# Excel Category 6A (F/FTP) Patch Leads LSOH

**excel**
without compromise.

CAT6A

DELTA

- X **25 Year System Warranty**
- X **Foil screen design, each pair screened**
- X **Lightweight, Compact Design**
- X **LSOH Outer Sheath**
- X **Slimline Molded Strain Relief Boot**
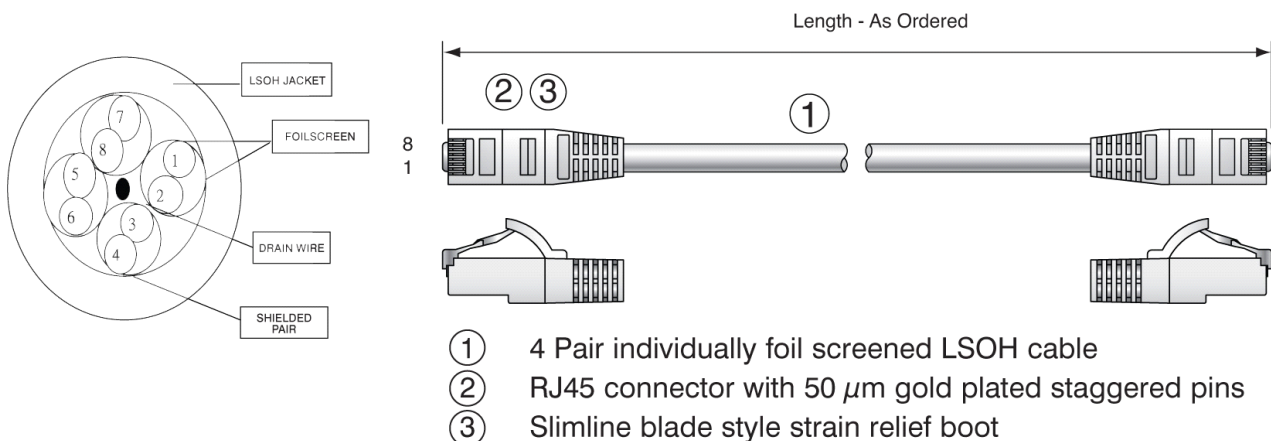- X **Component EC verified**

## Features

- 25 Year System Warranty
- Lightweight, Compact Design
- Slimline Molded Strain Relief Boot
- Specified to 500MHz
- No.2 cabling system by market share, as reported by BSRIA
- Low Smoke Zero Halogen Outer Sheath

- Foil screen design, each pair screened
- LSOH Outer Sheath
- Component EC verified
- Choice of Length and Colour
- Suitable for 10GBASE-T, 10 Gigabit Ethernet Applications

## Product Overview

Excel Category 6A – Augmented Category 6 – cables, and associated connectors, take the performance capabilities of copper infrastructure to new levels. The cable has been designed to exceed the ISO/IEC, TIA and CENELEC for Category 6A/Augmented Category 6 component requirements. This delivers Class EA/ Augmented Category 6 performance over full 100 metres channels which supports the applications including 10GBASE-T, 10 Gigabit Ethernet.

Each Excel Category 6A patch lead consists of 4 twisted pairs of 26AWG stranded copper wires, an aluminium/ polyester foil tape provides an individual screen for each pair. These pairs are then cabled together, with different lay lengths to ensure optimum performance. Staggered pin RJ45 shielded plugs, terminate the cable, and each lead is fitted with colour coded slimline molded boots, suitable for use in high density router or switch blades. The Excel Screened Category 6A Patch Leads are 3rd Party Verified by Delta for Component Compliance

Length - As Ordered

LSOH JACKET

FOILSCREEN

DRAIN WIRE

SHIELDED PAIR

① 4 Pair individually foil screened LSOH cable
② RJ45 connector with 50 $\mu$m gold plated staggered pins
③ Slimline blade style strain relief boot

## Construction

| | |
|---|---|
| Conductor | 26AWG (7/0.152mm), Stranded Plain Copper |
| Insulation | Foam Polyethylene |
| Screen applied to each pair | Aluminium Foil Tape |
| Drain Wire | 26AWG (7/0.16mm), Stranded Tinned Copper |
| Outer Sheath | Flame resistant, Low Smoke Zero Halogen |
| Outer Diameter | 5.7mm +/- 0.2mm |
| Installation Temperature Range | 0 to +60°C |
| Operating Temperature Range | -10 to +60°C |
| Flame Retardance | IEC 60332-1 |
| Smoke Emission | IEC 61034 |

