



Power Products

HellermannTyton

Introduction



HellermannTyton is a world leader in providing systems and solutions for heatshrink applications. HellermannTyton utilises global research and resources to offer solutions on a local basis. Wherever you are in the world, you have convenient access to HellermannTyton products and service.

The exceptional product range is the result of customer and project focused product development. All products are manufactured to world class quality specifications.

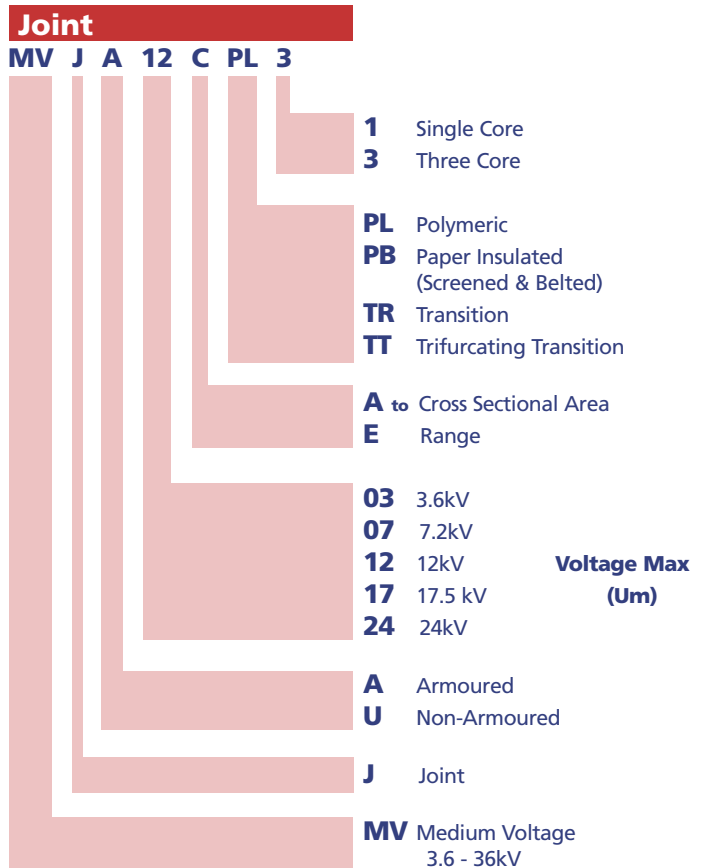
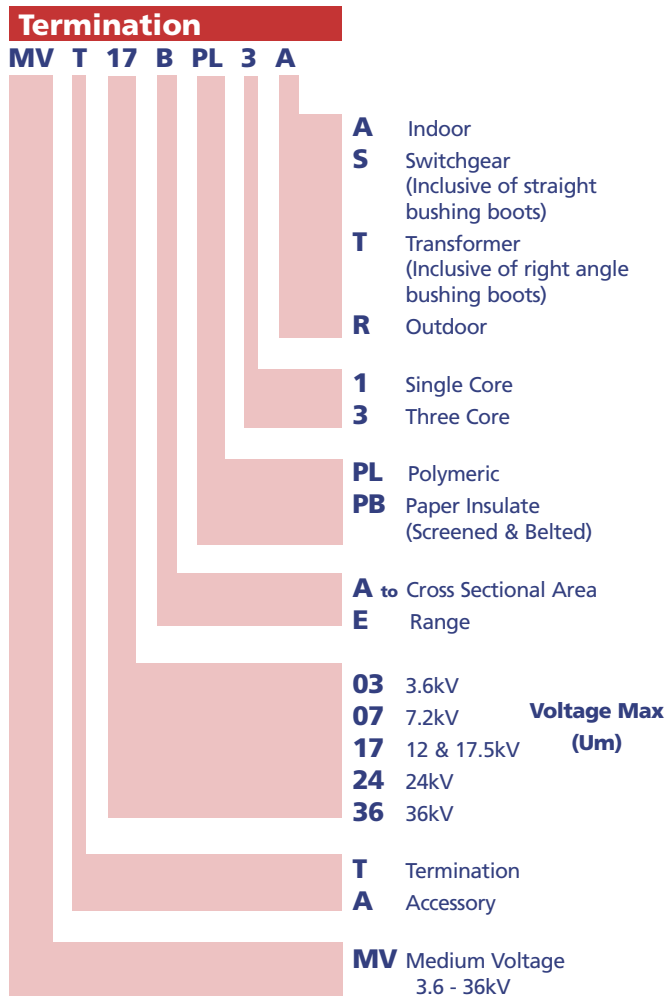
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Part Numbering System

Medium Voltage Terminations and Joints



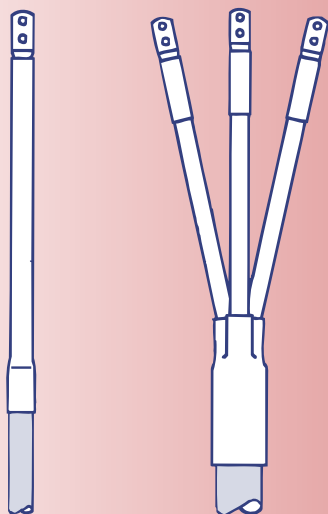
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Medium Voltage Cable Terminations

Single and Three Core 3.6 kV



MVT non-screened series polymeric insulated cable terminations are designed to withstand rigorous service conditions and are suitable for both indoor and outdoor use.

The non-tracking heatshrink outer insulation tubes provide excellent UV stability, resistance to humidity and environmental pollutants. Durable sealants are incorporated to ensure the terminations are effectively environmentally sealed.

| Part Number 3.6 kV for Indoor and Outdoor use | | Conductor size range mm ² | Standard Tail Lengths* (mm) | |
|--|------------|--|--------------------------------|--------|
| Single Core | 3 Core | | Single | 3 Core |
| MVT03APL1A | MVT03APL3A | 16 - 35 | 400 | 550 |
| MVT03BPL1A | MVT03BPL3A | 50 - 95 | | |
| MVT03CPL1A | MVT03CPL3A | 95 - 300 | | |
| MVT03DPL1A | MVT03DPL3A | 300 - 630 | | |

* Other tail lengths can be supplied to order

See Page 2 for Part Number matrix.

Terminal lugs and armour earthing arrangements are not included in the kits.

For accessories see page 10 and 11.

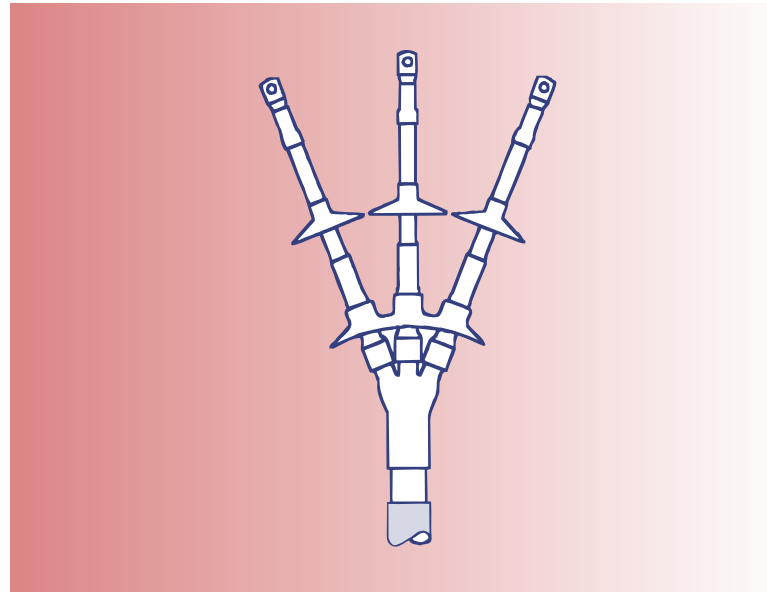
Standard Packaging – Three single core kits or one three core kit per box.

