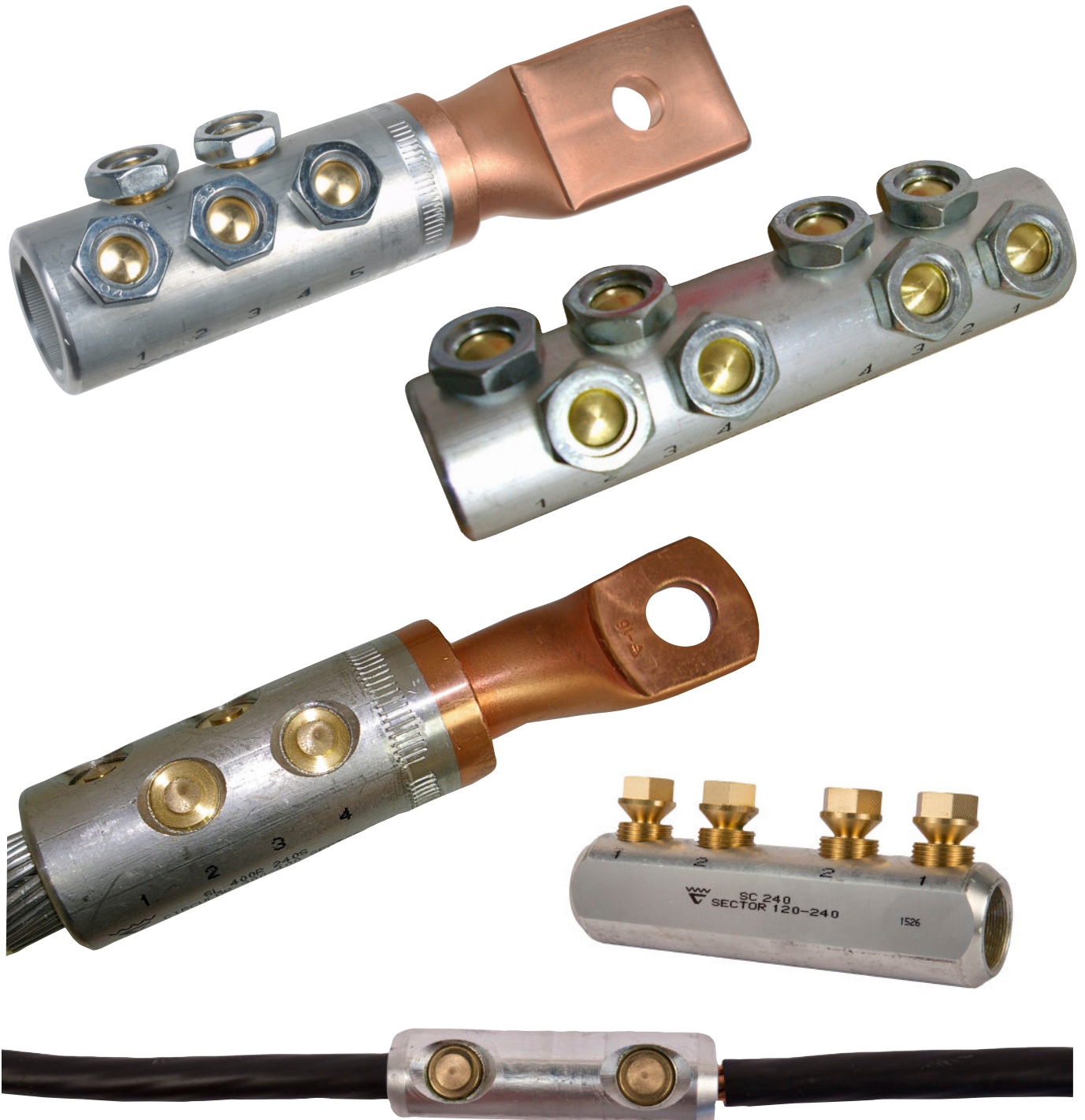
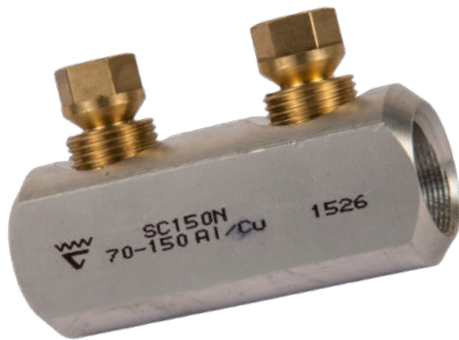


