Berk-Tek LANmark-C545 Cat 6A
24 AWG High Flex Shielded TPE

Berk-Tek
a **LEVITON** company

Berk-Tek LANmark Industrial Heavy-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, durable TPE jacket, cold-bend performance, and resistance to oil, weld spatter, and sunlight, this cable is suitable for the most demanding, continuous-motion, industrial applications. This product has both a foil shield and a braid to protect against low- and high-frequency noise on the factory floor. 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. It 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. Four such pairs and a cross filler form the basic unit, enclosed by polypropylene tape and shielded with an aluminum/polyester tape and 75% optical coverage braid, contained within a TPE jacket.

Related Standards

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

RoHS - EU Directive 2011/65/EU
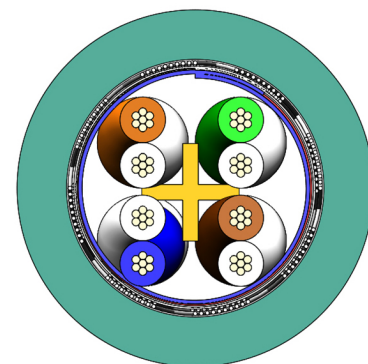
PoE - IEEE 802.3bt Type 1 (af, PoE) & 2 (at, PoE+), 3 &4

ODVA EtherNet/IP™ Compliant

EtherNet/IP™
ODVA

CC-Línk IE
F ield Compliant

STANDARDS

International ISO/IEC 11801; ODVA EtherNet/IP Compliant

National ANSI/TIA 568.2-D; UL 444

Agency Ratings		
Description	**Method**	
Listed Type	UL1666	CMR
Listed Type	UL444	CMX Outdoor
Oil Resistance	UL1277 11.2	II (75°C)
Sunlight Resistance	UL444 7.22	Yes (720 hrs)

Attributes		
Description	**Method**	
AWM Style	UL758	2463 (600V, 80°C)
Flex Life	C-Track, 5" radius	> 35 million cycles
Flex Life	Torsion (+/- 270°)	> 3 million cycles
Installation Pull Tension (Max):		
Bend Radius: > 3 inch	Internal	40 lbs.
Bend Radius: > 1.29 inch	TIA 568-C.0	25 lbs.
Abrasion	UL2556 7.10	75 cycles/1.5 lb. load

CHARACTERISTICS

Construction characteristics

Conductor material	24 AWG Stranded Tinned Copper (7/32)
Filler	HDPE Cross Filler
Insulation	HDPE
Jacket Material	TPE
Braid	Tinned copper - 75% optical coverage
Shielding	Aluminum/Polyester
Core Tape	Foamed polypropylene

Dimensional characteristics

Insulated conductor diameter (Nominal)	0.045 in
Average jacket thickness	0.033 in
Minimum jacket thickness at any point	0.026 in
Cable diameter (Nominal)	0.322 in
Nominal cable weight	48 lb/kft
Length per reel	1000.0 ft

Electrical characteristics

Nominal velocity of propagation	67 %

Transmission characteristics

Insertion loss de-rating factor	1.2

Usage characteristics

Minimum Bending Radius - Install	2.58 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
Cold Bend	-40 °C
Weld spatter resistance	Yes

PRODUCT LIST

	Part Number	Description	Packaging	Colour
🖧	11099210	LANmark-C545 Cat 6A 24 AWG High Flex Shielded TPE	Reel	Teal
🖧	11100618	LANmark-C545 Cat 6A 24 AWG High Flex Shielded TPE	Reel	Black
📞	11100620	LANmark-C545 Cat 6A 24 AWG High Flex Shielded TPE	Reel	Blue
📞	11100619	LANmark-C545 Cat 6A 24 AWG High Flex Shielded TPE	Reel	Grey

📞 = Make to order, 🖧 = In stock

LANMARK-C545 - TECHNICAL INFORMATION

Transmission Characteristics		
Description		
ISO/IEC 11801		Category 6A
ANSI/TIA-568.2-D		Category 6A
Coupling Attenuation	IEC 61156-5	Type I
Transfer Impedance	IEC 61156-5	Grade 2
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