Medium Voltage Cable Terminations

Paper Cables to 17.5 kV

MVT... PB series terminations offer a quick and easy solution to terminating paper insulated (belted and screened) cables. Combining stress control and non-tracking heatshrink technology. There is no longer a need for lead wiping, compound filling and the use of hot oils.

HellermannTyton Paper Terminations are fully tested to HD629.2 S1



| Part Number | | | | Conductor size range mm ² | Standard Tail Lengths* (mm) for Single and 3 Core | |
|------------------------|------------|------------|------------|--------------------------------------|---|---------|
| Single Core | | 3 Core | | | Indoor | Outdoor |
| Indoor | Outdoor | Indoor | Outdoor | | | |
| 3.6 kV | | | | | | |
| MVT03APB1A | MVT03APB1R | MVT03APB3A | MVT03APB3R | 16 - 50 | 550 | 550 |
| MVT03BPB1A | MVT03BPB1R | MVT03BPB3A | MVT03BPB3R | 70 - 185 | | |
| MVT03CPB1A | MVT03CPB1R | MVT03CPB3A | MVT03CPB3R | 185 - 300 | | |
| 7.2 kV | | | | | | |
| MVT07APB1A | MVT07APB1R | MVT07APB3A | MVT07APB3R | 16 - 50 | 650 | 650 |
| MVT07BPB1A | MVT07BPB1R | MVT07BPB3A | MVT07BPB3R | 70 - 150 | | |
| MVT07CPB1A | MVT07CPB1R | MVT07CPB3A | MVT07CPB3R | 185 - 400 | | |
| 12 kV — 17.5 kV | | | | | | |
| MVT12APB1A | MVT12APB1R | MVT12APB3A | MVT12APB3R | 35 - 70 | 650 | 650 |
| MVT12BPB1A | MVT12BPB1R | MVT12BPB3A | MVT12BPB3R | 95 - 185 | | |
| MVT12CPB1A | MVT12CPB1R | MVT12CPB3A | MVT12CPB3R | 240 - 400 | | |
| MVT12DPB1A | MVT12DPB1R | - | - | 400 - 630 | | |

* Other tail lengths can be supplied to order

See Page 2 for Part Number matrix.

Kits designed specifically for screened paper cables are also available.

Terminal lugs and armour earthing arrangements are not included in the kits.

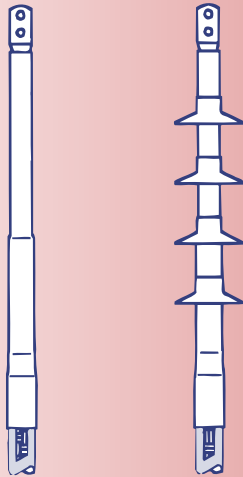
If solderless lead sheath earthing is required within the kit, add 'E' to the end of the Part Number.

For accessories see page 10 and 11.

Standard Packaging – Three single core kits or one three core kit per box.

Medium Voltage Cable Terminations

Single Core 7.2 kV — 36 kV



MVT... PL series terminations for single core cables offer excellent UV stability and non-tracking capability to efficiently terminate polymeric insulated screened cables in voltage classes 7.2 kV – 36 kV. They are suitable for all types of cable shielding in both armoured and un-armoured versions.

HellermannTyton PL terminations combine heatshrink technology to make a quick, efficient method of terminating polymeric insulated cables.

HellermannTyton Polymeric Terminations are independently tested to VDE 0278, IEC502 and IEEE48.

They are salt fog tested to VDE 0278 and IEEE4, and also pressure tested to IEEE48.

| Part Number | | Conductor size range mm ² | Standard Tail Lengths* (mm) | |
|------------------------|------------|--------------------------------------|-----------------------------|---------|
| Indoor | Outdoor | | Indoor | Outdoor |
| 7.2 kV | | | | |
| MVT07APL1A | MVT07APL1R | 16 - 35 | 400 | 400 |
| MVT07BPL1A | MVT07BPL1R | 50 - 120 | | |
| MVT07CPL1A | MVT07CPL1R | 150 - 240 | | |
| MVT07DPL1A | MVT07DPL1R | 300 - 400 | | |
| MVT07EPL1A | MVT07EPL1R | 500 - 630 | | |
| 12 kV — 17.5 kV | | | | |
| MVT17APL1A | MVT17APL1R | 25 - 70 | 400 | 400 |
| MVT17BPL1A | MVT17BPL1R | 95 - 185 | | |
| MVT17CPL1A | MVT17CPL1R | 240 - 400 | | |
| MVT17DPL1A | MVT17DPL1R | 500 - 630 | | |
| MVT17EPL1A | MVT17EPL1R | 800 - 1000 | | |
| 24 kV | | | | |
| MVT24APL1A | MVT24APL1R | 35 - 70 | 600 | 800 |
| MVT24BPL1A | MVT24BPL1R | 95 - 185 | | |
| MVT24CPL1A | MVT24CPL1R | 240 | | |
| MVT24DPL1A | MVT24DPL1R | 500 - 1000 | | |
| 36 kV | | | | |
| MVT36APL1A | MVT36APL1R | 50 - 95 | 600 | 800 |
| MVT36BPL1A | MVT36BPL1R | 120 - 300 | | |
| MVT36CPL1A | MVT36CPL1R | 400 - 630 | | |
| MVT36DPL1A | MVT36DPL1R | 800 - 1000 | | |

* Other tail lengths can be supplied to order

See Page 2 for Part Number matrix.

Terminal lugs and armour earthing arrangements are not included in the kits.

If solderless screen earthing is required within the kit, add 'E' to the end of the Part number

For accessories see page 10 and 11.

Standard Packaging – Three single core kits per box.

Medium Voltage Cable Terminations

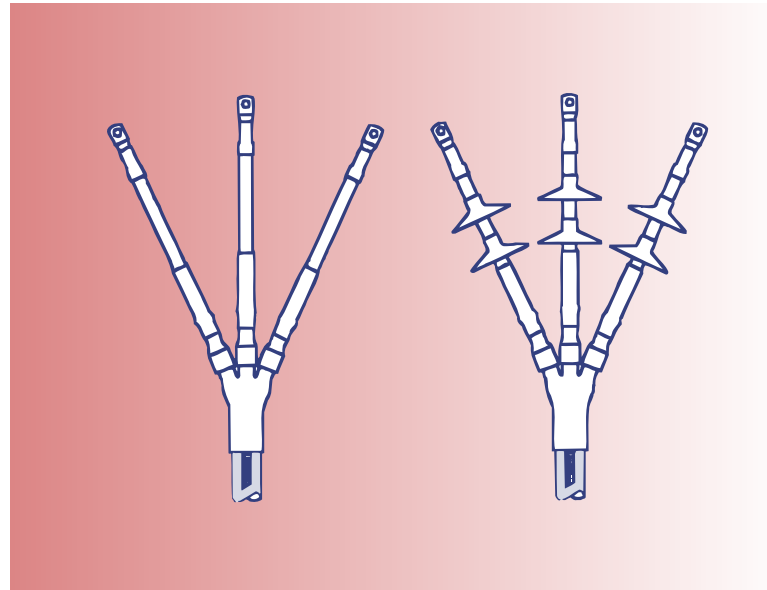
Three Core 7.2 kV — 36 kV

MVT... PL series terminations for three core cables offer excellent UV stability and non-tracking capability to efficiently terminate polymeric insulated screened cables in voltage classes 7.2 kV – 36 kV. They are suitable for all types of cable shielding in both armoured and un-armoured versions.

