APPLICATION

For interconnections between instruments, sensors and monitors. Individual and overall screened with specially selected lay schemes in order to counter static and cross talk noises. A “clean” and accurate signal can therefore be expected to be transferred. APL Armouring is provided for increased mechanical protection.

CHARACTERISTICS

Voltage Rating

300/500V

Maximum Operating Temperature

+105oC

Minimum Bending Radius

9x Overall Diameter

CONSTRUCTION

Conductor

Stranded annealed bunched copper

Insulation

XLPE (Cross-Linked Polyethylene)

Individual Screen

Al/PET (Aluminium/Polyester Tape)

Overall Screen

Al/PET (Aluminium/Polyester Tape)

Drain Wire (Individual and Collectively)

Tinned copper

Bedding

PVC (Polyvinyl Chloride)

Armouring

APL (Aluminium Polyethylene Laminated) with bunched tinned copper drain wire

Sheath

PE (Polyethylene)

Core Identification

Pairs: White Black, numbered

Triples: White Black Red, numbered

Outer Sheath Colour

Black

STANDARDS

SANS 1411 Part 4, SANS 1411 Part 2 Type B1, SANS 1411 Part 7

DIMENSIONS

NO. OF PAIRS/TRIPLE	NOMINAL CROSS SECTIONAL AREA mm2	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
2P	0.5	13.4	177
2P	1	14.9	224
2P	1.5	16.5	267
4P	0.5	14.8	234
4P	1	16.5	297
4P	1.5	19.2	388
8P	0.5	18.5	378
8P	1	20.9	496
8P	1.5	23.9	627
12P	0.5	20.7	465
12P	1	24.4	682
12P	1.5	27.5	839
16P	0.5	23.6	591
16P	1	27	845
16P	1.5	31.4	1099
24P	0.5	27.1	781
24P	1	32	1196
24P	1.5	36.8	1534
4T	0.5	16	271
4T	1	18.8	393
4T	1.5	21	472
8T	0.5	20.4	444
8T	1	23.4	641
8T	1.5	26.5	787
12T	0.5	24	614
12T	1	27.5	868
12T	1.5	32	1126
16T	0.5	26.1	747
16T	1	30.7	1126
24T	0.5	32	1070

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm2	MAXIMUM DC RESISTANCE OF CONDUCTOR AT 20°C ohms/km		NOMINAL MUTUAL CAPACITANCE nF/km	NOMINAL GROUND CAPACITANCE nF/km	NOMINAL INDUCTANCE mH/km
	Single Pair/Triad & Multicore	Multi-Pair Triad			
0.5	39.0	39.6	100	200	0.707
1	19.5	19.8	120	240	0.629
1.5	13.3	13.5	120	240	0.645

CAPACITANCE

NOMINAL CROSS SECTIONAL AREA mm2	CAPACITANCE pF/m	
	Nominal	Maximum
Core / Core Screened		
0.5	84	90
1.0	104	112
1.5	101	121
Core / Screen		
0.5	158	169
1.0	196	210
1.5	190	228
Core / Core No Screen		
0.5	53	56
1.0	63	66
1.5	61	70
Core / Screen OS only		
0.5	100	106
1.0	119	124
1.5	115	131