

## Shear Bolt cable lugs up to 12kV

For applications up to 12kV

Suitable for Al and  
Cu conductors

Certified according to  
**EN61238-1 class A**



Shear Bolt lugs are used for terminating aluminium or copper conductors in applications up to 12kV.

## Advantages

- Shear Bolt technology allows installation of the lugs using a regular wrench or a spanner, no crimping or other special tools are needed.
- Morek Shear Bolt cable lugs are range taking products that can be used with conductors of varying cross-sections, accommodating a wide range of conductors with only a few items.
- Shear Bolt lugs' specially designed aluminium bodies are made of high-strength aluminium alloy and are tin-plated, allowing their use with both aluminium and copper conductors.
- Bolts made of aluminium or tin-plated brass are designed to break at the exact torque required for best electrical connection.
- Shear Bolts are treated with special antioxidation grease to ensure the lubrication and eliminate all kinds of oxidation in places of electrical contact.

- All Morek Shear Bolt lugs are watertight and suitable for indoor and outdoor installation, to be used with solid, stranded, sector shaped and round conductors with plastic or oil-impregnated paper isolation.
- Shear Bolt lugs are compatible with most termination kits by many manufacturers. Compact design requires less installation space, especially for larger sizes.

## Certification and regulations

Tested according to IEC61238-1 class A

## Technical specifications

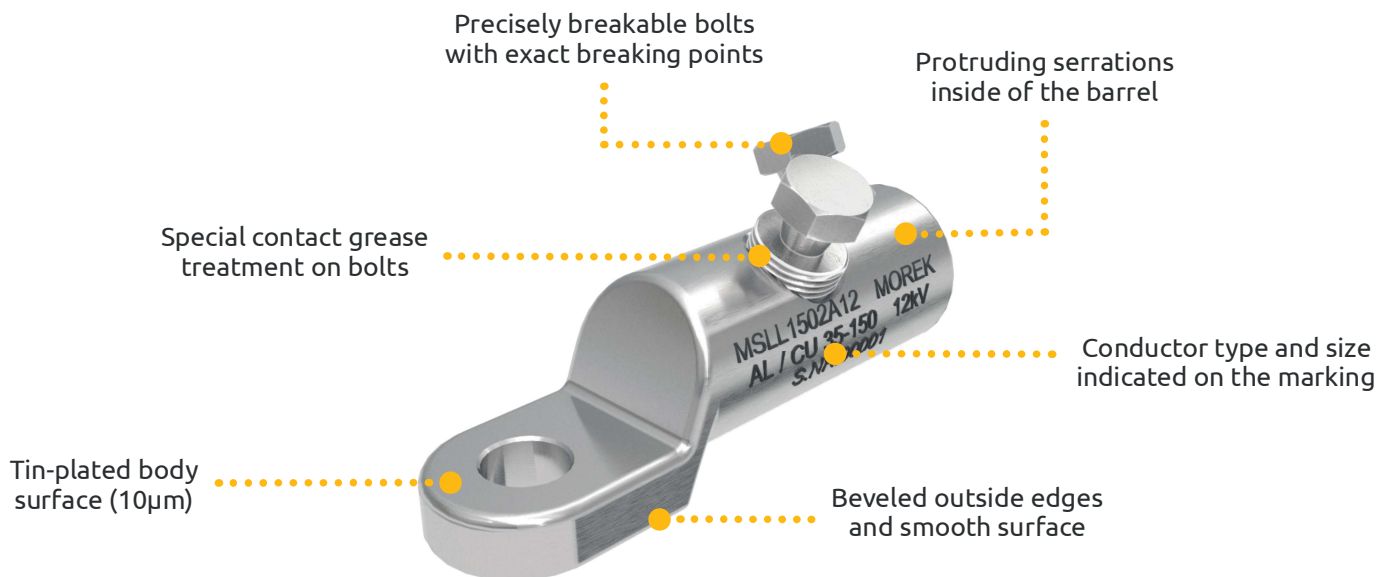
- Nominal voltage up to 12kV
- Suitable for copper and aluminium conductors
- Bolts are treated with antioxidation grease