## Performance Overview

Excel Category 6A patch leads are designed, manufactured and tested in accordance with the ISO and TIA standards for Cat 6A. The use of foil tape screens in the design of this cable ensure that systems are immune to performance concerns sometimes found in high speed, high frequency copper cable networks. Cables designed with pair screening such as this act against Alien Crosstalk, the inducement of noise from one 4 pair cable to an adjoining cable as well as protecting against signal loss though emissions and enabling immunity from disturbance's which could potentially be received from external sources.

| Frequency MHz | Impedance Ω | Insertion Loss 100m Max. | NEXT dB | PSNEXT dB | ACR-F dB | PS ACR-F dB | Return--Loss dB |
|---|---|---|---|---|---|---|---|
| 1 | NA | 2.2 | 74.3 | 62 | 63.3 | 60.3 | 20 |
| 4 | | 4.1 | 65.3 | 60.5 | 51.2 | 48.2 | 23 |
| 8 | | 5.7 | 60.8 | 55.6 | 45.2 | 42.2 | 24.5 |
| 10 | | 6.4 | 59.3 | 54 | 43.3 | 40.3 | 25 |
| 16 | 100+/-15 | 8.1 | 56.2 | 50.6 | 39.2 | 36.2 | 25 |
| 20 | | 9.1 | 54.8 | 49 | 37.2 | 34.2 | 25 |
| 31.25 | | 10.2 | 53.3 | 47.3 | 35.3 | 32.3 | 24.2 |
| 62.5 | | 11.4 | 51.9 | 45.7 | 33.4 | 30.4 | 23.3 |
| 100 | 100+/-22 | 16.3 | 47.4 | 40.6 | 27.3 | 24.3 | 20.7 |
| 125 | | 20.8 | 44.3 | 37.1 | 23.3 | 20.3 | 19 |
| 200 | | 30 | 39.8 | 31.9 | 17.2 | 14.2 | 16.4 |
| 250 | 100+/-25 | 33.8 | 38.3 | 30.2 | 15.3 | 12.3 | 15.6 |
| 300 | | 37.3 | 37.1 | 28.8 | 13.7 | 10.7 | 14.9 |
| 400 | | 43.6 | 35.3 | 25.8 | 11.2 | 8.2 | 13.8 |
| 500 | | 49.3 | 33.8 | 23.2 | 9.3 | 6.3 | 13 |

## Typical Applications

- 1000BASE-T, Gigabit Ethernet
- 10GBASE-T, 10 Gigabit Ethernet
- Digital and analogue video
- 1.2/2.4Gbs ATM

## Part Number Information

| Description | Grey | Blue | Red | Yellow | White | Black | Orange | Violet | Pink | Green |
|---|---|---|---|---|---|---|---|---|---|---|
| Category 6A Screened F/FTP LSOH Patch Lead, Booted,0.5m | 100-176 | 100-220 | 100-221 | 100-222 | 100-224 | 100-225 | 100-227 | 100-228 | 100-226 | 100-223 |
| Category 6A Screened F/FTP LSOH Patch Lead, Booted, 1m | 100-148 | 100-159 | 100-161 | 100-166 | 100-238 | 100-239 | 100-241 | 100-242 | 100-240 | 100-173 |
| Category 6A Screened F/FTP LSOH Patch Lead, Booted, 2m | 100-152 | 100-157 | 100-162 | 100-167 | 100-244 | 100-245 | 100-247 | 100-248 | 100-246 | 100-171 |
| Category 6A Screened F/FTP LSOH Patch Lead, Booted, 3m | 100-153 | 100-158 | 100-163 | 100-168 | 100-250 | 100-251 | 100-253 | 100-254 | 100-252 | 100-172 |
| Category 6A Screened F/FTP LSOH Patch Lead, Booted, 4m | 100-149 | | | | | | | | | |
| Category 6A Screened F/FTP LSOH Patch Lead, Booted, 5m | 100-154 | 100-160 | 100-165 | 100-170 | 100-256 | 100-257 | 100-259 | 100-260 | 100-258 | 100-174 |
| Category 6A Screened F/FTP LSOH Patch Lead, Booted, 7m | 100-178 | | | | | | | | | |
| Category 6A Screened F/FTP LSOH Patch Lead, Booted, 10m | 100-177 | 100-261 | 100-262 | 100-263 | | | | | | 100-264 |
| Category 6A Screened F/FTP LSOH Patch Lead, Booted, 15m | 100-265 | 100-266 | 100-267 | 100-268 | | | | | | 100-269 |
| Category 6A Screened F/FTP LSOH Patch Lead, Booted, 20m | 100-543 | 100-544 | 100-545 | 100-546 | | | | | | 100-547 |

## System Warranty

The Excel System Warranty provides a 25-year product and applications assurance of compliance with the industry performance standard appropriate to the class of cabling installed. The warranty may be applied for by an accredited Excel Partner who has designed, supplied and installed the said system.

**25 YEAR WARRANTY** excel

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