

APPLICATION

These power cables are used for electricity supply in low voltage installation systems. They are well adapted to underground use in industrial applications with an additional mechanical protection. They are suitable for laying Indoor, tunnel, cable trench, shaft or buried laying, The cable can withstand mechanical external forces and a certain tensile force, it widely used in transformer stations, electric power plants and industrial plants.

CONSTRUCTION

- Conductor: Aluminum, class 1 or class 2, solid or stranded, circular or circular compacted conductors
- Insulation: Cross-linked polyethylene XLPE
- Filler: Non-hygroscopic material
- Binder: Non-hygroscopic material
- Inner sheath: Polyvinyl chloride PVC
- Armour: Steel wire
- Binder: Non-hygroscopic material
- Outer sheath: Polyvinyl chloride PVC

MAIN CHARACTERISTICS

Good electrical and mechanical properties. Cross-linked polyethylene insulation allows greater power capacity under any operating condition, minimum dielectric losses, high insulation resistance. The PVC outer sheath allows an adequate resistance to oil and abrasion.

SPECIFICATION

IEC 60228 Conductors of Insulate Cables

IEC 60502-1 Power Cables with Extruded Insulation and Their Accessories for Rated Voltages from 1kV(Um=1.2kV) up to 30kV(Um=36kV) - Part 1: Cables for Rated Voltages of 1kV (Um=1.2kV) and 3kV(Um=3.6kV)

Parameter
IEC 60502-1

No. of Cores and Nominal Cross Section	Min. Number of Wires	Nominal Insulation Thickness	Nominal	Nominal	Approx.	Approx. Weight	Max. D.C. Resistance of Conductor
			Steel Wire Diameter	Sheath Thickness	Overall Diameter		at 20°C
No. × mm ²	No.	mm	mm	mm	mm	kg/km	Ω/km
2×2.5	1	0.7	0.8	1.8	14.1	314	12.1
2×4	1	0.7	0.8	1.8	15.1	357	7.41
2×6	1	0.7	0.8	1.8	16.1	406	4.61
2×10	6	0.7	1.25	1.8	19.5	619	3.08
2×16	6	0.7	1.25	1.8	21.1	743	1.91
2×25	6	0.9	1.6	1.8	25	1078	1.2
2×35	6	0.9	1.6	1.8	27	1243	0.868
2×50	6	1	1.6	1.8	30	1459	0.641
2×70	12	1.1	1.6	2	33.8	1796	0.443
2×95	15	1.1	2	2.1	39.1	2495	0.32

2×120	15	1.2	2	2.2	42.5	2836	0.253
2×150	15	1.4	2	2.3	46.5	3330	0.206
2×185	30	1.6	2.5	2.5	52.3	4386	0.164
2×240	30	1.7	2.5	2.7	57.7	5192	0.125
2×300	30	1.8	2.5	2.8	63.1	6049	0.1
2×400	53	2	2.5	3.1	70.1	7194	0.0778
3×2.5	1	0.7	0.8	1.8	14.6	340	12.1
3×4	1	0.7	0.8	1.8	15.6	388	7.41
3×6	1	0.7	0.8	1.8	16.7	448	4.61
3×10	6	0.7	1.25	1.8	20.4	682	3.08
3×16	6	0.7	1.25	1.8	22.1	835	1.91
3×25	6	0.9	1.6	1.8	26.2	1221	1.2
3×35	6	0.9	1.6	1.8	28.4	1414	0.868
3×50	6	1	1.6	1.9	31.8	1681	0.641
3×70	12	1.1	2	2	37.2	2389	0.443
3×95	15	1.1	2	2.2	41.5	2895	0.32

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			Steel Wire Diameter	Sheath Thickness	Overall Diameter		at 20°C
No. × mm ²	No.	mm	mm	mm	mm	kg/km	Ω/km
3×120	15	1.2	2	2.3	45.2	3336	0.253
3×150	15	1.4	2.5	2.5	51.1	4415	0.206
3×185	30	1.6	2.5	2.6	55.6	5113	0.164
3×240	30	1.7	2.5	2.8	61.8	6188	0.125
3×300	30	1.8	2.5	3	67.4	7206	0.1
3×400	53	2	2.5	3.2	74.7	8623	0.0778
4×2.5	1	0.7	0.8	1.8	15.4	377	12.1
4×4	1	0.7	0.8	1.8	16.6	436	7.41
4×6	1	0.7	1.25	1.8	18.7	631	4.61
4×10	6	0.7	1.25	1.8	21.8	779	3.08
4×16	6	0.7	1.6	1.8	24.4	1076	1.91
4×25	6	0.9	1.6	1.8	28.3	1404	1.2
4×35	6	0.9	1.6	1.9	30.9	1645	0.868
4×50	6	1	1.6	2	34.7	1977	0.641
4×70	12	1.1	2	2.2	40.7	2829	0.443
4×95	15	1.1	2	2.3	45.3	3434	0.32

4×120	15	1.2	2.5	2.5	51	4442	0.253
4×150	15	1.4	2.5	2.6	55.8	5198	0.206
4×185	30	1.6	2.5	2.8	61.4	6194	0.164
4×240	30	1.7	2.5	3	67.9	7424	0.125
4×300	30	1.8	2.5	3.2	74.1	8695	0.1
4×400	53	2	3.15	3.5	84.1	11526	0.0778
5×2.5	1	0.7	0.8	1.8	16.3	419	12.1
5×4	1	0.7	1.25	1.8	18.5	606	7.41
5×6	1	0.7	1.25	1.8	19.9	704	4.61
5×10	6	0.7	1.25	1.8	23.3	870	3.08
5×16	6	0.7	1.6	1.8	26.1	1227	1.91
5×25	6	0.9	1.6	1.8	30.5	1597	1.2
5×35	6	0.9	1.6	1.9	33.4	1890	0.868
5×50	6	1	2	2.1	39.3	2609	0.641

