



Technical Data

Document Reference
Data Sheet

R1270

RAMCRO - DATA LAN - M-BUS Cable For standard applications, flame retardant.

Single pair, LSZH/FRNC-Insulation, Collective Screened, LSZH/FRNC-Sheath

MAS0103HXEDN-T-RB

Application

M-BUS (Meter-Bus) is a european standard (EN 13757-2) physical and link layer, EN 13757-3 application layer) for the remote reading of gas or electricity meters. M-Bus is also suitable for other types of consumption meters.

Construction

Formation	1 Pair	Unit	Nominal Value
Section	16 AWG		
Conductor	Tinned copper wire, Multistrand	mm	1,4
Insulation	Thermoplastic Low Smoke, Halogen Free - LSZH (FRNC)	mm	3,0
Colour Code	Black, White		
Individual Screen	N.A.		
Wrapping	at least 1 layer of plastic tape 0,023 mm		
Collective Screen	0,026 mm Aluminium / PETP tape over tinned copper drain wire		
Inner Sheath	N.A.		
Armour	N.A.		
Outer Sheath	Thermoplastic Low Smoke, Halogen Free - LSZH (FRNC) - Purple RAL 4005	mm	7,8
Cable Printing	RAMCRO ITALY - R1270 DATA LAN CABLE 1PR 16AWG SCREENED 300 V 75 C IEC 60332-1/UL 1581 - MAS0103HXEDN-T-RB - "PROD.WEEK/18" + BATCH + METER MARKING		

Technical Data & Standard References

Fire Propagation:		Type of Cable:	DATA LAN - M-BUS Cable
- Test on single cable	IEC 60332-1	Low Voltage Directive	2014/35/UE
- Test on bunched cables	IEC 60332-3	Other References:	
Smoke Density	IEC 61034		
Amount of halogen acc. to IEC 60754-1 & EN 50267-1	ZERO		
Acidity (ph value) and conductivity	IEC 60754-2		
Sunlight resistance	UL 1581 section 1200		
Notes			

Electrical & Mechanical Data

Conductor Cross-section	Nom.	16 AWG	Temperature Range:			
DC Resistance per core at 20° C	max Ω/km	15,8	During Operation		° C	-30°C up to 80°C
Insulation Resistance at 20° C	min MΩ*km	25	During Installation		° C	-30°C up to 80°C
Nominal Mutual Capacitance	max pF/m	120				
Inductance	max mH/km	1	Min. Bending Radius	mm	8 x cable diameter	
Test Voltage - Core/Core	V	2000	Max Pulling Tension	N/mm2	0	
Test Voltage - Core/Screen	V	2000	Weight Approx	kg/km	0	
Operating Voltage	V	300	Put up length	mt	305	



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Via Marzorati, 15 - 20014 Nerviano - Milan - Italy / www.ramcro.it

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