



Application

IEC 11801-1:	Class D
EN 50173-1:	Class D
IEEE 802.3:	10Base-T; 100Base-T; 1000Base-T; 2.5GBase-T
IEEE 802.3:	Power over Ethernet PoE; PoE+

Applicable Standards

Design specification:	EN 50288-3-1, EN 50174-2, IEC 14763-2, IEC 61156-5; EN 50575+A1
-----------------------	---

Fire behaviour

Euroclass:	Eca
Smoke production:	-
Flaming droplets:	-
Acidity:	-
Flame retardant:	IEC 60332-1-2
Halogen free:	-
Smoke density:	-

Construction

Construction:	U/UTP
Conductor:	Bare copper wire, Ø 0.50 mm (AWG24/1)
Insulation:	Polyethylene, Ø 0.91 mm
Twisting:	2 cores to the pair
Cable lay up:	4 pairs
Outer jacket:	PVC
Cable marking blue, yellow:	Telegärtner UMJ 100 U/UTP 4x2xAWG24/1 Cat.5 PVC Eca NVP 67% ETL verified to ISO/IEC 11801 Cat.5 „production batch no“ „sequential length in meters“

Mechanical properties

Outer diameter:	5.2 ± 0.2 mm
Bending radius:	during operation: ≥ 21 mm
	during installation: ≥ 42 mm
Tensile force:	max. 80 N
Weight:	30.3 kg/km

Environment and Security

Temperature range:	during operation: -20 °C to +60 °C
	during installation: 0 °C to +50 °C
Fire load:	max. 310 MJ/km

Installation Cable

UMJ 100 U/UTP AWG24/1 Cat.5 PVC Eca



Electrical properties (typical at 20°C)

Characteristic impedance Z (1-100 MHz):	100 ± 15 Ω
Nominal velocity of propagation NVP:	ca. 67%
Propagation delay:	≤ 498 ns/100m
Delay skew:	≤ 45 ns/100m
Loop resistance:	≤ 19 Ω/100m
Resistance unbalance:	pair: ≤ 2% between the pairs: ≤ 4%
Insulation resistance (500V):	≥ 500 MΩx100m
Nominal capacity (at 1000 Hz):	< 5.1nF/100m
Capacitance unbalance (pair/ground):	≤ 160 pF/100m
Test voltage (DC, 60 sec.) (core/core):	1000 V
Transfer impedance (mΩ/m):	-
TCL:	Level 2
Segregation classification:	b

Transmission properties (at 20°C)

Has been verified as being compliant with the standards.

Order No.	Standard designation	Scope of delivery	Copper content kg/km
L02002A0036 grey RAL 7035	J-2YY 4x2x0.50 PVC	305m (1000ft) unreel box	15.3
L02002B0036 blue RAL 5005	J-2YY 4x2x0.50 PVC	305m (1000ft) unreel box	15.3
L02002C0036 grey RAL 7000	J-2YY 4x2x0.50 PVC	305m (1000ft) unreel box	15.3

The editions of the afore mentioned standards by the time of 3.11.2017 are valid.