

Welcome to HellermannTyton

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UB-Series Cable Ties

Commercial Grade Cable Ties

Cable ties fit for all purposes manufactured in PA66 material.

Features and Benefits

- A range of commercial grade cable ties
- Available in black or natural



A range of cable tie bases are also available please see page 10



For more products in this range see Section 1.1 in our Product Catalogue.



For more information on tooling please refer to the Application Tooling chapter in the Product Catalogue



Commercial Grade Cable Ties.

| TYPE | Width (W) mm | Length(L) mm | Bundle Ø max.mm | N | Material | Colour | Pack Cont. | Packs per Carton | Article-No. |
|-----------------|--------------|--------------|-----------------|-----|----------|--------------|------------|------------------|-------------|
| UB100A-B | 2.5 | 100 | 22 | 80 | PA66 | Black (BK) | 100 | 320 | 138-00000 |
| UB100A-N | 2.5 | 100 | 22 | 80 | PA66 | Natural (NA) | 100 | 320 | 138-00001 |
| UB140A-B | 2.5 | 140 | 35 | 80 | PA66 | Black (BK) | 100 | 250 | 138-00019 |
| UB140A-N | 2.5 | 140 | 35 | 80 | PA66 | Natural (NA) | 100 | 250 | 138-00020 |
| UB200A-B | 2.5 | 200 | 55 | 80 | PA66 | Black (BK) | 100 | 130 | 138-00021 |
| UB200A-N | 2.5 | 200 | 55 | 80 | PA66 | Natural (NA) | 100 | 130 | 138-00022 |
| UB150B-B | 3.5 | 150 | 35 | 135 | PA66 | Black (BK) | 100 | 100 | 138-00044 |
| UB150B-N | 3.5 | 150 | 35 | 135 | PA66 | Natural (NA) | 100 | 100 | 138-00045 |
| UB200B-B | 3.5 | 198 | 50 | 135 | PA66 | Black (BK) | 100 | 80 | 138-00025 |
| UB200B-N | 3.5 | 198 | 50 | 135 | PA66 | Natural (NA) | 100 | 80 | 138-00026 |
| UB160C-B | 4.6 | 160 | 35 | 225 | PA66 | Black (BK) | 100 | 80 | 138-00027 |
| UB160C-N | 4.6 | 160 | 35 | 225 | PA66 | Natural (NA) | 100 | 80 | 138-00028 |
| UB200C-B | 4.6 | 200 | 50 | 225 | PA66 | Black (BK) | 100 | 60 | 138-00046 |
| UB200C-N | 4.6 | 200 | 50 | 225 | PA66 | Natural (NA) | 100 | 60 | 138-00047 |
| UB250C-B | 4.6 | 245 | 65 | 225 | PA66 | Black (BK) | 100 | 60 | 138-00006 |
| UB250C-N | 4.6 | 245 | 65 | 225 | PA66 | Natural (NA) | 100 | 60 | 138-00007 |
| UB270C-B | 4.6 | 270 | 73 | 225 | PA66 | Black (BK) | 100 | 60 | 138-00034 |
| UB270C-N | 4.6 | 270 | 73 | 225 | PA66 | Natural (NA) | 100 | 60 | 138-00033 |
| UB300C-B | 4.6 | 300 | 85 | 225 | PA66 | Black (BK) | 100 | 50 | 138-00008 |
| UB300C-N | 4.6 | 300 | 85 | 225 | PA66 | Natural (NA) | 100 | 50 | 138-00009 |
| UB385C-B | 4.6 | 390 | 110 | 225 | PA66 | Black (BK) | 100 | 40 | 138-00050 |
| UB385C-N | 4.6 | 390 | 110 | 225 | PA66 | Natural (NA) | 100 | 40 | 138-00051 |
| UB385E-B | 7.6 | 390 | 100 | 535 | PA66 | Black (BK) | 100 | 20 | 138-00012 |
| UB385E-N | 7.6 | 390 | 100 | 535 | PA66 | Natural (NA) | 100 | 20 | 138-00013 |
| UB760E-B | 7.6 | 760 | 225 | 535 | PA66 | Black (BK) | 100 | 20 | 138-00041 |
| UB760E-N | 7.6 | 760 | 225 | 535 | PA66 | Natural (NA) | 100 | 20 | 138-00042 |
| UB540H-B | 13.0 | 535 | 150 | 535 | PA66 | Black (BK) | 50 | 12 | 138-00014 |
| UB540H-N | 13.0 | 535 | 150 | 535 | PA66 | Natural (NA) | 50 | 12 | 138-00043 |



Releasable Cable Ties

Cable Koala CKL330

A cable tie designed in conjunction with the health service for use on hospital beds and other equipment to secure cables.

Features and Benefits

- Soft, flexible and elastic
- Designed in conjunction with the UK health sector
- Suitable to apply tubes, cables, pipes etc on hospital beds
- Integrated magnet within each end of the strap
- Magnets can be applied to themselves or to metal
- Easy fastening and releasable
- Reusable



Cable Koala Tie.

| TYPE | Width (W) mm | Length (L) mm | Material | Colour | Pack Cont. | Article-No. |
|--------|--------------|---------------|----------|-------------|------------|-------------|
| CKL330 | 15.0 | 330 | TPE | Yellow (YE) | 5 | 115-00140 |

Releasable Cable Ties

Diamond Lock Tie DLK250

The automatic self locking feature of this cable tie makes installation quick and easy.

Features and Benefits

- Provides a strong, durable fastening – the flexible non-slip design provides a secure grip for a wide range of applications
- Innovative design allows full adjustment once applied – can also be released quickly and easily
- Good UV resistance – suitable for both indoor and outdoor use
- Flexible fastening options – can be applied in a single or double loop orientation, suitable for multiple bundles or for use as a fixing tie
- Easy cut strap for a neat and tidy finish
- Releasable
- Reusable



Diamond Lock Tie.



Diamond Lock Tie application.

i Diamond Lock Tie - 400mm long version available on request. Please contact our customer service department for further information

| TYPE | Width (W) mm | Length (L) mm | Material | Colour | Pack Cont. | Article-No. |
|--------|--------------|---------------|----------|--------------|------------|-------------|
| DLK250 | 16.2 | 260 | TPU | Natural (NA) | 20 | 148-00135 |



Releasable Cable ties

RS1 Bobble Tie

Features and Benefits

- Easily assembled - a simple and quick fixing solution
- Ideal for temporary fastening or as a bag closure
- High quality cable tie with releasable feature
- Natural Colour
- The bobble tie allows a simple and quick fixing



RS1 Series Bobble Tie.

| TYPE | Width (W) mm | Length (L) mm | Bundle Ø max. mm | Material | Colour | Pack Cont. |
|------|--------------|---------------|------------------|----------|--------------|------------|
| RS1 | 2.0 | 110 | 31 | PA66 | Natural (NA) | 100 |

HF ✓



Cable Ties with Ball-Lock

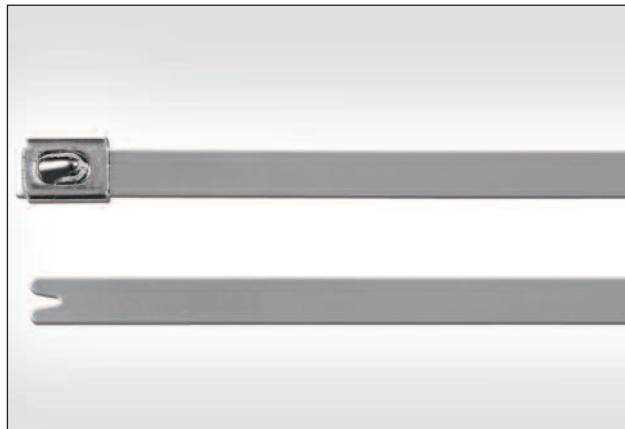
MBT-Series, Stainless Steel 316

Metal ties are ideal for all applications that require high strength, reliability and fire resistance. The MBT range of stainless steel cable ties can be used in chemical industries and on oil platforms as well as in mass transit, shipbuilding and mining industries.

MBT ties are also suitable for machine building, apparatus construction and in the outside area of radio technology. Additionally, MBT ties are ideal for securing lighting in theatres and exhibition halls.

Features and Benefits

- Cable ties MBT, made from stainless steel 316
- Patented non-releasable locking feature
- Corrosion resistant
- Weather resistant
- Outstanding chemical resistance
- Antimagnetic
- High temperature resistant
- Non-burning



Stainless Steel Cable Ties, uncoated.



For more information on tooling please refer to the Application Tooling chapter in the Product Catalogue



For more products in this range see Section 1.5 in our Product Catalogue.



Material specification please see page 25 in our Product Catalogue.

| TYPE | Width (W) mm | Length (L) mm | Bundle Ø max | | Material | Pack Cont. | Article-No. |
|--------|--------------|---------------|--------------|-----|----------|------------|-------------|
| MBT12S | 4.6 | 300 | 76 | 900 | SS316 | 100 | 111-01431 |

**Cable Ties with Ball-Lock and Coating****MBT-FC-Series, Stainless Steel 316**

The MBT range of stainless steel cable ties can be used in the most arduous of conditions or where the additional security, strength and fire resistance of a metal fixing is required. Used in all industries from mass transit, ship building, oil rigs, mining and chemical industry, theatres and exhibition halls. In the event of a fire, cables will remain securely held in place and will not fall to block emergency exits.

Features and Benefits

- Fully coated MBT, made from type 316 stainless steel with polyester coating
- Patented non-releasable locking feature
- Coated cable tie with smooth edges
- Comfortable handling and installation
- Eliminates contact corrosion between dissimilar materials during application

*Stainless Steel Cable Ties, coated.*

For more information on tooling please refer to the Application Tooling chapter in the Product Catalogue



Material specification please see page 25 in our Product Catalogue.

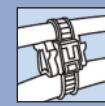


For more products in this range see Section 1.5 in our Product Catalogue.



**Red coated stainless steel ties also available.
Please contact our customer service department for further information.**

| TYPE | Width (W) mm | Length (L) mm | Bundle Ø max mm | | Material | Pack Cont. | Article-No. |
|----------|--------------|---------------|-----------------|-----|----------|------------|-------------|
| MBT12SFC | 4.6 | 300 | 76 | 540 | SS316 | 100 | 111-01437 |



One Piece Fixing and Cable Tie

Wall Plug Ties

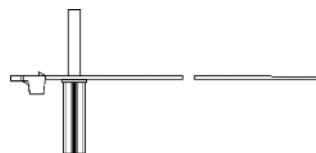
One piece fixing and cable tie can be fixed to brick, cement or wood. This product is often used in the construction industry and is both time saving and versatile. Simply drill an 8mm hole and knock in the peg. Used to fasten cables, pipes or hoses in place.

Features and Benefits

- One-piece for fixing to brick, cement or wood
- Practical for the construction industry
- Time saving and versatile



Wall Plug Ties.



Fixing of Wall Plug Ties.

| TYPE | Width (W) mm | Length (L) mm | Bundle Ø max. mm | Material | Colour | Pack Cont. | Article-No. |
|--------|--------------|---------------|------------------|----------|------------|------------|-------------|
| WPT230 | 8.0 | 230 | 59 | PA66 | Black (BK) | 100 | 126-00022 |

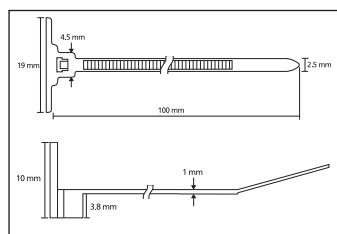


Self Adhesive Cable Tie

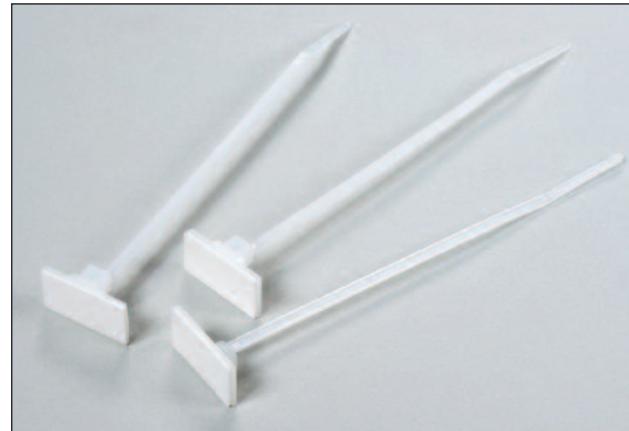
A Cable Tie with a Self Adhesive Base.

Features and Benefits

- Cable tie and integrated base
- Self-adhesive for firm securing of wiring bundles
- Quick and easy to install
- Ideal for use in a variety of clean applications.



Self Adhesive Cable Tie.



Cable Tie with Self Adhesive Base.

| TYPE | Width (W) mm | Length (L) mm | Bundle Ø max. mm | Material | Colour | Pack Cont. | Article-No. |
|--------|--------------|---------------|------------------|----------|--------------|------------|-------------|
| T18RSA | 2.5 | 100 | 16 | PA66 | Natural (NA) | 100 | 148-00001 |





Cable Tray Ties

CTF-Series

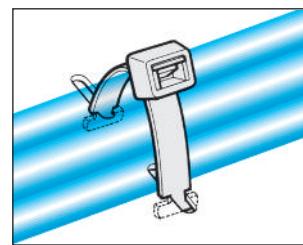
The CTF Fixing Ties offer a more secure fixing for cable tray applications that are also easier to install. The CTF cable tie has been designed to be used with common styles of cable tray, fitting easily into the pre-formed fixing holes. The tie breaks easily at the rated break point so that it can be installed on the cable tray without pulling the cable tie underneath the tray.

Features and Benefits

- Can be used with common styles of cable tray
- Easy installation - push into the cable tray and twist 90 degrees
- No pulling of cable tie underneath cable harness
- Recommended Tensioning Tools: MK6/ MK9/ MK21



Cable Tray Ties CTF-Series.



Cable Tray Ties in application.



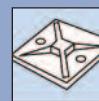
For more information on tooling please refer to the Application Tooling chapter in the Product Catalogue



| TYPE | Width (W) mm | Length (L) mm | N | Material | Colour | Pack Cont. | Article-No. |
|-------------------|-----------------|------------------|------|----------|------------|------------|-------------|
| CTF120 | 7.6 | 320 | 535 | PA66 | Black (BK) | 100 | 111-98121 |
| CTF250 | 13.0 | 355 | 1115 | PA66 | Black (BK) | 50 | 111-98160 |
| *CTF120/90 | 7.6 | 320 | 535 | PA66 | Black (BK) | 100 | 111-98100 |

For cable tray slots at 90°C



**UB-Series Mounts****Commercial Grade Mounts**

Cable Tie Bases ideally suited for holding cable ties in place. Perfect for applications where a reliable and durable fixation is required.

Features and Benefits

- A range of commercial grade cable tie mounts
- Available in black or natural
- Self adhesive, screw fixing



Commercial Grade cable tie Mounts.

| TYPE | Width (W) mm | Length (L) mm | Hole Ø (FH) mm | Strap width max.(G) mm | Material | Colour | Pack Cont. | Article-No. |
|---------------|--------------|---------------|----------------|------------------------|----------|--------------|------------|-------------|
| UB19-B | 19 | 19 | 3.1 | 4.1 | PA66 | Black (BK) | 100 | 151-00354 |
| UB19-N | 19 | 19 | 3.1 | 4.1 | PA66 | Natural (NA) | 100 | 151-00355 |
| UB28-B | 28 | 28 | 4.0 | 5.4 | PA66 | Black (BK) | 100 | 151-00356 |
| UB28-N | 28 | 28 | 4.0 | 5.4 | PA66 | Natural (NA) | 100 | 151-00357 |



Cable Clips for SWA Cables

SWA Fixings

A range of black polypropylene fixings suitable for use with SWA cables as listed. Also suitable for fixing conduit. Hole diameters of 5mm in SWA83 and SWA98 and 6mm in SWA106 means that screw fixings can be used in place of a nail if required. Screw not included.

Features and Benefits

- Supplied complete with masonry nail
- Packed in quantities of 25



Cable Clip with nail fixing.



Cable Clip with screw fixing.

| TYPE | CABLE SIZE | PIN LENGTH mm | FIXING TYPE | PACK CONT. | ARTICLE NO. |
|---------------|--|--------------------|--------------|------------|-------------|
| SWA46 | 2 Core 1.5mm 3 Core 1.5mm | 35 | Nail Fixing | 25 | 151-01573 |
| SWA53 | 2 Core 2.5mm 3 Core 2.5mm 4 Core 1.5mm | 35 | Nail Fixing | 25 | 151-01574 |
| SWA56 | 4 Core 2.5mm | 35 | Nail Fixing | 25 | 151-01575 |
| SWA61 | 2 Core 4.0mm 3 Core 4.0mm | 35 | Nail Fixing | 25 | 151-01576 |
| SWA65 | 2 Core 6.0mm | 40 | Nail Fixing | 25 | 151-01577 |
| SWA72 | 2 Core 16mm 3 Core 6.0mm 4 Core 6.0mm | 40 | Nail Fixing | 25 | 151-01578 |
| SWA83 | 2 Core 10.0mm & 25mm 3 Core 10mm & 16mm 4 Core 6.0mm | 50 | Nail Fixing | 25 | 151-01579 |
| SWA98 | 2 Core 35mm 3 Core 25mm 4 Core 10mm & 16mm | 50 | Nail Fixing | 25 | 151-01580 |
| SWA106 | 2 Core 50mm 3 Core 35mm 4 Core 25mm | Screw Not supplied | Screw Fixing | 25 | 151-01581 |



Screw Mount

D-Clips

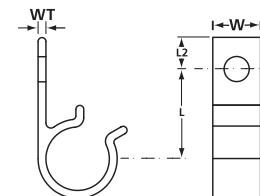
Screwed D-clips are available in 3 sizes and guarantee time and cost savings by simply pressing the cable into the holder. The flexible grip means that later removal or replacement of cables and pipes is possible. 3 different bore diameters for fixing the holder are available.

Features and Benefits

- Screwed D-Clips available in 3 sizes
- Guaranteed time and cost savings by simply pressing cable into holder
- Flexible grip for later removal or replacement of cables
- 3 different bore diameters available for fixing
- Polyacetal (POM) material
- Colour Black



D-Clip.



| TYPE | Length (L) mm | Length (L2) mm | Width (W) mm | Wall Thickness (WT) mm | Fixing Hole Diameter mm | Bundle Ø max mm | Colour | Pack Cont. | Article-No. |
|-------------|---------------|----------------|--------------|------------------------|-------------------------|-----------------|------------|------------|-------------|
| 4D10 | 17 | 8 | 15 | 2 | 4 | 10 | Black (BK) | 100 | 211-70000 |
| 4D15 | 25 | 10 | 15 | 2 | 4 | 15 | Black (BK) | 500 | 211-70001 |
| 4D20 | 28 | 10 | 15 | 2.5 | 4 | 20 | Black (BK) | 100 | 211-70002 |
| 6D10 | 17 | 8 | 15 | 2 | 6 | 10 | Black (BK) | 500 | 211-70100 |
| 6D15 | 25 | 10 | 15 | 2 | 6 | 15 | Black (BK) | 100 | 211-70103 |
| 6D20 | 28 | 10 | 15 | 2.5 | 6 | 20 | Black (BK) | 200 | 211-70104 |
| 8D10 | 17 | 8 | 15 | 2 | 8 | 10 | Black (BK) | 500 | 211-70200 |
| 8D15 | 25 | 10 | 15 | 2 | 8 | 15 | Black (BK) | 100 | 211-70203 |
| 8D20 | 28 | 10 | 15 | 2.5 | 8 | 20 | Black (BK) | 200 | 211-70204 |



Self Adhesive Tie Carrier

SACTC with flexible flat design

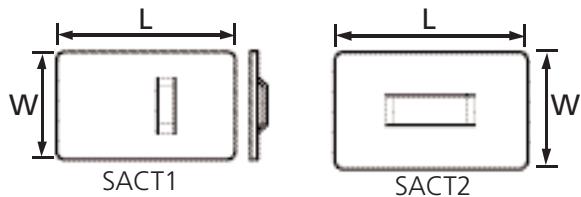
A mild steel fixing with a polyester coating to use with cable ties for securing cables and pipes.

Features and Benefits

- Cost effective with easy application on smooth, clean surfaces
- Acrylic adhesive with polyethylene protective liner
- Colour – white
- Self adhesive/ screw fixing



SACTC.



Flexible flat design.

| TYPE | Width (W) mm | Length (L) mm | Cable Tie Width (W) (mm) | HellermannTyton Cable Ties | Pack Cont | Article-No. |
|---------------|--------------|---------------|--------------------------|----------------------------|-----------|-------------|
| SACTC1 | 35 | 25 | 7 | Up to T50 & LK2A | 100 | 151-01571 |
| SACTC2 | 41 | 31 | 12 | Up to T120 & RLT150 | 100 | 151-01572 |



For the full range of SAC products see page
171 of our Product Catalogue



Metal Fire Clip

SSFC2516 Stainless Steel Fire Clip

The safest way of holding cables within mini trunking.

Features and Benefits

- Designed to fit trunking size 25 x 16mm
- Easy to apply without the need for a tool – simply fold the tabs to retain the cables
- Completely invisible once mounted within the trunking
- Manufactured from Stainless Steel 430 material
- No. 8 (4mm Ø) fixing hole for securing to the building fabric
- Holds cables in position, even in the event of a fire
- Tested to BS5839-1 2013 Section 26.2e for fire performance
- Meets the requirements of BS7671, 3rd Amendment, 7th Edition.



SSFC2516 Fire Clip.

| TYPE | Width (W) mm | Length (L) mm | Hole Ø mm | Material | Colour | Pack Cont | Article-No. |
|----------|--------------|---------------|-----------|----------|--------|-----------|-------------|
| SSFC2516 | 21 | 20 | 4 | SS430 | Metal | 50 | 151-01473 |



If you require other sizes please contact our customer service department.

Cradle Mount Clip

SSCM8 Cradle Mount Clip

A cradle mount clip that meets the requirements of BS7671, 3rd Amendment, 7th Edition.

Features and Benefits

- Suitable to use with MBT H and MBT S stainless steel ties, please see page 83 in the Product Catalogue
- No. 8 (4mm Ø) fixing hole for securing to the building fabric



SSCM8 Cradle Mount Clip.

| TYPE | Width (W) mm | Length (L) mm | Hole Ø mm | Material | Colour | Pack Cont. | Article-No. |
|-------|--------------|---------------|-----------|----------|--------|------------|-------------|
| SSCM8 | 12 | 16 | 4 | SS316 | Metal | 100 | 151-01564 |



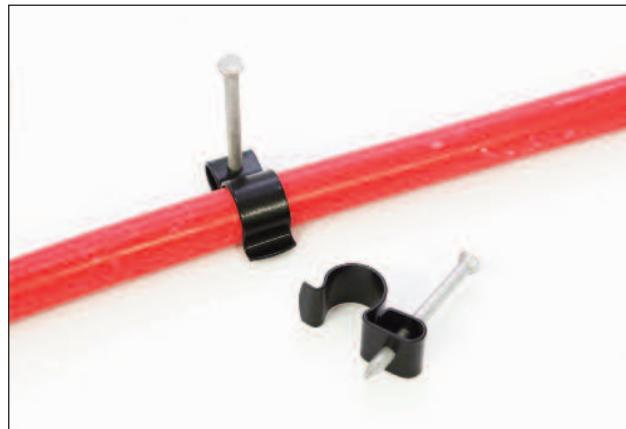
Metal Nail Clips

Coated Stainless Steel Cable Clips

Metal nail fixing solutions provide a quick and simple way of securing cables to meet the requirements of BS7671, which imposes the use of metal fixings to secure wiring systems within the escape routes of buildings. These fire resistant clips improve safety by ensuring that cabling will not collapse in the event of a fire.

Features and Benefits

- Designed to secure cables within high temperature environments
- Flex design grips the cables and clamps into position, even in the event of a fire
- Manufactured from stainless steel 430 material.
- Available with white or black PA11 coloured coating, making it discrete when fitted within commercial / building environments
- Suitable for a range of cable sizes, from 4.5mm to 11.0mm diameter
- Quick and easy to apply – simply push the clip over the cables and hammer into position
- Integrated hardened steel nail pre-fitted to clips to ensure a secure fixing to the building fabric (nail dimensions 25mm x 2.5mm)
- Meets the requirements of BS7671, 3rd Amendment 7th Edition

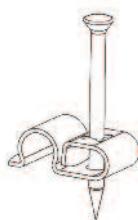


Metal nail fixing.

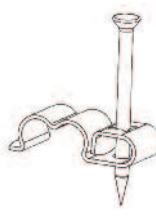


Quick and simple securing of cables.

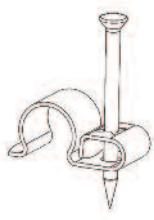
| TYPE | Length (L) mm | Width (W) mm | Hole Ø (FH) mm | Material | Colour | Pack Cont. | Article-No. |
|--------------------|---------------|--------------|----------------|-------------|------------|------------|-------------|
| SSNC4.5 | 14.3 | 7.0 | 2.5 | SS430, PA11 | Black (BK) | 50 | 151-01599 |
| | 14.3 | 7.0 | 2.5 | SS430, PA11 | White (WH) | 50 | 151-01604 |
| SSNC4.5TWIN | 19.0 | 7.0 | 2.5 | SS430, PA11 | Black (BK) | 50 | 151-01602 |
| | 19.0 | 7.0 | 2.5 | SS430, PA11 | White (WH) | 50 | 151-01606 |
| SSNC7.0 | 16.9 | 7.0 | 2.5 | SS430, PA11 | Black (BK) | 50 | 151-01603 |
| | 16.9 | 7.0 | 2.5 | SS430, PA11 | White (WH) | 50 | 151-01607 |
| SSNC11.0 | 20.5 | 7.0 | 2.5 | SS430, PA11 | Black (BK) | 50 | 151-01608 |
| | 20.5 | 7.0 | 2.5 | SS430, PA11 | White (WH) | 50 | 151-01609 |



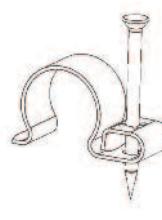
SSNC4.5



SSNC4.5TWIN



SSNC7.0

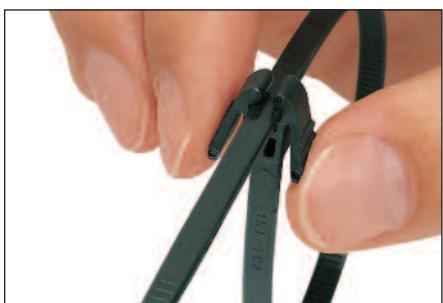


SSNC11.0

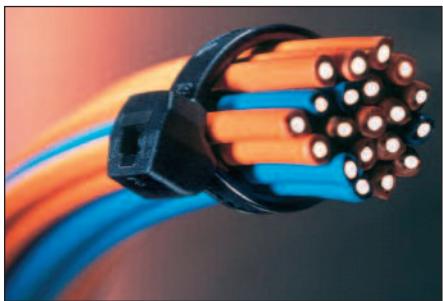


For fire-rated applications, it is recommended that the nail is secured into a hard, fire resistant surface.

Cable Ties and Fixings



For more information on our complete Fastening & Fixing range of products, please see our Product Catalogue Section 1 Cable Ties and Fixings





Sleeving

PVC Sleeving

A commercial grade of PVC sleeving which can be used in many applications.

Features and Benefits

- Highly flexible insulation
- Can also be used for identification
- Minimum working temperature -30°C
- Maximum working temperature 85°C
- Specification: BS2848 Type 3, Class 85T
- Colours available: black, blue, brown, grey, green/yellow
- Other sizes are available on request
- Supplied in a coil



PVC Sleeving.

| TYPE | ID mm | Wall Thickness mm | Colour | Pack Cont. | Article No. |
|-------------|-------|-------------------|--------------|------------|-------------|
| PVC20BK | 2.0 | 0.5 | Black | 100m coil | 172-02057 |
| PVC20BE | 2.0 | 0.5 | Blue | 100m coil | 172-02054 |
| PVC20BN | 2.0 | 0.5 | Brown | 100m coil | 172-02055 |
| PVC20GY | 2.0 | 0.5 | Grey | 100m coil | 172-02066 |
| PVC20GN-YW | 2.0 | 0.5 | Green/Yellow | 100m coil | 172-02012 |
| PVC30BK | 3.0 | 0.5 | Black | 100m coil | 172-02058 |
| PVC30BE | 3.0 | 0.5 | Blue | 100m coil | 172-02048 |
| PVC30BN | 3.0 | 0.5 | Brown | 100m coil | 172-02047 |
| PVC30GY | 3.0 | 0.5 | Grey | 100m coil | 172-02065 |
| PVC30GN-YW | 3.0 | 0.5 | Green/Yellow | 100m coil | 172-02021 |
| PVC40BK | 4.0 | 0.5 | Black | 100m coil | 172-02056 |
| PVC40BE | 4.0 | 0.5 | Blue | 100m coil | 172-02049 |
| PVC40BN | 4.0 | 0.5 | Brown | 100m coil | 172-02050 |
| PVC40GY | 4.0 | 0.5 | Grey | 100m coil | 172-02051 |
| PVC40GN-YW | 4.0 | 0.5 | Green/Yellow | 100m coil | 172-02029 |
| PVC50BK | 5.0 | 0.5 | Black | 100m coil | 172-02067 |
| PVC50BE | 5.0 | 0.5 | Blue | 100m coil | 172-02052 |
| PVC50BN | 5.0 | 0.5 | Brown | 100m coil | 172-02053 |
| PVC50GY | 5.0 | 0.5 | Grey | 100m coil | 172-02064 |
| PVC50GN-YW | 5.0 | 0.5 | Green/Yellow | 100m coil | 172-02035 |
| PVC60GN-YW | 6.0 | 0.5 | Green/Yellow | 100m coil | 172-02044 |
| PVC80GN-YW | 8.0 | 0.5 | Green/Yellow | 100m coil | 172-02069 |
| PVC100GN-YW | 10 | 0.5 | Green/Yellow | 100m coil | 172-02045 |
| PVC120GN-YW | 12 | 0.5 | Green/Yellow | 100m coil | 172-02080 |
| PVC160GN-YW | 16 | 0.5 | Green/Yellow | 100m coil | 172-02083 |

All dimensions are in mm (nominal) and are subject to technical modification.



Sleeving

PVC Sleeving – On a drum

A commercial grade of PVC sleeving which can be used in many applications.

Features and Benefits

- Highly flexible insulation
- Can also be used for identification
- Minimum working temperature -30°C
- Maximum working temperature 85°C
- Specification: BS2848 Type 3, Class 85T
- Colours available: blue, brown, green/yellow
- Other sizes are available on request
- Supplied on a drum



PVC Sleeving on a drum.

| TYPE | ID mm | Wall Thickness mm | Colour | Pack Cont. | Article-No. |
|--------------|----------|----------------------|--------------|------------|-------------|
| PVC20BERL | 2.0 | 0.5 | Blue | 100m drum | 172-02092 |
| PVC20BNRL | 2.0 | 0.5 | Brown | 100m drum | 172-02091 |
| PVC20GN-YWRL | 2.0 | 0.5 | Green-Yellow | 100m drum | 172-02088 |
| PVC30BERL | 3.0 | 0.5 | Blue | 100m drum | 172-02094 |
| PVC30BNRL | 3.0 | 0.5 | Brown | 100m drum | 172-02093 |
| PVC30GN-YWRL | 3.0 | 0.5 | Green-Yellow | 100m drum | 172-02089 |
| PVC40BERL | 4.0 | 0.5 | Blue | 100m drum | 172-02096 |
| PVC40BNRL | 4.0 | 0.5 | Brown | 100m drum | 172-02095 |
| PVC40GN-YWRL | 4.0 | 0.5 | Green-Yellow | 100m drum | 172-02090 |

All dimensions are in mm (nominal) and are subject to technical modification.



Sleeving

PVCB Sleeving

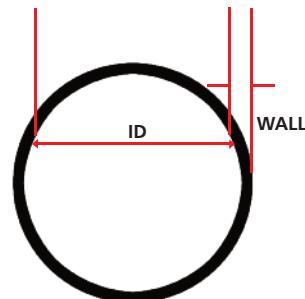
A commercial grade of PVC sleeving which has a wide range of uses in automotive and white goods manufacturing. PVCB has good resistance to moisture, oils, acids and fuels.

Features and Benefits

- Highly flexible
- Minimum working temperature -65°C
- Maximum working temperature 105°C
- Specification: BS2848 Type 3, Class 105T
- Standard colour black



PVCB Sleeving.

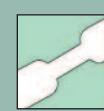


| TYPE | ID mm | Wall Thickness mm | Colour | Pack Cont. | Article No. |
|-----------|-------|-------------------|--------|------------|-------------|
| PVCB10BK | 1.0 | 0.5 | Black | 100m coil | 172-00227 |
| PVCB15BK | 1.5 | 0.5 | Black | 100m coil | 172-00051 |
| PVCB20BK | 2.0 | 0.5 | Black | 100m coil | 172-00055 |
| PVCB25BK | 2.5 | 0.5 | Black | 100m coil | - |
| PVCB30BK | 3.0 | 0.5 | Black | 100m coil | 172-00064 |
| PVCB40BK | 4.0 | 0.5 | Black | 100m coil | 172-00072 |
| PVCB50BK | 5.0 | 0.5 | Black | 100m coil | 172-00076 |
| PVCB60BK | 6.0 | 0.5 | Black | 100m coil | 172-00080 |
| PVCB70BK | 7.0 | 0.7 | Black | 100m coil | 172-00084 |
| PVCB80BK | 8.0 | 0.7 | Black | 100m coil | 172-00087 |
| PVCB90BK | 9.0 | 0.7 | Black | 100m coil | 172-00088 |
| PVCB100BK | 10.0 | 0.7 | Black | 100m coil | 172-00043 |
| PVCB120BK | 12.0 | 0.9 | Black | 100m coil | 172-00048 |
| PVCB130BK | 13.0 | 0.9 | Black | 50m coil | 172-00049 |
| PVCB150BK | 15.0 | 0.9 | Black | 50m coil | 172-00052 |
| PVCB200BK | 20 | 0.9 | Black | 50m coil | 172-00058 |
| PVCB250BK | 25 | 0.9 | Black | 25m coil | 172-00061 |

All dimensions are in mm (nominal) and are subject to technical modification.



For more products see Section 2.1 in our Product Catalogue.



Sleeving

HIS-3 BAG

A 3:1 shrink ratio in handy 250mm lengths allows for both individual and large bundled wires to be sleeved quickly and easily.

Features and Benefits

- Comes in 5 colours: black, brown, grey, blue, green/yellow
- 3 sizes from 6mm to 40mm
- Ideal to carry in a toolbox
- General purpose electrical installation
- Colour identification
- Protection against mechanical abrasion and corrosion

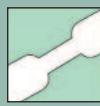


HIS-3 BAG.

| TYPE | Supplied ID mm | Recovered ID mm | Wall (WT) mm | Colour | Pack Cont. | Article No. |
|-----------------------|----------------|-----------------|--------------|----------------------|------------|-------------|
| HIS3 BAG 6/2 | 6 | 2 | 0.65 | BK, BN, GY, BE, GNYE | 15 x 250mm | 308-30616 |
| HIS3 BAG 12/4 | 12.4 | 4 | 0.80 | BK, BN, GY, BE, GNYE | 15 x 250mm | 308-31216 |
| HIS3 BAG 40/13 | 40 | 13 | 0.80 | BK, BN, GY, BE, GNYE | 15 x 250mm | 308-34010 |



For more products see Section 2.1 in our Product Catalogue.



Heat Shrinkable Tubing

LVRK Cable Repair Kit

The cable repair kit LVRK is a quick and safe repair of damaged cables and wires, post termination.

Features and Benefits

- For cables 1.5mm² - 2.5mm²
- Fast, safe, durable and labour saving repair of cables and wires
- No set of recessed conduit boxes or inserting lines necessary, therefore offering a cost saving



LVRK Cable Repair Kit.

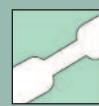
Features and Benefits

- 1 x adhesive lined shrink tube 200mm long
- 4:1 shrink ratio
- 5 x butt connectors with heat shrink insulation materials and adhesives
- 4 x heat stabilized Q-tie cable ties, innovative and time saving (thanks to an open tie head)

| TYPE | Description | Pack Cont | Article No. |
|------|------------------|-----------|-------------|
| LVRK | Cable Repair Kit | 1 | 380-04004 |



For more products see Section 2.1 in our Product Catalogue.



Heat Shrinkable Tubing

FCT Convolved Tubing

Used to protect cables from crush damage it is lightweight and flexible. Also used to route and protect wiring in control panels, cabinets, machines, cars and commercial vehicles.

Features and Benefits

- Catering for sizes from 4mm to 25mm
- Ranging in sizes from 6.8mm to 23.5mm inside diameters
- Available in black as standard
- Other colours available on request
- Applicator tools available for most sizes
- Halogen free
- Manufactured from quality grade materials: Polypropylene, Polyethylene and Nylon PA6
- Minimum working temperature -40°C
- Maximum working temperature 120°C
- Slit format also available



FCT Convolved Tubing.

| TYPE | Description | ID mm | Walk Thickness mm | Pack Cont. | Article-No. |
|-----------------|-------------|-------|-------------------|------------|-------------|
| FCT7BK | Standard | 6.8 | 0.45 | 200m | 169-00082 |
| FCT10BK | Standard | 10.5 | 0.45 | 200m | 169-00024 |
| FCT11BK | Standard | 11.5 | 0.45 | 200m | 169-00034 |
| FCT13BK | Standard | 12.5 | 0.45 | 200m | 169-00045 |
| FCT16BK | Standard | 16.5 | 0.45 | 100m | 169-00057 |
| FCT19BK | Standard | 19.5 | 0.45 | 50m | 169-00067 |
| FCT23BK | Standard | 23.5 | 0.45 | 50m | 169-00075 |
| FCT7BKS | Slit | 6.8 | 0.45 | 200m | 169-00085 |
| FCT10BKS | Slit | 10.5 | 0.45 | 200m | 169-00027 |
| FCT11BKS | Slit | 11.5 | 0.45 | 200m | 169-00038 |
| FCT13BKS | Slit | 12.5 | 0.45 | 200m | 169-00048 |
| FCT16BKS | Slit | 16.5 | 0.45 | 100m | 169-00060 |
| FCT19BKS | Slit | 19.5 | 0.45 | 50m | 169-00070 |
| FCT23BKS | Slit | 23.5 | 0.45 | 50m | 169-00078 |



For Application Tools to be used with the slit version please see our Product Catalogue page 311



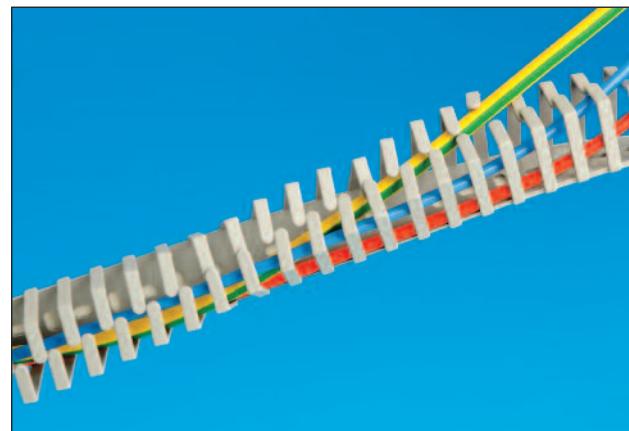
Protective Tubing

Kanalflex

A flexible routing system made from grey polypropylene (RAL7040). The upper 'tongues' of the section are inclined downward to facilitate easy insertion of cables.

Features and Benefits

- Supplied with adhesive strip and pre-drilled holes for additional screw fixing if required
- Supplied in lengths of 500mm in packs of 10 lengths

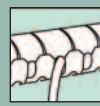


Kanalflex Routing System.

| TYPE | Dimensions mm | Pack Cont. | Article No. |
|----------------|---------------|------------|-------------|
| BK1313A | 12.5 x 12.5 | 10 x 0.5m | 181-00029 |
| BK1616A | 16 x 16 | 10 x 0.5m | 181-00030 |
| BK2020A | 20 x 20 | 10 x 0.5m | 181-00031 |
| BK2525A | 25 x 25 | 10 x 0.5m | 181-00032 |
| BK3030A | 30 x 30 | 10 x 0.5m | 181-00033 |
| BK4040A | 40 x 40 | 10 x 0.5m | 181-00034 |
| BK5050A | 50 x 50 | 10 x 0.5m | 181-00035 |



For more products see Section 3.5 in our Product Catalogue.



Flexible Tubing

Black Flexible Conduit

Made to CEI Standards CEI EN 50086 1-94 and CEI EN 50086 2.3-1996 degree of protection achieved with fitting is IP65.

Features and Benefits

- Plasticised PVC with shockproof rigid PVC spiral core
- Colour Black (other colours available to special order)
- Dielectric strength: greater than 2000V. 50 Hz for 15 min
- Minimum temperature 5°C
- Maximum temperature 60°C
- Bend radius: As conduit outside diameter
- Incandescent wire test at 850°C positive result – IMQ report No 1493
- Self-extinguishing to UL 94 VO Standards
- Supplied in 30m coils



Flexible Conduit.

| TYPE | Int. Dia mm | Ext. Dia mm | Pack Cont. |
|--------|-------------|-------------|------------|
| GUAN10 | 10 | 14.7 | 30m |
| GUAN12 | 12 | 16.4 | 30m |
| GUAN16 | 16 | 20.7 | 30m |
| GUAN20 | 20 | 24.7 | 30m |
| GUAN25 | 25 | 30.6 | 30m |
| GUAN28 | 28 | 33.5 | 30m |
| GUAN32 | 32 | 38.0 | 30m |
| GUAN35 | 35 | 41.0 | 30m |
| GUAN40 | 40 | 46.4 | 30m |
| GUAN50 | 50 | 57.2 | 30m |

Flexible Tubing

Black Flexible Conduit Handipacks

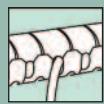
10 metres of black conduit and 10 straight fittings supplied in a handy pack.

Contents: 801 10 x GUAN16 & 10 x RAMN16
802 10 x GUAN22 & 10 x RAMN22
803 10 x GUAN20 & 10 x RAMN20



Flexible Conduit in a Handipack.

| TYPE | Int. Dia mm | Ext. Dia mm | Pack Cont. |
|------|-------------|-------------|------------|
| 801 | 16 | 20.7 | 1 |
| 802 | 22 | 27.7 | 1 |
| 803 | 20 | 24.7 | 1 |



Protective Tubing

Straight Fittings

A range of straight fittings which can be easily assembled onto the conduit without the use of tools to give a swivel joint to IP65 standards.

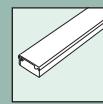
Features and Benefits

- Fittings are made from self-extinguishing polypropylene material
- Available with metric and gas threads in compliance with CEI23-26 standards
- Swivel fittings easily fitted to the conduit with O rings to maintain the IP rating when terminating into enclosures etc
- Colour Black



Flexible Conduit.

| TYPE | Thread | To fit conduit mm | Pack Cont. |
|---------------|-----------------|-------------------|------------|
| RAMN12 | 16 x 1.5 Metric | 12 | 1 |
| RAMN16 | 20 x 1.5 Metric | 16 | 1 |
| RAMN20 | 25 x 1.5 Metric | 20 | 1 |
| RAMN22 | 25 x 1.5 Metric | 22 | 1 |
| RAMN25 | 32 x 1.5 Metric | 25 | 1 |
| RAMN32 | 40 x 1.5 Metric | 32 | 1 |
| RAGN10 | 1/4 in Gas | 10 | 1 |
| RAGN12 | 3/8 in Gas | 12 | 1 |
| RAGN16 | 1/2 in Gas | 16 | 1 |
| RAGN22 | 3/4 in Gas | 22 | 1 |
| RAGN25 | 1 in Gas | 25 | 1 |
| RAGN28 | 1 in Gas | 28 | 1 |
| RAGN32 | 1.1/4 in Gas | 32 | 1 |
| RAGN35 | 1.1/4 in Gas | 35 | 1 |
| RAGN40 | 1.1/2 in Gas | 40 | 1 |
| RAGN50 | 2 in Gas | 50 | 1 |

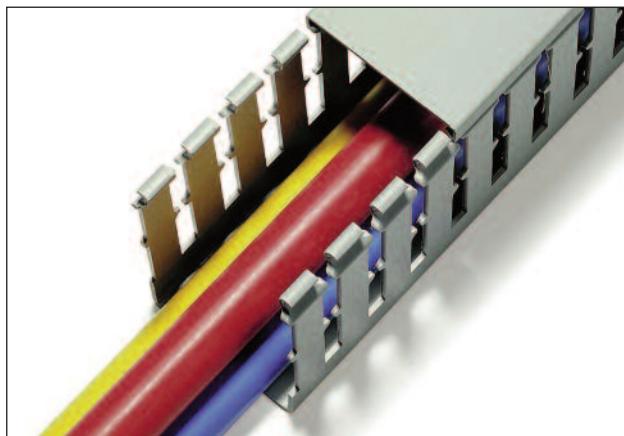


Trunking

Open Slot Trunking

Slotted trunking provides a neat and efficient means of supporting cables in switchgear, control cubicles etc. The open slot construction with tapered slots means that cables can be laid in an assembly wiring progresses, the lid being finally snapped in place to secure the installation.

When required, individual fingers forming the slots can be removed without the use of cutting tools to accommodate the larger cables or to permit butt joints between two trunking sections. Supplied in grey RAL7030.



Open Slot Trunking.

Features and Benefits

- Made from rigid anti-shock pvc
- Flame and combustion resistant to DIN 4102 and ASTM D 635
- Mounting hole diameters to DIN 43659
- Plain and open slot versions supplied in grey
- Supplied in 2m lengths in standard or bulk packs
- Open and closed trunking CSA approved
- Narrow slot trunking available on request.
- Spare lids available on request

| TYPE | Section W x H | Pack Cont. | |
|--------|------------------|--------------|----------|
| | | Standard (m) | Bulk (m) |
| HTS1B | 25 x 25 | 10 x 2 | 150 |
| HTS2 | 30 x 30 | 10 x 2 | 120 |
| HTS3 | 25 x 40 | 10 x 2 | 100 |
| HTS4 | 40 x 40 | 10 x 2 | 72 |
| HTS5 | 60 x 40 | 10 x 2 | 48 |
| HTS5A | 80 x 40 | 10 x 2 | 60 |
| HTS5B | 100 x 40 | - | 32 |
| HTS5C | 30 x 50 | 10 x 2 | 100 |
| HTS5D | 50 x 50 | 10 x 2 | 60 |
| HTS6 | 25 x 60 | 10 x 2 | 64 |
| HTS7 | 40 x 60 | 10 x 2 | 48 |
| HTS8 | 60 x 60 | 10 x 2 | 32 |
| HTS9 | 80 x 60 | 10 x 2 | 48 |
| HTS10 | 100 x 60 | 4 x 2 | 32 |
| HTS12 | 25 x 80 | 10 x 2 | 42 |
| HTS13 | 40 x 80 | 10 x 2 | 60 |
| HTS14 | 60 x 80 | 10 x 2 | 48 |
| HTS14A | 80 x 80 | 4 x 2 | 36 |
| HTS15 | 100 x 80 | 4 x 2 | 24 |
| HTS16 | 120 x 80 | 4 x 2 | 24 |
| HTS17A | 40 x 100 | - | 40 |
| HTS17B | 60 x 100 | - | 32 |
| HTS18A | 80 x 100 | 4 x 2 | 24 |
| HTS19 | 100 x 100 | 4 x 2 | 16 |
| HTS20 | 150 x 100 | 4 x 2 | 12 |



When ordering standard packs please add STD to the part number eg. HTS2STD

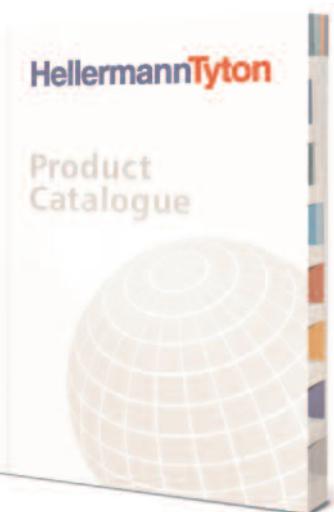
Electrical Installation - Downlight Covers - SpotClip



For more information on our complete SpotClip range of products, please see our Product Catalogue Section 4 Electrical Installation.

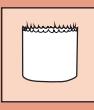


Application Video SpotClip





| MATERIAL THICKNESS & APPLICATION | | BI-METAL HOLE SAWS | | | TUNGSTEN CARBIDE HOLE SAWS | | | DIAMOND GRIT/TIPPED HOLE SAWS | |
|----------------------------------|--------------|--------------------|------------|----------------------------------|---------------------------------|--------------------------|-------------------------|--------------------------------------|--------------------------------|
| | | Fast Cut | Deep Cut | Cordless Smooth Cutting Hole Saw | Fast Cut Multi Purpose Hole Saw | Stainless Steel Hole Saw | Carbide Tipped Hole Saw | Ceramic & Abrasive Material Hole Saw | Brick & Masonry Dri-Core Drill |
| Hole Saw Depth | | 41mm 1.5/8" | 51mm 2" | 13mm 1/2" | 54mm 2.1/8" | 13mm 1/2" | 25mm 1" | Diameter Dependant | Diameter Dependant |
| Recommended Cutting Depths | Hole Saw Ref | FCH | DCH | CSC | MPH | SM | CTD | D | BMC |
| | <3MM | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| | 3-13MM | | ✓ | | ✓ | | ✓ | ✓ | |
| | >13MM | | ✓ | | ✓ | | ✓ | ✓ | ✓ |
| Metal/Inox (Stainless) | | ★★★ | ★★★ | ★★★ | | ★★★ | ★★★ | | |
| Non Ferrous Material | | ★★★ | ★★★ | ★★★ | | ★★★ | ★★★ | | |
| Cast Iron | | ★ | ★ | | | | ★★★ | | |
| Wood | | ★ | ★ | ★ | ★★★ | | | | |
| Nail Embedded Wood | | ★ | ★ | | | | | | |
| Veneer | | ★ | ★ | ★ | ★★★ | | | | |
| MDF | | | | | ★★★ | | | | |
| Plastic | | ★ | ★ | ★ | ★★★ | | | | |
| Acrylic | | ★ | ★ | ★ | ★★★ | | | | |
| Ceramic | | | | | ★ | | | ★★★ | |
| Porcelain/Glass/Stone | | | | | | | | ★★★ | |
| Fibreglass | | ★ | ★ | | ★ | | | ★★★ | |
| Formica | | ★ | ★ | ★ | ★★★ | | | | |
| Plaster | | ★ | ★ | ★ | ★★★ | | | | |
| Suspended Floors | | ★ | ★ | | | | | | |
| Brick & Masonry | | | | | | | | ★★★ | ★★★ |
| Cutting Performance | | | | | | | | | |
| Excellent | | ★★★ | | | | | | | |
| Satisfactory | | ★ | | | | | | | |



Starrett Hole Saws

The Fast Cut Bi Metal Hole Saw

The Fast Cut saw combines a new tooth material, and a new tooth design, providing a smoother, faster cut on a wide range of materials, when compared against the previous Constant Pitch Saws.

Features and Benefits

- Ideal for stainless and mild steel sheet and tubes with a wall thickness of up to 3mm (1/8")
- New 5.5 TPI/25mm tooth form provides a smoother, faster cut in all materials
- New tooth material for enhanced heat and wear resistance and greater product life
- Cutting depth of 41mm (1.5/8")



Fast Cut Hole Saw.



