



TC  
UL 1581

## RAMCROil - INSTRUMENTATION Cable

For standard applications, flame retardant.

Multi-Pair, HT 105°-Insulation, Collective Screen, PVC-Sheath, Sunlight Resistant

MAS0103HBACN-T-UL

### Application

These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685.

### Construction

		Unit	Value
Formation	1 Pairs		
Section	AWG16		
Conductor	tinned copper wire, 7 strand	mm	1,5
Insulation	Hi Temperature polyvinyl chloride - PVC HT 105°C	mm	2,3
Colour Code	Black and White, numbered		
Individual Screen	N.A.		
Wrapping	at least 1 layer of plastic tape		
Collective Screen	0,024 mm aluminium / PETP tape over tinned copper drain wire		
Inner Sheath	N.A.		
Armour	N.A.		
Outer Sheath	polyvinyl chloride - PVC - Grey	mm	6,5
Cable Printing	RAMCRO Italy Type TC - 1 pr 16AWG CU CL2/PVC/CAM/PVC 600V MIL UL 1581 105°C month+year + BATCH + METER MARKING		

### Technical Data & Standard References

Fire Propagation:			
- Test on single cable	IEC 60332-1	Construction Reference Standard	UL 1581
- Test on bunched cables	IEC 60332-3	Type of Cable	TC
- Vertical Tray Flame Test	UL1685	Other References:	
Limiting Oxygen Index (LOI)	ASTM D 2863 (min 30%)	- NEC code, sec. 725 PLTC,	- MIL-W-16878
Flammability temperature (FT)		- NEC code, sec. 727 ITC,	
Amount of halogen acid gas	IEC 60754-1 (max 15%)	- UL 1685	
Sunlight resistance	UL 1581 section 1200	- ASTM D 1239	
Oil Resistant	ENI 181.00	- NF C 32-020	
		- IRAM IAP	
		- IEC 79-14	

### Electrical & Mechanical Data

Conductor Cross-section	Nom. AWG	16	Temperature Range:	
DC Resistance per core at 20° C	max Ω/km	14,2	During Operation	° C -30° C up to +105°C
Insulation Resistance at 20° C	min Ω/km	25	During Installation	° C -5° C up to +50°C
Mutual Capacitance	max nF/km	120	Min. Bending Radius	mm 5 x cable diameter
Inductance	max mH/km	1	Max Pulling Tension	N/sqmm 130
Test Voltage - Core/Core	V	2000		
Test Voltage - Core/Screen	V	2000		
L/R Ratio	max μH/Ω	40		
Operatin Voltage	V	600		

Creator: LDG

Date of issue:

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29/01/2014 00:00

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