



Technical Data

UL 1424

Document Reference

23/04143

R19581

RAMCRO - Power-Limited Fire-Alarm Cable
For standard applications, flame retardant, Hydrocarbon & UV Res.

FPLR

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		
Formation	2 Cores	Nominal	
Section	14AWG	Unit	Value
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:	
- Test on single cable	IEC 60332-1
- Test on bunched cables	IEC 60332-3
- Vertical Tray Flame Test	UL1666
Limiting Oxygen Index (LOI)	(min 30%)
Smoke Density	IEC 61034
Amount of halogen acid gas	IEC 60754-1 (max 1,3%)
Acidity (ph value) and conductivity	IEC 60754-2
Sunlight resistance	UL 1581 section 1200
Notes	

Construction Reference Standard:

UL 1424

Type of Cable:

Fire Alarm Cable

Low Voltage Directive

2014/35/UE

Other References:

- NEC code, sec. FPLR,
- UL 1666
- ASTM D 1239
- NF C 32-020
- IRAM IAP

Electrical & Mechanical Data

Conductor Cross-section	Nom.	14AWG	Temperature Range:		° C	-5° C up to +50° C
DC Resistance per core at 20° C	max Ω/km	8.5	During Installation		° C	-30° C up to +80° C
Insulation Resistance at 20° C	min MΩ*km	25	Fixed Installation		° C	-30° C up to +105° 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 μH/Ω	60				
Operating Voltage d.c.	V	300				

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

Form 1