Shearbolt terminals



Shearbolt terminals for low and medium voltage



Using shearbolt connectors, assembly can be performed easily without heavy special tools and they can handle several cable sizes in a single through connector/terminal. Shearbolt connectors provide the user with a flexible solution.



Shearbolt connectors are made of an aluminium alloy that allows splicing of both copper and aluminium cable without the risk of galvanic corrosion. Shearbolt terminals are supplied with filler washers that allow the use of two different bolt sizes, in order to reduce the number of terminal variants.

Elpress shearbolt terminals for low and medium voltage are available as through connectors and cable terminals for:

- stranded and solid Al and Cu cables
- round cross section cables 10-630 mm²
- sector cross section cables 10-240 mm²
- low and medium voltage up to 36 kV

Properties

- meet the requirements of IEC 61238-1:2003
- shearbolt terminal with copper palm
 - provides better contact with Cu bus bar than Al palm
 - can be attached to Al bus bar without corrosion problems (provided it is an alloyed Al bus bar that can withstand the application environment)
- optimised sleeve that provides good pre-tension and long service life
- partition in the connector sleeves to prevent oil leakage
- the shearbolt terminals are available with pre-threaded screws and with reversible screws
- screws made of brass provide low friction and strong threads
- all brass screws shear when tightened to the correct torque

Tool

Tool for assembly can be a socket spanner or a nut driver with torque force >100 Nm. We recommend that the fitter uses a counter-hold tool to secure the cable terminal or the connector when tightening the torque screws.



ISL2201,
holding tool



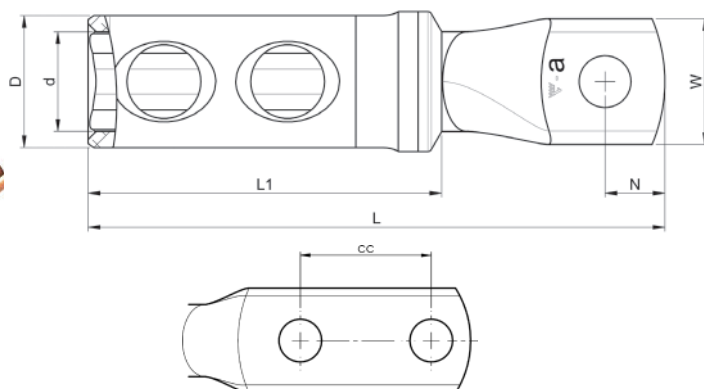
ELPRESS[®]

Shearbolt terminals 1-36 kV

Shearbolt terminals with pre-threaded screws 10-630 mm²

Properties

- suitable for both Al and Cu, Class 1 and Class 2 cable
- pre-threaded shear-off screws for easy handling
- the terminals are of the bimetallic type for best functionality