HellermannTyton PL terminations combine heatshrink technology to make a quick, efficient method of terminating polymeric insulated cables.

HellermannTyton Polymeric Terminations are independently tested to VDE 0278, IEC502 and IEEE48.

They are salt fog tested to VDE 0278 and IEEE4, and also pressure tested to IEEE48.



| Part Number | | Conductor size range mm ² | Standard Tail Lengths* (mm) | |
|------------------------|------------|--------------------------------------|-----------------------------|---------|
| Indoor | Outdoor | | Indoor | Outdoor |
| 7.2 kV | | | | |
| MVT07APL3A | MVT07APL3R | 16 - 35 | 650 | 650 |
| MVT07BPL3A | MVT07BPL3R | 50 - 120 | | |
| MVT07CPL3A | MVT07CPL3R | 150 - 240 | | |
| MVT07DPL3A | MVT07DPL3R | 240 - 400 | | |
| 12 kV — 17.5 kV | | | | |
| MVT17APL3A | MVT17APL3R | 25 - 70 | 650 | 650 |
| MVT17BPL3A | MVT17BPL3R | 95 - 185 | | |
| MVT17CPL3A | MVT17CPL3R | 240 - 400 | | |
| 24 kV | | | | |
| MVT24APL3A | MVT24APL3R | 35 - 70 | 750 | 900 |
| MVT24BPL3A | MVT24BPL3R | 95 - 185 | | |
| MVT24CPL3A | MVT24CPL3R | 240 - 400 | | |
| 36 kV | | | | |
| MVT36APL3A | MVT36APL3R | 50 - 95 | 900 | 1200 |
| MVT36BPL3A | MVT36BPL3R | 120 - 400 | | |

* Other tail lengths can be supplied to order

See Page 2 for Part Number matrix.

Terminal lugs and armour earthing arrangements are not included in the kits.

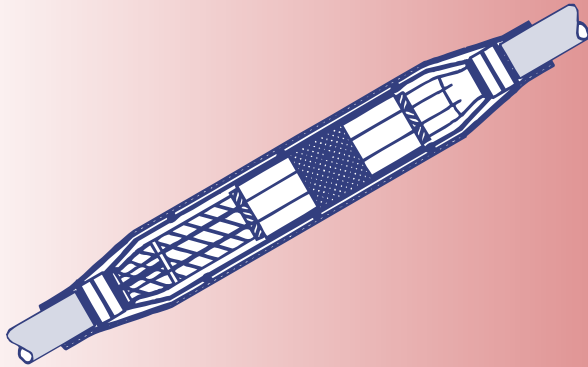
If solderless screen earthing is required within the kit, add 'E' to the end of the Part number

For accessories see page 10 and 11.

Standard Packaging – One three core kit per box.

Medium Voltage Joints

Heatshrink Three Core



Heatshrink jointing system for up to 24 kv three core power cables.

Featuring the following:

- Suitable for polymeric and paper cables and transition jointing.
- Simple and easy to install.
- Ferrule Insulation environmentally sealed.
- Suitable for mechanical and compression ferrules.
- Wraparound outer sealing sleeve for minimum installation space, also available.
- Strong wraparound metal cage provides armour continuity and maximum mechanical strength.

Independently tested to HD 629.1 S1:1996 & HD629.2 S1:1997.

| Part Number | | Example | | | |
|--|-----------------------|-----------|-----------|----------|---|
| Medium Voltage Joint | | MVJ | | | |
| A - Armoured | | A | | | |
| U - Non-Armoured | | | | | |
| Voltage | | 12 | | | |
| 12 kV (Um) - 6.6 kV & 11 kV | | | | | |
| 17 kV (Um) - 15 kV | | | | | |
| 24kV (Um) - 20/22 kV | | | | | |
| Size Code | Range mm ² | | | | B |
| | 6.6 kV | 11 kV | 15 kV | 22 kV | |
| A | 35 - 120 | 35 - 70 | 25 - 50 | 25 | |
| B | 120 - 240 | 95 - 185 | 70 - 150 | 35 - 95 | |
| C | 240 - 400 | 185 - 400 | 150 - 300 | 95 - 240 | |
| Joint Type | | PL | | | |
| PL - Polymeric to Polymeric | | | | | |
| PB - Paper to Paper | | | | | |
| TR - Transition | | | | | |
| TT - Trifurcating Transition Three Core Paper to Three Single Core Polymeric | | | | | |
| Number of Cores | | 3 | | | |
| 3 - Three Core to Three Core and Trifurcating Transition | | | | | |

Ferrules are not included within the kit, but are available to order.

Standard packaging - one complete jointing kit per box.

Medium Voltage Joints

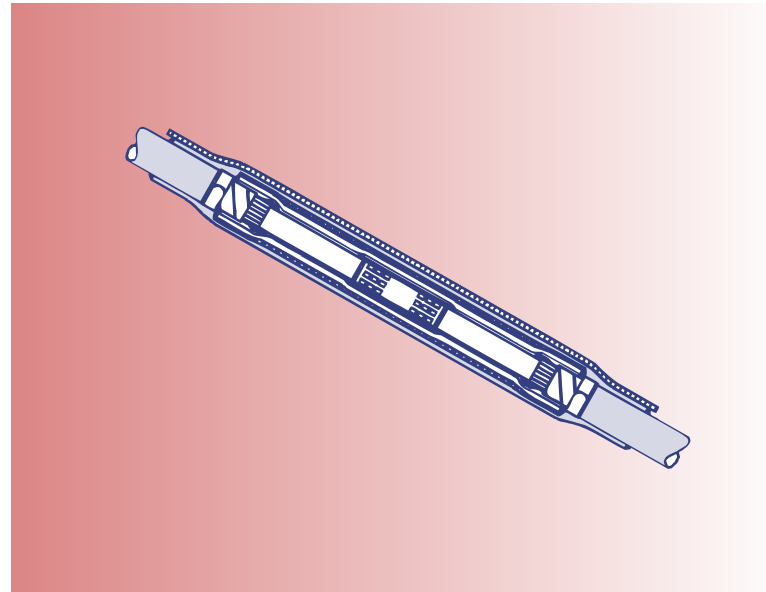
Heatshrink Single Core

Heatshrink jointing system for power cables up to 24 kV single core.

Featuring the following:

- Suitable for polymeric and paper cables and transition jointing.
- Simple and easy to install.
- Suitable for mechanical or compression ferrules.
- Ferrule Insulation environmentally sealed.
- Wraparound outer sealing sleeve for maximum mechanical strength and minimum installation space, also available.

