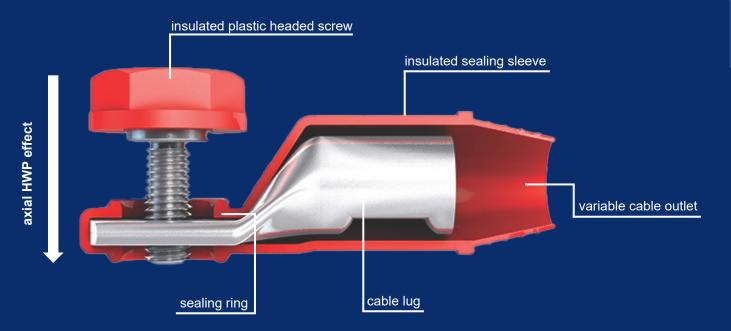


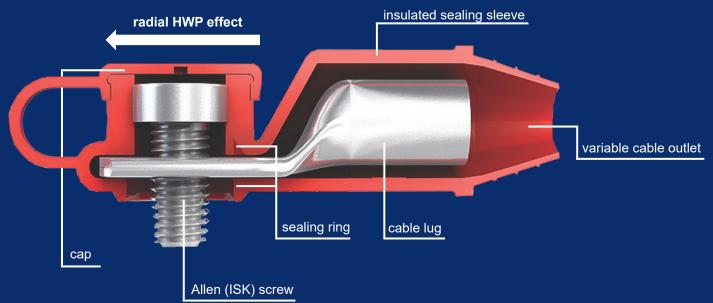




Make
The
Right
Connection.

www.hagemann-systems.de info@hagemann-systems.de



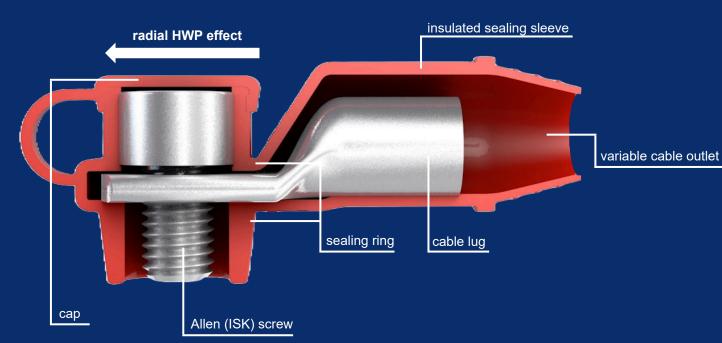


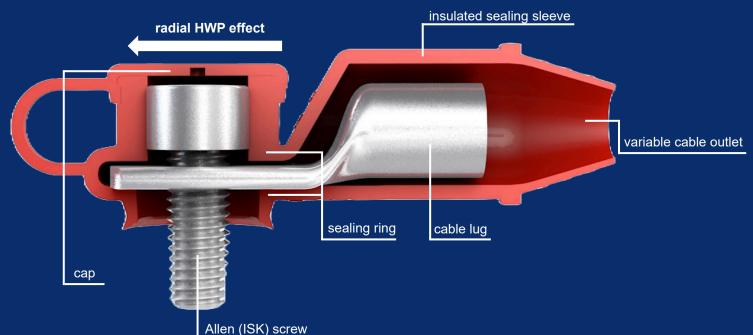
# **Lugsulation© Flex**

- for protruding contacts
- sealing axially in the direction of the screw
- application possible with insulated plastic headed screw or insulation nut
- connection of multiple cables possible with the use of a copper space ring
- protection class up to IP64 (certified)
- a higher protection class up to IP68 is possible with certain measures
- as example Flex can be used in European traction batteries according to DIN and British standard
- · sealing internal and external threads
- flame-retardant insulation available according to UL 94 V-0
- available from 10 240 mm²

