Technical Data

Document Reference
Data Sheet

TC Cables

Ramcro Cable
For standard applications, flame retardant, Oil resistant

Multi-Core, PVC HT 105-Insulation, Collective Screen, PVC Oil Res.-Sheath

SAS1005HBACX-T-UL — PVC HT 105/CAM/PVC Oil Res.

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	**10x18AWG**	Unit	Nominal Value
Formation	10 Cores		
Section	18AWG		
Conductor	Tinned copper wire, 7 strand	mm	1,2
Insulation	Hi Temperature Polyvinylchloride - PVC HT 105°C	mm	2,0
Colour Code	Black, White, Red, Green, Brown, Blue, Orange, Yellow, Purple, Grey		
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, Oil Resistant - Grey RAL 7001	mm	10,3
Cable Printing	RAMCRO ITALY TYPE TC - 10x18AWG 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
- Test on bunched cables	IEC 60332-3
- Vertical Tray Flame Test	UL1685
Limiting Oxygen Index (LOI)	(min 30%)
Smoke Density	IEC 61034
Amount of halogen acid gas	IEC 60754-1 (max 15%)
Acidity (ph value) and conductivity	IEC 60754-2
Sunlight resistance	UL 1581 section 1200
Notes	

Construction Reference Standard:	UL 1277
Type of Cable:	TC Cables
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.	18AWG
DC Resistance per core at 20° C	max Ω/km	21,4
Insulation Resistance at 20° C	min MΩ*km	25
Mutual Capacitance	max nF/km	250
Inductance	max mH/km	1
Test Voltage - Core/Core	V	2000
Test Voltage - Core/Screen	V	2000
L/R Ratio	max µH/Ω	40
Operating Voltage	V	600

Temperature Range:		
During Operation	° C	-30° C up to +105°C
During Installation	° C	-5° C up to +50°C
Min. Bending Radius	mm	10 x cable diameter
Max Pulling Tension	N/mm2	407
Weight Approx	kg/km	166