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درباره ما

شرکت سیم و کابل دامغان در سال ۱۳۶۹ در زمینی به وسعت ۱۱۰۰۰ متر مربع و ۱۸۵۰ متر سالن تولید و ۷۵۰ متر مربع سالن اداری و آزمایشگاه کنترل کیفی احداث و با تولید انواع سیم های فشار ضعیف شروع به فعالیت نمود. در سال ۱۳۹۰ این شرکت با تغییر مدیریت و رویکردی جدید اقدام به اصلاح و بازسازی و بروزرسانی خطوط تولید و تجهیز آزمایشگاه کنترل کیفی با هدف تنوع محصولات و ارتقاء کیفیت نمود و با جذب نیروهای متخصص علاوه بر افزایش ظرفیت تولید موفق به دریافت گواهینامه های -OHSAS1 8001:2007- ISO 9001:2008 IMS -ISO45001:2018- ISO14001:2015- و همچنین تأییدیه های متعدد از مراجع ذیصلاح مانند موسسه استاندارد، پژوهشگاه نیرو و توانیر در خصوص انواع سیم و کابل افشان و کابل های قدرت و بالابر گردیده و در سال ۱۳۹۶ نیز با نصب و راه اندازی ماشین آلات جدید موفق به تولید و اخذ استانداردهای کابل خودنگهدار و هادی های هوایی روکش دار 20 کیلو ولت و کابل های آلومینیومی گردیده است. در سال 1402 نیز با بهره برداری از سالن جدید، ظرفیت تولید شرکت 40 درصد افزایش یافت و تولید کابل های فشار متوسط و قوی و تولید مفتول آلومنیوم در دستور کار این شرکت قرار گرفت. این شرکت از سال ۱۳۹۷ موفق به صادرات به کشور تاجیکستان گردید و ظرف مدت 3 سال با توجه به کیفیت، مشتری مداری و قیمت رقابتی محصولات، موفق به صادرات و گرفتن بخشی از بازار کشورهای آسیای میانه، افغانستان و عراق گردیده است و درصدد ورود به بازار کشورهای حاشیه خلیج فارس و آفریقا نیز می باشد.

Damghan Wire and Cable Company was established in 1990 on a land area of 11,000 square meters, with 1,850 square meters of production hall and 750 square meters of administrative and quality control laboratory space, and began operations by producing various low-voltage wires. In 2011, with a management change and a new approach, this company undertook to renovate, refurbish, and upgrade production lines and equip the quality control laboratory with the aim of diversifying products and improving quality, and by attracting skilled personnel, in addition to increasing production capacity, succeeded in obtaining certifications such as OHSAS 18001:2007, ISO 14001:2015, ISO 45001:2018, ISO 9001:2008 IMS, as well as multiple approvals from competent authorities such as the Institute of Standards, Niroo Research Institute, and Tavanir company for various types of stranded conductors, power cables, and elevator cables. In 2017, with the installation and operation of new machinery, the company succeeded in producing and obtaining standards for Aerial Bundled Cable(ABC) , 20 kV insulated aerial conductors, and aluminum cables. In 2023, with the operation of a new hall, the company's production capacity increased by 40% and the production of medium and high and aluminum wire was placed on the company's agenda. Since 2018, the company has been successful in exporting to Tajikistan and within three years, due to quality, customer orientation, and competitive pricing of products, it has managed to export and gain a share of the markets in Central Asian countries, Afghanistan, and Iraq, and is also aiming to enter the markets of the Persian Gulf countries and Africa.



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Wire & Cable

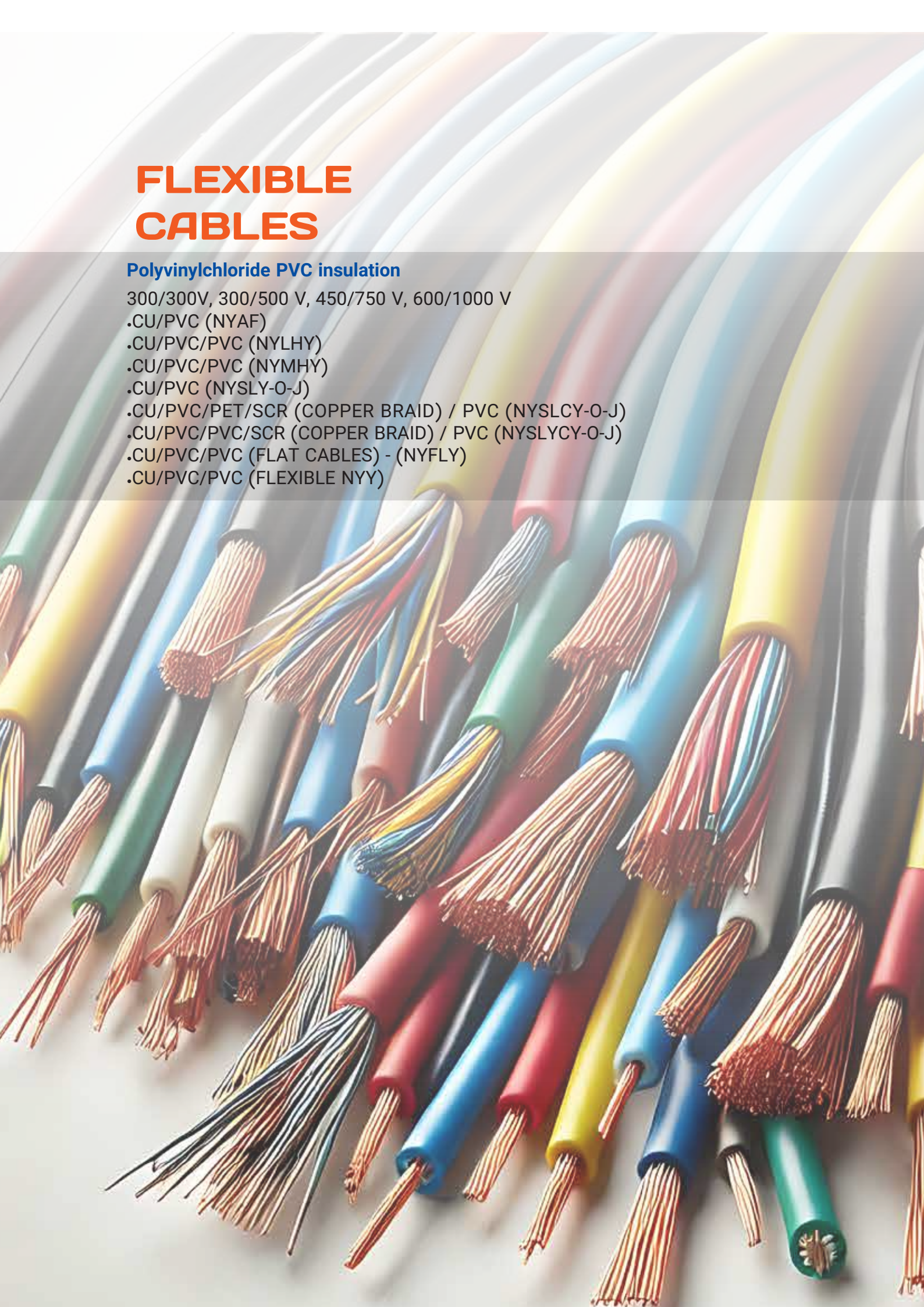
FLEXIBLE CABLES

FLEXIBLE CABLES

Polyvinylchloride PVC insulation

300/300V, 300/500 V, 450/750 V, 600/1000 V

- .CU/PVC (NYAF)
- .CU/PVC/PVC (NYLHY)
- .CU/PVC/PVC (NYMHY)
- .CU/PVC (NYSLY-O-J)
- .CU/PVC/PET/SCR (COPPER BRAID) / PVC (NYSLCY-O-J)
- .CU/PVC/PVC/SCR (COPPER BRAID) / PVC (NYSLYCY-O-J)
- .CU/PVC/PVC (FLAT CABLES) - (NYFLY)
- .CU/PVC/PVC (FLEXIBLE NYY)



PVC INSULATED NON SHEATED SINGLE CORE WIRE

Application:

These cables are used for the purpose of lighting in residential and commercial building in surface mounted or embedded conduits. Suitable for voltages up to 1000 VAC or up to 750 VDC to earth when used for fixed installation indoor applications.

Specification:

IEC 60227-3, BS-6004, VDE-0250, ISIRI (607)02

Construction:

- 1) Conductor: Plain annealed flexible copper stranded as per class 5 of IEC60228, VDE 0295, ISIRI 3084
- 2) Insulation Polyvinyl chloride- PVC



Size	No. strand x diameter	Insulation thickness	Approx. Overall diameter	Approx. weight	Max. d.c. resistance
mm ²	Nxdmm	mm	Kg/km	mm	Ω/km
0.5	16x0.2	0.6	2.2	9	39
0.75	24x0.2	0.6	2.4	12	26
1.0	32x0.2	0.6	2.6	15	19.5
1.5	30x0.25	0.7	3.0	21	13.3
2.5	50x0.25	0.8	3.6	33	7.98
4.0	56x0.3	0.8	4.2	48	4.95
6.0	84x0.3	0.8	4.8	68	3.30
10	80x0.4	1.0	6.1	114	1.91
16	127x0.4	1.0	7.1	173	1.21
25	199x0.4	1.2	9.3	272	0.780
35	278x0.4	1.2	10.7	365	0.554
50	398x0.4	1.4	12.6	520	0.386
70	357x0.5	1.4	14.4	712	0.272
95	484x0.5	1.6	16.4	956	0.206
120	612x0.5	1.6	18.2	1210	0.161
150	765x0.5	1.8	20.2	1520	0.129
185	943x0.5	2.0	22.4	1874	0.106
240	1224x0.5	2.2	25.4	2420	0.0801

Technical data:

- 1) Temperature: -25°C to +70°C
- 2) Working voltage: 300/500 V up to 1.0 mm², 450/750 V for 1.5mm² and above
- 3) Conductor resistance: As per class 5 of IEC 60228
- 4) Test voltage: 1500VAC for 300/500 V, 2500 VAC for 450/750 V for 5 minute
- 5) Flame retardant: Acc. IEC 60332-1

FLEXIBLE PVC CABLES WITH PVC INSULATION

Application:

Application: These cables are useful for use in dry or damp locations for medium duties in domestic premises, kitchens, office. Suitable for washing machines, refrigerator etc. Can be used for cooking and heating appliance provided that the cable does not come in contact with the hot parts.

