



Features

- Data transmission speed up to 10 Gbps
- Ingress Protection Rating to IP67 (M12)
- Ingress Protection Rating to IP20 (RJ45)
- Flame retardant to UL 444 CMX
- UV resistance to IEC 60068-2-5
- Oil resistance to UL758 60°C
- Hydrolysis resistance to VDE HD 22.10
- Halogen-free according to IEC 60754-1; silicone-free; CFC-free



Applications

- Industrial Automation
- Intelligent Manufacturing

Reference Standard

Cat.7 S/FTP Specification Standard

Application Standards	IEC 61156-6 Cat.7
Supported Data Rate	10 Gbps
Supported Bandwidth	1 to 600 MHz

Construction

Conductors	AWG26 Stranded Annealed Bare Copper
Conductor Insulation	Foam PE
Shielding	Individual pairs AL-Mylar shielded 100% Coverage + Tinned copper wire braiding , with min. 60% Coverage
Outer Jacket Material	PUR
Connector Material (M12)	Zinc alloy + Brass
Connector Material (RJ45)	PC (UL94 V-0)
Contact Plating	Gold plating
Cable Boot	PUR

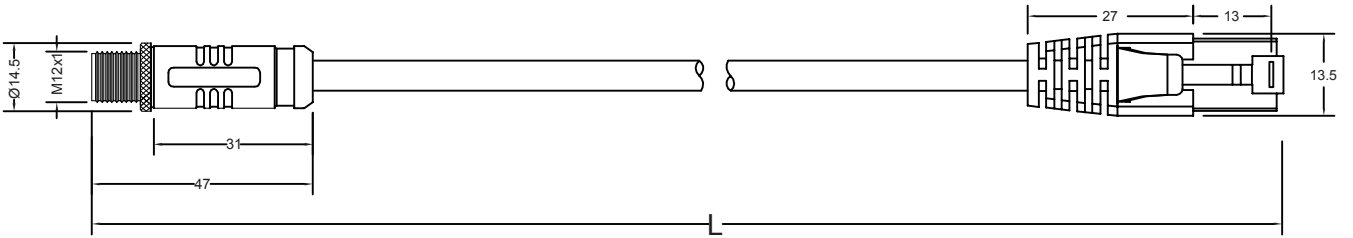
Electrical Characteristics

Conductor Resistance	max.14.5Ω /100M@20°C
Insulation Resistance	min. 5000MΩ /Km@20°C

Mechanical

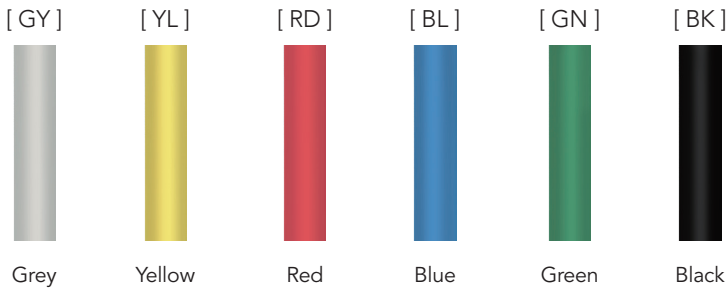
Temperature Range	-40°C up to 85°C
Cable Bend Radius	≥4xOD without load ≥8xOD with load

Connector Structure



CTi Cable Code	AWG	OD (mm)	Outer Jacket	Length	Product Description
LLS5001	26	6.2+/-0.5	PUR	1m-10m	M12 X-code + RJ45

Available colours



Transmission Performance according to IEC 61156-5 Cat.7 (at 20 °C/100m)

Frequency (MHz)	Impedance (Ω)	Attenuation (dB) Max.	NEXT (dB) Min.	PSNEXT (dB) Min.	ACRF (dB) Min.	PSACRF (dB) Min.	Return Loss (dB) Min.	Propagation Delay (ns) Max.	Delay Skew (ns) Max.
4	100	5.6	78	75	78	75	23	552	25
10	±15	8.8	78	75	74	71	25	545.4	
200	100	41.2	67.9	64.9	48	45	16.4	536.5	
250	±22	46.5	66.4	63.4	46	43	15.6	536.3	
300	100	51.3	65.2	62.2	44.5	41.5	15.6	536.1	
600	±25	75.1	60.7	57.7	38.4	35.4	15.6	535.5	