# **3M**

# Volition<sup>TM</sup> RJ45 K6 Jacks



RJ45 K6 Jacks

Part of our 3M™ Volition™ Nework Solutions, the new K6 range is our ultimate Category 6 hardware component (ISO/IEC 11801,EN 50173 and ANSI/TIA/EIA-568), with Keystone mounting.

The K6 jack is a core product in our system solution, which includes a comprehensive range of Keystone patch panels, sockets and face-plates, Category 6 patch cords and cables. The K6 Jack offers the best margin over Class E / Category 6 link standards.

#### The RJ45 K6 jack is available in three different formats:

- UTP
- FTP with drain wire
- STP 360° braid or foil connection

# A unique design:

#### **Features**

· Tool-less jack:

- · Re-usable:
- · Shallow Depth, Cable Entry from top or bottom:
- Keystone Mounting:
- UTP, FTP, and STP, 360° shielded versions have the same "one-click" tool-less design:
- Accepts both solid conductors from AWG 26 to 22 and stranded conductors:
- · Integral shutter:

#### **Benefits**

- · Easy and quick to install
- Fast reliable connection in record time: all 8 copper conductors are effortlessly wired in a single operation
- Quality of connection by design: not dependant on tool condition or operator skills, just listen for the click
- Consistent results: the length of untwisted pairs and the length between the end of the conductor and the IDC contacts are always kept to a minimum, by design
- If a wiring mistake is made there is no need to use a new jack
- · no time wasted waiting for another delivery
- · Easier cable management
- More space and flexibility to ensure the cable minimum bend radius is never compromised
  - Allows a wide range of cable routing options
  - Can be used with low profile trunking and boxes
- Compatibility between Volition copper and fibre jacks and many other accessories on the market using the standard keystone mounting
- Solutions for all levels of EMC protection using the same accessories means less training
- Compatible with all cables on the market and enables 'jack to plug' cables to be manufactured using stranded conductors (for use in open office architectures)
- Increased dust protection, especially during installation or in a dirty environment
- · No additional shuttering required on faceplates
- · Higher port density
- · Allows direct mounting into floor boxes
- · Protects jacks in the patch panel

# **Specifications**

#### Features

- Category 6 hardware component
- Keystone mounting
- IEC 60603-7 compliant
- Integral shutter
- Single forked contacts
- Conductor diameter: 0,50 mm to 0,65 mm solid copper,
  - 7 x 0,15 to 0,20 mm stranded cable
- Sheath diameter: 1,6 mm max

#### Technical characteristics

- Lead-through resistance 17 m $\Omega$  < Resistance <20 m $\Omega$
- Insulation resistance > 10  $M\Omega$

#### RJ-45 Category 6 Hardware test result (Typical values)

| Frequency         | 100 MHz  | 200 MHz  | 250 MHz  |
|-------------------|----------|----------|----------|
| Attenuation       | < 0.2 dB | < 0.2 dB | < 0.3 dB |
| Return Loss       | 24 dB    | 18.5 dB  | 16 dB    |
| NEXT pair to pair | 58 dB    | 50 dB    | 47.5 dB  |

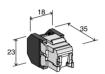
#### Permanent Link Class E test result (Typical values)

|           | Attenuation | NEXT    | ELFEXT  | Return Loss |
|-----------|-------------|---------|---------|-------------|
| Value     | 29.5 dB     | 43.4 dB | 22.2 dB | 25.3 dB     |
| Margin    | 1.0 dB      | 8.1 dB  | 5.9 dB  | 4.3 dB      |
| Frequency | 250 MHz     | 250 MHz | 250 MHz | 4 MHz       |

# **Ordering Information**

# Ref.-No.

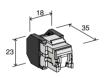
VOL-OCK6-U



Volition™, RJ45 K6 Jack, Category 6, UTP, white

8 contacts Item/unit: 1

UTP jacks are also available in blue, green, red, yellow, black, orange and almond



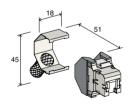
Volition™, RJ45 K6 Jack, Category 6, FTP, white

8 contacts

Ninth point for grounding continuity

Item/unit: 1

VOL-OCK6-F



Volition™, RJ45 K6 Jack, Category 6, STP, white and metallic shield

8 contacts

Metallic nose and tinned bronze cover shielded by a reversible metal cover Supplied with a fixing collar

Item/unit: 1

VOL-OCK6-S

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### Quante AG 3M Telecommunications

Uellendahler Str. 353 · D-42109 Wuppertal

Tel.: ++49 (0)202/ 292 - 0 Fax: ++49 (0)202/ 292 - 2893

#### 3M Quante Telecommunications Ltd.

Snailwell Business Park

Fordham Road · Snailwell · Cambridgeshire CB8 7NY/UK

Tel.: ++44 (0)1638/721333 Fax: ++44 (0)1638/720900