## Materials

**Lug body:** tin-plated high-strength aluminium alloy

**Aluminium-bolt cable lug bolts:** aluminium alloy

**Brass-bolt cable lug bolts:** tin-plated brass



EN 61238-1:2003 divides cable lugs and connectors into two classes:

**Class A** (heat cycle and **short-circuit tested**) - These are connectors intended for electrical distribution or industrial networks in which they can be subjected to short-circuits of relatively high intensity and duration. Therefore, Class A connectors are suitable for most applications.





**Class B** (heat cycle tests only, **not short-circuit tested**) - These are connectors for networks in which overloads or short-circuits are rapidly cleared by the installed protective devices, e.g. **fast-acting fuses**.






Palm opening size	MSLL35	MSLL50	MSLL51	MSLL70	MSLL95
M10	MSLL0351A10	MSLL0501A10	MSLL0502A10	-	-
M12	MSLL0351A12	MSLL0501A12	MSLL0502A12	MSLL0702A12	MSLL0951A12
M16	-	-	-	-	-

**Technical data**

Conductor cross-section Al (mm<sup>2</sup>)

RE  Round, solid	6 - 35	6 - 50	6 - 50	16 - 70	16 - 95
RM  Round, stranded	10 - 35	10 - 50	10 - 50	16 - 70	16 - 95
SE  Sector shaped, solid	16 - 35	16 - 50	16 - 50	16 - 70	16 - 95
SM  Sector shaped, stranded	16 - 25	16 - 35	16 - 35	16 - 70	16 - 95

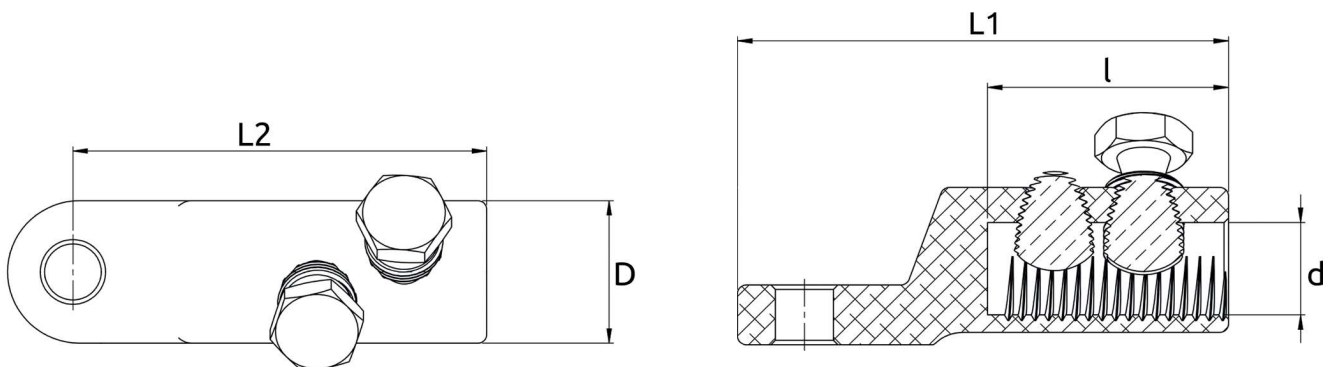
Conductor cross-section Cu (mm<sup>2</sup>)

RM  Round, stranded	16 - 35	6 - 50	6 - 50	16 - 70	25 - 95
SM  Sector shaped, stranded	16 - 35	6 - 50	6 - 50	16 - 70	25 - 95
RE  Round, solid	6 - 25	6 - 35	6 - 35	6 - 35	10 - 35

