

APPLICATION

Power cables for energy supply used in industry, distribution boards and power stations, for rated voltage up to 0.6/1kV. The concentric conductor can be used as neutral*– protective earthed conductor, Suitable for fixed installations indoor or outdoor.

CABLE DESIGNATION

Cu / XLPE / Cu wire conductor / PVC
F – Flexible

CONSTRUCTION CHARACTERISTICS

Conductor

Copper (plain annealed): stranded class 2, sector shape or circular, or circular flexible class 5.

Insulation

XLPE – (Cross-linked polyethylene).

Bedding/Inner sheath

PVC – (Polyvinyl chloride).

Neutral/Earth concentric conductor (CNE)

Single layer of plain annealed copper wires helically applied.

Oversheath

PVC – (Polyvinyl chloride).

GENERAL CHARACTERISTICS

Construction and test standards	IEC 60228 IEC 60502-1
Rated voltage U_0/U	0.6 / 1 kV
Test voltage	3.5 kV a.c. 5 minutes
Conductor maximum operating temperature	90°C
Maximum short-circuit temperature	250°C ($t \leq 5s$)



GENERAL CHARACTERISTICS

Minimum bending radius (mm) (permanent after installation) (during installation)	4xd if $d < 25$ · 6xd if $d \geq 25$ · 8xd if sector shape cond. 6xd if $d < 25$ · 9xd if $d \geq 25$ · 12xd if sector shape cond.
Maximum pulling force over conductor (N)	50 x S recommended not to exceed 20000 N
Flame retardant	IEC 60332-1-2 · EN 60332-1-2 (cable vertically mounted. length of charred cable \leq 540 mm)

d – cable outer diameter (mm)
S – conductor cross-section (mm²)

ELECTRICAL AND DIMENSIONAL CHARACTERISTICS

Cable composition n.º cond. x cross-section (mm ²)	Approximate outer diameter (mm)	Approximate weight (kg/km)	Current carrying capacity, in open air ⁽¹⁾ T = 30° C (A)
3 x 6 / 6	17,0	460	44
3 x 10 / 10	18,5	645	58
3 x 16 / 16	20,5	910	75
3 x 25 / 16	24,5	1275	96
3 x 35 / 16	24,5	1405	115
3 x 50 / 25	27,5	1870	135
3 x 70 / 35	31,5	2625	167
3 x 95 / 50	35,5	3560	197
3 x 120 / 70	39,0	4520	223
3 x 150 / 70	43,0	5395	251
3 x 185 / 95	47,0	6815	281
4 x 6 / 6	17,5	525	44
4 x 10 / 10	19,5	755	58
4 x 16 / 16	22,5	1100	75
4 x 25 / 16	26,0	1530	96
4 x 35 / 16	27,5	1780	115
4 x 50 / 25	31,5	2455	135
4 x 70 / 35	36,0	3370	167
4 x 95 / 50	39,5	4570	197
4 x 120 / 70	44,5	5760	223
4 x 150 / 70	46,5	6625	251

Other compositions are available, contact info@fast-cables.com for information.

(1) Current ratings for 3 phase systems.
Sector shape conductors for phase conductors with cross-section higher than 25 mm².