



Description	Unit	5 pair x 1.5 mm2	10 pair x 1.5 mm2
1. General		Flame Retardant Instrumentation cable	Flame Retardant Instrumentation cable
Rated voltage, U0/U	V	300/500	300/500
Type of cable		CU/XLPE/IOSCR/PVC FRLS/SWA/PVC FRLS	CU/XLPE/IOSCR/PVC FRLS/SWA/PVC FRLS
Ref. standard		BS EN 50288-7:2005	BS EN 50288-7:2005
No. of elements	no.	5 Pairs	10 Pairs
2. Construction			
2.1 Conductor			
Material		Annealed Plain Copper	Annealed Plain Copper
Nom. Cross sectional area	mm ²	1.50	1.50
Class (BS EN 60228)		Class-2	Class-2
No./Diameter of strands	nos/mm	7/0.53	7/0.53
2.2 Insulation			
Material		XLPE	XLPE
Thickness, min	mm	0.44	0.44
Core Colours		Black & White	Black & White
Core/Pair/Triad Identification		Number marking on white core	Number marking on white core
2.3 Screening			
Individual		Al-Mylar tape(0.024mm thick)+ Tinned Cu Drain Wire (0.5 mm ²)	Al-Mylar tape(0.024mm thick)+ Tinned Cu Drain Wire (0.5 mm ²)
Overall		Al-Mylar tape(0.024mm thick) + Tinned Cu Drain Wire (0.5 mm ²)	Al-Mylar tape(0.024mm thick) + Tinned Cu Drain Wire (0.5 mm ²)
2.4 Inner sheath			
Material		Extruded PVC FRLS	Extruded PVC FRLS
Colour of sheath		Black	Black
Thickness of sheath	mm	1.20	1.40
2.5 Armouring			
Material		Galvanized steel wire	Galvanized steel wire
Armour wire diameter	mm	0.90	1.25
2.6 Outer sheath			
Material		PVC FRLS	PVC FRLS
Colour of sheath		Black	Black
Thickness of Sheath, Nom	mm	1.60	1.80
Thickness of Sheath, Min	mm	1.08	1.24
Overall diameter of cable, approx	mm	21.0	28.0
Weight of cable, approx	kg/km	730	1300
3. Electrical parameters			
DC Resistance of conductor, max	Ω/km	12.34	12.34
Insulation resistance @ 20°C, min	MΩ-km	1000	1000
Mutual Capacitance, max	pF/m	150	150
L/R ratio, max	μH/Ω	40	40
4. Special properties			
Flame retardant		As per IEC 60332-3-22/Cat.A	As per IEC 60332-3-22/Cat.A
Oxygen index (ASTM D2863)	%	> 30	> 30
HCL emission (IEC 60754-1)		Max 17 % by weight of compound	Max 17 % by weight of compound
Smoke density rating (ASTM D2843)		Max 60%	Max 60%
5. Packing			
Standard packing		Wooden drum with UV protected wrapper	Wooden drum with UV protected wrapper
Standard drum length & tolerance	m	1000 ± 5 %	1000 ± 5 %
6. Printing on outer sheath			
Sequential length marking on outer sheath		NUHAS OMAN 300/500V 5PAIR X 1.5MM2 BS EN 50288-7 CU/XLPE/IOSCR/PVC FRLS/SWA/PVC FRLS YEAR of mfg. at every one meter	NUHAS OMAN 300/500V 10PAIR X 1.5MM2 BS EN 50288-7 CU/XLPE/IOSCR/PVC FRLS/SWA/PVC FRLS YEAR of mfg. at every one meter
Note:			
1. All values are nominal unless otherwise specified.			
2. Wherever applicable, non-hygroscopic interstitial fillers shall be provided.			
3. Non-metallic rip cord will be provided below inner sheath			