Independently tested to HD629.1 S1 and HD629.2 S1.



| Part Number | | Example | | | |
|--------------------------------|-----------------------|-----------|-----------|-----------|---|
| Medium Voltage Joint | | MVJ | | | |
| A - Armoured | | U | | | |
| U - Non-Armoured | | | | | |
| Voltage | | 12 | | | |
| 12 kV (Um) - 6.6 kV & 11 kV | | | | | |
| 17 kV (Um) - 15 kV | | | | | |
| 24kV (Um) - 20/22 kV | | | | | |
| Size Code | Range mm ² | | | | B |
| | 6.6 kV | 11 kV | 15 kV | 22 kV | |
| A | 35 - 120 | 35 - 70 | 25 - 50 | 25 | |
| B | 120 - 240 | 95 - 185 | 70 - 150 | 35 - 95 | |
| C | 240 - 400 | 185 - 400 | 150 - 300 | 95 - 240 | |
| D | 500 - 630 | 500 - 630 | 300 - 500 | 300 - 500 | |
| Joint Type | | PL | | | |
| PL - Polymeric to Polymeric | | | | | |
| PB - Paper to Paper | | | | | |
| TR - Transition | | | | | |
| Number of Cores | | 1 | | | |
| 1 - Single Core to Single Core | | | | | |

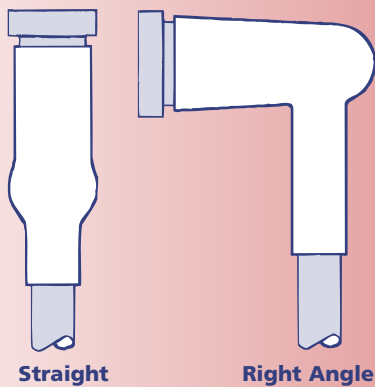
3.3 kV Non-shielded Joints are also available to order.

Ferrules are not included within the kit, but are available to order.

Standard packaging – One complete jointing kit per box.

Medium Voltage

Termination Accessories

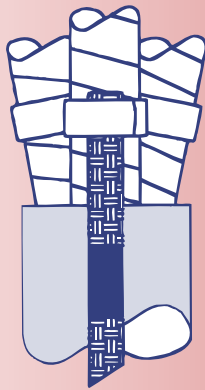


Bushing Boot Kits

Bushing Boot Kits comprise a set of 3 straight or right angle boots with sufficient medium voltage mastic to cover the bushing nuts.

They have been successfully impulse tested to 95 kVp.

| Part No. | Style | Conductor Size Range (mm ²) |
|-----------|-------------|---|
| MVA17AA3S | Straight | 16 - 35 |
| MVA17A3S | Straight | 50 - 400 |
| MVA17AA3T | Right Angle | 16 - 35 |
| MVA17A3T | Right Angle | 50 - 400 |



Solderless Screen Earthing Kit

Solderless Screen Earthing Kits are for earthing the copper screen layer within polymeric insulated cables. The kits consist of three constant force springs and three solder blocked earth braids.

| Part No. | | Diameter Over Screen (mm) | Conductor Range (mm ²) | | | | |
|---------------|---------------|---------------------------|------------------------------------|------------|------------|------------|------------|
| 1 Core System | 3 Core System | | 7.2 kV | 12 kV | 17.5 kV | 24 kV | 36 kV |
| MVAA1CSE | MVAA3CSE | 12 - 20 | 16 - 70 | 16 - 50 | 16 - 25 | - | - |
| MVAB1CSE | MVAB3CSE | 18 - 25 | 95 - 150 | 70 - 150 | 35 - 95 | 25 - 70 | - |
| MVAC1CSE | MVAC3CSE | 23 - 33 | 185 - 300 | 185 - 300 | 120 - 240 | 95 - 185 | 25 - 70 |
| MVAD1CSE | MVAD3CSE | 31 - 43 | 400 - 630 | 400 - 630 | 300 - 500 | 240 - 500 | 95 - 300 |
| MVAE1CSE | MVAE3CSE | 41 - 60 | 800 - 1000 | 800 - 1000 | 630 - 1000 | 630 - 1000 | 400 - 1000 |

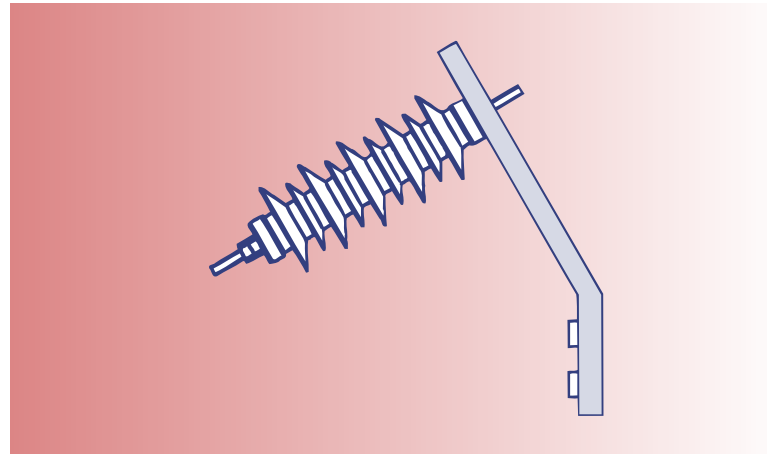
Stand-off Insulators

Stand-off Insulators for voltage maximums (Um) 17.5 kV, 24 kV and 36 kV.

Each kit contains three stand off insulators.

To support terminations and insulators a range of long and short brackets are available.

They are fully tested in accordance with IEC 383 and IEC 1109.



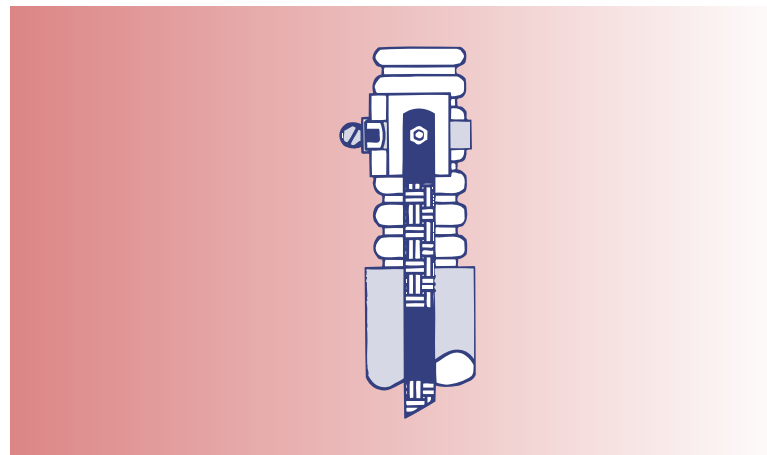
| Part No. | Voltage kV (Um) | Creepage Path (mm) | Impulse Withstand Dry (kVp) |
|----------|-----------------|--------------------|-----------------------------|
| MVA12SOI | 17.5 | 465 | 125 |
| MVA24SOI | 24 | 615 | 150 |
| MVA36SOI | 36 | 845 | 220 |

Sheath Earth Connector

Sheath Earth Connectors provide a simple and effective method of earthing lead or aluminium sheaths of PILC and PICAS 11 kV cables.

They are fully tested and compliant to C93.

