



RAMCROil Cable

For standard applications, low smoke, Halogen Free, flame retardant, Hydrocarbon & UV Res.

Single-Quad, XLPE-Insulation, Double Collective Screen, LSZH-Sheath

Code: MRT4122HIEXX-PROF

XLPE/BEDDING/AI-TCWB/LSZH

Application

These cables are designed for harsh industrial fixed installations and rapid cyclic data transmission. Suitable for PROFINET Type A, EtherCAT, Ethernet/IP and others system data optimised for automation technology. Not suitable for direct buried application

Construction	2x2x22AWG		
Formation	2 Pairs distributed in 1 Quad	Unit	Nominal Value
Section	22AWG		
Conductor	Plain annealed copper wire, solid	mm	0,6
Insulation	Cross Linked Polyethylene - XLPE	mm	1,5
Colour Code	White, Yellow, Blue, Orange		
Individual Screen	N.A.		
Bedding	Thermoplastic Low Smoke, Halogen Free - LSZH - FC type (fast connect)	mm	4,3
Collective Screen	0.025 mm Aluminium / PET + Tinned Copper Braid +TCDW 7x0.25mm (85%)	mm	4,9
Inner Sheath			
Armour	N.A.		
Outer Sheath	N.A.	mm	6,7
Cable Printing	Thermoplastic Low Smoke, Halogen Free - LSZH - Green RAL 6018 RAMCRO - LSZH - PROFINET A - 1x4x22AWG - 300V - IEC 60332-3 - IEC 60332-1 - UL1685 + BATCH + METER MARKING		

Technical Data & Standard References

Fire Propagation:		Construction Reference Standard:	PROFINet Guideline + IEC 61158-2
- Test on single cable	IEC 60332-1	Type of Cable:	Data Cable
- Test on bunched cables	IEC 60332-3	Low Voltage Directive	2014/35/UE
- Vertical Tray Flame Test	UL1685	Other References:	
Limiting Oxygen Index (LOI)	(min 37%)	- BS EN 60228	
Smoke Density	IEC 61034	- IEC 61158-2, Type A	
Amount of halogen acid gas	IEC 60754-1 (max 0,5%)	- EN 50288-7	
Acidity (ph value) and conductivity	IEC 60754-2	- BS 6234	
Sunlight Resistance	UL 1581 Section 1200	- BS50363	
		- IEC 60332-1	
		- IEC 60332-3-24	
		- ISO/IEC 11801	
		- EN 50173	
		- Category 5e	

Electrical & Mechanical Data

Conductor Cross-section	Nom.	22AWG	Temperature Range:	
DC Resistance per core at 20° C	max Ω/km	57,5	During Installation	° C -5° C up to +50° C
Insulation Resistance at 20° C	min MΩ*km	1000	Fixed Installation	° C -40° C up to +75° C
Mutual Capacitance (Nominal)	max nF/km	48	Insulation Operation	° C -40° C up to +90° C
Inductance	max mH/km	1	Min. Bending Radius	mm 8 x cable diameter
Test Voltage - Core/Core	V	2000	Max Pulling Tension	N 64
Test Voltage - Core/Screen	V	2000	Weight Approx	kg/km 68
L/R Ratio	max μH/Ω	25		
Operating Voltage	V	300		
Impedance (f = 100 MHz)	Ω	100 +/-20		
Attenuation at f = 16 MHz	Db/Km	< 69		
Attenuation at f = 100 MHz	Db/Km	< 195		

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