Specification:

IEC 60227, BS-6500, VDE-0250, ISIRI (607)53

Construction:

- 1) Conductor: Plain annealed copper stranded as per class 5 of IEC 60228, VDE0295, ISIRI 3084
 - 2) Insulation: Polyvinyl chloride -PVC
 - 3) Core identification: colour
 - 4) Assembly: Core twisted together to make a round assembly with fillers wherever necessary.
 - 5) Outer sheath: Polyvinyl chloride -PVC.
- standard colour is black, but any other colour can be supplied on request.



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Size	No. strand x diameter	Insulation thickness	Approx. Overall diameter	Approx. weight	Max. d.c. resistance
mm ²	Nxdmm	mm	Kg/km	mm	Ω/km
2x0.75	24x0.2	0.6	0.8	6.5	61
2x1	32x0.2	0.6	0.8	6.8	70
2x1.5	30x0.25	0.7	0.8	7.7	91
2x2.5	50x0.25	0.8	1.0	9.4	138
2x4	56x0.3	0.8	1.1	10.7	190
3x0.75	24x0.2	0.6	0.8	6.9	72
3x1	32x0.2	0.6	0.8	7.2	84
3x1.5	30x0.25	0.7	0.9	8.4	112
3x2.5	50x0.25	0.8	1.1	10.2	172
3x4	56x0.3	0.8	1.2	11.6	240
4x0.75	24x0.2	0.6	0.9	7.7	90
4x1	32x0.2	0.6	0.9	8.1	104
4x1.5	30x0.25	0.7	1.0	9.3	142
4x2.5	50x0.25	0.8	1.1	11.1	210
4x4	56x0.3	0.8	1.2	12.6	295
5x0.75	24x0.2	0.6	0.9	8.4	110
5x1	32x0.2	0.6	0.9	8.8	130
5x1.5	30x0.25	0.7	1.1	10.4	180
5x2.5	50x0.25	0.8	1.2	12.4	265
5x4	56x0.3	0.8	1.4	14.4	380

Technical data:

- 1) Temperature: -25°C to +70°C
- 2) Working voltage: 300/500 V R.M.S
- 3) Conductor resistance: As per class 5 of IEC 60228
- 4) Test voltage: 2000 VAC for 5 minute
- 5) Flame retardant: Acc. IEC 60332-1

FLEXIBLE PVC CABLES

Application:

These flexible control cables is suitable for all electrical installation in dry or humid location, under industrial condition, but not in the open air. Applications include machine tool manufacture, power station, heating and air conditioning installation etc.

Specification:

VDE - 0281, ISIRI(3569-1)

Construction:

- 1) Conductor: Plain annealed copper stranded as per class 5 of IEC 60228 or VDE0295
- 2) Insulation Polyvinyl chloride -PVC
- 3) Core identification: colour
- 4) Assembly: Core twisted together to make a round assembly with fillers wherever necessary.
- 5) Outer sheath: Polyvinyl chloride -PVC standard colour is black, but any other colour can be supplied on request.



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Size	No. strand x diameter	Insulation thickness	Sheath thickness	Approx. Overall diameter	Approx. weight
mm ²	Nxdmm	mm	mm	m	Kg/km
2x6	84x0.3	0.8	1.2	12	257
2x10	80x0.4	1.0	1.4	14.6	400
2x16	127x0.4	1.0	1.4	17.5	585
3x6	84x0.3	0.8	1.4	12.8	320
3x10	80x0.4	1.0	1.4	16.4	535
3x16	127x0.4	1.0	1.4	19.2	780
4x6	84x0.3	0.8	1.4	14	395
4x10	80x0.4	1.0	1.4	18	655
4x16	127x0.4	1.0	1.6	21	965
5x6	84x0.3	0.8	1.4	15.5	480
5x10	80x0.4	1.0	1.6	20.2	820
5x16	127x0.4	1.0	1.8	23.2	1160

Technical data:

- 1) Temperature: -25°C to +70°C
- 2) Working voltage: 450/750 V R.M.S
- 3) Conductor resistance: As per class 5 of IEC 60228
- 4) Test voltage: 2500 VAC for 5 minute
- 5) Flame retardant: Acc. IEC 60332-1

کابل های قابل انعطاف کنترل افشان با عایق PVC FLEXIBLE PVC CABLES

Application:

These cables are recommended for all electrical installations in dry or humid locations. These cables are specially suitable for control purposes in machine tool manufacturing, production lines, industrial plants, air conditioning installation and steel plants.

Specification:

IEC 60227, VDE-0250

Construction:

- 1) Conductor: Plain annealed copper stranded as per class 5 of IEC 60228 or VDE0295
- 2) Insulation: Polyvinyl chloride -PVC
- 3) Core identification: Black with white numbered. Cables with three or more cores shall have one core coloured green/yellow.
- 4) Assembly: The cores twisted together, if necessary in several concentric layers. The assembly is covered with a polyester tape if necessary
- 5) Outer sheath: Polyvinyl chloride -PVC.
standard colour is black, but any other colour can be supplied on request.



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Size	No. strand x diameter	Insulation thickness	Sheath thickness	Approx. Overall diameter	Approx. weight
mm ²	Nxdmm	mm	mm	mm	Kg/km
2x1.5	30x0.25	0.6	0.8	7.2	84
3x1.5	30x0.25	0.6	0.8	7.7	104
4x1.5	30x0.25	0.6	1.0	8.8	135
5x1.5	30x0.25	0.6	1.0	9.6	164
6x1.5	30x0.25	0.6	1.0	10.4	198
7x1.5	30x0.25	0.6	1.2	10.8	215
8x1.5	30x0.25	0.6	1.2	13	285
10x1.5	30x0.25	0.6	1.2	13.6	300
12x1.5	30x0.25	0.6	1.2	14	345
14x1.5	30x0.25	0.6	1.4	15.2	385
16x1.5	30x0.25	0.6	1.5	16.2	470
20x1.5	30x0.25	0.6	1.6	18.6	605
24x1.5	30x0.25	0.6	1.8	20.5	695
27x1.5	30x0.25	0.6	1.8	21	760
30x1.5	30x0.25	0.6	1.8	21.6	835
34x1.5	30x0.25	0.6	1.8	23.2	970
37x1.5	30x0.25	0.6	2.0	23.2	1020
40x1.5	30x0.25	0.6	2.0	25	1105
50x1.5	30x0.25	0.6	2.1	27.8	1380
61x1.5	30x0.25	0.6	2.1	29.5	1620

Technical data:

- 1) Temperature: -25°C to +70°C
- 2) Working voltage: 300/500 V R.M.S
- 3) Conductor resistance: As per class 5 of IEC 60228
- 4) Test voltage: 2000 VAC for 5 minute
- 5) Flame retardant: Acc. IEC 60332-1

کابل های قابل انعطاف تک رشته قدرت با عایق PVC

FLEXIBLE POWER CABLES WITH PVC INSULATION SINGLE CORE

Application:

Can be used indoor or outdoor in cable duct or tray in power and switching stations, industrial plants and commercial building. Suitable for direct burial where there is no danger of mechanical damage.

Specification:

IEC 60502-1, ISIRI (3569-1)

Construction:

- 1) Conductor: Plain annealed copper stranded as per class 5 of IEC 60228, ISIRI3084
- 2) Insulation Polyvinyl chloride -PVC
- 3) Outer sheath: Polyvinyl chloride- PVC standard colour is black, but any other colour can be supplied on request.



Size	No. strand x diameter	Insulation thickness	Sheath thickness	Approx. Overall diameter	Approx. weight
mm ²	Nxdmm	mm	mm	mm	Kg/km
1×4	56×0.3	1.0	1.4	7	84
1×6	84×0.3	1.0	1.4	7.6	108
1×10	127×0.4	1.0	1.4	9	162
1×16	80×0.4	1.0	1.4	10.2	230
1×25	199×0.4	1.2	1.4	12.6	340
1×35	278×0.4	1.2	1.4	13.9	450
1×50	398×0.4	1.4	1.4	16.3	612
1×70	357×0.5	1.4	1.5	18.2	850
1×95	484×0.5	1.6	1.6	21	1110
1×120	612×0.5	1.6	1.6	23	1390
1×150	765×0.5	1.8	1.7	25.4	1720
1×185	943×0.5	2.0	1.8	28.3	2100
1×240	1224×0.5	2.2	1.9	31.8	2730
1×300	1520×0.5	2.4	2.0	35.2	3400
1×400	2030×0.5	2.6	2.2	40	4440

Technical data:

- 1) Temperature: -25°C to +80°C
- 2) Maximum short circuit temperature: 160°C (5 seconds Max.)
- 3) Working voltage: 0.6/1.0 kv
- 4) Conductor resistance: As per class 5 of IEC 60228
- 5) Test voltage: 3.5 kv rms or 8.4 kvdc for 5 minutes
- 6) Flame retardant: Acc. IEC 60332-1

کابل های چند رشته ای قابل انعطاف با عایق PVC

FLEXIBLE POWER AND CONTROL CABLE WITH PVC INSULATION MULTI CORE

Application:

Can be used indoor or outdoor in cable duct or tray in power and switching stations, industrial plants and commercial building. Suitable for direct burial where there is no danger of mechanical damage.