Fast Cut Hole Saw application.



| TYPE | Saw Dia | Pack Cont. |
|---------|---------|------------|
| FCH0096 | 14mm | 1 |
| FCH0058 | 16mm | 1 |
| FCH1016 | 17mm | 1 |
| FCH0034 | 19mm | 1 |
| FCH2532 | 20mm | 1 |
| FCH1036 | 21mm | 1 |
| FCH0078 | 22mm | 1 |
| FCH1056 | 24mm | 1 |
| FCH0100 | 25mm | 1 |
| FCH0116 | 27mm | 1 |
| FCH0118 | 29mm | 1 |
| FCH0136 | 30mm | 1 |
| FCH0114 | 32mm | 1 |
| FCH0156 | 33mm | 1 |
| FCH0138 | 35mm | 1 |
| FCH0176 | 37mm | 1 |
| FCH0112 | 38mm | 1 |
| FCH0196 | 40mm | 1 |
| FCH0158 | 41mm | 1 |
| FCH1116 | 43mm | 1 |
| FCH0134 | 44mm | 1 |
| FCH1136 | 46mm | 1 |
| FCH0178 | 48mm | 1 |
| FCH0200 | 51mm | 1 |
| FCH0216 | 52mm | 1 |
| FCH0218 | 54mm | 1 |





Starrett Hole Saws

The Fast Cut Hole Saw



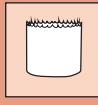
For the range of Arbors to suit. See pg 43



Fast Cut Hole Saw Kits also available. See pg 42

| TYPE | Saw Dia | Pack Cont. |
|----------|---------|------------|
| FCH56MM | 56mm | 1 |
| FCH0214 | 57mm | 1 |
| FCH0256 | 59mm | 1 |
| FCH0238 | 60mm | 1 |
| FCH0212 | 64mm | 1 |
| FCH0296 | 65mm | 1 |
| FCH0258 | 67mm | 1 |
| FCH68M | 68mm | 1 |
| FCH0234 | 70mm | 1 |
| FCH0278 | 73mm | 1 |
| FCH0300 | 76mm | 1 |
| FCH0318 | 79mm | 1 |
| FCH0314 | 83mm | 1 |
| FCH0338 | 86mm | 1 |
| FCH0312 | 89mm | 1 |
| FCH0358 | 92mm | 1 |
| FCH0334 | 95mm | 1 |
| FCH0378 | 98mm | 1 |
| FCH0400 | 102mm | 1 |
| FCH0418 | 105mm | 1 |
| FCH0414 | 108mm | 1 |
| FCH0438 | 111mm | 1 |
| FCH0412 | 114mm | 1 |
| FCH0434 | 121mm | 1 |
| FCH0500 | 127mm | 1 |
| FCH0514 | 133mm | 1 |
| FCH0512 | 140mm | 1 |
| FCH0600 | 152mm | 1 |
| FCH160MM | 160mm | 1 |
| FCH168MM | 168mm | 1 |
| FCH177MM | 177mm | 1 |
| FCH210MM | 210mm | 1 |





Starrett Hole Saws

Deep Cut Bi Metal Hole Saws

The Deep Cut saw combines the tried and tested tooth form from the previous Dual Pitch product, with a new tooth material for enhanced heat and wear resistance.

It also features an increased cutting depth of 51mm (2"), and is ideal for cutting metal or more than 3mm thickness tubes with a wall thickness of greater than 3mm and wood up to 51mm (2") thick.

Features and Benefits

- Aggressive material penetration and kerf clearance
- Ideal for solid materials or tubes of a wall thickness greater than 3mm
- 51mm cutting depth improves cutting performance on tubes, particularly where there is a need to cut through both sides of the tube
- New tooth material for enhanced heat and wear resistance and greater product life
- Cutting depth of 51mm (2")



Deep Cut Hole Saw.



Deep Cut Hole Saw application.

| TYPE | Saw Dia | Pack Cont. |
|---------|---------|------------|
| DCH0034 | 19mm | 1 |
| DCH2532 | 20mm | 1 |
| DCH1036 | 21mm | 1 |
| DCH0078 | 22mm | 1 |
| DCH1056 | 24mm | 1 |
| DCH0100 | 25mm | 1 |
| DCH0116 | 27mm | 1 |
| DCH0118 | 29mm | 1 |
| DCH0136 | 30mm | 1 |
| DCH0114 | 32mm | 1 |
| DCH0156 | 33mm | 1 |
| DCH0138 | 35mm | 1 |
| DCH0176 | 37mm | 1 |
| DCH0112 | 38mm | 1 |
| DCH0196 | 40mm | 1 |
| DCH0158 | 41mm | 1 |
| DCH1116 | 43mm | 1 |
| DCH0134 | 44mm | 1 |
| DCH1136 | 46mm | 1 |
| DCH0178 | 48mm | 1 |
| DCH0200 | 51mm | 1 |
| DCH0216 | 52mm | 1 |
| DCH0218 | 54mm | 1 |
| DCH056M | 56mm | 1 |
| DCH0214 | 57mm | 1 |
| DCH0256 | 59mm | 1 |
| DCH0238 | 60mm | 1 |
| DCH0212 | 64mm | 1 |



**Starrett Hole Saws****Deep Cut Bi Metal Hole Saws**

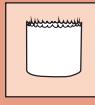
Deep Cut Hole Saw Kits available. see pg 42



For the range of Arbors to suit. see pg 43

| TYPE | Saw Dia | Pack Cont. |
|---------|---------|------------|
| DCH0296 | 65mm | 1 |
| DCH0258 | 67mm | 1 |
| DCH068M | 68mm | 1 |
| DCH0234 | 70mm | 1 |
| DCH0278 | 73mm | 1 |
| DCH0300 | 76mm | 1 |
| DCH0318 | 79mm | 1 |
| DCH0314 | 83mm | 1 |
| DCH0338 | 86mm | 1 |
| DCH0312 | 89mm | 1 |
| DCH0358 | 92mm | 1 |
| DCH0334 | 95mm | 1 |
| DCH0378 | 98mm | 1 |
| DCH0400 | 102mm | 1 |
| DCH0418 | 105mm | 1 |
| DCH0414 | 108mm | 1 |
| DCH0438 | 111mm | 1 |
| DCH0412 | 114mm | 1 |
| DCH0434 | 121mm | 1 |
| DCH0500 | 127mm | 1 |
| DCH0514 | 133mm | 1 |
| DCH0512 | 140mm | 1 |
| DCH0600 | 152mm | 1 |
| DCH160M | 160mm | 1 |
| DCH168M | 168mm | 1 |
| DCH177M | 177mm | 1 |
| DCH210M | 210mm | 1 |





Starrett Hole Saws

Bi-Metal Cordless Smooth Cut Hole Saws

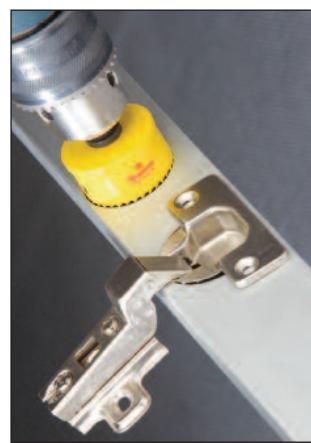
Complete hole saw assembly including arbor and pilot drill, specifically for cordless power tools. Heat resistant high speed steel edge, with alloy backing and constant pitch of 8 TPI for stainless and mild steel, sheet steel, plasterboard, wood and thin non-metallics.

Features and Benefits

- Ideal for cutting stainless steel, mild steel sheeting plus plasterboards, wood and thin plastics
- Safety stop at the base of the hole saw prevents drilling beyond the maximum cutting depth
- Complete assembly – arbor and pilot drill included
- Constant pitch teeth provide exceptionally smooth cuts pitch 8 teeth per 25mm/inch
- Recommended cutting depth 2mm
- Saw design enables longer battery life of tool between changes



Bi-Metal Cordless Smooth Cut Hole Saws.



CSC Hole Saw application.



*CSC Hole Saw Kits
also available
see pg 42.*

| TYPE | Saw Dia | Pack Cont. |
|-------|---------|------------|
| CSC16 | 16mm | 1 |
| CSC19 | 19mm | 1 |
| CSC20 | 20mm | 1 |
| CSC22 | 22mm | 1 |
| CSC25 | 25mm | 1 |
| CSC27 | 27mm | 1 |
| CSC29 | 29mm | 1 |
| CSC30 | 30mm | 1 |
| CSC32 | 32mm | 1 |
| CSC35 | 35mm | 1 |
| CSC38 | 38mm | 1 |
| CSC40 | 40mm | 1 |
| CSC51 | 51mm | 1 |



Starrett Hole Saws

TCT Tungsten Carbide Tipped Multi-Purpose Hole Saws

Tungsten carbide tipped multi-purpose hole saws with a unique tooth set for an ultra-aggressive, high performance cutting on non-metallics.

Perfect tool for users from construction and installation engineers to the DIY enthusiast. Offering very fast cutting times, and outstanding life. The MPH saws will cut through wood, MDF, plastics and ceramic wall tiles.

Features and Benefits

- Rapid, heat free stock removal of wood, MDF and plastics, plasterboard, and ceramic tiles up to five times faster than bi-metal hole saws
- Carbide tipped teeth for outstanding cutting performance and product durability
- Smooth cutting with minimal heat build up
- Suitable for use in electric and battery powered tools
- Cutting depth of 54mm (2-1/8")
- Special arbors featuring extended length pilot drills are available



Multi Purpose Hole Saw MPH.



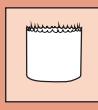
MPH Hole Saw application. MPH Hole Saw. Kits also available see pg 42.



For a full range of arbors to suit MPH Hole Saws see pg 43.

| TYPE | Saw Dia | Pack Cont. |
|---------|---------|------------|
| MPH0034 | 19mm | 1 |
| MPH2532 | 20mm | 1 |
| MPH0078 | 22mm | 1 |
| MPH0100 | 25mm | 1 |
| MPH0116 | 27mm | 1 |
| MPH0118 | 29mm | 1 |
| MPH0136 | 30mm | 1 |
| MPH0114 | 32mm | 1 |
| MPH0138 | 35mm | 1 |
| MPH0112 | 38mm | 1 |
| MPH0196 | 40mm | 1 |
| MPH0158 | 41mm | 1 |
| MPH0134 | 44mm | 1 |
| MPH0178 | 48mm | 1 |
| MPH0200 | 51mm | 1 |
| MPH0218 | 54mm | 1 |





Starrett Hole Saws

TCT Tungsten Carbide Tipped Multi-Purpose Hole Saws

| TYPE | Saw Dia | Pack Cont. |
|---------|---------|------------|
| MPH0214 | 57mm | 1 |
| MPH0238 | 60mm | 1 |
| MPH0212 | 64mm | 1 |
| MPH0296 | 65mm | 1 |
| MPH0258 | 67mm | 1 |
| MPH68MM | 68mm | 1 |
| MPH0234 | 70mm | 1 |
| MPH0278 | 73mm | 1 |
| MPH0300 | 76mm | 1 |
| MPH0318 | 79mm | 1 |
| MPH0314 | 83mm | 1 |
| MPH0338 | 86mm | 1 |
| MPH0312 | 89mm | 1 |
| MPH0358 | 92mm | 1 |
| MPH0334 | 95mm | 1 |
| MPH0378 | 98mm | 1 |
| MPH0400 | 102mm | 1 |
| MPH0418 | 105mm | 1 |
| MPH0414 | 108mm | 1 |
| MPH0456 | 109mm | 1 |
| MPH0438 | 111mm | 1 |
| MPH0412 | 114mm | 1 |
| MPH0458 | 118mm | 1 |
| MPH0434 | 121mm | 1 |
| MPH0500 | 127mm | 1 |
| MPH0512 | 140mm | 1 |
| MPH0600 | 152mm | 1 |
| MPH0614 | 159mm | 1 |





Starrett Hole Saws

Tungsten Carbide Tipped Stainless Steel Sheet Metal Hole Saw

Ideal for cutting stainless steel and high alloy steels, non ferrous light metals and reinforced fabrics, at a much faster speed than is possible with a bi-metal hole saw.

The tough tungsten carbide tipped teeth have a positive cutting angle which provides fast and efficient removal of chips and swarf, recommended cutting depth is 2mm.

Features and Benefits

- Ideal for production cutting, and particularly suitable for use in drills with limited speed control
- Tungsten carbide tipped teeth provide superb product life and cutting performance
- Replacement pilot drills are available
- Complete assembly – there is no requirement to purchase a separate arbor and pilot drill
- Safety stop at the base of the hole saw prevents drilling beyond maximum cutting depth
- Recommended cutting depth is 2mm

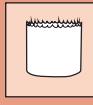


Sheet Metal Hole Saw.



Sheet Metal Hole Saw Application.

| TYPE | Saw Dia | Pack Cont. |
|-------------|---------|------------|
| SM15 | 15mm | 1 |
| SM16 | 16mm | 1 |
| SM18 | 18mm | 1 |
| SM19 | 19mm | 1 |
| SM20 | 20mm | 1 |
| SM22 | 22mm | 1 |
| SM25 | 25mm | 1 |
| SM27 | 27mm | 1 |
| SM29 | 29mm | 1 |
| SM30 | 30mm | 1 |
| SM32 | 32mm | 1 |
| SM38 | 38mm | 1 |
| SM40 | 40mm | 1 |
| SM45 | 45mm | 1 |
| SM50 | 50mm | 1 |
| SM51 | 51mm | 1 |
| SM60 | 60mm | 1 |
| SM65 | 65mm | 1 |
| SM75 | 75mm | 1 |
| SM80 | 80mm | 1 |



Starrett Hole Saws

Carbide Tipped Deep Cut Hole Saws

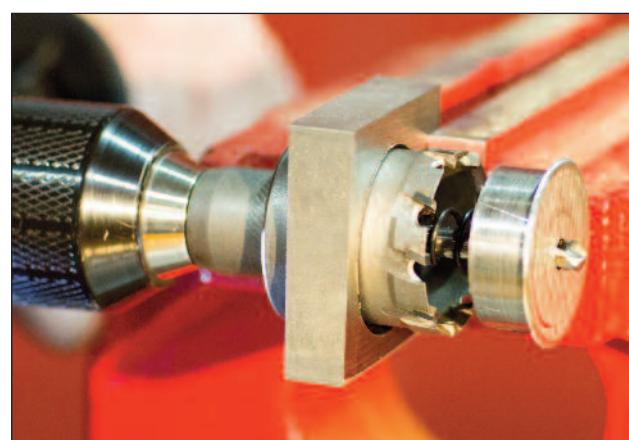
The new Starrett Carbide Tipped Deep Cut hole saw (CTD) is the perfect solution for repeated intensive drilling in mild and stainless steel, cast iron, aluminium and copper of all thicknesses up to and including 25mm (1"). Starrett CTD hole saws feature three different angles ground on to the cutting face of each tooth on the saw. This three ply tooth grind delivers a fast cut, minimal snag when the saw begins the cut, efficient swarf removal minimising heat build up, and maximum saw life. CTD will power through sheet, stainless steel up to 25mm thickness, enclosures, pipework and structural steel work with either a fixed or portable drill, in a fraction of the time taken by a standard hole saw.

Features and Benefits

- Supplied as one piece with no need for assembly
- Three ply tooth grind on each tooth delivers maximum performance and makes the saw much more robust than two ply equivalents
- Safety stop collar at the base of the saw prevents the saw 'following through' once the cut is complete
- Can be used with fixed or portable drills, mains power or cordless.
- All saws are supplied with an ejector spring to aid ejection of the core from the saw
- Replacement pilot drills are available



Carbide Tipped Deep Cut Hole Saw.



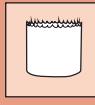
Carbide Tipped Deep Cut Hole Saw Application.

| TYPE | Saw Dia | Pack Cont. |
|-------|---------|------------|
| CTD15 | 15mm | 1 |
| CTD16 | 16mm | 1 |
| CTD17 | 17mm | 1 |
| CTD18 | 18mm | 1 |
| CTD19 | 19mm | 1 |
| CTD20 | 20mm | 1 |
| CTD21 | 21mm | 1 |
| CTD22 | 22mm | 1 |
| CTD23 | 23mm | 1 |
| CTD24 | 24mm | 1 |
| CTD25 | 25mm | 1 |
| CTD26 | 26mm | 1 |
| CTD27 | 27mm | 1 |
| CTD28 | 28mm | 1 |
| CTD29 | 29mm | 1 |
| CTD30 | 30mm | 1 |
| CTD32 | 32mm | 1 |
| CTD33 | 33mm | 1 |
| CTD34 | 34mm | 1 |

**Starrett Hole Saws****Carbide Tipped Deep Cut Hole Saws**

| TYPE | Saw Dia | Pack Cont. |
|-------------|----------------|-------------------|
| CTD35 | 35mm | 1 |
| CTD36 | 36mm | 1 |
| CTD38 | 38mm | 1 |
| CTD39 | 39mm | 1 |
| CTD40 | 40mm | 1 |
| CTD45 | 45mm | 1 |
| CTD50 | 50mm | 1 |
| CTD51 | 51mm | 1 |
| CTD55 | 55mm | 1 |
| CTD60 | 60mm | 1 |
| CTD64 | 64mm | 1 |
| CTD65 | 65mm | 1 |
| CTD70 | 70mm | 1 |
| CTD75 | 75mm | 1 |
| CTD80 | 80mm | 1 |
| CTD85 | 85mm | 1 |
| CTD90 | 90mm | 1 |
| CTD95 | 95mm | 1 |
| CTD100 | 100mm | 1 |





Starrett Hole Saws

Diamond Grit Hole Saw

High performance saws for non-metallics. Synthetic diamond grit bonded over a durable steel platform. Capable of cutting through porcelain, glass, ceramics, brick and stone. These hole saws are the ideal solution in the toughest of cutting situations.

Features and Benefits

- Small diameter hole saws are perfect for kitchen and bathroom installations
- Smooth surface finish
- Drive arbors with carbide tipped pilot drills available
- Cutting depth of 41mm



Diamond Grit Hole Saw.



Diamond Grit Hole Saw Application.

| TYPE | Saw Dia | Pack Cont. |
|-------|---------|------------|
| D0058 | 16mm | 1 |
| D0034 | 19mm | 1 |
| D2532 | 20mm | 1 |
| D0078 | 22mm | 1 |
| D0100 | 25mm | 1 |
| D0118 | 29mm | 1 |
| D0136 | 30mm | 1 |
| D0114 | 32mm | 1 |
| D0138 | 35mm | 1 |
| D0112 | 38mm | 1 |
| D0196 | 40mm | 1 |
| D0158 | 41mm | 1 |
| D1116 | 43mm | 1 |
| D0134 | 44mm | 1 |
| D0200 | 51mm | 1 |
| D0216 | 52mm | 1 |
| D56MM | 56mm | 1 |
| D0212 | 64mm | 1 |
| D0358 | 92mm | 1 |
| D0500 | 127mm | 1 |
| D0600 | 152mm | 1 |



Starrett Hole Saws

Diamond Tile Drills

High performance hole saws for drilling small diameter holes in many non-metallics. These diamond edge hole saws are produced with a uniform coating of synthetic diamond grit bonded to a durable steel platform. Diamond edge saws produce clean, accurate cuts on brick, glass, ceramic tiles and stone.

Features and Benefits

- Able to cut rapidly through porcelain, glass, ceramics, brick and stone
- Small diameter hole saws are perfect for kitchen and bathroom installations
- Smooth surface finish
- Drive arbor and pilot drill not required
- Maximum cutting depth of 20mm
- Plastic water dispensing bottle to apply coolant to drill bit is also available
- Diamond tile drill guide used in place of a pilot drill bit to eliminate hole saw walking and prevent damage to work surfaces



Diamond Tile Drills.



Diamond Tile Drill Application.

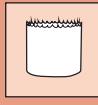


Tile Drill Water Bottle.



Diamond Tile Drill Guide.

| TYPE | Saw Dia/Description | Pack Cont. |
|--------|--------------------------|------------|
| D0005 | 5mm | 1 |
| D0006 | 6mm | 1 |
| D0065 | 6.5mm | 1 |
| D0008 | 8mm | 1 |
| D0010 | 10mm | 1 |
| D0012 | 12mm | 1 |
| WCD01 | Drill Water Bottle | 1 |
| DTDG01 | Diamond Tile Drill Guide | 1 |



Starrett Hole Saws

Diamond Core Drills

Designed for intensive dry cutting on brickwork and blockwork, and particularly suitable for plumbers, electricians, and other installation engineers.

These dri-core drills will be invaluable in the construction of flues, air vents and plumbing or electrical channels.

Features and Benefits

- Faster rate of cut than TCT alternatives with less pressure required
- 300mm saw length on 22 and 28mm diameter saws
- 150mm saw length on all other diameters



Diamond Core Drill.



Diamond Core Drill Application.

| TYPE | Saw Dia/Description | Pack Cont. |
|---------|------------------------|------------|
| BMC28 | 28mm | 1 |
| BMC52 | 52mm | 1 |
| BMC65 | 65mm | 1 |
| BMC102 | 102mm | 1 |
| BMC117 | 117mm | 1 |
| BMC127 | 127mm | 1 |
| BMC152 | 152mm | 1 |
| BMA1 | Hex Adaptor | 1 |
| BMA2 | SDS Adaptor | 1 |
| BMA1240 | Hex Adaptor | 1 |
| BMA2240 | SDS Adaptor 240mm | 1 |
| BMA3200 | Pilot Drill 13 x 200mm | 1 |
| BMA3350 | Pilot Drill 13 x 350mm | 1 |
| BMA4150 | Extension 150mm | 1 |
| BMA4250 | Extension 250mm | 1 |
| BMA5 | Drift Key | 1 |

*Other sizes available on request



Starrett Hole Saw Kits

Hole Saw Kits

A comprehensive range of kits to support our hole saw range. Suitable for tradesmen, installation engineers, industry in general and the DIY enthusiast. Our kits feature a range of saws with sizes selected specifically to suit the relevant application.

Packed in sturdy carrying cases, the kits will be an invaluable addition to any toolbox.

Features and Benefits

- Suitable for tradesmen, installation engineers and industry in general
- Packed in a sturdy carrying case

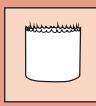


General Purpose Hole Saw Kit.



General Purpose Hole Saw Kit packaging for point of sale.

| TYPE | Description | Hole Saw Sizes | Arbor & Accessories | Pack Cont. |
|---|--|---|--|------------|
| FAST CUT BI-METAL HOLE SAW KITS | | | | |
| KFC06023 | General Purpose Kit 8 piece | 22mm, 29mm, 35mm, 44mm, 51mm & 64mm | A1 & A10 Arbors | 1 |
| KFC06022 | Electricians Kit 8 piece | 16mm, 20mm, 25mm, 29mm, 44mm & 51mm | A1 & A10 Arbors | 1 |
| KFC06021 | Electricians Kit 1 8 piece | 16mm, 20mm, 25mm, 32mm, 40mm & 51mm | A1 & A10 Arbors | 1 |
| KFC06071 | Ulti-Mate Electricians Kit 13 piece | 16mm, 20mm, 25mm, 32mm, 40mm & 51mm | A3 Ulti-Mate Arbor 6 Ulti-Mate Arbor Adapters | 1 |
| KFC11021 | Deluxe Electricians Kit 13 piece | 16mm, 20mm, 22mm, 25mm, 29mm, 35mm, 44mm, 51mm, 64mm, 68mm, & 76mm | A1 & A2 Arbors | 1 |
| KFC12021 | Plumbers and Electricians Kit 14 piece | 16mm, 20mm, 22mm, 29mm, 35mm, 38mm, 40mm, 44mm, 51mm, 57mm, 65mm & 68mm | A1 & A2 Arbors | 1 |
| KFC06011 | Super 6Plus Kit | 3 x 25mm, 3 x 20mm | A1 Arbor | 1 |
| BI METAL CORDLESS SMOOTH HOLE SAW KITS | | | | |
| KCS07011 | General Purpose Kit 8 piece | 16mm, 20mm, 25mm, 29mm, 30mm, 32mm, & 38mm | A18 Dual Hex Chuck | 1 |
| TCT MULTI-PURPOSE HOLE SAW KITS | | | | |
| KMP09021 | General Purpose Kit 1 11 piece | 19mm, 22mm, 29mm, 35mm, 44mm, 51mm, 57mm, 64mm & 68mm | A1E & A17-38E FREE XA014C | 1 |
| KMP11021 | General Purpose Kit 2 13 piece | 19mm, 22mm, 29mm, 35mm, 38mm, 44mm, 51mm, 57mm, 64mm, 68mm & 76mm | A1E & A17-38E FREE XA014C | 1 |
| KMP12011 | Downlight Hole Saw Kit 13 piece | 35mm, 40mm, 44mm, 51mm, 60mm, 65mm, 70mm, 73mm, 76mm, 83mm, 86mm & 92mm | XA17-38 (supplied with carbide tipped pilot drill) | 1 |
| KMP04051 | Multi-Purpose Hole Saws in a Tube Kit | 64mm, 70mm, 76mm, 79mm | A3 Ulti-Mate Arbor & 4 x Ulti-Mate Arbor Adapters | 1 |
| CARBIDE TIPPED DEEP CUT HOLE SAW KITS | | | | |
| KCT08001 | Specialist Hole Saw Kit | 16mm, 20mm, 22mm, 25mm, 32mm, 40mm, 51mm & 64mm | n/a | 1 |
| KCT07001 | Specialist Hole Saw Kit | 16mm, 20mm, 22mm, 25mm, 32mm, 40mm & 50mm | n/a | 1 |



Starrett Arbors and Accessories

High Speed Steel with Pilot Drill

Offering a range of arbors suitable for use with FCH, DCH, CSC and MPH type hole saws.

Features and Benefits

- 4 standard models available
- 6.35mm pilot drill included
- Easy replacement of the pilot drill



A1 Arbor. A4 Arbor. A2 Arbor. A10 Arbor.

| TYPE | Fits Hole Saw Dia mm | Shank Size | Pack Cont. |
|---|---|------------|------------|
| HIGH SPEED STEEL WITH PILOT DRILL - Arbor suitable for use with FCH, DCH, CT and C Hole Saws | | | |
| A1 | 14-30mm | 8.75mm Hex | 1 |
| A4 | 14-30mm | 6.5mm Hex | 1 |
| A2 - Quick Hitch | 32-210mm | 11mm Hex | 1 |
| A10 - Quick Hitch | 32-152mm | 8.75mm Hex | 1 |
| EXTENDED LENGTH - Arbor for use with MPH and DCH Hole Saws | | | |
| A1E | 14-30mm | 8.75mm Hex | 1 |
| A4E | 14-30mm | 6.5mm Hex | 1 |
| A2E - Quick Hitch | 32-210mm | 11mm Hex | 1 |
| A10E - Quick Hitch | 32-152mm | 8.75mm Hex | 1 |
| Arbor with Carbide Drill | | | |
| XA1 | 14-30mm | 8.75mm Hex | 1 |
| XA2 - Quick Hitch | 32-210mm | 11mm Hex | 1 |
| XA10 - Quick Hitch | 32-152mm | 8.75mm Hex | 1 |
| Locking Arbor | | | |
| A17-38E With extended length HSS Pilot Drill | 32-210mm | 8.75mm Hex | 1 |
| XA17-38 Carbide Tipped | 32-210mm | 8.75mm Hex | 1 |
| Arbor Extension | | | |
| A5 | A2, A2E | 13mm | 1 |
| A15 | A1, A1E, A10, A10E, A17-38 A17-38E | 9.5mm | 1 |
| SDS Plus Shank Arbor with high speed pilot drill | | | |
| A1-1 | For holesaws 14-30mm | | 1 |
| A2-1 | For holesaws 32-210mm | | |
| Arbor Adaptor - Allows use of Hole Saws up to 152mm | | | |
| A12 | Adaptor screws on to arbors with a 1/2"-20 screw thread and allows use of hole saws up to 152mm | | 1 |
| Oops' Arbor | | | |
| Oops Arbor - A19 | Fits A1, A2 or A10 type Arbors | | 1 |
| Arbor Pilot Drill - High Speed | | | |
| A014C | For all FCH Series Hole Saws | | 1 |
| A014CE | For TCT MPH and DCH Hole Saws | | 1 |
| Carbide Tipped Drill Bit | | | |
| XA014C | For all CT, MPH and D Series Hole Saws | | 1 |



Starrett Arbors and Accessories

ULTI-MATE Rapid Release Arbor System

The ULTI-MATE offers super fast, tool free changes between different diameters of hole saw, without adjustment of the drill chuck. Removal of cores from a hole saw after a cut is also much improved by the rapid release of the hole saw from the arbor.

Features and Benefits

- Super fast tool free changes
- Rapid release of the hole saw from the arbor

ULTI-MATE Rapid Release Arbor System



Rapid Release Arbor System.



Adaptor.

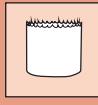


Arbor with pilot drill.

| TYPE | Description | Pack Cont. |
|-------|--|------------|
| A3 | ULTI-MATE hole saw arbor with pilot drill | 1 |
| A3-6 | ULTI-MATE hole saw arbor with pilot drill and one each of the standard hole saw adapters | 1 |
| A3-3 | 3 ULTI-MATE hole saw adapters, suitable for hole saws from 14mm - 30mm | 1 |
| A3-4 | 3 ULTI-MATE hole saw adapters, suitable for hole saws from 32mm - 102mm | 1 |
| A3-5 | ULTI-MATE hole saw adapter, suitable for heavy duty cutting on large diameter saws 102mm and greater | 1 |
| A3-7 | ULTI-MATE hole saw arbor with pilot drill, 20mm, 25mm, FCH Hole Saws and hole saw adapters | 1 |
| A3-8 | ULTI-MATE hole saw arbor with pilot drill, 20mm, 25mm, Deep Cut Hole Saws and hole saw adapters | 1 |
| A014M | Replacement Drill for ULTI-MATE Arbor | 1 |



For kit see page 42



Starrett Arbors and Accessories

OOPS Arbor

The A19 'Oops' Arbor is for use in conjunction with either the A1, A2 or A10 type hole saw arbors (e.g. A1-1, XA2, A1E etc). Replacing the pilot drill, the 'Oops' Arbor allows diameters to be enlarged by attaching a saw of the same size to that of the existing hole, thereby acting as a pilot for the larger diameter saw. Minimum hole enlargement is 4.7mm (3/16") between the pilot saw diameter and the cutting saw diameter.



'Oops' Arbor.

Features and Benefits

- The A19 'Oops' Arbor works with the following holesaws because they all have the same screw threads (1/2"-20 & 5/8"-18)
- (FCH) Constant Pitch HSS Bi Metal Holesaws
- (DCH) Dual Pitch HSS Bi Metal Holesaws
- (MPH) TCT Multi Purpose Holesaws
- (CTD) Carbide Tipped Holesaws
- (D) Diamond Grit Holesaws

| TYPE | Description | Pack Cont. |
|------|-------------|------------|
| A19 | Oops Arbor | 1 |

HelaTape. The Tape Team.



For more information on our complete HelaTape range of products, please see our Product Catalogue Section 4 Electrical Installation



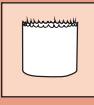
The Tape Team.

A professional team of electrical and technical tapes for bundling, insulating, fixing, sealing and marking.

HellermannTyton

Product Catalogue





Starrett Hole Saw Accessories

Hole Saw Core Ejectors

A simple, but highly effective method of ejecting the core from a hole saw after completion of the cut.

Features and Benefits

- Select the appropriate size of ejector for the hole saw
- Where it is necessary to assemble the two parts of the core ejector, twist the spring on to the ejector plate until it locks in place
- Twist the spring on the assembled core ejector over the pilot drill until the pilot drill is protruding from the plate
- Drill the hole
- Please note that using the core ejector will reduce the cutting depth of the saw. The table below lists the recommended optimum maximum material thickness for each type of hole saw. The core ejector will function at greater material thicknesses than those listed, however its effectiveness will diminish



KA Hole Saw Core Ejector.



Core ejector attached to a hole saw. After the hole saw has been drilled the core can clearly be seen at the end of the pilot drill.

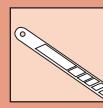
| TYPE | Description | Pack Cont. |
|-------|---------------------------------|------------|
| KA8-1 | 20-24mm Hole Saw Core Ejector | 1 |
| KA8-2 | 25-38mm Hole Saw Core Ejector | 1 |
| KA8-3 | 40-60mm Hole Saw Core Ejector | 1 |
| KA8-4 | 64-86mm Hole Saw Core Ejector | 1 |
| KA8-5 | 89-127mm Hole Saw Core Ejector | 1 |
| KA8-6 | 133-210mm Hole Saw Core Ejector | 1 |

| HOLESAW TYPE | Recommended Max material thickness |
|---------------|------------------------------------|
| FCH, DCH, CTD | 7mm |
| D, MPH | 5mm |

Please note:

In some applications it is possible that the core may be ejected from the saw at high speed. Please always use safety goggles and glasses and take extra care if drilling vertically.





Starrett Frames and Blades

Hacksaw Blades

This comprehensive range is manufactured to the most exacting standards to offer optimum cutting performance across the broadest range of materials.

Features and Benefits

- Bi-Metal Unique High Speed Steel Safe-Flex hacksaw blades are the industry's most advanced bi-metal hacksaw blade
- A patented solid state diffusion process produces the industry's most advanced bi-metal hacksaw blade
- Grey-Flex High Carbon Steel hacksaw blades are an all-purpose economical alternative when cutting mild steel, copper, brass, aluminium and other like materials
- The blades feature an all carbon construction with a hardened cutting edge and flexible back

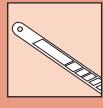


KBS1232 Bi-Metal Blade.



GF1224 Greg-Flex High Carbon Steel Blade.

| TYPE | Description | TPI | Pack Cont |
|-------------------|---|----------------|-----------|
| KBS1218-10 | Bi-Metal Unique Safe-Flex Blade 300mm x 13mm x 0.65mm | 18 | 10 |
| KBS1224-10 | Bi-Metal Unique Safe-Flex Blade 300mm x 13mm x 0.65mm | 24 | 10 |
| KBS1232-10 | Bi-Metal Unique Safe-Flex Blade 300mm x 13mm x 0.65mm | 32 | 10 |
| BS1224 | Bi-Metal Unique Safe-Flex Blade 300mm x 13mm x 0.65mm | 24 | 50 |
| BS1232 | Bi-Metal Unique Safe-Flex Blade 300mm x 13mm x 0.65mm | 32 | 50 |
| GF1224 | Grey-Flex High Carbon Steel Blade 300mm x 13mm x 0.65mm | 24 | 50 |
| GF1232 | Grey-Flex High Carbon Steel Blade 300mm x 13mm x 0.65mm | 32 | 50 |
| PT26689 | 9" replacement Blade for 147 Compass Saw | Variable Pitch | 1 |



Starrett Tools

Hacksaw Frames

A range of hacksaws to compliment the Starrett range are available.

Features and Benefits

- The 140G is a light duty non-adjustable hacksaw frame featuring a closed grip frame accepting 300mm blades. High speed steel Safe-Flex hacksaw blade included.
- The 145 is a closed grip, high tension heavy duty hacksaw frame with a closed grip feature, easy to use. High speed steel Safe-Flex hacksaw blade included.
- The K147 is a Bi-metal Compass Saw an ideal tool for cutting plasterboard, featuring a heavy-duty variable pitch, bi-metal blade to cut most materials and provide an extra-long cutting life. 225/9" bi-metal unique blade included
- The blade rotates full 360° to easily cut at any angle.
- The 148 saw is used for cutting PVC and ABS materials. Also used for cutting plasterboard, plywood and general purpose cutting. Available in two lengths 12" or 18"



140G.



145.



K147.

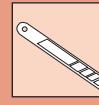


148.

| TYPE | Description | Pack Cont. |
|---------------|---|------------|
| 140G | Closed Grip Non-Adjustable Light Duty Hacksaw Frame | 1 |
| 145 | Closed Grip - High Tension Heavy Duty Hacksaw Frame | 1 |
| K147 | Bi-Metal Compass Saw with heavy duty bi-metal blade | 1 |
| 148-12 | PVC Saw 12" Blade | 1 |
| 148-18 | PVC Saw 18" Blade | 1 |



Replacement blades available. See page 50



Starrett Tools

Jigsaw Blades & Kits

These jigsaw blades incorporate the Starrett exclusive bi-metal unique process technology. Blades made from this process resist breakage, cut faster and last longer than conventional saws.

The range includes jigsaw blades that can cut wood, multi-purpose, metal and abrasive materials.

Features and Benefits

- Resist breakage
- Cuts faster
- Last longer than conventional saws
- Unified shank suitable for the vast majority of jig saw machines
- Other pack quantities available on request



BU46 Jigsaw Blade.



BU224 Jigsaw Blade.



BU6 Jigsaw Blade Wallet.

| TYPE | Description Length x Width x Thickness | Suitable for | TPI | Pack Cont |
|------------------|--|-----------------------------|------------|------------------|
| BU36T-5 | 75mm x 7.5mm x 1.3mm | wood | 6 | 5 |
| BU36-5 | 75mm x 7.5mm x 1.3mm | wood | 6 | 5 |
| BU38-5 | 75mm x 7.5mm x 1.3mm | wood | 8 | 5 |
| BU310T-5 | 75mm x 7.5mm x 1.3mm | wood | 10 | 5 |
| BU310DT-5 | 75mm x 7.5mm x 1.3mm | wood | 10 | 5 |
| BU46-5 | 100mm x 9.5mm x 1.3mm | wood | 6 | 5 |
| BU56-5 | 125mm x 9.5mm x 1.3mm | wood | 6 | 5 |
| BU214-5 | 50mm x 7.5mm x 1mm | multi-purpose | 14 | 5 |
| BU218-5 | 50mm x 9.5mm x 1mm | multi-purpose | 18 | 5 |
| BU214S-5 | 50mm x 4.5mm x 1mm | multi-purpose | 14 | 5 |
| BU41014-5 | 100mm x 9.5mm x 1mm | multi-purpose | 10-14 | 5 |
| BU418-5 | 100mm x 9.5mm x 1mm | multi-purpose | 18 | 5 |
| BU224-5 | 50mm x 7.5mm x 1mm | metal | 24 | 5 |
| BU232-5 | 50mm x 7.5mm x 1mm | metal | 32 | 5 |
| BU224S-5 | 50mm x 4.5mm x 1mm | metal | 24 | 5 |
| BU424-5 | 100mm x 9.5mm x 1mm | metal | 24 | 5 |
| BU230X-5 | 50mm x 7.5mm x 1mm | multi-purpose carbide grit | Coarse CG | 5 |
| BU3DC-2 | 75mm x 8mm x 1.5mm | straight cutting /laminates | 9-19 | 2 |
| BU2DC-2 | 50mm x 5mm x 1.5mm | contour cutting /laminates | 9-19 | 2 |
| BU6 | Unified Shank Assorted Pack: BU36, BU46, BU310T, BU3DC, BU2DCS, BU41014, BU214, BU214S, BU218, BU418, BU224, BU224S, BU424, BU232 | see above | see above | 1 |



Starrett Tools

Utility Knives

A range of Utility Knives are available with varying blade widths to suit many applications.

Features and Benefits

KUX035-N

- Small plastic utility knife with automatic locking, metal blade guide
- This utility knife works with 9mm (3/8") blade (S05R)
- ABS plastic body and rubber plastic over-mould
- Blade with 13 break-away segments
- Replacement blades also available



KUX035-N.



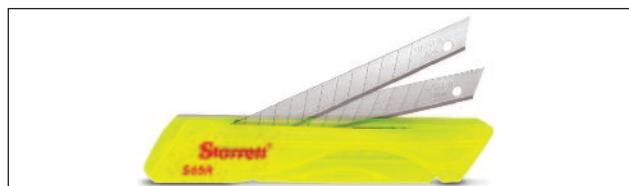
KUX025-N.



KUXPO10-N.



SO11.



KS05R.

KUX025-N

- Large plastic utility knife with automatic locking metal blade guide
- This utility knife works with 18mm (.710") blade (S06R)
- ABS plastic body and rubber plastic over-mould
- Blade with 8 break-away segments
- Replacement blades also available

KUXPO10-N

- A die-cast folding knife using trapezoidal or hook blade
- This utility knife works with trapezoidal (S01R) or hook blades (SH01R)
- Supplied with 1 blade and a dispenser with 3 spare trapezoidal blades
- Replacement blades also available

SO11

- The ultimate in safety knives, the Hidden Edge® keeps the blade safely tucked away when not in use, yet instantly available by simply releasing the safety lock and squeezing the lever to the knife body
- The cutting depth is easily and accurately adjusted with a thumbwheel
- With quick release blade change and storage for space blades in the lever, blade changes are fast and tool free - there is no need to take the knife apart to change the blade
- An optional belt holster is also available (for details contact customer services)
- Supplied with three blades
- Replacement blades also available

| Type | Description | Pack Cont. |
|-----------|--|------------|
| KUX035-N | Small Plastic Automatic Locking Knife 9mm Blade | 1 |
| KUX025-N | Large Plastic Automatic Locking Knife 18mm Blade | 1 |
| KUXPO10-N | Aluminium Die-Cast Body Folding Knife | 1 |
| SO11 | Hidden Edge Utility Knife | 1 |
| KS01R | Standard Trapezoidal Blade to suit SO11 Knife & KUXP010N | 10 |
| KSH01R | Hook Blade to suit KUXP010-N Knife | 10 |
| KS05R | Break-away 9mm Blade to suit KUX035-N Knife | 10 |
| KS06R | Break-away 18mm Blade to suit KUX025-N Knife | 10 |



Starrett Tools

Aluminium Spirit Levels

The range of Torpedo levels are manufactured from extruded aluminium frames with high visibility yellow and red ABS plastic construction for impact resistance.

The range of box beam levels are also produced from aluminium and the special box shape cross section is for improved strength and rigidity.

Features and Benefits

- Aluminium frames
- Vertical, horizontal and 45° vials
- V-grooved top surface and magnetic bottom surface

Box Beam level:

- Two vertical vials and one horizontal vial with ABS plastic vial holders
- Shock-absorbing end caps to protect working edges and preserve accuracy



KLTS9-N.



KLTX95-N.



KLBX24-N.



KLBX48-N.

| TYPE | Description | Pack Cont. |
|-----------------|---|------------|
| KLTS9-N | 225mm length Magnetic Torpedo Level | 1 |
| KLTX95-N | 240mm length Exact Magnetic Torpedo Level | 1 |
| KLBX24-N | 600mm Heavy Duty Aluminium three vial Exact Box Beam Level | 1 |
| KLBX48-N | 1200mm Heavy Duty Aluminium three vial Exact Box Beam Level | 1 |



Starrett Tools

Tape Measures

Produced of high impact resistant ABS plastic for extended case life. These tape measures offer over-moulded cases for improved grip. Their ergonomic design fits comfortably in the hand and incorporate industry standard standout and improved blade protection

Features and Benefits

- Nylon coated blade provides twice the abrasion resistance of other tapes
- High impact resistant ABS plastic case and rubber plastic over-moulding
- Includes a steel belt clip



KTX12-12ME-N Tape.



KTX34-16ME-N Tape.



KTX1-26ME-N Tape.

| TYPE | Description | Pack Cont. |
|---------------------|---|------------|
| KTX12-12ME-N | 13mm x 3.5m English/Metric Tape/Imperial Tape | 1 |
| KTX34-16ME-N | 19mm x 5m English/Metric Tape/Imperial Tape | 1 |
| KTX1-26ME-N | 25mm x 8m English/Metric Tape/Imperial Tape | 1 |
| KTX12-3.5M-N | 3.5m Metric Only Tape | 1 |
| KTX1-5M-N | 5m Metric Only Tape | 1 |
| KTX1-8M-N | 8m Metric Only Tape | 1 |



Starrett Tools

Chalk Lines and Refills

High impact-resistant ABS plastic cases that hold 4oz of chalk. Each chalk line includes 30m of line with a press to release feature.

Features and Benefits

KCS001-N

- High impact resistant ABS plastic case
- Holds 4oz of chalk
- 30m press to release line
- 3.5X faster line rewind
- Stainless steel hook
- Refills available



KCS001-N.

KCX001-N

- High impact resistant case
- Rubber plastic soft touch over-moulding
- Holds 4oz of chalk
- 30m press to release line and includes 50% stronger line
- 6X faster line rewind
- Stainless steel hook
- Easy feed winder
- Refills available



KCX001-N.

SC8

- Formulated and coloured to mark distinctively and lay down hard clean lines.
- New bottle design provides easier handling and no-spill cap
- Easy to see colours
- Colours available Blue, Orange, Red and White



SC8.

| TYPE | Description | Pack Cont. |
|----------|----------------------------------|------------|
| KCS001-N | Chalk Line 30m 4oz | 1 |
| KCX001-N | Chalk Line 30m 4oz | 1 |
| SC8B | Temporary Blue Chalk Refill 8 oz | 1 |
| SC8R | Temporary Red Chalk Refill 8oz | 1 |
| SC8W | Temporary White Chalk Refill 8oz | 1 |



Starrett Hole Saw Accessories

Debris Collector

Simply insert the arbor shank through the eyelet at the nylon base, before attaching to the drill, press the rim of the cowl against the surface of the material being sawn and begin sawing. The flange of the cowl then forms a seal against the material being cut, collecting all dirt and debris inside the cowl. Suitable for FCH/DCH MPH/D Fast Cutting Multi Purpose and Bi-Metal Hole Saws up to and including 121mm (4.3/4").

Features and Benefits

- No clean up – no need for time consuming masking of areas prior to drilling or clean up after drilling
- No drill damage – no dust or debris in the drill motor
- No debris spread – no spread of dust in the air
- Works with bi-metal and multi-purpose hole saws
- Ideal when retro fitting/upgrading halogen downlighters to LED versions



HTDB2.

| TYPE | Description | Pack Cont. |
|-------|------------------|------------|
| HTDB2 | Debris Collector | 1 |



Starrett Tools

Tool Bags

Compact Tool Bags – BGS

Ideal for carrying tools for small jobs. Main zip compartment, removable shoulder strap, reinforced carry strap and external and internal pockets.

Features and Benefits

- 12 external pockets and 6 internal pockets
- Ideal for day to day tools
- Main compartment with zip closure
- Velcro external pocket
- Removable shoulder strap
- Dimensions (mm L x W x H) 300 x 170 x 220
- Tools not included

Medium Tool Bag – BGM

Hard wearing with ABS plastic reinforced base, ready for heavy duty use. Main zip compartment offers security and ease of storage, pockets allow for better organisation of tools. Includes adjustable shoulder strap.

Features and Benefits:

- 7 external pockets and 6 internal pockets
- Reinforced waterproof base
- Main compartment with zip closure
- Large pockets and compartments
- Large internal space with easy access
- Removable shoulder strap
- Dimensions (mm L x W x H) 400 x 220 x 320
- Tools not included

Large Tool Bag – BGL

Large storage capacity, with easy access to tools, and rubber carry handle. Removable shoulder strap and various internal and external compartments.

Features & Benefits:

- 21 external pockets, 5 internal and 8 elasticated compartments
- Reinforced carry handle
- Reinforced external base with ABS plastic supports
- Quick and easy access to tools
- Removable shoulder strap
- Tools not included



BGS.



BGM.



BGL.

| TYPE | Description | Pack Cont. |
|------------|------------------|------------|
| BGS | Compact Tool Bag | 1 |
| BGM | Medium Tool Bag | 1 |
| BGL | Large Tool Bag | 1 |



Starrett Portable Band Saw Machine

Portable Band Saw Machine

The S1005 portable band saw machine is ideal for cutting small solids, trunking, conduit, and armoured cables quickly and efficiently. Designed for field work and areas where mains power cables may cause problems, the combination of a sturdy, well designed machine and Starrett's huge experience in band saw blade manufacture results in a tough, durable, high quality band saw machine.

Features and Benefits

- Lightweight, for use in any location
- Ergonomic shape ensures comfortable and safe use for the operator
- Robust design ensures durability
- High quality machine motor, of sufficient strength to provide the torque necessary to cut even relatively hard materials
- Simple blade change and tensioning system

Characteristics

- Battery with Lithium-ion and energy display technology
- Compact and lightweight
- Handle for quick change of the blade
- Designed for professional use
- Ergonomic Handle

Specifications

- Cutting Speed: 170 m / min (550 ft / min.)
- Cutting capacity: Ø 63mm (2.1 / 2 ") / 63 x 63mm (2.1 / 2 " x 2.1 / 2 ")
- Blade dimensions: 13 x 0.35 x 732mm (28.13 / 16 "x 0.013" x 0.020 ")
- Weight with battery: 3.5 kg (7,7lb)

Box Contents

- 1 Machine - S1005
- 2 Batteries
- 1 Handle
- 1 Charger 220V
- 1 Band Saw Blade Kit
- 1 Carrying Case



Band Saw Machine S1005.



Band Saw Package.

| TYPE | Description | Pack Cont. |
|-----------|------------------------------|------------|
| S1005 | Band Saw Package | 1 |
| RX1100732 | Replacement blades 10-14 TPI | 1 |
| RX1300732 | Replacement blades 14-18 TPI | 1 |
| RX1500732 | Replacement blades 24 TPI | 1 |



Tools

Rack-a-Tier Wire Dispensing Tool

This multi-purpose premium wire dispensing tool is lightweight and durable. It accommodates a wide range of cable sizes with loads of up to 150kg (330lbs). The one tool that does it all: wire dispenser, pipe vise, saw horse, work bench, wall shelf or even a table.

Features and Benefits

- Lightweight
- Durable one piece construction
- Waterproof and easy to clean
- Made of recycled material
- Easy to store and transport
- Ease and speed of set up



Rack-a-Tier.



Rack-a-Tier application.

| TYPE | Description | Pack Cont. |
|-----------------|----------------------------------|------------|
| RT1 RACKATIERBK | Rack-a-Tier Wire Dispensing Tool | 1 |

Tools

Rack-a-Tier Bend-All Knuckle Saver

Save your knuckles by using the Bend All cable bender! Made with machined aircraft aluminium, this cable bender is extremely strong and durable. It connects to your standard 1/2" ratchet, making cable bending a breeze for you.

