

APPLICATION

Power supply cable for rated voltage up to 0.6/1kV. Suitable for indoor and outdoor fixed installations protected or not, in industrial areas, buildings and similar applications.

CABLE DESIGNATION

Cu / LSHF / LSHF

CONSTRUCTION CHARACTERISTICS

Conductor

Copper (plain annealed): solid class 1 or stranded class 2 or flexible class 5, circular or sector shaped

Insulation

LSHF – Low Smoke Halogen Free thermoplastic compound. Fire retardant.

Oversheath

LSHF – Low Smoke Halogen Free thermoplastic compound. Fire retardant.

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	70°C
Maximum short-circuit temperature	160°C (t ≤ 5s)
Minimum bending radius (mm) (permanent, after installation) (during installation)	4xd if d < 25 · 6xd if d ≥ 25 · 8xd if sector shape cond. 6xd if d < 25 · 9xd if d ≥ 25 · 12xd if sector shape cond.
Maximum pulling force over conductor (N)	Copper – 50 x S
Flame retardant	IEC 60332-1-2 · EN 60332-1-2 (cable vertically mounted, length of charred cable ≤ 540 mm)
Fire retardant (frt)	IEC 60332-3-24 · EN 60332-3-24 (bunch of cables vertically mounted on a ladder, length of charred cable ≤ 2.5 m)
Halogen free (zh)	
Low smoke	IEC 61034-2 · EN 61034-2 (cable light transmittance ≥ 60%)
Low toxicity	IEC 60754-1 · EN 50267-2-1 (halogen acid gas content ≤ 0.5%)
Low corrosivity	IEC 60754-2 · EN 50267-2-3 (pH ≥ 4.3 · conductivity ≤ 10 μS/mm)

S – conductor cross-section (mm²)

d – cable outer diameter (mm)



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 ⁽²⁾ T = 30°C (A)	
			2 charged conductors	3 charged conductors
Cu / LSHF / LSHF				
1x1.5	6.0	57	17.5	15.5
1x2.5	6.4	70	24	21
1x4.0	7.4	95	32	28
1x6.0	7.9	121	41	36
1x10	8.8	166	57	50
1x16	9.9	230	76	68
1x25	11.5	328	131	110
1x35	12.5	428	162	137
1x50	14.0	556	196	167
1x70	15.6	755	251	216
1x95	17.9	1026	304	269
1x120	19.6	1271	352	308
1x150	21.5	1553	406	356
1x185	23.8	1928	463	409
1x240	26.8	2502	546	485
1x300	29.8	3141	629	561
1x400	33.4	4005	754	656
1x500	39.4	4957	868	749
1x630	43.4	6338	1005	855
2x1.5	10.0	126	22	
2x2.5	10.8	153	30	
2x4.0	12.7	208	40	
2x6.0	13.8	258	51	
2x10	15.6	356	70	
2x16	17.8	494	94	
2x25	21.0	698	119	
2x35	23.0	892	148	
2x50	26.0	1161	180	
3x1.5	10.5	154	22	18.5
3x2.5	11.4	197	30	25
3x4.0	13.4	265	40	34
3x6.0	14.7	342	51	43
3x10	16.6	476	70	60
3x16	18.9	677	94	80
3x25	19.3	919	119	101
3x35	21.3	1209	148	126
3x50	24.6	1610	180	153

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 ⁽²⁾ T = 30°C (A)	
			2 charged conductors	3 charged conductors
3x70	27.3	2204		196
3x95	31.5	3028		238
3x120	34.2	3751		276
3x150	38.0	4591		319
3x185	41.9	5713		364
3x240	47.2	7413		430
3x300	52.1	9294		497
3x400	59.2	11678		597
3x16+1x10	20.8	808		80
3x25+1x16	23.1	1151		101
3x35+1x16	25.6	1433		126
3x50+1x25	29.9	1952		153
3x70+1x35	33.6	2669		196
3x95+1x50	38.8	3640		238
3x120+1x70	42.3	4583		276
3x150+1x70	47.2	5470		319
3x185+1x95	52.0	6882		364
3x240+1x120	58.8	8073		430
3x300+1x150	65.1	11107		497
3x400+1x185	74.0	13926		597
4x1.5	11.3	192		18.5
4x2.5	12.3	247		25
4x4.0	14.6	329		34
4x6.0	16.0	437		43
4x10	18.2	627		60
4x16	20.8	870		80
4x25	23.1	1250		101
4x35	25.6	1609		126
4x50	29.9	2181		153
4x70	33.6	2997		196
4x95	38.8	4096		238
4x120	42.3	5073		276
4x150	47.2	6232		319
4x185	52.0	7754		364
4x240	58.8	10059		430
4x300	65.1	12634		497
4x400	74.0	15844		597