Specification:

IEC 60502-1, ISIRI (3569-1)

Construction:

- 1) Conductor: Plain annealed copper stranded as per class 5 of IEC 60228
- 2) Insulation Polyvinyl chloride -PVC
- 3) Core identification: colour
- 4) Inner covering: Extruded PVC compatible with the operating temperature of the conductor. this inner covering is applicable to cables having conductor of 16 mm² and above.
- 5) Outer sheath: Polyvinyl chloride -PVC
standard colour is black, but any other colour can be supplied on request.

Technical data:

- 1) Temperature: -25°C to +80°C
- 2) Maximum short circuit temperature: 160°C (5 seconds Max.)
- 3) Working voltage: 0.6/1.0 kv
- 4) Conductor resistance: As per class 5 of IEC 60228
- 5) Test voltage: 3.5 kv rms or 8.4 kvdc for 5 minutes
- 6) Flame retardant: Acc. IEC 60332-1



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Size	No. strand x diameter	Insulation thickness	Inner covering	Sheath thickness	Approx. Overall diameter	Approx. weight
mm ²	Nxdmm	mm	mm	mm	mm	Kg/km
2x1.5	30x0.25	0.8	-	1.8	10	134
2x2.5	50x0.25	0.8	-	1.8	11	174
2x4	56x0.3	1.0	-	1.8	12	221
2x6	84x0.3	1.0	-	1.8	13.2	284
2x10	80x0.4	1.0	-	1.8	15.8	460
2x16	127x0.4	1.0	-	1.8	17.8	660
2x25	199x0.4	1.2	1.0	1.8	25.4	1150
2x35	278x0.4	1.2	1.1	1.8	28	1470
2x50	398x0.4	1.4	1.2	2.0	32.5	1990
2x70	357x0.5	1.4	1.2	2.1	37	2700
3x1.5	30x0.25	0.8	0.8	1.8	10.5	132
3x2.5	50x0.25	0.8	0.8	1.8	11.5	204
3x4	56x0.3	1.0	1.0	1.8	12.7	270
3x6	84x0.3	1.0	1.0	1.8	14	360
3x10	80x0.4	1.0	1.0	1.8	16.8	540
3x16	127x0.4	1.0	1.0	1.8	19	756
3x25	199x0.4	1.2	1.2	1.8	26	1350
3x35	278x0.4	1.2	1.2	1.9	30	1790
3x50	398x0.4	1.4	1.4	2.0	35	2500

Size	No. strand x diameter	Insulation thickness	Inner covering	Sheath thickness	Approx. Overall diameter	Approx. weight
mm ²	Nxdmm	mm	mm	mm	mm	Kg/km
3×70	357×0.5	1.4	1.2	2.2	39.5	3240
3×95	484×0.5	1.6	1.3	2.4	45.6	4400
3×120	612×0.5	1.6	1.4	2.5	50	5400
3×150	765×0.5	1.8	1.5	2.7	55.6	6700
3×25/16	199×0.4-127×0.4	1.2-1.0	1.1	1.9	28	1520
3×35/16	278×0.4-127×0.4	1.2-1.0	1.2	2.0	31	1940
3×50/25	398×0.4-199×0.4	1.4-1.2	1.2	2.1	36.2	2700
3×70/35	357×0.5-278×0.4	1.4-1.2	1.3	2.3	41	3650
3×95/50	484×0.5-398×0.4	1.6-1.4	1.4	2.5	47	4800
3×120/70	612×0.5-357×0.5	1.6-1.4	1.5	2.6	52.4	6060
3×150/70	765×0.5-357×0.5	1.8-1.4	1.6	2.8	58.4	7340
4×1.5	30×0.25	0.8	-	1.8	11.3	185
4×2.5	50×0.25	0.8	-	1.8	12.4	246
4×4	56×0.3	1.0	-	1.8	13.8	325
4×6	84×0.3	1.0	-	1.8	15.2	425
4×10	80×0.4	1.0	-	1.8	18.4	670
4×16	127×0.4	1.0	-	1.8	20.8	950
4×25	199×0.4	1.2	1.1	1.9	29	1670
4×35	278×0.4	1.2	1.2	2.0	32.6	2220
4×50	398×0.4	1.4	1.3	2.2	38.4	3070
4×70	357×0.5	1.4	1.4	2.4	43.8	4130
4×95	484×0.5	1.6	1.5	2.6	50	5480
4×120	612×0.5	1.6	1.6	2.7	54.8	6860
4×150	765×0.5	1.8	1.6	2.9	61	8540
5×1.5	30×0.25	0.8	-	1.8	12.3	226
5×2.5	50×0.25	0.8	-	1.8	13.5	300
5×4	56×0.3	1.0	-	1.8	15.0	434
5×6	84×0.3	1.0	-	1.8	16.6	564
5×10	80×0.4	1.0	-	1.8	20.4	845
5×16	127×0.4	1.0	-	1.8	23.6	1190
5×25	199×0.4	1.2	1.2	1.9	32.4	2110
5×35	278×0.4	1.2	1.2	2.2	36.2	2710
5×50	398×0.4	1.4	1.4	2.4	42.6	3730

کابل های قدرت تخت افشان قابل انعطاف سه رشته با عایق و روکش PVC

FLEXIBLE PVC CABLES WITH PVC INSULATION

Application:

Can be used indoor or outdoor in cable duct or tray in power and switching stations, industrial plants and commercial building. Suitable for direct burial where there is no danger of mechanical damage.

Specification:

IEC 60502, BS-6500, VDE-0250, ISIRI (3569-1)

Construction:

- 1) Conductor: Plain annealed copper stranded as per class 5 of IEC60228, VDE0295, ISIRI 3084
- 2) Insulation Polyvinyl chloride -PVC
- 3) Core identification: colour
- 4) Assembly: Core twisted together to make a round assembly with fillers wherever necessary.
- 5) Outer sheath: Polyvinyl chloride -PVC. standard colour is black, but any other colour can be supplied on request.



Size	No. strand x diameter	Insulation thickness	Sheath thickness	Approx. Overall diameter	Approx. weight
mm ²	Nxdmm	mm	mm	mm	Kg/km
3x4	56x0.30	1.0	1.0	1.8	4.95
3x6	84x0.30	1.0	1.0	1.8	3.30
3x10	80x0.40	1.0	1.0	1.8	1.91
3x16	126x0.40	1.0	1.0	1.8	1.21
3x25	196x0.40	1.2	1.2	1.8	0.78
3x35	276x0.40	1.2	1.2	1.8	0.554

Technical data:

- 1) Temperature: -25°C to +80°C
- 2) Working voltage: 600/1000 R.M.S
- 3) Conductor resistance: As per class 5 of IEC 60228
- 4) Test voltage: 3.5 kv rms for 5 minute
- 5) Flame retardant: Acc. IEC 60332-1



FIXED CABLES



FIXED CABLES

FIXED INSTALLATION CABLES

Polyvinylchloride PVC insulation 450/750 V, 600/1000 V

CU (SOFT/HARD BARE COPPER)

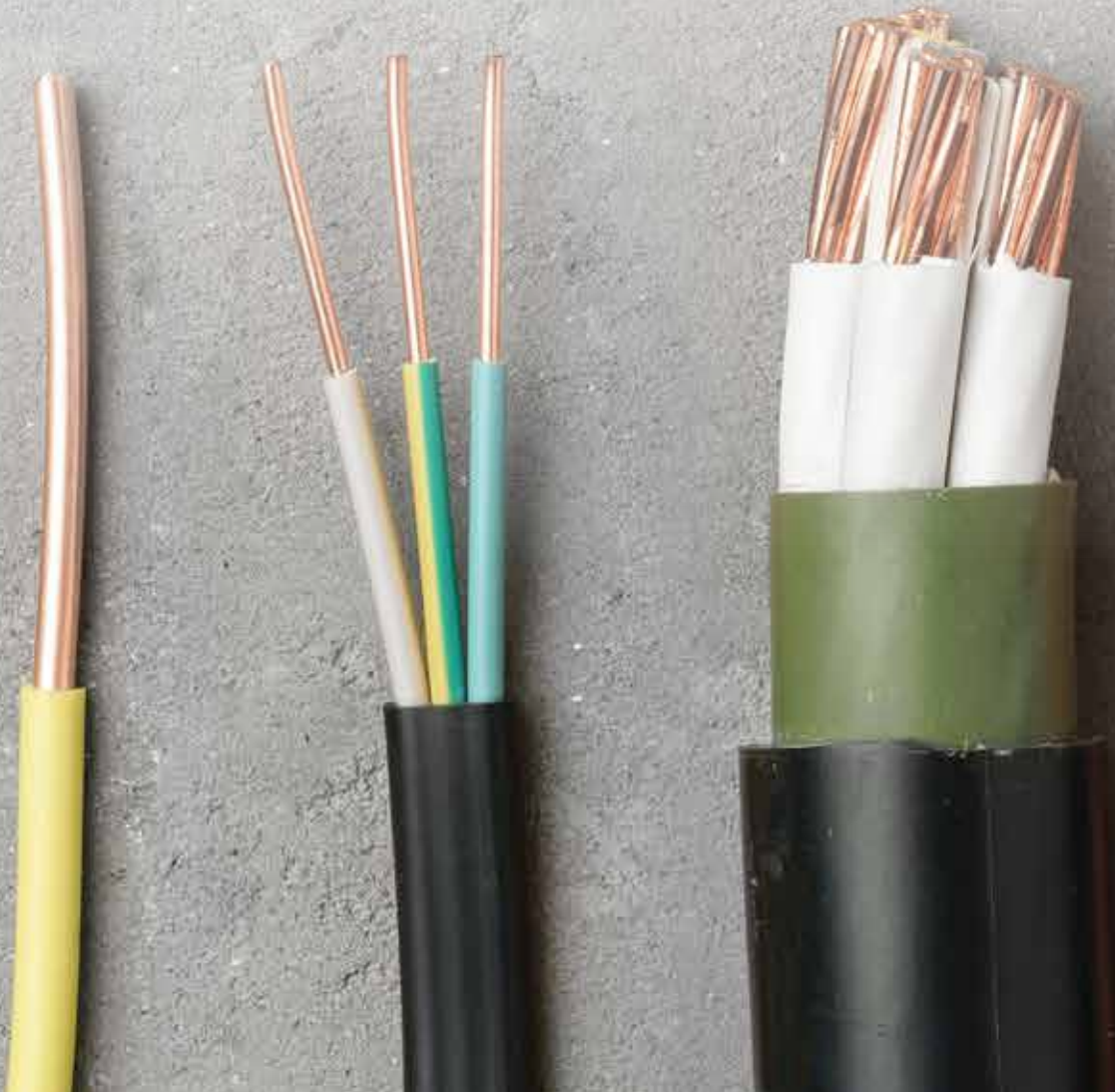
CU/PVC (NYA)

