Pairs - Overall Screen - Unarmoured

Cu - PVC or PE or XLPE - Al Screen - PVC or LSHF
BS 5308 - IEC

APPLICATION

Cables for signalling systems, instrumentation and control of electrical mechanisms grouped in pairs. Maximum rated voltage 500 V (peak value, not for power supply), Indicated for fixed installations, indoor or outdoor, protected or not.

CABLE DESIGNATION

Cu / PVC / Al screen / PVC
Cu / PE / Al screen / PVC
Cu / XLPE / Al screen / PVC
Cu / XLPE / Al screen / LSHF

CONSTRUCTION CHARACTERISTICS

Conductor

Rigid (class 2) of flexible (class 5) copper, sizes 0.5 mm^2; 1.0 mm^2 and 1.5 mm^2, as per IEC 60228.

Insulation

PVC, solid polyethylene or cross-linked polyethylene.

Arrangement (formation)

Stranded pairs.

Core assembly

Concentric layers.

Core wrapping

Dielectric tape, helically applied with an overlap.

Shield (screen)

Aluminium / polyester tape applied helically with an overlap.
A 0.5 mm^2 tinned copper drain wire is applied under the tape.

Oversheath (jacket)

Extruded PVC or LSHF – Low Smoke Halogen Free thermoplastic compound.Fire retardant.

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GENERAL AND ELECTRICAL CHARACTERISTICS (20°C)

		0.5 mm²	1.0 mm²	1.5 mm²
Maximum resistance of conductor at 20°C dc(Ω/km)	Class 2	36.7	18.5	12.3
	Class 5	39.8	19.9	13.6
Dielectric strength (60s) – 500 V rating		3 kV_{dc} or 2.0 kV_{ac}		
Mutual capacitance		Polyolefin: < 150 nF/km PVC: < 250 nF/km		
Capacitance unbalance		500 pF/500m		

DIMENSIONAL CHARACTERISTICS

Rigid Cu • PE • Al screen • PVC – 500V rating

N.° of pairs	0.5 mm²		1.0 mm²		1.5 mm²	
	Diameter (mm)	Weight (kg/km)	Diameter (mm)	Weight (kg/km)	Diameter (mm)	Weight (kg/km)
4	11.0	130	12.5	170	14.0	230
7	13.5	190	15.0	270	16.5	360
9	16.5	250	18.5	350	20.5	470
12	18.0	320	20.0	430	22.0	580
19	21.0	460	24.0	650	26.5	890
27	25.5	640	28.5	900	31.5	1 230
37	28.5	840	32.0	1 200	36.0	1 650

Flexible Cu • PE • Al screen • PVC – 500V rating

N.º of pairs	0.5 mm²		1.0 mm²		1.5 mm²	
	Diameter (mm)	Weight (kg/km)	Diameter (mm)	Weight (kg/km)	Diameter (mm)	Weight (kg/km)
4	11.0	130	12.5	180	14.0	230
7	13.0	190	15.5	280	17.0	350
9	16.0	250	19.0	360	20.5	450
12	17.5	310	20.5	450	22.5	560
19	21.0	440	24.5	670	26.5	850
27	25.0	610	29.5	930	32.0	1170
37	28.5	790	33.0	1220	36.5	1570