

# 3M™ Volition™ K6ASE RJ45 STP Jack



3M™ Volition™  
K6A RJ45 STP Jack with 360° shield and  
straight cable entry

## 3M™ Volition™ K6A RJ45 STP Jack with straight cable entry

The new K6ASE RJ45 jack is a key component of the Volition Cat.6A system, designed for Class E<sub>A</sub> and Category 6A on twisted copper pairs in compliance with the most recent ISO/IEC and TIA standards for Channel and Permanent Link configurations with 3M cables.

The 360° shielding of the jack facilitates a worry-free Class E<sub>A</sub> / Category 6A installation. Its design allows an easy, tool-less termination on Volition Cat6<sub>A</sub> F/UTP, F/FTP and Cat7 S/FTP cables.

The parameter which causes most difficulty for Ethernet 10Gb/s over twisted pairs applications (10GBASE-T) is Alien Crosstalk, which is crosstalk between pairs in neighbouring cables. However, Alien Crosstalk relates not only to cables but also to RJ45 Jacks, in particular in cross connects or patch panels where many channels are adjacent.

The 360° shielding of the Volition K6ASE RJ45 Jacks acts like a Faraday screen around the screened RJ45 which gives unsurpassed protection against it. The quality of the 360° shielding is maintained in the connection to the cable thanks to the metal braid of the shielding cap. This method of wiring is without equal in reducing the noise between pairs in neighbouring cables.

### Applications

- IEEE 802.3 10G BASE-T

### Standards

- ISO/ IEC 11801 Edition 2, Am 1-2  
- ISO/ IEC 60603-7-5 mechanical requirements  
- EN 50173-1  
- ANSI/ TIA/ EIA-568-C-2

### **Features**

- 360° Metallic shielding
- 360° shielding is maintained in the connection to the cable because of the integral earth braid
- Re-usable jack
- Separate wire guide
- Tool-less termination
- No need to untwist pairs before termination
- Connector can be terminated with both solid and stranded wire
- Compact size
- Integral shutter

### **Benefits**

- Immunity to alien crosstalk
- Good transfer impedance to give immunity to electromagnetic interference
- If a wiring mistake is made there is no need to use a new jack
- Minimised stripping length, with wires all the same length
- Very fast and safe termination process
- Enables 'jack to plug' cables to be manufactured using stranded conductors (for use in open office architectures)
- Easier cable management and more space and flexibility to ensure the cable minimum bend radius is never compromised
- Increased dust protection, especially during installation or in a dirty environment, no additional shuttering required on faceplates, allows direct mounting into floor boxes and protects jacks in the patch panel

## Specification

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### Features

- Galvanized copper shielding as protection against the effects of alien crosstalk
- Galvanized copper cap for the rear of the jack
- Galvanized copper cable cap is reversible to allow for top or bottom cable entry
- Metal braid on cap gives 360° connection to cable screen
- Tool-less connection of all eight wires at one time by closing the metal locking wings
- Wire holder is labelled with both 568A and 568B wire maps
- Single forked contacts
- Keystone mounting
- Integrated shutter
- White colour (RAL 9010)

### Technical characteristics

Conforms to the Channel and Permanent Link performance parameters of Class E<sub>A</sub> and Category 6A

#### Conductor diameter

solid wires: 0,50 to 0,65 mm  
stranded wires: 7 x 0,15 to 0,20 mm

#### Maximum diameter of

wire insulation: 1,6 mm

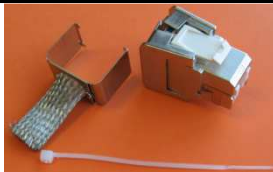
Lead through resistance: < 200 mΩ

Insulation resistance: RI > 500 MΩ

Protection contacts: 1,6 μm gold

## Ordering Information

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### 3M™ Volition™ RJ45 K6A Jack, STP

Supplied with a cable tie to hold the connector braid onto the cable shielding

## Ref. No.

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VOL-OCK6A-SE8

VOL-OCK6A-SEB (bulk)

### Important Notice

The details contained in this literature have been carefully prepared from information available to 3M at the time of its production. However, it is not intended to be relied upon for purposes of product specification and you should contact your sales representative if specification details are required. Because of the wide variety of processes and conditions in which these products may be used, the user should first carry out tests to determine the suitability of the products for the particular use intended. All questions of warranty and liability relating to 3M products are governed by the selling 3M subsidiary's Terms of Sale subject where applicable to the prevailing law. 3M and Volition are trademarks of the 3M company.



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