Technical Data

Document Reference
21/00000

UL 13

UL Listed

PLTC

RAMCROil - INSTRUMENTATION Cable
For standard applications, low smoke, Halogen Free

Single-Triad, XLPE-Insulation, Collective Screen, LSZH-Sheath

Code: MAS3706HEEXO-UL13 XLPE/CAM/LSZH

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 — 1x3x20AWG

		Unit	Nominal Value
Formation	1 Triad		
Section	20AWG		
Conductor	Plain annealed copper wire, 7 strand	mm	0,9
Insulation	Cross Linked Polyethylene - XLPE	mm	1,7
Colour Code	White, Black, Red		
Individual Screen	N.A.		
Wrapping	at least 1 layer of plastic tape		
Collective Screen	Aluminium / PET tape over tinned copper drain wire		
Inner Sheath	N.A.		
Armour	N.A.		
Outer Sheath	Thermoplastic Low Smoke, Halogen Free - LSZH - Black	mm	6,0
Cable Printing	RAMCRO S.p.A. – (UL) Listed E345186 Type PLTC - 1 tr 20 - Shielded - 75°C + BATCH + 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	UL1685
Limiting Oxygen Index (LOI)	(min 37%)
Smoke Density	IEC 61034
Amount of halogen acid gas	IEC 60754-1 (max 0,5%)
Acidity (ph value) and conductivity	IEC 60754-2
Notes	

Construction Reference Standard:	UL 13
Type of Cable:	PLTC Cable
Low Voltage Directive	2014/35/UE
Other References:	
	- NEC code, sec. 725 PLTC,
	- NEC code, sec. 727 ITC,
	- UL 1685
	- ASTM D 1239
	- NF C 32-020
	- IRAM IAP

Electrical & Mechanical Data

Conductor Cross-section	Nom.	20AWG	Temperature Range:		
DC Resistance per core at 20° C	max Ω/km	34,6	During Installation	° C	-5° C up to +50°C
Insulation Resistance at 20° C	min MΩ*km	1000	Fixed Installation	° C	-40° C up to +75°C
Mutual Capacitance	max nF/km	115	Insulation Operation	° C	-40° C up to +90°C
Inductance	max mH/km	1	Min. Bending Radius	mm	8 x cable diameter
Test Voltage - Core/Core	V	2000	Max Pulling Tension	N	77
Test Voltage - Core/Screen	V	2000	Weight Approx	kg/km	56
L/R Ratio	max µH/Ω	25			
Operating Voltage	V	300			

RoHS 2002/95/EC

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