No. of bolts Ø mm	1 / M10	1 / M10	2 / M10	2 / M12	1 / M12
L1 / L2 / l	53 / 40 / 18	62 / 51 / 28	62 / 51 / 30	90 / 75 / 40	65 / 52 / 24
D / d	16 / 9	20 / 11	20 / 11	22 / 12	25 / 14
Weight (g)	23	37	42	62	65
Package (pcs)	50	50	50	50	25

**Bolts:** aluminium alloy  
Suitable for Al/Cu applications

Dimensions





Palm opening size	MSLL96	MSLL150	MSLL240	MSLL300
M10	-	-	-	-
M12	MSLL0952A12	MSLL1502A12	MSLL2402A12	MSLL3002A12
M16	-	-	MSLL2402A16	MSLL3002A16

### Technical data

#### Conductor cross-section Al (mm<sup>2</sup>)

RE  Round, solid	16 - 95	35 - 150	50 - 240	120 - 300
RM  Round, stranded	16 - 95	35 - 150	50 - 240	120 - 300
SE  Sector shaped, solid	16 - 95	35 - 150	50 - 240	120 - 300
SM  Sector shaped, stranded	16 - 95	35 - 120	50 - 240	120 - 300

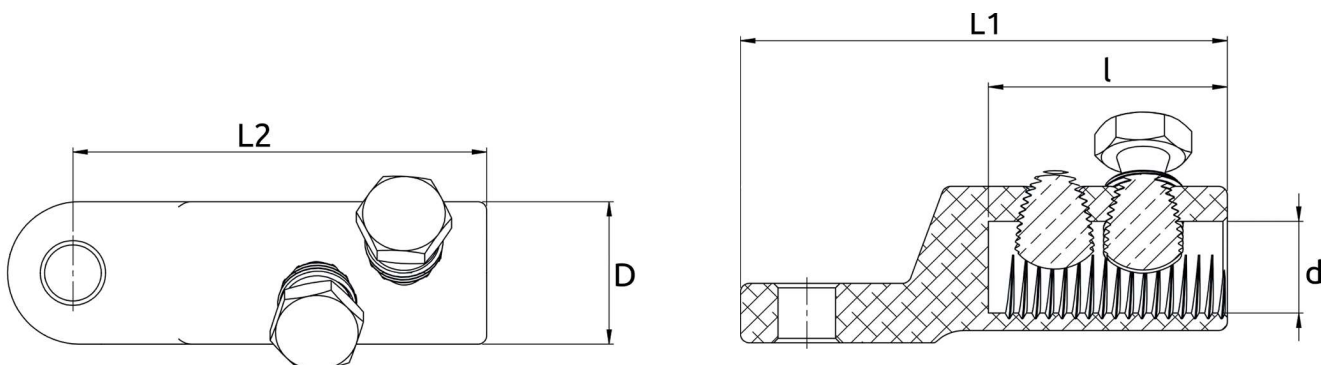
#### Conductor cross-section Cu (mm<sup>2</sup>)

RM  Round, stranded	25 - 95	35 - 150	50 - 240	120 - 300
SM  Sector shaped, stranded	25 - 95	35 - 150	50 - 240	120 - 300
RE  Round, solid	10 - 35	25 - 35	-	-

No. of bolts Ø mm	2 / M12	2 / M16	2 / M18	2 / M22
L1 / L2 / l	76 / 63 / 32	100 / 85 / 52	115 / 97 / 57	123 / 104 / 59
D / d	25 / 15	29 / 18	35 / 22	38 / 24,5
Weight (g)	82	120	250	280
Package (pcs)	25	40	15	10

**Bolts:** aluminium alloy  
Suitable for Al/Cu applications

## Dimensions





**Palm opening size**

**MSLL35**





**MSLL50**

**MSLL70**




M10	MSLL0351B10	MSLL0501B10	-
M12	MSLL0351B12	MSLL0501B12	MSLL0702B12
M16	-	-	-

**Technical data**

Conductor cross-section Al (mm<sup>2</sup>)