Short Circuit Rating — PICAS 13.1 kA for 3 seconds
 — PILC 6 kA for 3 seconds



| Part No. | Cable Size (mm ²) |
|-----------|-------------------------------|
| MVA12ASEC | Up to 185 |
| MVA12BSEC | 240-300 |

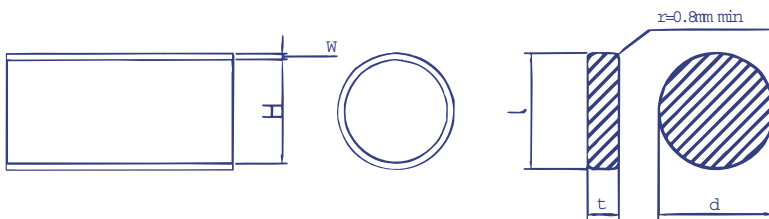
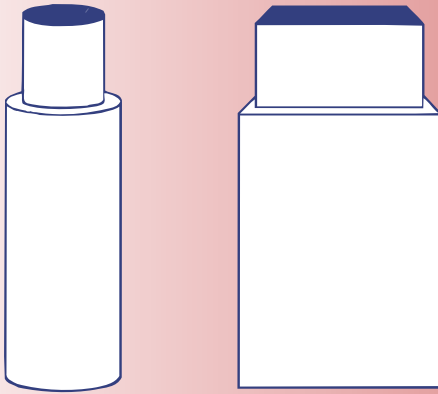
Medium Voltage

Busbar Insulating Tubing

TBIM – Medium Wall

TBIT – Heavy Wall

Busbar heatshrink tubes are suitable for flat or round, straight or set busbars. They are very flexible allowing them to be quickly installed. Each size will fit a range of busbar sizes. They are also ideal for protection against accidental bridging caused by birds and animals.



TBIM — Medium Wall

| Part No. | Dimensions | | | Application Range | |
|------------|------------|----|-----|----------------------|------------------|
| | H | | W | l + t (min - max) | d (min - max) |
| | a | b | b | | |
| TBIM15-06 | 15 | 6 | 2.0 | 11 - 20 | 6.5 - 13 |
| TBIM30-12 | 30 | 12 | 2.3 | 21 - 38 | 13 - 25 |
| TBIM50-20 | 50 | 20 | 2.5 | 35 - 62 | 22 - 40 |
| TBIM75-30 | 75 | 30 | 2.5 | 52 - 94 | 33 - 60 |
| TBIM100-40 | 100 | 40 | 2.5 | 70 - 125 | 44 - 80 |
| TBIM120-50 | 120 | 50 | 3.0 | 88 - 170 | 55 - 110 |

*All dimensions in mm

TBIT — Thick Wall

| Part No. | Dimensions | | | Application Range | |
|------------|------------|----|---|----------------------|------------------|
| | H | | W | l + t (min - max) | d (min - max) |
| | a | b | b | | |
| TBIT25-10 | 25 | 10 | 4 | 17 - 30 | 11 - 20 |
| TBIT40-16 | 40 | 16 | 4 | 28 - 47 | 18 - 30 |
| TBIT65-25 | 65 | 25 | 4 | 44 - 69 | 28 - 48 |
| TBIT100-40 | 100 | 40 | 4 | 69 - 110 | 44 - 75 |

*All dimensions in mm

a-as supplied

b-after full recovery

Standard packaging 25 metre reels.

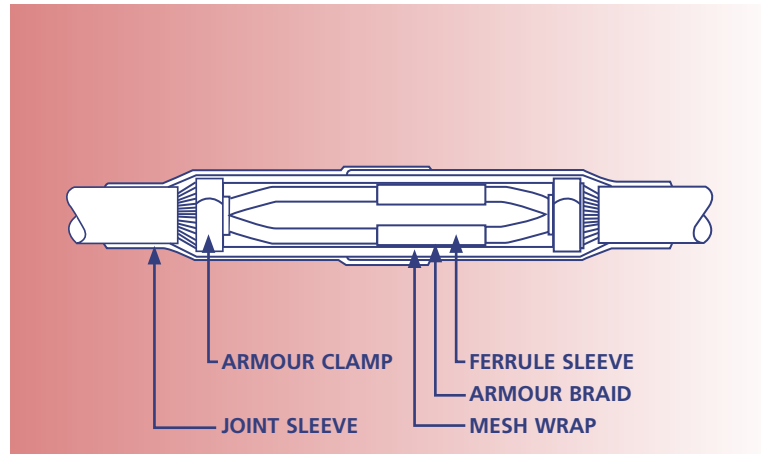
Low Voltage Kits

Heatshrink LV 4 Core Joints

LV Heatshrink Through Joints and Terminations are designed for both Polymeric and Paper cables, and Transition Jointing.

HellermannTyton Heatshrink technology makes a quick, efficient and clean method of jointing cables.

Hellermann Joint and Termination Kits are suitable for voltages up to 1kV and comply with CENELEC Standard HD 623.



JOINT KITS contain re-insulation sleeves and heavy wall tubes to re-instate the cable sheath. Earth bonding components and metal mesh are supplied to restore the cables armour.

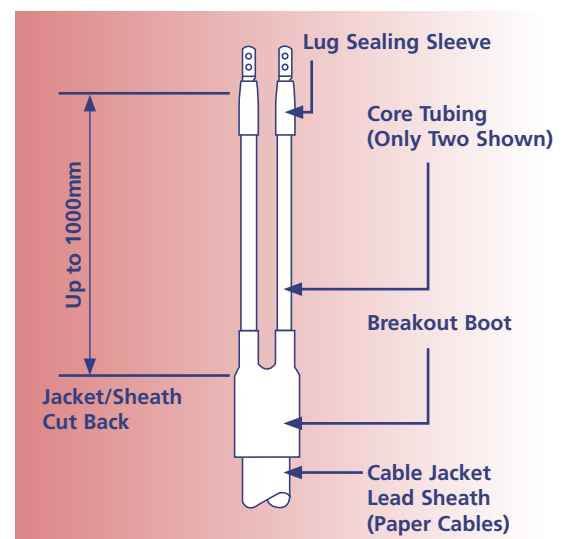
| 4 Core Armoured Cable Part Number | Conductor Range mm ² |
|-----------------------------------|---------------------------------|
| LVJA1.5-4PL4 | 1.5 - 4 |
| LVJA6-16PL4 | 6 - 16 |
| LVJA25-50PL4 | 25 - 50 |
| LVJA70-150PL4 | 70 - 150 |
| LVJA185-300PL4 | 185 - 300 |

Also available Paper and Transition Joints, and Joints for Non-Armoured cables. Breakout Boots and Oil Barrier Tubes are provided to seal the cable crotch where paper cables are involved.

A range of Termination & Live Pot End Kits are also available for Polymeric and Paper cables.

Kits contain a cable breakout boot, lug sealing sleeves and phase insulation sleeves sufficient for 1 metre tails.

Also available Armour and/or Lead Sheath Earthing kits.



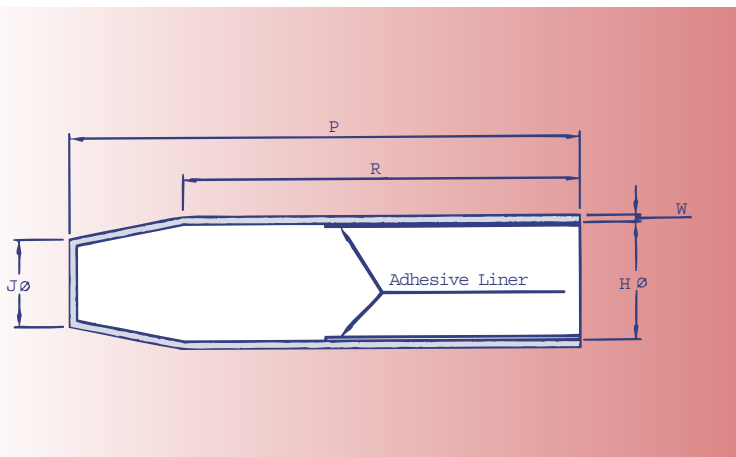
Low Voltage Moulded Parts

Heatshrink End Caps

HellermannTyton end caps are used to seal cables during storage or transportation. They can also be used as an insulating cap for live LV cables. A lining of hot melt adhesive provides an excellent environmental seal.

