

Berk-Tek LANmark-C542 Cordset - Cat 5e, SF/UTP TPE, RJ-RJ, IP20 Rated



Berk-Tek LANmark Industrial cordsets enable the expansion and integration of Ethernet into machines, sensors, PLC/DCS networks and various industrial environments. With over 50 years of cable manufacturing experience, Berk-Tek offers best-in-class Industrial Ethernet cables that perform reliably in industrial harsh conditions, leading to maximum production uptime and efficiency.

DESCRIPTION

With its high flex life, 600V AWM, stranded shielded construction and durable TPE jacket resistant to abrasion, oil, UV light and weld spatter, this cordset is ideal for interconnecting devices and robotics in machines and C-track chains. This cable is also rated CMR and CMX outdoor, so it transitions easily from indoor to outdoor environment. This cordset is available in various lengths.

Related Standards:

UL 444 and C22.2 No. 214.02

CE Approved: EU Directive 2014/35/EU (Low Voltage)

EU Directive 2011/65/EU (RoHS)

TIA 1096

UL 94 - V0

Agency Ratings

| Description | Method | |
|-------------|--------|-------------------|
| Listed Type | UL1666 | CMR |
| Listed Type | UL444 | CMX Outdoor |
| AWM Style | UL758 | 2463 (600V, 80°C) |



STANDARDS

International ISO/IEC 11801

National ANSI/TIA-568.2-D;
UL 444; UL 94 V0

CHARACTERISTICS



Construction characteristics



| | |
|-----------------------|--------------------------------------|
| Type of cable | SF/UTP |
| Conductor material | 24 AWG Stranded Tinned Copper (7/32) |
| Insulation | HDPE |
| Jacket Material | TPE |
| Braid | Tinned copper - 75% optical coverage |
| Shielding | Aluminum/Polyester |
| Core Tape | Foamed polypropylene |
| Connector type | RJ 45 |
| Load Bar | Polycarbonate |
| Contacts | Copper Alloy with Gold Plating |
| Plug Body | Polycarbonate |
| Connector Orientation | Straight |
| Wiring type | EIA / TIA568B |
| Boot/Strain Relief | Polycarbonate |
| Connector Shielding | Copper Alloy with Nickel Plating |

Dimensional characteristics

| | |
|--|-----------|
| Insulated conductor diameter (Nominal) | 0.046 in |
| Average jacket thickness | 0.03 in |
| Minimum jacket thickness at any point | 0.024 in |
| Cable diameter (Nominal) | 0.3 in |
| Nominal cable weight | 46 lb/kft |
| Number of pairs | 4 |

PRODUCT LIST

| Part Number | Description | Colour | Length [m] |
|--|--|--------|------------|
|  11099853 | LANmark-C542 Cordset - Cat 5e, RJ-RJ, IP20 Rated, 2m | Teal | 2 |
|  11099855 | LANmark-C542 Cordset - Cat 5e, RJ-RJ, IP20 Rated, 5m | Teal | 5 |

 = Make to order,  = In stock

MICE CHARACTERISTICS*

| Mechanical | | |
|------------------------------------|--------------------|-----------------------------|
| Characteristic | Value | Method |
| Torsion (+/- 270°) | 3 million cycles | Internal |
| Trailing Chain: 10x OD | 1 million cycles | Internal |
| Trailing Chain: 20x OD | 10 million cycles | Internal |
| Abrasion Resistance | 50 cycles | UL 2556 7.10 (1.5 lb. load) |
| Cold Bend | -40°C | UL 444 |
| Minimum Bend Radius (Static) | 1.2 in | TIA 568-C.0 |
| Connector Mating Cycles | 750 insertions max | |
| Ingress | | |
| Characteristic | Value | Method |
| Weld Spatter Resistant | Yes | Internal |
| IP Rating (Connector) | 20 | IEC 60529 |
| Climatic and Chemical | | |
| Characteristic | Value | Method |
| Oil Resistance | II (75°C) | UL 1277 12.2 |
| UV Resistance | 720 hours | UL 444 7.22 |
| Storage Temperature | -40°C - 80°C | Internal |
| Static Operating Temperature | -40°C - 80°C | Internal |
| Electromagnetic | | |
| Characteristic | Value | Method |
| Transmission Performance | Category 5e | ANSI/TIA 568.2-D |
| Transfer Impedance | Grade 2 | Internal |
| Coupling Attenuation | Type 2 | IEC 61156-1 |
| Mutual Capacitance (Maximum) | 5.6 nF/100m | |
| DC Resistance (Maximum) | 9.38 Ohm/100m | |
| DC Resistance Unbalance (Maximum) | 5% | |
| Nominal VoP | 66% | |
| Pair-to-ground Unbalance (Maximum) | 330 pF/100m | |
| Skew (Maximum) | 45 ns/100m | |
| Power over Ethernet | PoE+ Type 2 | IEEE (802.3at) |
| Insertion Loss De-rating Factor | 1.2 | |

*Characteristics apply to cable only except where connector is specified.

4-PAIR COLOR CODE

| Color Code | | |
|------------|--------------|--------|
| Pair-1 | White/Blue | Blue |
| Pair-2 | White/Orange | Orange |
| Pair-3 | White/Green | Green |
| Pair-4 | White/Brown | Brown |