RE 	Round, solid	6 - 35	6 - 50	16 - 70
RM 	Round, stranded	10 - 35	10 - 50	16 - 70
SE 	Sector shaped, solid	16 - 35	16 - 50	16 - 70
SM 	Sector shaped, stranded	16 - 25	16 - 35	16 - 70

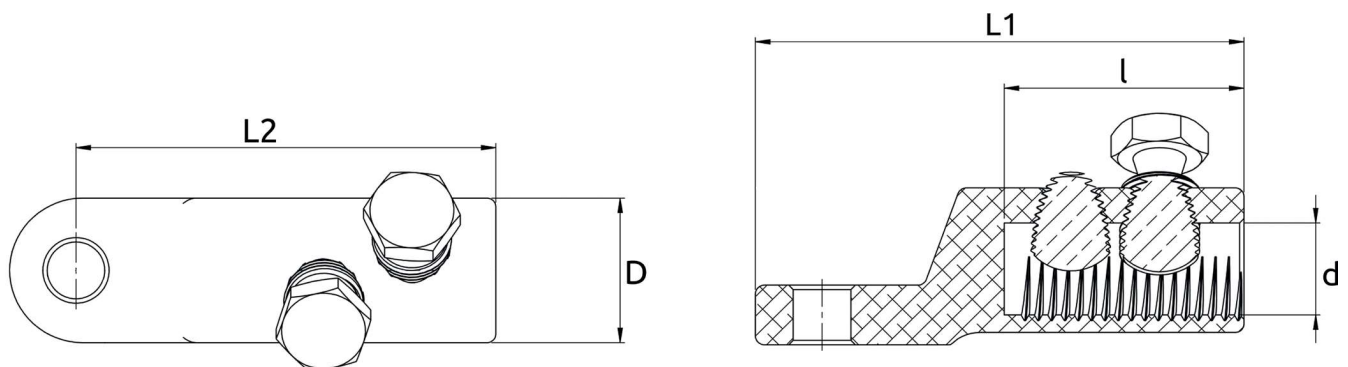
Conductor cross-section Cu (mm<sup>2</sup>)

RM 	Round, stranded	16 - 35	6 - 50	16 - 70
SM 	Sector shaped, stranded	16 - 35	6 - 50	16 - 70
RE 	Round, solid	6 - 25	6 - 35	6 - 35

No. of bolts Ø mm	1 / M10	1 / M10	2 / M12
L1 / L2 / l	53 / 40 / 18	62 / 51 / 28	90 / 75 / 40
D / d	16 / 9	20 / 11	22 / 12
Weight (g)	27	47	100
Package (pcs)	50	50	30

**Bolts:** tin-plated brass  
Suitable for Al/Cu applications

Dimensions





Palm opening size	MSSL150	MSSL240	MSSL300
M10	-	-	-
M12	MSSL1502B12	MSSL2402B12	MSSL3002B12
M16	-	MSSL2402B16	MSSL3002B16

### Technical data

#### Conductor cross-section Al (mm<sup>2</sup>)

RE  Round, solid	35 - 150	120 - 240	120 - 300
RM  Round, stranded	35 - 150	120 - 240	120 - 300
SE  Sector shaped, solid	35 - 150	120 - 240	120 - 300
SM  Sector shaped, stranded	35 - 120	120 - 240	120 - 300

#### Conductor cross-section Cu (mm<sup>2</sup>)

RM  Round, stranded	35 - 150	120 - 240	120 - 300
SM  Sector shaped, stranded	35 - 150	120 - 240	120 - 300
RE  Round, solid	25 - 35	-	-

No. of bolts Ø mm	2 / M16	2 / M18	2 / M22
L1 / L2 / l	100 / 85 / 52	115 / 97 / 57	123 / 104 / 59
D / d	29 / 18	35 / 22	38 / 24,5
Weight (g)	170	345	380
Package (pcs)	40	15	10

**Bolts:** tin-plated brass

Suitable for Al/Cu applications

### Dimensions