They are suitable for use on paper and polymeric insulated or lead jacketed cables, which may include aluminium or steel armouring.

Conforms to EA-TS 09-11.



| Part No. | Exp'd (Min) | Fully recovered dimensions (Max) | | | | | For Cable Dia's |
|----------|-------------|----------------------------------|------|---------|---------|---------|-----------------|
| | H | H | J | P ± 10% | R ± 10% | W ± 10% | |
| 1612-1 | 10.0 | 4.0 | 3.0 | 33.5 | 30.0 | 2.0 | 4-8 |
| 1618-1 | 14.0 | 6.0 | 5.0 | 55.3 | 50.0 | 2.3 | 6-11 |
| 1613-1 | 20.0 | 7.5 | 6.5 | 55.3 | 50.0 | 2.3 | 8-16 |
| 1619-1 | 20.0 | 9.0 | 8.0 | 75.0 | 72.0 | 3.0 | 9-16 |
| 1601-1 | 23.8 | 9.4 | 7.4 | 88.9 | 85.5 | 2.0 | 9-19 |
| 1614-1 | 40.0 | 15.0 | 10.5 | 90.0 | 80.0 | 3.0 | 15-32 |
| 1620-1 | 35.0 | 12.7 | 10.0 | 184.1 | 179.0 | 3.3 | 13-28 |
| 1615-1 | 63.0 | 25.0 | 16.0 | 143.3 | 130.0 | 3.3 | 25-50 |
| 1615-2 | 55.0 | 25.0 | 16.0 | 143.3 | 130.0 | 3.3 | 25-44 |
| 1617-1 | 76.0 | 30.0 | 17.0 | 158.0 | 150.0 | 4.0 | 30-60 |
| 1616-1 | 100.0 | 45.0 | 26.0 | 162.5 | 140.0 | 4.0 | 45-80 |
| 1616-7 | 125.0 | 45.0 | 26.0 | 162.5 | 140.0 | 4.0 | 45-100 |
| 1608-1 | 158.7 | 63.5 | 27.0 | 127.0 | 105.5 | 3.3 | 70-135 |
| 1607-1 | 158.7 | 63.5 | 27.0 | 182.0 | 160.0 | 4.0 | 70-135 |

*All dimensions in mm

End caps with the exception of 1612 and 1618 can be fitted with air valves for certain pressurised cable applications. To order end caps with valves insert a V after the material reference code e.g. 1615-1-B8VW2.

Standard Material - B8 Semi-rigid flame retarded polyolefin.

Standard Adhesive - W or W2 80°C Hot Melt.

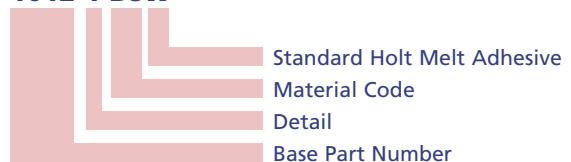
Live cable end seal kits.

Can be made to customers' requirements to suit all types of LV cable constructions.

They provide insulation between phases and ground. The outer end seal is marked with lightning flashes to indicate a live circuit.

Ordering Example

1612-1-B8W



Low Voltage Moulded Parts

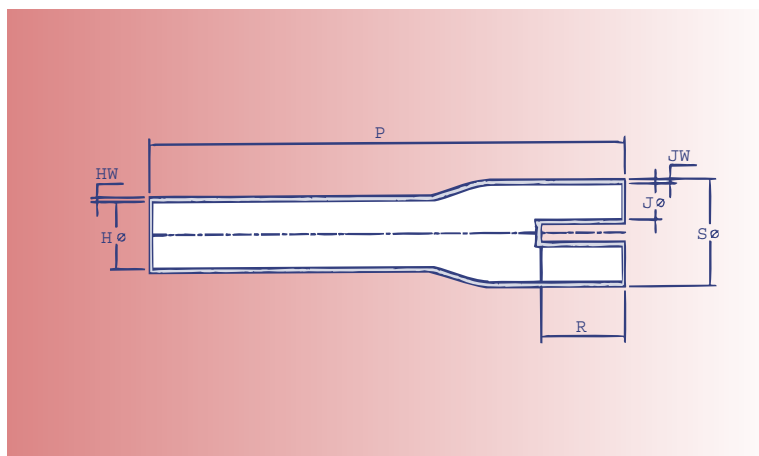
Heatshrink Cable Breakouts

HellermannTyton cable breakouts are designed for the insulating and sealing of cable crutches and provide resistance to abrasion and weathering.

They are manufactured from tough cross-linked polyolefin. They provide mechanical protection and strain relief.

A lining of hot melt adhesive provides an excellent environmental seal.

Conforms to EA-TS 09-11.



| Type | Part No. | Expanded (Min) | | Fully recovered dimensions (Max) | | | | | | | Approx Conductor Size (mm ²) |
|--------|----------|----------------|------|----------------------------------|------|---------|---------|---------|----------|----------|--|
| | | H | J | H | J | P ± 10% | R ± 10% | S (nom) | HW ± 10% | JW ± 10% | |
| 2 Core | 216-1 | 21.0 | 9.0 | 9.4 | 2.8 | 76.5 | 20.0 | 15.0 | 1.6 | 1.6 | 2.5 - 10 |
| | 223-1 | 30.0 | 15.0 | 9.4 | 4.1 | 94.0 | 30.0 | 20.0 | 1.5 | 1.2 | 4 - 35 |
| | 217-1 | 31.0 | 15.0 | 15.2 | 4.3 | 99.5 | 28.5 | 19.0 | 2.2 | 2.2 | 25 - 50 |
| | 218-1 | 50.0 | 21.0 | 22.9 | 7.6 | 119.0 | 34.0 | 30.0 | 3.2 | 3.2 | 50 - 150 |
| | 219-1 | 87.0 | 43.0 | 38.1 | 12.7 | 141.5 | 42.5 | 44.0 | 3.8 | 3.8 | 185 - 400 |
| 3 Core | 318-1 | 25.0 | 9.0 | 9.1 | 3.0 | 76.5 | 20.0 | 16.0 | 2.5 | 2.5 | 4 - 16 |
| | 319-1 | 31.0 | 15.0 | 17.5 | 4.6 | 93.5 | 28.5 | 23.0 | 2.9 | 2.9 | 16 - 35 |
| | 320-1 | 55.8 | 30.4 | 22.5 | 9.0 | 180.0 | 44.0 | 37.0 | 3.0 | 2.0 | 50 - 150 |
| | 328-1 | 43.2 | 20.8 | 22.9 | 7.6 | 99.0 | 34.0 | 36.0 | 3.8 | 3.8 | 50 - 150 |
| | 316-2 | 72.0 | 37.0 | 35.0 | 17.5 | 178.0 | 38.0 | 55.0 | 4.0 | 3.0 | 150 - 240 |
| | 324-1 | 90.0 | 35.0 | 34.0 | 14.0 | 200.0 | 50.0 | 54.0 | 3.0 | 2.0 | 150 - 300 |
| | 342-1 | 110.0 | 40.0 | 35.0 | 17.5 | 230.0 | 45.0 | 55.0 | 4.0 | 3.5 | 150 - 400 |
| | 341-1 | 125.0 | 50.8 | 59.0 | 25.4 | 283.0 | 71.0 | 75.0 | 3.8 | 3.8 | 400 |
| 4 Core | 442-1 | 28.0 | 9.0 | 9.0 | 1.8 | 78.0 | 17.0 | 20.0 | 2.7 | 2.0 | 2.5 - 10 |
| | 408-2 | 35.0 | 15.0 | 12.0 | 3.0 | 95.0 | 24.0 | 22.0 | 2.5 | 2.0 | 4 - 35 |
| | 409-2 | 47.4 | 21.5 | 22.9 | 6.4 | 165.1 | 38.1 | 38.1 | 4.1 | 3.3 | 35 - 70 |
| | 436-1 | 45.0 | 20.0 | 24.9 | 7.1 | 99.0 | 34.0 | 39.0 | 4.5 | 4.5 | 35 - 70 |
| | 418-4 | 60.0 | 30.0 | 22.9 | 6.4 | 202.0 | 38.1 | 38.1 | 4.1 | 3.3 | 35 - 120 |
| | 409-4 | 60.0 | 30.0 | 27.0 | 8.0 | 165.1 | 38.1 | 48.1 | 4.1 | 3.3 | 70 - 120 |
| | 444-1 | 78.7 | 38.1 | 35.6 | 12.5 | 240.0 | 55.0 | 50.8 | 4.0 | 3.5 | 120 - 300 |
| | 444-2 | 95.0 | 48.0 | 35.6 | 12.5 | 240.0 | 55.0 | 50.8 | 4.0 | 3.5 | 120 - 400 |
| 5 Core | 508-1 | 60.0 | 30.0 | 24.5 | 7.5 | 180.0 | 30.0 | 48.0 | 3.5 | 3.0 | 35 - 185 |
| 6 Core | 609-1 | 30.0 | 8.2 | 16.0 | 4.0 | 75.0 | 20.0 | 25.0 | 2.5 | 1.5 | 4 - 35 |
| | 609-2 | 40.0 | 12.0 | 16.0 | 4.0 | 75.0 | 20.0 | 25.0 | 2.5 | 1.5 | 4 - 70 |
| | 608-1 | 60.7 | 20.3 | 36.8 | 8.9 | 137.2 | 50.8 | 50.0 | 2.5 | 2.5 | 70 - 120 |