CU/PVC/PVC (NYY-O-J)

CU/PVC/PVC/CWS, CTS/PVC (NYCY, NYSY)

CU/PVC/PVC/AWA, SWA/PVC (NYRY)

CU/PVC/PVC/DTA/PVC (NYBY)



HARD DRAWN BARE COPPER CONDUCTORS

Application:

- 1) Soft drawn: These conductors are used for earthing electrical system where high conductivity is requirement.
- 2) Hard drawn: These conductors are used for overhead electrical transmission and distribution systems.

Construction:

- 1) Soft drawn: As per class 2 of IEC-60228, ISIRI (3569-1)
- 2) Hard drawn: As per BS-125
- 3) Working voltage: 0.6/1.0 kv



BEHFAR
DAMGHAN

Size	No. strand x diameter	Approx. Overall diameter	Approx. weight	Min. Breaking load
mm ²	Nxdmm	mm	Kg/km	KN
10	7×1.35	4.1	90	4.02
16	7×1.70	5.1	144	6.37
25	7×2.12	6.3	218	9.72
35	7×2.50	7.5	309	13.78
50	19×1.80	9.0	439	19.39
70	19×2.10	10.5	597	26.39
95	37×2.50	12.5	84	37.40
120	19×2.80	14.0	1062	46.91
150	37×2.25	15.8	1336	58.99
185	37×2.50	17.5	1649	72.83

کابل های غیر قابل انعطاف تک رشته ای با عایق PVC

PVC INSULATED PVC SHEATHED SINGLE CORE CABLES

Application:

These cables can be used indoors or outdoors in cable duct or tray in power and switching station, industrial plant and commercial buildings. Suitable for direct burial where there is no danger of mechanical damage. Specification IEC 60502-1, BS-6346, VDE-0271, ISIRI (3569-1)

Construction:

- 1) Conductor: Plain annealed copper solid as per class 1 or stranded as per class 2 of IEC 60228, ISIRI (3569-1)
- 2) Insulation Polyvinyl chloride- PVC
- 3) Core identification: colour
- 4) Outer sheath: Polyvinyl chloride -PVC
standard colour is black, but any other colour can be supplied on request.



BEHFAR
DAMGHAN

Size	No. strand x diameter	Insulation thickness	Sheath thickness	Approx. Overall diameter	Approx. weight
mm ²	Nxdmm	mm	mm	mm	Kg/km
1x4 re	1x2.26	1.0	1.4	7.1	82
1x4 rm	7x0.85	1.0	1.4	7.4	86
1x6 re	1x2.78	1.0	1.4	7.6	110
1x6 rm	7x1.04	1.0	1.4	7.9	116
1x10 re	1x3.57	1.0	1.4	8.4	152
1x10 rm	7x1.35	1.0	1.4	8.9	160
1x16 rm	7x1.70	1.0	1.4	9.9	226
1x25 rm	7x2.14	1.2	1.4	11.6	333
1x35 rm	7x2.52	1.2	1.4	12.8	436
1x50 rm	19x1.78	1.4	1.4	14.5	570
1x70 rm	19x2.17	1.4	1.4	16.7	780
1x95 rm	19x2.52	1.6	1.5	18.9	1080
1x120 rm	37x2.03	1.6	1.5	20.6	1330
1x150 rm	37x2.25	1.8	1.6	22.8	1620
1x185 rm	37x2.52	2.0	1.7	25.2	2070
1x240 rm	61x2.25	2.2	1.8	28.5	2640
1x300 rm	61x2.52	2.4	1.9	31.5	3240
1x400 rm	61x2.85	2.6	2.0	35.1	4170
1x500 rm	61x3.20	2.8	2.1	38.8	5210

Technical data:

- 1) Temperature: -25°C to +80°C
- 2) Maximum short circuit temperature: 160°C (5 seconds Max.)
- 3) Working voltage: 0.6/1.0 kv
- 4) Conductor resistance: As per class 1 or 2 of IEC 60228
- 5) Test voltage: 3.5 kv rms or 8.4 kvdc for 5 minutes
- 6) Flame retardant: Acc. IEC 60332-1

کابل های غیر قابل انعطاف چند رشته ای با عایق PVC
**PVC INSULATED PVC SHEATHED
 MULTI CORE CABLES**



Size	No. strand x diameter	Insulation thickness	Sheath thickness	Approx. Overall diameter	Approx. weight
mm ²	Nxdmm	mm	mm	mm	Kg/km
3×25/16 rm	7×2.14 - 7×1.70	1.2 - 1.0	1.8	26.2	1470
3×35/16 rm	7×2.52 - 7×1.70	1.2 - 1.0	1.8	28	1800
3×25/25 sm	19×1.83 - 7×2.14	1.4 - 1.2	1.8	27.3	1970
3×70/35 sm	19×2.22 - 7×2.52	1.4 - 1.2	1.9	31.0	2750
3×95/50 sm	19×2.57 - 19×1.83	1.6 - 1.4	2.1	34.7	3640
3×120/70 sm	37×2.08 - 19×2.22	1.6 - 1.4	2.2	38.2	4670
3×150/70 sm	37×2.30 - 19×2.22	1.8 - 1.4	2.3	44	5540
3×185/95 sm	37×2.57 - 7×2.57	2.0 - 1.6	2.4	47.4	6980
3×240/120 sm	37×2.93 - 7×2.08	2.2 - 1.6	2.5	53.6	9040

کابل های غیر قابل انعطاف چند رشته ای با عایق PVC

PVC INSULATED PVC SHEATHED MULTI CORE CABLES

Application:

These cables can be used indoors or outdoors in cable duct or tray in power and switching station, industrial plant and commercial buildings. Suitable for direct burial where there is no danger of mechanical damage. Specification IEC 60502-1, BS-6346, VDE-0271, ISIRI (3569-1)

Construction:

- 1) Conductor: Plain annealed copper solid as per class 1 or stranded as per class 2 of IEC 60228, ISIRI (3569-1)
- 2) Insulation Polyvinyl chloride- PVC
- 3) Core identification: colour
- 4) Outer sheath: Polyvinyl chloride -PVC
standard colour is black, but any other colour can be supplied on request.



BEHFAR
DAMGHAN

Size	No. strand x diameter	Insulation thickness	Sheath thickness	Approx. Overall diameter	Approx. weight
mm ²	Nxdmm	mm	mm	mm	Kg/km
4x1/5 re	1x1.38	0.8	1.8	13.0	250
4x1/5 rm	1x0.53	0.8	1.8	13.4	260
4x2/5 re	1x1.78	0.8	1.8	14.0	310
4x2/5 rm	7x0.67	0.8	1.8	14.5	325
4x4 re	1x2.26	1.0	1.8	15.6	430
4x4 rm	7x0.85	1.0	1.8	16.6	448
4x6 re	1x2.78	1.0	1.8	16.8	540
4x6 rm	7x1.04	1.0	1.8	18.0	560
4x10 re	1x3.57	1.0	1.8	18.8	740
4x10 rm	7x1.35	1.0	1.8	20.3	760
4x16 rm	7x1.70	1.0	1.8	22.8	1060
4x25 rm	7x2.14	1.2	1.8	25.5	1580
4x35 rm	7x2.52	1.2	1.8	27.8	2060
4x50 sm	19x1.83	1.4	1.9	30.6	2200

Technical data:

- 1) Temperature: -25°C to +80°C
- 2) Maximum short circuit temperature: 160°C (5 seconds Max.)
- 3) Working voltage: 0.6/1.0 kv
- 4) Conductor resistance: As per class 1 or 2 of IEC 60228
- 5) Test voltage: 3.5 kv rms or 8.4 kvdc for 5 minutes
- 6) Flame retardant: Acc. IEC 60332-1

کابل های سولار با سطح ولتاژ 1.5 کیلوولت

Photovoltaic Cables

Application:

These Cables are used to generate electricity for different places (Both residential and industrial and power plants). In addition, due to the fact that these cables are useful for home and power plants, they are anti-scratch and halogen-free, and they can also be resistant to flame, ozone, and UV rays.

