



## Technical Data

### Document Reference

23/04143

UL 1424

R19581

FPLR

### RAMCRO - Power-Limited Fire-Alarm Cable

For standard applications, flame retardant, Hydrocarbon & UV Res.

Multi-Core, PVC Insulation, Collective Screen, PVC-Sheath

SAR0201HFOCH-UL1424

PVC /CAM/PVC

#### 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 1666.

#### Construction 2C14AWG

		Unit	Nominal Value
Formation	2 Cores		
Section	14AWG		
Conductor	Plain annealed copper wire, solid	mm	1.6
Insulation	Polyvinylchloride - PVC	mm	2.7
Colour Code	Black, Red		
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	Polyvinyl chloride - PVC - Red	mm	7.5
Cable Printing	RAMCRO ITALY RAMFIRECAB E475091 (UL) FPLR 2C 14AWG SHIELDED 105C POWER LIMITED FIRE ALARM CABLE PVC R19581 RMC2 - "PROD.WEEK/YEAR" + BATCH NUMBER + ITALY+ METER MARKING		

#### Technical Data & Standard References

Fire Propagation:		Construction Reference Standard:	UL 1424
- Test on single cable	IEC 60332-1	Type of Cable:	Fire Alarm Cable
- Test on bunched cables	IEC 60332-3	Low Voltage Directive	2014/35/UE
- Vertical Tray Flame Test	UL1666	Other References:	
Limiting Oxygen Index (LOI)	(min 30%)	- NEC code, sec. FPLR,	
Smoke Density	IEC 61034	- UL 1666	
Amount of halogen acid gas	IEC 60754-1 (max 1,3%)	- ASTM D 1239	
Acidity (ph value) and conductivity	IEC 60754-2	- NF C 32-020	
Sunlight resistance	UL 1581 section 1200	- IRAM IAP	
Notes			

#### Electrical & Mechanical Data

Conductor Cross-section	Nom.	14AWG	Temperature Range:	
DC Resistance per core at 20° C	max $\Omega$ /km	8.5	During Installation	° C -5° C up to +50° C
Insulation Resistance at 20° C	min $M\Omega$ *km	25	Fixed Installation	° C -30° C up to +80° C
Mutual Capacitance	max nF/km	250	Insulation Operation	° C -30° C up to +105° C
Inductance	max mH/km	1	Min. Bending Radius	mm 8 x cable diameter
Test Voltage - Core/Core	V	3000	Max Pulling Tension	N 209
Test Voltage - Core/Screen	V	2000	Weight Approx	kg/km 101
L/R Ratio	max $\mu H/\Omega$	60		
Operating Voltage d.c.	V	300		

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Form 1

Cables designed according to customers request. Attention: mentioned standards might be partially applicable.

