

APPLICATION

Armoured 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, Can be installed directly or buried.

CABLE DESIGNATION

Cu / PVC / Al Screen / Al Screen / PVC / STA (Steel tape armour) / PVC
Cu / PVC / Al Screen / Al Screen / PVC / SWA (Steel wire armour) / PVC
Cu / PE / Al Screen / Al Screen / PVC / STA (Steel tape armour) / PVC
Cu / PE / Al Screen / Al Screen / PVC / SWA (Steel wire armour) / PVC
Cu / XLPE / Al Screen / Al Screen / PVC / STA (Steel tape armour) / PVC
Cu / XLPE / Al Screen / Al Screen / PVC / SWA (Steel wire armour) / PVC
Cu / XLPE / Al Screen / Al Screen / LSHF / STA (Steel tape armour) / LSHF
Cu / XLPE / Al Screen / Al Screen / LSHF / SWA (Steel wire armour) / LSHF
F – Flexible

CONSTRUCTION CHARACTERISTICS

Conductor

Rigid (class 2) or 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.

Inner sheath (jacket)

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

Armour

Double steel tape armour or galvanised steel wire armour, helically applied.

Oversheath (jacket)

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



LOW VOLTAGE CABLES

CONTROL & INSTRUMENTATION CABLES

Pairs - Screened Pair - Armoured
 Cu-PVC or PE or XLPE Insulation-Individual Al Screen
 Coll. Al Screen-PVC or LSHF-STA or SWA-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 • SWA • 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	17.0	460	18.5	540	19.5	610
7	19.5	580	21.0	690	23.5	990
9	23.5	890	26.0	1 060	28.0	1 220
12	25.0	990	27.5	1 200	30.0	1 420
19	29.0	1 250	31.5	1 530	34.5	1 850
27	33.5	1 580	38.0	2 170	42.0	2 680
37	38.0	2 120	42.5	2 690	47.0	3 590

Flexible Cu • XLPE • Al screen • Al screen • PVC • SWA • 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	16.5	450	18.5	550	20.0	610
7	19.5	570	21.5	700	24.0	980
9	23.5	870	26.5	1 080	28.5	1 220
12	25.0	980	28.0	1 220	30.5	1 410
19	28.5	1 220	32.5	1 570	35.0	1 820
27	33.5	1 540	38.5	2 230	42.5	2 640
37	38.0	2 060	43.5	2 740	47.5	3 540