Features and Benefits

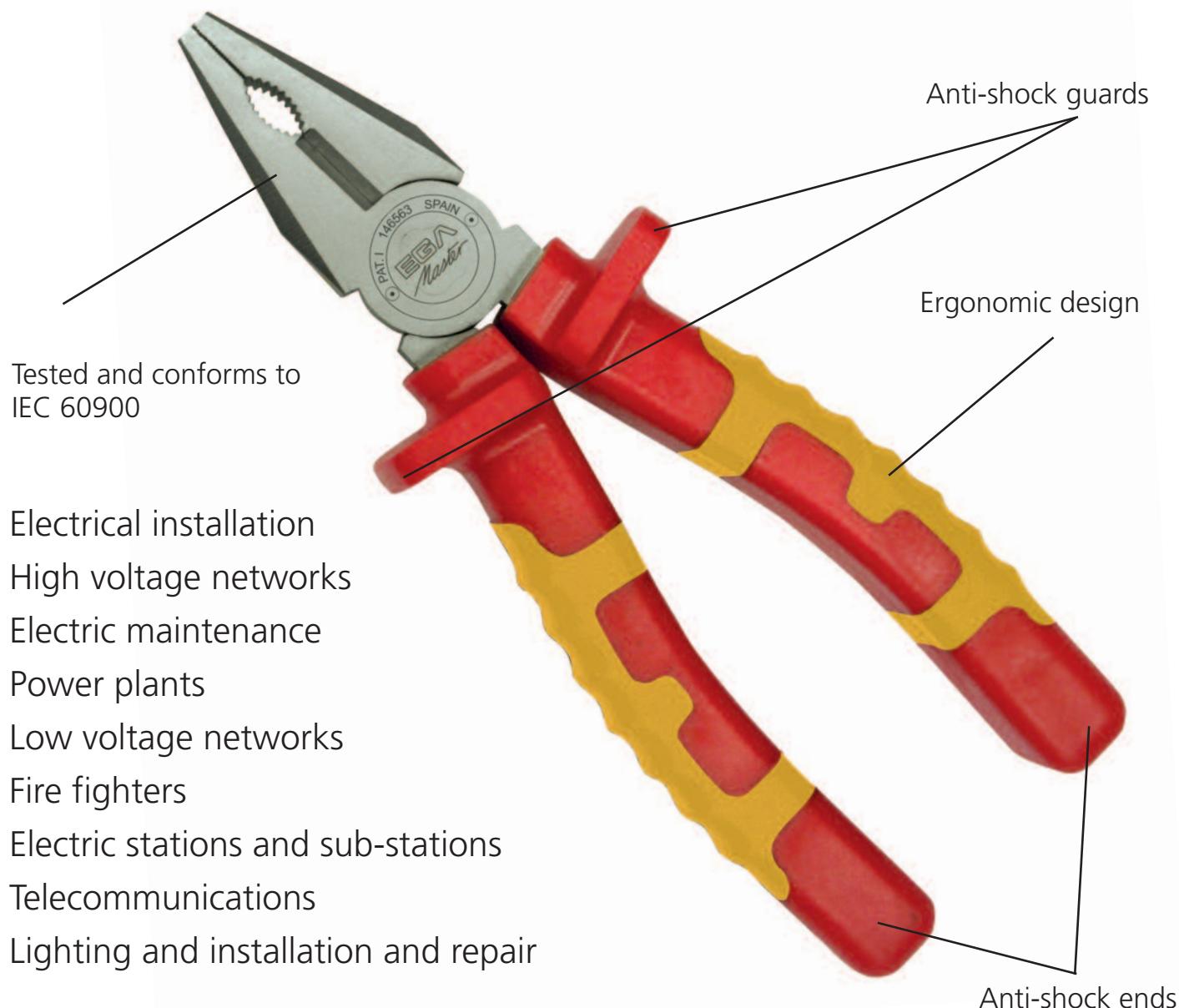
- Captures wire
- Bend inside enclosures to the right or left
- Bend to the front or back
- Your feeder will lie in the lugs



Rack-a-Tier Bend-All Knuckle Saver.

| TYPE | Description | Pack Cont. |
|----------|------------------------|------------|
| BEND-ALL | Tool for bending cable | 1 |

VDE 1000V Electricians Tools



1.000V
IEC 60900



ADHESIVENESS TEST



DIELECTRIC TEST AT
10.000V



HEAT RESISTANCE TEST



IMPACT TEST



PENETRATION TEST



**VDE 1000V Electricians Tools****VDE 1000V Insulated Screwdrivers Slotted/Straight**

A range of 1000V Slotted/Straight Screwdrivers which are tested and conform to IEC 60900

Features and Benefits

- Ergonomic anti-slip handles offer optimal grip
- Each piece tested at 10,000V (10 times the voltage certified)
- Manufactured to European standards



Slotted/Straight Screwdriver.



| TYPE | Description | Pack Cont. |
|-------|------------------------------------|------------|
| 76730 | SCREWDRIVER 2.5 X 60 ROTORK 1000V | 1 |
| 76731 | SCREWDRIVER 3 X 60 ROTORK 1000V | 1 |
| 76651 | SCREWDRIVER 3 X 100 ROTORK 1000V | 1 |
| 76652 | SCREWDRIVER 4 X 125 ROTORK 1000V | 1 |
| 76654 | SCREWDRIVER 6.5 X 150 ROTORK 1000V | 1 |
| 76732 | SCREWDRIVER 8 X 290 ROTORK 1000V | 1 |
| 78733 | SCREWDRIVER 10 X 315 ROTORK 1000V | 1 |

VDE 1000V Electricians Tools**VDE 1000V Insulated Screwdrivers Phillips (PH)**

A range of 1000V Phillips Screwdrivers which are tested and conform to IEC 60900

Features and Benefits

- Ergonomic anti-slip handles offer optimal grip
- Each piece tested at 10,000V (10 times the voltage certified)
- Manufactured to European standards



Phillips Screwdriver.



| TYPE | Description | Pack Cont. |
|-------|--|------------|
| 76655 | SCREWDRIVER PHILLIPS PH-0 ROTORK 1000V | 1 |
| 76656 | SCREWDRIVER PHILLIPS PH-1 ROTORK 1000V | 1 |
| 76657 | SCREWDRIVER PHILLIPS PH-2 ROTORK 1000V | 1 |
| 76658 | SCREWDRIVER PHILLIPS PH-3 ROTORK 1000V | 1 |
| 76735 | SCREWDRIVER PHILLIPS PH-4 ROTORK 1000V | 1 |



Other tools are available please ask customer service for assistance.



VDE 1000V Electricians Tools

VDE 1000V Insulated Screwdrivers Pozidrive (PZ)

A range of 1000V Pozidrive Screwdrivers which are tested and conform to IEC 60900

Features and Benefits

- Ergonomic anti-slip handles offer optimal grip
- Each piece tested at 10,000V (10 times the voltage certified)
- Manufactured to European standards



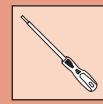
Pozidrive Screwdriver.



| TYPE | Description | Pack Cont. |
|-------|---|------------|
| 76659 | SCREWDRIVER POZIDRIVE PZ-0 ROTORK 1000V | 1 |
| 76660 | SCREWDRIVER POZIDRIVE PZ-1 ROTORK 1000V | 1 |
| 76661 | SCREWDRIVER POZIDRIVE PZ-2 ROTORK 1000V | 1 |
| 76662 | SCREWDRIVER POZIDRIVE PZ-3 ROTORK 1000V | 1 |
| 76736 | SCREWDRIVER POZIDRIVE PZ-4 ROTORK 1000V | 1 |



Other tools are available please ask customer service for assistance.



VDE 1000V Electricians Tools

VDE 1000V 8 Piece Screwdriver Set

A range of 1000V Insulated Tool sets which are tested and conform to IEC 60900. A set of 8 pieces.

Features and Benefits

- Tested and conforms to IEC 60900
- Manufactured to European standards



8 Piece Screwdriver Set.



| TYPE | Contents | Pack Cont. |
|-------|--|------------|
| 76684 | Slotted: 3 x 100mm, 4 x 125mm, 5.5 x 150mm, 6.5 x 150mm. Phillips: PH1, PH2 Pozidrive: PZ1 & PZ2 | 1 x set |
| 76964 | Slotted: 2.5 x 60mm, 4 x 125mm, 5.5 x 150mm 6.5 x 150mm Phillips: PH0, PH1, PH2 & PH3 | 1 x set |
| 76982 | Slotted: 3 x 100mm, 2.5 x 100mm, 4 x 125mm 6.5 x 150mm Phillips: PH0, PH1, PH2 & PH3 | 1 x set |

VDE 1000V Electricians Tools

VDE 1000V 6 Piece Screwdriver Set

A range of 1000V Insulated Tool sets which are tested and conform to IEC 60900. A set of 6 pieces.

Features and Benefits

- Tested and conforms to IEC 60900
- Manufactured to European standards



6 Piece Screwdriver Set.



| TYPE | Contents | Pack Cont. |
|-------|--|------------|
| 76943 | Slotted: 3 x 100mm, 4 x 125mm, 5.5 x 150mm. Phillips: PH0, PH1 & PH2 | 1 x set |
| 76976 | Slotted: 3 x 100mm, 4 x 125mm, 6.5 x 150mm. Pozidrive: PZ0, PZ1 & PZ2 | 1 x set |



Other tools are available please ask customer service for assistance.



VDE 1000V Electricians Tools

VDE 1000V 4 Piece Screwdriver Set

A range of 1000V Insulated Tool sets which are tested and conform to IEC 60900. A set of 4 pieces.

Features and Benefits

- Tested and conforms to IEC 60900
- Manufactured to European standards



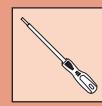
4 Piece Screwdriver Set.



| TYPE | Contents | Pack Cont. |
|-------|-------------------|------------|
| 76988 | PH0,PH1,PH2 & PH3 | 1 x set |
| 76985 | PZ0,PZ1,PZ2 & PZ3 | 1 x set |



Other tools are available please ask customer service for assistance.

**VDE 1000V Electricians Tools****VDE 1000V Pliers**

A range of 1000 Volt Insulated Pliers which are tested and conform to IEC 60900.

Features and Benefits

- Tested and conforms to IEC 60900
- Manufactured to European standards



| TYPE | Contents | Pack Cont. |
|-------|--|------------|
| 76582 | Combination 165mm | 1 |
| 76583 | Combination 180mm | 1 |
| 76584 | Combination 200mm | 1 |
| 76589 | Flat Nose 160mm | 1 |
| 76590 | Round Nose 160mm | 1 |
| 76591 | Long Nose 160mm | 1 |
| 76592 | Long Nose 200mm | 1 |
| 76593 | Bent Nose 160mm | 1 |
| 76594 | Bent Nose 200mm | 1 |
| 76595 | Diagonal Cutting Pliers 160mm | 1 |
| 76596 | Diagonal Cutting Pliers 200mm | 1 |
| 76597 | Heavy Duty Cutting Pliers 180mm | 1 |
| 76598 | Heavy Duty Cutting Pliers 200mm | 1 |
| 76599 | End Cutting Pliers 160mm | 1 |
| 76600 | End Cutting Pliers (Electrician) 160mm | 1 |
| 76602 | End Cutting Pliers (Electrician) 200mm | 1 |

VDE 1000V Wire Strippers

| TYPE | Description | Pack Cont. |
|-------|----------------------|------------|
| 76603 | Wire Strippers 160mm | 1 |

VDE 1000V Water Pump Pliers

| TYPE | Description | Pack Cont. |
|-------|-------------------------|------------|
| 73004 | Water Pump Pliers 250mm | 1 |
| 73005 | Water Pump Pliers 300mm | 1 |

VDE 1000V Scissors

| TYPE | Description | Pack Cont. |
|-------|----------------|------------|
| 79057 | Scissors 160mm | 1 |



Other tools are available please ask customer service for assistance.



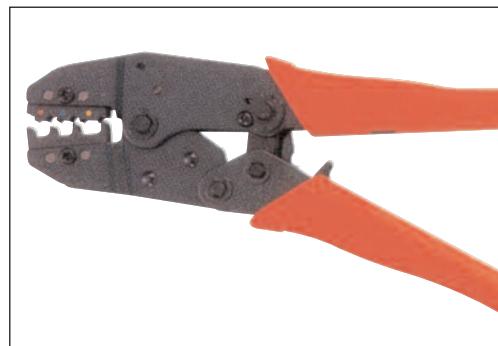
Tools

Crimp Tools

7700 - A ratchet type tool for use with pre-insulated light duty terminals - red, blue & yellow.

Features and Benefits

- Crimp range 1.5 - 6mm²



Ratchet Tool Type 7700.

| TYPE | Crimp Type | Crimp Range | Pack Cont. |
|------|--------------------|------------------------|------------|
| 7700 | Ratchet Crimp Tool | 1.5 - 6mm ² | 1 |

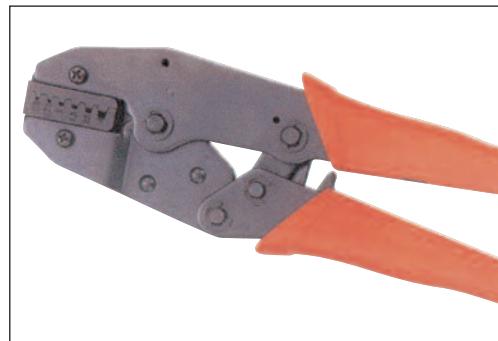
Tools

Crimp Tools

7702 - A ratchet type tool for use with pre-insulated cord end sleeves.

Features and Benefits

- Crimp range 0.5, 0.75, 1.0, 1.5, 2.5 and 4.0mm²



Ratchet Tool Type 7702.

| TYPE | Crimp Type | Crimp Range | Pack Cont. |
|------|--------------------|------------------------|------------|
| 7702 | Ratchet Crimp Tool | 0.5-4.0mm ² | 1 |

Tools

Crimp Tools

7703 - A ratchet type tool for use with pre-insulated cord end sleeves.

Features and Benefits

- Crimp range 6mm, 10mm & 16mm² (7703)
- Crimp range 0.5, 0.75, 1.0, 1.5, 2.5, 4.0, 6.0, 10.0 and -16mm² (7709)



Ratchet Tool Type 7703 + 7709.

| TYPE | Crimp Type | Crimp Range | Pack Cont. |
|------|--------------------|--|------------|
| 7703 | Ratchet Crimp Tool | 6mm ² , 10mm ² & 16mm ² | 1 |
| 7709 | Ratchet Crimp Tool | 0.5-16mm ² | 1 |

**Tools****Crimp Tools**

7701309 - A ratchet type tool for use with pre-insulated closed end connectors

Features and Benefits

- Crimp range 1-10mm²



Ratchet Tool Type 7701309.

| TYPE | Crimp Type | Crimp Range | Pack Cont. |
|---------|--------------------|---------------------|------------|
| 7701309 | Ratchet Crimp Tool | 1-10mm ² | 1 |

Tools**Crimp Tools**

6095 - A crimp type tool for use with non insulated copper tube terminals and splices.

Features and Benefits

- Crimp range 10-16-25-35-50-70-95-120mm²



Crimp Tool Type 6095.

| TYPE | Crimp Type | Crimp Range | Pack Cont. |
|------|-------------------|-------------------------|------------|
| 6095 | Heavy Duty Indent | 10mm-120mm ² | 1 |

Tools**Crimp Tools**

60150 - A crimp type tool for use with non insulated copper tube terminals and splices.

Features and Benefits

- Crimp range 10-16-25-35-70-95-120 and 150mm²



Crimp Tool Type 60150

| TYPE | Crimp Type | Crimp Range | Pack Cont. |
|-------|-------------------|-----------------------|------------|
| 60150 | Heavy Duty Indent | 10-150mm ² | 1 |



Tools

Crimp Tools

7701516 - A ratchet type tool for use with non insulated copper tube terminals.

Features and Benefits

- Crimp range 0.5, 2.5, 4.0, 10 and 16mm²



Ratchet Tool Type 7701516.

| TYPE | Crimp Type | Crimp Range | Pack Cont. |
|---------|--------------------|-----------------------|------------|
| 7701516 | Medium Duty Indent | 0.5-16mm ² | 1 |

Tools

Crimp Tools

7800 - A ratchet type tool for use with non insulated copper tube terminals and splices.

Features and Benefits

- Crimp range 1.5-2.5, 6.0, 10 and 16mm²



Ratchet Tool Type 7800.

| TYPE | Crimp Type | Crimp Range | Pack Cont. |
|------|--------------------|-----------------------|------------|
| 7800 | Medium Duty Indent | 1.5-16mm ² | 1 |

Tools

Crimp Tools

7725 - A ratchet type tool for use with non insulated copper tube terminals and splices.

Features and Benefits

- Crimp range 10-16 and 25mm²



Ratchet Tool Type 7725.

| TYPE | Crimp Type | Crimp Range | Pack Cont. |
|------|--------------------|----------------------|------------|
| 7725 | Medium Duty Indent | 10-25mm ² | 1 |



Tools

Crimp Tools

8038 - A ratchet type tool for use with non insulated copper tube terminals and splices.

Features and Benefits

- Crimp range 6-10-16-25 and 50mm²



Ratchet Tool Type 8038.

| TYPE | Crimp Type | Crimp Range | Pack Cont. |
|-------------|--------------------|---------------------|------------|
| 8038 | Medium Duty Indent | 6-50mm ² | 1 |

Tools

Crimp Tools

60050H - A ratchet type tool for use with non insulated copper tube terminals and splices.

Features and Benefits

- Crimp range 6-10-16-25-35-50mm²



Ratchet Tool Type 60050H.

| TYPE | Crimp Type | Crimp Range | Pack Cont. |
|---------------|----------------------|---------------------|------------|
| 60050H | Heavy Duty Hexagonal | 6-50mm ² | 1 |

Tools

Crimp Tools

60120H - A ratchet type tool for use with non insulated copper tube terminals and splices.

Features and Benefits

- Crimp range 10-16-25-35-50-70-95-120mm²



Ratchet Tool Type 60120H

| TYPE | Crimp Type | Crimp Range | Pack Cont. |
|---------------|-----------------------|-------------------------|------------|
| 60120H | Medium Duty Hexagonal | 10mm-120mm ² | 1 |



Hole Cutting and Drills

Step Drills

HSS spiral flutes ensure quiet operation and high performance. The tapered, chamfered end of the cone makes it easier to withdraw the tool from the material.

Features and Benefits

- HSS
- With split point and edge breaker
- Variable spiral flute
- Hole diameter and rotation speed laser engraved



Step Drill.

| TYPE | Cut-out | Pack Cont. |
|-----------------|---------|------------|
| EX07027 | 4-20mm | 1 |
| EX07028 | 6-30mm | 1 |
| *EX07002 | 4-20mm | 1 |
| *EX07003 | 6-30mm | 1 |

* Includes a roto-stop shank



Hole Cutting and Drills

Switch and Socket Box Rethreaders

Designed for cleaning the threads in fixings holes of sockets or switch boxes with malformed threads or are blocked with plaster or cement.

Features and Benefits

- HSS tap for a clean, accurate cut and long life
- Moulded handle



Rethreader.

| TYPE | Size | Cut-out | Pack Cont. |
|--------|-------|------------|------------|
| NWS350 | 3.5mm | Rethreader | 1 |

Tools

Drill Bit Sets

A selection of drill bit sets to meet the electricians requirements.

Features and Benefits

- Drill bits to European standards
- Packed in re-usable cases



Drill Bit Sets.

| TYPE | Description | Pack Cont. |
|---------|--|------------|
| 205200 | 170 Piece Drill Set. Metal Carry Case. 10 pieces of each 1-8mm, 5 pieces of each 8.5mm-19mm in increments of 0.5mm | 1 |
| D16165 | 16mm 4 Flute Drill | 1 |
| D120165 | 20mm 4 Flute Drill | 1 |
| D22165 | 22mm 4 Flute Drill | 1 |
| D32165 | 32mm 4 Flute Drill | 1 |
| D00165 | 5 Piece set (all above sizes) | 1 |
| EX32601 | Ruko 19 Piece Twist Drill Set | 1 |

**Tools****Nylon Fish Tape**

Used for cable routing, easy navigation through conduit runs.

Features and Benefits

- Available in three sizes
- Lightweight
- Strong



Nylon Fish Tape.

| TYPE | Description | Pack Cont. |
|--------------|---------------------|------------|
| DTN10 | Nylon 10m Fish Tape | 1 |
| DTN20 | Nylon 20m Fish Tape | 1 |
| DTN30 | Nylon 30m Fish Tape | 1 |



Tools

Cable Cutters

A selection of cable cutters and strippers to meet the electricians requirements.

TTC6, TTC8 AND TTC10

Features and Benefits

- TTC6 - Cable cutting up to 25mm²
- TTC8 - Cable cutting up to 35mm²
- TTC10 – Cable cutting up to 50mm²
- Cuts and strips cable
- Suitable for aluminium and copper cables



TTC6/TTC8/TTC10.

| TYPE | Description | Pack Cont. |
|--------------|---|------------|
| TTC6 | Cable Cutter cuts up to 25mm ² | 1 |
| TTC8 | Cable Cutter cuts up to 35mm ² | 1 |
| TTC10 | Cable Cutter cuts up to 50mm ² | 1 |

Tools

Cable Cutters

Cable cutter suitable for Twin and Earth cables.

HTCA26F

Features and Benefits

- Provided very clean cut of twin and earth cables as well as single cables



HTCA26F.

| TYPE | Description | Pack Cont. |
|----------------|--------------|------------|
| HTCA26F | Cable Cutter | 1 |



Tools

Cable Cutters

Cable cutter for hardened steel stranded cable.

HTWC200

Features and Benefits

- Cuts hardened steel cable such as catenary wire up to 6mm diameter
- Provides very clean cut without splaying cable strands



HTWC200.

| TYPE | Description | Pack Cont. |
|---------|--------------|------------|
| HTWC200 | Cable Cutter | 1 |

Tools

Cable Cutters

A cable cutter suitable for cutting steel wire armoured cable.

HTCA450-AL

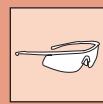
Features and Benefits

- Suitable for cutting Steel Wire Armour Cable up to 17mm diameter
- Will also cut copper and aluminium cable
- Light weight aluminium handle
- Long handles reduce cutting effort



HTCA450-AL.

| TYPE | Description | Pack Cont. |
|------------|---|------------|
| HTCA450-AL | Cable Cutter cuts up to 17mm ² | 1 |



Personal Safety Equipment

Plano Eyewear

A range of Plano Security eyewear that offers comfort and a modern design in the most complete respect of European EN166 Standards specification. Recommended for mechanics and the building trade.

PLG35

Features and Benefits

- Extremely sporting and lightweight frameless glasses
- Wraparound lenses offer total protection and unrestricted side view
- Polycarbonate, anti-scratch and ultraviolet protection
- Cannot be used for welding



PLG35 Eyewear.

| TYPE | Frame Colour | Lens Colour | Pack Cont. |
|-------|--------------|-------------|------------|
| PLG35 | Silver | Transparent | 1 |

Personal Safety Equipment

Plano Eyewear

A range of Plano Security eyewear that offers comfort and a modern design in the most complete respect of European EN166 Standards specification. Recommended for mechanics and the building trade.

PLG36

Features and Benefits

- Sun Protective, Anti Scratch, Ultra Violet protection, Anti Fog
- Polycarbonate Lenses.
- All-day comfort: adjustable frames, lightweight, universal fit
- Top quality, manufactured to European Standard CE EN166 F or FT
- Wrap-around lenses to prevent debris entering the eyes at the side or from underneath



PLG36 Eyewear.

| TYPE | Frame Colour | Lens Colour | Pack Cont. |
|-------|--------------|-------------|------------|
| PLG36 | Black | Dark Grey | 1 |



Personal Safety Equipment

Plano Eyewear

A range of Plano Security eyewear that offers comfort and a modern design in the most complete respect of European EN166 Standards specification. Recommended for mechanics and the building trade.

PLG33

Features and Benefits

- Anti-scratch and gives UV protection
- Wraparound polycarbonate lenses
- Lightweight frames
- Anti-fog/mist
- Removable ventilation strip designed to prevent misting on the inside and also absorbs perspiration
- Rubber nose grip provides extra comfort and reduces slipping when the head is lowered
- Comes with an easily attachable lanyard



PLG33 Eyewear.

| TYPE | Frame Colour | Lens Colour | Pack Cont. |
|-------|--------------|-------------|------------|
| PLG33 | Blue | Clear | 1 |

Personal Safety Equipment

Plano Eyewear

PLG24

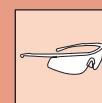
Features and Benefits

- High-visibility, Anti scratch, Ultra Violet protection
- Polycarbonate Lenses
- All-day comfort: adjustable frames, lightweight, universal fit
- Top quality, manufactured to European Standard CE EN166 F or FT
- Wrap-around lenses to prevent debris entering the eye at the side or from underneath



PLG24- Eyewear

| TYPE | Frame Colour | Lens Colour | Pack Cont. |
|-------|-----------------|-------------|------------|
| PLG24 | Grey/Lime Green | Lime Green | 1 |



Personal Safety Equipment

Head Torch

This Head Torch is energy saving, high power with a long life ultra bright 1W LED bulb.

Features and Benefits

- Light weight 77gm including batteries
- 3 function settings
- Fully adjustable head strap
- Pivoting lamp
- Bulb life 50,000 hours
- ABS/Aluminium alloy body
- Blister packed



Head Torch.



Head Torch blister packed.

| TYPE | Description | Pack Cont. |
|-------|-------------------|------------|
| HT105 | 1W LED Head Torch | 1 |

Personal Safety Equipment

Knee Protection

Nailers protective knee pads are a new generation of effective knee pad joint protectors.

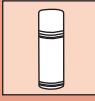
Features and Benefits

- Comfortable
- Retain shape better
- Lasts longer
- Absorbs shock effectively
- Quick fix and release, adjustable straps
- Fully certified EN1621/1 – abrasion and impact tested



Gel knee protector.

| TYPE | Description | Pack Cont. |
|----------|---------------------|------------|
| 60200-G1 | Gel knee protectors | 1 |



Chemicals and Aerosols

Ambersil Chemicals and Aerosols

A range of aerosols and chemicals for cleaning, protecting, lubricating and degreasing.

Features and Benefits

Fospro-PX

- Protects against corrosion
- Ideal for use on all mechanical and electrical equipment
- Used as a penetrant to quickly free seized nuts, bolts and bearings

Contact-Cleaner FG

- Designed for electrical maintenance especially in the food industry
- Highly effective precision cleaning solvent

CCL100 Contact Cleaner

- Fast drying cleaner for all electrical and electronic components
- Speedily cleans grease and dirt from components

Lec Klene Degreaser

- Highly refined, low aromatic solvent cleaner
- For effective cleaning of electrical and aerospace equipment

Air Duster Cleaner

- Liquified gas which provides a dry powerful blast for easy removal of dust and other loose contamination
- Formulated without the use of any CFC's or HCFC's

40+ Protective Lube

- A complete maintenance treatment for protection against corrosion, water displacement, lubrication and light surface rust removal
- Removes and repels ambient moisture

Toughwipes

- Wipes which are impregnated with an effective cleaning and conditioning solution
- Gentle on hands but tough on contamination

Corrosion Inhibitor

- A protective coating that provides long lasting protection against rust and corrosion

Chainspray Lubricant

- Lubricating chains



Contact Cleaner FG.

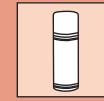


Fospro-PX.



For other products from the Ambersil range
please call our customer service department
on 01922 458151

| TYPE | Description | Pack Cont. |
|------------|----------------------------------|--------------|
| 6710318504 | Fospro-PX Protective Lubricant | 12 x 400ml |
| 6150009510 | Contact-Cleaner FG | 1 x 400ml |
| 6330272100 | Touchwipes 100's | 1 Tub of 100 |
| 6130002900 | Lec-Klene | 1 x 400ml |
| 63700M7018 | CCL100 Contact Cleaner Lubricant | 1 x 400ml |
| 6130012100 | Air Duster | 1 x 400ml |
| 6130007000 | 40+ Protective Lube | 1 x 400ml |
| 6190011600 | Corrosion Inhibitor | 1 x 400ml |
| 6150001100 | Chain Spray Lubricant | 1 x 400ml |



Chemicals and Aerosols

Cable Scout⁺ Pulling Lubricant

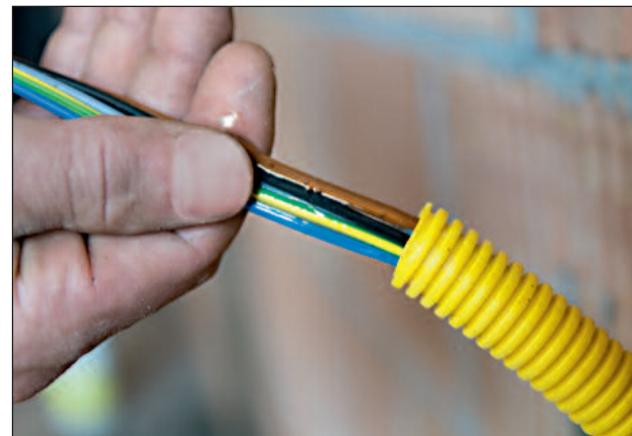
HellermannTyton's Cable Scout⁺ Pulling Lubricant is designed for installation of cables and can be easily applied without dripping on the installation. It has exceptional protection against cable jacket damage by reducing the frictional resistance up to 80%.

Features and Benefits

- Working temperature range +5°C to +40°C
- Clear and colourless
- Water based, easy to clean, no stains
- Easy to use, with a brush or pump
- Suitable for many types of cables
- Skin compatibility
- Environmentally friendly, biologically degradable
- Non-toxic
- Non-flammable
- 1 litre bottle



Clear cable pulling lubricant.



Assists cables to glide easily.

| Type | Description | Pack Cont. |
|--------|---|------------|
| CS-CPL | CableScout ⁺ Cable Pulling Lubricant | 1 |



Connection Products

Nylon Cable Glands

Nylon domed headed cable glands are quick and easy to install and cater for a wide range of cable sizes.

A range of quality nylon cable glands that can be used on a wide range of applications when connecting cable to electrical equipment (but not steel wire armoured cable).

Features and Benefits

- Material Nylon 66
- Low smoke, zero halogen
- IP rating IP68
- Metric thread
- Available in red, black, white, dark grey and grey
- Euro slot packaging
- Complete with lock nut and washer



Nylon Cable Glands.

| TYPE | Size | Colour | Cable Clamp Range | Pack Cont. |
|------------------|------|-----------------|-------------------|------------|
| NGM12RD | M12 | Red (RD) | 3-6.5mm | 10 |
| NGM12WE | M12 | White (WE) | 3-6.5mm | 10 |
| NGM12GY | M12 | Grey (GY) | 3-6.5mm | 10 |
| NGM12DGY | M12 | Dark Grey (DGY) | 3-6.5mm | 10 |
| NGM12BK | M12 | Black (BK) | 3-6.5mm | 10 |
| NGM16RD | M16 | Red (RD) | 5-10mm | 10 |
| NGM16WE | M16 | White (WE) | 5-10mm | 10 |
| NGM16GY | M16 | Grey (GY) | 5-10mm | 10 |
| NGM16DGY | M16 | Dark Grey (DGY) | 5-10mm | 10 |
| NGM16BK | M16 | Black (BK) | 5-10mm | 10 |
| NGM20SRD | M20 | Red (RD) | 6-12mm | 10 |
| NGM20SWE | M20 | White (WE) | 6-12mm | 10 |
| NGM20SGY | M20 | Grey (GY) | 6-12mm | 10 |
| NGM20SDGY | M20 | Dark Grey (DGY) | 6-12mm | 10 |
| NGM20SBK | M20 | Black (BK) | 6-12mm | 10 |
| NGM20RD | M20 | Red (RD) | 10-14mm | 10 |
| NGM20WE | M20 | White (WE) | 10-14mm | 10 |
| NGM20GY | M20 | Grey (GY) | 10-14mm | 10 |
| NGM20DGY | M20 | Dark Grey (DGY) | 10-14mm | 10 |
| NGM20BK | M20 | Black (BK) | 10-14mm | 10 |
| NGM25RD | M25 | Red (RD) | 13-18mm | 10 |
| NGM25WE | M25 | White (WE) | 13-18mm | 10 |
| NGM25GY | M25 | Grey (GY) | 13-18mm | 10 |
| NGM25DGY | M25 | Dark Grey (DGY) | 13-18mm | 10 |
| NGM25BK | M25 | Black (BK) | 13-18mm | 10 |
| NGM32RD | M32 | Red (RD) | 18-25mm | 5 |
| NGM32WE | M32 | White (WE) | 18-25mm | 5 |
| NGM32GY | M32 | Grey (GY) | 18-25mm | 5 |
| NGM32DGY | M32 | Dark Grey (DGY) | 18-25mm | 5 |
| NGM32BK | M32 | Black (BK) | 18-25mm | 5 |
| NGM40RD | M40 | Red (RD) | 22-32mm | 5 |
| NGM40WE | M40 | White (WE) | 22-32mm | 5 |
| NGM40GY | M40 | Grey (GY) | 22-32mm | 5 |
| NGM40DGY | M40 | Dark Grey (DGY) | 22-32mm | 5 |
| NGM40BK | M40 | Black (BK) | 22-32mm | 5 |
| NGM50RD | M50 | Red (RD) | 30-38mm | 2 |
| NGM50WE | M50 | White (WE) | 30-38mm | 2 |
| NGM50GY | M50 | Grey (GY) | 30-38mm | 2 |
| NGM50DGY | M50 | Dark Grey (DGY) | 30-38mm | 2 |
| NGM50BK | M50 | Black (BK) | 30-38mm | 2 |
| NGM63RD | M63 | Red (RD) | 34-44mm | 2 |
| NGM63WE | M63 | White (WE) | 34-44mm | 2 |
| NGM63GY | M63 | Grey (GY) | 34-44mm | 2 |
| NGM63DGY | M63 | Dark Grey (DGY) | 34-44mm | 2 |
| NGM63BK | M63 | Black (BK) | 34-44mm | 2 |



Other colours available on request subject to minimum order quantity and lead times



Connection Products

Brass Cable Glands

Glands manufactured as per BS 6121 PT1: 1989
for use with PVC SWA PVC 600/1000V Cables

| Cable Cond. Size | | Number of Cores | | | | | | | | | | | | |
|----------------------|---------|-----------------|-----|-----|----|-----|-----|-----|----|----|----|----|----|----|
| Area mm ² | Neutral | 1 | 2 | 3 | 3½ | 4 | 5 | 7 | 10 | 12 | 19 | 27 | 37 | 48 |
| 1.5 | - | - | 20S | 20S | - | 20S | 20S | 20S | 20 | 20 | 25 | 25 | 32 | 32 |
| 2.5 | - | - | 20S | 20S | - | 20S | 20S | 20 | 25 | 25 | 25 | 32 | 32 | 40 |
| 4 | - | - | 20S | 20S | - | 20 | 20 | 25 | 25 | 25 | 32 | 40 | 40 | 50 |
| 6 | - | - | 20S | 20 | - | 20 | 20 | 25 | 25 | 25 | 32 | 40 | 40 | 50 |
| 10 | - | - | 25 | 25 | - | 25 | 25 | 25 | 25 | 25 | 32 | 32 | 40 | 50 |
| 16 | - | - | 25 | 25 | - | 25 | 25 | 25 | 25 | 25 | 32 | 32 | 40 | 50 |
| 25 | 16 | - | 25 | 25 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 |
| 35 | 16 | - | 25 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 |
| 50 | 25 | 25 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 |
| 70 | 35 | 25 | 32 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| 95 | 50 | 25 | 40 | 40 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| 120 | 70 | 25 | 40 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| 150 | 70 | 32 | 40 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| 185 | 95 | 32 | 50 | 50 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 |
| 240 | 120 | 40 | 50 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 |
| 300 | 150 | 40 | 63 | 63 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 |
| 300 | 185 | - | - | - | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 |
| 400 | 185 | 50 | 63 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 |
| 500 | - | 50 | | | | | | | | | | | | |
| 630 | - | 50 | | | | | | | | | | | | |
| 800 | - | 63 | | | | | | | | | | | | |
| 1000 | - | 63 | | | | | | | | | | | | |

Glands manufactured as per

BS 6121 PT1: 1989

For use with PVC SWA PVC 600/1000V Cables

This selection chart is given for guidance only.
Actual cable dimension must be considered
before making final selection.

◆ GLAND KIT

Brass Glands

BW Indoor Gland

Features and Benefits

- For use with all types of SWA cables to BS6346
- For use indoors in dry locations
- Simple two part design with low resistance armour locking and no sealing



BW Brass Cable Glands

| TYPE | Description | Pack Cont. |
|--------------|---------------|------------|
| BW20S | 20mm Small | 2 |
| BW20 | 20mm Standard | 2 |
| BW25 | 25mm Standard | 2 |
| BW32 | 32mm Standard | 2 |
| BW40 | 40mm Standard | 1 |
| BW50 | 50mm Standard | 1 |
| BW63 | 63mm Standard | 1 |
| BW75 | 75mm Standard | 1 |

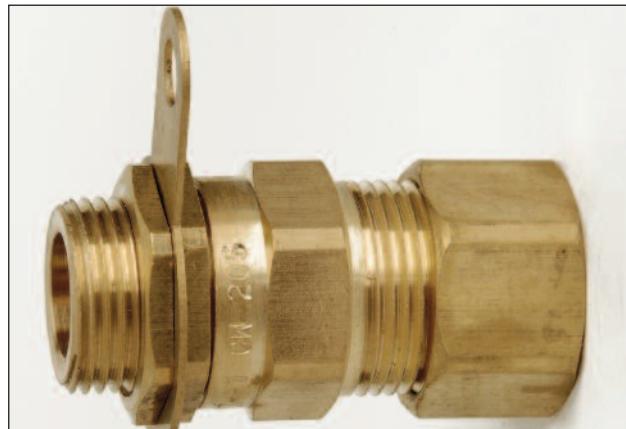


Brass Glands

CW Indoor Gland

Features and Benefits

- For use with all types of SWA cables to BS6346
- For use indoors and outdoors whenever it is required to provide a sealing on the cable outer sheath
- CW glands are weather proof and can be used in corrosive conditions when protected with a shroud
- Positive armour locking effective earth continuity, increased mechanical strength



CW Brass Cable Glands.

| TYPE | Description | Pack Cont. |
|--------------|---------------|------------|
| CW20S | 20mm Small | 2 |
| CW20 | 20mm Standard | 2 |
| CW25 | 25mm Standard | 2 |
| CW32 | 32mm Standard | 2 |
| CW40 | 40mm Standard | 1 |
| CW50 | 50mm Standard | 1 |
| CW63 | 63mm Standard | 1 |
| CW75 | 75mm Standard | 1 |

Brass Glands

BW Indoor Gland – LSF

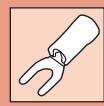
Features and Benefits

- BW LSF Gland for use on LSF cables and applications.
- For use with all types of BW cables
- For use in indoors in dry locations
- Simple two part design with low resistance armour locking and no sealing
- BW Gland LSF compliant as per BS6724:1990



BW LSF Brass Cable Glands.

| TYPE | Description | Pack Cont. |
|-----------------|-------------------|------------|
| LSFBW20S | 20mm Small LSF | 2 |
| LSFBW20 | 20mm Standard LSF | 2 |
| LSFBW25 | 25mm Standard LSF | 2 |
| LSFBW32 | 32mm Standard LSF | 2 |
| LSFBW40 | 40mm Standard LSF | 1 |
| LSFBW50 | 50mm Standard LSF | 1 |
| LSFBW63 | 63mm Standard LSF | 1 |
| LSFBW75 | 75mm Standard LSF | 1 |

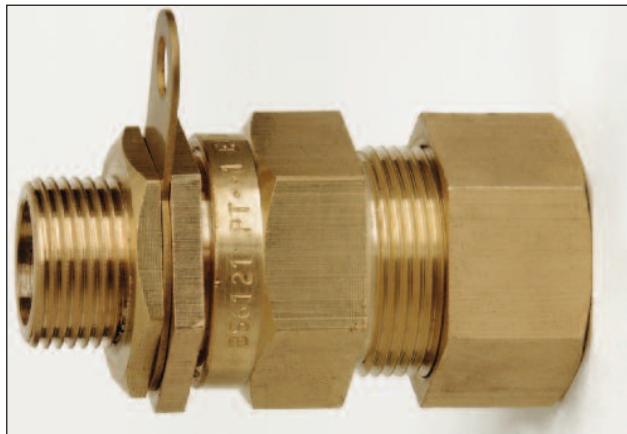


Brass Glands

CW Indoor Gland – LSF

Features and Benefits

- CW LSF Gland for use with LSF cables
- For use indoors and outdoors whenever it is required to provide a sealing on the cable outer sheath
- CW LSF glands are weather proof and can be used in corrosive conditions when protected with a shroud
- Positive armour locking, effective earth continuity, increased mechanical strength
- CW LSF gland is compliant as per BS6724:1990



CW LSF Brass Cable Glands.

| TYPE | Description | Pack Cont. |
|----------|-------------------|------------|
| LSFCW20S | 20mm Small LSF | 2 |
| LSFCW20 | 20mm Standard LSF | 2 |
| LSFCW25 | 25mm Standard LSF | 2 |
| LSFCW32 | 32mm Standard LSF | 2 |
| LSFCW40 | 40mm Standard LSF | 1 |
| LSFCW50 | 50mm Standard LSF | 1 |
| LSFCW63 | 63mm Standard LSF | 1 |
| LSFCW75 | 75mm Standard LSF | 1 |

Brass Glands

BWR Three Part Gland

Features and Benefits

- For use with all types of SWA cables to BS6346
- For use indoors in dry locations
- Positive armour locking, effective earth continuity, increased mechanical strength



BWR Brass Cable Glands.

| TYPE | Description | Pack Cont. |
|--------|---------------|------------|
| BWR20S | 20mm Small | 2 |
| BWR20 | 20mm Standard | 2 |
| BWR25 | 25mm Standard | 2 |
| BWR32 | 32mm Standard | 2 |
| BWR40 | 40mm Standard | 1 |
| BWR50 | 50mm Standard | 1 |
| BWR63 | 63mm Standard | 1 |
| BWR75 | 75mm Standard | 1 |

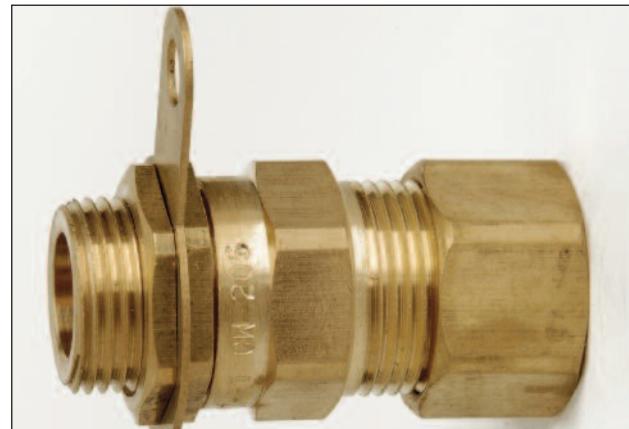


Brass Glands

E1W Industrial Gland

Features and Benefits

- For use with all types of SWA cables to BS6346
- Application indoor and outdoor whenever it is required to provide sealing on cable outer sheath as well as inner sheath
- E1W glands are weather proof and can be used in corrosive conditions when protected with a shroud



E1W Brass Cable Glands.

| TYPE | Description | Pack Cont. |
|---------------|---------------|------------|
| E1W20S | 20mm Small | 2 |
| E1W20 | 20mm Standard | 2 |
| E1W25 | 25mm Standard | 2 |
| E1W32 | 32mm Standard | 2 |
| E1W40 | 40mm Standard | 1 |
| E1W50 | 50mm Standard | 1 |
| E1W63 | 63mm Standard | 1 |
| E1W75 | 75mm Standard | 1 |

Brass Glands

LXT Light Duty Industrial Gland

Features and Benefits

- For use with flexible wire braided cable e.g. SY/CY cable



LXT Brass Cable Glands.

| TYPE | Description | Pack Cont. |
|---------------|---------------|------------|
| LXT20S | 20mm Small | 2 |
| LXT20 | 20mm Standard | 2 |
| LXT25 | 25mm Standard | 2 |
| LXT32 | 32mm Standard | 2 |
| LXT40 | 40mm Standard | 1 |
| LXT50 | 50mm Standard | 1 |



Connection Products

HTCB⁺ Connector Box

A thermo plastic (polypropylene) enclosure, which can be used as a junction box for fixed wiring and when used in conjunction with the cable restraints (supplied) can also be used as an in-line connector for such applications as terminating solid/stranded cable to flexible cable. Its tapered pin allows ease when locating the connector strip within the housing.

Features and Benefits

- Dimensions: 109mm x 52mm x 28mm
- Voltage: 250 V AC
- The HTCB⁺ is designed to take up to 4 pole 15/16A terminal strips across its width enabling wiring of typical lighting circuit with cabling loop in, loop out, switch and light, for example.

Contents include:

- 1 x connector box enclosure
- 2 x cable restraints
- 4 screws 12.5mm x 3mm (for cable restraints)
- 2 x screws 19.5mm x 3mm (for box lid)
- Screws and cable restraints are packed separately to save contractors assembly time
- Supplied in a trade counter merchandiser in quantities of 50



Connector Box Merchandiser Box.



Connector Box.

| TYPE | Description | Pack Cont. |
|-------------------|---------------|------------|
| HTCB ⁺ | Connector Box | 1 |

Connection Products

Terminal Kits

This 1400 piece Pre-insulated Cord End Sleeve Kit comes complete with crimp tool and wire cutter.

Features and Benefits

- 0.5mm² - 16mm²
- Crimp tool and wire cutter included
- ROHS Approved
- UL Approved



Pre-Insulated Cord End Sleeve Kit.

| TYPE | Description | Pack Cont. |
|-----------|--|------------|
| A8191797T | 0.5mm ² - 16mm ² | 1 |



Connection Products

Terminal Kits

This 630 piece terminal kit comes in a quality steel box.

Features and Benefits

- 0.5-6mm² cable diameter
- Colour coded pre-insulated
- Cutting tool included
- Ratchet crimp tool included
- RoHS Approved
- UL Approved



630 Piece Terminal Kit.

| TYPE | Description | Pack Cont. |
|----------|------------------------|------------|
| A801632T | 630 Piece Terminal Kit | 1 |



Connection Products

Terminal Kits

This 225 piece terminal kit contains a selection of popular sizes of heat shrinkable pre-insulated crimp terminals and one crimping tool.

Features and Benefits

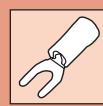
- 0.5-6mm² cable diameter
- 225 pre-insulated copper terminals
- Range of popular types: ring, spade, bullet and splices
- Offers water resistant seal
- Ratchet crimp tool included
- Comes in a polypropylene multi-compartment box with locking lid
- RoHS Approved
- UL Approved



A8190227T.

| TYPE | Description | Pack Cont. |
|-----------|------------------------|------------|
| A8190227T | 225 Piece Terminal Kit | 1 |





Connection Products

Terminal Kits

This 150 piece copper lug terminal kit comes in a handy case. Suitable for the termination of cables.

Features and Benefits

- Contains a selection of copper lug terminals
- Sizes 6-16mm²
- Ratchet crimp tool included



HCKIT 770156.

| TYPE | Description | Pack Cont. |
|-------------|-----------------------------------|------------|
| HCKIT770156 | 150 Piece Copper Lug Terminal Kit | 1 |

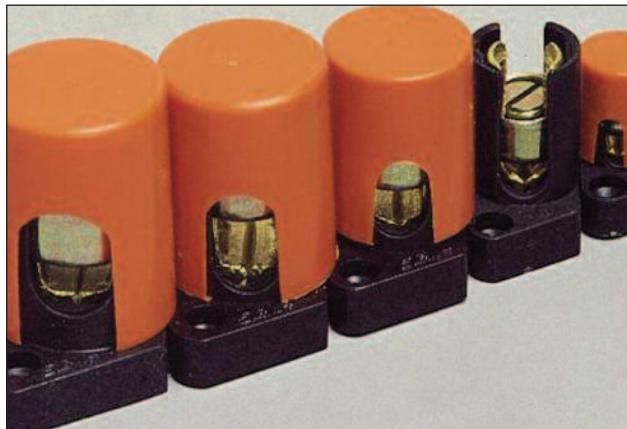
Connection Products

Sigma Terminals

Terminals made of self-extinguishing Polyamide-6. Black base, terminal made of MS-58 brass (DIN-17660), ring made of tempered, galvanised and bichromated steel and cap made of self-extinguishing orange polypropylene.

Features and Benefits

- Clipping proof. The connection is done through a tightening device that presses evenly all of the contact surface, avoiding frictions and strains that could damage the conductors.
- Loosening proof. The ring that surrounds the brass body guarantees that the pressure exerted by the conductors will not open the terminal and loosen the connection.
- Total insulation. All SIGMA "S" terminals are supplied with a cap, which avoids any accidental contacts with live parts. All sizes can be joined together. Nominal current: 500 V.



Sigma Terminals.

| TYPE | Cross Section | Amps | Pack Cont. |
|------------|-----------------------------|------|------------|
| NSYS04 | 4mm ² Cable | 25A | 20 |
| NSYS06 | 6mm ² Cable | 32A | 20 |
| NSYS10 | 10mm ² Cable | 50A | 20 |
| NSYS16 | 16mm ² Cable | 63A | 20 |
| NSYS25/35 | 25-35mm ² Cable | 100A | 20 |
| NSYS50 | 50mm ² Cable | 125A | 20 |
| NSYS70 | 70mm ² Cable | 160A | 20 |
| NSYS95/100 | 95-100mm ² Cable | 200A | 20 |



Connection Products

CBC Series Rail Mounted Terminal Blocks

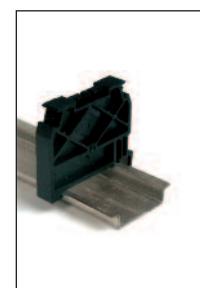
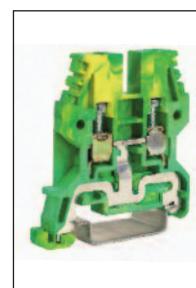
These terminal blocks offer reduced overall dimension, resulting in high compactness.

Features and Benefits

- Same overall dimensions from 2.5mm to 10mm²
- Patented 'easy bridge' system: doubles the possibility to insert PTC multi-cross connections, without the need of insulating protection.
- High conductivity with 3 products able to cover the needs normally satisfied by 6 terminals.
- UL94V-0 polyamide insulating body
- Suited for photovoltaic plants with rated voltage up to 100vdc
- KEMA, UL, R.I.NA, ATEX and IEC Ex Certified
- For ratings see below table



Terminal Block.



| CBC SERIES | CBC.2/GR | CBC.4/GR | CBC.6/GR | CBC.10/GR | TEO.4/0 | TEC.6/0 | TEC.10/0 |
|--|--------------|--------------|--------------|--------------|---------|---------|----------|
| Electrical Function | Feed through | Feed through | Feed through | Feed through | Earth | Earth | Earth |
| Rated Cross-section(mm²) | 2.5 | 4 | 6 | 10 | 4 | 6 | 10 |
| Rates Voltage (V) | 1000 | 1000 | 1000 | 1000 | - | - | - |
| Rated Current (A) | 32 | 41 | 57 | 76 | | | |

| TYPE | Description | Pack Cont. |
|-----------------------|-----------------------------|------------|
| CBC.2/GR | Feed Through Terminal Block | 120 |
| CBC.4/GR | Feed Through Terminal Block | 100 |
| CBC.6/GR | Feed Through Terminal Block | 100 |
| CBC.10/GR | Feed Through Terminal Block | 100 |
| TEO.4/0 | Earth Terminal Block | 1 |
| TEC.6/0 | Earth Terminal Block | 1 |
| TEC.10/0 | Earth Terminal Block | 1 |
| CBC.2-10/PT/GR | End Section | 50 |
| PTC/2/10 | 10 Pole Plug In Jumper | 25 |
| PTC/4/10 | 10 Pole Plug In Jumper | 25 |
| PTC/6/10 | 10 Pole Plug In Jumper | 25 |
| PTC/10/10 | 10 Pole Plug In Jumper | 10 |
| PTC/SP | Jumper Marking Strip | 10 |
| DFM900 | Jumper Barrier | 50 |
| CNU8 | Marking Tags | 500 |
| BTO | End Brackets | 25 |

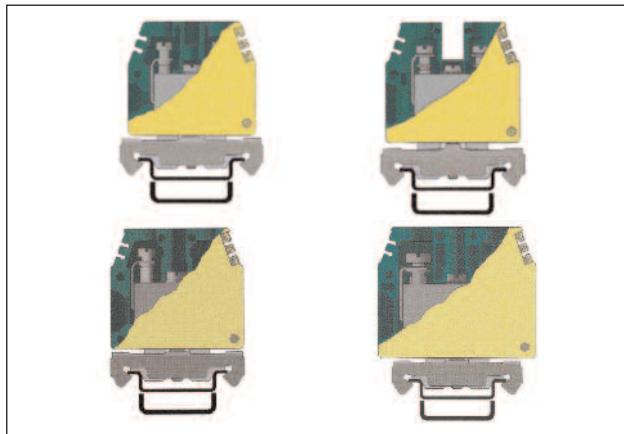


Connection Products

Earth Terminals

Features and Benefits

- Polyamide insulator
- Available as 35mm Top Hat and 32mm G Rail types in screw clamp fixing form
- TEO.2 earth terminal, suitable for 35mm Top Hat rail mounting through blade connect system to rail
- Copper/zinc alloy, high percentage of copper conductor



Earth Terminals.

| TYPE | Rated Wire | Description | Pack Cont. |
|-----------------|-----------------------------------|-------------|------------|
| TEO.2 | Earth Terminal 2.5mm ² | 35mm Rail | 1 |
| TEO.4 | Earth Terminal 4mm ² | 35mm Rail | 1 |
| TE.6/0 | Earth Terminal 6mm ² | 35mm Rail | 1 |
| TE.10/0 | Earth Terminal 10mm ² | 35mm Rail | 1 |
| TE.16/0 | Earth Terminal 16mm ² | 35mm Rail | 1 |
| TE.50/0 | Earth Terminal 50mm ² | 35mm Rail | 1 |
| TE.4/D | Earth Terminal 4mm ² | G Rail | 1 |
| TE.6/D | Earth Terminal 6mm ² | G Rail | 1 |
| TE.10/D | Earth Terminal 10mm ² | G Rail | 1 |
| TE.16/D | Earth Terminal 16mm ² | G Rail | 1 |
| TE.50/D | Earth Terminal 50mm ² | G Rail | 1 |
| CBC2/4PT | End section for TEO.4 terminal | End section | 50 |

Connection Products

End Brackets

Top hat or G Rail end brackets

Features and Benefits

- Used on the end of din rail to ensure that other terminals / units do not slide around
- Quick fit



End Bracket.