Specification: IEC 62930, EN50618



Size (mm ²)	Insulation Thickness (mm)	Sheath Thickness (mm)	Overall Diameter (mm)	Max. of Elec Resistance(Ω/km)
1×1.5	0.7	0.8	4.6	13.7
1×2.5	0.7	0.8	4.9	8.21
1×4	0.7	0.8	5.4	5.09
1×6	0.7	0.8	5.9	3.39
1×10	0.7	0.8	6.9	1.95
1×16	0.7	0.9	8	1.24
1×25	0.9	1	10.3	0.795
1×35	0.9	1.1	11.8	0.565
1×50	1	1.2	13.5	0.393
1×70	1.1	1.2	16	0.277
1×95	1.1	1.3	17.8	0.210
1×120	1.2	1.3	19.8	0.164
1×150	1.4	1.4	21.1	0.132
1×185	1.6	1.6	24.4	0.108
1×240	1.7	1.7	27.1	0.0817

Technical data:

Temperature: -40° C to +120° C

Insulation: XLPO

Outer Sheath: CrossLinkable HFFR

Working voltage: 1.5 Kv

Test voltage: 15 Kv

کابل های قدرت با هادی هم مرکز (کنسانتریک)

Inflexible PVC insulated & sheathed Power shielded cables (NYCY Cables)

Application:

For use indoors, in cable ducts, outdoors, in water, in concrete and in ground for power plants, industrial plants, as well as in local power networks, if increased electrical protection is required.

Specification: ISIRI 3569 – IEC 60502 – BS 5467 – VDE 0271



BEHFAR
DAMGHAN

Nominal Cross Section N*mm ²	No. of Strands Diameter* N*mm ²	Insulation Thickness mm	Insulation Thickness mm	Overall Diameter mm	Max of Conductor Resist. At 20° C Ω/Km
1×4+4	1×2.25	1.3	1.8	10.1	4.61
1×6+6	1×2.76	1.5	1.8	10.5	3.08
1×10+10	1×3.57	1.5	1.8	11.8	1.83
1×16+16	7×1.7	1.5	1.8	14	1.15
3×6+6	1×2.76	1	1.8	17.3	3.08
3×10+10	1×3.57	1	1.8	19.4	1.83

Technical data:

Temperature: -30° C to +70° C

Insulation: PVC type DIV 4

Outer Sheath: PVC type DMV5

Concentric Conductor: Annealed Copper Wire class 1, 2

Concentric layers of material: Copper wire or Combination of wires and tapes

Working voltage: 0.6 -1 Kv

Test voltage: 3.5 Kv



BEHFAR
DAMGHAN
Wire & Cable

FIXED CABLES

FIXED CABLES

FIXED INSTALLATION CABLES

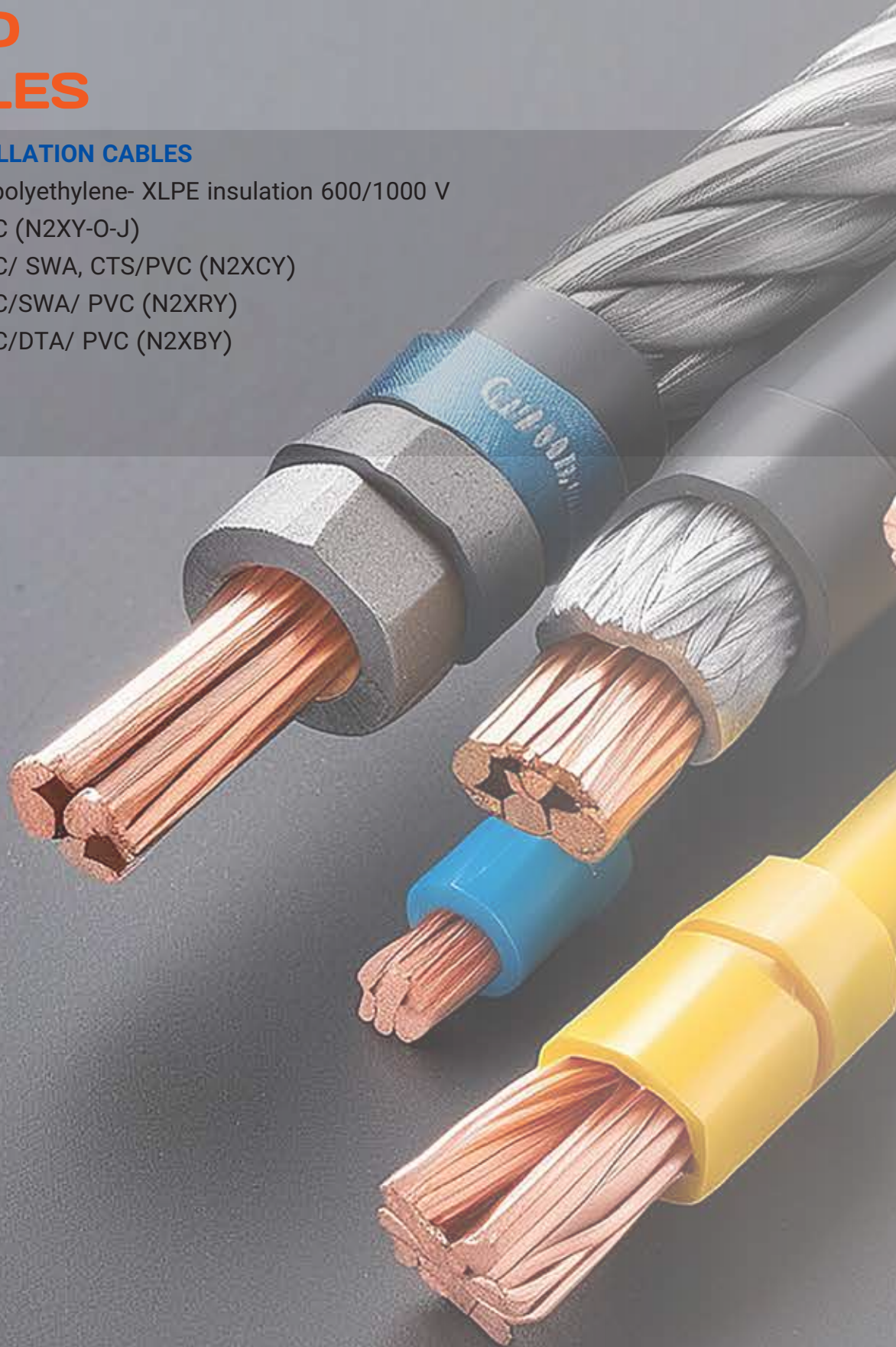
cross linked polyethylene- XLPE insulation 600/1000 V

CU/XLPE/PVC (N2XY-O-J)

CU/XLPE/PVC/ SWA, CTS/PVC (N2XCY)

CU/XLPE/PVC/SWA/ PVC (N2XRY)

CU/XLPE/PVC/DTA/ PVC (N2XBY)



کابل های غیر قابل انعطاف تک رشته ای با عایق XLPE

XLPE INSULATED PVC SHEATHED SINGLE CORE CABLES

Application:

These cables can be used indoors or outdoors in cable duct or tray in power and switching stations, industrial plant and commercial building.

Specification: IEC 60502-1, ISIRI (3569-1)

Construction:

- 1) Conductor: Plain annealed copper solid as per class 1 or stranded as per class 2 of IEC 60228
- 2) Insulation Cross-linked polyethylene -XLPE
- 3) Core identification: colour
- 4) outer sheath: Polyvinyl chloride -PVC
standard colour is black, but any other colour can be supplied on request.



BEHFAR
DAMGHAN

Size	No. strand x diameter	Insulation thickness	Sheath thickness	Approx. Overall diameter	Approx. weight
mm ²	Nxdmm	mm	mm	mm	Kg/km
1x4 re	1x2.26	0.7	1.4	6.5	76
1x4 rm	7x0.85	0.7	1.4	6.8	80
1x6 re	1x2.78	0.7	1.4	7.0	98
1x6 rm	7x1.04	0.7	1.4	7.3	105
1x10 re	1x3.57	0.7	1.4	7.8	140
1x10 rm	7x1.35	0.7	1.4	8.3	145
1x16 rm	7x1.70	0.7	1.4	9.3	210
1x25 rm	7x2.14	0.9	1.4	11.0	310
1x35 rm	7x2.52	0.9	1.4	12.2	410
1x50 rm	19x1.78	1.0	1.4	13.7	530
1x70 rm	19x2.17	1.1	1.4	16.1	770
1x95 rm	19x2.52	1.1	1.5	17.8	1010
1x120 rm	37x2.03	1.2	1.5	19.8	1270
1x150 rm	37x2.25	1.4	1.6	21.8	1550
1x185 rm	37x2.52	1.6	1.6	24.2	1940
1x240 rm	61x2.25	1.7	1.7	27.4	2510
1x300 rm	61x2.52	1.8	1.8	30	3110
1x400 rm	61x2.85	2.0	1.9	33.5	3980
1x500 rm	61x3.20	2.2	2.1	37.4	5000

Technical data:

- 1) Temperature: -25°C to +90°C
- 2) Maximum short circuit temperature: 250°C (5 seconds Max.)
- 3) Working voltage: 0.6/1.0 kv
- 4) Conductor resistance: As per class 1 or 2 of IEC 60228
- 5) Test voltage: 3.5 kv rms or 8.4 kvdc for 5 minutes
- 6) Flame retardant: Acc. IEC 60332-1

کابل های غیر قابل انعطاف چند رشته ای با عایق XLPE

XLPE INSULATED PVC SHEATHED MULTI CORE CABLES

Application:

These cables can be used indoors or outdoors in cable duct or tray in power and switching stations, industrial plant and commercial building.