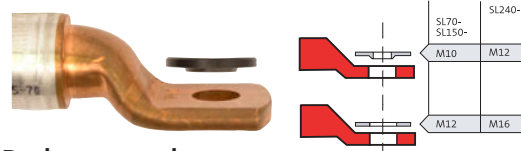
| Cable types, mm ² | | kV | Shearbolt terminal | Screened conductor | Screened conductor (filler piece purchased separately) | L mm | W mm | L1 mm | ø D mm | ø d mm | N mm | cc mm | Screw |
|------------------------------|---------|------|--------------------|--------------------|--|-------|------|-------|--------|--------|------|-------|-----------|
| round | section | | | | | | | | | | | | |
| 10-50 | 10-50 | 1 | SL50N-10-12 | 10-35 | | 80 | 24.5 | 41 | 23 | 16 | 12.5 | | M10, M12* |
| 35-95 | 35-95 | 1 | SL95N-10-12 | 57-95 | 16-50 (SC95N/PEN) | 98 | 27.3 | 52.5 | 17 | 10.7 | 12.5 | | M10, M12* |
| 120-240 | 120-240 | 1 | SL240N-10-12 | | 29-146 (SC240N/PEN) | 144.5 | 31.5 | 89 | 33.0 | 24.5 | 15 | | M10, M12* |
| 185-240 | | 1-36 | SL240R-12-16 | | | 134 | 30 | 79 | 33.5 | 20 | 15 | | M12, M16* |
| 185-240 | | 1-36 | SL240R-12X2-40 | | | 174 | 31.5 | 79 | 33.5 | 20.0 | 15 | 40 | M12 |
| 300-400 | | 1-36 | SL400R-12X2-40 | | | 210 | 42 | 103 | 41.5 | 25.8 | 15 | 40 | M12 |
| 630 | | 1-36 | SL630B-12X2-40 | | | 218 | 55 | 115 | 49.0 | 33.0 | 17 | 40 | M12 |

* reducer washer included

Shearbolt terminals with reversible screws 10-630 mm²

Properties

- suitable for both Al and Cu, Class 1 and Class 2 cable
- reversible shear-off screws
- the terminals are of bimetallic type for best functionality



Reducer washers

The reducer washer is included with shearbolt terminals with a flat hole. The reducer washer is used to reduce the bolt dimension by one size.

| Cable types, mm ² | | kV | Shearbolt terminal | Screened conductor | L mm | W mm | L1 mm | ø D mm | ø d mm | N mm | cc mm | Screw |
|------------------------------|---------|------|---------------------|--------------------|-------|------|-------|--------|--------|------|-------|-----------|
| round | section | | | | | | | | | | | |
| 10-70 | 25-70 | 1-36 | SL70R70S-10-12 | 10-57 | 97 | 25.5 | 59 | 21 | 10.7 | 12.5 | | M10, M12* |
| 95-150 | 95 | 1-36 | SL150R95S-10-12 | 70-95 | 116 | 30.5 | 75.5 | 27 | 16 | 12.5 | | M10, M12* |
| 95-150 | 95 | 1-36 | SL150R95S-12X2-40 | 70-95 | 172 | 30.5 | 75.5 | 27 | 16 | 15 | 40 | M12 |
| 185-240 | 120-185 | 1-36 | SL240R185S-12-16 | | 134 | 31.5 | 79 | 33.5 | 20 | 15 | | M12, M16* |
| 300-400 | 240 | 1-36 | SL400R240S-16 | | 182 | 41.5 | 103 | 41.5 | 25.8 | 21 | | M16 |
| 300-400 | 240 | 1-36 | SL400R240S-20 | | 182 | 41.5 | 103 | 41.5 | 25.8 | 21 | | M20 |
| 300-400 | 240 | 1-36 | SL400R240S-00 | | 187 | 41.5 | 103 | 41.5 | 25.8 | - | | - |
| 500-630 | - | 1-36 | SL500B-630B-12X2-40 | | 218 | 55 | 115 | 49 | 33 | 12 | 40 | M12 |
| 500-630 | - | 1-36 | SL630R-1 | | 243 | 55 | 129 | 49 | 33 | - | | - |
| 500-630 | - | 1-36 | SL630R-16 | | 241.5 | 55 | 129 | 49 | 33 | 30 | | M16 |
| 500-630 | - | 1-36 | SL630R-14 | | 243 | 55 | 129 | 49 | 33 | 30 | | M14 |
| 500-630 | - | 1-36 | SL630R-12X2-40 | | 243 | 55 | 129 | 49 | 33 | 15 | 40 | M12 |