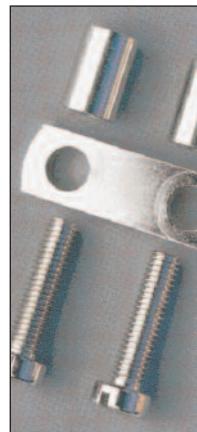
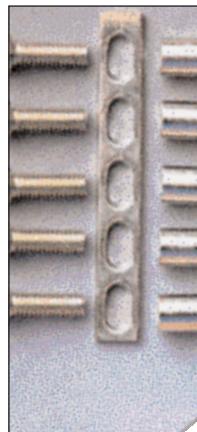
| TYPE | Description | Pack Cont. |
|------------------|---|------------|
| BT/3 | End Bracket For 35mm Top Hat Rail | 25 |
| BT/DIN/PO | End Bracket For 32mm G Type Rail | 25 |
| BT/U | Universal End Bracket 32/35mm Top Hat/G-Type Rail | 25 |



Connection Products

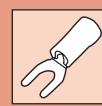
Cross Connections

For connecting 2 or more terminals via link. Screw and distance sleeve included with 2 way kit, to be ordered separately for multipole commoning bar.



Cross Connections.

| TYPE | Description | For Terminal Type | Pack Cont. |
|---------------|---|-------------------|--------------|
| PMP01 | 45 Way Multiple Connecting Bar | CBD.2 | 2M (8x250mm) |
| PMP/42 | 38 Way Multiple Connecting Bar | CBD.4 | 2M (8x250mm) |
| PMP/13 | 31 Way Multiple Connecting Bar | CBD.6 | 2M (8x250mm) |
| PMP/04 | 25 Way Multiple Connecting Bar | CBD.10 | 2M (8x250mm) |
| PMP/05 | 21 Way Multiple Connecting Bar | CBD.16 | 2M (8x250mm) |
| PMP/06 | 16 Way Multiple Connecting Bar | CBD.35 | 2M (8x250mm) |
| PMP/07 | 14 Way Multiple Connecting Bar | CBD.50 | 2M (8x250mm) |
| PMP/08 | 12 Way Multiple Connecting Bar | CBD.70 | 2M (8x250mm) |
| CPM/21 | Screw And Distance Sleeve For PMP/01 | CBD.2 | 25 |
| CPM/12 | Screw And Distance Sleeve For PMP/42 | CBD.4 | 25 |
| CPM/83 | Screw And Distance Sleeve For PMP/13 | CBD.6 | 25 |
| CPM/03 | Screw And Distance Sleeve For PMP/04 | CBD.10 | 25 |
| CPM/44 | Screw And Distance Sleeve For PMP/05 | CBD.16 | 25 |
| CPM/06 | Screw And Distance Sleeve For PMP/06 | CBD.35 | 10 |
| CPM/07 | Screw And Distance Sleeve For PMP/07 | CBD.50 | 10 |
| CPM/08 | Screw And Distance Sleeve For PMP/08 | CBD.70 | 15 |
| POF/44 | 2 Way Link Including Distance Sleeve/Screws | CBD.16 | 25 |
| POF/06 | 2 Way Link Including Distance Sleeve/Screws | CBD.35 | 15 |
| POF/07 | 2 Way Link Including Distance Sleeve/Screws | CBD.50 | 15 |
| POF/08 | 2 Way Link Including Distance Sleeve/Screws | CBD.70 | 15 |

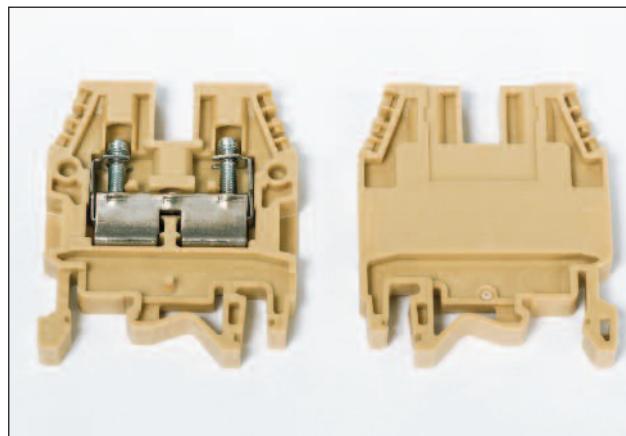


Connection Products

Rail Mounted Terminal Blocks

Features and Benefits

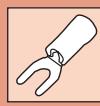
- Conforms to all major international standards including UL, cUL, CSA, KEMA and LR
- Ex-e Certified
- Self extinguishing UL94V-0 material
- Polyamide material for use between -30°C to +110°C
- Full range of accessories available
- Current ratings up to 192 Amps (to IEC standards)
- TopHat/GRail
- Blue EXI version available on request



Terminal Block.

| TYPE | Rated Wire(flexible) | Current Rating | Terminal Width | Pack Cont. |
|---------------|-----------------------|----------------|----------------|------------|
| CBD.2 | 0.5-4mm ² | 24A | 5.5 | 10 |
| CBD.4 | 0.5-6mm ² | 32A | 6.5 | 10 |
| CBD.6 | 0.5-10mm ² | 41A | 8 | 10 |
| CBD.10 | 0.5-16mm ² | 57A | 10 | 10 |
| CBD.16 | 0.5-25mm ² | 76A | 12 | 5 |
| CBD.35 | 0.5-35mm ² | 101A | 16 | 5 |
| CBD.50 | 1.5-50mm ² | 125A | 18 | 5 |
| CBD.70 | 1.5-95mm ² | 192A | 20.5 | 5 |

| TYPE | Description | Pack Cont. |
|------------------|-----------------------------|------------|
| CB.2/PT | End Section For CBD.2 | 10 |
| CB.4/6/PT | End Section For CBD.4&CBD.6 | 10 |
| CB.10/PT | End Section For CBD.10 | 10 |
| CB.16/PT | End Section For CBD.16 | 5 |
| CB.35/PT | End Section For CBD.35 | 5 |
| CB.50/PT | End Section For CBD.50 | 5 |
| CB.70/PT | End Section For CBD.70 | 5 |



Accessories for Rail Mounted Terminal Blocks

Coloured Partitions For Rail Mount Terminals

Features and Benefits

- Manufactured in polyamide and available in red only.
- Used for the separation of elements on the terminal board, in order to make certain circuits easy to locate or to increase the insulation distances between terminal blocks.



Partitions.

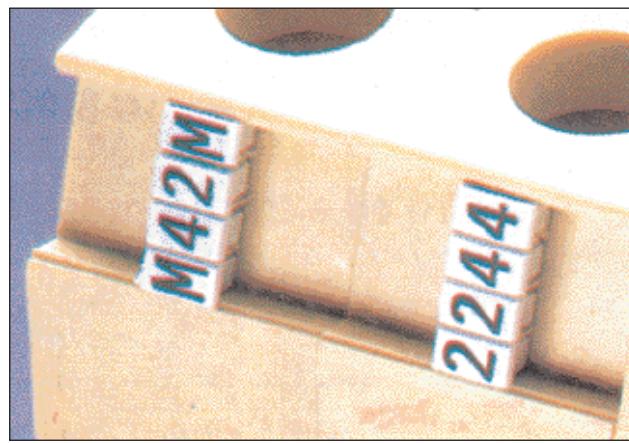
| TYPE | To Fit Screw Clamp Terminal | Pack Cont. |
|-----------|------------------------------|------------|
| DFU/1 RED | CBD.2, | 50 |
| DFU/4 RED | CBD.4, CBD.6, CBD.10, CBD.16 | 50 |
| DFU/5 RED | CBD.25, CBD.35 | 25 |
| DFU/6 RED | CBD.70 | 25 |

Accessories for Rail Mounted Terminal Blocks

Quick Attaching Clip-on Marker

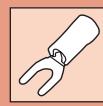
Features and Benefits

- Quick attaching clip-on marker tags allowing the composition of identification markings, also alphanumerical for circuits.
- For other identical numbers/letters the reference is CSC/(state number or letter required)



Clip-on Marker.

| TYPE | Composition | Pack Cont. |
|--------|-------------|------------|
| CSC/09 | Blank | 500 tags |



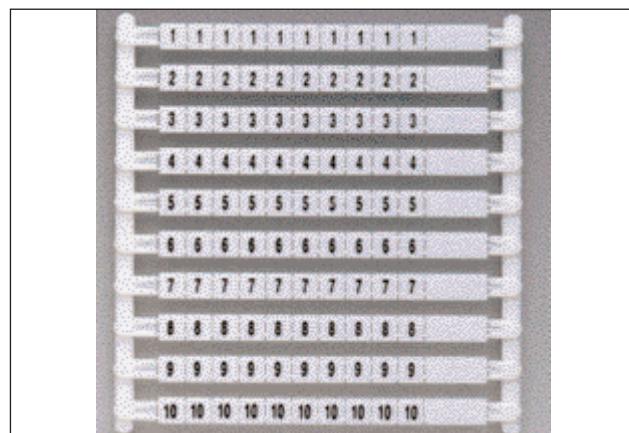
Accessories for Rail Mounted Terminal Blocks

Marking Systems

Marking tags are ideal for marking all terminals.

Features and Benefits

- Black on white markers
- Attach into position either before or after composition of the terminal board
- For other progressive series of 50 digits the reference is CNU/8/state the initial number



Marking system.

| TYPE | Description | Composition | Pack Cont. |
|--------------|-------------------|-------------|------------|
| CNU/8/001 | Marking System | 1 to 50 | 500 |
| CNU/8/051 | Marking System | 51 to 100 | 500 |
| CNU/8/301 | Marking System | 301 to 350 | 500 |
| CNU/8/510 | Marking System | 1 to 10 | 500 |
| CNU/8/600 | Marking System | 91 to 100 | 500 |
| CNU/8/030 | Blank Marker Card | Blank | 500 |
| CB/CTL/BLACK | Black Marker Pen | - | 1 |



Connection Products

DIN Rail and Mounting Brackets

A range of Top Hat and G Type din rail. Mounting brackets also available.

Features and Benefits

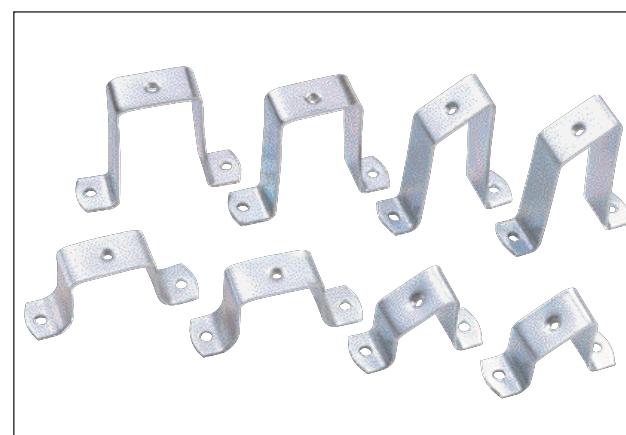
- Top hat or G Rail
- Zinc coated
- Plain or slotted
- Available in 1 or 2 metre lengths



Din Rail.

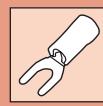
| TYPE | Description | | Rail Depth mm | Rail Width mm | Weight (kg/m) | Pack Cont. |
|---------------------|--------------|----------|---------------|---------------|---------------|------------|
| TS1520X2M | Mini Top Hat | Standard | 5.5 x 10.5 | 15 | 0.165 | 20 x 2m |
| TS15F20X2M | Mini Top Hat | Slotted | 5.5 x 10.5 | 15 | 0.14 | 20 x 2m |
| TS3220X2M | G Type | Standard | 5.5 x 10.5 | 32 | 0.73 | 20 x 2m |
| TS32F620X2M | G Type | Slotted | 5.5 x 10.5 | 32 | 0.69 | 20 x 2m |
| TS3520X2M | Top Hat | Standard | 7.5 x 27 | 35 | 0.35 | 20 x 2m |
| TS35F620X2M | Top Hat | Slotted | 7.5 x 27 | 35 | 0.3 | 20 x 2m |
| TS35S20X2M | Top Hat | Standard | 15 x 27 | 35 | 0.39 | 20 x 2m |
| TS35C20X2M | Deep Top Hat | Standard | 15 x 27 | 35 | 0.67 | 20 x 2m |
| TS35CF620X2M | Deep Top Hat | Slotted | 5.5 x 10.5 | 35 | 0.615 | 20 x 2m |
| TS15F10X1M | Mini Top Hat | Slotted | 5.5 x 10.5 | 15 | 0.14 | 10 x 1m |
| TS3210X1M | G Type | Standard | 5.5 x 10.5 | 32 | 0.73 | 10 x 1m |
| TS3510X1M | Top Hat | Standard | 7.5 x 27 | 35 | 0.35 | 10 x 1m |
| TS35F610X1M | Top Hat | Slotted | 7.5 x 27 | 35 | 0.3 | 10 x 1m |

A range of mounting / support brackets available angled or straight



Mounting Brackets.

| TYPE | Type | Height mm | Fixing | Pack Cont. |
|---------------|----------------|-----------|--------|------------|
| BK0425 | Angled | 42 | M6 | 2 |
| TS-SM6 | Angled | 48 | M6 | 1 |
| BK0805 | Angled | 82 | M6 | 2 |
| BK0201 | Straight | 20 | M6 | 2 |
| BK0441 | Straight | 41 | M6 | 2 |
| BK0706 | Straight | 70 | M6 | 2 |
| BK0904 | Straight | 90 | M6 | 2 |
| CSK6.3 | Screws to Suit | - | M6 | 10 |



Connection Products

PE Terminal Strip Connectors

A range of strip connectors in varying sizes and materials

Features and Benefits

- Sizes from 3A-4mm up to 60A-25mm
- Polyethylene (80°C)
- Packed 10 strips of 12 poles
- Colours natural (NT) or black (BK)
- Self-extinguishing flame retardant material



PE Terminal Strips.

| TYPE | Material | Colour | Specification | Pack Cont. |
|---------------|----------|--------------|---------------|------------|
| CS3NT | PE | Natural (NT) | 3A-4mm | 1 pack |
| CS3BK | PE | Black (BK) | 3A-4mm | 1 pack |
| CS5NT | PE | Natural (NT) | 5A-6mm | 1 pack |
| CS5BK | PE | Black (BK) | 5A-6mm | 1 pack |
| CS15NT | PE | Natural (NT) | 15A-12mm | 1 pack |
| CS15BK | PE | Black (BK) | 15A-12mm | 1 pack |
| CS30NT | PE | Natural (NT) | 30A-16mm | 1 pack |
| CS30BK | PE | Black (BK) | 30A-16mm | 1 pack |
| CS60NT | PE | Natural (NT) | 60A-25mm | 1 pack |
| CS60BK | PE | Black (BK) | 60A-25mm | 1 pack |

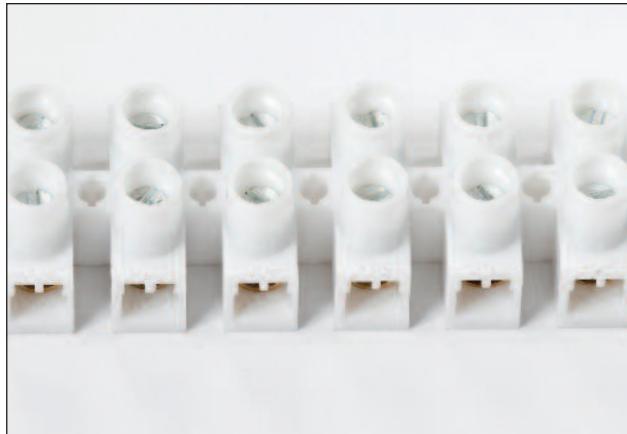
Connection Products

PP Terminal Strip Connectors

A range of strip connectors in varying sizes and materials

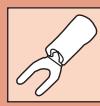
Features and Benefits

- Sizes from 3A-4mm up to 60A-25mm
- Polypropylene (-20°C +90°C)
- Colour : White (WE)
- Packed 10 strips of 12 poles
- Captive and raised screws for easy wiring
- Standards: CE-BSEN-60998
- Flame retardant-Self Extinguishing material
- Brass inserts, plated steel screws



PP Terminal Strips.

| TYPE | Material | Colour | Specification | Pack Cont. |
|------------------|----------|------------|---------------|------------|
| CS3WT-PP | PP | White (WE) | 3A-4mm | 1 pack |
| CS5WT-PP | PP | White (WE) | 5A-6mm | 1 pack |
| CS15WT-PP | PP | White (WE) | 15A-12mm | 1 pack |
| CS30WT-PP | PP | White (WE) | 30A-16mm | 1 pack |
| CS60WT-PP | PP | White (WE) | 60A-25mm | 1 pack |



Connection Products

Helacon Plus Mini Push-In Connectors

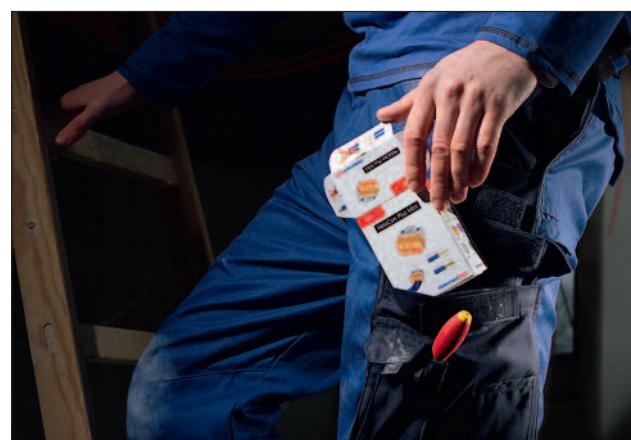
HelaCon connectors are used for fast, easy and reliable connection and distribution of cable and conductors in electrical installation applications. The new generation of HelaCon Plus Mini wire connectors can be applied tool-free using the push-in spring technology. HelaCon Plus Mini uses a double spring which is approved for solid and stranded wires.

Features and Benefits

- 40% smaller – space saving design
- Low insertion force – Easy to use, saves time on installation
- For professional cable connections in electrical installations
- Easy access to voltage test entry and innovative port shape design
- Correct installation can be visually checked through transparent housing
- Different colour codes for easy identification of size
- Allows different conductor diameters in each entry
- Safe application, installation and maintenance



HelaCon Plus Mini wire connector range in space saving design.



Packed in a handy box.

| MATERIAL | Polycarbonate (PC) |
|------------------------------|--|
| Max Current | 24A |
| Max Voltage | 450V |
| Wire Range (VDE) | 0.5 to 2.5 mm ² solid wires / 1.0 to 2.5 mm ² stranded |
| Stripping Length | 11mm |
| Flammability | UL94VO |
| Operating Temperature | -30 °C to +85 °C |



| TYPE | No. of conductors | Colours | Width (W) mm | Height (H) mm | Depth mm | Pack Cont. | Article-No. |
|---------------|-------------------|------------------|--------------|---------------|----------|------------|-------------|
| HCPM-2 | 2 | Yellow (YE) | 10.8 | 7.7 | 16.5 | 150 pcs | 148-90036 |
| HCPM-3 | 3 | Orange (OG) | 15.1 | 7.7 | 16.5 | 100 pcs | 148-90037 |
| HCPM-4 | 4 | Transparent (CL) | 19.4 | 7.7 | 16.5 | 100 pcs | 148-90038 |
| HCPM-5 | 5 | Blue (BU) | 23.7 | 7.7 | 16.5 | 75 pcs | 148-90039 |
| HCPM-6 | 6 | Violet (VT) | 28 | 7.7 | 16.5 | 50 pcs | 148-90040 |
| HCPM-8 | 8 | Black (BK) | 36.6 | 7.7 | 16.5 | 50 pcs | 148-90041 |



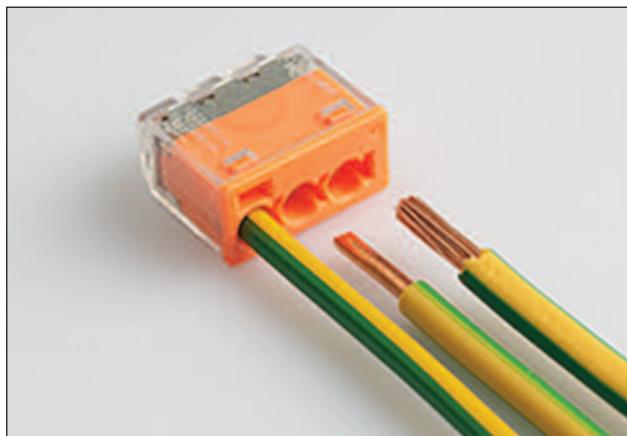
Connection Products

HelaCon Plus 32amp Push-in Wire Connector Releasable

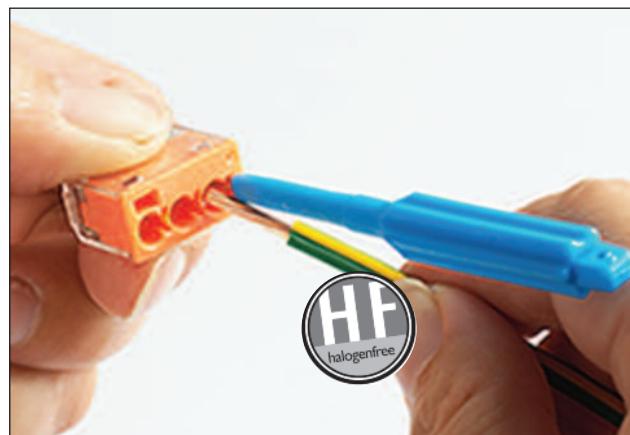
A 32 amp 450V releasable push in wire connector used for fast, easy and reliable connection of lighting and power circuits.

Features and Benefits

- Suitable for 0.5mm² to 4mm² solid/stranded cable
- Can be released using special tool (included in pack)
- 3 poles
- Tool can also be purchased separately
- Suitable for fine stranded (flex) cable 0.5-2.5mm²



HelaCon 32amp.



Replacement Tool.

| TYPE | Description | Pack Cont. |
|----------------|------------------------------|------------|
| HECP3-32A | 32amp Push-In Wire Connector | 75 |
| HECP3-32A TOOL | Spare Tool | 1 |

Connection Products

HelaCon Kit

The HelaCon range of plastic wire connectors are used for fast, easy and reliable connection and distribution of cable and conductors in electrical housing applications.

Features and Benefits

- Fast and easy to use
- Top quality case to store the connectors in
- Can be refilled over and over again.
- Contains 740 assorted wire connectors



HelaCon Kit

| TYPE | Kit Contents | Pack Cont. |
|-----------|---|------------|
| 148-00107 | 200 x HECP-2, 200 x HECP-3, 150 x HECP-4, 100 x HECP-5, 50 x HECP-6, 40 x HECP-8 | 740 |



Connection Products

Pre-Insulated Light Duty Terminals

A range of Pre-insulated terminals from 0.5mm²-6.0mm²

Features and Benefits

- Red insulation 0.5-1.5mm²
- Blue insulation 1.5-2.5mm²
- Yellow insulation 4.0-6.0mm²
- Material: Copper Tin Plated. Sleeve Vinyl.
- RoHS compliant
- UL Approved
- Retail packaged



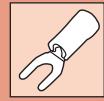
Light Duty Terminals.



For tool to suit these terminals see page
65 Tool reference 7700

| TYPE | Drawings | Description | Size (mm) | Dimensions (mm) | Colour | Pack Cont. |
|--------------|----------|-------------|-----------|-----------------|-------------|------------|
| HFP1.5-003 | | Ring | 0.5-1.5 | 3.0 | Red (RD) | 100 |
| HFP2.5-003 | | | 1.5-2.5 | 3.0 | Blue (BU) | 100 |
| HFP1.5-003.5 | | | 0.5-1.5 | 3.5 | Red (RD) | 100 |
| HFP2.5-003.5 | | | 1.5-2.5 | 3.5 | Blue (BU) | 100 |
| HFP4.0-003.5 | | | 4.0-6.0 | 3.5 | Yellow (YW) | 100 |
| HFP1.5-004 | | | 0.5-1.5 | 4.0 | Red (RD) | 100 |
| HFP2.5-004 | | | 1.5-2.5 | 4.0 | Blue (BU) | 100 |
| HFP4.0-004 | | | 4.0-6.0 | 4.0 | Yellow (YW) | 100 |
| HFP1.5-005 | | | 0.5-1.5 | 5.0 | Red (RD) | 100 |
| HFP2.5-005 | | | 1.5-2.5 | 5.0 | Blue (BU) | 100 |
| HFP4.0-005 | | | 4.0-6.0 | 5.0 | Yellow (YW) | 100 |
| HFP1.5-006 | | | 0.5-1.5 | 6.0 | Red (RD) | 100 |
| HFP2.5-006 | | | 1.5-2.5 | 6.0 | Blue (BU) | 100 |
| HFP4.0-006 | | | 4.0-6.0 | 6.0 | Yellow (YW) | 100 |
| HFP1.5-008 | | | 0.5-1.5 | 8.0 | Red (RD) | 100 |
| HFP2.5-008 | | | 1.5-2.5 | 8.0 | Blue (BU) | 100 |
| HFP4.0-008 | | | 4.0-6.0 | 8.0 | Yellow (YW) | 100 |
| HFP2.5-010 | | Fork | 1.5-2.5 | 10.0 | Blue (BU) | 100 |
| HFP4.0-010 | | | 4.0-6.0 | 10.0 | Yellow (YW) | 100 |
| HFP1.5-S3 | | | 0.5-1.5 | 3.0 | Red (RD) | 100 |
| HFP1.5-S3.5 | | | 0.5-1.5 | 3.5 | Red (RD) | 100 |
| HFP2.5-S3.5 | | | 1.5-2.5 | 3.5 | Blue (BU) | 100 |
| HFP4.0-S3.5 | | | 4.0-6.0 | 3.5 | Yellow (YW) | 100 |
| HFP1.5-S4 | | | 0.5-1.5 | 4.0 | Red (RD) | 100 |
| HFP2.5-S4 | | | 1.5-2.5 | 4.0 | Blue (BU) | 100 |
| HFP1.5-S5 | | | 0.5-1.5 | 5.0 | Red (RD) | 100 |
| HFP2.5-S5 | | | 1.5-2.5 | 5.0 | Blue (BU) | 100 |
| HFP4.0-S5 | | | 4.0-6.0 | 5.0 | Yellow (YW) | 100 |
| HFP1.5-S6 | | | 0.5-1.5 | 6.0 | Red (RD) | 100 |
| HFP2.5-S6 | | | 1.5-2.5 | 6.0 | Blue (BU) | 100 |
| HFP4.0-S6 | | | 4.0-6.0 | 6.0 | Yellow (YW) | 100 |





Connection Products

Pre-Insulated Light Duty Terminals

A range of Pre-insulated terminals from 0.5mm-6.0mm²

| TYPE | Drawings | Description | Size (mm) | Dimensions (mm) | Colour | Pack Cont. |
|-----------------------|-----------------|-------------------------|------------------|------------------------|---------------|-------------------|
| HFP1.5WP12 | | Pin | 0.5-1.5 | Pin Length 12 | Red (RD) | 100 |
| HFP2.5-WP12 | | | 1.5-2.5 | Pin Length 12 | Blue (BU) | 100 |
| HFP4.0-WP14 | | | 4.0-6.0 | Pin Length 12 | Yellow (YW) | 100 |
| HFP2.5-FB9 | | Flat Blade | 1.5-2.5 | 9.0 x 2.8 | Blue (BU) | 100 |
| HFP1.5-FB18 | | | 0.5-1.5 | 18.0 x 2.3 | Red (RD) | 100 |
| HFP2.5-FB18 | | | 1.5-2.5 | 18.0 x 2.3 | Blue (BU) | 100 |
| HFP1.5-FB10 | | | 0.5-1.5 | 10.0 x 2.3 | Red (RD) | 100 |
| HFP1.5-HB | | Hook Blade | 0.5-1.5 | 3.0 | Red (RD) | 100 |
| HFP2.5-HB | | | 1.5-2.5 | 3.0 | Blue (BU) | 100 |
| HFP1.5-BC | | Butt | 0.5-1.5 | ~ | Red (RD) | 100 |
| HFP2.5-BC | | | 1.5-2.5 | ~ | Blue (BU) | 100 |
| HFP4.0-BC | | | 4.0-6.0 | ~ | Yellow (YW) | 100 |
| HFP1.5-BCHS* | | | 0.5-1.5 | ~ | Red (RD) | 25 |
| HFP2.5-BCHS* | | | 1.5-2.5 | ~ | Blue (BU) | 25 |
| HFP4.0-BCHS* | | | 4.0-6.0 | ~ | Yellow (YW) | 25 |
| HFP1.5-F110-5 | | Female Push On | 0.5-1.5 | 2.8 x 0.5 | Red (RD) | 100 |
| HFP1.5-F110-8 | | | 0.5-1.5 | 2.8 x 0.8 | Red (RD) | 100 |
| HFP1.5-F187-5 | | | 0.5-1.5 | 4.7 x 0.5 | Red (RD) | 100 |
| HFP2.5-F187-5 | | | 1.5-2.5 | 4.7 x 0.5 | Blue (BU) | 100 |
| HFP1.5-F187-8 | | | 0.5-1.5 | 4.7 x 0.8 | Red (RD) | 100 |
| HFP2.5-F187-8 | | | 1.5-2.5 | 4.7 x 0.8 | Blue (BU) | 100 |
| HFP1.5-F250-8 | | | 0.5-1.5 | 6.3 x 0.8 | Red (RD) | 100 |
| HFP2.5-F250-8 | | | 1.5-2.5 | 6.3 x 0.8 | Blue (BU) | 100 |
| HFP4.0-F250-8 | | | 4.0-6.0 | 6.3 x 0.8 | Yellow (YW) | 100 |
| HFP4.0-F375-8 | | | 4.0-6.0 | 9.5 x 1.0 | Yellow (YW) | 100 |
| HFP1.5-M250-8 | | Male Push On | 0.5-1.5 | 6.3 x 0.8 | Red (RD) | 100 |
| HFP2.5-M250-8 | | | 1.5-2.5 | 6.3 x 0.8 | Blue (BU) | 100 |
| HFP4.0-M250-8 | | | 4.0-6.0 | 6.3 x 0.8 | Yellow (YW) | 100 |
| HFP1.5-FS250-8 | | Female Fully Insulated | 0.5-1.5 | 6.3 x 0.8 | Red (RD) | 100 |
| HFP2.5-FS250-8 | | | 1.5-2.5 | 6.3 x 0.8 | Blue (BU) | 100 |
| HFP2.5-F250-8 | | | 1.5-2.5 | 6.3 x 0.9 | Blue (BU) | 100 |
| HFP4.0-FS250-8 | | | 1.5-2.5 | 6.3 x 0.9 | Yellow (YW) | 100 |
| HFP1.5-MF250-8 | | Push on Adaptor | 0.5-1.5 | 6.3 x 0.9 | Red (RD) | 100 |
| HFP2.5-MF250-8 | | | 1.5-2.5 | 6.3 x 0.8 | Blue (BU) | 100 |
| HFP1.5-MB | | Male Bullet Connector | 0.5-1.5 | 4 | Red (RD) | 100 |
| HFP2.5-MB | | | 1.5-2.5 | 4 | Blue (BU) | 100 |
| HFP1.5-FB | | Female Bullet Connector | 0.5-1.5 | 4 | Red (RD) | 100 |
| HFP2.5-FB | | | 1.5-2.5 | 4 | Blue (BU) | 100 |
| HFP1.0CEC | | Closed End Connector | 1.0 | ~ | Clear | 25 |
| HFP2.5CEC | | | 2.5 | ~ | Clear | 25 |
| HFP4.0CEC | | | 4.0 | ~ | Clear | 25 |
| HFP10.0CEC | | | 10.0 | ~ | Clear | 25 |

* Heatshrinkable



Connection Products

Copper Tube Terminals and Copper Tube Butt Splices

Suitable for the termination of cables and stud connectors and splices for joining cable together.

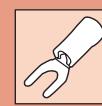
Features and Benefits

- Material: High conductivity copper BS EN12449
- Purity: >99.9%
- Coating: Electro Tin Plating to BS1872
- Terminals have flared (bell mouth) entry for ease of cable insertion
- Terminals have inspection holes to check that the cable is inserted properly before terminal is crimped to the cable
- Range covers cable sizes from 6mm to 300mm
- Packed in polythene (PE) bags with Euro slot



Copper Tube Terminals.

| TYPE | To fit cable size mm | Stud Dia mm | Pack Cont. |
|-----------|-------------------------|----------------|------------|
| HCT 6-4 | 6.0 | 4.0 | 100 |
| HCT 6-6 | 6.0 | 6.0 | 100 |
| HCT 6-8 | 6.0 | 8.0 | 100 |
| HCT 6-10 | 6.0 | 10.0 | 100 |
| HCT 10-6 | 10.0 | 6.0 | 100 |
| HCT 10-8 | 10.0 | 8.0 | 100 |
| HCT 10-10 | 10.0 | 10.0 | 100 |
| HCT 10-12 | 10.0 | 12.0 | 100 |
| HCT 16-6 | 16.0 | 6.0 | 100 |
| HCT 16-8 | 16.0 | 8.0 | 100 |
| HCT 16-10 | 16.0 | 10.0 | 100 |
| HCT 16-12 | 16.0 | 12.0 | 100 |
| HCT 25-6 | 25.0 | 6.0 | 100 |
| HCT 25-8 | 25.0 | 8.0 | 100 |
| HCT 25-10 | 25.0 | 10.0 | 100 |
| HCT 25-12 | 25.0 | 12.0 | 100 |
| HCT 35-6 | 35.0 | 6.0 | 100 |
| HCT 35-8 | 35.0 | 8.0 | 100 |
| HCT 35-10 | 35.0 | 10.0 | 100 |
| HCT 35-12 | 35.0 | 12.0 | 100 |
| HCT50-6 | 50.0 | 6.0 | 50 |
| HCT 50-8 | 50.0 | 8.0 | 50 |
| HCT 50-10 | 50.0 | 10.0 | 50 |
| HCT 50-12 | 50.0 | 12.0 | 50 |
| HCT 70-6 | 70.0 | 6.0 | 50 |
| HCT 70-8 | 70.0 | 8.0 | 50 |
| HCT 70-10 | 70.0 | 10.0 | 50 |



Connection Products

HCT Series

| TYPE | To fit cable size mm | Stud Dia mm | Pack Cont. |
|------------|-------------------------|----------------|------------|
| HCT 70-12 | 70.0 | 12.0 | 50 |
| HCT 70-14 | 70.0 | 14.0 | 50 |
| HCT 70-16 | 70.0 | 16.0 | 50 |
| HCT 95-8 | 95.0 | 8.0 | 5 |
| HCT 95-10 | 95.0 | 10.0 | 5 |
| HCT 95-12 | 95.0 | 12.0 | 5 |
| HCT 95-14 | 95.0 | 14.0 | 5 |
| HCT 95-16 | 95.0 | 16.0 | 5 |
| HCT120-8 | 120.0 | 8.0 | 5 |
| HCT 120-10 | 120.0 | 10.0 | 5 |
| HCT 120-12 | 120.0 | 12.0 | 5 |
| HCT120-14 | 120.0 | 14.0 | 5 |
| HCT 120-16 | 120.0 | 16.0 | 5 |
| HCT 150-10 | 150.0 | 10.0 | 5 |
| HCT 150-12 | 150.0 | 12.0 | 5 |
| HCT150-14 | 150.0 | 14.0 | 5 |
| HCT150-16 | 150.0 | 16.0 | 5 |
| HCT 185-10 | 185.0 | 10.0 | 5 |
| HCT 185-12 | 185.0 | 12.0 | 5 |
| HCT 185-14 | 185.0 | 14.0 | 5 |
| HCT 185-16 | 185.0 | 16.0 | 5 |
| HCT240-10 | 240.0 | 10.0 | 5 |
| HCT240-12 | 240.0 | 12.0 | 5 |
| HCT 300-10 | 300.0 | 10.0 | 5 |
| HCT 300-12 | 300.0 | 12.0 | 5 |
| HCT 300-16 | 300.0 | 16.0 | 5 |





Copper Tube Terminals and Copper Tube Butt Splices

HCBS Series



Copper Tube Butt Splices.

| TYPE | Description | Cable Cross Section mm | Pack Cont. |
|----------------|-------------------------|-----------------------------------|-----------------------|
| HCBS6 | Copper Tube Butt Splice | 6.0 | 50 |
| HCBS10 | Copper Tube Butt Splice | 10.0 | 25 |
| HCBS16 | Copper Tube Butt Splice | 16.0 | 25 |
| HCBS25 | Copper Tube Butt Splice | 25.0 | 25 |
| HCBS35 | Copper Tube Butt Splice | 35.0 | 25 |
| HCBS50 | Copper Tube Butt Splice | 50.0 | 10 |
| HCBS70 | Copper Tube Butt Splice | 70.0 | 10 |
| HCBS95 | Copper Tube Butt Splice | 95.0 | 10 |
| HCBS120 | Copper Tube Butt Splice | 120.0 | 5 |
| HCBS150 | Copper Tube Butt Splice | 150.0 | 5 |
| HCBS185 | Copper Tube Butt Splice | 18.0 | 5 |
| HCBS240 | Copper Tube Butt Splice | 240.0 | 5 |
| HCBS300 | Copper Tube Butt Splice | 300.0 | 5 |

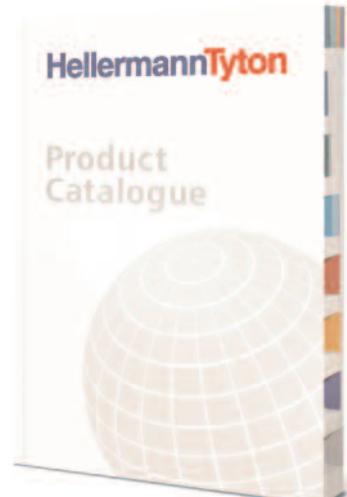


Full range of tooling available see page
65-67

Cable Installation System – Cable Scout⁺ Rod Sets



For more information on our complete Cable Scout⁺ range of products, please see our Product Catalogue Section 4 Electrical Installation.





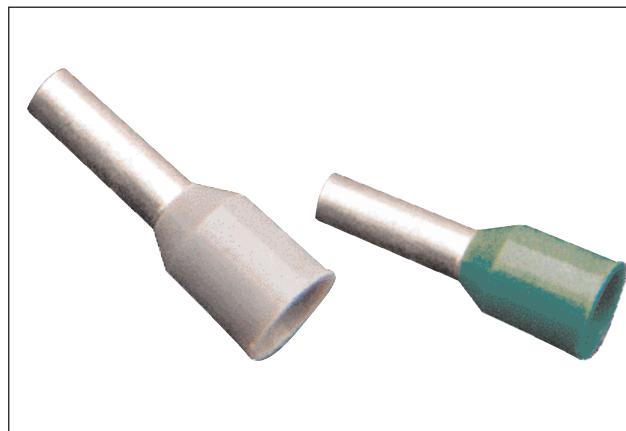
Connection Products

Pre-insulated End Sleeve Terminals

A comprehensive range of pre-insulated end sleeve terminals available in both French and German standard colour codings.

Features and Benefits

- RoHS and UL approved
- Material Nylon (PA66)
- Other sizes and materials are available on request, subject to MOQ and lead time



End Sleeve Terminals.



For tool to suit see page 65-66 Tool reference 7702, 7703 and 7709

| TYPE | Reference | Cable Size | Colour | Pack Cont. |
|--------------------------|------------------|-------------|--------|------------|
| French Colour | CE005008 | 0.50mm x 8F | White | 500 |
| | CE075008 | 0.75mm x 8F | Blue | 500 |
| | CE010008 | 1.0mm x 8F | Red | 500 |
| | CE015008 | 1.5mm x 8F | Black | 500 |
| | CE025008 | 2.5mm x 8F | Grey | 500 |
| | CE040010 | 4.0mm x 10F | Orange | 500 |
| | CE060012 | 6.0mm x 12F | Green | 100 |
| | CE100012 | 10mm x 12F | Brown | 100 |
| | CE160012 | 16mm x 12F | Ivory | 100 |
| | CE250016 | 25mm x 16F | Black | 100 |
| | CE350016 | 35mm x 16F | Red | 50 |
| | CE500020 | 50mm x 20F | Blue | 50 |
| German Colour | CE005008W | 0.50mm x 8G | Orange | 500 |
| | CE075008W | 0.75mm x 8G | White | 500 |
| | CE100008W | 1.0mm x 8G | Yellow | 500 |
| | CE015008W | 1.5mm x 8G | Red | 500 |
| | CE25008W | 2.5mm x 8G | Blue | 500 |
| | CE040010W | 4.0mm x 10G | Grey | 500 |
| | CE060012W | 6.0mm x 12G | Black | 100 |



RoHS





Connection Products

Pre-insulated Twin End Sleeve Terminals

A comprehensive range of pre-insulated twin end sleeve terminals available in standard colour codings.

Features and Benefits

- RoHS and UL approved
- Material Nylon (PA66)
- Other sizes and materials are available on request, subject to MOQ and lead time



For tool to suit see page 65-66 Tool reference 7702, 7703 and 7709

| TYPE | Reference | Cable Size | Colour | Pin Length | Pack Cont. |
|---|-----------------|------------|--------|------------|------------|
|  | CT205008 | 2 x 0.5 | White | 8.0 | 1000 |
| | CT207508 | 2 x 0.75 | Grey | 8.0 | 1000 |
| | CT207510 | 2 x 0.75 | Grey | 10.0 | 1000 |
| | CT210008 | 2 x 1.0 | Red | 8.0 | 1000 |
| | CT210010 | 2 x 1.0 | Red | 10.0 | 1000 |
| | CT215008 | 2 x 1.5 | Black | 8.0 | 1000 |
| | CT225013 | 2 x 2.5 | Blue | 13.0 | 1000 |
| | CT225010 | 2 x 2.5 | Blue | 10.0 | 1000 |
| | CT225013 | 2 x 2.5 | Grey | 13.0 | 1000 |
| | CT240012 | 2 x 4.0 | Grey | 12.0 | 1000 |
| | CT260014 | 2 x 6.0 | Yellow | 14.0 | 1000 |
| | CT215012 | 2 x 1.5 | Black | 12.0 | 1000 |



RoHS ✓



Specification Overview

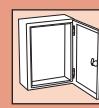
Steel

| TYPE | Material | Colour | IP Rating | IK Rating | Page No. |
|-----------------------------|---------------------------|-----------------------|-----------|-----------|----------|
| NSYCRN (single door) | Mild steel | RAL7035 | IP66 | IK10 | 109 |
| NSYCRN (double door) | Mild steel | RAL7035 | IP55 | IK10 | 110 |
| HT | Mild steel | RAL7035 | IP66 | IK10 | 117 |
| NSYS3X | 304 grade stainless steel | Scotch-Brite® brushed | IP66 | IK10 | 121 |
| HTATX | Mild steel | RAL7035 | IP66 | IK10 | 123 |
| NSYSM | Mild steel | RAL7035 | IP55 | IK10 | 125 |
| NSYSBM | Mild steel | RAL7035 | IP66 | IK10 | 129 |
| NSYDBN | Mild steel | RAL7035 | IP55 | IK07 | 134 |
| NSYDAN | Mild steel | RAL7035 | IP55 | IK07 | 134 |

Specification Overview

Plastic

| TYPE | Material | Colour | IP Rating | IK Rating | Page No. |
|------------------------------|----------------------------------|---------|-----------|-----------|----------|
| BRES | GRP | RAL7035 | IP66 | IK10 | 135 |
| NSYPLM32G | Polycarbonate | RAL7035 | IP66 | IK10 | 139 |
| NSYPLMG | GRP | RAL7035 | IP66 | IK10 | 139 |
| NSYPLAG (single door) | GRP | RAL7035 | IP65 | IK10 | 142 |
| NSYPLAG (double door) | GRP | RAL7035 | IP65 | IK10 | 142 |
| CA | Polyester with polycarbonate lid | RAL7035 | IP66 | IK10 | 144 |
| NSYPLS | GRP with polycarbonate lid | RAL7035 | IP65 | IK09 | 149 |
| NSYPLSP | GRP | RAL7035 | IP65 | IK09 | 149 |
| NSYTBS | ABS | RAL7035 | IP66 | IK07 | 152 |
| NSYTBP | Polycarbonate | RAL7035 | IP66 | IK08 | 154 |



Enclosures

Material Overview

Properties of GRP (Glass Reinforced Polyester)

The mechanical properties of GRP include good insulation, strength, hardness and stability over a temperature range between -50°C to +150°C. GRP is resistant to mineral acids, oxidants and reducing agents, neutral and acid solutions, greases, oils and some alcohols. It also offers an electrical advantage in that, as an excellent insulator, it can offer protection from electric shock. When exposed to flame it is self extinguishing, which significantly reduces the risk of fire. Some GRP enclosures are halogen-free and so are ideal for use in areas where public safety is paramount. However, contact with methyl alcohol, alkaline solutions, amines, gaseous ammonia and its solution should be avoided.

It should be noted that when any work is carried out on the enclosure, cut or exposed surfaces, holes or edges should be treated to avoid moisture ingress. Damage to the surface may also result in moisture ingress into the material through the exposed glass fibres.

Properties of ABS (Acrylonitrile Butadiene Styrene)

Usually produced in the same design as polycarbonate enclosures, ABS is a cheaper material with characteristics similar to polycarbonate but not suitable for such extremes of temperatures and having a lower impact strength. ABS and polycarbonate may be combined offering an enclosure with an ABS base and a polycarbonate lid. When exposed to flame, it is not necessarily self-extinguishing.

Properties of PVC (Poly Vinyl Chloride)

PVC is used for moulding small plastic boxes. It has excellent resistance to mineral acids (both dilute and concentrated), alkalis and detergents. Resistance to alcohol-based solvents is good but poor to ketones, and hydrocarbons. Although it is a self-extinguishing material, PVC does give off toxic and corrosive gases when burned. PVC has a low UV resistance and can be brittle.

Properties of Mild Steel

Mild steel is the most widely used material for general-purpose enclosures and is generally regarded as the most cost effective. Mild steel is an ideal material for fabrications, hole punching and forming and is easily welded to form permanent bonds. The downside of mild steel is that it offers little in the way of corrosion resistance making it largely unsuitable for outdoor applications or installations in a corrosive environment.

Properties of Stainless Steel

Stainless steel is capable of withstanding more aggressive environments and can provide a suitable solution for outdoor applications. In some applications, such as food manufacturing, food processing and pharmaceutical production it offers additional hygiene benefits and is commonly used where hygiene, cleanliness and corrosion resistance are important. Stainless steel offers a number of other advantages: it does not deteriorate when exposed to ultra violet light, it is a low-maintenance material and it may be less expensive than surface-treated mild steel. In choosing stainless steel, however, it is important to get the correct grade of stainless. Standard stock enclosures, covering the majority of industrial beverage and dairy industries, are made from grade 304. If the operating conditions are more demanding, such as a highly corrosive, salt-laden environment, grade 316 would be specified.

Specification Considerations

A key consideration for the specification of an enclosure is its IP rating. IP ratings are defined in the IEC 60529 standard for degrees of protection provided by enclosures, published in the UK as BS EN 60529. Degrees of protection are specified by the letters IP followed by two or more digits. The first digit, a number 1 to 6, reflects the degree of protection for internal components from the ingress of objects, plus the protection of persons against contact with live parts of the equipment within the enclosure. The second digit, a number from 1 to 8, relates to the protection of equipment within the enclosure against harmful ingress of moisture, caused by spray, drips or immersion.

It is important to avoid opting automatically for a higher IP rating in the belief that this reflects a higher performance, because this may mean that the enclosure will not do the job required in that particular application. For example, an enclosure may pass the test for a high level of protection against ingress of water but when installed may be subject to environmental conditions that could cause rusting or damage. To ensure that the choice of enclosure is both cost-effective and provides the performance required, it is important to understand the conditions and environment in which the enclosure is situated. You should also remember that IP ratings refer to the ability of an enclosure to pass the tests under controlled conditions, not its ability to withstand additional influences such as weather conditions, corrosive environments or extreme temperatures.



Enclosures

Material Overview

Outdoors

When an enclosure is used outdoors consideration must be given to the prevailing weather conditions and extremes of temperature.

These conditions will determine choice of material and accessories; for example, canopies, heaters, vents and thermal management systems; and special finishes like anti-condensation paint.

The Cooling Effect

A standard enclosure will probably allow rainfall to run around the outside of various gasketed areas. If the internal temperature is reduced rapidly, the pressure inside a high IP rated enclosure may be significantly lower than the ambient pressure outside, thereby inducing a suction effect through the gasketed areas. This could result in moisture around the gaskets being drawn into the enclosure.

This effect may be avoided by reducing the number of gasketed areas in contact with the rain by choosing an enclosure with gutters and/or fitting a rain hood. Alternatively to equalise the pressure quickly, controlled ventilation would allow the enclosure to breathe, although this may reduce the IP rating of the enclosure.

Condensation

Condensation is often mistaken for water ingress. It is caused by a difference in temperature between the inner and outer surfaces of an enclosure and normally forms on the same side as the prevailing wind. Apart from water lying in the bottom of the enclosure, moisture may condense on the components causing electrical 'leakage' and 'tracking' as well as component corrosion and degradation of insulation.

The most common solutions are to fit anti-condensation heaters, controlled ventilation or use of anti-condensation paint.

UV Protection

UV stabilizers are added to polycarbonate to help protect the material from the effects of exposure to the sun. Radiation from the sun, especially in the UV portion of the spectrum, degrades the properties of polycarbonate which could cause warping or discolouration. The addition of UV stabilizers allows the material to sustain exposure to the sun for a longer period of time.

Corrosive Environments

In certain applications enclosures will need protection from chemicals and selection of the right material is determined by the chemical involved. The most likely choice is stainless steel but even then care must be taken to ensure the correct grade is selected. Some non-metallic materials have excellent resistance to certain chemicals and poor resistance to others. It is also important to remember that the components within the enclosure may also need protecting, for example, protection from harmful gases.

Marine, Coastal and Off-shore

Coastal, external applications can usually be covered by referring to the previous 'outdoors' element of this section and then paying particular attention to the treatments or materials chosen to address the extra corrosion likely from the salt laden atmosphere. Off-shore specifications depend on the intended location of the enclosure e.g. a relatively low IP rated enclosure in an accommodation area through to a very high rating on a ship's deck.

Hose-down areas

Enclosures in these areas are usually in processing plants when the environment is subject to special regulations. The enclosures chosen are usually free of surface treatment to avoid contamination, for example, by paint flakes entering the production process. In practice most users choose stainless steel design, which have few external features, for ease of cleaning. Various non-metallic products offer the same benefits but a stainless steel enclosure will maintain the best appearance.



