to technical changes.

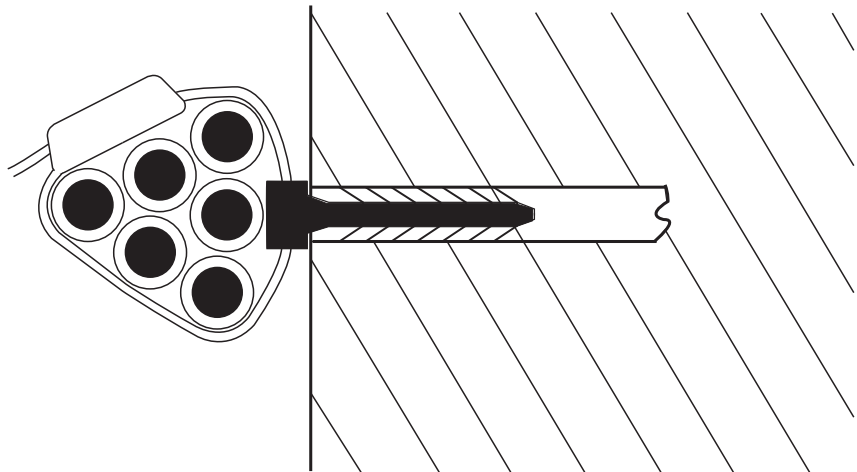


### LOK Fixing Base

#### Features and Benefits

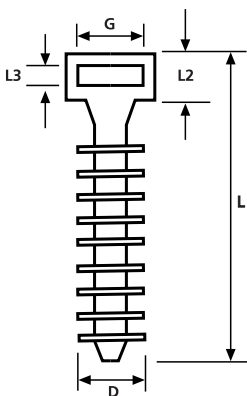
The LOK01 - LOK05 were primarily designed to be used with the RPE and PE series of cable ties but will function just as well with any cable ties up to 9 mm wide.

Suitable for use in a wide range of materials including, concrete, brick, block or wood. Installed by knocking into a 7 mm or 8 mm diameter hole (depending on the material). The LOK01B is designed for soft brickwork and 6 mm holes. Because of its elongated head, the bundles can be located at a distance from the brickwork with the LOK05.

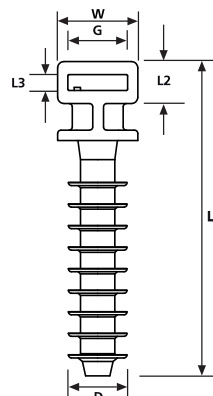


#### Application

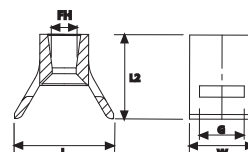
The LOK mounts, in conjunction with a cable tie can be used either indoors or outdoors for a diverse range of applications from holding climbing plants, to securing cables running between buildings.



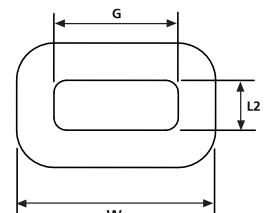
LOK01, LOK01B, LOK01S Fixing Base



LOK05 Fixing Base

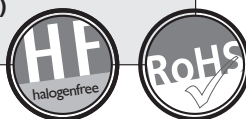


LOK02 Fixing Base



LOK04 Fixing Base

| 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>  |



| Material Data         |  |
|-----------------------|--|
| Material              | <b>Polyamide 6 high impact modified (PA6HIR)</b>         |
| Operating Temperature | <b>-40 °C to +105 °C Continuous, (+105 °C for 500 h)</b> |
| Flammability          | <b>UL94 HB</b>   |

#### Technical Table

| Article-No. | Type   | Length (L) | Length (L2) | Length (L3) | Width (W) | Ø D | Strap Width max. (G) | Fixing Hole Ø (FH) | Colour     | Material |
|-------------|--------|------------|-------------|-------------|-----------|-----|----------------------|--------------------|------------|----------|
| 151-80110   | LOK01  | 44.0       | 6.5         | 2.5         | 12.0      | 9.2 | 9.0                  | 7.0-8.0            | Black (BK) | PA6HIR   |
| 151-80210   | LOK02  | 21.0       | 18.0        | -           | 14.0      | -   | 9.0                  | 4.9-5.1            | Black (BK) | PA6HIR   |
| 151-80500   | LOK01B | 30.0       | 6.5         | 2.5         | 12.0      | 7.2 | 9.0                  | 6.0                | Black (BK) | PA6HIR   |
| 151-80600   | LOK01S | 34.0       | 6.5         | 2.5         | 12.0      | 9.2 | 9.0                  | 7.0-8.0            | Black (BK) | PA6HIR   |
| 151-80700   | LOK05  | 49.0       | 12.5        | 2.5         | 12.0      | 9.2 | 9.0                  | 7.0-8.0            | Black (BK) | PA66     |
| 151-80410   | LOK04  | -          | -           | 4.0         | 16.0      | -   | 9.0                  | -                  | Black (BK) | PA66     |

All dimensions in mm. Subject to technical changes.



