

**JUMPER RJ-45 CONNECTORS, IP68**

# **ORCAVE**

## **RJ45-RJ45**

RJ-45 type data connectors are used at the bottom of the outlet of the control element and at the top of the entrance to the luminaire to simplify the installation of SMART type Miracle luminaires. The connector serves as a waterproof connection with the CAT6 cable in the column.



## Parameters

<b>Connectors</b>	RJ-45
<b>Cable diameter</b>	7.5 - 17.5mm
<b>Cable type</b>	CAT min class 6
<b>Protection</b>	IP68
<b>Material</b>	PA66
<b>Dimensions</b>	120 x 25 mm

## Variants

**Overview of valid combinations** for different types of cabling and lighting

## Combination for SMART with CAT6

<b>Source Adapter</b>	313-LD-48/LIN CAT
<b>Source-cable jumper</b>	RJ45-RJ45
<b>Connecting cable</b>	CAT min class 6
<b>Cable-lamp jumper</b>	RJ45-RJ45
<b>Output from luminaire</b>	CAT6 terminated with RJ-45

## Combination for SMART with CYKY 3x1.5

<b>Transition from source</b>	313-LD-48/LIN CYKY
<b>Source-cable jumper</b>	CYKY-3-CYKY / 12mm
<b>Connecting cable</b>	CYKY typically 3x 1.5mm <sup>2</sup>
<b>Jumper cable-lamp</b>	CYKY-3-CYKY / 12mm
<b>Output from lamp</b>	CYKY cable

## Combination for ADVANCED with CYKY 5x1.5

<b>Adapter from the source</b>	no, the Orcave 303-111 LD source ends with a 5-core cable
<b>Jumper source-cable</b>	CYKY-5-CYKY / 14mm
<b>Connecting cable</b>	CYKY typically 5x 1.5mm <sup>2</sup>
<b>Cable-lamp jumper</b>	CYKY-5-CYKY / 14mm
<b>Output from the lamp</b>	CYKY 5-core cable

## Design

The plastic connector is designed so that the cable can be inserted even with the connector. The connector is pulled through a tightening neck that has a sufficient diameter. The sealing O-ring is cut and easily fits on the cable behind the connector. After inserting the connector into the central part of the jumper, the tightening neck is only tightened firmly. The design has an IP68 degree of protection, i.e. withstands immersion in water. The actual material from which the jumper is made shows excellent resistance to mechanical damage or various chemicals. It is permanent, does not age and its properties do not change depending on the surrounding atmospheric conditions.

## Functions

A CAT6 data cable is used to connect the SMART-type Miracle lamp with the control element at the foot of the column, which makes installation as easy as possible, is purchased in the required length, with optimal surface treatment and

internal composition. This design has a number of advantages. First of all, it has been widely used in data networks for many years, and the cabling is therefore very cheap, available in any length and design (this applies both to the internal composition and to the material of the external insulation with regard to the environment in which the cable is installed). These cables can be used for Miracle lamps precisely because they are powered by a safe voltage of 48V. The warming of the CAT6 cable was satisfactory even for the worst operating conditions, i.e. a length of 12m and a lamp power of 190W (current load up to 4A). The actual installation is very simple. A connecting cable of a suitable length is applied at both ends via the RJ45-RJ45 jumper by simply inserting it into the socket. No modification of wires and insulation as in the case of CYKY cables, no risk of confusion and error. In addition, the data cable is much easier to handle and installation is easy even in low ambient temperatures.