Specification: IEC 60502-1, ISIRI (3569-1)

Construction:

- 1) Conductor: Plain annealed copper solid as per class 1 or stranded as per class 2 of IEC 60228
- 2) Insulation Cross-linked polyethylene -XLPE
- 3) Core identification: colour up to 4 core and black with number printing for 5 core and above.
- 4) outer sheath: Polyvinyl chloride -PVC
standard colour is black, but any other colour can be supplied on request.



Size	No. strand x diameter	Insulation thickness	Sheath thickness	Approx. Overall diameter	Approx. weight
mm ²	Nxdmm	mm	mm	mm	Kg/km
3x25/16 rm	7x2.14-7x1.70	0.9 – 0.7	1.8	24.2	1320
3x35/16 rm	7x2.52 - 7x1.70	0.9 – 0.7	1.8	26.2	1660
3x50/25 sm	19x1.83 - 7x2.14	1.0 – 0.9	1.8	26.2	1834
3x70/35 sm	19x2.22 - 7x2.52	1.1 – 0.9	1.9	29.4	2594
3x95/50 sm	19x2.57 - 19x1.83	1.1 – 1.0	2.0	32.5	3480
3x120/70 sm	37x2.08 - 19x2.22	1.2 – 1.1	2.1	36.2	4450
3x150/70 sm	37x2.30 - 19x2.22	1.4 – 1.1	2.3	41.0	5320
3x185/95 sm	37x2.57 - 37x2.57	1.6 – 1.1	2.5	44.6	6670
3x240/120 sm	37x2.93 - 37x2.08	1.7 – 1.2	2.6	50.4	8640
4x1.5 re	1x1.38	0.7	1.8	12.4	190
4x1.5 rm	1x0.53	0.7	1.8	12.9	200
4x2.5 re	1x1.78	0.7	1.8	13.3	245
4x2.5 rm	7x0.67	0.7	1.8	13.8	260
4x4 re	1x2.26	0.7	1.8	14.5	320
4x4 rm	7x0.85	0.7	1.8	15.2	370
4x6 re	1x2.78	0.7	1.8	15.7	460
4x6 rm	7x1.04	0.7	1.8	16.5	480
4x10 re	1x3.57	0.7	1.8	17.6	650
4x10 rm	7x1.35	0.7	1.8	18.8	670
4x16 rm	7x1.70	0.7	1.8	21.2	980
4x25 rm	7x2.14	0.9	1.8	25.2	1430
4x35 rm	7x2.52	0.9	1.8	28.0	1900
4x50 rm	19x1.83	1.0	1.8	28.5	2050

Technical data:

- 1) Temperature: -25°C to +90°C
- 2) Maximum short circuit temperature: 250°C (5 seconds Max.)
- 3) Working voltage: 0.6/1.0 kv
- 4) Conductor resistance: As per class 1 or 2 of IEC 60228
- 5) Test voltage: 3.5 kv rms or 8.4 kvdc for 5 minutes
- 6) Flame retardant: Acc. IEC 60332-1



FIXED CABLES



FIXED CABLES

ALUMINIUM CABLES

Polyvinylchloride PVC or cross linked polyethylene XLPE insulation 600/1000V

AL/PVC/PVC (NAYY)

AL/XLPE/PVC (NA2XY)

AL/XLPE/PVC/SWA/PVC (NA2XRY)

AL/XLPE/PVC/DTA/PVC (NA2XBY)

AL/XLPE (AERIAL BUNDLED CABLE ABC CABLES)



کابل های غیر قابل انعطاف تک رشته ای با هادی آلومینیوم و عایق PVC

PVC INSULATED PVC SHEATHED SINGLE CORE CABLE

Application:

These cables can be used indoors or outdoors in cable duct or tray in power and switching station, industrial plant and commercial buildings. Suitable for direct burial where there is no danger of mechanical damage.

Specification: IEC 60502-1, ISIRI (3569-1)

Construction:

1) Conductor: Plain aluminum stranded and compacted as per class2 of IEC60228

2) Insulation: Polyvinyl chloride- PVC

3) Core identification: colour

4) Outer sheath: Polyvinyl chloride -PVC

standard colour is black, but any other colour can be supplied on request.



BEHFAR
DAMGHAN

Size	No. strand x diameter	Insulation thickness	Sheath thickness	Approx. Overall diameter	Approx. weight
mm ²	Nxdmm	mm	mm	mm	Kg/km
1×16 rm	7×1.70	1.0	1.4	9.9	128
1×25 rm	7×2.14	1.2	1.4	11.6	180
1×35 rm	7×2.57	1.2	1.4	12.8	224
1×50 rm	19×1.83	1.4	1.4	14.5	288
1×70 rm	19×2.22	1.4	1.4	16.7	368
1×95 rm	19×2.57	1.6	1.5	18.9	488
1×120 rm	37×2.10	1.6	1.5	20.6	582
1×150 rm	37×2.30	1.8	1.6	22.8	700
1×185 rm	37×2.57	2.0	1.7	25.2	870
1×240 rm	61×2.93	2.2	1.8	28.5	1100
1×300 rm	61×2.57	2.4	1.9	31.5	1360
1×400 rm	61×2.90	2.6	2.0	35.1	1720
1×500 rm	61×3.28	2.8	2.1	38.8	2120

Technical data:

1) Temperature: -25°C to +80°C

2) Maximum short circuit temperature: 160°C (5 seconds Max.)

3) Working voltage: 0.6/1.0 kv

4) Conductor resistance: As per class 2 of IEC 60228

5) Test voltage: 3.5 kv rms or 8.4 kvdc for 5 minutes 6) Flame retardant: Acc. IEC 60332-1

کابل های غیر قابل انعطاف چند رشته ای با هادی آلومینیوم با عایق PVC

PVC INSULATED PVC SHEATED MULTI CORE CABLE

Application:

These cables can be used indoors outdoors in cable duct or tray in power and switching station, industrial plant and commercial buildings. Suitable for direct burial where there is no danger of mechanical damage.

Specification: IEC 60502-1, ISIRI (3569-1)

Construction:

- 1) Conductor: Plain aluminum stranded as per class2 of IEC 60228
- 2) Insulation Polyvinyl chloride -PVC
- 3) Core identification: colour
- 4) Inner covering: Extruded PVC compatible with the operating temperature of the conductor. In sector cables the core covered with one or two layer polypropylene tape.
- 5) Outer sheath: Polyvinyl chloride -PVC
standard colour is black, but any other colour can be supplied on request.



Size	No. strand x diameter	Insulation thickness	Sheath thickness	Approx. Overall diameter	Approx. weight
mm ²	Nxdmm	mm	mm	mm	Kg/km
3×50 sm	19×1.83	1.4	1.8	26.8	830
3×70 sm	19×2.22	1.4	1.9	30.2	1050
3×95 sm	19×2.57	1.6	2.0	33.8	1430
3×120 sm	37×2.08	1.6	2.1	36.4	1710
3×150 sm	37×2.30	1.8	2.2	40.5	2090
3×185 sm	37×2.57	2.0	2.4	45.2	2520
3×240 sm	37×2.93	2.2	2.6	52	3260
3×300 sm	61×2.57	2.4	2.7	59	4010

Technical data:

- 1) Temperature: -25°C to +80°C
- 2) Maximum short circuit temperature: 160°C (5 seconds Max.)
- 3) Working voltage: 0.6/1.0 kv
- 4) Conductor resistance: As per class 2 of IEC 60228
- 5) Test voltage: 3.5 kv rms or 8.4 kvdc for 5 minutes
- 6) Flame retardant: Acc. IEC 60332-1

Size	No. strand x diameter	Insulation thickness	Sheath thickness	Approx. Overall diameter	Approx. weight
mm ²	Nxdmm	mm	mm	mm	Kg/km
3×25/16 rm	7×2.14-7×1.70	1.2 – 1.0	1.8	26.2	904
3×35/16 rm	7×2.52 - 7×1.70	1.2 – 1.0	1.8	28.5	1080
3×50/25 sm	19×1.83 - 7×2.14	1.4 – 1.2	1.8	27.6	925
3×70/35 sm	19×2.22 - 7×2.52	1.4 – 1.2	1.9	31.0	1180
3×95/50 sm	19×2.57 - 19×1.83	1.6 – 1.4	2.1	34.7	1630
3×120/70 sm	37×2.08 - 19×2.22	1.6 – 1.4	2.2	38.2	1980
3×150/70 sm	37×2.30 - 19×2.22	1.8 – 1.4	2.3	44	2360
3×185/95 sm	37×2.57 - 19×2.57	2.0 – 1.6	2.4	47.4	2890
3×240/120 sm	37×2.93 - 37×2.08	2.2 – 1.6	2.5	53.6	3722

Size	No. strand x diameter	Insulation thickness	Sheath thickness	Approx. Overall diameter	Approx. weight
mm ²	Nxdmm	mm	mm	mm	Kg/km
4×50 sm	19×1.83	1.4	1.9	30.6	1090
4×70 sm	19×2.22	1.4	2.0	34.2	1400
4×95 sm	19×2.57	1.6	2.1	38.4	1880
4×120 sm	37×2.08	1.6	2.2	41.5	2260
4×150 sm	37×2.30	1.8	2.4	45.5	2790
4×185 sm	37×2.57	2.0	2.6	50.5	3370
4×240 sm	37×2.93	2.2	2.8	59	4350

کابل های غیر قابل انعطاف تک رشته ای با هادی آلومینیوم و عایق XLPE

XLPE INSULATED PVC SHEATED SINGLE CORE CABLE

Application:

These cables can be used indoors or outdoors in cable duct or tray in power and switching stations, industrial plant and commercial building.