Enclosures

IP Ratings

| First numeral | | Second numeral | | Third numeral | |
|---------------------------------|--|----------------------------|--|-----------------------|--|
| Protection against solid bodies | | Protection against liquids | | Mechanical protection | |
| IP | | IP | | IK | |
| 0 | | 0 | | 0 | |
| 1 | | 1 | | 01 | |
| 2 | | 2 | | 02 | |
| 3 | | 3 | | 03 | |
| 4 | | 4 | | 04 | |
| 5 | | 5 | | 05 | |
| 6 | | 6 | | 06 | |
| | | 7 | | 07 | |
| | | 8 | | 08 | |
| | | | | 09 | |
| | | | | 10 | |
| | | | | | |

**NSYCRN****Mild Steel Wall Mounted Enclosures**

Steel enclosures made from a continuous length of sheet steel. Both internally and externally protected with texturized polyester epoxy resin RAL7035 grey paint.

Features and Benefits

- Welded studs on the back for direct fixing of mounting plates and other accessories
- Drill holes for wall fixings are sealed with the supplied plastic plugs to maintain degree of protection
- Concealed and easily removable hinges allow the easy reversal of the door, as well as enabling 120° door opening
- Foamed-in polyurethane gasket and front rain gutter ensures high degree of protection
- IK10
- Suitable for use indoors
- Supplied with a double bar lock as standard



Mild Steel Wall Mounted Enclosure.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Number of doors | Pack Cont. |
|--------------|--------------|-------------|-------------|-----------|--------------------|------------|
| NSYCRN22150 | 200 | 200 | 150 | IP66 | 1 | 1 |
| NSYCRN23150 | 200 | 300 | 150 | IP66 | 1 | 1 |
| NSYCRN252150 | 250 | 200 | 150 | IP66 | 1 | 1 |
| NSYCRN325150 | 300 | 250 | 150 | IP66 | 1 | 1 |
| NSYCRN325200 | 300 | 250 | 200 | IP66 | 1 | 1 |
| NSYCRN33150 | 300 | 300 | 150 | IP66 | 1 | 1 |
| NSYCRN33200 | 300 | 300 | 200 | IP66 | 1 | 1 |
| NSYCRN34200 | 300 | 400 | 200 | IP66 | 1 | 1 |
| NSYCRN345150 | 300 | 450 | 150 | IP66 | 1 | 1 |
| NSYCRN43150 | 400 | 300 | 150 | IP66 | 1 | 1 |
| NSYCRN43200 | 400 | 300 | 200 | IP66 | 1 | 1 |
| NSYCRN44200 | 400 | 400 | 200 | IP66 | 1 | 1 |
| NSYCRN46250 | 400 | 600 | 250 | IP66 | 1 | 1 |
| NSYCRN46300 | 400 | 600 | 300 | IP66 | 1 | 1 |
| NSYCRN54150 | 500 | 400 | 150 | IP66 | 1 | 1 |
| NSYCRN54200 | 500 | 400 | 200 | IP66 | 1 | 1 |
| NSYCRN54250 | 500 | 400 | 250 | IP66 | 1 | 1 |
| NSYCRN55250 | 500 | 500 | 250 | IP66 | 1 | 1 |
| NSYCRN64150 | 600 | 400 | 150 | IP66 | 1 | 1 |
| NSYCRN64200 | 600 | 400 | 200 | IP66 | 1 | 1 |
| NSYCRN64250 | 600 | 400 | 250 | IP66 | 1 | 1 |
| NSYCRN65150 | 600 | 500 | 150 | IP66 | 1 | 1 |
| NSYCRN65200 | 600 | 500 | 200 | IP66 | 1 | 1 |
| NSYCRN65250 | 600 | 500 | 250 | IP66 | 1 | 1 |
| NSYCRN66200 | 600 | 600 | 200 | IP66 | 1 | 1 |
| NSYCRN66250 | 600 | 600 | 250 | IP66 | 1 | 1 |
| NSYCRN66300 | 600 | 600 | 300 | IP66 | 1 | 1 |
| NSYCRN68300 | 600 | 800 | 300 | IP66 | 1 | 1 |
| NSYCRN75200 | 700 | 500 | 200 | IP66 | 1 | 1 |
| NSYCRN75250 | 700 | 500 | 250 | IP66 | 1 | 1 |
| NSYCRN86200 | 800 | 600 | 200 | IP66 | 1 | 1 |



NSYCRN

Mild Steel Wall Mounted Enclosures

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Number of doors | Pack Cont. |
|-------------------------|------------------|-----------------|-----------------|------------------|------------------------|-------------------|
| NSYCRN86250 | 800 | 600 | 250 | IP66 | 1 | 1 |
| NSYCRN86300 | 800 | 600 | 300 | IP66 | 1 | 1 |
| NSYCRNG86400* | 800 | 600 | 400 | IP66 | 1 | 1 |
| NSYCRN88200 | 800 | 800 | 200 | IP66 | 1 | 1 |
| NSYCRN88300 | 800 | 800 | 300 | IP66 | 1 | 1 |
| NSYCRNG810300D* | 800 | 1000 | 300 | IP55 | 2 | 1 |
| NSYCRNG812300D* | 800 | 1200 | 300 | IP55 | 2 | 1 |
| NSYCRN106250 | 1000 | 600 | 250 | IP66 | 1 | 1 |
| NSYCRN106300 | 1000 | 600 | 300 | IP66 | 1 | 1 |
| NSYCRNG106400* | 1000 | 600 | 400 | IP66 | 1 | 1 |
| NSYCRN108250 | 1000 | 800 | 250 | IP66 | 1 | 1 |
| NSYCRN108300 | 1000 | 800 | 300 | IP66 | 1 | 1 |
| NSYCRNG108400* | 1000 | 800 | 400 | IP66 | 1 | 1 |
| NSYCRNG1010300D* | 1000 | 1000 | 300 | IP55 | 2 | 1 |
| NSYCRNG1012300D* | 1000 | 1200 | 300 | IP55 | 2 | 1 |
| NSYCRNG1012400D* | 1000 | 1200 | 400 | IP55 | 2 | 1 |
| NSYCRNG126300* | 1200 | 600 | 300 | IP66 | 1 | 1 |
| NSYCRNG126400* | 1200 | 600 | 400 | IP66 | 1 | 1 |
| NSYCRNG128300* | 1200 | 800 | 300 | IP66 | 1 | 1 |
| NSYCRNG128400* | 1200 | 800 | 400 | IP66 | 1 | 1 |
| NSYCRNG1210300D* | 1200 | 1000 | 300 | IP55 | 2 | 1 |
| NSYCRNG1210400D* | 1200 | 1000 | 400 | IP55 | 2 | 1 |
| NSYCRNG1212300D* | 1200 | 1200 | 300 | IP55 | 2 | 1 |
| NSYCRNG1212400D* | 1200 | 1200 | 400 | IP55 | 2 | 1 |
| NSYCRNG1410300D* | 1400 | 1000 | 300 | IP55 | 2 | 1 |



* NSYCRNG enclosures supplied with a 3 point locking system

**NSYCRN T****Mild Steel Wall Mounted Enclosures with Glazed Door**

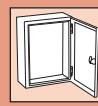
Steel enclosures with a transparent door. Both internally and externally protected with texturized polyester epoxy resin RAL7035 grey paint to IK08.

Features and Benefits

- Easily reversible door, as well as enabling 110° door opening
- IK08
- Tempered glass transparent door
- NSYCRNG enclosures supplied with a 3 point locking system
- Suitable for use indoors
- Supplied with a double bar lock as standard



| TYPE | Height mm | Width mm | Depth mm | IP Rating | Number of doors | Pack Cont. |
|------------------------|------------------|-----------------|-----------------|------------------|------------------------|-------------------|
| NSYCRN325150T | 300 | 250 | 150 | IP66 | 1 | 1 |
| NSYCRN325200T | 300 | 250 | 200 | IP66 | 1 | 1 |
| NSYCRN33150T | 300 | 300 | 150 | IP66 | 1 | 1 |
| NSYCRN33200T | 300 | 300 | 200 | IP66 | 1 | 1 |
| NSYCRN34200T | 300 | 400 | 200 | IP66 | 1 | 1 |
| NSYCRN43150T | 400 | 300 | 150 | IP66 | 1 | 1 |
| NSYCRN43200T | 400 | 300 | 200 | IP66 | 1 | 1 |
| NSYCRN44200T | 400 | 400 | 200 | IP66 | 1 | 1 |
| NSYCRN46250T | 400 | 600 | 250 | IP66 | 1 | 1 |
| NSYCRN46300T | 400 | 600 | 300 | IP66 | 1 | 1 |
| NSYCRN54150T | 500 | 400 | 150 | IP66 | 1 | 1 |
| NSYCRN54200T | 500 | 400 | 200 | IP66 | 1 | 1 |
| NSYCRN54250T | 500 | 400 | 250 | IP66 | 1 | 1 |
| NSYCRN55250T | 500 | 500 | 250 | IP66 | 1 | 1 |
| NSYCRN64150T | 600 | 400 | 150 | IP66 | 1 | 1 |
| NSYCRN64200T | 600 | 400 | 200 | IP66 | 1 | 1 |
| NSYCRN64250T | 600 | 400 | 250 | IP66 | 1 | 1 |
| NSYCRN65150T | 600 | 500 | 150 | IP66 | 1 | 1 |
| NSYCRN65200T | 600 | 500 | 200 | IP66 | 1 | 1 |
| NSYCRN65250T | 600 | 500 | 250 | IP66 | 1 | 1 |
| NSYCRN66200T | 600 | 600 | 200 | IP66 | 1 | 1 |
| NSYCRN66250T | 600 | 600 | 250 | IP66 | 1 | 1 |
| NSYCRN66300T | 600 | 600 | 300 | IP66 | 1 | 1 |
| NSYCRN68300T | 600 | 800 | 300 | IP66 | 1 | 1 |
| NSYCRN75200T | 700 | 500 | 200 | IP66 | 1 | 1 |
| NSYCRN75250T | 700 | 500 | 250 | IP66 | 1 | 1 |
| NSYCRN86200T | 800 | 600 | 200 | IP66 | 1 | 1 |
| NSYCRN86250T | 800 | 600 | 250 | IP66 | 1 | 1 |
| NSYCRN86300T | 800 | 600 | 300 | IP66 | 1 | 1 |
| NSYCRNG86400T | 800 | 600 | 400 | IP66 | 1 | 1 |
| NSYCRN88200T | 800 | 800 | 200 | IP66 | 1 | 1 |
| NSYCRN88300T | 800 | 800 | 300 | IP66 | 1 | 1 |
| NSYCRN106250T | 1000 | 600 | 250 | IP66 | 1 | 1 |
| NSYCRN106300T | 1000 | 600 | 300 | IP66 | 1 | 1 |
| NSYCRNG106400T | 1000 | 600 | 400 | IP66 | 1 | 1 |
| NSYCRN108250T | 1000 | 800 | 250 | IP66 | 1 | 1 |
| NSYCRN108300T | 1000 | 800 | 300 | IP66 | 1 | 1 |
| NSYCRNG108400T | 1000 | 800 | 400 | IP66 | 1 | 1 |
| NSYCRNG1010300T | 1000 | 1000 | 300 | IP55 | 2 | 1 |
| NSYCRNG126300T | 1200 | 600 | 300 | IP66 | 1 | 1 |
| NSYCRNG126400T | 1200 | 600 | 400 | IP66 | 1 | 1 |
| NSYCRNG128300T | 1200 | 800 | 300 | IP66 | 1 | 1 |
| NSYCRNG128400T | 1200 | 800 | 400 | IP66 | 1 | 1 |

**NSYMM**

**Galvanised Steel Mounting Plates to suit
NSYCRN/NSYPLM/NSYS3X Enclosures**

Galvanised steel plates with cut-outs for ease of installation.

Features and Benefits

- Suitable for use with a range of enclosures.
- Other materials are available on request.



Galvanised Steel Mounting Plate

| TYPE | Height of Enclosure mm | Width of Enclosure mm | Height of plate mm | Width of plate mm | Pack Cont. |
|------------------|-----------------------------------|----------------------------------|-------------------------------|------------------------------|-------------------|
| NSYMM22 | 200 | 200 | 150 | 150 | 1 |
| NSYMM23 | 200 | 300 | 150 | 250 | 1 |
| NSYMM2520 | 250 | 200 | 200 | 150 | 1 |
| NSYMM32 | 300 | 200 | 250 | 150 | 1 |
| NSYMM3025 | 300 | 250 | 250 | 200 | 1 |
| NSYMM33 | 300 | 300 | 250 | 250 | 1 |
| NSYMM43 | 300 | 400 | 250 | 350 | 1 |
| NSYMM3045 | 300 | 450 | 250 | 400 | 1 |
| NSYMM44 | 400 | 400 | 350 | 350 | 1 |
| NSYMM64 | 400 | 600 | 350 | 550 | 1 |
| NSYMM54 | 500 | 400 | 450 | 350 | 1 |
| NSYMM55 | 500 | 500 | 450 | 450 | 1 |
| NSYMM65 | 600 | 500 | 550 | 450 | 1 |
| NSYMM66 | 600 | 600 | 550 | 550 | 1 |
| NSYMM75 | 700 | 500 | 650 | 450 | 1 |
| NSYMM76 | 700 | 600 | 650 | 550 | 1 |
| NSYMM86 | 800 | 600 | 750 | 550 | 1 |
| NSYMM88 | 800 | 800 | 750 | 750 | 1 |
| NSYMM106 | 1000 | 600 | 950 | 550 | 1 |
| NSYMM108 | 1000 | 800 | 950 | 750 | 1 |
| NSYMM1010 | 1000 | 1000 | 950 | 950 | 1 |
| NSYMM126 | 1200 | 600 | 1150 | 550 | 1 |
| NSYMM128 | 1200 | 800 | 1150 | 750 | 1 |
| NSYMM1210 | 1200 | 1000 | 1150 | 950 | 1 |
| NSYMM1212 | 1200 | 1200 | 1150 | 1150 | 1 |
| NSYMM1410 | 1400 | 1000 | 1350 | 950 | 1 |

**NSYCAG****Louvre Plates**

To be fitted in the surface of the enclosure for internal ventilation. Coated in texturized RAL7035 grey paint.

*Louvre Plate.*

| TYPE | Height mm | Width mm | Pack Cont. |
|-----------------------|----------------------|---------------------|-------------------|
| NSYCAG110X46M | 144 | 62 | 1 |
| NSYCAG180X62M | 208 | 90 | 1 |
| NSYCAG216X62M | 244 | 90 | 1 |
| NSYCAG317X91M | 345 | 118 | 1 |
| NSYCAG317X120M | 345 | 148 | 1 |
| NSYCAG417X120M | 445 | 148 | 1 |

EX Spacer Studs**Hexagonal Spacer Studs**

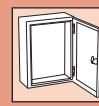
Hexagonal spacers for raising mounting plates and other equipment. They can be linked together to achieve variable heights with gradual elevation.

*Spacer Studs.*

| TYPE | Height mm | Width mm | Pack Cont. |
|---------------|----------------------|---------------------|-------------------|
| EX206 | 20 | 6 | 1 |
| EX306 | 30 | 6 | 1 |
| EX406 | 40 | 6 | 1 |
| EX408 | 40 | 8 | 1 |
| EX506 | 50 | 6 | 1 |
| EX508 | 50 | 8 | 1 |
| EX1006 | 100 | 6 | 1 |



Other sizes available on request

**NSYDPA****Document Pocket**

Polystyrene document wallets in A5, A4 and A3 size that are mounted with adhesive tape.



Document Pocket.

| TYPE | Height mm | Width mm | Depth mm | Document format | Colour | PackCont. |
|----------|-----------|----------|----------|-----------------|---------|-----------|
| NSYDPA5 | 174 | 188 | 22 | A5 | RAL7035 | 1 |
| NSYDPA4 | 230 | 248 | 22 | A4 | RAL9001 | 1 |
| NSYDPA44 | 234 | 278 | 40 | A4 | RAL7035 | 1 |
| NSYDPA3 | 258 | 476 | 35 | A3 | RAL7035 | 1 |

Touch Up Paint**RAL7035 Touch Up Paint**

A fast drying, long lasting touch up paint in RAL7035 designed to cover cosmetic damage to the surface of the enclosure.



Touch Up Paint.

| TYPE | Size | Colour | Pack Cont. |
|------------|-------|---------|------------|
| 6180400016 | 400ml | RAL7035 | 1 |

**Locks****Locks and keys to suit NSYCRN Enclosures**

A range of locks to suit the NSYCRN range of enclosures.



NSYCL40CRN Key Lock.

| TYPE | Description | Pack Cont. |
|--------------------|---|-------------------|
| NSYCL405CRN | Full key operated lock with 405 key for NSYCRN enclosures | 1 |
| NSYTEL405ML | Full key operated lock with 405 key for NSYCRNG enclosures | 1 |
| NSYTL405SML | Full key operated handle lock with 405 key for NSYCRNG enclosures | 1 |
| NSYCDB3 | Replacement double bar lock with NSYCRN enclosures | 1 |
| NSYDBP | Replacement key for double bar lock (wing key) for NSYCRN and NSYPLM enclosures | 1 |
| NSYKPLM | Stainless steel padlock bracket for NSYCRN, NSYPLM and NSY53X enclosures | 1 |
| NSYCBCCRN | Padlock system for NSYCRN enclosures | 1 |
| NSYLDB5 | Key for double bar lock for NSYCRN, NSYCRNG, NSYPLM and NSYPLA enclosures | 1 |



Other keys available on request

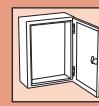
NSYSDCR**Depth Adjustable Supports to suit NSYCRN/NSYS3X Enclosures**

For 200, 250, 300 and 400mm depth enclosures. The different positions allow the adjusting of mounting plates and accessories every 12.5mm.



Depth Adjustable Supports.

| TYPE | Enclosure Depth mm | Pack Cont. |
|-------------------|-------------------------------|-------------------|
| NSYSDCR200 | 200 | Set of 4 |
| NSYSDCR250 | 250 | Set of 4 |
| NSYSDCR300 | 300 | Set of 4 |
| NSYSDCR400 | 400 | Set of 4 |

**NSYPPFCR****Wall fixing kit to suit NSYCRN enclosures**

Manufactured in galvanised steel. Fitted from the outside. Can be mounted vertically or horizontally.

*Wall Fixing Kit.*

| TYPE | Pack Cont. |
|-----------------|-------------------|
| NSYPPFCR | Set of 4 |

NSYPIN**Internal Door to suit NSYCRN/NSYS3X Enclosures**

Internal doors to attach directly to the enclosure or to the adjustable NSYSDCR supports. Finished in texturized polyester epoxy paint in RAL7035.

*Internal Door.*

| TYPE | Height mm | Width mm | Pack Cont. |
|------------------|----------------------|---------------------|-------------------|
| NSYPIN43 | 400 | 300 | 1 |
| NSYPIN54 | 500 | 400 | 1 |
| NSYPIN64 | 600 | 400 | 1 |
| NSYPIN75 | 700 | 500 | 1 |
| NSYPIN86 | 800 | 600 | 1 |
| NSYPIN106 | 1000 | 600 | 1 |
| NSYPIN108 | 1000 | 800 | 1 |
| NSYPIN126 | 1200 | 600 | 1 |
| NSYPIN128 | 1200 | 800 | 1 |



HT

Mild Steel Wall Mounted Enclosures complete with Back Plate

Steel enclosures made from a continuous length of sheet steel. Both internally and externally protected with texturized polyester epoxy resin RAL7035 grey paint.

Features and Benefits

- Easily reversible door, as well as enabling 110° door opening
- Watertight gasket to guarantee the degree of protection
- Customised enclosures can be produced to accommodate specific dimensions, RAL colour requirements, and cable entries or cut outs (moq would apply)
- IK10
- Suitable for use indoors



Wall Mounted Enclosure.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Number of doors | Pack Cont. |
|------------|-----------|----------|----------|-----------|-----------------|------------|
| HT252015 | 250 | 200 | 150 | IP66 | 1 | 1 |
| HT302515 | 300 | 250 | 150 | IP66 | 1 | 1 |
| HT302520 | 300 | 250 | 200 | IP66 | 1 | 1 |
| HT303015 | 300 | 300 | 150 | IP66 | 1 | 1 |
| HT303020 | 300 | 300 | 200 | IP66 | 1 | 1 |
| HT403015 | 400 | 300 | 150 | IP66 | 1 | 1 |
| HT403020 | 400 | 300 | 200 | IP66 | 1 | 1 |
| HT404020 | 400 | 400 | 200 | IP66 | 1 | 1 |
| HT504015 | 500 | 400 | 150 | IP66 | 1 | 1 |
| HT504020 | 500 | 400 | 200 | IP66 | 1 | 1 |
| HT504025 | 500 | 400 | 250 | IP66 | 1 | 1 |
| HT505025 | 500 | 500 | 250 | IP66 | 1 | 1 |
| HT604015 | 600 | 400 | 150 | IP66 | 1 | 1 |
| HT604020 | 600 | 400 | 200 | IP66 | 1 | 1 |
| HT605020 | 600 | 500 | 200 | IP66 | 1 | 1 |
| HT605025 | 600 | 500 | 250 | IP66 | 1 | 1 |
| HT606020 | 600 | 600 | 200 | IP66 | 1 | 1 |
| HT606025 | 600 | 600 | 250 | IP66 | 1 | 1 |
| HT606030 | 600 | 600 | 300 | IP66 | 1 | 1 |
| HT705020 | 700 | 500 | 200 | IP66 | 1 | 1 |
| HT705025 | 700 | 500 | 250 | IP66 | 1 | 1 |
| HT806020 | 800 | 600 | 200 | IP66 | 1 | 1 |
| HT806025 | 800 | 600 | 250 | IP66 | 1 | 1 |
| HT806030 | 800 | 600 | 300 | IP66 | 1 | 1 |
| HT808030 | 800 | 800 | 300 | IP66 | 1 | 1 |
| HT1008030 | 1000 | 800 | 300 | IP66 | 1 | 1 |
| HT1206030 | 1200 | 600 | 300 | IP66 | 1 | 1 |
| HT1010300 | 1000 | 1000 | 300 | IP66 | 1 | 1 |
| HT12080300 | 1200 | 800 | 300 | IP66 | 1 | 1 |
| HT12080400 | 1200 | 800 | 400 | IP66 | 1 | 1 |



Comes with mounting plate



Enclosures over 1000mm high supplied with a 3 point locking system

**HTT****Mild Steel Wall Mounted Enclosures with Glazed Door complete with Back Plate**

Steel enclosures with a transparent door. Both internally and externally protected with texturized polyester epoxy resin RAL7035 grey paint .

Features and Benefits

- Easily reversible door, as well as enabling 110° door opening
- Watertight gasket to guarantee the degree of protection
- 4mm thick tempered glass used for the transparent door
- IK09
- Suitable for use indoors
- Supplied with double bar lock as standard



Glazed Door Wall Mounted Enclosure.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Number of doors | Pack Cont. |
|------------------|-----------|----------|----------|-----------|-----------------|------------|
| HTT303015 | 300 | 300 | 150 | IP66 | 1 | 1 |
| HTT403015 | 400 | 300 | 150 | IP66 | 1 | 1 |
| HTT403020 | 400 | 300 | 200 | IP66 | 1 | 1 |
| HTT404020 | 400 | 400 | 200 | IP66 | 1 | 1 |
| HTT504015 | 500 | 400 | 150 | IP66 | 1 | 1 |
| HTT504020 | 500 | 400 | 200 | IP66 | 1 | 1 |
| HTT504025 | 500 | 400 | 250 | IP66 | 1 | 1 |
| HTT505025 | 500 | 500 | 250 | IP66 | 1 | 1 |
| HTT604015 | 600 | 400 | 150 | IP66 | 1 | 1 |
| HTT604020 | 600 | 400 | 200 | IP66 | 1 | 1 |
| HTT606020 | 600 | 600 | 200 | IP66 | 1 | 1 |
| HTT606025 | 600 | 600 | 250 | IP66 | 1 | 1 |
| HTT705020 | 700 | 500 | 200 | IP66 | 1 | 1 |
| HTT705025 | 700 | 500 | 250 | IP66 | 1 | 1 |
| HTT806020 | 800 | 600 | 200 | IP66 | 1 | 1 |
| HTT806025 | 800 | 600 | 250 | IP66 | 1 | 1 |
| HTT806030 | 800 | 600 | 300 | IP66 | 1 | 1 |



Comes with mounting plate

**Locks****Locks and Keys to suit HT Enclosures**

A range of locks and keys to suit the range of HT wall mounted enclosures.



Lock and Key HTFOK.

| TYPE | Description | Pack Cont. |
|---------------------|-------------------------------------|------------|
| HTFOK | Full key operated lock with 405 key | 1 |
| LOCK&KEY | Replacement double bar lock | 1 |
| HTKLK | Replacement key for double bar lock | 1 |

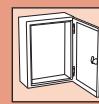
SP**Height Adjustment Elements to suit HT Enclosures**

For 150, 200, 250, 300 and 400mm depth enclosures. The different positions allow the position of mounting plates and accessories to be adjusted to suit the requirement.



Height adjustable elements.

| TYPE | Enclosure Depth mm | Pack Cont. |
|--------------|-----------------------|------------|
| SP150 | 150 | Set of 4 |
| SP200 | 200 | Set of 4 |
| SP250 | 250 | Set of 4 |
| SP300 | 300 | Set of 4 |
| SP400 | 400 | Set of 4 |



HTWBRK

Wall Fixing Kit to suit HT Enclosures

Manufactured in galvanised steel. Fitted from the outside.
Can be mounted vertically or horizontally.



Wall Fixing Kit.

| TYPE | Pack Cont. |
|--------|------------|
| HTWBRK | Set of 4 |

**NSYS3X****Grade 304 Stainless Steel Wall Mounted Enclosures**

Stainless steel enclosures suitable for corrosive environments and installations requiring strict hygiene. They are ideal for the chemical, petrochemical and food industries etc.

Features and Benefits

- AST brush finish, providing anti-corrosion properties
- Manufactured in AISI304 stainless steel as standard, but can be produced in AISI316 grade (resistant to concentrated acids and halides) on request
- Concealed and easily removable hinges allow the easy reversal of the door, as well as enabling 120° door opening
- IK10
- Supplied with a double bar lock as standard

*Stainless Steel Wall Mounted Enclosure.*

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Number of doors | Pack Cont. |
|---------------------|----------------------|---------------------|---------------------|------------------|----------------------------|-------------------|
| NSYS3X3215 | 300 | 200 | 150 | IP66 | 1 | 1 |
| NSYS3X302515 | 300 | 250 | 150 | IP66 | 1 | 1 |
| NSYS3X3315 | 300 | 300 | 150 | IP66 | 1 | 1 |
| NSYS3X4315 | 400 | 300 | 150 | IP66 | 1 | 1 |
| NSYS3X4320 | 400 | 300 | 200 | IP66 | 1 | 1 |
| NSYS3X4420 | 400 | 400 | 200 | IP66 | 1 | 1 |
| NSYS3X5420 | 500 | 400 | 200 | IP66 | 1 | 1 |
| NSYS3X6420 | 600 | 400 | 200 | IP66 | 1 | 1 |
| NSYS3X6625 | 600 | 600 | 250 | IP66 | 1 | 1 |
| NSYS3X7525 | 700 | 500 | 250 | IP66 | 1 | 1 |
| NSYS3X8625 | 800 | 600 | 250 | IP66 | 1 | 1 |
| NSYS3X8830 | 800 | 800 | 300 | IP66 | 1 | 1 |
| NSYS3X10830 | 1000 | 800 | 300 | IP66 | 1 | 1 |
| NSYS3X12830 | 1200 | 800 | 300 | IP66 | 1 | 1 |



316 grade stainless steel enclosures and accessories available on request



Locks

Locks and Keys to suit NSYS3X Enclosures

A range of locks to suit the NSYS3X stainless steel enclosures.



Lock to suit Stainless Steel Enclosures.

| TYPE | Description | Pack Cont. |
|--------------------|--|------------|
| NSYCL405CSX | Full key operated handle lock with 405 key | 1 |
| NSYSTDCSX | Chrome plated Zamak double bar lock | 1 |
| NSYSTDCHX | Stainless steel double bar lock | 1 |

NSYPFCX

Wall Fixing Kit to suit NSYS3X Enclosures

Manufactured in 304 grade stainless steel. Fitted from the outside. Can be mounted vertically or horizontally.



Wall Fixing Kit.

| TYPE | Description | Pack Cont. |
|----------------|-----------------|------------|
| NSYPFCX | Wall fixing kit | Set of 4 |



For other accessories, please see pages
112-115 of the Additions Catalogue



ATEX

ATEX Atmosphere Classification

ATEX is a term commonly used in potentially explosive atmospheres. An explosive atmosphere is defined as a mixture of flammable substances in the form of gas, vapour or dust which, if exposed to a source of ignition, can catch fire in the form of an explosion.

Since 2003 the European directive makes compulsory to use ATEX certified enclosures & equipment in potentially explosive areas. This is in line with the dangerous substances and explosive atmospheres regulations (DSEAR) 2002.



Labelling:

0163: Organisation ref number

 Atex symbol according to directive

II: Equipment for differing mining facilities and hazardous areas

2: Product category

GD: Gas and dust

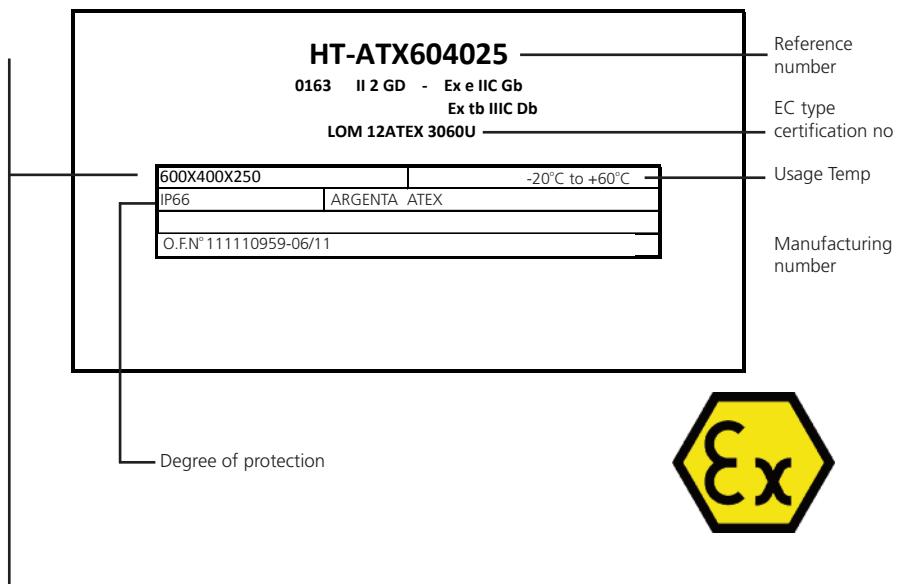
EX: Product is ATEX compliant

IIE: Gas type: Hydrogen and similar.

Gb/Db: Protection against dust and gas for non-electrical equipment 'Control of ignition sources'

Tb: Type of protection 'Enclosure'

IIC: Powder type 'Conducting'



| Application | Hazardous area category | Zones | Atmosphere |
|--|--|--|-------------|
| GROUP I MINING | M1 and M2 | Gas & Dust (G and D) Zone 1: Gas, vapour and mist Zone 20: Dusts | G D G |
| GROUP II INDUSTRIAL (NON-MINING) MINING | 1. Continuous for long periods 2. Occasional 3. Short periods only | Zone 1: Gas, vapour and mist Zone 2: Gas, vapour and mist Zone 22: Dusts | D D D |



HT ATEX

ATEX Mild Steel Wall Mounted Enclosures

Group 1 ATEX mild steel enclosures. Both internally and externally protected with texturized polyester epoxy resin RAL7035 grey paint.

Features and Benefits

- Designed for use in potentially hazardless atmospheres
- Comes complete with mounting plate and set of 4 wall brackets
- Continuously injected silicone gasket for installations where a high sealing degree is required
- Totally reversible cabinet
- Range of temperature under normal conditions: -25°C to +60°C
- Certified for use in gas Zones 1 and 2, and Zones 21 and 22 for dust
- IK10



Group 1 ATEX Enclosure.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Pack Cont. | Article-No. |
|-------------|-----------|----------|----------|-----------|------------|-------------|
| HTATX302015 | 300 | 200 | 150 | IP66 | 1 | 1 |
| HTATX303020 | 300 | 300 | 200 | IP66 | 1 | 1 |
| HTATX403020 | 400 | 300 | 200 | IP66 | 1 | 1 |
| HTATX404020 | 400 | 400 | 200 | IP66 | 1 | 1 |
| HTATX504020 | 500 | 400 | 200 | IP66 | 1 | 1 |



Other sizes available on request



Stainless steel and GRP versions also available



The ATEX certification is a certification of the component. The final unit must also have an ATEX certificate and a declaration of conformity

**NSY5M****Mild Steel Floor Standing Enclosures Complete with Mounting Plate**

Steel enclosures made as a single piece with rear welded panel. Both internally and externally protected with texturized polyester epoxy resin RAL7035 grey paint.

*Mild Steel Floor Standing Enclosures.***Features and Benefits**

- Easily reversible door with reinforcement frame, enabling 120° door opening
- 4 locking points system with handle and 5mm double bar insert
- IK08
- Suitable for use indoors

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Number of doors | Pack Cont. |
|-----------------------|-----------|----------|----------|-----------|-----------------|------------|
| NSY5M12830P | 1200 | 800 | 300 | IP55 | 1 | 1 |
| NSY5M1210302DP | 1200 | 1000 | 300 | IP55 | 2 | 1 |
| NSY5M1212402DP | 1200 | 1200 | 400 | IP55 | 2 | 1 |
| NSY5M14630P | 1400 | 600 | 300 | IP55 | 1 | 1 |
| NSY5M14640P | 1400 | 600 | 400 | IP55 | 1 | 1 |
| NSY5M14830P | 1400 | 800 | 300 | IP55 | 1 | 1 |
| NSY5M14840P | 1400 | 800 | 400 | IP55 | 1 | 1 |
| NSY5M1410402DP | 1400 | 1000 | 400 | IP55 | 2 | 1 |
| NSY5M1412402DP | 1400 | 1200 | 400 | IP55 | 2 | 1 |
| NSY5M16630P | 1600 | 600 | 300 | IP55 | 1 | 1 |
| NSY5M16640P | 1600 | 600 | 400 | IP55 | 1 | 1 |
| NSY5M16830P | 1600 | 800 | 300 | IP55 | 1 | 1 |
| NSY5M16840P | 1600 | 800 | 400 | IP55 | 1 | 1 |
| NSY5M1610302DP | 1600 | 1000 | 300 | IP55 | 2 | 1 |
| NSY5M1610402DP | 1600 | 1000 | 400 | IP55 | 2 | 1 |
| NSY5M1612302DP | 1600 | 1200 | 300 | IP55 | 2 | 1 |
| NSY5M1612402DP | 1600 | 1200 | 400 | IP55 | 2 | 1 |
| NSY5M18630P | 1800 | 600 | 300 | IP55 | 1 | 1 |
| NSY5M18640P | 1800 | 600 | 400 | IP55 | 1 | 1 |
| NSY5M18650P | 1800 | 600 | 500 | IP55 | 1 | 1 |
| NSY5M18830P | 1800 | 800 | 300 | IP55 | 1 | 1 |
| NSY5M18840P | 1800 | 800 | 400 | IP55 | 1 | 1 |
| NSY5M18850P | 1800 | 800 | 500 | IP55 | 1 | 1 |
| NSY5M18860P | 1800 | 800 | 600 | IP55 | 1 | 1 |
| NSY5M181040P | 1800 | 1000 | 400 | IP55 | 1 | 1 |
| NSY5M1810402DP | 1800 | 1000 | 400 | IP55 | 2 | 1 |



Comes with mounting plate



**NSYSM**

Mild Steel Floor Standing Enclosures complete with mounting plate

| TYPE | Height mm | Width mm | Depth mm | Number of doors | IP Rating | Pack Cont. |
|-----------------------|-----------|----------|----------|-----------------|-----------|------------|
| NSYSM1810502DP | 1800 | 1000 | 500 | 2 | IP55 | 1 |
| NSYSM1812402DP | 1800 | 1200 | 400 | 2 | IP55 | 1 |
| NSYSM1812502DP | 1800 | 1200 | 500 | 2 | IP55 | 1 |
| NSYSM1816402DP | 1800 | 1600 | 400 | 2 | IP55 | 1 |
| NSYSM1816502DP | 1800 | 1600 | 500 | 2 | IP55 | 1 |
| NSYSM20630P | 2000 | 600 | 300 | 1 | IP55 | 1 |
| NSYSM20640P | 2000 | 600 | 400 | 1 | IP55 | 1 |
| NSYSM20650P | 2000 | 600 | 500 | 1 | IP55 | 1 |
| NSYSM20830P | 2000 | 800 | 300 | 1 | IP55 | 1 |
| NSYSM20840P | 2000 | 800 | 400 | 1 | IP55 | 1 |
| NSYSM20850P | 2000 | 800 | 500 | 1 | IP55 | 1 |
| NSYSM20860P | 2000 | 800 | 600 | 1 | IP55 | 1 |
| NSYSM2010402DP | 2000 | 1000 | 400 | 2 | IP55 | 1 |
| NSYSM2010502DP | 2000 | 1000 | 500 | 2 | IP55 | 1 |
| NSYSM2012402DP | 2000 | 1200 | 400 | 2 | IP55 | 1 |
| NSYSM2012502DP | 2000 | 1200 | 500 | 2 | IP55 | 1 |
| NSYSM2012602DP | 2000 | 1200 | 600 | 2 | IP55 | 1 |
| NSYSM2016402DP | 2000 | 1600 | 400 | 2 | IP55 | 1 |
| NSYSM2016502DP | 2000 | 1600 | 500 | 2 | IP55 | 1 |
| NSYSM2016602DP | 2000 | 1600 | 600 | 2 | IP55 | 1 |

Locks

Locks suitable for use on NSYSM Enclosures

A range of locks suitable for use on NSYSM enclosures.
Replacements, double bar inserts and key inserts.



NSYSFHS1 Lock.

| TYPE | Description | Pack Cont. |
|-------------------|------------------------------------|------------|
| NSYSFHS1* | Replacement handle for NSYSM boxes | 1 |
| NSYINDB31 | 3mm double bar insert | 1 |
| NSYINDB51 | 5mm double bar insert | 1 |
| NSYIN405E1 | 405 key insert | 1 |



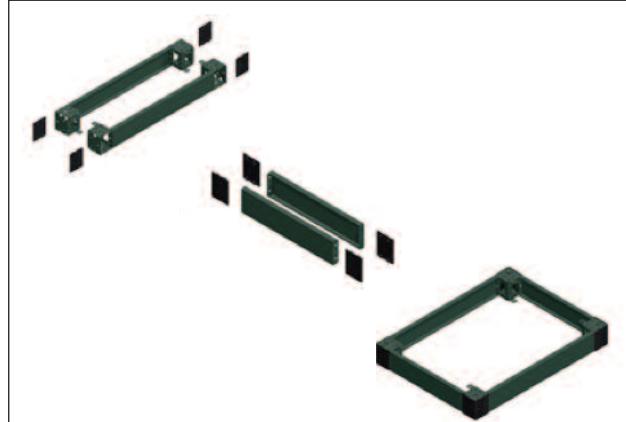
NSYSFHS1 is not supplied with an insert: both handle and insert are required for a full lock transformation

**NSYSP****100mm plinths suitable for use on NSYSM enclosures**

The complete plinth consists of two elements; the front and rear kit (determined by the length of the enclosure) and the side panels (determined by the depth of the enclosure) - to be ordered separately.

Features and Benefits

- Robust design
- Can be fixed from the inside or the outside of the enclosure depending on the application



Both front panels and side panels required to assemble complete plinth.

| TYPE | | Width of Enclosure mm | Depth of Enclosure mm | Height of Plinth mm | Pack Cont. |
|--------------------|-------------------|--------------------------|--------------------------|------------------------|------------|
| Front Panels | Side Panels | | | | |
| NSYSPF3100 | NSYSPS5100 | 300 | 500 | 100 | 2 |
| NSYSPF3100 | NSYSPS6100 | 300 | 600 | 100 | 2 |
| NSYSPF4100 | NSYSPS4100 | 400 | 400 | 100 | 2 |
| NSYSPF4100 | NSYSPS5100 | 400 | 500 | 100 | 2 |
| NSYSPF4100 | NSYSPS6100 | 400 | 600 | 100 | 2 |
| NSYSPF4100 | NSYSPS8100 | 400 | 800 | 100 | 2 |
| NSYSPF6100 | NSYSPS3100 | 600 | 300 | 100 | 2 |
| NSYSPF6100 | NSYSPS4100 | 600 | 400 | 100 | 2 |
| NSYSPF6100 | NSYSPS5100 | 600 | 500 | 100 | 2 |
| NSYSPF6100 | NSYSPS6100 | 600 | 600 | 100 | 2 |
| NSYSPF6100 | NSYSPS8100 | 600 | 800 | 100 | 2 |
| NSYSPF8100 | NSYSPS3100 | 800 | 300 | 100 | 2 |
| NSYSPF8100 | NSYSPS4100 | 800 | 400 | 100 | 2 |
| NSYSPF8100 | NSYSPS5100 | 800 | 500 | 100 | 2 |
| NSYSPF8100 | NSYSPS6100 | 800 | 600 | 100 | 2 |
| NSYSPF8100 | NSYSPS8100 | 800 | 800 | 100 | 2 |
| NSYSPF10100 | NSYSPS3100 | 1000 | 300 | 100 | 2 |
| NSYSPF10100 | NSYSPS4100 | 1000 | 400 | 100 | 2 |
| NSYSPF10100 | NSYSPS5100 | 1000 | 500 | 100 | 2 |
| NSYSPF10100 | NSYSPS6100 | 1000 | 600 | 100 | 2 |
| NSYSPF10100 | NSYSPS8100 | 1000 | 800 | 100 | 2 |
| NSYSPF12100 | NSYSPS3100 | 1200 | 300 | 100 | 2 |
| NSYSPF12100 | NSYSPS4100 | 1200 | 400 | 100 | 2 |
| NSYSPF12100 | NSYSPS5100 | 1200 | 500 | 100 | 2 |
| NSYSPF12100 | NSYSPS6100 | 1200 | 600 | 100 | 2 |
| NSYSPF12100 | NSYSPS8100 | 1200 | 800 | 100 | 2 |
| NSYSPF16100 | NSYSPS4100 | 1600 | 400 | 100 | 2 |
| NSYSPF16100 | NSYSPS5100 | 1600 | 500 | 100 | 2 |
| NSYSPF16100 | NSYSPS6100 | 1600 | 600 | 100 | 2 |



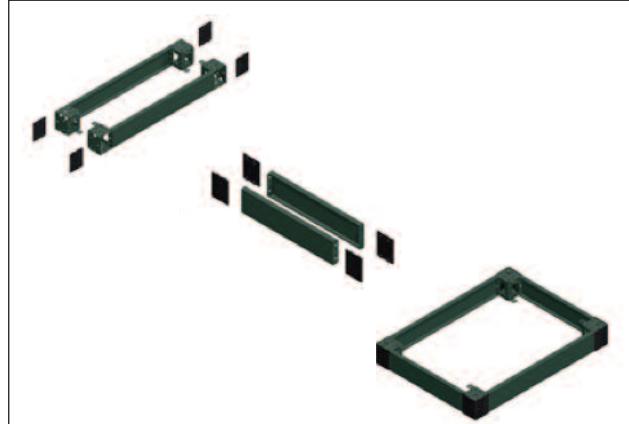
Please note that the front panels and side panels must be ordered separately

**NSYSP****200mm plinths suitable for use on NSYSM enclosures**

The complete plinth consists of two elements; the front and rear kit (determined by the length of the enclosure) and the side panels (determined by the depth of the enclosure) - to be ordered separately.

Features and Benefits

- Robust design
- Can be fixed from the inside or the outside of the enclosure depending on the application



Both front panels and side panels required to assemble complete plinth.

| TYPE | | Width of Enclosure mm | Depth of Enclosure mm | Height of Plinth mm | Pack Cont. |
|--------------------|-------------------|--------------------------|--------------------------|------------------------|------------|
| Front Panels | Side Panels | | | | |
| NSYSPF6200 | NSYSPS4200 | 600 | 400 | 200 | 2 |
| NSYSPF6200 | NSYSPS6200 | 600 | 600 | 200 | 2 |
| NSYSPF8200 | NSYSPS3200 | 800 | 300 | 200 | 2 |
| NSYSPF8200 | NSYSPS4200 | 800 | 400 | 200 | 2 |
| NSYSPF8200 | NSYSPS6200 | 800 | 600 | 200 | 2 |
| NSYSPF10200 | NSYSPS3200 | 1000 | 300 | 200 | 2 |
| NSYSPF12200 | NSYSPS4200 | 1200 | 400 | 200 | 2 |
| NSYSPF6200 | NSYSPS3200 | 600 | 300 | 200 | 2 |
| NSYSPF10200 | NSYSPS4200 | 1000 | 400 | 200 | 2 |
| NSYSPF6200 | NSYSPS8200 | 600 | 800 | 200 | 2 |
| NSYSPF8200 | NSYSPS8200 | 800 | 800 | 200 | 2 |
| NSYSPF12200 | NSYSPS3200 | 1200 | 300 | 200 | 2 |
| NSYSPF4200 | NSYSPS4200 | 400 | 400 | 200 | 2 |
| NSYSPF4200 | NSYSPS5200 | 400 | 500 | 200 | 2 |
| NSYSPF4200 | NSYSPS6200 | 400 | 600 | 200 | 2 |
| NSYSPF6200 | NSYSPS5200 | 600 | 500 | 200 | 2 |
| NSYSPF8200 | NSYSPS5200 | 800 | 500 | 200 | 2 |
| NSYSPF10200 | NSYSPS5200 | 1000 | 500 | 200 | 2 |
| NSYSPF10200 | NSYSPS6200 | 1000 | 600 | 200 | 2 |
| NSYSPF12200 | NSYSPS5200 | 1200 | 500 | 200 | 2 |
| NSYSPF12200 | NSYSPS6200 | 1200 | 600 | 200 | 2 |
| NSYSPF16200 | NSYSPS4200 | 1600 | 400 | 200 | 2 |
| NSYSPF16200 | NSYSPS5200 | 1600 | 500 | 200 | 2 |
| NSYSPF3200 | NSYSPS5200 | 300 | 500 | 200 | 2 |
| NSYSPF3200 | NSYSPS6200 | 300 | 600 | 200 | 2 |
| NSYSPF4200 | NSYSPS8200 | 400 | 800 | 200 | 2 |
| NSYSPF10200 | NSYSPS8200 | 1000 | 800 | 200 | 2 |
| NSYSPF12200 | NSYSPS8200 | 1200 | 800 | 200 | 2 |
| NSYSPF16200 | NSYSPS6200 | 1600 | 600 | 200 | 2 |



Please note that the front panels and side panels must be ordered separately



NSYSBM

Mild Steel Industrial Boxes

Mild steel enclosures with a plain lid, with a polyester powder finish in RAL7035. Ideal for use in a wide range of industrial machines and building functions.

Features and Benefits

- Direct wall-mounting (4 x Ø 10 mm holes with sealing plugs to maintain the IP rating) or with the help of fixing lugs installed from the outside (to be ordered separately, please see the specific accessory pages)
- Extension box (please see page 132) available to increase the range of sizes available
- Equipped with 4 or 6 half-turn thread screws (6 screws provided for boxes with a width greater than 400mm) to ensure maximum watertightness.
- IK10



Mild Steel Industrial Box.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | PackCont. |
|---------------------|--------------|-------------|-------------|-----------|-----------|
| NSYSBM15158 | 150 | 150 | 80 | IP66 | 1 |
| NSYSBM15208 | 150 | 200 | 80 | IP66 | 1 |
| NSYSBM15308 | 150 | 300 | 80 | IP66 | 1 |
| NSYSBM15408 | 150 | 400 | 80 | IP66 | 1 |
| NSYSBM20208 | 200 | 200 | 80 | IP66 | 1 |
| NSYSBM20308 | 200 | 300 | 80 | IP66 | 1 |
| NSYSBM20408 | 200 | 400 | 80 | IP66 | 1 |
| NSYSBM20508 | 200 | 500 | 80 | IP66 | 1 |
| NSYSBM20608 | 200 | 600 | 80 | IP66 | 1 |
| NSYSBM151512 | 150 | 150 | 120 | IP66 | 1 |
| NSYSBM152012 | 150 | 200 | 120 | IP66 | 1 |
| NSYSBM153012 | 150 | 300 | 120 | IP66 | 1 |
| NSYSBM154012 | 150 | 400 | 120 | IP66 | 1 |
| NSYSBM202012 | 200 | 200 | 120 | IP66 | 1 |
| NSYSBM203012 | 200 | 300 | 120 | IP66 | 1 |
| NSYSBM204012 | 200 | 400 | 120 | IP66 | 1 |
| NSYSBM205012 | 200 | 500 | 120 | IP66 | 1 |
| NSYSBM206012 | 200 | 600 | 120 | IP66 | 1 |
| NSYSBM208012 | 200 | 800 | 120 | IP66 | 1 |
| NSYSBM303012 | 300 | 300 | 120 | IP66 | 1 |
| NSYSBM304012 | 300 | 400 | 120 | IP66 | 1 |
| NSYSBM305012 | 300 | 500 | 120 | IP66 | 1 |
| NSYSBM306012 | 300 | 600 | 120 | IP66 | 1 |
| NSYSBM308012 | 300 | 800 | 120 | IP66 | 1 |
| NSYSBM404012 | 400 | 400 | 120 | IP66 | 1 |
| NSYSBM405012 | 400 | 500 | 120 | IP66 | 1 |
| NSYSBM406012 | 400 | 600 | 120 | IP66 | 1 |
| NSYSBM408012 | 400 | 800 | 120 | IP66 | 1 |



NSYSBMC

Mild Steel Industrial Boxes with FL21 Cable Entry

Mild steel enclosures with a plain lid and two or more FL21 cable gland plates, with a polyester powder finish in RAL7035.

Features and Benefits

- Two or more FL21 cable gland plates for easy drilling and to guarantee the maximum access area, supplied with the enclosure.
- Equipped with 4 or 6 half-turn thread screws (6 screws provided for boxes with a width greater than 400mm) to ensure maximum watertightness.
- IK10



Mild Steel Industrial Box with cable entry plain door.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | PackCont. |
|---------------|-----------|----------|----------|-----------|-----------|
| NSYSBMC153012 | 150 | 300 | 120 | IP55 | 1 |
| NSYSBMC154012 | 150 | 400 | 120 | IP55 | 1 |
| NSYSBMC203012 | 200 | 300 | 120 | IP55 | 1 |
| NSYSBMC204012 | 200 | 400 | 120 | IP55 | 1 |
| NSYSBMC206012 | 200 | 600 | 120 | IP55 | 1 |
| NSYSBMC208012 | 200 | 800 | 120 | IP55 | 1 |
| NSYSBMC303012 | 300 | 300 | 120 | IP55 | 1 |
| NSYSBMC304012 | 300 | 400 | 120 | IP55 | 1 |
| NSYSBMC306012 | 300 | 600 | 120 | IP55 | 1 |
| NSYSBMC308012 | 300 | 800 | 120 | IP55 | 1 |
| NSYSBMC404012 | 400 | 400 | 120 | IP55 | 1 |
| NSYSBMC406012 | 400 | 600 | 120 | IP55 | 1 |
| NSYSBMC408012 | 400 | 800 | 120 | IP55 | 1 |

NSYSBMB

Mild Steel Industrial Boxes with FL21 Cable Entry and Glazed Door

Mild steel enclosures supplied with FL21 cable gland plates, a hinged cover with a transparent polycarbonate window and a DIN rail. Polyester powder finish in RAL7035.



