



RAMCRO - DATA Cable

For standard applications, low smoke, Halogen Free

Single-Pair, PE-Insulation, Double Collective Screen, LSZH UV/Oil Res.-Sheath

SDS0105HDNDX-T-PAPR

PE/AI-TCWB/LSZH UV Res.

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	18AWG		
Conductor	Tinned copper wire, 7 strand	mm	1,2
Insulation	Polyethylene - PE	mm	3,2
Colour Code	(+)-core: Orange, (-)-core: Blue		
Individual Screen	N.A.		
Wrapping	at least 1 layer of plastic tape 0,023 mm + 2 Interstitial Fillers		
Collective Screen	Aluminium / PETP + Tinned Copper Braid (85%) + tcdw 7x0.25 mm		
Inner Sheath	N.A.		
Armour	N.A.		
Outer Sheath	Thermoplastic Low Smoke, Halogen Free - LSZH UV Res. - Blue	mm	8,0
Cable Printing	RAMCRO - FIELDBUS / PROFIBUS PA 100 Ω - FB-2YS(St+Ce)H - 1x2x18AWG - 300V 75° C- IEC 60332-3 UL1685 - IEC 60332-1 + BATCH + METER MARKING		

Technical Data & Standard References

Fire Propagation:		Construction Reference Standard:	PROFIBUS PA 100 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:	- BS EN 60228
Smoke Density	IEC 61034		- BS 6234
Amount of halogen acid gas	IEC 60754-1 (max 0,5%)		- BS50363
Acidity (ph value) and conductivity	IEC 60754-2		- IEC 60332-1
Sunlight resistance	UL 1581 section 1200		- IEC 60332-3-24
Notes			- NF C 32-020
			- IRAM IAP
			- UL1685
			- IEC 61158-2

Electrical & Mechanical Data

Conductor Cross-section	Nom.	18AWG	Temperature Range:	
DC Resistance per core at 20° C	max Ω/km	21,4	During Operation	° C -30° C up to +90° C
Insulation Resistance at 20° C	min MΩ*km	5000	During Installation	° C -5° C up to +50° C
Mutual Capacitance	max nF/km	150	Min. Bending Radius	mm 7,5 x cable diameter
Inductance	max mH/km	1	Max Pulling Tension	N/mm2 81
Test Voltage - Core/Core	V	2000	Weight Approx	kg/km 75
Test Voltage - Core/Screen	V	2000		
Impedance (f = 31,25 kHz)	Ω	100 +/- 20		
Operating Voltage	V	600		
Velocity of propagation % speed of Light	5ns/m	68%		
Attenuation at f = 39 KHz	Db/Km	3		

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