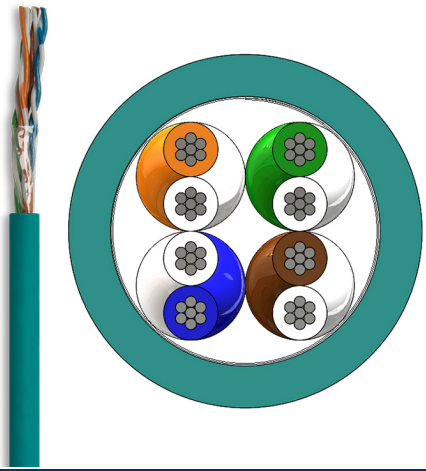
Berk-Tek LANmark-B540 Cat 5e PVC

Berk-Tek a LEVITON company



Berk-Tek LANmark Industrial Medium-Duty Ethernet Cables enable the expansion and integration of Ethernet into the Industrial environment. With over 50 years of manufacturing expertise, you can be sure these Industrial Cables will perform both mechanically and electrically. With its 600V AWM design, PVC jacket, cold-bend performance, and resistance to oil, this cable is suitable for medium-duty, static, industrial applications. Additionally, the stranded conductors also help maintain performance in a high-vibration environment. It is rated CMR and CMX Outdoor, so it easily transitions from indoor to outdoor environments and is also suitable for cable tray installations.

DESCRIPTION

Construction

24 AWG stranded tinned copper wire insulated with HDPE. Two insulated conductors twisted together to form a pair and four such pairs to form the basic unit, enclosed by polyester tape, with PVC jacket.

Related Standards

Low Voltage - EU Directive 2014/35/EU, CE Approved

RoHS - EU Directive 2011/65/EU

PoE+ - Type 2 (802.3at)
ODVA EtherNet/IP™ Compliant

EtherNet/IP™ ODVA Compliant

STANDARDS

International ISO/IEC 11801; ODVA EtherNet/IP Compliant

National ANSI/TIA-568.2-D; UL 444

Ratings		
Description	**Method**	
Listed Type	UL1666	CMR
Listed Type	UL444	CMX Outdoor
Oil Resistance	UL1277 11.2	I (60°C)
Sunlight Resistance	UL444 7.12	Yes (300 hrs)

Attributes		
Description	**Method**	
AWM Style	UL758	2463 (600V, 80°C)
Cold Bend	UL444 7.10	-40°C
Installation Pull Tension (Max):		
Bend Radius: > 3 inch	Internal	40 lbs.
Bend Radius: > 1.00 inch	TIA 568-C.0	25 lbs.
Abrasion	UL2556 7.10	75 cycles/1.5 lb. load

NETWORK SOLUTIONS HEADQUARTERS
Bothell, WA, USA | leviton.com/ns
(800) 824 3005 / +1 (425) 486 2222 | appeng@leviton.com

BERK-TEK A LEVITON COMPANY
New Holland, PA, USA | leviton.com/berktek
+1 (717) 354 6200 | berktek.support@leviton.com

CHARACTERISTICS

Construction characteristics	
Conductor material	24 AWG Stranded Tinned Copper (7/32)
Insulation	HDPE
Jacket Material	PVC
Core Tape	Polyester
Dimensional characteristics	
Insulated conductor diameter (Nominal)	0.04 in
Average jacket thickness	0.03 in
Minimum jacket thickness at any point	0.024 in
Cable diameter (Nominal)	0.25 in
Nominal cable weight	34 lb/kft
Length per reel	1000.0 ft
Electrical characteristics	
Mutual capacitance	5.6 nF/100m max.
DC Resistance (max.)	9.38 Ohm/100m
DC resistance unbalance (max.)	5 %
Nominal velocity of propagation	67 %
Transmission characteristics	
Skew (max.)	45 ns/100m
Insertion loss de-rating factor	1.2
Usage characteristics	
Minimum Bending Radius - Install	1 in
Recommended installation temperature range	-20 .. 80 °C
Recommended operating temperature range	-40 .. 80 °C
Recommended storage temperature range	-40 .. 80 °C
Maximum cable length	83 m

PRODUCT LIST

Part Number	Description	Packaging	Colour
11099205	LANmark-B540 Cat 5e PVC	Reel	Teal
11102379	LANmark-B540 Cat 5e PVC	Reel	Black

= Make to order, = In stock

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LANMARK-B540 - TECHNICAL INFORMATION

Electrical Characteristics		
Parameter	**Frequency**	**Equation**
RL (dB)	1-10 MHz	20+5*Log(F)
	10-20 MHz	25
	20-100 MHz	25-7*Log(F/20)
Insertion Loss (dB/100m)	1-100 MHz	(1.967*√F+0.023*F+0.050/√F)*1.2
NEXT (dB)	1-100 MHz	35.3-15*Log(F/100)
PS-NEXT (dB)	1-100 MHz	32.3-15*Log(F/100)
ACR (dB/100m)	1-100 MHz	NEXT - Insertion Loss
PS-ACR	1-100 MHz	PS-NEXT - Insertion Loss
ACRF (dB)	1-100 MHz	23.8-20*Log(F/100)
PSACRF (dB)	1-100 MHz	20.8-20*Log(F/100)
Propagation Delay	1-100 MHz	534+(36/√F)

Transmission Characteristics	
Description	
ISO/IEC 11801	Category 5
ANSI/TIA-568.2-D	Category 5e
ODVA EtherNet/IP™ Compliant	Category 5e

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

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