Mild Steel Industrial Box with a glazed door.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | PackCont. |
|---------------|-----------|----------|----------|-----------|-----------|
| NSYSBMB203012 | 200 | 300 | 120 | IP55 | 1 |
| NSYSBMB204012 | 200 | 400 | 120 | IP55 | 1 |
| NSYSBMB206012 | 200 | 600 | 120 | IP55 | 1 |
| NSYSBMB208012 | 200 | 800 | 120 | IP55 | 1 |



NSYMM

Mounting Plates to suit NSYSBM, NSYSBMC and NSYSBMB Enclosures

Galvanised steel plates with cut-outs for ease of installation.

- Other materials are available on request



Galvanised Steel Mounting Plate.

| TYPE | Height mm | Width mm | Pack Cont. |
|-----------|--------------|-------------|------------|
| NSYMM11SB | 150 | 150 | 1 |
| NSYMM12SB | 150 | 200 | 1 |
| NSYMM13SB | 150 | 300 | 1 |
| NSYMM14SB | 150 | 400 | 1 |
| NSYMM22SB | 200 | 200 | 1 |
| NSYMM23SB | 200 | 300 | 1 |
| NSYMM24SB | 200 | 400 | 1 |
| NSYMM25SB | 200 | 500 | 1 |
| NSYMM26SB | 200 | 600 | 1 |
| NSYMM28SB | 200 | 800 | 1 |
| NSYMM33SB | 300 | 300 | 1 |
| NSYMM34SB | 300 | 400 | 1 |
| NSYMM35SB | 300 | 500 | 1 |
| NSYMM36SB | 300 | 600 | 1 |
| NSYMM38SB | 300 | 800 | 1 |
| NSYMM44SB | 400 | 400 | 1 |
| NSYMM45SB | 400 | 500 | 1 |
| NSYMM46SB | 400 | 600 | 1 |
| NSYMM48SB | 400 | 800 | 1 |



Other materials are available on request



NSYAES

Mild Steel Extension Box for use with NSYSBM and NSYSBMC Enclosures

Extension box that fits onto the corresponding box of the same height and width.

Features and Benefits

- Improved ergonomics and accessibility inside the box
- Increases the interior depth of the box by 80mm
- Maintains IP66 rating (if one extension box is used)



Extension Box.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Pack Cont. |
|-------------|--------------|-------------|-------------|-----------|------------|
| NSYAES228SB | 200 | 200 | 80 | IP66 | 1 |
| NSYAES238SB | 200 | 300 | 80 | IP66 | 1 |
| NSYAES248SB | 200 | 400 | 80 | IP66 | 1 |
| NSYAES258SB | 200 | 500 | 80 | IP66 | 1 |
| NSYAES268SB | 200 | 600 | 80 | IP66 | 1 |
| NSYAES338SB | 300 | 300 | 80 | IP66 | 1 |
| NSYAES348SB | 300 | 400 | 80 | IP66 | 1 |
| NSYAES358SB | 300 | 500 | 80 | IP66 | 1 |
| NSYAES368SB | 300 | 600 | 80 | IP66 | 1 |

NSYAEU

Coupling kit suitable for use with NSYSBMB and NSYSBMC Enclosures

Kit to enable NSYSBMB and NSYSBMC boxes to be coupled together in any combination through the FL21 cable entry openings.

Supplied as one sealing gasket and necessary fixing elements.



Coupling Kit.

| TYPE | IP Rating | Pack Cont. |
|-------------|-----------|------------|
| NSYAEUBU148 | IP55 | 1 |



NSYAEDHSB

Hinges suitable for use with NSYSBM and NSYSBMC Enclosures

The hinges allow the cover to open to more than 180°.

Features and Benefits

- Can be used in conjunction with all covers in the NSYSBM range
- A specific mark on the body indicates where the hole should be drilled
- 3 hinges are required for boxes with a width greater than 500mm



Hinges.

| TYPE | Description | Pack Cont. |
|-----------|-------------|------------|
| NSYAEDHSB | Hinges | 6 |

NSYAEFDFSB

Wall Fixing Lugs suitable for use with NSYSBM / NSYSBMC and NSYSBMB enclosures

Wall fixing lugs to be mounted directly onto the rear of the box either in a horizontal or vertical position.

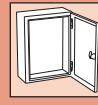
Features and Benefits

- Can be used in conjunction with all covers in the NSYSBM range
- A specific mark on the body indicates where the hole should be drilled



Wall Fixing Lugs.

| TYPE | Description | Pack Cont. |
|------------|------------------|------------|
| NSYAEFDFSB | Wall Fixing Lugs | Set of 4 |



NSYD

Mild Steel Junction Box

Mild steel junction box, both internally and externally protected with texturized polyester epoxy resin RAL7035 grey paint.

Features and Benefits

- PVC sealing gasket
- Back ready for threaded drill holes
- Enclosures that are 155x105 and larger have four M4 threaded holes fitted with removable plugs for the direct fixing of the mounting plate



Mild Steel Junction Box.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Pack Cont. |
|-------------------|-----------|----------|----------|-----------|------------|
| NSYDBN88 | 85 | 85 | 49 | IP55 | 1 |
| NSYDBN1010 | 105 | 105 | 49 | IP55 | 1 |
| NSYDBN1510 | 155 | 105 | 61 | IP55 | 1 |
| NSYDBN2015 | 206 | 156 | 83 | IP55 | 1 |
| NSYDBN2520 | 256 | 206 | 93 | IP55 | 1 |
| NSYDBN3025 | 307 | 257 | 116 | IP55 | 1 |
| NSYDBN3530 | 357 | 307 | 136 | IP55 | 1 |
| NSYDAN1510 | 155 | 105 | 88 | IP55 | 1 |
| NSYDAN2015 | 206 | 156 | 122 | IP55 | 1 |
| NSYDAN2520 | 256 | 206 | 140 | IP55 | 1 |
| NSYDAN3025 | 307 | 257 | 174 | IP55 | 1 |
| NSYDAN3530 | 357 | 307 | 210 | IP55 | 1 |



Hinged version available on request

NSYPMD

Mounting plates to suit NSYDBN and NSYDAN Enclosures

Features and Benefits

- Plain mounting plates with cut-outs for ease of installation



Mounting Plate.

| TYPE | Height mm | Width mm | Pack Cont. |
|-------------------|-----------|----------|------------|
| NSYPMD1510 | 155 | 105 | 1 |
| NSYPMD2015 | 206 | 156 | 1 |
| NSYPMD2520 | 256 | 206 | 1 |
| NSYPMD3025 | 307 | 257 | 1 |
| NSYPMD3530 | 357 | 307 | 1 |

**BRES****GRP Wall Mounted Enclosures**

A range of heat moulded enclosures made from reinforced polyester with 30% glass fibre in RAL7035.

Features and Benefits

- Self extinguishing material as per ASTM D635
- Resistant against rusting and corrosion by chemical or atmospheric agents
- Door hinges allow a 180° opening
- Plinths and other accessories available on request
- IK10
- Maximum working temperature ranges from -30°C to +120°C

*BRES Enclosure.*

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Pack Cont. |
|----------------|----------------------|---------------------|---------------------|------------------|-------------------|
| BRES325 | 300 | 250 | 140 | IP66 | 1 |
| BRES43 | 400 | 300 | 200 | IP66 | 1 |
| BRES44 | 400 | 400 | 200 | IP66 | 1 |
| BRES54 | 500 | 400 | 200 | IP66 | 1 |
| BRES64 | 600 | 400 | 230 | IP66 | 1 |
| BRES65 | 600 | 500 | 230 | IP66 | 1 |
| BRES83 | 800 | 300 | 230 | IP66 | 1 |
| BRES86 | 800 | 600 | 300 | IP66 | 1 |

BRES P**GRP Wall Mounted Enclosures with Glazed Door**

A range of heat moulded enclosures with a glazed door. Made from reinforced polyester with 30% glass fibre in RAL7035.

Features and Benefits

- Self extinguishing material as per ASTM D635
- Resistant against rusting and corrosion by chemical or atmospheric agents
- Door hinges allow a 180° opening
- IK10
- Maximum working temperature ranges from -30°C to +120°C

*BRES Enclosure with Glazed Door.*

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Pack Cont. |
|-----------------|----------------------|---------------------|---------------------|------------------|-------------------|
| BRES325P | 300 | 250 | 140 | IP66 | 1 |
| BRES43P | 400 | 300 | 200 | IP66 | 1 |
| BRES44P | 400 | 400 | 200 | IP66 | 1 |
| BRES54P | 500 | 400 | 200 | IP66 | 1 |
| BRES64P | 600 | 400 | 230 | IP66 | 1 |
| BRES65P | 600 | 500 | 230 | IP66 | 1 |
| BRES83P | 800 | 300 | 230 | IP66 | 1 |
| BRES86P | 800 | 600 | 300 | IP66 | 1 |

**BRES 3L****GRP Wall Mounted Enclosures with 3-point Locking system**

A range of heat moulded enclosures made from reinforced polyester with 30% glass fibre in RAL7035

Features and Benefits

- Self extinguishing material as per ASTM D635
- Resistant against rusting and corrosion by chemical or atmospheric agents.
- Door hinges allow a 180° opening
- 3-point locking system offers greater security and the facility to use a padlock to secure the door



BRES Enclosure with 3-point Locking System.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Pack Cont. |
|-----------------|--------------|-------------|-------------|-----------|------------|
| BRES433L | 400 | 300 | 200 | IP66 | 1 |
| BRES443L | 400 | 400 | 200 | IP66 | 1 |
| BRES543L | 500 | 400 | 200 | IP66 | 1 |
| BRES643L | 600 | 400 | 230 | IP66 | 1 |
| BRES653L | 600 | 500 | 230 | IP66 | 1 |
| BRES833L | 800 | 300 | 230 | IP66 | 1 |
| BRES863L | 800 | 600 | 300 | IP66 | 1 |



Plinths and other accessories available on request

PBM**Metal Mounting Plate to suit BRES Enclosures**

A range of metal plates for use with BRES range of enclosures.



Metal Mounting Plate.

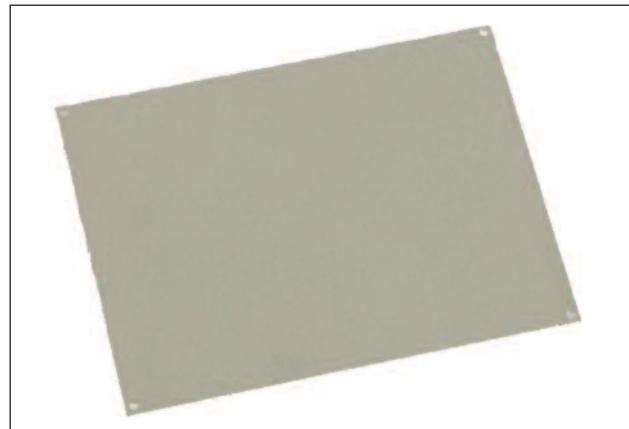
| TYPE | Height mm | Width mm | Pack Cont. |
|---------------|--------------|-------------|------------|
| PBM325 | 300 | 250 | 1 |
| PBM43 | 400 | 300 | 1 |
| PBM44 | 400 | 400 | 1 |
| PBM54 | 500 | 400 | 1 |
| PBM64 | 600 | 400 | 1 |
| PBM65 | 600 | 500 | 1 |
| PBM83 | 800 | 300 | 1 |
| PBM86 | 800 | 600 | 1 |



PBP

Polyester Mounting plate to suit BRES Enclosures

A range of polyester mounting plates suitable for use with BRES range of enclosures.



Polyester Mounting Plate.

| TYPE | Height mm | Width mm | Pack Cont. |
|--------|--------------|-------------|------------|
| PBP325 | 300 | 250 | 1 |
| PBP43 | 400 | 300 | 1 |
| PBP44 | 400 | 400 | 1 |
| PBP54 | 500 | 400 | 1 |
| PBP64 | 600 | 400 | 1 |
| PBP65 | 600 | 500 | 1 |
| PBP83 | 800 | 300 | 1 |
| PBP86 | 800 | 600 | 1 |

SDP

Adjustable Bracket to suit BRES Enclosures

A set of 4 wall fixing brackets to suit the BRES range of enclosures.



Adjustable Bracket.

| TYPE | Enclosure Depth mm | Pack Cont. |
|--------|-----------------------|------------|
| SDP200 | 200 | 4 |
| SDP230 | 230 | 4 |
| SDP300 | 300 | 4 |

**OFM****Wall Mounting Kit to suit BRES Enclosures**

A set of 4 wall fixing brackets to suit the BRES range of enclosures.

Features and Benefits

- Can be fitted vertically or horizontally



Wall Mounting Kit.

| TYPE | Description | Pack Cont. |
|-------|-------------------|------------|
| OFM14 | Wall Mounting Kit | Set of 4 |

Locks**Key Lock to suit BRES Enclosures**

Locks and accessories to suit the BRES range of enclosures.



Key Lock.

| TYPE | Description | Pack Cont. |
|-----------|--------------------------------|------------|
| CML12 | 405 type key lock | 1 |
| CBC13INOX | Stainless steel padlock device | 1 |
| CDB10 | Replacement double bar lock | 1 |



NSYPLMG

GRP Wall Mounted Enclosures

A range of wall mounted enclosures made from polyester reinforced with fiberglass, moulded by hot compression in RAL 7035 grey.

Features and Benefits

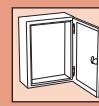
- Door hinges allow a 180°C opening
- NSYPLM108G supplied with a 4 point locking mechanism
- Self extinguishing material
- Resistant against rusting and corrosion by chemical or atmospheric agents
- Working temperature from -50°C to +150°C
- For indoor or outdoor use
- IK10



GRP Wall Mounted Enclosures.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Pack Cont. |
|--------------------|--------------|-------------|-------------|-----------|------------|
| NSYPLM32G | 310 | 215 | 160 | IP66 | 1 |
| NSYPLM3025G | 308 | 255 | 160 | IP66 | 1 |
| NSYPLM43G | 430 | 330 | 200 | IP66 | 1 |
| NSYPLM54G | 530 | 430 | 200 | IP66 | 1 |
| NSYPLM64G | 647 | 436 | 250 | IP66 | 1 |
| NSYPLM75G | 747 | 536 | 300 | IP66 | 1 |
| NSYPLM86G | 847 | 636 | 300 | IP66 | 1 |
| NSYPLM108G | 1056 | 852 | 350 | IP66 | 1 |

*NSYPLM32G made from ABS/PC



NSYPLM T

GRP Wall Mounted Enclosures with Glazed Door

Wall mounting enclosures made from GRP, moulded by hot compression in RAL 7035 grey with a glazed door.

Features and Benefits

- Door hinges allow a 180° opening
- Self extinguishing material
- Resistant against rusting and corrosion by chemical or atmospheric agents.
- Maximum working temperature ranges from -50°C to +150°C
- For indoor or outdoor use
- IK10
- NSYPLM108TG supplied with a 4 point locking system



GRP Glazed Door Enclosure.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Pack Cont. |
|---------------------|----------------------|---------------------|---------------------|------------------|-------------------|
| NSYPLM32TG | 310 | 215 | 160 | IP66 | 1 |
| NSYPLM3025TG | 308 | 255 | 160 | IP66 | 1 |
| NSYPLM43TG | 430 | 330 | 200 | IP66 | 1 |
| NSYPLM54TG | 530 | 430 | 200 | IP66 | 1 |
| NSYPLM64TG | 647 | 436 | 250 | IP66 | 1 |
| NSYPLM75TG | 747 | 536 | 300 | IP66 | 1 |
| NSYPLM86TG | 847 | 636 | 300 | IP66 | 1 |
| NSYPLM108TG | 1056 | 852 | 350 | IP66 | 1 |

*NSYPLM32G made from ABS/PC



Locks

Locks to suit NSYPLMG Enclosures

Locks and accessories to suit the NSYPLM range of enclosures.



NSYCDBPLM Lock.

| TYPE | Description | Pack Cont. |
|-------------|-------------------------------------|------------|
| NSYTL405PLM | Full key operated lock with 405 key | 1 |
| NSYCDBPLM | Replacement double bar lock | 1 |
| NSYKPLM | Stainless steel padlock bracket | 1 |

NSYPFPLM

Wall Fixing Kit to suit NSYPLM Enclosures

Wall fixing kit which is manufactured in galvanised steel .



Wall Fixing Kit.

| TYPE | To fit Enclosures | Pack Cont. |
|-------------|-------------------------|------------|
| NSYPFPLM32G | NSYPLM32 | Set of 4 |
| NSYPFPLMG | NSYPLM3025 to NSYPLM108 | Set of 4 |



For other accessories please see pages
112-115 of the Additions Catalogue

**NSYPLAG****GRP Floor Standing Enclosures**

A range of floor standing enclosures made from polyester reinforced with fiberglass, moulded by hot compression in RAL 7035 grey.

Features and Benefits

- Door hinges allow a 120° opening
- Self extinguishing material
- Resistant against rusting and corrosion by chemical or atmospheric agents.
- Maximum working temperature ranges from -50°C to +150°C
- For indoor or outdoor use
- IK10
- Enclosures over 1000m height are supplied with a 4 point locking system



Floor Standing Enclosure.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Number of Doors | Pack Cont. |
|---------------------|----------------------|---------------------|---------------------|------------------|----------------------------|-------------------|
| NSYPLA553G | 500 | 500 | 320 | IP65 | 1 | 1 |
| NSYPLA554G | 500 | 500 | 420 | IP65 | 1 | 1 |
| NSYPLA573G | 500 | 750 | 320 | IP65 | 1 | 1 |
| NSYPLA574G | 500 | 750 | 420 | IP65 | 1 | 1 |
| NSYPLA5103G | 500 | 1000 | 320 | IP65 | 2 | 1 |
| NSYPLA5104G | 500 | 1000 | 420 | IP65 | 2 | 1 |
| NSYPLA5123G | 500 | 1250 | 320 | IP65 | 2 | 1 |
| NSYPLA5124G | 500 | 1250 | 420 | IP65 | 2 | 1 |
| NSYPLA753G | 750 | 500 | 320 | IP65 | 1 | 1 |
| NSYPLA754G | 750 | 500 | 420 | IP65 | 1 | 1 |
| NSYPLA773G | 750 | 750 | 320 | IP65 | 1 | 1 |
| NSYPLA774G | 750 | 750 | 420 | IP65 | 1 | 1 |
| NSYPLA7103G | 750 | 1000 | 320 | IP65 | 2 | 1 |
| NSYPLA7104G | 750 | 1000 | 420 | IP65 | 2 | 1 |
| NSYPLA7123G | 750 | 1250 | 320 | IP65 | 2 | 1 |
| NSYPLA7124G | 750 | 1250 | 420 | IP65 | 2 | 1 |
| NSYPLA1053G | 1000 | 500 | 320 | IP65 | 1 | 1 |
| NSYPLA1054G | 1000 | 500 | 420 | IP65 | 1 | 1 |
| NSYPLA1073G | 1000 | 750 | 320 | IP65 | 1 | 1 |
| NSYPLA1074G | 1000 | 750 | 420 | IP65 | 1 | 1 |
| NSYPLA10103G | 1000 | 1000 | 320 | IP65 | 2 | 1 |
| NSYPLA10104G | 1000 | 1000 | 420 | IP65 | 2 | 1 |
| NSYPLA10123G | 1000 | 1250 | 320 | IP65 | 2 | 1 |
| NSYPLA10124G | 1000 | 1250 | 420 | IP65 | 2 | 1 |
| NSYPLA1253G | 1250 | 500 | 320 | IP65 | 1 | 1 |
| NSYPLA1254G | 1250 | 500 | 420 | IP65 | 1 | 1 |
| NSYPLA1273G | 1250 | 750 | 320 | IP65 | 1 | 1 |
| NSYPLA1274G | 1250 | 750 | 420 | IP65 | 1 | 1 |
| NSYPLA12103G | 1250 | 1000 | 320 | IP65 | 2 | 1 |
| NSYPLA12104G | 1250 | 1000 | 420 | IP65 | 2 | 1 |
| NSYPLA12123G | 1250 | 1250 | 320 | IP65 | 2 | 1 |
| NSYPLA12124G | 1250 | 1250 | 420 | IP65 | 2 | 1 |
| NSYPLA1553G | 1500 | 500 | 320 | IP65 | 1 | 1 |
| NSYPLA1554G | 1500 | 500 | 420 | IP65 | 1 | 1 |
| NSYPLA1573G | 1500 | 750 | 320 | IP65 | 1 | 1 |
| NSYPLA1574G | 1500 | 750 | 420 | IP65 | 1 | 1 |
| NSYPLA15103G | 1500 | 1000 | 320 | IP65 | 2 | 1 |
| NSYPLA15104G | 1500 | 1000 | 420 | IP65 | 2 | 1 |
| NSYPLA15123G | 1500 | 1250 | 320 | IP65 | 2 | 1 |
| NSYPLA15124G | 1500 | 1250 | 420 | IP65 | 2 | 1 |

**NSYPMM****Galvanised Steel Mounting Plates to suit NSYPLAG Enclosure**

Galvanised steel plates with cut-outs for ease of installation.

*Mounting Plate.*

| TYPE | Height of Enclosure mm | Width of Enclosure mm | Pack Cont. |
|----------------------------|-------------------------------|------------------------------|-------------------|
| NSYPMM55 | 500 | 500 | 1 |
| NSYPMM75 | 500 | 750 | 1 |
| NSYPMM510 | 500 | 1000 | 1 |
| NSYPMM55+NSYPMM75 | 500 | 1250 | 1 |
| NSYPMM75 | 750 | 500 | 1 |
| NSYPMM77 | 750 | 750 | 1 |
| NSYPMM710 | 750 | 1000 | 1 |
| NSYPMM712 | 750 | 1250 | 1 |
| NSYPMM105 | 1000 | 500 | 1 |
| NSYPMM107 | 1000 | 750 | 1 |
| NSYPMM1010 | 1000 | 1000 | 1 |
| NSYPMM1012 | 1000 | 1250 | 1 |
| NSYPMM125 | 1250 | 500 | 1 |
| NSYPMM127 | 1250 | 750 | 1 |
| NSYPMM1210 | 1250 | 1000 | 1 |
| NSYPMM1212 | 1250 | 1250 | 1 |
| NSYPMM155 | 1500 | 500 | 1 |
| NSYPMM157+NSYPMM157 | 1500 | 750 | 1 |
| NSYPMM1510 | 1500 | 1000 | 1 |
| NSYPMM1512 | 1500 | 1250 | 1 |

Other versions available on request

Locks**Locks to suit NSYPLAG Enclosures**

| TYPE | Description | Pack Cont. |
|-------------------|--------------------------|-------------------|
| NSYIN405E1 | Lock insert with 405 key | 1 |
| NSYEBMPLA | Standard handle | 1 |
| NSYBCPLA | Padlock device | 1 |
| NSYINDB51 | Double bar lock insert | 1 |



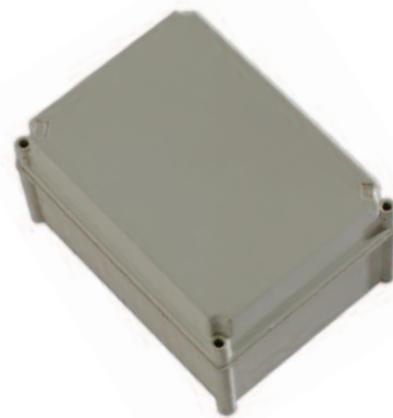
Please note that both the standard handle and the lock insert are required for a full lock transformation

**CA S****Polyester/polycarbonate Modular Enclosures with Opaque Lid**

Reinforced polyester modular enclosures in RAL7035.

Features and Benefits

- Self extinguishing material
- Resistant against rusting and corrosion by chemical or atmospheric agents
- For indoor or outdoor use
- Maximum working temperature -30°C to 120°C
- IK10



Modular Enclosure with Opaque Lid.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Pack Cont. |
|----------------|--------------|-------------|-------------|-----------|------------|
| CA1515S | 135 | 135 | 130 | IP66 | 1 |
| CA215S | 135 | 180 | 130 | IP66 | 1 |
| CA220S | 180 | 180 | 130 | IP66 | 1 |
| CA315S | 135 | 270 | 130 | IP66 | 1 |
| CA32S | 180 | 270 | 170 | IP66 | 1 |
| CA33S | 270 | 270 | 170 | IP66 | 1 |
| CA42S | 180 | 360 | 170 | IP66 | 1 |
| CA43S | 270 | 360 | 170 | IP66 | 1 |
| CA43AS | 270 | 360 | 205 | IP66 | 1 |
| CA44S | 360 | 360 | 170 | IP66 | 1 |
| CA44AS | 360 | 360 | 205 | IP66 | 1 |
| CA63S | 270 | 540 | 170 | IP66 | 1 |
| CA63AS | 270 | 540 | 205 | IP66 | 1 |
| CA64S | 360 | 540 | 170 | IP66 | 1 |
| CA64AS | 360 | 540 | 205 | IP66 | 1 |
| CA66S | 540 | 540 | 170 | IP66 | 1 |
| CA66AS | 540 | 540 | 205 | IP66 | 1 |
| CA84AS | 360 | 720 | 205 | IP66 | 1 |
| CA86AS | 540 | 720 | 205 | IP66 | 1 |

**CA****Polyester/polycarbonate Modular Enclosures with Clear Lid**

Reinforced polyester base in RAL7035, with polycarbonate clear lid.

Features and Benefits

- Self extinguishing material
- Resistant against rusting and corrosion by chemical or atmospheric agents.
- For indoor or outdoor use
- Maximum working temperature -30°C to 120°C
- IK10



Modular Enclosure with Clear Lid.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Pack Cont. |
|---------------|--------------|-------------|-------------|-----------|------------|
| CA1515 | 135 | 135 | 130 | IP66 | 1 |
| CA215 | 135 | 180 | 130 | IP66 | 1 |
| CA220 | 180 | 180 | 130 | IP66 | 1 |
| CA315 | 135 | 270 | 130 | IP66 | 1 |
| CA32 | 180 | 270 | 170 | IP66 | 1 |
| CA33 | 270 | 270 | 170 | IP66 | 1 |
| CA42 | 180 | 360 | 170 | IP66 | 1 |
| CA43 | 270 | 360 | 170 | IP66 | 1 |
| CA43A | 270 | 360 | 205 | IP66 | 1 |
| CA44 | 360 | 360 | 170 | IP66 | 1 |
| CA44A | 360 | 360 | 205 | IP66 | 1 |
| CA63 | 270 | 540 | 170 | IP66 | 1 |
| CA63A | 270 | 540 | 205 | IP66 | 1 |
| CA64 | 360 | 540 | 170 | IP66 | 1 |
| CA64A | 360 | 540 | 205 | IP66 | 1 |
| CA66 | 540 | 540 | 170 | IP66 | 1 |
| CA66A | 540 | 540 | 205 | IP66 | 1 |
| CA84A | 360 | 720 | 205 | IP66 | 1 |
| CA86A | 540 | 720 | 205 | IP66 | 1 |



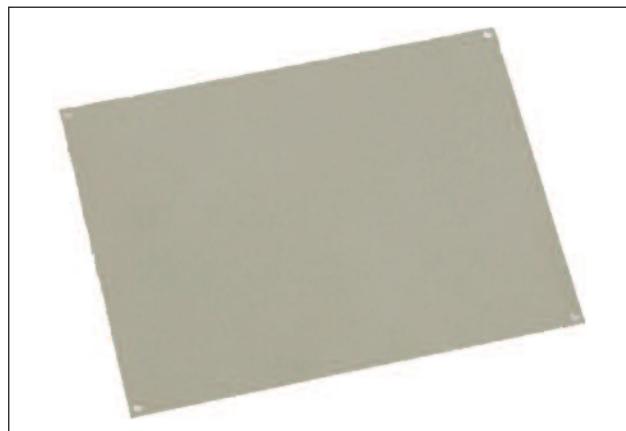
The CA range can be fully customised to meet your requirements MOQ may apply



PP

Polyester Mounting Plates to suit CA and CA S Enclosures

A range of polyester mounting plates for use with the CA/CA S range of enclosures.



Polyester Mounting Plate.

| TYPE | Height mm | Width mm | Pack Cont. |
|--------|--------------|-------------|------------|
| PP1515 | 135 | 135 | 1 |
| PP215 | 180 | 135 | 1 |
| PP220 | 180 | 180 | 1 |
| PP315 | 270 | 135 | 1 |
| PP32 | 270 | 180 | 1 |
| PP33 | 270 | 270 | 1 |
| PP42 | 360 | 180 | 1 |
| PP43 | 360 | 270 | 1 |
| PP44 | 360 | 360 | 1 |
| PP63 | 540 | 270 | 1 |
| PP64 | 540 | 360 | 1 |
| PP66 | 540 | 540 | 1 |
| PP84 | 720 | 360 | 1 |
| PP86 | 720 | 520 | 1 |

OFC

Wall Fixing Brackets to suit CA Enclosures

Brackets to secure enclosures to a wall or similar surface.
Suitable for all enclosures.



Wall Fixing Bracket.

| TYPE | To fit Enclosures | Pack Cont. |
|---------|-------------------|------------|
| OFC400 | CA32 to CA86 | Set of 4 |
| OFC4000 | CA1515 to CA315 | Set of 4 |

**BOBRE****External Hinges to suit CA Enclosures**

External hinge used to adapt the CA range of modular enclosures from loose lid to hinged lid.

*External Hinges.*

| TYPE | For use with | Pack Cont. |
|----------|---------------|------------|
| BOBREEXT | CA32 to CA86A | Set of 2 |

**NSYPLSC****Polyester/polycarbonate Modular Boxes with Opaque Lid**

Insulated modular boxes with bases made of hot moulded fibreglass reinforced polyester, and lids made of polycarbonate in RAL 7035.

Features and Benefits

- Self extinguishing material
- Good resistance to UV and chemicals
- Resistant against rusting and corrosion by chemical or atmospheric agents
- IK09
- For indoor or outdoor use
- Maximum working temperature -30°C to 120°C



Modular Box with Opaque Lid.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Pack Cont. |
|----------------------|--------------|-------------|-------------|-----------|------------|
| NSYPLSC1827G | 180 | 270 | 180 | IP65 | 1 |
| NSYPLSC2727G | 270 | 270 | 180 | IP65 | 1 |
| NSYPLSC2736G | 270 | 360 | 180 | IP65 | 1 |
| NSYPLSC2754G | 270 | 540 | 180 | IP65 | 1 |
| NSYPLSC3636G | 360 | 360 | 180 | IP65 | 1 |
| NSYPLSC3654G | 360 | 540 | 180 | IP65 | 1 |
| NSYPLSC5454G | 540 | 540 | 180 | IP65 | 1 |
| NSYPLSC2727AG | 270 | 270 | 230 | IP65 | 1 |
| NSYPLSC2736AG | 270 | 360 | 230 | IP65 | 1 |
| NSYPLSC2754AG | 270 | 540 | 230 | IP65 | 1 |
| NSYPLSC3654AG | 360 | 540 | 230 | IP65 | 1 |
| NSYPLSC5454AG | 540 | 540 | 230 | IP65 | 1 |
| NSYPLSC3672AG | 360 | 720 | 230 | IP65 | 1 |
| NSYPLSC5472AG | 540 | 720 | 230 | IP65 | 1 |

**NSYPLS****Polyester/Polycarbonate Modular Boxes with Transparent Lid**

Insulated modular boxes with bases made of hot moulded fibreglass reinforced polyester in RAL7035, and lids made of transparent polycarbonate.

Features and Benefits

- Self extinguishing material
- Good resistance to UV and chemicals
- Resistant against rusting and corrosion by chemical or atmospheric agents
- IK09
- For indoor or outdoor use
- Maximum working temperature -30°C to 120°C



NSYPLS Modular Enclosure.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Pack Cont. |
|---------------------|--------------|-------------|-------------|-----------|------------|
| NSYPLS1827G | 180 | 270 | 180 | IP65 | 1 |
| NSYPLS2727G | 270 | 270 | 180 | IP65 | 1 |
| NSYPLS2736G | 270 | 360 | 180 | IP65 | 1 |
| NSYPLS2754G | 270 | 540 | 180 | IP65 | 1 |
| NSYPLS3636G | 360 | 360 | 180 | IP65 | 1 |
| NSYPLS3654G | 360 | 540 | 180 | IP65 | 1 |
| NSYPLS5454G | 540 | 540 | 180 | IP65 | 1 |
| NSYPLS2727AG | 270 | 270 | 230 | IP65 | 1 |
| NSYPLS2736AG | 270 | 360 | 230 | IP65 | 1 |
| NSYPLS2754AG | 270 | 540 | 230 | IP65 | 1 |
| NSYPLS3654AG | 360 | 540 | 230 | IP65 | 1 |
| NSYPLS5454AG | 540 | 540 | 230 | IP65 | 1 |
| NSYPLS3672AG | 360 | 720 | 230 | IP65 | 1 |
| NSYPLS5472AG | 540 | 720 | 230 | IP65 | 1 |

NSYPLSP**Polyester Modular Boxes with Opaque Lid**

Insulated modular boxes and lids made of hot moulded fibreglass reinforced polyester in RAL7035.



Modular Box with Opaque Lid.

Features and Benefits

- Self extinguishing material
- Good resistance to UV and chemicals
- Resistant against rusting and corrosion by chemical or atmospheric agents
- IK09
- For indoor or outdoor use
- Maximum working temperature -30°C to 120°C

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Pack Cont. |
|---------------------|--------------|-------------|-------------|-----------|------------|
| NSYPLSP1827G | 180 | 270 | 180 | IP65 | 1 |
| NSYPLSP2727G | 270 | 270 | 180 | IP65 | 1 |
| NSYPLSP2736G | 270 | 360 | 180 | IP65 | 1 |
| NSYPLSP2754G | 270 | 540 | 180 | IP65 | 1 |
| NSYPLSP3636G | 360 | 360 | 180 | IP65 | 1 |
| NSYPLSP3654G | 360 | 540 | 180 | IP65 | 1 |
| NSYPLSP5454G | 540 | 540 | 180 | IP65 | 1 |



NSYPMM

Metal Mounting Plate to suit NSYPLS Enclosures

A range of metal mounting plates suitable for use on the NSYPLS range of enclosures.



Metal Mounting Plates.

| TYPE | Height mm | Width mm | Pack Cont. |
|-------------------|----------------------|---------------------|-------------------|
| NSYPMM1827 | 140 | 230 | 1 |
| NSYPMM2727 | 230 | 230 | 1 |
| NSYPMM2736 | 230 | 320 | 1 |
| NSYPMM2754 | 230 | 500 | 1 |
| NSYPMM3636 | 320 | 320 | 1 |
| NSYPMM3654 | 320 | 500 | 1 |
| NSYPMM5454 | 500 | 500 | 1 |
| NSYPMM3672 | 320 | 680 | 1 |
| NSYPMM5472 | 500 | 680 | 1 |

NSYPMA

Polyester Mounting Plate to suit NSYPLS Enclosures

A range of polyester mounting plates suitable for use on the NSYPLS range of enclosures.

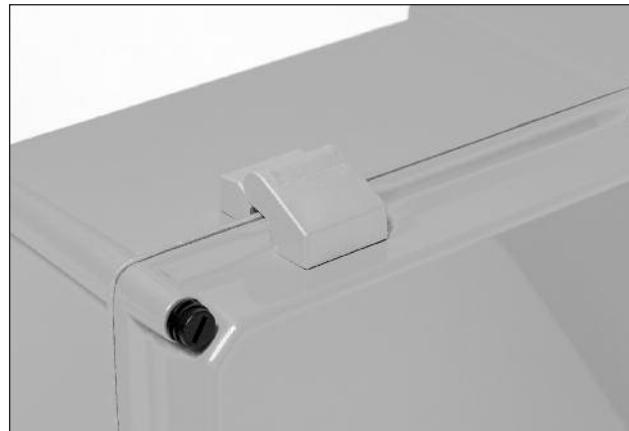


Polyester Mounting Plates.

| TYPE | Height mm | Width mm | Pack Cont. |
|--------------------|----------------------|---------------------|-------------------|
| NSYPMA1827G | 140 | 230 | 1 |
| NSYPMA2727G | 230 | 230 | 1 |
| NSYPMA2736G | 230 | 320 | 1 |
| NSYPMA2754G | 230 | 500 | 1 |
| NSYPMA3636G | 320 | 320 | 1 |
| NSYPMA3654G | 320 | 500 | 1 |
| NSYPMA5454G | 500 | 500 | 1 |
| NSYPMA3672G | 320 | 680 | 1 |
| NSYPMA5472G | 500 | 680 | 1 |

**NSYBE27****Hinges to suit NSYPLSC / NSYPLS and NSYPLSP Enclosures**

Plastic external hinges which allow the cover to open to more than 180°.



Plastic External Hinge.

| TYPE | Description | Pack Cont. |
|----------|-------------|------------|
| NSYBE27G | Hinges | 2 |

NSYPF27N**Wall Fixing Kit to suit NSYPLSC / NSYPLS and NSYPLSP Enclosures**

Passivated zinc coated steel wall fixing lugs for use with NSYPLS enclosures.



Fixing Lugs.

| TYPE | Description | Pack Cont. |
|----------|-----------------|------------|
| NSYPF27N | Wall fixing kit | Set of 4 |

**NSYTBS****ABS Industrial Boxes with Opaque Lid**

Industrial boxes made of ABS and coated in RAL7035 grey epoxy paint, opaque lid.

Features and Benefits

- Halogen free insulating plastic materials
- Resistant against rusting and corrosion by chemical or atmospheric agents
- IK07
- For indoor or outdoor use



ABS Industrial Box with Opaque Lid.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Pack Cont. |
|----------------------|--------------|-------------|-------------|-----------|------------|
| NSYTBS775 | 74 | 74 | 54 | IP66 | 1 |
| NSYTBS885 | 89 | 89 | 54 | IP66 | 1 |
| NSYTBS1176 | 116 | 74 | 62 | IP66 | 1 |
| NSYTBS11116 | 116 | 116 | 62 | IP66 | 1 |
| NSYTBS1397 | 138 | 93 | 72 | IP66 | 1 |
| NSYTBS16128 | 164 | 121 | 87 | IP66 | 1 |
| NSYTBS19128 | 192 | 121 | 87 | IP66 | 1 |
| NSYTBS191210H | 192 | 121 | 105 | IP66 | 1 |
| NSYTBS19168 | 193 | 164 | 87 | IP66 | 1 |
| NSYTBS191610H | 193 | 164 | 105 | IP66 | 1 |
| NSYTBS24198 | 241 | 194 | 87 | IP66 | 1 |
| NSYTBS241910H | 241 | 194 | 105 | IP66 | 1 |
| NSYTBS241912H | 241 | 194 | 127 | IP66 | 1 |
| NSYTBS29248 | 291 | 241 | 88 | IP66 | 1 |
| NSYTBS292412 | 291 | 241 | 128 | IP66 | 1 |
| NSYTBS292412H | 291 | 241 | 128 | IP66 | 1 |
| NSYTBS292416H | 291 | 241 | 168 | IP66 | 1 |
| NSYTBS342912 | 341 | 291 | 128 | IP66 | 1 |
| NSYTBS342916H | 341 | 291 | 168 | IP66 | 1 |



Mounting plates and hinges available on request - Please contact customer services

**NSYTBS T****ABS Industrial Boxes with Smoked Transparent Lids**

Industrial boxes made of ABS and coated in RAL7035 grey epoxy paint, complete with smoked transparent lid.

Features and Benefits

- Halogen free insulating plastic materials
- Resistant against rusting and corrosion by chemical or atmospheric agents
- IK07
- For indoor or outdoor use



ABS Industrial Box with Transparent Smoked Lid.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Pack Cont. |
|-----------------------|--------------|-------------|-------------|-----------|------------|
| NSYTBS1397T | 138 | 93 | 72 | IP66 | 1 |
| NSYTBS16128T | 164 | 121 | 87 | IP66 | 1 |
| NSYTBS19128T | 192 | 121 | 87 | IP66 | 1 |
| NSYTBS191210HT | 192 | 121 | 105 | IP66 | 1 |
| NSYTBS19168T | 193 | 164 | 87 | IP66 | 1 |
| NSYTBS191610HT | 193 | 164 | 105 | IP66 | 1 |
| NSYTBS24198T | 241 | 194 | 87 | IP66 | 1 |
| NSYTBS241910HT | 241 | 194 | 105 | IP66 | 1 |
| NSYTBS241912HT | 241 | 194 | 127 | IP66 | 1 |
| NSYTBS29248T | 291 | 241 | 88 | IP66 | 1 |
| NSYTBS292412T | 291 | 241 | 128 | IP66 | 1 |
| NSYTBS292412HT | 291 | 241 | 128 | IP66 | 1 |
| NSYTBS292416HT | 291 | 241 | 168 | IP66 | 1 |
| NSYTBS342912T | 341 | 291 | 128 | IP66 | 1 |
| NSYTBS342916HT | 341 | 291 | 168 | IP66 | 1 |



Mounting plates and hinges available on request - Please contact customer services

**NSYTB****Polycarbonate Industrial Boxes with Opaque Lid**

Industrial boxes made of polycarbonate and coated in RAL7035 grey epoxy paint.

Features and Benefits

- Halogen free insulating plastic materials
- Resistant against rusting and corrosion by chemical or atmospheric agents
- IK08
- For indoor or outdoor use



Polycarbonate Box with Opaque Lid.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Pack Cont. |
|--------------|--------------|-------------|-------------|-----------|------------|
| NSYTB775 | 74 | 74 | 54 | IP66 | 1 |
| NSYTB885 | 89 | 89 | 54 | IP66 | 1 |
| NSYTB1176 | 116 | 74 | 62 | IP66 | 1 |
| NSYTB11116 | 116 | 116 | 62 | IP66 | 1 |
| NSYTB1397 | 138 | 93 | 72 | IP66 | 1 |
| NSYTB16128 | 164 | 121 | 87 | IP66 | 1 |
| NSYTB19128 | 192 | 121 | 87 | IP66 | 1 |
| NSYTB191210H | 192 | 121 | 105 | IP66 | 1 |
| NSYTB19168 | 193 | 164 | 87 | IP66 | 1 |
| NSYTB191610H | 193 | 164 | 105 | IP66 | 1 |
| NSYTB24198 | 241 | 194 | 87 | IP66 | 1 |
| NSYTB241910H | 241 | 194 | 105 | IP66 | 1 |
| NSYTB241912H | 241 | 194 | 127 | IP66 | 1 |
| NSYTB29248 | 291 | 241 | 88 | IP66 | 1 |
| NSYTB292412 | 291 | 241 | 128 | IP66 | 1 |
| NSYTB292412H | 291 | 241 | 128 | IP66 | 1 |
| NSYTB292416H | 291 | 241 | 168 | IP66 | 1 |
| NSYTB342912 | 341 | 291 | 128 | IP66 | 1 |
| NSYTB342916H | 341 | 291 | 168 | IP66 | 1 |



**Mounting plates and hinges available
on request**

**NSYTBP T****Polyester Industrial Boxes with Smoked Transparent Lids**

Industrial boxes made of polyester and coated in RAL7035 grey epoxy paint, complete with smoked transparent lid.

Features and Benefits

- Halogen free insulating plastic materials
- Resistant against rusting and corrosion by chemical or atmospheric agents
- IK08
- For indoor or outdoor use



Polyester Box with Smoked lid.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Pack Cont. |
|-----------------------|--------------|-------------|-------------|-----------|------------|
| NSYTBP1397T | 138 | 93 | 72 | IP66 | 1 |
| NSYTBP16128T | 164 | 121 | 87 | IP66 | 1 |
| NSYTBP19128T | 192 | 121 | 87 | IP66 | 1 |
| NSYTBP191210HT | 192 | 121 | 105 | IP66 | 1 |
| NSYTBP19168T | 193 | 164 | 87 | IP66 | 1 |
| NSYTBP191610HT | 193 | 164 | 105 | IP66 | 1 |
| NSYTBP24198T | 241 | 194 | 87 | IP66 | 1 |
| NSYTBP241910HT | 241 | 194 | 105 | IP66 | 1 |
| NSYTBP241912HT | 241 | 194 | 127 | IP66 | 1 |
| NSYTBP29248T | 291 | 241 | 88 | IP66 | 1 |
| NSYTBP292412T | 291 | 241 | 128 | IP66 | 1 |
| NSYTBP292412HT | 291 | 241 | 128 | IP66 | 1 |
| NSYTBP292416HT | 291 | 241 | 168 | IP66 | 1 |
| NSYTBP342912T | 341 | 291 | 128 | IP66 | 1 |
| NSYTBP342916HT | 341 | 291 | 168 | IP66 | 1 |



**Mounting plates and hinges available
on request**



EL

Light Range Junction Boxes with Opaque Lids

Halogen free polystyrene junction boxes with screw down lids in RAL 7035.

Features and Benefits

- Includes supports for installation of DIN rail and mounting plates
- IK07



Junction Box with Opaque lid.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Pack Cont. |
|--------------|--------------|-------------|-------------|-----------|------------|
| EL111 | 108 | 108 | 64 | IP67 | 1 |
| EL161 | 162 | 116 | 78 | IP67 | 1 |
| EL171 | 175 | 151 | 95 | IP67 | 1 |
| EL231 | 241 | 180 | 95 | IP67 | 1 |
| EL322 | 328 | 239 | 129 | IP67 | 1 |



Versions with pre-moulded cable entries or transparent lids available on request



Plastic and metal back plates also available on request

A

Adaptable Boxes with Opaque Lids

Plastic halogen free junction boxes with stepped glands and press-fit lids in RAL 7035

Features and Benefits

- Double insulated
- IK07
- Range of temperature -15°C to +60°C



Junction Box with Stepped Glands.

| TYPE | Height mm | Width mm | Depth mm | Description | IP Rating | Pack Cont. |
|---------------|--------------|-------------|-------------|-------------|-----------|------------|
| A165MM | 65 | - | 35 | Round | IP44 | 1 |
| A280MM | 80 | - | 35 | Round | IP44 | 1 |
| A3JB | 80 | 80 | 40 | Square | IP44 | 1 |



ASH

Adaptable Junction Boxes with Opaque Lids

Double insulated adaptable box with smooth walls and screw on lids in RAL 7035

Features and Benefits

- Double insulated
- IK08
- Installation temperature -15°C to +60°C



Junction Box with Opaque lid.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Pack Cont. |
|-------|--------------|-------------|-------------|-----------|------------|
| ASH15 | 110 | 110 | 112 | IP55 | 1 |
| ASH25 | 150 | 110 | 150 | IP55 | 1 |
| ASH35 | 150 | 150 | 150 | IP55 | 1 |
| ASH45 | 220 | 150 | 150 | IP55 | 1 |
| ASH55 | 300 | 220 | 150 | IP55 | 1 |

AS

Adaptable Junction Boxes with Opaque Lids

Plastic junction box with smooth walls and screw on lids in RAL 7035

Features and Benefits

- Double insulated
- IK08
- Installation temperature -15°C to +60°C



Junction Box Opaque lid.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Pack Cont. |
|------|--------------|-------------|-------------|-----------|------------|
| AS05 | 123 | 83 | 62 | IP56 | 1 |
| AS15 | 103 | 103 | 62 | IP56 | 1 |
| AS25 | 154 | 113 | 77 | IP56 | 1 |
| AS35 | 193 | 144 | 79 | IP56 | 1 |
| AS45 | 242 | 190 | 90 | IP56 | 1 |
| AS55 | 305 | 225 | 126 | IP56 | 1 |
| AS65 | 390 | 310 | 128 | IP56 | 1 |



AS T

Adaptable Junction Boxes with Transparent Lids

Plastic adaptable box with smooth walls in RAL 7035 and screw on transparent lids

Features and Benefits

- Double insulated
- IK08
- Installation temperature -15°C to +60°C



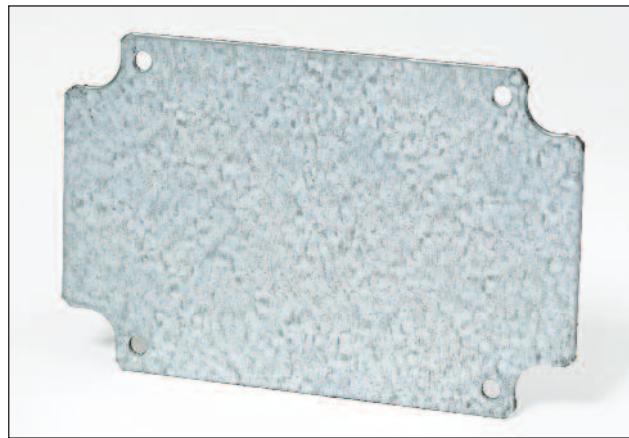
Junction Box Transparent Lid.

| TYPE | Height mm | Width mm | Depth mm | IP Rating | Pack Cont. |
|--------------|-----------|----------|----------|-----------|------------|
| AS35T | 190 | 140 | 70 | IP56 | 1 |
| AS45T | 240 | 190 | 90 | IP56 | 1 |
| AS55T | 300 | 220 | 150 | IP56 | 1 |
| AS65T | 380 | 300 | 150 | IP56 | 1 |

PB

Metal Mounting Plates for use with AS and ASH Junction Boxes

Metal mounting plates with cut outs for ease of installation



Metal Mounting Plate.

| TYPE | For use with | Pack Cont. |
|------------|--------------|------------|
| PB1 | AS35/AS35T | 1 |
| PB2 | AS45/AS45T | 1 |
| PB3 | AS55/AS55T | 1 |
| PB4 | AS65/AS65T | 1 |
| PB5 | ASH15/ASH15T | 1 |
| PB6 | ASH25/ASH25T | 1 |
| PB7 | ASH35/ASH35T | 1 |
| PB8 | ASH45/ASH45T | 1 |
| PB9 | ASH55/ASH55T | 1 |



CDN

Distribution Boards

Distribution boards made from RAL 7035 polycarbonate with a smoked transparent window.

Features and Benefits

- For indoor or outdoor use
- Comes complete with earth and neutral bars
- IK08
- Range of temperature -25°C to +40°C



Distribution Boards.



MOQ may apply to some sizes

| TYPE | Height mm | Width mm | Thickness mm | Number of Modules | Description | Pack Cont. |
|--------------------|-----------|----------|--------------|-------------------|--|------------|
| CDN4PTRR | 231 | 166 | 113 | 1 x 4 | Sup: 2 x M25 + 1 x M40 Inf: 2 x M25 + 1 x M40 | 1 |
| CDN6PTRR | 231 | 202 | 113 | 1 x 6 | Sup: 2 x M25 + 1 x M40 Inf: 2 x M25 + 1 x M40 | 1 |
| CDN8PTRR | 231 | 238 | 118 | 1 x 8 | Sup: 4 x M25 + 1 x M40 Inf: 4 x M25 + 1 x M40 | 1 |
| CDN12PTRR | 246 | 310 | 148 | 1 x 12 | Sup: 6 M20 + 2 x M25 + 2 x M32 + 1 x M40 Inf: 6 M20 + 2 x M25 + 2 x M32 + 1 x M40 | 1 |
| CDN18PTRR | 286 | 418 | 148 | 1 x 18 | Sup: 12 M20 + 6 x M25 + 2 x M32 + 1 x M40 Inf: 12 M20 + 6 x M25 + 2 x M32 + 1 x M40 Int: 4 x M25 | 1 |
| CDN24PTRR | 436 | 310 | 148 | 2 x 12 | Sup: 8 M20 + 2 x M25 + 2 x M32 + 1 x M40 Inf: 6 M20 + 2 x M25 + 2 x M32 + 1 x M40 Int: 4 x M25 | 1 |
| CDN36PT2FRR | 436 | 418 | 148 | 2 x 18 | Sup: 12 M20 + 6 x M25 + 2 x M32 + 1 x M40 Inf: 12 M20 + 6 x M25 + 2 x M32 + 1 x M40 Int: 4 x M25 | 1 |
| CDN36PT3FRR | 586 | 310 | 148 | 3 x 12 | Sup: 8 M20 + 2 x M25 + 2 x M32 + 1 x M40 Inf: 6 M20 + 2 x M25 + 2 x M32 + 1 x M40 Int: 4 x M25 | 1 |
| CDN54PTRR | 586 | 418 | 148 | 3 x 18 | Sup: 12 M20 + 6 x M25 + 2 x M32 + 1 x M40 Inf: 12 M20 + 6 x M25 + 2 x M32 + 1 x M40 Int: 4 x M25 | 1 |



CT

Distribution Boards Without Door

Surface mounting distribution board without a door.
Finished in RAL7035.

