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. These cables can be laying indoor, tunnel and underground. Able to bear external mechanical force, but unable to bear large pulling force.

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 tape
- Outer sheath: Polyvinyl chloride PVC

MAIN CHARACTERRISTICS

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 Tape Thickness	Sheath Thickness	Overall Diameter		at 20℃
No. × mm2	No.	mm	mm	mm	mm	kg/km	Ω/km
2×2.5	1	0.7	0.2	1.8	13	228	12.1
2×4	1	0.7	0.2	1.8	14	260	7.41
2×6	1	0.7	0.2	1.8	15	300	4.61
2×10	6	0.7	0.2	1.8	17.5	373	3.08
2×16	6	0.7	0.2	1.8	19.1	461	1.91
2×25	6	0.9	0.2	1.8	22.3	609	1.2
2×35	6	0.9	0.2	1.8	24.3	722	0.868
2×50	6	1	0.2	1.8	27.3	874	0.641
2×70	12	1.1	0.2	1.9	30.9	1106	0.443
2×95	15	1.1	0.2	2	35.4	1433	0.32
2×120	15	1.2	0.5	2.2	40.2	2078	0.253
2×150	15	1.4	0.5	2.3	44.2	2465	0.206

2×185	30	1.6	0.5	2.5	49	2977	0.164
2×240	30	1.7	0.5	2.6	54.2	3603	0.125
2×300	30	1.8	0.5	2.8	59.8	4330	0.1
2×400	53	2	0.5	3	66.6	5268	0.0778
3×2.5	1	0.7	0.2	1.8	13.5	249	12.1
3×4	1	0.7	0.2	1.8	14.5	287	7.41
3×6	1	0.7	0.2	1.8	15.6	335	4.61
3×10	6	0.7	0.2	1.8	18.4	422	3.08
3×16	6	0.7	0.2	1.8	20.1	529	1.91
3×25	6	0.9	0.2	1.8	23.5	711	1.2
3X35	6	0.9	0.2	1.8	25.7	853	0.868
3×50	6	1	0.2	1.8	28.9	1045	0.641
3×70	12	1.1	0.2	2	33.7	1409	0.443
3×95	15	1.1	0.5	2.2	39.2	2153	0.32

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 Tape Thickness	Sheath Thickness	Overall Diameter		at 20℃
No. × mm2	No.	mm	mm	mm	mm	kg/km	Ω/km
3×120	15	1.2	0.5	2.3	42.9	2517	0.253
3×150	15	1.4	0.5	2.4	47.6	3043	0.206
3×185	30	1.6	0.5	2.6	52.3	3636	0.164
3×240	30	1.7	0.5	2.7	58.3	4504	0.125
3×300	30	1.8	0.5	2.9	63.9	5362	0.1
3×400	53	2	0.5	3.2	71.4	6602	0.0778
4×2.5	1	0.7	0.2	1.8	14.3	278	12.1
4×4	1	0.7	0.2	1.8	15.5	325	7.41
4×6	1	0.7	0.2	1.8	16.7	383	4.61
4×10	6	0.7	0.2	1.8	19.8	487	3.08
4×16	6	0.7	0.2	1.8	21.7	619	1.91
4×25	6	0.9	0.2	1.8	25.6	843	1.2
4×35	6	0.9	0.2	1.8	28	1021	0.868
4×50	6	1	0.2	1.9	31.8	1274	0.641
4×70	12	1.1	0.2	2.1	37	1723	0.443
4×95	15	1.1	0.5	2.3	43	2599	0.32
4×120	15	1.2	0.5	2.4	47.5	3100	0.253
4×150	15	1.4	0.5	2.6	52.5	3724	0.206

4×185	30	1.6	0.5	2.7	57.9	4503	0.164
4×240	30	1.7	0.5	2.9	64.4	5552	0.125
4×300	30	1.8	0.5	3.1	70.6	6634	0.1
4×400	53	2	0.5	3.4	79.3	8279	0.0778
5×2.5	1	0.7	0.2	1.8	15.2	311	12.1
5×4	1	0.7	0.2	1.8	16.5	365	7.41
5×6	1	0.7	0.2	1.8	17.9	434	4.61
5×10	6	0.7	0.2	1.8	21.3	558	3.08
5×16	6	0.7	0.2	1.8	23.4	717	1.91
5×25	6	0.9	0.2	1.8	27.8	985	1.2
5×35	6	0.9	0.2	1.9	30.7	1214	0.868
5×50	6	1	0.2	2	35.6	1571	0.641

