

PowerCat 6A Slim 28 AWG Shielded LSOH Patch Cords

molex

Molex slim shielded LSOH 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 35% space saving compared with standard Molex 26 AWG C6A Patch Cords.

The Slim version allows 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 aluminium/mylar foil and enclosed in a LSOH 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

Low 5.2mm outer diameter reduces patching congestion

Offers 35% space saving compared with standard 26 AWG cords

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

4 Pair 28 AWG stranded copper wire foil shielded

LSOH 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



26 AWG

28 AWG

6.5 mm
o.d.

5.2 mm
o.d.

www.molex.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 LSOH Patch Cords



Installation Considerations

- A maximum of 10m of 28 AWG patch cordage can be installed in a channel length of 92.5m (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.
- Consult Molex Connected Enterprise Solutions Technical Support for installation guidance.

Specifications

MECHANICAL

Cable

Conductor Size: 28AWG 7 x 0.12mm stranded bare copper wire
Construction: U/FTP
Screen Material: Aluminium/Mylar
Drain Wire: Tinned copper wire
Sheath: LSOH IEC 60332-1
Bend Radius: >8 x Outer diameter
Outer Diameter: 5.2 +/- 0.4mm
Rated Voltage: 30V
Tensile Strength before aging: >8.3MPa
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: -20°C to 75°C

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

Ordering Information

Order No.	SAP No.	Description
PCD-7030A-0*	Consult Molex	PowerCat 6A Slim 28 AWG Shielded Patch Cord LSOH 0.5m
PCD-70301-0*	Consult Molex	PowerCat 6A Slim 28 AWG Shielded Patch Cord LSOH 1m
PCD-7030B-0*	Consult Molex	PowerCat 6A Slim 28 AWG Shielded Patch Cord LSOH 1.5m
PCD-70302-0*	Consult Molex	PowerCat 6A Slim 28 AWG Shielded Patch Cord LSOH 2m
PCD-7030C-0*	Consult Molex	PowerCat 6A Slim 28 AWG Shielded Patch Cord LSOH 2.5m
PCD-70303-0*	Consult Molex	PowerCat 6A Slim 28 AWG Shielded Patch Cord LSOH 3m
PCD-70305-0*	Consult Molex	PowerCat 6A Slim 28 AWG Shielded Patch Cord LSOH 5m
PCD-70307-0*	Consult Molex	PowerCat 6A Slim 28 AWG Shielded Patch Cord LSOH 7m
PCD-70310-0*	Consult Molex	PowerCat 6A Slim 28 AWG Shielded Patch Cord LSOH 10m

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

Note: Conditions apply when installing these cords in a 4-connector channel with EU cable part no CAA-00413-VL. Contact Molex Technical Support for installation design guidance.

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.