Features and Benefits

- IK08
- Installation temperature -15°C to +60°C
- MOQ may apply to some sizes



MOQ may apply to some sizes



Distribution Board without Door.

| TYPE | Height mm | Width mm | Thickness mm | Number of Modules | IP Rating | Pack Cont. |
|------|-----------|----------|--------------|-------------------|-----------|------------|
| CT2 | 51 | 130 | 60 | 1-2 pole | IP40 | 1 |
| CT4 | 88 | 130 | 60 | 3-4 pole | IP40 | 1 |

CT PT

Distribution Boards with Transparent Door

Surface mounting distribution board in RAL 7035 complete with transparent door

Features and Benefits

- IK09
- Installation temperature -15°C to +60°C



MOQ may apply to some sizes



Distribution Board c/w Transparent Door.

| TYPE | Height mm | Width mm | Thickness mm | Number of Modules | IP Rating | Pack Cont. |
|--------|-----------|----------|--------------|-------------------|-----------|------------|
| CT5PT | 144 | 168 | 94 | 4+1 smooth sides | IP40 | 1 |
| CT8PT | 215 | 168 | 94 | 8 smooth sides | IP40 | 1 |
| CT12PT | 283 | 168 | 94 | 12+1 smooth sides | IP40 | 1 |
| CT24PT | 256 | 326 | 101 | 24 smooth sides | IP40 | 1 |



CT

Wall Mounted Distribution Boards

Surface mounting distribution board in RAL 7035 complete with opaque door.

Features and Benefits

- IK09
- Installation temperature -15°C to +60°C



MOQ may apply to some sizes



Wall Mounted Distributor Board.

| TYPE | Height mm | Width mm | Thickness mm | Description | IP Rating | Pack Cont. |
|-------|-----------|----------|--------------|-------------|-----------|------------|
| CT5G | 83 | 175 | 106 | 3 pole | IP55 | 1 |
| CT8G | 125 | 175 | 114 | 5 pole | IP55 | 1 |
| CT12G | 215 | 175 | 114 | 8 pole | IP55 | 1 |

CT GL

Distribution Boards with Provision for CEE Sockets

Surface mounting distribution board in RAL 7035 complete with opaque door and provisions for CEE sockets

Features and Benefits

- IK09
- Installation temperature -15°C to +60°C



MOQ may apply to some sizes



Distribution Boards with Provision for CEE Socket.

| TYPE | Height mm | Width mm | Thickness mm | Description | IP Rating | Pack Cont. |
|--------|-----------|----------|--------------|-------------|-----------|------------|
| CT24GL | 285 | 500 | 136 | 36 way | IP65 | 1 |



Terminal support bars available on request



CK

Mini Distribution Boards

Mini boards for modular devices, complete with metric and PG system cable entries.

Features and Benefits

- IK09
- Installation temperature -35°C to +60°C



MOQ may apply to some sizes



Mini Distribution Boards.

| TYPE | Height mm | Width mm | Depth mm | Description | IP Rating | Pack Cont. |
|--------------|-----------|----------|----------|-------------|-----------|------------|
| CK003 | 90 | 150 | 111.5 | 3 modules | IP65 | 1 |
| CK004 | 123 | 200 | 111.5 | 4 modules | IP65 | 1 |
| CK006 | 159 | 200 | 111.5 | 6 modules | IP65 | 1 |
| CK008 | 195 | 200 | 111.5 | 8 modules | IP65 | 1 |
| CK012 | 267 | 200 | 111.5 | 12 modules | IP65 | 1 |

CK

Modular Distribution Boards

Modular boards to receive modular devices, complete with metric and PG system cable entries.

Features and Benefits

- IK09
- Installation temperature -35°C to +60°C



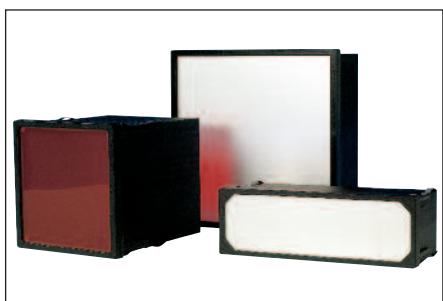
MOQ may apply to some sizes



Modular Distribution Board.

| TYPE | Height mm | Width mm | Depth mm | Description | IP Rating | Pack Cont. |
|--------------|-----------|----------|----------|----------------|-----------|------------|
| CK112 | 340 | 280 | 164 | 12 modules | IP65 | 1 |
| CK118 | 448 | 280 | 164 | 18 modules | IP65 | 1 |
| CK224 | 340 | 460 | 164 | 2 x 12 modules | IP65 | 1 |
| CK236 | 448 | 460 | 164 | 2 x 18 modules | IP65 | 1 |
| CK336 | 340 | 610 | 164 | 3 x 12 modules | IP65 | 1 |

Panel Instrument Cases and Enclosures



For more information on our range of Panel Instrument Cases and Enclosures please ask our Customer Service Department for more details



XTALFA

Filter Fans

Filter fans for use in applications where the external temperature is lower than the desired temperature inside the enclosure.

Features and Benefits

- Snap in fixing system for use on panels with a thickness of 1.2mm to 2.4mm
- Screw kit included for other thicknesses



Filter Fan.

| TYPE | Height mm | Width mm | Depth mm | Power Supply | Airflow | IP Rating | Pack Cont (m/hr) |
|----------------|-----------|----------|----------|------------------|----------|-----------|------------------|
| XTALFAA500BP | 114 | 114 | 57 | 230v ac 50/60 Hz | 24 m/hr | IP54 | 1 |
| XTALFAA5010BP | 114 | 114 | 57 | 110v ac 50/60 Hz | 24 m hr | IP54 | 1 |
| XTALFAA5024BPT | 114 | 114 | 57 | 24v dc 50/60 Hz | 24 m hr | IP54 | 1 |
| XTALFA1600BP | 150 | 150 | 77 | 230v ac 50/60 Hz | 55 m hr | IP54 | 1 |
| XTALFA1610BP | 150 | 150 | 77 | 110v ac 50/60 Hz | 55 m hr | IP54 | 1 |
| XTALFA1624BPT | 150 | 150 | 77 | 24v dc 50/60 Hz | 55 m hr | IP54 | 1 |
| XTALFA2300BP | 250 | 250 | 111 | 230v ac 50/60 Hz | 105 m hr | IP54 | 1 |
| XTALFA2310BP | 250 | 250 | 111 | 110v ac 50/60 Hz | 105 m hr | IP54 | 1 |
| XTALFA2324BPT | 250 | 250 | 111 | 24v dc 50/60 Hz | 105 m hr | IP54 | 1 |
| XTALFA2500BP | 250 | 250 | 119 | 230v ac 50/60 Hz | 230 m hr | IP54 | 1 |
| XTALFA2510BP | 250 | 250 | 119 | 110v ac 50/60 Hz | 230 m hr | IP54 | 1 |
| XTALFA2524BPT | 250 | 250 | 119 | 24v dc 50/60 Hz | 230 m hr | IP54 | 1 |
| XTALFA3500BP | 325 | 325 | 151 | 230v ac 50/60 Hz | 500 m hr | IP54 | 1 |
| XTALFA3510BP | 325 | 325 | 151 | 110v ac 50/60 Hz | 500 m hr | IP54 | 1 |

XTALFA

Filter and Grill

Ventilation cutlet grill suitable for use with XT series thermal management systems.



Filter and Grill.

| TYPE | Height mm | Width mm | Depth mm | For Use With | Pack Cont. |
|-------------|-----------|----------|----------|--------------------------------|------------|
| XTALFAA000G | 114 | 114 | 17 | XTALFAA500BP | 1 |
| XTALFA1000G | 150 | 150 | 28 | XTALFA1600BP | 1 |
| XTALFA2000G | 250 | 250 | 30 | XTALFA2300BP & XTALFA2500BP | 1 |
| XTALFA3000G | 325 | 325 | 30 | XTALFA3500BP | 1 |



XTTH

Thermostats

Compact thermostats for din rail mounting to control ventilation and heating devices.



Thermostats.

| TYPE | Description | Temperature | Power Supply | Pack Cont. |
|---------|-------------|-------------|--------------|------------|
| XTTHV02 | N/O vent ● | 0/+60°C | 120V/230V | AC 1 |
| XTTHR02 | N/C vent ● | 0/+60°C | 120V/230V | AC 1 |

XTSHT

Heaters

Enclosure heaters are designed to prevent failures or corrosion caused by low temperature or high humidity inside the enclosure.



Heaters.

| TYPE | Height mm | Width mm | Depth mm | Watts | Power Supply | Max Current | Pack Cont. |
|-----------|-----------|----------|----------|-------|-------------------|-------------|------------|
| XTSHT25W | 90 | 50 | 80 | 25W | 110-250V AC or DC | 2A | 1 |
| XTSHT50W | 110 | 50 | 80 | 50W | 110-250V AC or DC | 2A | 1 |
| XTSHT75W | 160 | 50 | 80 | 75W | 110-250V AC or DC | 4A | 1 |
| XTSHT100W | 110 | 90 | 80 | 100W | 110-250V AC or DC | 4A | 1 |



VC

Zerust® Diffuser

Anti corrosion vapour capsules with adhesive backing offering protection against rust in sensitive areas, such enclosures containing ferrous and non-ferrous metal components.

Features and Benefits

- Snap in fixing system for use on panels with a thickness of 1.2mm to 2.4mm
- Screw kit included for other thicknesses



Zerust Diffuser Capsule.

| TYPE | VOLUME OF PROTECTION | RADIUS OF PROTECTION | DURATION OF PROTECTION | PACK CONT. |
|-------|----------------------|----------------------|------------------------|------------|
| VC1-1 | 0.12 m ³ | 0.3m | 1 year | 1 |
| VC2-1 | 0.95 m ³ | 0.6m | 1 year | 1 |
| VC2-2 | 0.95 m ³ | 0.6m | 2 years | 1 |



Pre-Printed Cable Markers

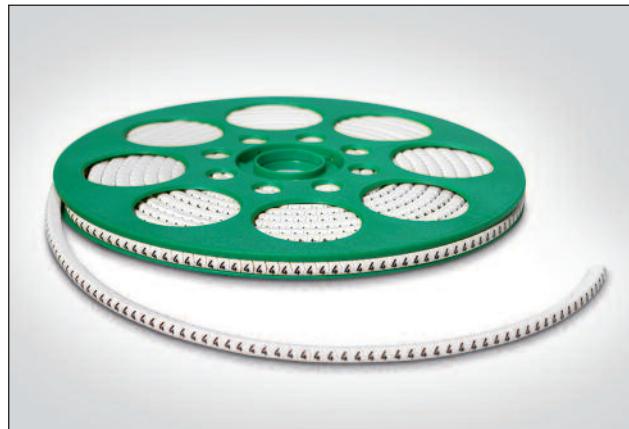
Helagrip, Slide on, Chevron Cut

Helagrip is used to mark cable and wire. Ideally suited to panel building, mass transit, utilities, telecommunications, and electrical contracting.

Characters are 0-9, A-Z, and standard electrical symbols. Available in reels of 250 or 1000 dependant on the size.

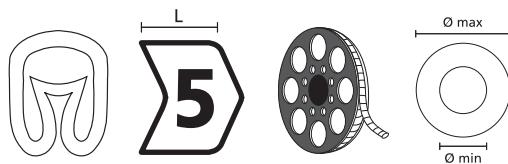
Features and Benefits

- Easy to apply one size marker to fit a wide range of cables
- Markers are applied before termination takes place
- Chevron cut to lock markers together ensuring text remains in place
- Traditional wire marking available in yellow, white and colour code
- Flexible material so product remains securely on the wire



Chevron Cut Helagrip Markers.

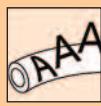
| | |
|-------------------------------|---|
| MATERIAL | Flexible Polyvinyl Chloride, cadmium free (PVC) |
| Opearation Temperature | -65°C to +105°C, intermittent +135°C |
| Flammability | UL94 V0 (3mm) |
| Specifications | BS-2782-540B, BS-6746C, IEC 757, UL224 |



| TYPE | Bundle Ø min mm | Bundle Ø max mm | Length (L) mm | Pack Cont. |
|---------|--------------------|--------------------|------------------|------------|
| HGDC1-3 | 1.0 | 3.0 | 3.5 | 1000 |
| HGDC2-5 | 2.0 | 5.0 | 3.5 | 1000 |
| HGDC4-9 | 4.0 | 9.0 | 5.0 | 250 |



See page 444 in the Product Catalogue for black on yellow and colour coded markers



Pre-Printed Cable Markers

Helagrip, Slide on, Chevron Cut Black on White

| HGDC1-3 Reels of 1000 | |
|-----------------------|-------------|
| Mark | Article-No. |
| A | 516-01755 |
| B | 516-01756 |
| C | 516-01757 |
| D | 516-01758 |
| E | 516-01759 |
| F | 516-01760 |
| G | 516-01761 |
| H | 516-01762 |
| I | 516-01763 |
| J | 516-01764 |
| K | 516-01765 |
| L | 516-01766 |
| M | 516-01767 |
| N | 516-01768 |
| O | 516-01781 |
| P | 516-01770 |
| Q | 516-01771 |
| R | 516-01772 |
| S | 516-01773 |
| T | 516-01774 |
| U | 516-01775 |
| V | 516-01776 |
| W | 516-01777 |
| X | 516-01778 |
| Y | 516-01779 |
| Z | 516-01780 |
| 0 | 516-01781 |
| 1 | 516-01782 |
| 2 | 516-01783 |
| 3 | 516-01784 |
| 4 | 516-01785 |
| 5 | 516-01786 |
| 6 | 516-01787 |
| 7 | 516-01788 |
| 8 | 516-01789 |
| 9 | 515-01699 |
| · | 516-01791 |
| + | 516-01792 |
| - | 516-01793 |
| » | 516-01794 |
| « | 516-01795 |



| HGDC2-5 Reels of 1000 | |
|-----------------------|-------------|
| Mark | Article-No. |
| A | 515-02019 |
| B | 515-02029 |
| C | 515-02039 |
| D | 515-02049 |
| E | 515-02059 |
| F | 515-02069 |
| G | 515-02079 |
| H | 515-02089 |
| I | 515-02099 |
| J | 515-02109 |
| K | 515-02119 |
| L | 515-02129 |
| M | 515-02139 |
| N | 515-02149 |
| O | 515-02279 |
| P | 515-02169 |
| Q | 515-02179 |
| R | 515-02189 |
| S | 515-02199 |
| T | 515-02209 |
| U | 515-02219 |
| V | 515-02229 |
| W | 515-02239 |
| X | 515-02249 |
| Y | 515-02259 |
| Z | 515-02269 |
| 0 | 515-02279 |
| 1 | 515-02289 |
| 2 | 515-02299 |
| 3 | 515-02309 |
| 4 | 515-02319 |
| 5 | 515-02329 |
| 6 | 515-02339 |
| 7 | 515-02349 |
| 8 | 515-02359 |
| 9 | 515-02699 |
| · | 515-02419 |
| + | 515-02379 |
| - | 515-02389 |
| » | 515-02399 |
| « | 515-02409 |



| HGDC4-9 Reels of 250 | |
|----------------------|-------------|
| Mark | Article-No. |
| A | 515-03795 |
| B | 515-03796 |
| C | 515-03797 |
| D | 515-03798 |
| E | 515-03799 |
| F | 515-03800 |
| G | 515-03801 |
| H | 515-03802 |
| I | 515-03803 |
| J | 515-03804 |
| K | 515-03805 |
| L | 515-03806 |
| M | 515-03807 |
| N | 515-03808 |
| O | 515-03821 |
| P | 515-03810 |
| Q | 515-03811 |
| R | 515-03812 |
| S | 515-03813 |
| T | 515-03814 |
| U | 515-03815 |
| V | 515-03816 |
| W | 515-03817 |
| X | 515-03818 |
| Y | 515-03819 |
| Z | 515-03820 |
| 0 | 515-03821 |
| 1 | 515-03822 |
| 2 | 515-03823 |
| 3 | 515-03824 |
| 4 | 515-03825 |
| 5 | 515-03826 |
| 6 | 515-03827 |
| 7 | 515-03828 |
| 8 | 515-03829 |
| 9 | 515-03699 |
| · | 515-03942 |
| + | 515-03831 |
| - | 515-03832 |
| » | 515-03833 |
| « | 515-03834 |





Pre-Printed Cable Markers

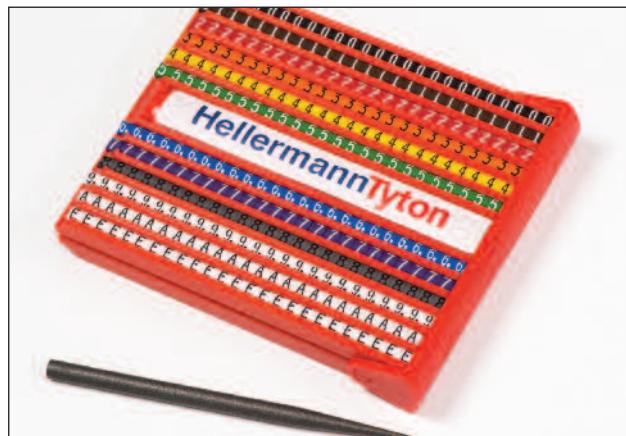
Helagrip Cassette

A variety of marks in a convenient dispenser.

MHG1-3CASS contains 50 each of colour coded numbers 0, 1, 2 and 3 and 25 each of 4, 5, 6, 7, 8, 9 and A, E, L, N, R, S, T, +, - and earth printed black on white

MHG2-5CASS contains 25 each of colour coded numbers 1, 2, 3, 4, 5, 6, 7, 8, 9 and A, E, L, N, R, S, T, +, - and earth printed black on white.

- TJC Applicator tool included



Helagrip Cassette.

| Type | Contents | Cable Ø Range mm | Marker Length mm | Application Tool | Article Number |
|------------|----------|------------------|------------------|------------------|----------------|
| MHG1-3CASS | | 1.0 - 3.0 | 3.5 | TJC1-3 | 518-06013 |
| MHG2-5CASS | | 2.0 - 5.0 | 3.5 | TJC2-5 | 518-06025 |

Pre-Printed Cable Markers

Helagrip Kit

Some of the most commonly used markers supplied in a kit.

Each kit contains 250 each of colour coded numbers 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 and L, N, R, S, T, +, - and earth printed black on white.



Helagrip Kit.

| Type | Contents | Cable Ø Range mm | Marker Length mm | Application Tool | Article Number |
|-----------|----------|------------------|------------------|------------------|----------------|
| MHG1-3KIT | | 1.0 - 3.0 | 3.5 | TJC1-3 | 518-05013 |
| MHG2-5KIT | | 2.0 - 5.0 | 3.5 | TJC2-5 | 518-05025 |



TJC applicator tools sold separately.
See page 175 in Additions Catalogue



Pre-Printed Cable Markers

Ovalgrip, Slide on, Straight Cut Black on White

Ideally suited to panel building, mass transit, utilities, telecommunications and electrical contracting.
Markers are available in black on white with characters 0-9, A-Z and standard electrical symbols.

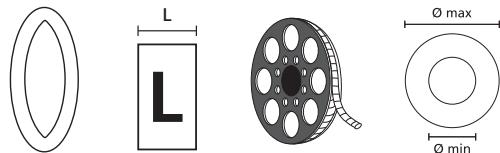
Features and Benefits

- Oval shaped markers designed to fit AT1, AT2 or AT3 (depends on Ovalgrip size)
AT1 Arrowtags will fit 7 size 50 markers.
AT2 Arrowtags will fit 8 size 85 markers.
AT3 Arrowtags will fit 14 size 85 markers.
- Ideal for use in maintenance and repair and fixed with cable ties
- Direct application to wire and cable before termination is also recommended
- HODS85 markers are available as bags of 100 or reels of 1000



Suitable for a variety of different applications.

| | |
|------------------------------|---|
| MATERIAL | Flexible Polyvinyl Chloride, cadmium free (PVC) |
| Operation Temperature | -65°C to +105°C, intermittent +135°C |
| Flammability | UL94 V0 (3mm) |
| Specifications | BS-2782-540B, BS-6746C, IEC 757, IEC 304, UL224 |



| TYPE | Bundle Ø min. mm | Bundle Ø max. mm | Length (L) mm | Pack Cont. | For Size |
|--------|------------------|------------------|---------------|------------|----------|
| HODS50 | 1.7 | 3.6 | 4.0 | 1000 | AT1 |
| HODS85 | 1.8 | 6.3 | 4.5 | 100/1000 | AT2/AT3 |

See page 447 in Product Catalogue for black on yellow and colour coded ovalgrip markers

See page 458 in Product Catalogue for arrowtags



Identification Systems

Wire and Cable Markers

Pre-printed Cable Markers

Ovalgrip, Slide on, Straight Cut Black on White

| HODS50 - Reels of 1000 | | |
|------------------------|------------|------|
| Article-No. | Pack Cont. | |
| A | 531-00109 | 1000 |
| B | 531-00110 | 1000 |
| C | 531-00111 | 1000 |
| D | 531-00112 | 1000 |
| E | 531-00113 | 1000 |
| F | 531-00114 | 1000 |
| G | 531-00115 | 1000 |
| H | 531-00116 | 1000 |
| I | 531-00117 | 1000 |
| J | 531-00118 | 1000 |
| K | 531-00119 | 1000 |
| L | 531-00120 | 1000 |
| M | 531-00121 | 1000 |
| N | 531-00122 | 1000 |
| O | 531-00123 | 1000 |
| P | 531-00124 | 1000 |
| Q | 531-00125 | 1000 |
| R | 531-00126 | 1000 |
| S | 531-00127 | 1000 |
| T | 531-00128 | 1000 |
| U | 531-00129 | 1000 |
| V | 531-00130 | 1000 |
| W | 531-00131 | 1000 |
| X | 531-00132 | 1000 |
| Y | 531-00133 | 1000 |
| Z | 531-00134 | 1000 |
| 0 | 531-00099 | 1000 |
| 1 | 531-00100 | 1000 |
| 2 | 531-00101 | 1000 |
| 3 | 531-00102 | 1000 |
| 4 | 531-00103 | 1000 |
| 5 | 531-00104 | 1000 |
| 6 | 531-00105 | 1000 |
| 7 | 531-00106 | 1000 |
| 8 | 531-00107 | 1000 |
| 9 | 531-15374 | 1000 |
| + | 531-00718 | 1000 |
| - | 531-00719 | 1000 |
| / | 531-00720 | 1000 |
| . | 531-00721 | 1000 |
| ÷ | 531-00722 | 1000 |



| HODS85 - Reels of 1000 | | |
|------------------------|------------|------|
| Article-No. | Pack Cont. | |
| A | 531-07825 | 1000 |
| B | 531-07826 | 1000 |
| C | 531-07827 | 1000 |
| D | 531-07828 | 1000 |
| E | 531-07829 | 1000 |
| F | 531-07830 | 1000 |
| G | 531-07831 | 1000 |
| H | 531-07832 | 1000 |
| I | 531-07833 | 1000 |
| J | 531-07834 | 1000 |
| K | 531-07835 | 1000 |
| L | 531-07836 | 1000 |
| M | 531-07837 | 1000 |
| N | 531-07838 | 1000 |
| O | 531-07815 | 1000 |
| P | 531-07840 | 1000 |
| Q | 531-07841 | 1000 |
| R | 531-07842 | 1000 |
| S | 531-07843 | 1000 |
| T | 531-07844 | 1000 |
| U | 531-07845 | 1000 |
| V | 531-07846 | 1000 |
| W | 531-07847 | 1000 |
| X | 531-07848 | 1000 |
| Y | 531-07849 | 1000 |
| Z | 531-07850 | 1000 |
| 0 | 531-07815 | 1000 |
| 1 | 531-07816 | 1000 |
| 2 | 531-07817 | 1000 |
| 3 | 531-07818 | 1000 |
| 4 | 531-07819 | 1000 |
| 5 | 531-07820 | 1000 |
| 6 | 531-07821 | 1000 |
| 7 | 531-07822 | 1000 |
| 8 | 531-07823 | 1000 |
| 9 | 531-07737 | 1000 |
| + | 531-07813 | 1000 |
| - | 531-07810 | 1000 |
| / | 531-07812 | 1000 |
| . | 531-07811 | 1000 |
| ÷ | 531-07814 | 1000 |



| HODS85 - Bags of 100 | | |
|----------------------|-----------------|-----------|
| Article-No. | Pack Cont. | |
| A | MHO85X5WE-100 A | 531-07861 |
| B | MHO85X5WE-100 B | 531-07862 |
| C | MHO85X5WE-100 C | 531-07863 |
| D | MHO85X5WE-100 D | 531-07864 |
| E | MHO85X5WE-100 E | 531-07865 |
| F | MHO85X5WE-100 F | 531-07866 |
| G | MHO85X5WE-100 G | 531-07867 |
| H | MHO85X5WE-100 H | 531-07868 |
| I | MHO85X5WE-100 I | 531-07869 |
| J | MHO85X5WE-100 J | 531-07870 |
| K | MHO85X5WE-100 K | 531-07871 |
| L | MHO85X5WE-100 L | 531-07872 |
| M | MHO85X5WE-100 M | 531-07873 |
| N | MHO85X5WE-100 N | 531-07874 |
| O | MHO85X5WE-100 O | 531-07875 |
| P | MHO85X5WE-100 P | 531-07876 |
| Q | MHO85X5WE-100 Q | 531-07877 |
| R | MHO85X5WE-100 R | 531-07878 |
| S | MHO85X5WE-100 S | 531-07879 |
| T | MHO85X5WE-100 T | 531-07880 |
| U | MHO85X5WE-100 U | 531-07881 |
| V | MHO85X5WE-100 V | 531-07882 |
| W | MHO85X5WE-100 W | 531-07883 |
| X | MHO85X5WE-100 X | 531-07884 |
| Y | MHO85X5WE-100 Y | 531-07885 |
| Z | MHO85X5WE-100 Z | 531-07886 |
| 0 | MHO85X5WE-100 0 | 531-07851 |
| 1 | MHO85X5WE-100 1 | 531-07852 |
| 2 | MHO85X5WE-100 2 | 531-07853 |
| 3 | MHO85X5WE-100 3 | 531-07854 |
| 4 | MHO85X5WE-100 4 | 531-07855 |
| 5 | MHO85X5WE-100 5 | 531-07856 |
| 6 | MHO85X5WE-100 6 | 531-07857 |
| 7 | MHO85X5WE-100 7 | 531-07858 |
| 8 | MHO85X5WE-100 8 | 531-07859 |
| 9 | MHO85X5WE-100 9 | 531-07860 |
| + | MHO85X5WE-100 + | 531-08051 |
| - | MHO85X5WE-100 - | 531-08010 |
| / | MHO85X5WE-100 / | 531-08011 |
| . | MHO85X5WE-100 . | 531-08054 |

i These markers are supplied fully severed in bags of 100



Pre-Printed Cable Markers

Ovalgrip Kit

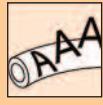
Some of the most commonly used markers supplied in a kit.

Each kit contains 125 each of colour coded numbers 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 and L, N, R, S, T, +, - and earth printed black on white



A convenient idea for a range of applications.

| Type | Contents | Bundle min mm | Bundle max mm | Article Number |
|----------|--|---------------|---------------|----------------|
| MHO85KIT | 0 1 2 3 4 5 6 7 8 9 L N R S T + - E | 2.5 | 6.0 | 531-00253 |



Pre-Printed Cable Markers

MP Markers, Thin Wall, Slide On, Straight Cut

These high grade PVC makers have a thin wall which makes them ideal for identifying wire in areas where space is at a premium.

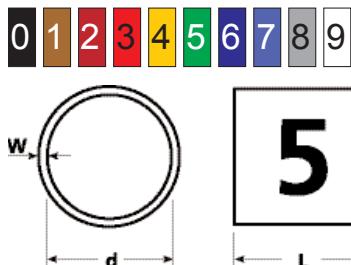
Features and Benefits

- Flexible markers to make installation easier
- Lighter than other markers due to the thin wall
- The material can be expanded up to 150%
- Supplied fully severed in bags of 1000



Ideal for identification in small spaces.

| | |
|-------------------------------|--|
| MATERIAL | PVC |
| Colours | International resistor colour code 0-9 |
| Temperature | -65 to +105°C |
| Material Specification | UL224, BS-3858 Type 3, IEC 304 |



d internal diameter
L length of single mark
w wall thickness

| TYPE | Wall Thickness (mm) | Inside Ø (mm) | Length (L) (mm) | Tools | Pack Cont. |
|-------------|---------------------|---------------|-----------------|--------|------------|
| MP10 | 0.35 | 1.0 | 3.0 | - | 1000 |
| MP12 | 0.35 | 1.2 | 3.0 | - | 1000 |
| MP15 | 0.35 | 1.5 | 3.0 | TJC1-3 | 1000 |
| MP20 | 0.35 | 2.0 | 5.0 | TJC2-5 | 1000 |
| MP25 | 0.35 | 2.5 | 5.0 | TJC2-5 | 1000 |
| MP30 | 0.35 | 3.0 | 5.0 | TJC2-5 | 1000 |
| MP40 | 0.35 | 4.0 | 5.0 | TJC4-9 | 1000 |
| MP55 | 0.35 | 5.5 | 5.0 | - | 1000 |



TJC applicator tools sold separately.
See page 175 in Additions Catalogue



Pre-printed Cable Markers

MP markers, Thin Wall, Slide On, Straight Cut - Colour Coded

| MP10 | |
|------|-------------|
| Mark | Article-No. |
| 0 | 520-02600 |
| 1 | 604-00203 |
| 2 | 604-00204 |
| 3 | 604-00205 |
| 4 | 604-00206 |
| 5 | 604-00207 |
| 6 | 604-00208 |
| 7 | 604-00209 |
| 8 | 604-00210 |
| 9 | 604-00211 |

| MP12 | |
|------|-------------|
| Mark | Article-No. |
| 0 | 604-00300 |
| 1 | 604-00301 |
| 2 | 604-00302 |
| 3 | 604-00303 |
| 4 | 604-00304 |
| 5 | 604-00305 |
| 6 | 604-00306 |
| 7 | 604-00307 |
| 8 | 604-00308 |
| 9 | 604-00309 |

| MP15 | |
|------|-------------|
| Mark | Article-No. |
| 0 | 604-00402 |
| 1 | 604-00403 |
| 2 | 604-00404 |
| 3 | 604-00405 |
| 4 | 604-00406 |
| 5 | 604-00407 |
| 6 | 604-00408 |
| 7 | 604-00409 |
| 8 | 604-00410 |
| 9 | 604-00411 |

| MP20 | |
|------|-------------|
| Mark | Article-No. |
| 0 | 604-00547 |
| 1 | 604-00548 |
| 2 | 604-00549 |
| 3 | 604-00550 |
| 4 | 604-00551 |
| 5 | 604-00552 |
| 6 | 604-00553 |
| 7 | 604-00554 |
| 8 | 604-00555 |
| 9 | 604-00556 |

| MP25 | |
|------|-------------|
| Mark | Article-No. |
| 0 | 604-00610 |
| 1 | 604-00611 |
| 2 | 604-00612 |
| 3 | 604-00613 |
| 4 | 604-00614 |
| 5 | 604-00615 |
| 6 | 604-00616 |
| 7 | 604-00617 |
| 8 | 604-00618 |
| 9 | 604-00619 |

| MP30 | |
|------|-------------|
| Mark | Article-No. |
| 0 | 604-00715 |
| 1 | 604-00716 |
| 2 | 604-00717 |
| 3 | 604-00718 |
| 4 | 604-00719 |
| 5 | 604-00720 |
| 6 | 604-00721 |
| 7 | 604-00722 |
| 8 | 604-00723 |
| 9 | 604-00724 |

| MP40 | |
|------|-------------|
| Mark | Article-No. |
| 0 | 604-00826 |
| 1 | 604-00827 |
| 2 | 604-00828 |
| 3 | 604-00829 |
| 4 | 604-00830 |
| 5 | 604-00831 |
| 6 | 604-00832 |
| 7 | 604-00833 |
| 8 | 604-00834 |
| 9 | 604-00835 |

| MP55 | |
|------|-------------|
| Mark | Article-No. |
| 0 | 604-00907 |
| 1 | 604-00908 |
| 2 | 604-00909 |
| 3 | 604-00910 |
| 4 | 604-00911 |
| 5 | 604-00912 |
| 6 | 604-00913 |
| 7 | 604-00914 |
| 8 | 604-00915 |
| 9 | 604-00916 |



Thimble Jig

Thimble Jig Applicator Tool

PTFE coated applicator tools designed for use with Helagrip and MP markers.

Features and Benefits

- PTFE coating ensures that the markers can be slipped onto the wire with minimum effort.



Use TJC tools for easy application.

| Type | Diameter max. mm | Diameter min. mm | Pack Cont. |
|--------|---------------------|---------------------|------------|
| TJC1-3 | 2.8 | 1.3 | 1 |
| TJC2-5 | 5.0 | 2.3 | 1 |
| TJC4-9 | 9.0 | 4.0 | 1 |

Adhesive Markers

Adhesive Vinyl Cloth Markers

Adhesive vinyl cloth markers printed with black on white numbers 0-9. Supplied in 2.4m rolls of each digit in a handy dispenser. Designed for easy marking of wires and cables.

Features and Benefits

- Easy to use
- PVC film with high opacity and adhesion strength
- Excellent adhesion to various surfaces
- Indoor use only



Handy wire marker dispenser.

| Type | Length | Width mm | Pack Cont. |
|------|---------------|-------------|------------|
| MT1 | 2.4m per roll | 5.0 | 1 |



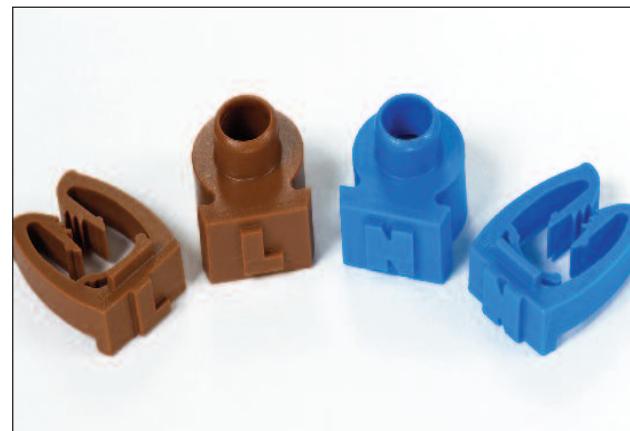
Smart Meter Cable Identification

Smart Meter Clips and Collars

As the installation of Smart Meters are rolled out across the UK and Europe it is ever more critical for installers to have a quick, safe and uniform identification method for cables. With a built in revenue protection system the Smart Meter clips and collars save time and cost compared to alternative methods.

Features and Benefits

- Quick, clean and safe installation
- Identification moulded onto the collar and clip
- No waste disposal
- Provides revenue protection
- Colour coded
- Captive when fitted
- Low profile
- Adaptable to multiphase
- No application tools
- Suitable for 16mm² and 25mm² cables



Smart Meter Clips and Collars.

| | |
|------------------------------|-------------------------------|
| MATERIAL | Polyamide 6.6 (PA66) |
| Operating Temperature | -40°C to +85°C (+105°C, 500h) |
| Flammability | UL94 (1.4mm) |
| Specifications | BS-7671 |



| TYPE | Identification mark | Description | Colour | Pack Cont. | Article No. |
|--------------------|---------------------|-------------|------------|------------|-------------|
| SMCLIPBRL | L | Clip | Brown | 1000 pcs. | 539-00002 |
| SMCLIPLBN | N | Clip | Light Blue | 1000 pcs. | 539-00003 |
| SMCOLLARBRL | L | Collar | Brown | 1000 pcs. | 539-00000 |
| SMCOLLARLBN | N | Collar | Light Blue | 1000 pcs. | 539-00001 |

L1, L2, L3 are also available for multiphase installations



Smart Meter Cable Stripping Tools

CORE16 and CORE25

The CORE tools strip the cable safely to a pre-defined length, ensuring that the cable is stripped correctly first time, every time, to provide a quick, easy and compliant install.

The inner and outer sheathing is removed by the CORE tool leaving a shoulder that allows the cable to fit perfectly inside the Smart Meter collars.

Features and Benefits

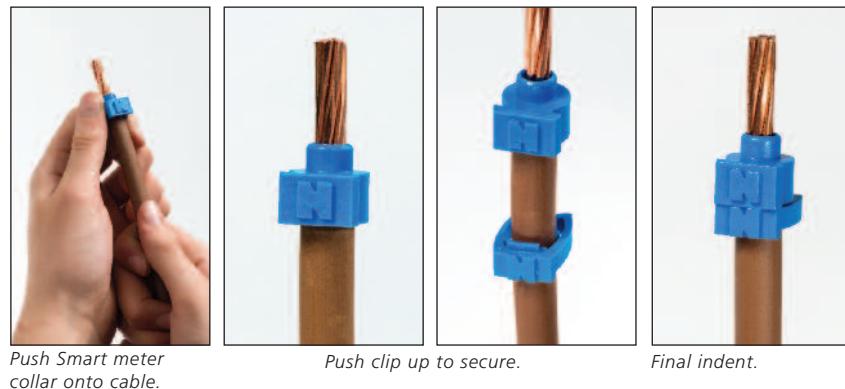
- To be used in conjunction with smart meter clips and collars
- Speeds up installation time
- Strips the cable correctly every time
- Reduces the amount of cable wasted
- Ergonomic design
- Reduces risk of injury compared to using conventional methods



The CORE tools are designed to accurately strip cable to the required length.



Insert cable, twist to strip cable.



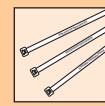
Push Smart meter collar onto cable.

Push clip up to secure.

Final indent.

| Type | Application | For Cable Diameter |
|--------|-------------------------------|--------------------|
| CORE16 | Smart Meter clips and collars | 16mm ² |
| CORE25 | Smart Meter clips and collars | 25mm ² |





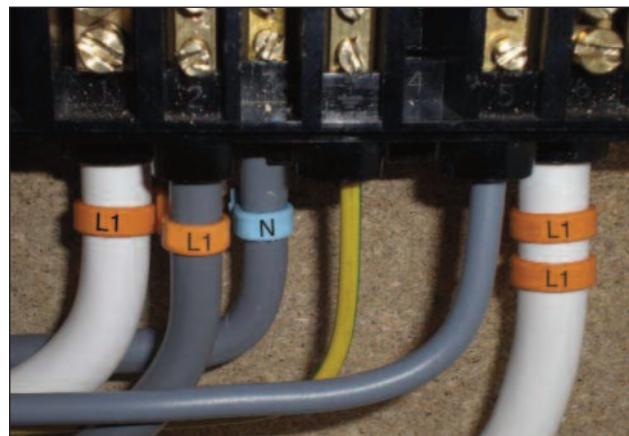
Printed Cable Ties

Printed Cable Ties for Metering Installation

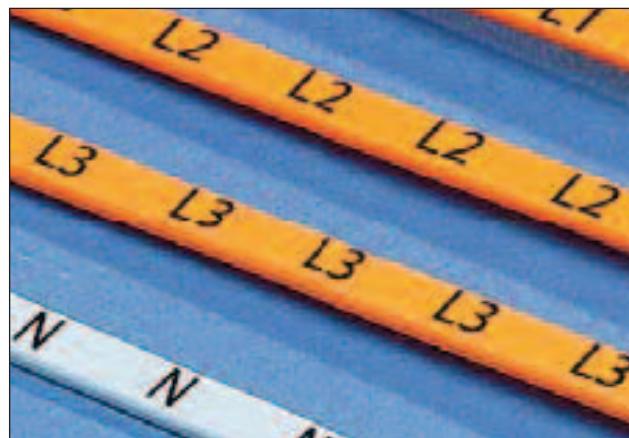
A range of printed ties specifically designed for meter installations.

Features and Benefits

- Manufactured from Virgin Grade PA66 material
- MOQ applies
- Colours available: Light Blue Printed N, Dark Blue printed N, Orange Printed L, Orange Printed L1, Orange Printed L2, Orange Printed L3, Brown Printed L1, Brown Printed L2, and Brown Printed L3.



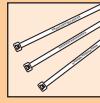
Printed Cable Ties for Metering Installation.



Printed Cable Ties.

| Type | Description | Length mm | Width mm | Pack Cont. |
|---------------|--------------------------------|-----------|----------|------------|
| T50RPRN.N1904 | Dark Blue Meter Tie Printed N | 200 | 4.6 | 1000 |
| T50RPRN.NL920 | Light Blue Meter Tie Printed N | 200 | 4.6 | 1000 |
| T50RPRN.N9900 | Orange Meter Tie Printed L | 200 | 4.6 | 1000 |
| T50RPRN.N9901 | Orange Meter Tie Printed L1 | 200 | 4.6 | 1000 |
| T50RPRN.N9902 | Orange Meter Tie Printed L2 | 200 | 4.6 | 1000 |
| T50RPRN.N9903 | Orange Meter Tie Printed L3 | 200 | 4.6 | 1000 |
| T50RPRN.NA921 | Brown Meter Tie Printed L1 | 200 | 4.6 | 1000 |
| T50RPRN.NA922 | Brown Meter Tie Printed L2 | 200 | 4.6 | 1000 |
| T50RPRN.NA923 | Brown Meter Tie Printed L3 | 200 | 4.6 | 1000 |





Identification Systems

Printed Cable Ties

Identification Cable Ties

Printed Ties for General ID purposes

Used to easily identify cables, pipes, tools and equipment.

Features and Benefits

- Can be custom printed to your requirements
- Manufactured from virgin grade PA66 material
- Available in various colours
- Other sizes available on request
- MOQ applicable



Identification Cable Ties.

| TYPE | Description | Length mm | Width mm | Printable Area mm | Pack Cont. |
|---------|-------------|-----------|----------|-------------------|------------|
| T50RPRN | Printed Tie | 200 | 4.6 | 100 | 1000 |
| LK2APRN | Printed Tie | 275 | 4.6 | 200 | 1000 |



Identification Cable Ties

Printed Ties to Identify Vibration Risk

A range of cable ties for use on power tools and other equipment to identify vibration risk.

Features and Benefits

- Can be used to identify 3 risk levels:
Low, Medium and High
- Custom printed to your specific requirements
- Available in red, blue, green, yellow and orange
- MOQ applicable



Printed Ties.

| TYPE | Description | Length mm | Width mm | Printable Area mm | Pack Cont. |
|----------|-------------|-----------|----------|-------------------|------------|
| T120RPRN | Printed Tie | 380 | 7.6 | 180 | 1000 |





Identification Cable Ties

Printed Fluorescent Ties

A range of fluorescent cable ties which can be custom printed for your specific requirements.

Features and Benefits

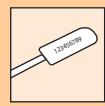
- Easily identifies tools and equipment
- Manufactured from virgin grade PA66 material
- Available in fluorescent orange or yellow
- MOQ applicable



Printed Fluorescent Ties.

| TYPE | Description | Length mm | Width mm | Printable Area mm | Pack Cont. |
|----------|-------------|-----------|----------|-------------------|------------|
| T120IPRN | Printed Tie | 300 | 7.6 | 180 | 1000 |





Security Seals

Pull Tight Security Seal

A range of pull tight security seals suitable for fire doors, fire extinguishers, safety deposit boxes and coin boxes.

Features and Benefits

- Moulded in high grade polypropylene
- Supplied in mats of 10
- Available with a sequential serial number if required
- Customised printing available at extra cost, MOQ will apply



PTSK Security Seal.

| TYPE | Description | Length mm | Width mm | Flag Length mm | Flat Width mm | Printable Area mm | Pack Cont. |
|------|-----------------|-----------|----------|----------------|---------------|-------------------|------------|
| PTSK | Pull Tight Seal | 195 | 2.4 | 40 | 19.5 | 32 | 2000 |



Security Seals

Pull Tight Security Seal

A range of pull tight security seals suitable for transportation, postal bags and roll cages.

Features and Benefits

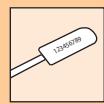
- Moulded in high grade polypropylene
- 220mm long
- Customised printing available at extra cost, MOQ will apply



PTSK2 Security Seal.

| TYPE | Description | Length mm | Width mm | Flag Length mm | Flat Width mm | Printable Area mm | Pack Cont. |
|-------|-----------------|-----------|----------|----------------|---------------|-------------------|------------|
| PTSK2 | Pull Tight Seal | 220 | 8 | 85 | 27 | 50 | 1000 |





Security Seals

Pull Tight Security Seal

These pull tight security seals are suitable for postal bags, security containers and transportation.

Features and Benefits

- 350mm long
- Moulded in high grade polypropylene
- Customised printing available at extra cost,
MOQ will apply



PTSK3 Security Seal.

| TYPE | Description | Length mm | Width mm | Flag Length mm | Flat Width mm | Printable Area mm | Pack Cont. |
|-------|-----------------|-----------|----------|----------------|---------------|-------------------|------------|
| PTSK3 | Pull Tight Seal | 350 | 8 | 85 | 27 | 50 | 1000 |



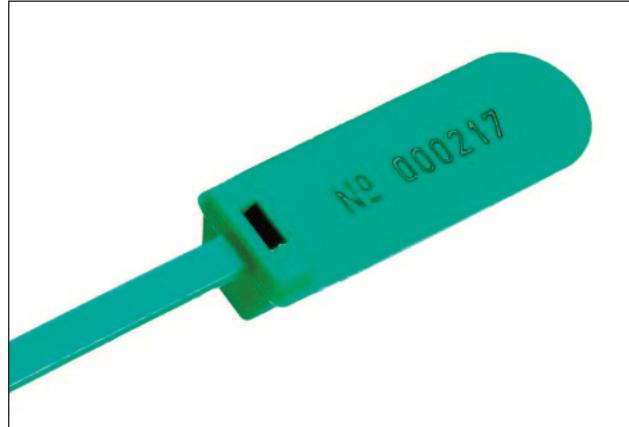
Security Seals

Fixed Length Security Seal

These security seals suitable for vehicle doors, roll cages and tankers.

Features and Benefits

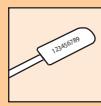
- 200mm long
- Moulded in high grade polypropylene
- Customised printing available at extra cost,
MOQ will apply



FLSK Security Seal.

| TYPE | Description | Length mm | Width mm | Flag Length mm | Flat Width mm | Printable Area mm | Pack Cont. |
|------|-------------------|-----------|----------|----------------|---------------|-------------------|------------|
| FLSK | Fixed Length Seal | 200 | 5.9 | 55 | 19.5 | 50 | 1000 |





Security Seals

Pluglok Security Closure

This range of pluglok security closures are for use with the attached lid distribution containers.

Features and Benefits

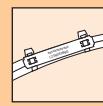
- Easy application and removal giving considerable time savings
- Manufactured in high grade polypropylene
- Other sizes available on request
- Available in green, red, white and yellow
- Please state colour when ordering



PLS10 Pluglok Seal.

| TYPE | Description | Pack Cont. |
|-------|-----------------------|------------|
| PLS10 | Pluglok Security Seal | 1000 |





Identification Tags for Cable Bundles, Thermal Transfer

TTAGMC – Metal Content Tiptags, Polyolefin

TTAGMC is designed for use in identifying wire, cable bundles and equipment in food and pharmaceutical industries, where material needs to be detectable by its metal content.

Printers: TT4000+ and TT430
 Ribbon: TTRW or TTDHOUT
 Software: TagPrint ProV3

Features and Benefits

- Identification tags for use with large wire and cable bundles
- Perforated format that includes fastening slots for fixing ties
- Outstanding chemical resistance
- Non-burning
- High temperature resistance
- Available in blue as standard
- Special lengths, widths and colours available on request

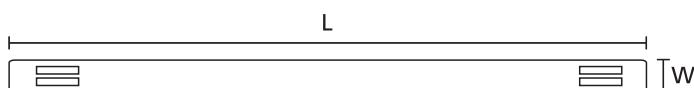


Metal Content Tiptags.

| | |
|--------------------------------|----------------|
| MATERIAL | Polyolefin |
| Operation Temperature | -40°C to +85°C |
| Flammability | UL94(1.4mm) |
| Recommended Ribbon Type | TTRW, TTDHOUT |



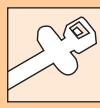
RoHS ✓



| TYPE | Length (L) mm | Width (W) mm | Pack Cont. | Colour | Article-No. |
|-----------------|------------------|-----------------|------------|-----------|-------------|
| TTAGMC11BEX65S | 65.0 | 11.0 | 190 | Blue (BU) | 556-26500 |
| TTAGMC11BEX100S | 100.0 | 11.0 | 120 | Blue (BU) | 556-26501 |
| TTAGMC15BEX65S | 65.0 | 15.0 | 190 | Blue (BU) | 556-26502 |
| TTAGMC15BEX100S | 100.0 | 15.0 | 120 | Blue (BU) | 556-26503 |



For printers, ribbons and software see section
5.6 in our Product Catalogue



RFID (Radio Frequency Identification)

What is RFID?

HellermannTyton has developed a range of nylon and metal identification cable ties with RFID tag to enable users to easily fix the RFID tag to equipment that needs to carry a serial number for tracking and identification purposes.

There are currently three options available with more configurations currently in development. Each variant comes fitted with the appropriate RFID transponder.

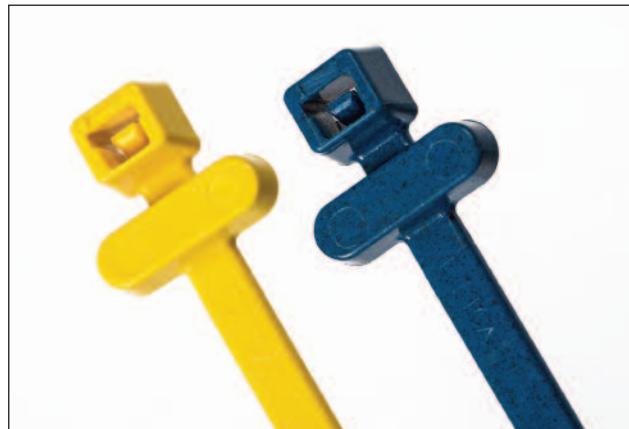
Data relating to an item is stored on a RFID tag attached to an item, in this case a cable tie. Similar to a bar code the tag is a data carrier, it carries data programmed into a small computer chip and operates at a wide range of frequencies.

Applications include:

- Theft prevention
- Keg and gas cylinder tracking
- Asset management
- Attendance verification
- Security tagging
- Leak detection
- Essential maintenance
- Baggage tagging

Advantages of RFID over other ID technologies:

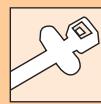
- Reliable operation in harsh environments (i.e. wet, dusty, dirty conditions; corrosive environments, vibration and shock)
- No need for contact or line-of-sight
- Freedom from line-of-sight constraints (transponders can be read irrespective of orientation and through virtually any material, including flush mounted in or surface mounted on metals)



RFID Cable Ties.



Application.



