

APPLICATION

Cables for signalling systems, instrumentation and control of electrical mechanisms, grouped in individual shielded 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 / Al Screen / PVC

Cu / PE / Al Screen / Al Screen / PVC

Cu / XLPE / Al Screen / Al Screen / PVC

Cu / XLPE / Al Screen / Al Screen / LSHF

CONSTRUCTION CHARACTERISTICS

Conductor

Rigid (class 2) of flexible (class 5) copper, sizes 0.5 mm²; 1.0 mm² and 1.5 mm², as per IEC 60228.

Insulation

PVC, solid polyethylene or cross-linked polyethylene.

Arrangement (formation)

Stranded pairs.

Shield (Pair)

Aluminium / polyester tape applied helically with an overlap.

A 0.5 mm² tinned copper drain wire is applied under the tape.

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 mm² tinned copper drain wire is applied under the tape.

Oversheath (jacket)

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



LOW VOLTAGE CABLES

INSTRUMENTATION CABLES

Pairs - Screened Pair - Unarmoured
 Cu - PVC or PE or XLPE insulation - Individual Al Screen
 Colective Al Screen - PVC or LSHF BS 5308-IEC

GENERAL AND ELECTRICAL CHARACTERISTICS (20°C)

		0.5 mm ²	1.0 mm ²	1.5 mm ²
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 • XLPE • Al screen • Al screen • PVC – 500V rating

N.º of pairs	0.5 mm ²		1.0 mm ²		1.5 mm ²	
	Diameter (mm)	Weight (kg/km)	Diameter (mm)	Weight (kg/km)	Diameter (mm)	Weight (kg/km)
4	12.5	140	14.0	190	15.0	240
7	15.0	210	17.0	290	18.5	370
9	18.5	270	20.5	380	23.0	500
12	20.0	340	22.5	480	25.0	630
19	23.5	490	26.5	690	29.5	930
27	28.5	670	32.0	970	36.0	1 300
37	32.5	900	36.5	1 270	40.5	1 740

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

N.º of pairs	0.5 mm ²		1.0 mm ²		1.5 mm ²	
	Diameter (mm)	Weight (kg/km)	Diameter (mm)	Weight (kg/km)	Diameter (mm)	Weight (kg/km)
4	12.5	140	14.5	200	15.5	240
7	15.0	210	17.0	300	18.5	360
9	18.5	270	21.0	390	23.0	480
12	20.0	330	23.0	490	25.0	610
19	23.5	470	27.5	710	30.0	890
27	28.5	650	33.0	990	36.5	1240
37	32.0	850	37.5	1 300	41.0	1650