

PowerCat 6A Slim 28 AWG Shielded PVC Patch Cords

molex

Molex slim shielded PVC patch cords support Category 6A systems utilizing 28 AWG low diameter cable to reduce patch cord congestion in high density installations.

Molex PowerCat 6A Slim Patch Cords are designed to support high-speed 10GBASE-T networks and offer a 20% space saving compared with standard Molex 26 AWG C6A Patch Cords.

The Slim version allow for easier management and improved airflow between patched ports in high-density patching installations. The lower diameter cord makes visibility of individual plugs and ports clearer and provide improved access for patching.

Manufactured from high quality, flexible four pair 28 AWG stranded copper wire. Each pair is shielded in aluminum/mylar foil and enclosed in a PVC sheath. The patch cords include Molex high performance Category 6A shielded RJ45 plugs with anti-snag latch protection and low-profile, strain-relief boots.



Features and Advantages

Offers 20% space saving compared with standard 26 AWG cords

Low 0.20-inch outer diameter reduces patching congestion

Better port number visibility

Improved access to patch plugs

Improved airflow

Ideal for high-density patching areas in data centers where long channel lengths are not a requirement.

Category 6A performance

Supports PoE IEEE 802.3 type 1,2,3 & 4 (follow installation guidance)

4 Pair 28 AWG stranded copper wire foil shielded

PVC sheath

High performance C6A shielded plugs

Anti-snag plug latch protection

Low profile, strain-relief boots

Supports 10GBASE-T networks when installed as a complete PowerCat 6A solution

ANSI/TIA-568.2-D:2018 compliant



www.molexc.es.com

Molex is a registered trademark of Molex, LLC in the United States of America and may be registered in other countries; all other trademarks listed herein belong to their respective owners. This information is correct at the time of publication, specifications are subject to change.

PowerCat 6A Slim 28 AWG Shielded PVC Patch Cords

molex

Installation Considerations

- A maximum of 32ft of 28 AWG patch cordage can be installed in a channel length of 303ft (de-rating factor 1.95).
- 28 AWG patch cord bundles must be controlled when used to support PoE devices IEEE 802.3bt to prevent heat build-up which degrades signal performance. Vertical or horizontal managers should not exceed 12 cords, to avoid temperature rise above recommended levels. 28 AWG patch cord bundles should not be placed in conduit or space-confined areas where heat build-up could occur.
- Molex recommends the use of 26AWG patch cords for PoE applications to ensure reliable operation as they are an efficient choice to mitigate risks. However, if 28AWG cords are required, certain considerations must be taken into account and Molex recommendations must be observed. As compliance testing of patch cords below 0.5m meter length is not feasible, patch cords shorter than 0.5m (500mm) should not be installed in a communication channel as Molex cannot guarantee the performance of very short patch cords.
- Consult Molex Connected Enterprise Solutions Technical Support for installation guidance.

Specifications

COMMERCIAL STANDARDS

ANSI/TIA-568.2-D:2018
ISO 11801:2017
UL 1863 (Pending)
CAN/CSA C22.2 No.233-17 (Pending)
IEEE 802.3af, 802.3at, 802.3bt
IEC 60603-7
IEC 60332-1
IEC 60754

MECHANICAL

Cable

Conductor Size: 28AWG stranded bare copper wire
Construction: U/FTP
Screen Material: Aluminum/Mylar
Drain Wire: Tinned copper wire
Sheath: CM PVC
Bend Radius: >8 x Outer diameter
Outer Diameter: 0.20"
Rated Voltage: 30V
Tensile Strength before aging: >13.8MPa
Insertion Loss de-rating factor: 1.95 (as per ANSI/TIA-568.2-D:2018)

Plug

Durability: >750 mating cycles
Housing Material: Polycarbonate UL94V-0 or 94V-2 (plug & boot)
Color: Clear
Contact Material: Phosphor Bronze
Contact Plating: 50 micro inches gold
RJ45 plug dimensions compliant with IEC 60603-7
Contact Resistance: <20MΩ
Insulation Resistance: <500MΩ, 1000V DC/min
Dielectric Withstand Voltage: 1000 VDC/min, <0.5A
Current: 250V AC max @ 2A
Cable to plug tensile strength: 89N min.

Patch Cord Assembly

Operating Temperature: -25°C to +55°C

Ordering Information

| Order No. | SAP No. | Description |
|-----------------|---------------|--|
| PCD-70503-**-** | Consult Molex | PowerCat 6A Slim 28 AWG Shielded Patch Cord PVC 3ft |
| PCD-70505-**-** | Consult Molex | PowerCat 6A Slim 28 AWG Shielded Patch Cord PVC 5ft |
| PCD-70507-**-** | Consult Molex | PowerCat 6A Slim 28 AWG Shielded Patch Cord PVC 7ft |
| PCD-70510-**-** | Consult Molex | PowerCat 6A Slim 28 AWG Shielded Patch Cord PVC 10ft |
| PCD-70515-**-** | Consult Molex | PowerCat 6A Slim 28 AWG Shielded Patch Cord PVC 15ft |
| PCD-70520-**-** | Consult Molex | PowerCat 6A Slim 28 AWG Shielded Patch Cord PVC 20ft |

Insert color code in place of ** in part number when ordering patch cords: 0E = Gray, 0H = Blue, 0C = Red, 0K = Yellow, 0J = Green, BK = Black, WH = White

www.molexces.com

Molex is a registered trademark of Molex, LLC in the United States of America and may be registered in other countries; all other trademarks listed herein belong to their respective owners. This information is correct at the time of publication, specifications are subject to change.