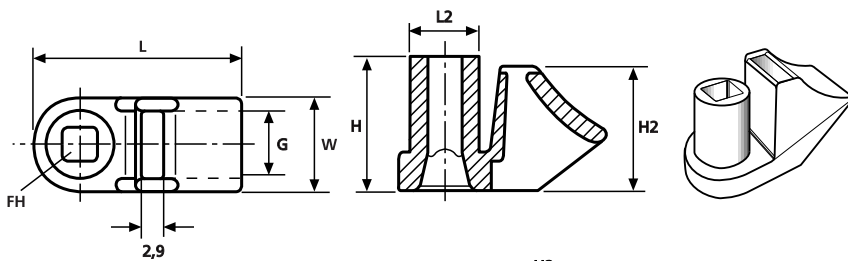
### SBH, SBF and CTMS Cable Tie Base for Weld Studs

#### Features and Benefits

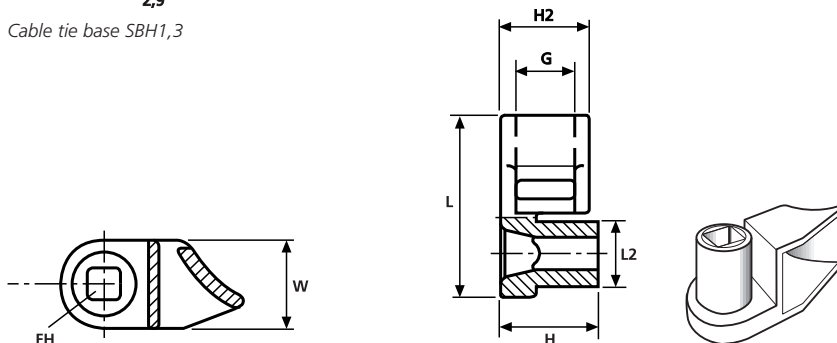
When used with a cable tie and simply hammered onto the stud the SBH type offer a simple and quick method of fixing. The SBH1 and 3 as well as the CTMS5 allow the cables to run across the panel whilst the SBH2 allows the cable to run at 90 degrees to the panel.

#### Application

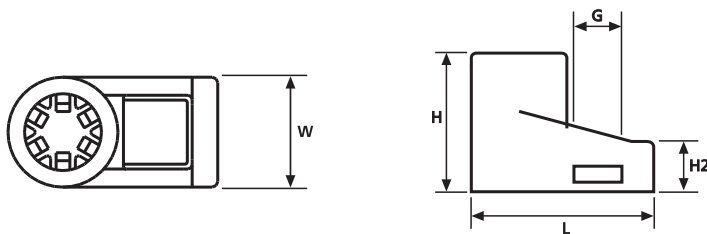
Many industries (but specifically the automotive market) are using "weld studs" as the standard method of attaching components. Simply hammered onto the stud, these parts provide ideal fixing bases for attaching cables, pipes or hoses. The use of weld studs avoids the problems with "holes" (ingress of moisture, corrosion etc).



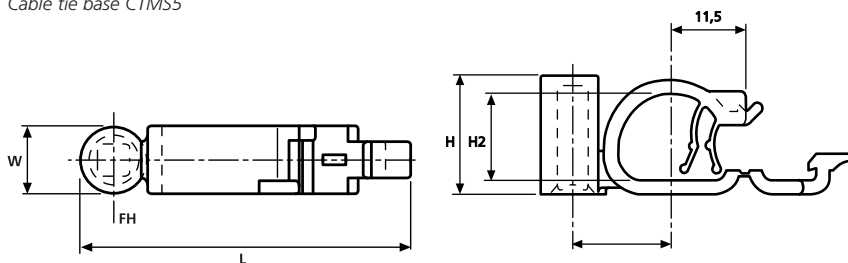
Cable tie base SBH1,3



Cable tie base SBH2



Cable tie base CTMS5



Cable tie base SBF2

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



#### Technical Table

| Article-No. | Type  | Length (L) | Length (L2) | Width (W) | Height (H) | Height (H2) | Stud Ø | Bundle Ø max. | Strap Width max. (G) | Material | Colour     |
|-------------|-------|------------|-------------|-----------|------------|-------------|--------|---------------|----------------------|----------|------------|
| 151-26150   | SBH1  | 26.8       | 9.0         | 12.5      | 13.9       | 15.9        | 5.0    | -             | 8.5                  | PA66     | Black (BK) |
| 151-26250   | SBH2  | 26.8       | 9.0         | 12.5      | 14.0       | 12.5        | 5.0    | -             | 8.5                  | PA66     | Black (BK) |
| 150-18900   | SBH3  | 26.8       | 9.0         | 12.5      | 18.0       | 15.9        | 5.0    | -             | 8.5                  | PA66     | Black (BK) |
| 150-47700   | SBF2  | 47.7       | -           | 10.0      | 18.2       | 13.5        | 5.0    | 13.5          | -                    | PA66     | Black (BK) |
| 151-03301   | CTMS5 | 19.0       | -           | 10.0      | 14.5       | 5.3         | 5.0    | -             | 5.0                  | PA66     | Black (BK) |

All dimensions in mm. Subject to technical changes.