#### **Lugsulation© Cap**

- all Lugsulation variants are available in the cap version
- fully insulates the connection without requiring a plastic headed screw
- the main feature is the use of an Allen screw (ISK)
- is usually used when there is little space for installation
- the cylindrical head seals radially i.e., circumferentially to the direction of screwing – against its inner wall
- as an example, this variant can be used in applications like motors, lithium batteries or inverters/converters
- protection class up to IP64
- suitable for sealing internal threads
- available in 50 mm<sup>2</sup> M8 / M10 and 95 mm<sup>2</sup> M10 (other sizes only with large order quantity)



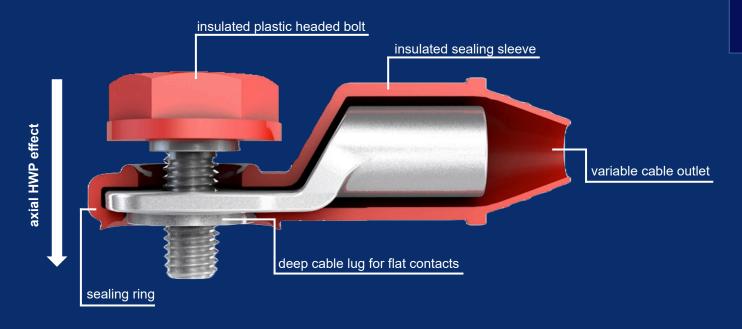


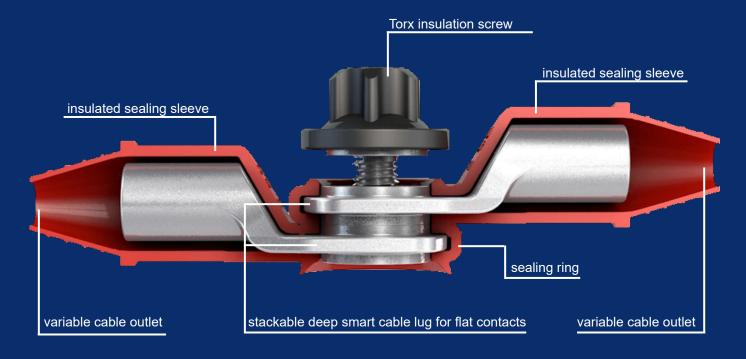
# **Lugsulation© Cap High**

- a variant of the Lugsulation Cap with an extended sealing geometry
- the main feature is the use of an Allen screw (ISK)
- sealing extension height: 12.5 mm; sealing diameter: 11.5 mm
- as an example, this variant can be used in applications like motors, lithium batteries, or inverters/converters
- the cylindrical head seals radially i.e., circumferentially to the direction of screwing – against its inner wall
- protection class up to IP64
- suitable for sealing internal threads
- available for 16–25 mm<sup>2</sup> cross-sections with M8 and M6 internal threads (other sizes only with large order quantity)
- designed to be used in combination with a copper spacer ring

# Lugsulation© Cap Seal

- a variant of the Lugsulation Cap with an extended sealing geometry
- the main feature is the use of an Allen screw (ISK)
- as an example, this variant can be used in applications like motors, lithium batteries, or inverters/converters
- the cylindrical head seals radially i.e., circumferentially to the direction of screwing against its inner wall
- protection class up to IP64
- suitable for sealing internal threads
- sealing extension height: 5.5 mm
- available in two configurations: 16 mm² / M5 sealing diameter: 11.4 mm and 35 mm² / M8 - sealing diameter: 15.4 mm
- designed to be used in combination with a copper spacer ring



