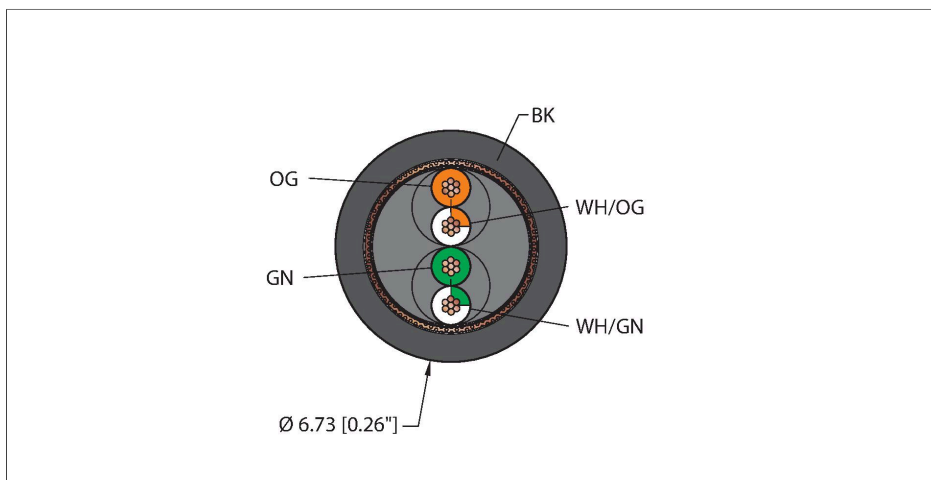


BLK,TPE,2UTPX24,S-BF,FL,CM,EN,CAT5E,SND Industrial Ethernet Cable – Reelfast™ Bulk Cable



Features



- Unshielded Twisted Pair
- Industrial Ethernet Cable
- fieldbus type: Ethernet CAT5E, Black TPE jacket, shielded, 2UTPX24 AWG
- Flame Ratings: UL 1685, UL1061
- Flexlife® and C-Track Approved
- UL AWM 600V
- CMX OUTDOOR 300V
- CM 300V

Technical data

Type	BLK,TPE,2UTPX24,S-BF,FL,CM,EN,CAT5E,SND
ID	RF52507
Cable data	
Cable Platform	Industrial Ethernet Cable
Fieldbus	Ethernet CAT5E, 441BK
Total number of conductors	4
Cable diameter	Ø 6.73 mm
Cable jacket	TPE, Black
Shielding	Aluminum/polyester, 38 AWG, TC (Tinned Copper), 75% coverage
Conductor material	TC (tinned copper)
Conductor colors	OG, WH/OG, GN, WH/GN
Sub assembly 1	
Description of assembly	UTP (Unshielded Twisted Pair)
Number of pairs	2
Conductor diameter	0.048 "
Conductor insulation material	HDPE
Cable conductor cross-section	2x24 AWG [Similar to 0.25 mm ²]
Number of strands x O.D.	7x32 AWG
Weight	0.093 lbs. /meter
Electrical properties at +20 °C	
Voltage	UL AWM 600V CMX OUTDOOR 300V CM 300V

BLK,TPE,2UTPX24,S-BF,FL,CM,EN,CAT5E,SND 11/14/2025 21-54 | technical changes reserved

Technical data

Dielectric strength	200 V RMS
Mutual capacitance	1kHz 5.6 nF/100m
Rated voltage	600 V
DC resistance	26.5 Ω/1000ft
DC resistance imbalance	5 %
Coupler loss	30 ≤ f ≤ 100 MHz 55-20 LOG (f/100) dB MIN, 55 dB min
Transmission impedance of the surface	1 ≤ f ≤ 100 MHz 10 f mΩ/m
Cable test information	Starting at the reel, the following items are checked. (100-m cable)
Capactance pair to ground	MAX 1kHz 330 pF/100m
Return loss 1	1 ≤ f < 10 MHz 20 + 5 LOG(f) dB min.
Return loss 2	10 ≤ f < 20 MHz 25 dB min.
Return loss 3	20 ≤ f ≤ 100 MHz 25 - 7 LOG(f/20) dB min.
Insertion loss	1 ≤ f ≤ 100 MHz 1.2[1.967 √f + 0.023(f) + 0.050/√f] dB max.
Close-range cross talk	1 ≤ f ≤ 100 MHz 35.3 - 15 LOG(f/100) dB min
Ratio of loss — Long-range cross talk	1 ≤ f ≤ 100 MHz 23.8 - 20 LOG(f/100) dB min.
Runtime delay	1 ≤ f ≤ 100 MHz 534 + 36/√f ns max
Runtime delay offset	1 ≤ f ≤ 100 MHz <25ns
Mechanical and chemical properties	
Bending radius (static)	≥ 4 x Ø
Bending radius (dynamic)	≥ 10 x Ø
Bending radius (C-track)	≥ 4 ln.
Bending cycles (C-track)	35 Million *
Admissible acceleration	Max. 16.7 m/s ²
Admissible travel path, horizontal	0.6 m (at 16.7 m/s ²)
Admissible traversing speed	1.2 m/s
Torsional stress	± 270 °/m
Torsion rating	Max. 3 million
Torsional stress	52 Cycles/min
UL cold bend rating	-40 °C
	*When properly installed @ 20°C, 50%RH, and a cycle speed of ≤0.5 cycles per second.
C-Track	Yes
Ambient temperature range (static)	-40...+80 °C
Ambient temperature range (dynamic)	5...+80 °C

Technical data

Temperature range (installation) -10...+80 °C

Approval

UL Approvals UL 444 CMX OUTDOOR-CM
UL 758 AWM 2463

CSA Approvals CMX OUTDOOR-CM

Compliances RoHS
CE

Note

- Flex ratings may be reduced if used in extreme temperatures, exposure to certain chemicals, operating above the rated cycle speed, or operating below the rated cable bend radius.

- We reserve the right to make technical alterations without prior notice.