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 Tape Thickness	Sheath Thickness	Overall Diameter		at 20℃
No. × mm2	No.	mm	mm	mm	mm	kg/km	Ω/km
5×70	12	1.1	0.5	2.3	42	2470	0.443
5×95	15	1.1	0.5	2.4	47.5	3121	0.32
5×120	15	1.2	0.5	2.5	52	3677	0.253
5×150	15	1.4	0.5	2.7	57.9	4489	0.206
5×185	30	1.6	0.5	2.9	63.7	5393	0.164
5×240	30	1.7	0.5	3.1	70.9	6670	0.125
5×300	30	1.8	0.5	3.4	78.3	8106	0.1
5×400	53	2	0.8	3.7	88.8	10874	0.0778
3×4+1×2.5	1/1	0.7/0.7	0.2	1.8	15.2	313	7.41/12.1
3×6+1×4	1/1	0.7/0.7	0.2	1.8	16.4	368	4.61/7.41
3×10+1×6	6/15	0.7/0.7	0.2	1.8	19	461	3.08/4.61
3×16+1×10	6/6	0.7/0.7	0.2	1.8	21.2	586	1.91/3.08
3×25+1×16	6/6	0.9/0.7	0.2	1.8	24.6	786	1.20/1.91
3×35+1×16	6/6	0.9/0.7	0.2	1.8	26.4	917	0.868/1.91

3×50+1×25	6/6	1.0/0.9	0.2	1.9	30.3	1166	0.641/1.20
3×70+1×35	12/6	1.1/0.9	0.2	2	34.9	1545	0.443/0.868
3×95+1×50	6/15	1.1/1.0	0.5	2.2	40.7	2344	0.320/0.641
3×120+1×70	12/15	1.2/1.1	0.5	2.3	44.8	2801	0.253/0.443
3×150+1×70	12/15	1.4/1.1	0.5	2.5	49.1	3311	0.206/0.443
3×185+1×95	30/15	1.6/1.1	0.5	2.6	54	3974	0.164/0.320
3×240+1×120	30/15	1.7/1.2	0.5	2.8	60.3	4934	0.125/0.253
3×300+1×150	30/15	1.8/1.4	0.5	3	66.2	5903	0.100/0.206
3×400+1×185	53/30	2.0/1.6	0.5	3.2	74	7306	0.0778/0.164
3×4+2×2.5	1/1	0.7/0.7	0.2	1.8	16	343	7.41/12.1
3×6+2×4	1/1	0.7/0.7	0.2	1.8	17.3	406	4.61/7.41
3×10+2×6	6/15	0.7/0.7	0.2	1.8	19.9	508	3.08/4.61
3×16+2×10	6/6	0.7/0.7	0.2	1.8	22.6	653	1.91/3.08
3×25+2×16	6/6	0.9/0.7	0.2	1.8	26	875	1.20/1.91
3×35+2×16	6/6	0.9/0.7	0.2	1.8	27.7	1001	0.868/1.91
3×50+2×25	6/6	1.0/0.9	0.2	1.9	32.7	1332	0.641/1.20

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 Tape Thickness	Sheath Thickness	Overall Diameter		at 20℃
No. × mm2	No.	mm	mm	mm	mm	kg/km	Ω/km

3×70+2×35	12/6	1.1/0.9	0.2	2.1	36.9	1726	0.443/0.868
3×95+2×50	6/15日	1.1/1.0	0.5	2.3	43.1	2599	0.320/0.641
3×120+2×70	12/15	1.2/1.1	0.5	2.4	48.1	3198	0.253/0.443
3×150+2×70	12/15	1.4/1.1	0.5	2.5	51.4	3627	0.206/0.443
3×185+2×95	30/15	1.6/1.1	0.5	2.7	57.4	4478	0.164/0.320
3×240+2×120	30/15	1.7/1.2	0.5	2.9	63.5	5467	0.125/0.253
3×300+2×150	30/15	1.8/1.4	0.5	3.1	69.9	6560	0.100/0.206
3×400+2×185	53/30	2.0/1.6	0.5	3.4	78.2	8146	0.0778/0.164
4×4+1×2.5	1/1	0.7/0.7	0.2	1.8	16.2	354	7.41/12.1
4×6+1×4	1/1	0.7/0.7	0.2	1.8	17.6	420	4.61/7.41
4×10+1×6	6/15	0.7/0.7	0.2	1.8	20.6	533	3.08/4.61
4×16+1×10	6/6	0.7/0.7	0.2	1.8	23	684	1.91/3.08
4×25+1×16	6/6	0.9/0.7	0.2	1.8	26.9	930	1.20/1.91
4×35+1×16	6/6	0.9/0.7	0.2	1.8	29.1	1100	0.868/1.91
4×50+1×25	6/6	1.0/0.9	0.2	2	34.3	1464	0.641/1.20
4×70+1×35	12/6	1.1/0.9	0.5	2.2	40.1	2275	0.443/0.868
4×95+1×50	6/15	1.1/1.0	0.5	2.3	45	2825	0.320/0.641
4×120+1×70	12/15	1.2/1.1	0.5	2.5	50.1	3447	0.253/0.443
4×150+1×70	12/15	1.4/1.1	0.5	2.6	54.4	4023	0.206/0.443
4×185+1×95	30/15	1.6/1.1	0.5	2.8	60.5	4931	0.164/0.320
4×240+1×120	30/15	1.7/1.2	0.5	3	67.2	6062	0.125/0.253
4×300+1×150	30/15	1.8/1.4	0.5	3.2	74.2	7346	0.100/0.206
4×400+1×185	53/30	2.0/1.6	0.8	3.6	84.2	9900	0.0778/0.164

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