* reducer washer included



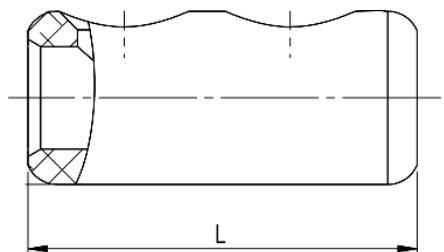
ELPRESS

Shearbolt through connectors 1-36 kV

Shearbolt through connectors with pre-threaded screws 10 - 240 mm²

Properties

- suitable for both Al and Cu, Class 1 and Class 2 cable
- partition to prevent oil leakage
- pre-threaded shear-off screws for easy handling

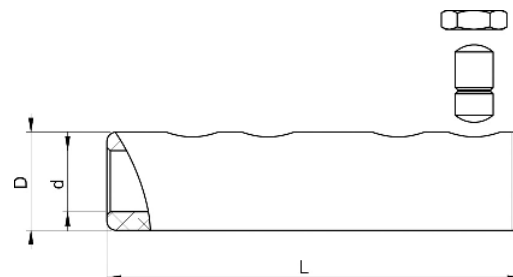
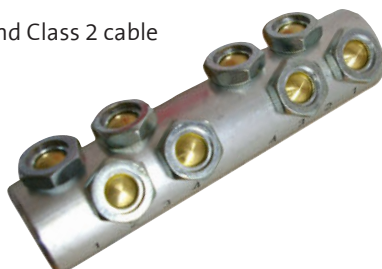


| Cable types, mm ² | | kV | Through connector | Screened conductor | Screened conductor (filler piece purchased separately) | L mm | ø D mm | ø d mm |
|------------------------------|---------|----|-------------------|--------------------|--|------|--------|--------|
| round | section | | | | | | | |
| 10-50 | 16-50 | 1 | SC50R50S | 10-35 | | 62 | 17.3 | 10.7 |
| 35-95 | 50-95 | 1 | SC95N | 57-95 | 16-50 (SC95N/PEN) | 69 | 23.0 | 16.0 |
| 70-150 | 70-150 | 1 | SC150N | 120-146 | 21-95 (SC150N/PEN) | 80 | 23.0 | 19.5 |
| 95-240 | 120-240 | 1 | SC240N | | 29-146 (SC240N/PEN) | 144 | 33.1 | 25.0 |

Shearbolt through connectors with reversible screws 10 - 630 mm²

Properties

- suitable for both Al and Cu, Class 1 and Class 2 cable
- partition to prevent oil leakage
- reversible shear-off screws



| Cable types, mm ² | | kV | Through connector | Screened conductor | Screened conductor (filler piece purchased separately) | L mm | ø D mm | ø d mm |
|------------------------------|---------|------|-------------------|--------------------|--|------|--------|--------|
| round | section | | | | | | | |
| 50-95 | 50-95 | 1-36 | SC95R95S | 70-95 | 16-57 (SC95N/PEN) | 114 | 27.0 | 16.0 |
| 95-150 | 95 | 1-36 | SC150R95S | 70-95 | | 114 | 27.0 | 16.0 |
| 185-240 | 120-185 | 1-36 | SC240R185S | | | 134 | 33.5 | 20.0 |
| 300-400 | 240 | 1-36 | SC400R240S | | | 175 | 41.5 | 25.8 |
| 500-630 | - | 1-36 | SC630R | | | 210 | 49.0 | 33.0 |

PEN - filler piece for shearbolt connectors

Filler piece that works perfectly when connecting screened conductors.

| Filler piece |
|--------------|
| SC95N/PEN |
| SC150N/PEN |
| SC240/PEN |

