

Berk-Tek LANmark-C541 Cordset - Cat 5e, SF/UTP TPE, M12-M12 D-Coded, IP67 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, 2 pair shielded design 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 M12 cordset is IP-67 rated which is ideal for clean-in-place and wash-in-place applications. This cable is CM and CMX outdoor listed and is also 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)

Agency Ratings

Description	Method	
Listed Type	UL1685	CM
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	M12 D-Coded (Male)
Contacts	Copper Alloy with Gold Plating
Plug Body	Zinc Alloy
Wire Aligner	Polyamide
Overmold	PUR
Connector Orientation	Straight
Wiring type	EIA / TIA568B
Boot/Strain Relief	Polycarbonate
Connector Shielding	Zinc Alloy

Dimensional characteristics

Insulated conductor diameter (Nominal)	0.048 in
Average jacket thickness	0.03 in
Minimum jacket thickness at any point	0.024 in
Cable diameter (Nominal)	0.26 in
Nominal cable weight	34 lb/kft
Number of pairs	2

PRODUCT LIST

Part Number	Description	Colour	Length [m]
 11099861	LANmark-C541 Cordset - Cat 5e, M12-M12 D-Coded, IP67 Rated, 2m	Teal	2
 11099862	LANmark-C541 Cordset - Cat 5e, M12-M12 D-Coded, IP67 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	75 cycles	UL 2556 7.10 (1.5 lb. load)
Cold Bend	-40°C	UL 444
Minimum Bend Radius (Static)	1.16 in	TIA 568-C.0
Connector Mating Cycles	100 insertions max	
Ingress		
Characteristic	Value	Method
Weld Spatter Resistant	Yes	Internal
IP Rating (Connector)	67	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	68%	
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.

2-PAIR COLOR CODE

Color Code		
Pair-1	White/Orange	Orange
Pair-2	White/Green	Green