Specification: IEC 60502-1, ISIRI 3569-1

Construction:

- 1) Conductor: Plain aluminum stranded and compacted as per class 2 of IEC 60228
- 2) Insulation: Cross-linked polyethylene XLPE
- 3) Core identification: colour
- 4) outer sheath: Polyvinyl chloride -PVC
standard colour is black, but any other colour can be supplied on request.



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Size	No. strand x diameter	Insulation thickness	Sheath thickness	Approx. Overall diameter	Approx. weight
mm ²	N x d mm	mm	mm	mm	Kg/km
1x16 rm	7x1.70	0.7	1.4	9.5	116
1x25 rm	7x2.14	0.9	1.4	11.2	166
1x35 rm	7x2.57	0.9	1.4	12.1	204
1x 50 rm	19x1.83	1.0	1.4	13.3	256
1x70 rm	19x2.22	1.1	1.4	15.3	336
1x95 rm	19x2.57	1.1	1.5	17.2	445
1x120 rm	37x2.10	1.2	1.5	18.5	546
1x150 rm	37x2.30	1.4	1.6	20.6	670
1x185 rm	37x2.57	1.6	1.6	22.5	820
1x240 rm	37x2.93	1.7	1.8	26.2	1060
1x300 rm	61x2.57	1.8	1.9	29.2	1290
1x400 rm	61x2.90	2.0	2.0	31.4	1600
1x500 rm	61x3.28	2.2	2.1	35.6	2080

Technical data:

- 1) Temperature: -25°C to +90°C
- 2) Maximum short circuit temperature: 250°C (5 seconds Max.)
- 3) Working voltage: 0.6/1.0 kv
- 4) Conductor resistance: As per class 2 of IEC 60228
- 5) Test voltage: 3.5 kv rms or 8.4 kvdc for 5 minutes
- 6) Flame retardant: Acc. IEC 60332-1

کابل های غیر قابل انعطاف چند رشته ای با هادی آلومینیوم و عایق XLPE

XLPE INSULATED PVC SHEATED MULTI CORE CABLE

Application:

These cables can be used indoors or outdoors in cable duct or tray in power and switching stations, industrial plant and commercial building.

Specification: IEC 60502-1, ISIRI 3569-1

Construction:

- 1) Conductor: Plain aluminum stranded as per class2 of IEC 60228
- 2) Insulation Cross-linked polyethylene -XLPE
- 3) Core identification: colour
- 4) Inner covering: Extruded PVC compatible with the operating temperature of the conductor. In sector cables the core covered with one or two layer polypropylene tape.
- 5) Outer sheath: Polyvinyl chloride -PVC
standard colour is black, but any other colour can be supplied on request



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Size	No. strand x diameter	Insulation thickness	Sheath thickness	Approx. Overall diameter	Approx. weight
mm ²	Nxdmm	mm	mm	mm	Kg/km
3x25+16 rm	7x2.14 - 7x1.70	0.9 - 0.7	1.8	24.2	780
3x35+16 rm	7x2.52 - 7x1.70	0.9 - 0.7	1.8	26.2	940
3x50/25 sm	19x1.83 - 7x2.14	1.0 - 0.9	1.8	26.2	860
3x70/35 sm	19x2.22 - 7x2.52	1.1 - 0.9	1.9	29.4	1160
3x95/50 sm	19x2.57 - 19x1.83	1.1 - 1.0	2.1	32.5	1520
3x120/70 sm	37x2.08 - 19x2.22	1.2 - 1.1	2.2	36.2	1910
3x150/70 sm	37x2.30 - 19x2.22	1.4 - 1.1	2.3	41.2	2280
3x185/95 sm	37x2.57 - 19x2.57	1.6 - 1.1	2.5	44.4	2840
3x240/120 sm	37x2.93 - 37x2.08	1.7 - 1.2	2.7	51.2	3520

Size	No. strand x diameter	Insulation thickness	Sheath thickness	Approx. Overall diameter	Approx. weight
mm ²	Nxdmm	mm	mm	mm	Kg/km
3x50 sm	19x1.83	1.0	1.8	25.1	720
3x70 sm	19x2.22	1.1	1.9	28.4	950
3x95 sm	19x2.57	1.1	2.0	31.5	1220
3x120 sm	37x2.08	1.2	2.1	35.0	1510
3x150 sm	37x2.30	1.4	2.2	39.0	1860
3x185 sm	37x2.57	1.6	2.3	43.2	2320
3x240 sm	37x2.93	1.7	2.6	49.0	2950

Technical data:

- 1) Temperature: -25°C to +90°C
- 2) Maximum short circuit temperature: 250°C (5 seconds Max.)
- 3) Working voltage: 0.6/1.0 kv
- 4) Conductor resistance: As per class 2 of IEC 60228
- 5) Test voltage: 3.5 kv rms or 8.4 kvdc for 5 minutes
- 6) Flame retardant: Acc. IEC 60332-1

XLPE INSULATED AERIAL BUNDLED CABLE (ABC)

Application: These cables can be used electrical distribution systems

Specification: BS 7870

Construction:

- 1) Conductor: Plain aluminum stranded, compacted as per class2 of IEC 60228 with (EC grade 1350 alloy)
- 2) Insulation: Cross-linked polyethylene -XLPE
- 3) Core identification: Black with continuous longitudinal ribs



Size	No. strand x diameter	Insulation thickness	Sheath thickness	Approx. Overall diameter
mm ²	Nxdmm	mm	mm	mm
1×25+16+25	7×2.22 - 7×1.73	1.3 - 1.1	15.0	330
1×35+16+35	7×2.62 - 7×1.73	1.3 - 1.1	22.0	386
3×35+16+50	7×2.22 - 7×1.73	1.3 - 1.1	27.0	640
3×50+25+50	7×2.62 - 7×1.73	1.5 - 1.1	29.0	785
3×70+25+70	19×2.22 - 7×2.22	1.5 - 1.3	35.0	1155
3×95+25+70	19×2.62 - 7×2.22	1.7 - 1.3	38.0	1426
3×35+35+25+25	7×2.62 - 7×1.73 - 7×2.22	1.3 - 1.1 - 1.3	28.0	730
3×50+50+25+25	7×3.09 - 7×1.73 - 7×2.62	1.5 - 1.1 - 1.3	31.0	906
3×70×70+25+25	19×2.22 - 7×1.73 - 7×3.09	1.5 - 1.1 - 1.5	34.0	1160
3×95+95+25+25	19×2.62 - 7×2.22 - 19×2.22	1.7 - 1.3 - 1.5	39.0	1530

Technical data:

- 1) Temperature: -40°C to +80°C
 - 2) Maximum of resistivity for aluminum: 0.02808Ω.mm²/m
 - 3) Conductor resistance: As per class 2 of IEC 60228
 - 4) Maximum short circuit temperature: 250°C (5 seconds Max.)
 - 5) lay of length: (22-28) times of overall diameter (mm) - left-handed
 - 6) Working voltage: 0.6/1.0 kv
 - 7) Test voltage: 2.5 KVAC for 5 minutes
 - 8) Messenger size: 16 (7×1.57 mm), 25(7×1.93 mm)
 - 9) In three core cables: (1 x phase + lighting - neutral/messenger)
 - In five core cables: (3 x phase + lighting - neutral/messenger)
 - In six core cables: (3 x phase + lighting + neutral - messenger)
- * The other technical data will be according BS 7870 or equivalent standard.

