

Highly flexible Cat.5e LAN cables

UL Style No. 20276, 80 °, 30V

This is a high flexibility shielded cable which uses a special polymer and a special shield, realizing innovatively high bending resistance.

It supports Gigabit Ethernet, and realizes 1Gbps high-speed data transmission.

It also supports high-speed data transmission in industrial Ethernet, industrial machine vision, etc.



- Standard shielded-type



- Screw lock-type

Outline

High-speed camera image transmission formats that use Gigabit Ethernet are standardized. Oki Electric cable offers the TPMC-C5e (S-HFR) cable as the optimum high flexibility shielded cable for industrial applications which support these high camera image transmission formats.

DISCLAIMER:

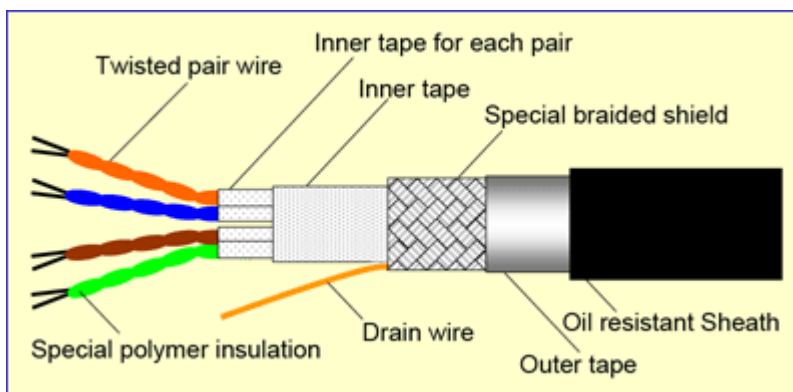
Applications

- Can be used as a LAN cable that supports the 1000BASE-T format (transmission speed 1Gbps).
- Is suitable for applications such as robots and FA devices which require high bending resistance and sliding resistance.
- Can be used to connect industrial high-speed cameras to terminal equipment, particularly those that support Ethernet.
- This cable has an oil resistant sheath, enabling it to be used in severe environments such as those encountered in factories.

Features

- This cable is intended for movable applications. It uses high flexibility special polymer insulation and a special braided shield, resulting in high bending resistance and high sliding resistance, and can also withstand twisting motion.
- The special braided shield increases noise immunity.
- It supports industrial high-speed camera image transmission formats.
- It has an oil resistant sheath, making it suitable for use in factory environments, for example.
- It can be used with general shielded modular plugs.

Cable construction



DISCLAIMER:



Construction and performance

- TPMC-C5e (S-HFR) cable

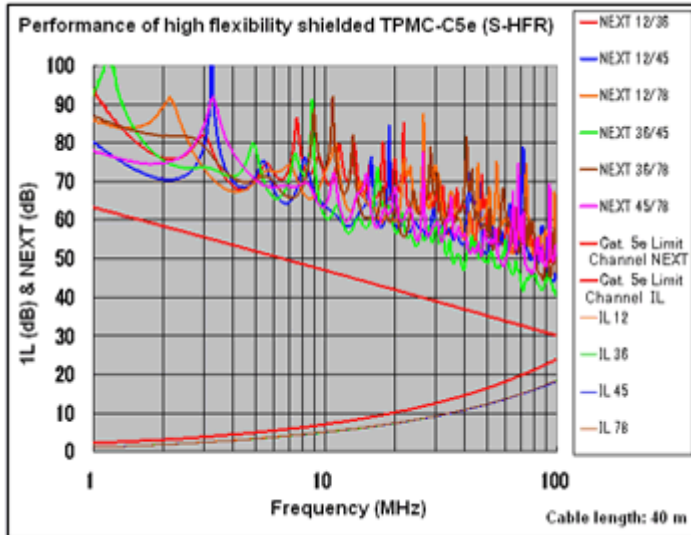
Item	Construction	Item	Construction	
Conductor	O.D.	AWG26 twisted wire conductor	Shield	
	Type	Special polymer		
Insulation	O.D.	0.94mm	Shield	
	Type	Oil-resistant PVC		
Number of pairs	4 pairs		O.D.	6.8mm

Item	Performance	Item	Performance	
Max cable length	40m	Rating	30V 80degrees UL-certified product	
Characteristic impedance	100 +/-15Ω	Voltage withstand	AC350V-1 min	
Loss	24 dB/40m max (20degrees)	Fire retardancy	UL VW-1	
Near-end crosstalk loss	30 dB (@ 100 MHz) min	Oil resistance characteristics	JIS K6723	
PSNEXT	27 dB (@ 100 MHz) min	Bending resistance	Sliding	3 million cycles (R50)
Return loss	10 dB (@ 100 MHz) min		Bending	0.3 million cycles (R20)
Conductor resistance	14.9 Ω/km max (20degrees)		Twisting	5 million cycles (+/- 180degrees)

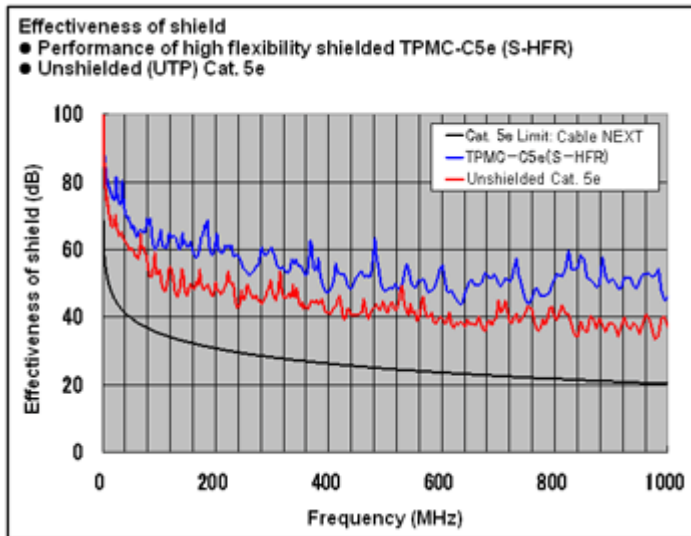
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Performance



Has adequate performance margin for both crosstalk (NEXT) and loss (IL) with respect to the transmission standard for gigabit Ethernet.



The shielding effect of the high flexibility shielded TPMC-C5e (S-HFR) cable is about 10 dB compared to the unshielded (UTP) Cat. 5e cable.

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