



PWR LIGHTING

PWRBLOX CABLE SPECSHEET



DESCRIPTION

Cable Type	Hybrid power & data cable
Rated Voltage	300V
Rated Temperature	105°C
Flame Test	VW-1
Reference Standard	UL758 & customer's specification

CABLE CONSTRUCTION

Component A Signal Pair	22AWG*1P+AL • Construction (±0.007mm) 17/0.16TC • Stranded Dia.(mm) 0.76 • Insulation PVC • Avg. Thickness (mm) 0.37 • Insulation Dia.(±0.10mm) 1.50 • Insulation Colors: Yellow-Green • Shield Overlap: ≥ 25%
Component B Power Cores	16AWG (2 Cores) • Construction (±0.007mm) 65/0.16TC • Stranded Dia.(mm) 1.50 • Insulation PVC • Avg. Thickness (mm) 0.40 • Insulation Dia.(±0.10mm) 2.30 • Insulation Colors: Red, Blue
Jacket	• Material: QMTT² PVC, UV-resistant • Average Thickness: 0.76 mm • Outer Diameter: 7.10 ± 0.20 mm • Color: Black • Marking (White): E343712 AWM 21996 105°C 300V VW-1 DHE WET(60°C) UV resistant CABLE
Outer Diameter	7.10 ± 0.20 mm



PWRPIXELBLOX CABLE SPECSHEET

ELECTRICAL CHARACTERISTICS (AT 20°C)

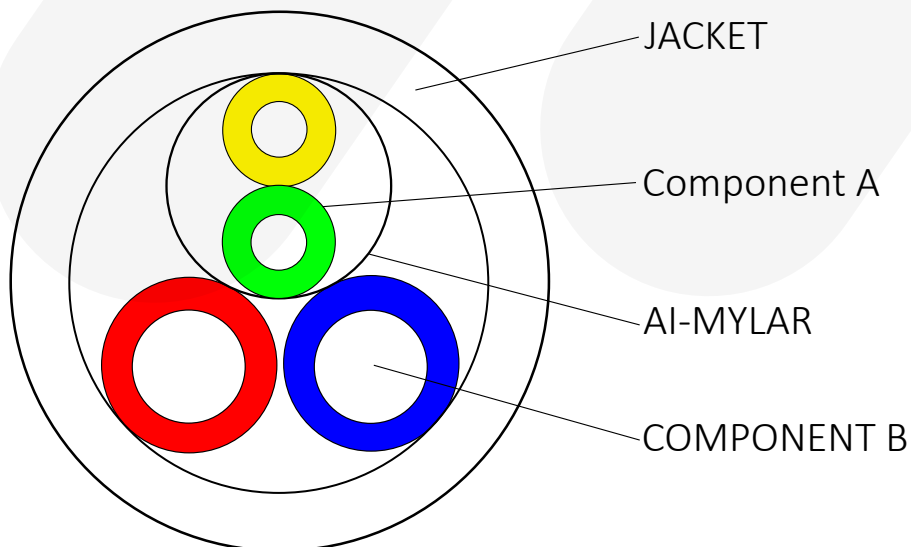
Max Conductor DC Resistance	• 22AWG: 59.4 Ω/km • 16AWG: 13.7 Ω/km
Min Insulation Resistance	10 M Ω ·km
Dielectric Strength	AC 1500V for 1 min

MECHANICAL CHARACTERISTICS

Jacket Tensile Strength	≥ 1.05 kgf/mm ² (PVC)
Flame Test	VW-1
UV Resistance	720 h
Cold Resistance	-40°C

COMPLIANCE

Product Standard Certification	UL21996
Reference Standard	UL758 & customer specification
Environmental	EN1122 (Cd < 5 ppm) EPA3050B (Pb < 50 ppm)





PWRPIXELBLOX CABLE SPECSHEET

CABLE CONSIDERATIONS

To ensure safe operation, reliable performance and compliance with insurance requirements, the following cable guidelines must always be respected:

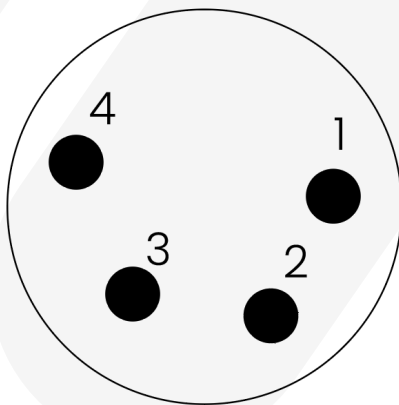
Always connect male to female connectors.
The male connector is the input.
The female connector is the output.

Power, data stability & cable distance

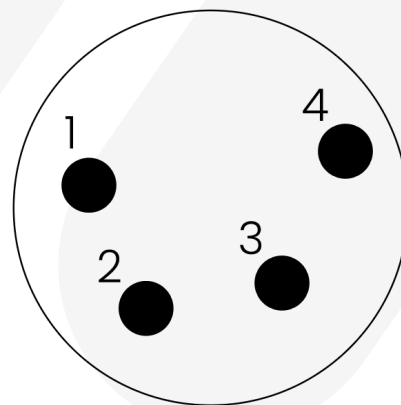
For stable data transmission, ensure the output voltage remains above 20V. Maintaining sufficient voltage is essential for reliable system performance. If the output voltage drops below 20V, use the **Power T** to inject 24V on the output line.

The maximum cable distance between the controller and the first PWR Blox fixture (pixel) is 60 meters.

XLR4 CONNECTOR DETAILS



MALE



FEMALE

XLR-4 connector pin assignment

- Pin 1: GND (Blue)
- Pin 2: Data - (Green)
- Pin 3: Data + (Yellow)
- Pin 4: +24V Power (Red)



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POWER T