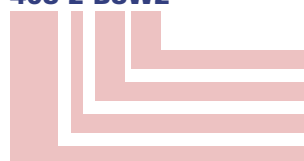
*All dimensions in mm unless otherwise stated

Standard Material - B8 Semi-rigid flame retarded polyolefin.

Standard Adhesive - W or W2 80°C Hot Melt.

Ordering Example

408-2-B8W2

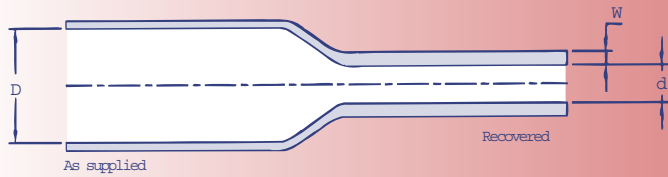


Standard Hot Melt Adhesive
Material Code
Detail
Base Part Number

Low Voltage Heatshrink Tubing

Energy Medium & Heavy Wall

Medium and heavy wall cross-linked polyolefin heatshrink tubing for the Electrical Supply and Contracting Industry. Tested and compliant to EA-TS 09-11.



| Part Number | Bore as supplied Minimum | Bore recovered Maximum | Wall thickness fully recovered nominal |
|--|-----------------------------|---------------------------|---|
| | D | d | W |
| EMWA — Energy Medium Wall Adhesive Lined Tubing | | | |
| EMWA12-3 | 12.0 | 3.0 | 1.5 |
| EMWA19-6 | 19.0 | 6.0 | 1.5 |
| EMWA30-8 | 30.0 | 8.0 | 2.0 |
| EMWA38-12 | 38.0 | 12.0 | 2.0 |
| EMWA50-16 | 50.0 | 16.0 | 2.0 |
| EMWA63-19 | 63.0 | 19.0 | 2.5 |
| EMWA75-22 | 75.0 | 22.0 | 3.0 |
| EMWA95-30 | 95.0 | 30.0 | 3.3 |
| EMWA115-40 | 115.0 | 40.0 | 3.3 |
| EMWA140-42 | 140.0 | 42.0 | 3.5 |
| EHWA — Energy Heavy Wall Adhesive Lined Tubing | | | |
| EHWA9-3 | 9.0 | 3.0 | 1.8 |
| EHWA19-6 | 19.0 | 6.0 | 2.4 |
| EHWA33-8 | 33.0 | 8.0 | 3.0 |
| EHWA45-12 | 45.0 | 12.0 | 4.1 |
| EHWA51-16 | 51.0 | 16.0 | 4.1 |
| EMWA68-22 | 68.0 | 22.0 | 4.1 |
| EHWA85-26 | 85.0 | 26.0 | 4.1 |
| EHWA105-30 | 105.0 | 30.0 | 4.1 |
| EHWA130-36 | 130.0 | 36.0 | 4.2 |
| EHWA160-50 | 160.0 | 50.0 | 4.5 |
| EHWA185-50 | 185.0 | 50.0 | 4.5 |

*All dimensions in mm

Also available without adhesive on reels – when ordering delete the 'A' from Part Number.

Standard length of adhesive coated products is 1, 1.2 & 1.5 metres, other cut lengths are available to order.

Standard colour: Black
Shrink Ratio up to 4:1

Ordering Example

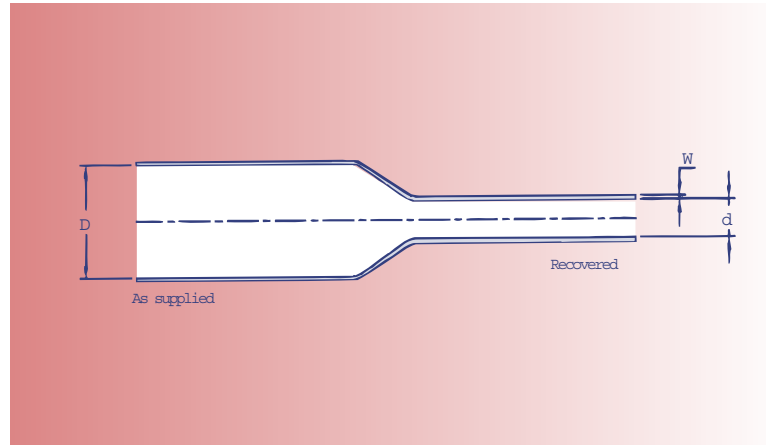
EMWA12-3



Low Voltage Heatshrink Tubing

Energy Thin Wall

Thin wall cross-linked polyolefin heatshrink tubing for the Electrical Supply and Contracting Industry.
Tested and compliant to EA-TS 09-11.



