



RAMCRO - DATA Cable

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

Single-Pair, FPE-Insulation, Double Collective Screen, LSZH-Sheath



MRT0122HXE4X-DP

FPE/AI-TCWB/LSZH

Application

These cables are designed for rapid cyclic data transmission. Suitable for RS-485 systems data rate optimised for automation technology. Not suitable for direct buried application

Construction

		Unit	Nominal Value
Formation	1 Pair		
Section	22AWG		
Conductor	Plain annealed copper wire, solid	mm	0,6
Insulation	Foam Polyethylene - FPE	mm	2,55
Colour Code	(+) -core: Green, (-) -core: Red		
Individual Screen	N.A.		
Bedding	Thermoplastic Low Smoke, Halogen Free - LSZH - FC type (fast connect)	mm	5,7
Collective Screen	0.025mm Aluminium / PETP + Tinned Copper Braid (85%) + TCDW 7x0.25mm	mm	6,3
Inner Sheath			
Armour	N.A.		
Outer Sheath	N.A.	mm	8,3
Cable Printing	Thermoplastic Low Smoke, Halogen Free - LSZH - Violet RAL 4001 RAMCRO - PROFIBUS DP 150 Ω - FB-O2Y(St+Ce) H - LSZH - 1x2x22AWG - 300V - IEC 60332-3 - IEC 60332-1 UL 1685 + BATCH + METER MARKING		

Technical Data & Standard References

Fire Propagation:		Construction Reference Standard:	PROFIBUS DP 150 Ω
- 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
Limiting Oxygen Index (LOI)	(min 37%)	Other References:	
Smoke Density	IEC 61034	- BS EN 60228	
Amount of halogen acid gas	IEC 60754-1 (max 0,5%)	- IEC 61158-2, Type A	
Acidity (ph value) and conductivity	IEC 60754-2	- EN 50288-7	
Vertical Tray Flame Test	UL 1685	- BS 6234	
Sunlight Resistance	UL 1581 section 1200	- BS50363	
		- IEC 60332-1	
		- IEC 60332-3-24	
		- DIN 19245 T3	
		- EN50170	

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	9,6	Insulation Operation	° C -40° C up to +90° C
Inductance	max mH/km	1	Min. Bending Radius	mm 7,5 x cable diameter
Test Voltage - Core/Core	V	2000	Max Pulling Tension	N 32
Test Voltage - Core/Screen	V	2000	Weight Approx	kg/km 89
Impedance (f ≥ 3 MHz)	Ω	150 +/- 15		
Operating Voltage	V	300		
Attenuation at f = 9.6 kHz	Db/Km	< 25		
Attenuation at f = 38.4 kHz	Db/Km	< 4		
Attenuation at f = 4 MHz	Db/Km	< 22		
Attenuation at f = 16 MHz	Db/Km	< 42		

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