Datasheet

3M™ Volition™
K6A RJ45 STP Jack

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3M™ Volition™ K6A RJ45 STP Jack, New Design, with three cable entries

The new K6A RJ45 Jack is a key component of the Volition Category6A/Class EA system, fully compliant with Category 6A ISO/IEC, EN and TIA standards for hardware performance, confirmed by multiple independent lab certifications (Delta and GHMT PVP).

Its top-class electrical performance guarantees consistently high headroom at any link length, down to 3m links.

The unique three cable entry points make it possible to install the jack anywhere.

The 360° shielding of the jack facilitates a worry-free Class EA / Category 6A installation.

The traditional 3M 'one click' design allows an easy, tool-less termination on Volition Category 6A F/UTP, U/FTP, F/FTP and Category 7 S/FTP cables.

Applications

- IEEE 802.3 10G BASE-T
- PoE – IEEE 802.3at

Standards

- ISO/ IEC 11801 Edition 2, Am 1-2
- ISO/ IEC 60603-7-51
- EN 50173-1
- ANSI/ TIA/ EIA-568-C.2-2009
- IEC60512-99-01 (48B/2245/CDV)

Features	Benefits
• Three cable entry points	• Less cable bending required - better compliance with minimum bend radius. • Allows selection of the cable entry according to the best cable path: floor, ceiling, duct, patch panel.
• Category.6A compliant according to ISO/IEC and TIA standards	• Out performs standards, high reliability - positive permanent link headroom down to 3m links.
• Certified by Delta and GHMT PVP	• Assurance that the 3M K6A Jack complies with standards.
• 360° Metallic shielding	• Total immunity to alien crosstalk, by design - no need to test ANEXT on the field, dramatic reduction in testing time.
• Tool-less termination	• No specialised tools required - termination performance independent of tool quality. • No additional expenditure on tools - No delays caused by lack of tools or damaged tools.
• Re-usable jack	• If a wiring mistake is made there is no need to use a new jack - no time wasted waiting for another delivery.
• No untwisting of pairs before termination	• Minimised stripping length - very limited pair untwist - pairs kept together. • Easy fitting of the pairs without threading through a wire guide. • Termination performance not affected by operator skills.
• Connector can be terminated with both solid and stranded wire	• Enables 'jack to plug' cables to be manufactured using stranded conductors (for use in open office architectures and consolidation points).
• Integrated automatic dust shutter	• Increased dust protection, especially during installation or in a dirty environment. • No additional shuttering required on faceplates. • Allows direct mounting into floor boxes - protects jacks in the patch panels.
• Keystone format - Compact size	• Same format as other 3M RJ45 connectors. • Easy mounting onto: - 3M branded face plates, patch panels, adaptors and other accessories. - Keystone format, face plates, patch panels, adaptors and other accessories. • Compact size allows easier cable management and more space to ensure the cable minimum bend radius is never compromised.
• POE+ compliant	• Supports PoE plus applications according to latest IEEE standards.

Specifications

Features

- Plated copper shielding as protection against the effects of alien crosstalk
- Plated copper cap for the rear of the jack
- Plated copper cable cap is adaptable to allow for top, bottom or rear 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 with hardware performance parameters of Category 6_A ISO and Category 6A TIA

Compliant to Channel and Permanent Link performance parameters of Class E_A ISO and Category 6A TIA

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

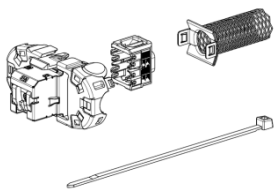
Lead through resistance: < 200 mΩ

Insulation resistance: RI > 500 MΩ

Protection contacts: 1,6 µm gold

Electrical parameters (typical values)	Margins "Permanent Link" Amendment 2 ISO/IEC 11801 2nd edition:2010 "Class E_A"	Margins "Channel" Amendment 1 ISO/IEC 11801 2nd edition:2008 "Class E_A"
NEXT	*5 dB*	*5.5 dB*
PSNEXT	*7.5 dB*	*7 dB*
ACR-F	*16 dB*	*12 dB*
PSACR-F	*17.5 dB*	*13.5 dB*
Return Loss	*3 dB*	*6 dB*

Ordering Information



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

Ref. No.

VOLOCK6ASN8
VOLOCK6ASNV (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.
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