| Part Number | Bore as supplied Minimum | Bore recovered Maximum | Wall thickness fully recovered nominal |
|--|-----------------------------|---------------------------|---|
| | D | d | W |
| ETW – Energy Thin Wall Tubing 2:1 | | | |
| ETW32 | 3.2 | 1.6 | 0.50 |
| ETW48 | 4.8 | 2.4 | 0.50 |
| ETW64 | 6.4 | 3.2 | 0.60 |
| ETW95 | 9.5 | 4.8 | 0.60 |
| ETW127 | 12.7 | 6.4 | 0.60 |
| ETW190 | 19.0 | 9.5 | 0.80 |
| ETW254 | 25.4 | 12.7 | 0.90 |
| ETW318 | 31.8 | 15.9 | 1.00 |
| ETW381 | 38.1 | 19.0 | 1.00 |
| ETW508 | 50.8 | 25.4 | 1.10 |
| ETW760 | 76.0 | 38.0 | 1.30 |
| ETW1020 | 102.0 | 51.0 | 1.40 |
| ETW – Energy Thin Wall Tubing 3:1 | | | |
| ETW3-1 | 3.0 | 1.0 | 0.55 |
| ETW6-2 | 6.0 | 2.0 | 0.64 |
| ETW9-3 | 9.0 | 3.0 | 0.75 |
| ETW12-4 | 12.0 | 4.0 | 0.75 |
| ETW18-6 | 18.0 | 6.0 | 0.75 |
| ETW24-8 | 24.0 | 8.0 | 1.00 |
| ETW39-13 | 39.0 | 13.0 | 1.15 |
| ETWA – Energy Thin Wall Adhesive Lined Tubing 3:1 | | | |
| ETWA3-1 | 3.0 | 1.0 | 1.0 |
| ETWA6-2 | 6.0 | 2.0 | 1.0 |
| ETWA9-3 | 9.0 | 3.0 | 1.4 |
| ETWA12-4 | 12.0 | 4.0 | 1.8 |
| ETWA19-6 | 19.0 | 6.0 | 2.2 |
| ETWA24-8 | 24.0 | 8.0 | 2.5 |
| ETWA39-13 | 39.0 | 13.0 | 2.5 |

*All dimensions in mm

Ordering Example

ETW64BK

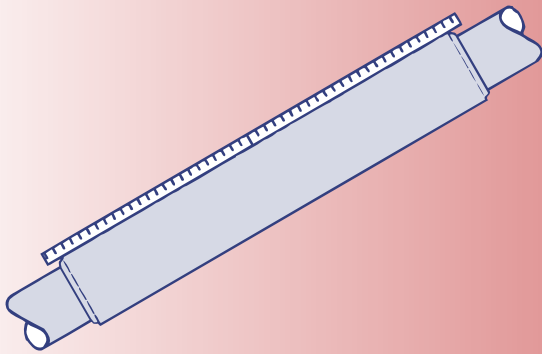


Supplied on reels or as cut lengths.

Standard colours: Black (BK), Red (RD), Yellow (YW), Blue (BE), Green-Yellow (GN-YW) and Transparent (TT), with the exception of ETWA which is supplied in black only.

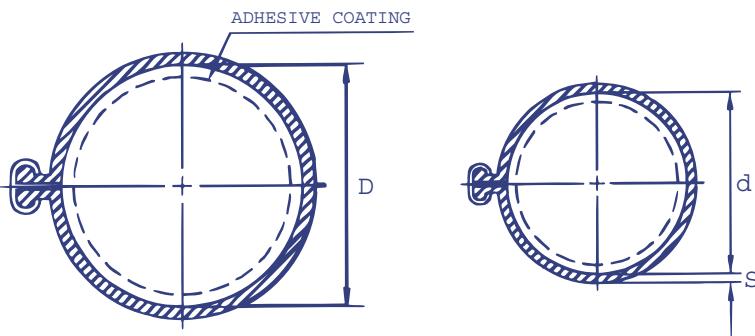
Wraparound Sleeve

Cable Repair Sleeve



Cable Repair Sleeves, WRS are easily applied utilising a stainless steel rail system fitted over a raised profile. Manufactured from cross-linked polyolefin, which equals or exceeds the properties of the original cable jacket.

Environmental sealing is achieved with an internal coating of hot melt adhesive.



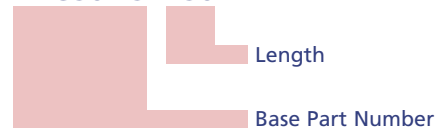
| Base Part No. | Expanded Diameter D | Fully Recoverd | | Application Range Diameter | Standard Length |
|---------------|------------------------|----------------|------------------|----------------------------|-----------------------|
| | | Diameter d | Wall thickness S | | |
| WRS40-12 | 40 | 12 | 3.0 | 13-25 | 250,500,750,1000,1500 |
| WRS50-15 | 50 | 15 | 3.0 | 17-30 | 250,500,750,1000,1500 |
| WRS75-22 | 75 | 22 | 3.0 | 25-40 | 500,750,1000,1500 |
| WRS105-30 | 105 | 30 | 3.0 | 35-55 | 1000,1500 |
| WRS146-38 | 146 | 38 | 3.0 | 45-75 | 1000,1500 |
| WRS188-55 | 188 | 55 | 3.0 | 62-95 | 1000,1500 |

*All dimensions in mm

Other sizes available upon request.

Ordering Example

WRS50-15X250



Medium Voltage Terminations

HellermannTyton Medium Voltage Terminations are tested in accordance with VDE0278(HD629.1S1) and IEC502 for polymeric insulation and HD629.2S1 for paper insulation cables.

| Test Description | Hellermann Product Code and System Voltages | | | |
|------------------------------|---|------------------------|------------------------|------------------------|
| | MVT15.PL 17.5 kV (Um) | MVT24.PL 24 kV (Um) | MVT36.PL 36 kV (Um) | MVT12.PB 12 kV (Um) |
| DC Withstand 15 min (kV) | 52 | 76 | 114 | 38 |
| AC Withstand Dry 5 min (kV) | 39 | 57 | 85 | 28.5 |
| AC Withstand Wet 1 min (kV) | 35 | 51 | 76 | 25.5 |
| Partial Discharge <10pc (kV) | 15 | 22 | 33 | - |
| Impulse Voltage (kVp) | 95 | 125 | 194 | 95 |
| Heat Cycling Air (kV) | 23 | 32 | 47.5 | 9.5 |
| Salt Fog 1000 hr (kV) | 11 | 16 | 24 | 8 |

Medium Voltage Joints

HellermannTyton Medium Voltage Joints are tested in accordance with HD629.1S1 for polymeric insulation, and HD629.2S1 for paper insulation cables and transition joints.

| Test Description | Hellermann Product Code and System Voltage | | |
|-------------------------------|--|--------------------------|--------------------------|
| | MVJ.12.PL. 12 kV (Um) | MVJ.12.PB. 12 kV (Um) | MVJ.24.PL. 24 kV (Um) |
| DC Withstand 15 min (kV) | 38 - ve | 38 - ve | 100 - ve |
| AC Withstand 5 min (kV) | 28.5 | 28.5 | 52 |
| Partial Discharge <10pC (kV) | 11 | - | 22 |
| Impulse Voltage (kVp) | 95 | 95 | 150 |
| Heat Cycling Air & Water (kV) | 16 | 9.5 | 42.3 |

Low Voltage Products to EA-TS 09-11

| Properties | Typical Results | Test Method |
|----------------------------------|--------------------|-------------|
| Continuous operating temperature | -55°C to +110°C | - |
| Tensile Strength | 15 MPa | IEC 540 |
| Ultimate Elongation | 400% | IEC 540 |
| Heat Shock | No Damage | ASTM D2671 |
| Dielectric Strength | 15 kV/mm | ASTM D2671 |
| Water Absorption | <0.1% | ASTM D570 |
| Flammability | Self Extinguishing | ASTM D635 |

All HellermannTyton moulded shapes and heatshrink tubing meet or exceed these requirements.