



# Technical Data

UL 13

Document Reference  
14-02578

## RAMCROil - INSTRUMENTATION Cable

For standard applications, flame retardant.

Multi-Core, HT 105°-Insulation, Collective Screen, PVC-Sheath

SAS0701HEACX-T-UL13

### 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	Nominal Value
Formation	7 Cores		
Section	14AWG		
Conductor	tinned copper wire, 7 strand	mm	1,8
Insulation	Hi Temperature polyvinyl chloride - PVC HT 105°C	mm	2,9
Colour Code	0		
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.		
Outher Sheath	polyvinyl chloride - PVC - Black	mm	14,6
Cable Printing	RAMCRO S.p.A. - (UL) Listed E345186 Type PLTC - 7C 14AWG Shielded - 105°C + BATCH + METER MARKING		

### Technical Data & Standard References

Fire Propagation:		Construction Reference Standard	UL 13
- Test on single cable	IEC 60332-1	Type of Cable:	PLTC Cable
- Test on bunched cables	IEC 60332-3	Other References:	
- Vertical Tray Flame Test	UL1685	- NEC code, sec. 725 PLTC,	
Limiting Oxygen Index (LOI)	ASTM D 2863 (min 30%)	- NEC code, sec. 727 ITC,	
Flammability temperature (FT)		- UL 1685	
Amount of halogen acid gas	IEC 60754-1 (max 15%)	- ASTM D 1239	
Sunlight resistance	UL 1581 section 1200	- NF C 32-020	
Notes		- IRAM IAP	
		- IEC 79-14	

### Electrical & Mechanical Data

Conductor Cross-section	Nom.	14AWG	Temperature Range:	
DC Resistance per core at 20° C	max Ω/km	8,9	During Operation	° C -30° C up to +105°C
Insulation Resistance at 20° C	min MΩ*km	25	During Installation	° C -5° C up to +50°C
Mutual Capacitance	max nF/km	140	Min. Bending Radius	mm 6 x cable diameter
Inductance	max mH/km	1	Max Pulling Tension	N/mm2 730
Test Voltage - Core/Core	V	2000	Weight Approx	kg/km 400
Test Voltage - Core/Screen	V	2000		
L/R Ratio	max μH/Ω	25		
Operating Voltage	V	300		

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