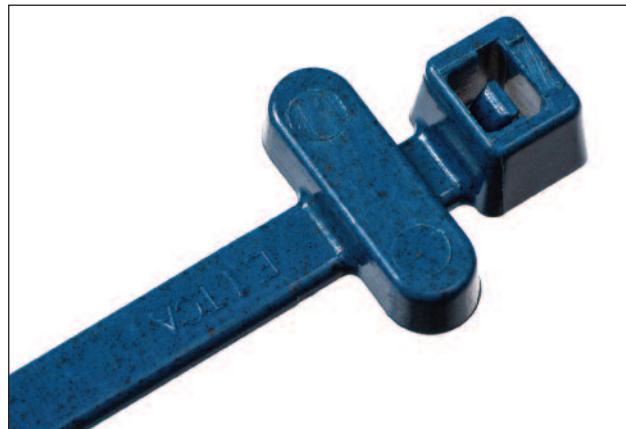
Cable Ties Complete with RFID Transponder Metal Content Nylon

Low Frequency (LF) and High Frequency (HF)

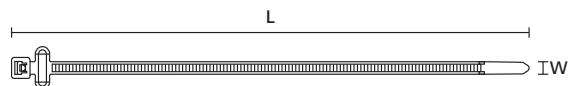
To complement our standard range of nylon RFID cable ties, we have introduced a metal content version made from polyimide 6.6 with metal particles (PA66MC) to be used within the food and pharmaceutical industries.

Features and Benefits

- Complete with either a low frequency (LF) or High Frequency (HF) transponder
- Standard colour blue



Metal Content RFID Cable Tie.



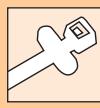
| TYPE | Length (L) mm | Width (W) mm | Material | Colour | Pack Cont. | Article No. |
|----------------|------------------|-----------------|---------------------|--------|------------|-------------|
| MCTRFDCHA.NL3P | 200 | 4.6 | PA66MP with HF RFID | BLUE | 100 | 111-01676 |
| MCTRFDCLA.NL3P | 200 | 4.6 | PA66MP with LF RFID | BLUE | 100 | 111-01976 |



Please see page 457 of Product Catalogue
for other ranges



Material specification, please see page 24 of
the Product Catalogue



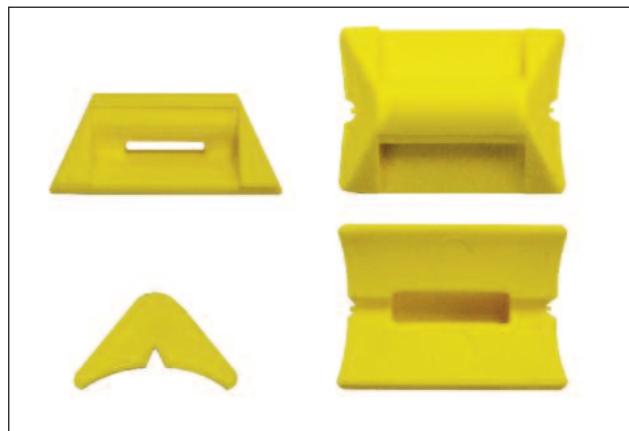
Cable Tie Cradle complete with RFID Transponder

High Frequency (HF)

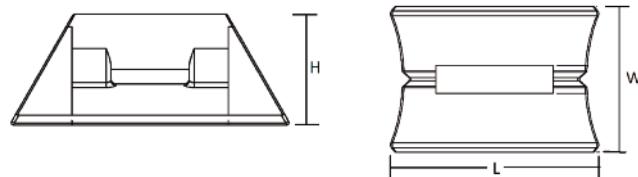
To complement the RFID cable ties, HellermannTyton also has an RFID cradle which can be used when the standard RFID cable tie is not long enough. The cradle is manufactured in thermoplastic polyurethane (TPU) and has a slot to allow any length of cable tie up to 7.9mm wide and is pre-fitted with a high frequency RFID transponder.

Features and Benefits

- Standard colour is yellow, other colours are available upon request
- High frequency (13.56 MHz) as standard
- Made from durable TPU and is suitable to be used in salt water conditions
- Cable Tie slot to suit standard cable ties up to 7.9mm wide
- ATEX approved transponder



Cable Tie Cradle with RFID Transponder.



| TYPE | Height (H) mm | Width (W) mm | Length (L) mm | Colour | Pack Cont. | Article No. |
|----------------|------------------|-----------------|------------------|--------|------------|-------------|
| RFID-CRADLE-HF | 11.31 | 19.80 | 27.87 | Yellow | 100 | 151-01472 |



ATEX



HF ✓



RoHS ✓



Material specification, please see page 24 of
the Product Catalogue



Other frequencies available on request



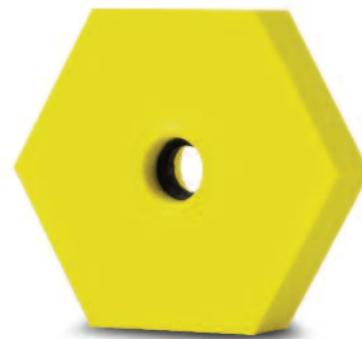
HEX TAG Complete with RFID Transponder

High Frequency (HF)

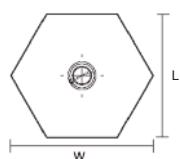
Alongside the cradle, HellermannTyton also has an RFID HEX TAG which can be used when a cable tie fixing is not suitable. The HEX TAG is manufactured in Polyamide 6.6 (PA66) and has a hole in its centre which is used to fix the tag to a piece of equipment either a stud, bolt or screw.

Features and Benefits

- Standard colour is yellow, other colours are available upon request
- High frequency (13.56 MHz) as standard. Other frequencies available upon request
- ATEX approved transponder



HEX TAG.



| TYPE | Height (H) mm | Width (W)/Length (L) mm | HoleØ mm | Colour | Pack Cont. | Article No. |
|----------------|------------------|----------------------------|-------------|--------|------------|-------------|
| RFID-HEXTAG-HF | 8.0 | 33.35 | 6.5 | Yellow | 100 | 151-01582 |



Material specification, please see page 24 of the Product Catalogue



RFID Reader

RFID Readers for Scanning RFID Identification Products

RFID readers are used to simply and quickly read data from transponders which are integrated into our RFID range of identification products. The readers are suitable for a wide range of applications and are available as handheld or desktop devices for high or low frequency ranges.

Features and Benefits

- Very easy to use
- Different versions to meet different needs
- The USB interface enables the reader to be connected easily to a PC
- HS9 readers can be connected to a smartphone or PC via Bluetooth
- Compatible with Android and iOS devices



High Frequency Desktop Reader.

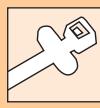


Low or High Frequency Bluetooth reader.

| TYPE | Description | Reading System | Operating Frequency | Article No. |
|---------------|------------------|-----------------------|--------------------------------|-------------|
| RFID-HS9BT-LF | Hand Held Reader | ASK 64-bit Manchester | 125 kHz, Low Frequency (LF) | 556-00701 |
| RFID-HS9BT-HF | Hand Held Reader | ISO 14443, ISO 15693 | 13.56 MHz, High Frequency (HF) | 556-00700 |
| RFID-DT22 | Desktop Reader | ISO 14443A, ISO 15693 | 13.56 MHz, High Frequency (HF) | 556-00702 |



For more information please contact our customer services department or consult our RFID brochure



Stainless Steel Cable Ties Complete with RFID Transponder

High Frequency (HF) and Ultra High Frequency (UHF)

The HellermannTyton range of stainless steel cables ties complete with a fitted RFID transponder are ideal for asset management applications in harsh environments. Using our proven range of MBT polyester coated stainless steel range the tie comes fitted with a slide on carrier holding either a high frequency (HF) or ultra high frequency (UHF) RFID transponder.

Features and Benefits

- Standard colour red, black coating is also available as a special
- 316 Stainless Steel
- Patented non-releasable locking feature
- Comfortable handling and installation
- Eliminates contact corrosion between dissimilar materials during application



Stainless Steel Cable Tie with RFID Transponder.

| TYPE | Length (L) mm | Width (W) mm | Frequency | Colour | Pack Cont. | Article No. |
|-------------------------|---------------|--------------|---------------------|--------|------------|-------------|
| MBT8HFCRFID KIT | 201 | 7.9 | HF RFID transponder | RED | 50 pcs | 156-01167 |
| MBT14HFCRFID KIT | 362 | 7.9 | HF RFID transponder | RED | 50 pcs | 111-01586 |
| MBT20HFCRFID KIT | 521 | 7.9 | HF RFID transponder | RED | 50 pcs | 111-01587 |
| MBT27HFCRFID KIT | 685 | 7.9 | HF RFID transponder | RED | 50 pcs | 111-01588 |
| MBT33HFCRFID KIT | 838 | 7.9 | HF RFID transponder | RED | 50 pcs | 111-01589 |

| TYPE | Length (L) mm | Width (W) mm | Frequency | Colour | Pack Cont. | Article No. |
|-------------------------|---------------|--------------|----------------------|--------|------------|-------------|
| MBT8HHFRFID KIT | 201 | 7.9 | UHF RFID transponder | RED | 50 pcs | 156-01565 |
| MBT14HHFRFID KIT | 362 | 7.9 | UHF RFID transponder | RED | 50 pcs | 156-01566 |
| MBT20HHFRFID KIT | 521 | 7.9 | UHF RFID transponder | RED | 50 pcs | 156-01567 |
| MBT27HHFRFID KIT | 685 | 7.9 | UHF RFID transponder | RED | 50 pcs | 156-01568 |
| MBT33HHFRFID KIT | 838 | 7.9 | UHF RFID transponder | RED | 50 pcs | 156-01569 |

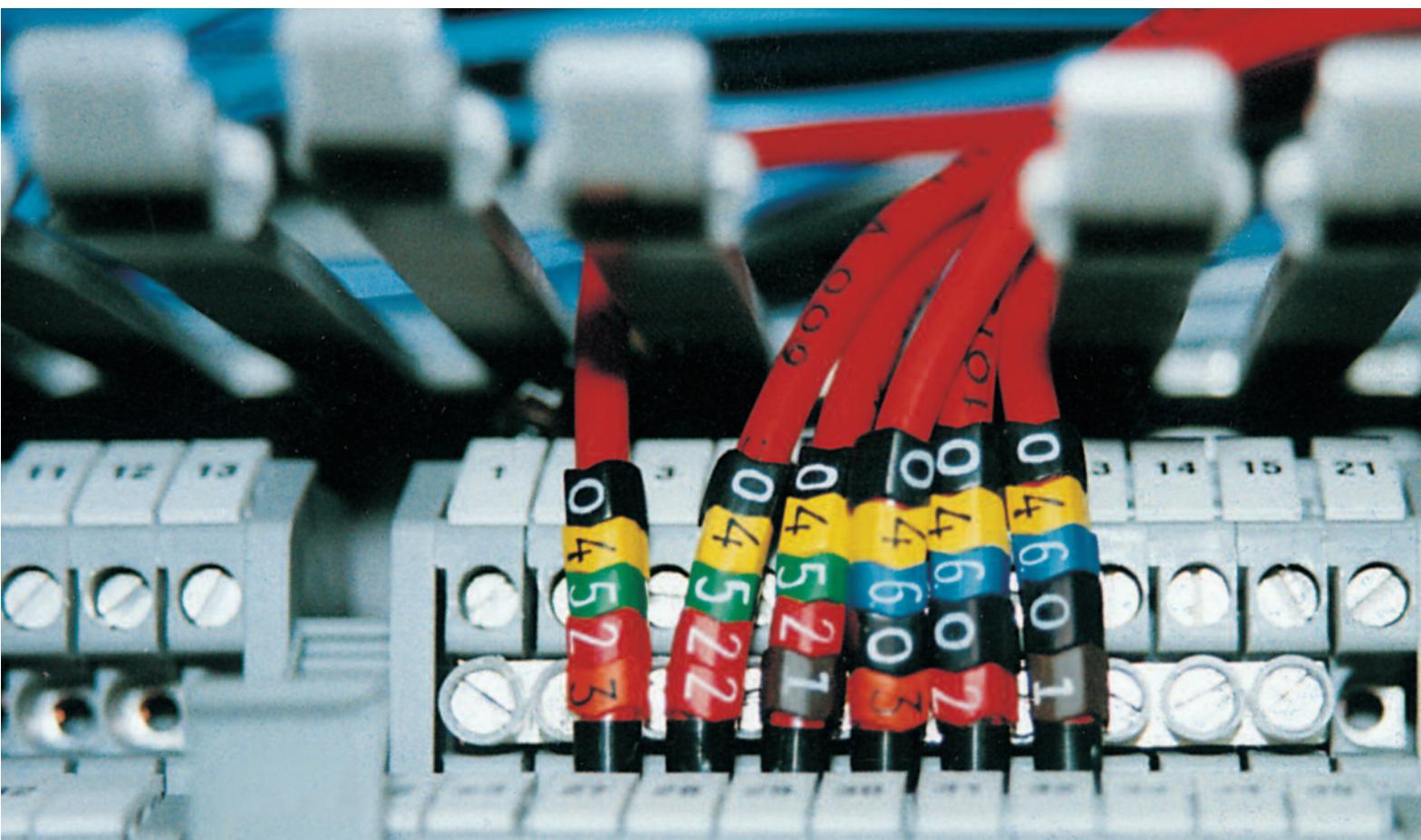


See pages 522-523 Product Catalogue
For recommended tools MK9SST / MK9PSST /
HDT16 / KST-STG200

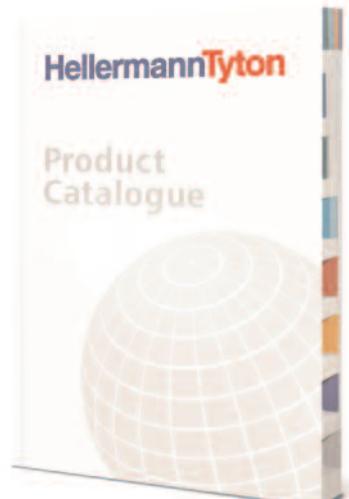
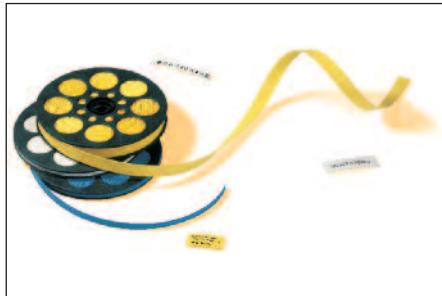


Material specification, please see page 24 of
the Product Catalogue

Identification Systems



For more information on our complete Identification range of products, please see our Product Catalogue Section 5 Identification Systems





Application Tooling for Cable Ties

Manual Tensioning Tool with Plastic Housing

HellermannTyton's EVO9 mechanical hand tool was ergonomically designed to reduce the risks of repetitive stress injuries to operators while concurrently increasing productivity. The EVO9 Tension/Lock/Cut Technology delivers performance, safety and comfort for the operators. Available in a standard grip span (EVO9) or short grip span (EVO9SP), for smaller hands, as well as high tension version (EVO9 HT). Additional accessories are available.

Features and Benefits

- Ergonomic, slip-proof handle for a comfortable and secure grip
- Extremely low maintenance
- Fast and precise application with minimum effort (TLC mechanism)
- Convenient and simple tension adjustment
- Integrated 3 position quick adjustment override
- Housings made of resilient and lightweight glass fibre-reinforced polyester
- Standard grip span (95 mm) and short grip span (90 mm) available



EVO9.

| TYPE | Strap Width max. mm | Strap Thickness max. mm | Weight kg | Article No. | Pack Cont. |
|----------------|------------------------|----------------------------|--------------|-------------|------------|
| EVO9 | 13 | 1.52 | 0.36kg | 110-80002 | 1 |
| EVO9 SP | 13 | 1.52 | 0.36kg | 110-80003 | 1 |
| EVO9 HT | 13 | 1.52 | 0.36kg | 110-80017 | 1 |



Application Tooling for Heat Shrinkable Tubing

Weldy Plus Heat Gun

A unique professional tool with a LCD display.

Features and Benefits

- Electronic temperature and air-flow adjustment
- 14 pre-set programmes for plastic welding
- LCD display
- Multilingual menu
- Temperature range +80°C to +650°C
- A range of accessories also available
- Comes in a solid plastic case



Weldy Plus.

| TYPE | Voltage | Output | Airflow | Weight | Pack Cont. |
|---------------------------|---------|--------|---------|--------|------------|
| Weldy Plus 119.995 | 110V | 2000W | n/a | 620g | 1 |
| Weldy Plus 119.086 | 230V | 2000W | n/a | 620g | 1 |

Application Tooling for Heat Shrinkable Tubing

Weldy Pro Heat Gun

The popular version with the simple, manual controllable temperature adjustment by a potentiometer

Features and Benefits

- Electronic temperature adjustment from 100°C to 550°C
- Air flow adjustment via two step switch
- Compact and lightweight
- A range of accessories also available



Weldy Pro.

| TYPE | Voltage | Output | Airflow | Weight | Pack Cont. |
|--------------------------|---------|--------|---------|--------|------------|
| Weldy Pro 119.085 | 230V | 1800W | n/a | 570g | 1 |



Application Tooling for Heat Shrinkable Tubing

Accessories

A range of accessories are available for the Weldy Pro and Weldy Plus Heat guns



Accessories.

| TYPE | Item No. | Description | Pack Cont. |
|----------------|----------|---------------------------|------------|
| 119.345 | 1 | Welding Nozzle | 1 |
| 119.344 | 2 | Reflector Nozzle | 1 |
| 119.341 | 3 | Glass Protection Nozzle | 1 |
| 119.342 | 4 | Wide Slot Nozzle | 1 |
| 119.343 | 5 | Reduction Nozzle 20mm dia | 1 |
| 119.346 | 6 | Overlap Welding Nozzle | 1 |
| 119.348 | 7 | Pressure Roller | 1 |
| 119.347 | 8 | Solder Sleeve Reflector | 1 |



Application Tooling for Heat Shrinkable Tubing

Weldy Hot Air Tool

WELDY energy HT1600 is a compact and robust hot air hand tool for an endless range of professional applications.

This hot-air-tool with its up-to-date design, its solid overall performance and with an unbeatable cost-performance ratio.

The energy HT1600 kit: your professional hot air equipment for recovering all types of heat shrink materials.



HT1600 Hot Air Tool.

Main Applications

- Joining industrial fabrics and tarpaulins
- Recovering heat shrink tubing and heat shrink shapes

Features and Benefits

- Handy and reliable
- Economical and universal
- Up to 700 °C
- Long lifetime
- Free adjustable temperature
- Heating tube protection for more security
- Swiss technology and engineering
- Professional outdoor tool
- Suitable for all job-sites
- Easy-to-clean air filter
- Carbon brush stop and heating element protection provide automatic protective measures
- Sturdy tool case supplied
- 120 / 230 V
- CN-, EU- and US-plug
- Light weight

| TYPE | Description | Spec | Pack Cont. |
|--------|--------------|------------|------------|
| HT1600 | Hot Air Tool | 240V/1600W | 1 |

| TYPE | Article-No. | Page | TYPE | Article-No. | Page | TYPE | Article-No. | Page |
|---------|-------------|------|-------------------|-------------|------|----------|-------------|------|
| 145 | - | 49 | 6130002900 | - | 77 | AS25 | - | 157 |
| 801 | - | 24 | 6130007000 | - | 77 | AS35 | - | 157 |
| 802 | - | 24 | 6130012100 | - | 77 | AS35T | - | 158 |
| 803 | - | 24 | 6150001100 | - | 77 | AS45 | - | 157 |
| 6095 | - | 66 | 6150009510 | - | 77 | AS45T | - | 158 |
| 7700 | - | 65 | 6180400016 | - | 114 | AS55 | - | 157 |
| 7702 | - | 65 | 6190011600 | - | 77 | AS55T | - | 158 |
| 7703 | - | 65 | 6330272100 | - | 77 | AS65 | - | 157 |
| 7709 | - | 65 | 6710318504 | - | 77 | AS65T | - | 158 |
| 7725 | - | 67 | 140G | - | 49 | ASH15 | - | 157 |
| 7800 | - | 67 | 148-00107 | - | 96 | ASH25 | - | 157 |
| 8038 | - | 68 | 148-12 | - | 49 | ASH35 | - | 157 |
| 60150 | - | 66 | 148-18 | - | 49 | ASH45 | - | 157 |
| 73004 | - | 64 | 4D10 | 211-70000 | 12 | ASH55 | - | 157 |
| 73005 | - | 64 | 4D15 | 211-70001 | 12 | BEND-ALL | - | 58 |
| 76582 | - | 64 | 4D20 | 211-70002 | 12 | BGL | - | 56 |
| 76583 | - | 64 | 60050H | - | 68 | BGM | - | 56 |
| 76584 | - | 64 | 60120H | - | 68 | BGS | - | 56 |
| 76589 | - | 64 | 60200-G1 | - | 76 | BK0201 | - | 93 |
| 76590 | - | 64 | 63700M7018 | - | 77 | BK0425 | - | 93 |
| 76591 | - | 64 | 6D10 | 211-70100 | 12 | BK0441 | - | 93 |
| 76592 | - | 64 | 6D15 | 211-70103 | 12 | BK0706 | - | 93 |
| 76593 | - | 64 | 6D20 | 211-70104 | 12 | BK0805 | - | 93 |
| 76594 | - | 64 | 8D10 | 211-70200 | 12 | BK0904 | - | 93 |
| 76595 | - | 64 | 8D15 | 211-70203 | 12 | BK1313A | 181-00029 | 23 |
| 76596 | - | 64 | 8D20 | 211-70204 | 12 | BK1616A | 181-00030 | 23 |
| 76597 | - | 64 | A014C | - | 43 | BK2020A | 181-00031 | 23 |
| 76598 | - | 64 | A014CE | - | 43 | BK2525A | 181-00032 | 23 |
| 76599 | - | 64 | A014M | - | 44 | BK3030A | 181-00033 | 23 |
| 76600 | - | 64 | A1 | - | 43 | BK4040A | 181-00034 | 23 |
| 76602 | - | 64 | A10 - Quick Hitch | - | 43 | BK5050A | 181-00035 | 23 |
| 76603 | - | 64 | A10E Quick Hitch | - | 43 | BMA1 | - | 41 |
| 76651 | - | 60 | A1-1 | - | 43 | BMA1240 | - | 41 |
| 76652 | - | 60 | A12 | - | 43 | BMA2 | - | 41 |
| 76654 | - | 60 | A15 | - | 43 | BMA2240 | - | 41 |
| 76655 | - | 60 | A165MM | - | 156 | BMA3200 | - | 41 |
| 76656 | - | 60 | A17-38E | - | 43 | BMA3350 | - | 41 |
| 76657 | - | 60 | A19 | - | 43 | BMA4150 | - | 41 |
| 76658 | - | 60 | A19 | - | 45 | BMA4250 | - | 41 |
| 76659 | - | 61 | A1E | - | 43 | BMA5 | - | 41 |
| 76660 | - | 61 | A2 - Quick Hitch | - | 43 | BMC102 | - | 41 |
| 76661 | - | 61 | A2-1 | - | 43 | BMC117 | - | 41 |
| 76662 | - | 61 | A280MM | - | 156 | BMC127 | - | 41 |
| 76684 | - | 62 | A2E Quick Hitch | - | 43 | BMC152 | - | 41 |
| 76730 | - | 60 | A3 | - | 44 | BMC28 | - | 41 |
| 76731 | - | 60 | A3-3 | - | 44 | BMC52 | - | 41 |
| 76732 | - | 60 | A3-4 | - | 44 | BMC65 | - | 41 |
| 76735 | - | 60 | A3-5 | - | 44 | BOBREEXT | - | 147 |
| 76736 | - | 61 | A3-6 | - | 44 | BRES325 | - | 135 |
| 76943 | - | 62 | A3-7 | - | 44 | BRES325P | - | 135 |
| 76964 | - | 62 | A3-8 | - | 44 | BRES43 | - | 135 |
| 76976 | - | 62 | A3JB | - | 156 | BRES433L | - | 136 |
| 76982 | - | 62 | A4 | - | 43 | BRES43P | - | 135 |
| 76985 | - | 63 | A4E | - | 43 | BRES44 | - | 135 |
| 76988 | - | 63 | A5 | - | 43 | BRES443L | - | 136 |
| 78733 | - | 60 | A801632T | - | 85 | BRES44P | - | 135 |
| 79057 | - | 64 | A8190227T | - | 85 | BRES54 | - | 135 |
| 205200 | - | 70 | A8191797T | - | 84 | BRES543L | - | 136 |
| 7701309 | - | 66 | AS05 | - | 157 | BRES54P | - | 135 |
| 7701516 | - | 67 | AS15 | - | 157 | BRES64 | - | 135 |

| TYPE | Article-No. | Page | TYPE | Article-No. | Page | TYPE | Article-No. | Page |
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| BRES643L | - | 136 | CA315S | - | 144 | CDN4PTRR | - | 159 |
| BRES64P | - | 135 | CA32 | - | 145 | CDN54PTRR | - | 159 |
| BRES65 | - | 135 | CA32S | - | 144 | CDN6PTRR | - | 159 |
| BRES653L | - | 136 | CA33 | - | 145 | CDN8PTRR | - | 159 |
| BRES65P | - | 135 | CA33S | - | 144 | CE005008 | - | 103 |
| BRES83 | - | 135 | CA42 | - | 145 | CE005008W | - | 103 |
| BRES833L | - | 136 | CA42S | - | 144 | CE0060012W | - | 103 |
| BRES83P | - | 135 | CA43 | - | 145 | CE010008 | - | 103 |
| BRES86 | - | 135 | CA43A | - | 145 | CE010008W | - | 103 |
| BRES863L | - | 136 | CA43AS | - | 144 | CE015008 | - | 103 |
| BRES86P | - | 135 | CA43S | - | 144 | CE015008W | - | 103 |
| BS1224 | - | 48 | CA44 | - | 145 | CE025008 | - | 103 |
| BS1232 | - | 48 | CA44A | - | 145 | CE040010 | - | 103 |
| BT/3 | - | 88 | CA44AS | - | 144 | CE040010W | - | 103 |
| BT/DIN/PO | - | 88 | CA44S | - | 144 | CE060012 | - | 103 |
| BT/U | - | 88 | CA63 | - | 145 | CE075008 | - | 103 |
| BTO | - | 87 | CA63A | - | 145 | CE075008W | - | 103 |
| BU214-5 | - | 50 | CA63AS | - | 144 | CE100012 | - | 103 |
| BU214S-5 | - | 50 | CA63S | - | 144 | CE160012 | - | 103 |
| BU218-5 | - | 50 | CA64 | - | 145 | CE250016 | - | 103 |
| BU224-5 | - | 50 | CA64A | - | 145 | CE25008W | - | 103 |
| BU224S-5 | - | 50 | CA64AS | - | 144 | CE350016 | - | 103 |
| BU230X-5 | - | 50 | CA64S | - | 144 | CE500020 | - | 103 |
| BU232-5 | - | 50 | CA66 | - | 145 | CK003 | - | 162 |
| BU2DC-2 | - | 50 | CA66A | - | 145 | CK004 | - | 162 |
| BU310DT-5 | - | 50 | CA66AS | - | 144 | CK006 | - | 162 |
| BU310T-5 | - | 50 | CA66S | - | 144 | CK008 | - | 162 |
| BU36-5 | - | 50 | CA84A | - | 145 | CK012 | - | 162 |
| BU36T-5 | - | 50 | CA84AS | - | 144 | CK112 | - | 162 |
| BU38-5 | - | 50 | CA86A | - | 145 | CK118 | - | 162 |
| BU3DC-2 | - | 50 | CA86AS | - | 144 | CK224 | - | 162 |
| BU41014-5 | - | 50 | CB/CTL/BLACK | - | 92 | CK236 | - | 162 |
| BU418-5 | - | 50 | CB10/PT | - | 90 | CK336 | - | 162 |
| BU424-5 | - | 50 | CB16/PT | - | 90 | CKL330 | 115-00140 | 4 |
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| BU56-5 | - | 50 | CB35/PT | - | 90 | CNU8/001 | - | 92 |
| BU6 | - | 50 | CB4/6/PT | - | 90 | CNU8/030 | - | 92 |
| BW20 | - | 80 | CB50/PT | - | 90 | CNU8/051 | - | 92 |
| BW20S | - | 80 | CB70/PT | - | 90 | CNU8/301 | - | 92 |
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1. Interpretation

1.1 In these Conditions:

"ACKNOWLEDGEMENT OF ORDER" shall mean the document by which the Seller or its authorised representative accepts the Order. "BUYER" shall mean the purchaser of the Goods from the Seller.

"BUYER'S SPECIFICATION" means any variation, modification or amendment to Seller's specification as requested by Buyer and agreed between the parties in accordance with clause 2.3 and/or as identified in the Acknowledgement of Order.

"CONDITIONS" means the terms and conditions of sale set out herein and includes any special terms and conditions included in the Acknowledgement of Order.

"CONTRACT" shall mean the contract for the sale and purchase of the Goods made pursuant to these Conditions.

"DELIVERY" shall mean delivery of the Goods or any part of them in accordance with clause 6.1 of these Conditions.

"DELIVERY DATE" shall mean the date or period for Delivery set out in an Acknowledgement of Order or which is otherwise agreed by the Seller and the Buyer.

"FORCE MAJEURE" shall mean any circumstances beyond the reasonable control of the Seller.

"GOODS" shall mean the goods which the Seller has agreed to supply to the Buyer pursuant to these Conditions.

"INFORMATION" shall mean any and all IPR, technical or commercial data, know-how, show-how, formulae, processes, designs, photographs, drawings, specifications, details of customers and suppliers, pricing information, samples, prototypes and other sensitive business information and any other information of a confidential nature together with any experimental or test data and results produced by the Seller as a result of it carrying out necessary tests for the purposes of performing the Contract which either directly or indirectly is disclosed by or on behalf of the Seller to the Buyer or to any person on behalf of the Buyer orally, in writing, by physical embodiment, by data transmission or in any other way.

"INTELLECTUAL PROPERTY RIGHTS" ("IPR") shall mean all patents, trade marks, service marks, design rights (whether patentable, registrable or otherwise), applications for any of the foregoing copyright, know-how, trade or business names, rights in databases, topography rights and other similar rights or obligations whether registrable or not in any country (including, but not limited to the United Kingdom).

"LOSS" shall mean all actions, claims, demands, losses (direct, indirect, consequential or otherwise), expenses, costs, actions and proceedings.

"ORDER" shall mean the Buyer's order for Goods.

"SELLER" shall mean HellermannTyton Ltd, a company registered in England and Wales under company number 05652018 and having its registered office at Griffin House, 135 High Street, Crawley, West Sussex, RH10 1DQ.

"SPECIFICATION" shall mean the description of the Goods set out in the Acknowledgement of Order pursuant to clause 3.4 including any variation, modification or amendment to specification as a consequence of Buyer's Specification and "Specification" and "Buyer's Specification" shall be construed accordingly.

1.2 Any reference in these Conditions to any provision of a statute shall be construed as a reference to that provision as amended re-enacted or extended at the relevant time.

1.3 The headings in these Conditions are for convenience only and shall not affect their interpretation.

1.4 In these Conditions "Incoterms" means the

international rules for the interpretation of trade terms of the International Chamber of Commerce 2010 as amended or republished from time to time (Incoterms® 2010). Unless the Contract otherwise requires any terms or expression which is defined in or given a particular meaning by the provisions of Incoterms shall have the same meaning in these Conditions, but if there is any conflict between the provisions of Incoterms and these Conditions the latter shall prevail.

2. Basis of Sale

2.1 These Conditions together with the Seller's Acknowledgement of Order apply to all Contracts between the Seller and the Buyer and shall prevail and be effective notwithstanding any variations or additions whether contained or referred to in the Buyer's order, or other document submitted by the Buyer including without limitation any standard conditions of purchase of the Buyer, acceptance of quotation or in correspondence or elsewhere, or implied by trade, custom, practice or course of dealing, and shall supersede all other and any prior promises, representations or undertakings.

2.2 Where the Buyer purchases Goods from the Seller which include electrical and electronic equipment (as defined by the Waste Electrical and Electronic Equipment Regulations 2006 as amended or re-enacted from time to time ("WEEE")), he does so on the understanding that he will, at his own expense, properly collect, treat, recover and dispose of it in an environmentally sound manner, or arrange for the proper collection, treatment, recovery and environmentally sound disposal of such electrical or electronic equipment in accordance with the requirements of WEEE. Further, the Buyer agrees that where the electrical and electronic equipment referred to above is intended to replace electrical or electronic equipment that was supplied to the Buyer prior to the 13 August 2005, it will be responsible for the environmentally sound collection, treatment, recovery and disposal of that electrical and electronic equipment being replaced and shall not ask the Seller to take it back in order to arrange the same.

2.3 No variation to these Conditions shall be binding unless agreed in writing by an authorised representative of the Seller.

2.4 The Seller's employees or agents are not authorised to make any representations or recommendations concerning the Goods unless confirmed by a duly authorised representative of the Seller in writing. In entering into the Contract the Buyer acknowledges that it does not rely on and waives any claim for breach of any such representations which are not so confirmed. For the avoidance of doubt, nothing herein contained shall be deemed to exclude the Seller's liability due to fraud or fraudulent misrepresentation.

2.5 Any typographical clerical or other error or omission in any sales literature quotation price list Acknowledgement of Order invoice or other documentation or information issued by the Seller shall be subject to correction without any liability on the part of the Seller.

3. Orders and Specifications

3.1 Every acceptance by the Buyer of any quotation given by the Seller shall be deemed an offer by the Buyer to purchase Goods from the Seller and will not be deemed to be accepted by the Seller until a duly authorised representative of the Seller has provided an Acknowledgement of Order in relation to such offer by the Buyer.

3.2 No Order submitted by the Buyer shall be deemed to be accepted by the Seller unless and until confirmed by an Acknowledgement of Order.

3.3 The Buyer shall be responsible to the Seller for ensuring the accuracy of the terms of any Order (including any applicable Specification or Buyer's Specification) submitted by the Buyer and for giving the Seller any necessary

information relating to the Goods within a sufficient time to enable the Seller to perform the Contract in accordance with its terms.

3.4 The quantity quality and description of and any Specification for the Goods shall be those set out in the Seller's Acknowledgement of Order.

3.5 If the Goods are to be manufactured by the Seller in accordance with the Buyer's Specification:

3.5.1 the Buyer shall indemnify the Seller against all Loss suffered by the Seller in connection with any claim by a third party that the manufacture and/or supply of the Goods to such Buyer Specification or instructions infringes the rights of any third party; and

3.5.2 the Buyer shall be responsible for supplying reliable and accurate information to the Seller (including, without limitation, drawings, plans and designs) to enable the Seller to manufacture the Goods to the Buyer's Specification. The Seller shall be entitled to assume that all information supplied by the Buyer is true, accurate, complete and fit for the purpose for which it is supplied and that the Seller can rely on the same. The Seller shall not be liable for any Loss or delay in Delivery of the Goods which directly or indirectly arises from the Buyer's failure to supply accurate information at all or on time.

3.6 The Seller reserves the right to make any changes in the Specification of the Goods which are required to conform with any applicable safety or other statutory requirements and/or where such changes do not materially affect the quality or performance of the Goods. For the avoidance of doubt and subject to clause 10.1, the Seller provides no implied warranties in relation to Goods supplied to the Buyer's Specification.

3.7 No Order which has been accepted by the Seller by an Acknowledgement of Order may be cancelled by the Buyer except with the agreement in writing of the Seller and on terms that the Buyer shall indemnify the Seller in full against all Loss incurred by the Seller as a result of cancellation.

4. Price of the Goods

4.1 The price shall be the price in the Acknowledgement of Order ("Price").

4.2 The Seller reserves the right by giving notice to the Buyer at any time before Delivery to increase the Price to reflect any increase in the cost to the Seller which is due to any factor beyond the control of the Seller (such as without limitation any foreign exchange fluctuation, currency regulation alteration of duties significant increase in the costs of labour materials or other costs of manufacture), any change in Delivery Dates quantities or Specifications for the Goods which is requested by the Buyer or any delay caused by any instructions of the Buyer or failure of the Buyer to give the Seller adequate information or instructions.

4.3 Except as otherwise stated in an Acknowledgement of Order all prices are given by the Seller for Delivery as defined in clause 6.1. Where the Seller agrees to deliver the Goods otherwise than as defined in clause 6.1 the Buyer shall be liable to pay the Seller's charges for transport packaging and insurance where requested.

4.4 The price is exclusive of any applicable value added tax (which will be applied in accordance with the legislation in force at the tax point date) and which the Buyer shall be additionally liable to pay to the Seller.

5. Terms of Payment

5.1 Subject to any special terms agreed in an Acknowledgement of Order the Seller shall be entitled to invoice the Buyer for the Price on Delivery immediately the Goods have been despatched, when they are ready for despatch but are prevented or delayed from being despatched due to Force Majeure or the day the



Goods are put out ready for collection (whichever event occurs the earliest).

5.2 The Buyer shall pay the Price without deduction within 30 days of the date of the Seller's invoice notwithstanding that Delivery may not have taken place and the property in the Goods has not passed to the Buyer. The time of payment of the Price shall be of the essence of the Contract. Receipts for payment will be issued only upon request.

5.3 If the Buyer fails to make any payment in accordance with clause 5.2 then without prejudice to any other right or remedy available to the Seller the Seller shall be entitled to:-

5.3.1 cancel the contract or suspend any Deliveries to the Buyer;

5.3.2 appropriate any payment made by the Buyer to such of the Goods (or the goods supplied under any other contract between the Buyer and the Seller) as the Seller may think fit (notwithstanding any purported appropriation by the Buyer);

5.3.3 charge the Buyer interest on the amount unpaid at the rate of 3 percent per annum above HSBC Bank base rate from time to time until payment in full is made (a part of a month being treated as a full month for the purpose of calculating interest); and

5.3.4 demand payment of all outstanding balances from the Buyer whether due or not and/or cancel all outstanding Orders and/or decline to make further Deliveries (under this or any other contract between the Buyer and the Seller) or provision of services.

5.4 Except where insolvency laws provide otherwise the Buyer shall not be entitled to withhold or set off payment for Goods for any reason whatsoever. All Goods for which payment has not been made in accordance with clause 5.2 and which are held by the Seller at its premises are so held at the Buyer's risk.

6. Delivery

6.1 Except as otherwise stated in an Acknowledgement of Order delivery shall take place when the Seller places the Goods at the disposal of the Buyer at the Seller's premises and not loaded on any collecting vehicle.

6.2 Any Delivery Date is approximate only. The Seller shall not be liable for any Loss arising from any failure to deliver the Goods on the Delivery Date howsoever caused. Time for delivery shall not be of the essence unless previously agreed by the Seller in writing. The Goods may be delivered by the Seller in advance of the quoted delivery date upon giving reasonable notice to the Buyer.

6.3 The Buyer shall not be entitled to change the Delivery Date without the prior written consent of a duly authorised representative of the Seller.

6.4 Where delivery of the Goods is to be made by the Seller, the Seller reserves the right to deliver up to 10 per cent more or 10 per cent less than the quantity ordered provided that there is a pro rata adjustment to the Price to reflect the Goods actually delivered and the quantity so delivered shall be deemed to be the quantity ordered. Goods delivered in excess of such tolerance may be rejected by the Buyer provided that it serves notice of rejection within 10 working days of Delivery.

6.5 Where the Goods are to be delivered in installments each delivery shall constitute a separate contract and failure by the Seller to deliver any one or more of the installments in accordance with these Conditions or any claim by the Buyer in respect of any one or more installments shall not entitle the Buyer to treat the Contract as a whole as repudiated.

6.6 Subject to clause 10.6 if the Seller fails to deliver the Goods for any reason other than Force Majeure or due to Buyer's fault and the Seller is accordingly liable to the Buyer, the Seller's only liability shall be limited to the excess (if any) of the cost to the Buyer (having used its best endeavours to replace the Goods

by purchasing them in the cheapest available market) of purchasing similar goods to replace those not delivered.

6.7 If the Buyer fails to take Delivery on the Delivery Date then without prejudice to any other right or remedy available to the Seller the Seller may:

6.7.1 store the Goods until actual delivery and charge the Buyer for the costs (including insurance) of storage; or

6.7.2 treat the Contract as repudiated by the Buyer and without prejudice to any other right it may have against the Buyer the Seller shall be entitled to resell the Goods and be indemnified by the Buyer for any Loss which it suffers.

7. Risk and Property

7.1 Risk of damage to or loss of the Goods shall pass to the Buyer on Delivery of the Goods;

7.2 Notwithstanding Delivery and the passing of risk in the Goods or any other provision of these Conditions the property in the Goods shall remain with the Seller until the Seller has received in cash or cleared funds payment in full of the Price and any other monies due to the Seller in respect of the Goods and all other goods agreed to be sold by the Seller to the Buyer for which payment is then due under the Contract or any other contract between the Seller and the Buyer (including without limitation costs of Delivery).

7.3 Until such time as the property in the Goods passes to the Buyer the Buyer shall hold the goods as the Seller's fiduciary agent and bailee and shall keep the Goods separate from those of the Buyer and third parties and properly stored protected and insured and identified as the Seller's property.

7.4 Until such time as the property in the Goods passes to the Buyer the Buyer shall be entitled to resell or use the Goods in the ordinary course of its business but shall account to the Seller for the proceeds of sale or otherwise of the Goods whether tangible or intangible including insurance proceeds and shall keep all such proceeds separate from any monies or property of the Buyer and third parties and in the case of tangible proceeds properly stored protected and insured.

7.5 If the Goods are prior to sale by the Buyer made up or incorporated in or mixed with other goods, then if they remain separately identifiable the Seller shall retain property and title thereof and if they do not remain separately identifiable the Seller shall become a joint owner of the goods in or which the Goods are incorporated or mixed in such proportion as the value of the Goods bears to the value of the Goods in which the Goods are so incorporated or mixed.

7.6 If the Buyer sells the Goods or the goods in which the Goods have been incorporated or mixed the sale shall be on behalf of the Seller as the joint owner thereof as the case may be and the proceeds of any such sale for the Seller's share thereof if the sale is of jointly owned property shall be held on trust for the Seller and in a separate identified account.

7.7 Until such time as the property in the Goods passes to the Buyer (and provided the Goods are still in existence and have not been resold) the Seller shall be entitled at any time to require the Buyer to deliver up the Goods to the Seller and if the Buyer fails to do so forthwith to enter the premises of the Buyer or any third party where the Goods are stored and take possession of any Goods in which property remains in the Seller and remove and dispose of them as the Seller thinks fit. The Seller shall apply the proceeds of disposal (after deduction of all expenses) in discharge of the amount unpaid by the Buyer.

7.8 The Buyer shall not be entitled to pledge or in any way charge by way of security for any indebtedness any of the Goods which remain the property of the Seller without the Seller's consent but if the Buyer does so all moneys

owing by the Buyer to the Seller shall (without prejudice to any other right or remedy of the Seller) forthwith become due and payable.

8. Confidentiality and IPR

8.1 The Buyer agrees and undertakes that it will keep confidential and will not disclose or use for any purpose (other than to perform its obligations under the Contract) any Information. Any Information supplied to the Buyer by the Seller shall at all times remain the property of the Seller. The Buyer shall not acquire any rights in the Information, which shall be returned to the Seller immediately upon request.

8.2 Unless otherwise agreed in writing all IPR in relation to the Goods including without limitation their method of manufacture shall vest in the Seller and remain the property of the Seller notwithstanding the purchase of the Goods by the Buyer and the Buyer undertakes to do all acts and/or enter into such agreements or deeds as the Seller shall require to vest any such IPR in the Seller.

8.3 Unless otherwise agreed in writing and notwithstanding that the Buyer may have contributed towards the costs of such items all tooling (and all IPR in relation to such tooling) produced or acquired by the Seller in relation to the manufacture of the Goods shall be and remain the property of the Seller.

9. Lien

9.1 In addition to any other right or lien to which the Seller may by law or pursuant to these Conditions be entitled, the Seller shall be entitled to a general lien on all the goods and the property of the Buyer in the Seller's possession and a right of sale of such goods and property at the Seller's sole discretion for any unpaid money due under the terms of the same or any other Contract between the Seller and the Buyer.

9.2 In addition and without prejudice to its other rights, the Seller shall have the right on fourteen days notice to the Buyer to put any goods or property over which it has a lien into a saleable state by any means whatsoever and (without prior notice to the Buyer) to sell such goods and shall be deemed the Buyer's agent for the purposes of effecting such sale. Out of the proceeds of the sale the Seller shall be entitled to retain a sum equivalent to all unpaid monies due to it from the Buyer as aforesaid together with the cost of putting the goods into a saleable state and the expenses of sale without prejudice to the Seller's right to recover the balance thereof from the Buyer.

10. Warranties and Liability

10.1 The Seller warrants that at Delivery the Goods will be free from defect in materials, workmanship and design (where designed by the Seller) provided that subject as aforesaid and expressly provided in these Conditions, and except where the Goods are sold to a person dealing as a consumer (within the meaning of the Unfair Contract Terms Act 1977) all warranties conditions or other terms implied by statute and/or common law are excluded to the fullest extent permitted by law.

10.2 Where the Goods are sold under a consumer transaction (as defined by the Consumer Transactions (Restrictions on Statements) Order 1976) the statutory rights of the Buyer are not affected by these Conditions.

10.3 Any specification or sample supplied by the Seller in any brochure, catalogue, estimate or quotation provided by Seller shall be approximate only and for information and guidance only and shall not form part of the Contract.

10.4 Any claim based upon the quality or condition of the Goods or any failure of the Goods to meet the Specification ("Claim") by the Buyer shall (whether or not delivery is refused by the Buyer) be notified to the Seller in writing within 7 days from the date of delivery or (where the defect or failure was not apparent on reasonable inspection) within one month after



discovery of the defect or failure. If delivery is not refused and the Buyer does not notify the Seller accordingly, the Buyer shall not be entitled to reject the Goods and the Seller shall have no liability in respect of such a Claim and the Buyer shall be bound to pay the Price as if the Goods had been delivered in accordance with the Contract. The Buyer shall not be entitled to make any Claim after the expiration of six months from the date of Delivery of the Goods.

10.5 Where any valid Claim in respect of any of the Goods is notified to the Seller in accordance with clause 10.4 the Seller shall be entitled to replace the Goods (or the part in question) free of charge or at the Seller's sole discretion refund to the Buyer the Price (or a proportionate part of the Price) but the Seller shall have no further liability to the Buyer and the Buyer shall have no other remedy.

10.6 The Seller shall have no liability to the Buyer in relation to non-delivery or short delivery of the Goods unless such non-delivery or short delivery is notified to the Seller in writing within fourteen days of the Delivery Date.

10.7 Where any valid Claim in respect of the Goods is notified to the Seller in accordance with clause 10.6 the Seller shall be entitled to deliver the Goods or the shortfall of the Goods, but the Buyer shall have no other remedy.

10.8 Except in respect of death or personal injury caused by the Seller's negligence the Seller's total liability to the Buyer under these Conditions shall not exceed the total price of all Goods supplied hereunder.

10.9 The Seller shall have no liability to the Buyer under or arising out of or otherwise in connection with the Contract or the supply of Goods by the Seller to the Buyer and/or their use or resale by the Buyer in contract tort (including negligence or breach of statutory duty) or otherwise for loss of profit, business, contracts, revenues or anticipated savings or for any special indirect or consequential damage or loss of any nature or for the costs of recall of any Goods except as may otherwise be expressly provided for in these Conditions.

10.10 Notwithstanding any provision of these Conditions the Seller shall have no liability to the Buyer in respect of any defect in the quality of the Goods or the failure of the Goods to meet Specification where the defect or failure has arisen as a result of improper use, installation or storage of Goods or as a result of any act or omission of the Buyer (including but not limited to requiring Goods to be supplied to Buyer's Specification).

10.11 For the avoidance of doubt nothing herein contained shall be deemed to exclude or restrict the Seller's liability for death or personal injury arising due to the Seller's negligence.

10.12 Where any Claim is made under this clause 10 the Buyer grants the Seller or its agents the right to enter upon the Buyer's premises to inspect the Goods. Unless and until the Seller has been afforded an opportunity to examine the Goods no Claim will be accepted.

10.13 The Seller shall not be liable to the Buyer or be deemed to be in breach of the Contract by reason of any delay in performing or any failure to perform any of the Seller's obligations in relation to the Goods if the delay or failure was due to Buyer's fault or Force Majeure.

10.14 The Buyer shall indemnify the Seller against all Loss suffered by the Seller which arises as a result of the breach by the Buyer of any provision of the Contract or the negligence of the Buyer or any of its employees, agents or representatives.

11. Insolvency of Buyer

11.1 In the event that:

11.1.1 the Buyer makes any voluntary arrangement with its creditors or becomes subject to an administration order or (being an individual or firm) becomes bankrupt or (being a company) goes into liquidation (otherwise than

for the purposes of amalgamation or reconstruction);

11.1.2 an encumbrancer takes possession or a receiver or administrator is appointed of any of the property or assets of the Buyer;

11.1.3 the Buyer ceases or threatens to cease to carry on business;

11.1.4 the Seller reasonably apprehends that any of the events mentioned above is about to occur in relation to the Buyer and notifies the Buyer accordingly; or

11.1.5 if the Buyer's jurisdiction is not in England and Wales any events similar to those described in clauses 11.1.1 to 11.1.4 occur there without prejudice to any other right or remedy available to the Seller the Seller shall be entitled to suspend further performance of the Contract for such time as it shall in its absolute discretion see fit or treat the Contract as wrongfully repudiated by the Buyer and forthwith terminate the Contract (either with or without notice to the Buyer) without any liability to the Buyer and if the Goods have been delivered but not paid for the Price shall become immediately due and payable notwithstanding any previous agreement or arrangement to the contrary.

12. Export Terms

12.1 Where the Goods are supplied for export from the United Kingdom the provision of this clause 12 shall (subject to any special terms in the Acknowledgement of Order or otherwise agreed in writing between the Buyer and the Seller) apply notwithstanding any other provision of these Conditions.

12.2 The Buyer shall be responsible for complying with any legislation or regulations governing the importation of the Goods into the country of destination and for the payment of any duties thereon. In particular, if any licence or consent of any government or other authority shall be required for the acquisition, carriage or use of the Goods by the Buyer the Buyer shall obtain the same at its own expense and if necessary produce evidence of the same to the Seller on demand. Failure to do so shall not entitle the Buyer to withhold or delay payment of the Price. Any additional expenses or charges incurred by the Seller resulting from such failure shall be for the Buyer's account.

12.3 Unless otherwise agreed in writing between the Buyer and the Seller the Goods shall be delivered ex-works (Incoterms® 2010) and the Seller shall be under no obligation to give the Buyer notice under section 32(3) of the Sale of Goods Act 1979.

12.4 Notwithstanding clause 5.2 payment of all amounts due to the Seller shall be made by irrevocable letter of credit opened by the Buyer in favour of the Seller and confirmed by a bank in the United Kingdom acceptable to the Seller or if the Seller has agreed in writing on or before acceptance of the Buyer's order to waive this requirement for any other agreed method of payment

13. General

13.1 The Seller shall be entitled to assign or subcontract all or any of its rights and obligations hereunder. The Buyer shall not be entitled to assign, transfer, subcontract or otherwise delegate any of its rights or obligations hereunder.

13.2 Any notice required or permitted to be given by either party to the other under these Conditions shall be given in writing at its registered office or principal place of business or such other address as may be notified for such purpose to the party giving notice.

13.3 No waiver by the Seller of any breach of Contract or any provision herein by the Buyer shall be considered as a waiver of any subsequent breach of the same or any other provision.

13.4 If any provision of these Conditions is held by any competent authority to be invalid or unenforceable in whole or in part the validity of

the other provisions of these Conditions and the remainder of the provision in question shall not be affected thereby.

13.5 The parties hereto intend that no term of the Contract may be enforced by any person, entity or body that is not a party to the Contract.

13.6 The Contract shall be governed by the laws of England and Wales and the Buyer and the Seller hereby submit to the exclusive jurisdiction of the English Courts save with respect to enforcement where their jurisdiction shall be non-exclusive.

Rev: HTLSale/02. Valid on all Orders placed on or after 17 March 2015.





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