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# RJ 45 Cat6A cords for zone distribution box

#### Cat. No(s): 0 515 23/24/25 - 0 518 49 Configure To Order (CTO) range



# 1.USE

S/FTP Cat.6A RJ 45/RJ 45 cords for zone distribution box. For direct connection by male RJ45 plug to the zone distribution box and RJ45 socket with copper feedthrough to provide:

- Safe connection
- Quick, reliable connection

Straight RJ45 - RJ45.

The cord is snagless : it has a strain-relief boot to protect the connector's lock from being snapped off easily.

Compatible with a "PoE" remote power supply up to 90W (IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt) when installed according to standards ISO/ IEC 14763-2:2019 and/or and EN 50174-2:2018

#### 2. RANGE

Туре	Type of sleeve	Colour	RAL	Length (m)	Cat. Nos.	
					8	0 515 23
S/FTP	LSZH	Yellow	RAL 1018	15	0 515 24	
5/FTP		Yellow	fellow	KAL IUI8	20	0 515 25
	PVC			10	0 518 49	

Configurations of above table are also available on-demand in the following colors.

Red	Green	Blue	Grey	Black	White
RAL 3020		RAL 5015	RAL 7035	RAL 9005	RAL 9003

For other lengths (from 5,5m and with 0,5m step to 20m), cable types, sleeves and colours, please contact us.

# 3. MARKINGS

Marking on products:

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

CONTENTS

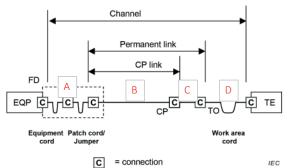
#### **4. PERFORMANCE**

#### 4.1 NORMATIVES PERFORMANCE AT 20°C:

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

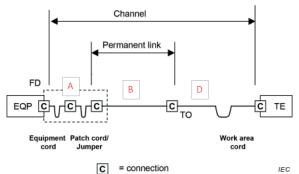
Both cross connect and interconnect are allowed.

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



CP Cord (C)	Maximum CP link (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

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



С = connection

MUTOA/W.A. Cord (D)	Maximum PL (B)	TR Cord(s) (A)	Total Channel
8 m	82 m	5 m	95 m
15 m	72 m	5 m	92 m
20 m	64 m	5 m	89 m

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# 4.2 LEGRAND POE FOR RP3 COMPLIANCE

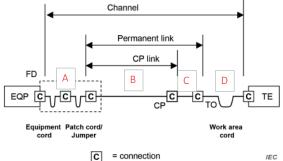
For PoE compliant cabling of Type RP3 according to ISO/IEC 14763 and EN 50174-2, follow the LCS<sup>3</sup> PoE guidelines and the maximum distances in the 2 options below:

4.2.1 Legrand PoE compliance for all configurations (Version 3 in the LCS<sup>3</sup> 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.

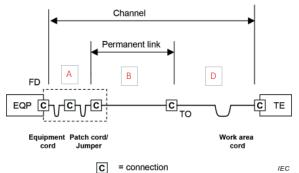
a) Use of the cord in a channel with a Consolidation Point



#### С = connection

	CP Cord (C)	Maximum CP link (B)	TR Cord(s) (A)	Work Area Cord (D)	Total Channel
Shielded	8 m	69 m	5 m	5 m	87 m
Systems	15 m	59 m	5 m	5 m	84 m
	20 m	51 m	5 m	5 m	81 m
Unshielded	8 m	65 m	5 m	5 m	83 m
Systems	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



= connection

	CP Cord (C)	Maximum PL (B)	TR Cord(s) (A)	Total Channel
Shielded	8 m	78 m	5 m	91 m
Systems	15 m	67 m	5 m	87 m
	20 m	60 m	5 m	85 m
Unshielded	8 m	74 m	5 m	87 m
Systems	15 m	63 m	5 m	83 m
	20 m	56 m	5 m	81 m

4.2.2 Legrand PoE compliance for optimized distance (Version 2 in the LCS<sup>3</sup> PoE Guidelines)

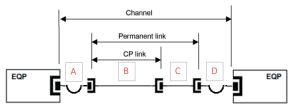
If the objective is to optimize the channel length, then the distance limits below can be used.

Conditions:

Only interconnect is allowed.

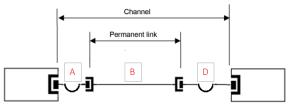
The equipment cord is maximum 2m.

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



	CP Cord (C)	Maximum CP link (B)	Equipment Cord (A)	Work Area Cord (D)	Total Chan- nel
Shielded	8 m	75 m	2 m	5 m	90 m
Systems	15 m	64 m	2 m	5 m	86 m
	20 m	57 m	2 m	5 m	84 m
Unshielded	8 m	70 m	2 m	5 m	85 m
Sytems	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



	CP Cord (C)	Maximum PL (B)	Equipment Cord (A)	Total Channel
Shielded	8 m	83 m	2 m	93 m
Systems	15 m	73 m	2 m	90 m
	20 m	65 m	2 m	87 m
Unshielded	8 m	79 m	2 m	89 m
Sytems	15 m	69 m	2 m	86 m
	20 m	61 m	2 m	83 m

For PoE standard installations non-compliant with LCS<sup>3</sup> PoE guidelines, contact Legrand technical support to obtain adjusted distances according to temperature.

Technical data sheet: S000081756EN-03

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# **5. TECHNICAL AND MECHANICAL FEATURES**

Туре	S/FTP	
Type of sleeve	LSZH PVC	
Number of pairs	4	
Assembly	pai	rs
Cable type	Cable with solid wire	Cable with stranded wire
Diameter over insulation (mm)	1.02±0,05	
Cable diameter (mm)	5.7±0,2	
AWG gauge	26	
Min. bending radius when laying (mm)	) 24	
Tensile strength of the cord	≥50 N	
Number of twists		D
Number of insertions	2500	
Wiring method	T568B	

## 6. ELECTRICAL FEATURES AT 20°C

Loop resistance	<2Ω
Contact resistance	<20 mΩ
Total resistance of the cord	<5 Ω
Resistance per 100 m of cable with cords	<14 Ω
DC dielectric strength	1 KV/1 min
Characteristic impedance from 1 to 500 MHz	$100\Omega\pm25\%$

# **7. ENVIRONMENTAL FEATURES**

LSZH cords only :

LSZH cable sheath compliant with :

Smoke density: Series IEC 61034 including IEC 61034-2, EN 61034-2 Toxicity of fire effluent: Series IEC 60754 including IEC 60754-2, EN 60754-2

Fire resistance: Series IEC 60332-1 including IEC 60332-1-2 LSZH and PVC cords :

Storage and transport temperature: -20 to +75°C

Operating temperature: -20 to +60°C

Installation temperature : 0 to +60°C

### 8. STANDARDS AND APPROVALS

Cords are compliant to the following series

ISO/IEC 11801 series : International standard for generic cabling for customer premises

ANSI/TIA 568 series : North American standard for generic cabling for customer premises

EN 50173 series : European standard for generic cabling for customer premises

Components of the cords are compliant to the following series

IEC 61156 : International standard for twisted pair cable specifications IEC 60603-7 : International standard for connector specifications

# Cords are compliant to requirements for the following remote powering applications

IEEE 802.3af , IEEE 802.3at , IEEE 802.3bt : "Power over Ethernet", Types 1 to 4, up to 90W.