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			Steel Wire Diameter	Sheath Thickness	Overall Diameter		at 20°C
No. × mm ²	No.	mm	mm	mm	mm	kg/km	Ω/km
5×70	12	1.1	2	2.3	44.3	3271	0.443
5×95	15	1.1	2.5	2.5	51	4494	0.32
5×120	15	1.2	2.5	2.6	55.5	5148	0.253
5×150	15	1.4	2.5	2.8	61.4	6181	0.206
5×185	30	1.6	2.5	3	67.2	7236	0.164
5×240	30	1.7	2.5	3.2	74.4	8761	0.125
5×300	30	1.8	3.15	3.4	82.9	11266	0.1
5×400	53	2	3.15	3.8	92.4	13590	0.0778
3×4+1×2.5	1/1	0.7/0.7	0.8	1.8	16.3	422	7.41/12.1
3×6+1×4	1/1	0.7/0.7	1.25	1.8	18.4	608	4.61/7.41
3×10+1×6	6/15	0.7/0.7	1.25	1.8	21	736	3.08/4.61
3×16+1×10	6/6	0.7/0.7	1.25	1.8	23.2	905	1.91/3.08
3×25+1×16	6/6	0.9/0.7	1.6	1.8	27.3	1321	1.20/1.91
3×35+1×16	6/6	0.9/0.7	1.6	1.8	29.1	1489	0.868/1.91

3×50+1×25	6/6	1.0/0.9	1.6	1.9	33	1831	0.641/1.20
3×70+1×35	12/6	1.1/0.9	2	2.1	38.6	2584	0.443/0.868
3×95+1×50	6/15	1.1/1.0	2	2.2	43	3114	0.320/0.641
3×120+1×70	12/15	1.2/1.1	2	2.4	47.3	3683	0.253/0.443
3×150+1×70	12/15	1.4/1.1	2.5	2.5	52.4	4719	0.206/0.443
3×185+1×95	30/15	1.6/1.1	2.5	2.7	57.5	5527	0.164/0.320
3×240+1×120	30/15	1.7/1.2	2.5	2.9	63.8	6672	0.125/0.253
3×300+1×150	30/15	1.8/1.4	2.5	3	69.5	7800	0.100/0.206
3×400+1×185	53/30	2.0/1.6	3.15	3.3	78.8	10313	0.0778/0.164
3×4+2×2.5	1/1	0.7/0.7	1.25	1.8	18	577	7.41/12.1
3×6+2×4	1/1	0.7/0.7	1.25	1.8	19.3	660	4.61/7.41
3×10+2×6	6/15	0.7/0.7	1.25	1.8	21.9	807	3.08/4.61
3×16+2×10	6/6	0.7/0.7	1.6	1.8	25.3	1138	1.91/3.08
3×25+2×16	6/6	0.9/0.7	1.6	1.8	28.7	1450	1.20/1.91
3×35+2×16	6/6	0.9/0.7	1.6	1.8	30.4	1614	0.868/1.91
3×50+2×25	6/6	1.0/0.9	2	2	36.4	2285	0.641/1.20

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No. × mm ²	No.	mm	mm	mm	mm	kg/km	Ω/km
3×70+2×35	12/6	1.1/0.9	2	2.1	40.4	2814	0.443/0.868
3×95+2×50	6/15	1.1/1.0	2	2.3	45.4	3436	0.320/0.641

3×120+2×70	12/15	1.2/1.1	2.5	2.5	51.6	4566	0.253/0.443
3×150+2×70	12/15	1.4/1.1	2.5	2.6	54.9	5099	0.206/0.443
3×185+2×95	30/15	1.6/1.1	2.5	2.8	60.9	6138	0.164/0.320
3×240+2×120	30/15	1.7/1.2	2.5	3	67	7316	0.125/0.253
3×300+2×150	30/15	1.8/1.4	2.5	3.2	73.4	8591	0.100/0.206
3×400+2×185	53/30	2.0/1.6	3.15	3.5	83	11345	0.0778/0.164
4×4+1×2.5	1/1	0.7/0.7	1.25	1.8	18.2	587	7.41/12.1
4×6+1×4	1/1	0.7/0.7	1.25	1.8	19.6	682	4.61/7.41
4×10+1×6	6/15	0.7/0.7	1.25	1.8	22.6	838	3.08/4.61
4×16+1×10	6/6	0.7/0.7	1.6	1.8	25.7	1182	1.91/3.08
4×25+1×16	6/6	0.9/0.7	1.6	1.8	29.6	1515	1.20/1.91
4×35+1×16	6/6	0.9/0.7	1.6	1.9	32	1750	0.868/1.91
4×50+1×25	6/6	1.0/0.9	2	2.1	38	2485	0.641/1.20
4×70+1×35	12/6	1.1/0.9	2	2.2	42.4	3054	0.443/0.868
4×95+1×50	6/15	1.1/1.0	2	2.4	47.5	3726	0.320/0.641
4×120+1×70	12/15	1.2/1.1	2.5	2.5	53.4	4843	0.253/0.443
4×150+1×70	12/15	1.4/1.1	2.5	2.7	57.9	5608	0.206/0.443
4×185+1×95	30/15	1.6/1.1	2.5	2.9	64	6702	0.164/0.320
4×240+1×120	30/15	1.7/1.2	2.5	3.1	70.7	8012	0.125/0.253
4×300+1×150	30/15	1.8/1.4	3.15	3.3	79	10410	0.100/0.206
4×400+1×185	53/30	2.0/1.6	3.15	3.6	87.6	12438	0.0778/0.164