L[•] legrand®

87045 LIMOGES Cedex France Telephone: (+33) 05 55 06 87 87 - Fax: (+33) 05 55 06 88 88

Cat. 6 LSOH cords

Catalogue numbers: 0 517 57/58/59/96/97/98



1. USE

Cords for VDI transmission networks. Cords wired according to method T568B. RJ45 plug/wire (single-core cable). Blue RAL 5015.



Compatible remote powering "PoE" up to 100w (IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt) when installed according to standards ISO/IEC 14763-2 (final draft) and/or and EN 50174-2:2018

2. RANGE

| Cat. Nos. | Length (m) | Туре | Type of sleeve |
|-----------|------------|-------|----------------|
| 0 517 57 | 8 | | |
| 0 517 58 | 15 | U/UTP | |
| 0 517 59 | 20 | | |
| 0 517 96 | 8 | | LSOH |
| 0 517 97 | 15 | F/UTP | |
| 0 517 98 | 20 | | |

3. CORD MARKINGS

- LEGRAND
- Catalogue number
- Gauge
- Type
- Impedance
- Type of sleeve
- Category

4. PERFORMANCE

4.1 Normatives performance at 20°C:

The following tables show the maximum distances allowed depending on the configurations.

Both cross connect and interconnect are allowed.

a) Use of the cord in a channel with a Consolidation Point



C = connection

| CP Cord (C) | Maximum PL (B) | TR Cord(s) (A) | Work Area Cord (D) | Total Channel |
|-------------|-------------------|----------------|-----------------------|---------------|
| 8 m | 74 m | 5 m | 5 m | 92 m |
| 15 m | 63 m | 5 m | 5 m | 88 m |
| 20 m | 56 m | 5 m | 5 m | 86 m |



The use of these cords for a MUTOA channel is not possible

IEC

Cat. 6 LSOH cords

4.2 Legrand PoE for RP3 compliance

For PoE compliant cabling of Type RP3 according to ISO/IEC 14763 and EN 50174-2, follow the LCS³ PoE guidelines and the maximum distances in the 2 options below:

4.2.1 Legrand PoE compliance for all configurations (Version 3 in the \mbox{LCS}^3 PoE Guidelines).

In order to allow all standard compliant configurations, then the distance limits shown below should be followed.

Both cross connect and interconnect are allowed.

a) Use of the cord in a channel with a Consolidation Point



C = connection

IEC

| | CP Cord (C) | Maximum PL (B) | TR Cord(s) (A) | Work Area Cord (D) | Total Channel |
|-----------------------|-------------|-------------------|-------------------|-----------------------|------------------|
| Shielded Systems | 8 m | 69 m | 5 m | 5 m | 87 m |
| | 15 m | 59 m | 5 m | 5 m | 84 m |
| | 20 m | 51 m | 5 m | 5 m | 81 m |
| Unshielded Systems | 8 m | 65 m | 5 m | 5 m | 83 m |
| | 15 m | 54 m | 5 m | 5 m | 79 m |
| | 20 m | 47 m | 5 m | 5 m | 77 m |

b) Use of the cord in a channel with a MUTOA



The use of these cords for a MUTOA channel is not possible

4.2.2 Legrand PoE compliance for optimized distance (Version 2 in the \mbox{LCS}^3 PoE Guidelines)

If the objective is to optimize the channel length, then the distance limits below can be used. Conditions: Only interconnect is allowed.

The equipment cord is maximum 2m.

a) Use of the cord in a channel with a Consolidation Point



| | CP Cord (C) | Maximum PL (B) | Equipment Cord (A) | Work Area Cord (D) | Total Channel |
|----------------------|-------------|-------------------|-----------------------|-----------------------|------------------|
| Shielded Systems | 8 m | 75 m | 2 m | 5 m | 90 m |
| | 15 m | 64 m | 2 m | 5 m | 86 m |
| | 20 m | 57 m | 2 m | 5 m | 84 m |
| Unshielded Sytems | 8 m | 70 m | 2 m | 5 m | 85 m |
| | 15 m | 60 m | 2 m | 5 m | 82 m |
| | 20 m | 52 m | 2 m | 5 m | 79 m |

b) Use of the cord in a channel with a MUTOA



The use of these cords for a MUTOA channel is not possible

For PoE standard installations non-compliant with LCS³ PoE guidelines, contact Legrand technical support to obtain adjusted distances according to temperature.

| System performance at 250 MHz (standard ISO/IEC 11801-1) | | | |
|--|------|--|--|
| Attenuation (dB) | 31.1 | | |
| Minimum NEXT (dB) | 35.3 | | |
| PS NEXT (dB) | 32.7 | | |
| ACR-F (dB) | 16.2 | | |
| PS ACR-F (dB) | 13.2 | | |
| Return Loss (dB) | 10 | | |

Llegrand

Cat. 6 LSOH cords

5. TECHNICAL AND MECHANICAL FEATURES

| Туре | U/UTP | F/UTP | |
|---|--------|--------|--|
| Type of sleeve | LSOH | | |
| Number of pairs | 4 | | |
| Assembly | Pairs | | |
| Diameter over insulation (mm) | 0.99 | 1 | |
| Cable diameter (mm) | 6.2 | 6 | |
| AWG gauge | 24 | 24 | |
| Min. bending radius when laying (mm) | 24 | 24 | |
| Tensile strength of the cord | ≥ 50 N | ≥ 50 N | |
| Number of twists | 500 | 500 | |
| Number of insertions | 750 | 750 | |

6. ELECTRICAL FEATURES AT 20°C

| Loop resistance | < 5 Ω |
|--|------------|
| Contact resistance | < 20 mΩ |
| Total resistance of the cord | < 5 Ω |
| Resistance per 100 m of cable with cords | < 9.38 Ω |
| DC dielectric strength | 1 KV/1 min |
| Characteristic impedance from 1 to 250 MHz | 100 Ω |

7. ENVIRONMENTAL FEATURES

Storage and transport temperature: 0 to + 50°C Usage temperature: - 20 to + 60°C Fire resistance: IEC 60332-1, UL VW-1

8. STANDARDS AND APPROVALS

ISO/IEC 11801 series ANSI/TIA-568 series EN 50173 series IEEE 802.3bt : "PoE++"

L¹ legrand