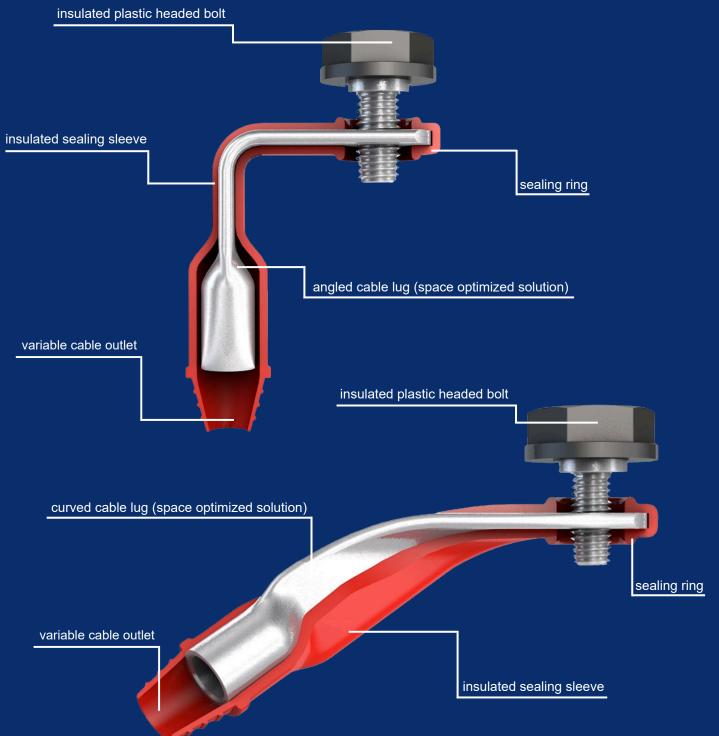


# **Lugsulation© Deep Low**

- 100 % contact on flat terminals and busbars due to the special deep cable lug
- the higher level of the cable lug surface allows circumferential, mainly radially insertable seal
- protection class up to IP64
- a higher protection class up to IP68 is possible with certain measures
- Deep is used as an example in switch cabinet constructions
- sealing internal & external threads
- Deep is available also in the "Cap" version
- available in 35mm<sup>2</sup> M6 (other sizes only with large order quantity)

#### **Lugsulation© Deep Smart**

- fully insulates the terminals with the flat contact surface
- developed as stackable design that enables serial and parallel mounting on flat terminal without additional components
- suitable for terminals with height from 0 to 2.5 mm
- sealing provided without additional components fully insulated across the contact
- torx insulating screw as identification for the series
- made of special rubber, also in V0 (UL94) for durability and flame resistance
- protection class up to IP64 (certified)
- a higher protection class up to IP68 is possible with certain measures
- designed for lithium-ion batteries and electrical systems requiring compact, fully insulated connections
- torx available sizes: M6T M8 and M10 in lengths 15/22/28 mm
- available for cable cross sections from 16–120 mm²



#### **Space Optimized Solutions**

### **Lugsulation© Angled**

- designed for tight installation spaces in batteries and electrical systems
- developed for tight installation conditions in batteries and electrical systems
- provides complete insulation over the contact against short circuits, moisture, and stress
- available with 90°, 45° and other cable outlets for precise routing
- customized for specific space and technical requirements
- can be easily integrated into complex system layouts
- · quick to install in existing assemblies
- also suitable for lithium-ion batteries, compact machinery, and complex electrical systems
- works well with front terminal connections as well as replacement installation
- · certified up to IP64; IP68 possible with additional sealing

# **Lugsulation© Curved**

- designed for tight installation conditions and optimized current routing in electrical systems
- provides complete insulation over the contact against short circuits, moisture and stress
- features a curved cable outlet for flexible installation in confined areas
- customized for specific space and technical requirements
- allows maximum space utilization in tight and complex layouts
- easy installation in existing system environments
- suitable for e.g. inverters, converters, batteries, compact machines and complex electric systems
- certified up to IP64; IP66 with additional sealing possible

Lugsulation© Flex

Lugsulation© Cap

Lugsulation© Cap High

Lugsulation© Cap Seal

**Connection Type** 









**Further Application** 









**Half-Sectional View** 









**Bottom View** 

The Lugsulation is available in a set: sealing sleeve, cable lug and insulation screw

# **Space Optimized Solutions** Lugsulation© Lugsulation© Lugsulation© Lugsulation© Deep Low **Deep Smart** Angled Curved **Connection Type Further Application Half-Sectional View**

**Bottom View** 