BEHFAR DAMGHAN WIRE & CABLE
CO 20KV I.R.I.S IRAN 09:09:57

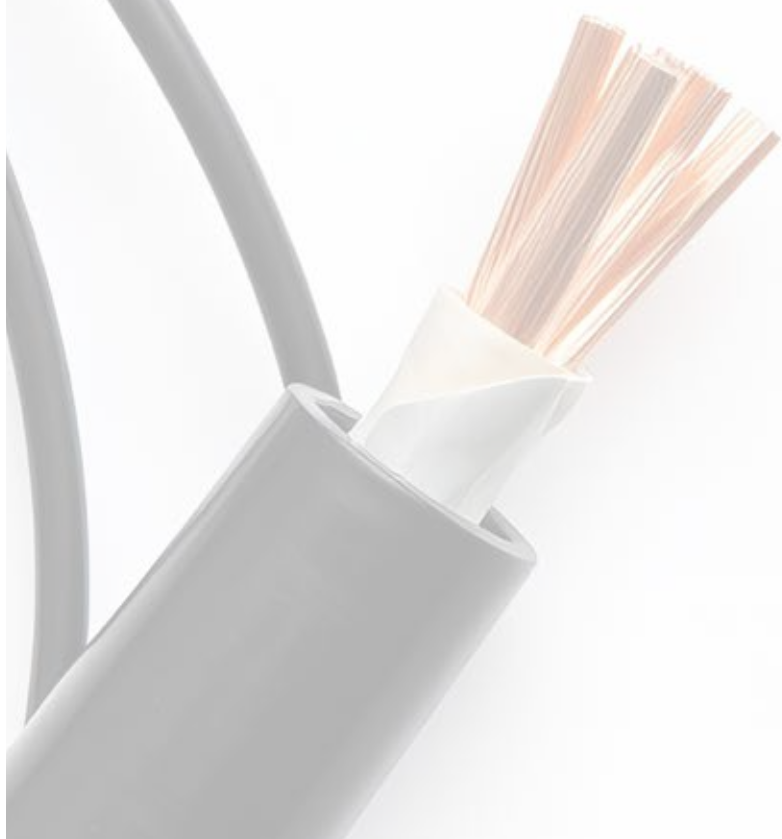


مقادیر / مشخصات						واحد	شرح مشخصه
هادی آلومینیوم تقویت شده با فولاد (ACSR)			هادی آلومینیوم آلایژی (AAAC)				
WOLF	HYENA	MINK				mm	سطح مقطع نامی
198-AL1/37-STIA	106-AL1/20-STIA	63-AL1/11-STIA	183-AL3	130-AL3	77-AL3		کد مشخصه هادی مطابق EN 50182
20×59/7×2/59	7×4/39/7×1/93	6×3/66/1×3/66	19×3/50	19×3/95	7×3/75		ساختمان هادی قبل از فشرده سازی
194/9	126/4	73/6	182/8	129/9	77/3		سطح مقطع کل هادی
16/86	13/55	10/21	16/63	14/01	10/69		قطر نامی هادی (فشرده)
65/46	38/86	20/59	51/23	36/39	21/67		نیروی پارگی نامی هادی (فشرده)
0/1920	0/2843	0/4767	0/1900	0/2674	0/4467		مقاومت الکتریکی هادی در ۲۰ C
689	428	242	484	344	204		وزن تقریبی واحد طول هادی (بدون روکش)
20 - 33	33 - 20	33 - 20	33 - 20	33 - 20	33 - 20		ولتاژ نامی (U)



TECNICAL INFORMATION

مشخصات فنی



مقاومت الکتریکی بر اساس سطح مقطع هادی

CONDUCTOR RESISTANCE VALUE ACCORDING TO CROSS-SECTION

Class 1 = for single-wire conductors
Class 2 = for multiply wire conductors
Class 5 for finaly standard wire conductors
Class 6 = for exetra standard wire conductors



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POWER CABLE AND WIRE					WELDING CABLES			
CONDUCTRE DIMENSION			Cu conductor		Al conductor		Cu conductor	
Tinned Cu wire			Plain Cu wire		Plain Al wire		Plain Wire	Tinned Wire
Cross-section mm	Class1 & 2 OHM/km	Class 5 & 6 OHM/km	Class1 & 2 OHM/km	Class5 & 6 OHM/km	Class1 OHM/km	Class2 OHM/km	OHM/km	OHM/km
0.05	-	~380.0	-	~360.0	-	-	-	-
0.08	-	~240.0	-	~230.0	-	-	-	-
0.09	-	~230.0	-	~215.0	-	-	-	-
0.14	-	~140.0	-	~138.0	-	-	-	-
0.22	-	~96.8	-	~95.0	-	-	-	-
0.25	-	~79.3	-	~77.8	-	-	-	-
0.34	-	~57.1	-	~56.0	-	-	-	-
0.5	36.7	40.1	36.0	39.0	-	-	-	-
0.75	24.8	26.7	24.5	26.0	-	-	-	-
1.0	18.2	20.0	18.1	19.5	-	-	-	-
1.5	12.2	13.7	12.1	13.3	-	-	-	-
2.5	7.56	8.21	7.41	7.98	-	-	-	-
4.0	4.70	5.09	4.61	4.95	-	-	-	-
6.0	3.11	3.39	3.08	3.30	-	-	-	-
10.0	1.84	1.95	1.83	1.91	-	-	-	-
16.0	1.16	1.24	1.15	1.21	-	1.91	1.16	1.19
25.0	0.734	0.795	0.727	0.780	1.20	1.20	0.758	0.780
35.0	0.529	0.565	0.524	0.554	0.868	0.868	0.536	0.552
50.0	0.391	0.393	0.387	0.386	0.641	0.641	0.379	0.390
70.0	0.270	0.277	0.268	0.272	0.443	0.443	0.268	0.276
95.0	0.195	0.210	0.193	0.206	0.320	0.320	0.198	0.204
120.0	0.154	0.164	0.153	0.161	0.253	0.253	0.155	0.159
150.0	0.126	0.132	0.124	0.129	0.206	0.206	0.125	0.129
185.0	0.100	0.108	0.099	0.106	0.164	0.164	0.102	0.105
240.0	0.0762	0.0817	0.0754	0.0801	0.125	0.125	-	-
300.0	0.0607	0.0654	0.0601	0.0641	0.100	0.100	-	-
400.0	0.0475	0.0495	0.0470	0.0486	-	0.0778	-	-
500.0	0.369	0.0391	0.0366	0.0384	-	0.0605	-	-
630.0	0.0286	0.0292	0.0283	0.0287	-	0.0469	-	-

مقدار جریان الکتریکی بر اساس سطح مقطع هادی

CURRENT RATING (AC) - U, / U, 0.6/1kV



Copper conductors laid in air

- 1) Current in DC circuits with return conductor far away.
- 2) For auxiliary and multicore cables with 4-cores fully loaded.

Basic assumption and conditions of installation:

Ambient temperature
Distance between cables
Loading factor
Distance between cables and walls, ground ceiling
Distance between systems (one upon another)
Distance between cables (one by side)
Distance between cables (one upon another)
(VDE 0298)

30 C
2 x overall diameter
1.0
2 cm
30 cm
2 x overall diameter
2 x overall diameter

nominal cross sectional area 			 			
nom.	pvc	XLPE	pvc	XLPE	pvc	XLPE
(mm ²)	(A)	(A)	(A)	(A)	(A)	(A)
1.5	27	33	20	24	21	27
2.5	35	43	26	32	28	36
4	47	57	34	42	37	47
6	59	72	43	53	47	89
10	81	99	59	73	64	81
16	107	131	78	97	84	109
25	144	177	105	132	114	146
35	176	217	129	162	139	179
50	214	265	157	197	169	218
70	270	336	199	250	213	275
95	334	415	246	308	264	336
120	389	485	285	359	307	388
150	446	557	326	412	352	438
185	516	647	374	475	406	501
240	618	775	445	564	483	580
300	711	894	510	649	552	649
400	843	1061	597	761	646	734
500	994	1254	663	860	747	827
630	1180	1486	-	-	858	934
800	1396	1751	-	-	971	-
1000	1620	2044	-	-	1078	-

مقدار جریان الکتریکی بر اساس سطح مقطع هادی

CURRENT RATING (AC) - U, /U, 0.6/1kV

Copper conductors direct in ground

- 1) Current in DC circuits with return conductor far away.
- 2) For auxiliary and multicore cables with 4-cores fully loaded.

Basic assumption and conditions of installation:



Thermal resistivity of soil
Standard ground temperature
Loading factor
Depth of burial
No. of cable systems

1.0 Km/W
25°C
0.7
0.7-1.2 m
1

nominal cross sectional area							
nom.	pvc	XLPE	pvc	XLPE	pvc	XLPE	
(mm ²)	(A)	(A)	(A)	(A)	(A)	(A)	
1.5	41	48	27	31	30	33	
2.5	55	63	36	40	39	42	
4	71	82	46	52	50	54	
6	90	102	58	64	62	67	
10	124	136	78	86	83	89	
16	160	176	101	111	107	115	
25	208	229	132	145	138	148	
35	250	275	159	174	164	177	
50	296	326	188	206	195	209	
70	365	400	232	254	238	256	
95	438	480	280	305	286	307	
120	501	548	318	348	325	349	
150	563	616	359	392	365	393	
185	639	699	406	444	413	445	
240	746	815	473	517	479	516	
300	845	924	535	585	539	581	
400	975	1065	613	671	614	662	
500	1125	1228	684	756	693	749	
630	1304	1424	-	-	777	843	
800	1507	1638	-	-	859	935	
1000	1715	1870	-	-	936	1022	

جریان الکتریکی برای کابل های قدرت و کنترل فشار ضعیف

L.V POWER AND CONTROL CABLES



Group Rating Factors for More than one Multicore armoured or Unarmoured Cables

Laid on Trays, Clipped to the surface, run in Trench etc.

Common for Installation In Air, Ground, Duct, Trench Etc.

TABLE-5

No. of load conductors	2	3	4	5	6	8	10	12	14	16	18	20
Correction factor	0.8	0.7	0.65	0.6	0.57	0.52	0.48	0.45	0.43	0.41	0.39	0.38

Where spacing between adjacent cables is more than twice their overall diameters, no correction factor need to be applied

Group Rating Factors for more than Three Single Core cables

Laid in Cables buried in Concrete, on surface of Wall, in Trunking, Racks, etc

Common For Installation In Air, Ground, Duct, Trench Etc

TABLE-6

No. of load conductors	4	6	8	10	12	16	20	24	28	32	36	40
Correction factor	0.8	0.69	0.62	0.52	0.55	0.51	0.48	0.43	0.41	0.39	0.38	0.36

Rating Factors for variation in Ambient Temperature for Cables

Laid in Air

For Installation In Air Only

TABLE-7

Ambient temperature C	4	6	8	10	12	16	20
PVC insulated cables	1.49	1.40	1.31	1.22	1.11	1.0	0.86
XLPE insulated cables	1.27	1.22	1.17	1.02	1.06	1.0	0.94

Rating Factors for variation in Ground Temperature for Cables

Laid Direct in Ground or in Ducts

For Installation In Ground and Duct Only

TABLE-8

Ambient temperature C	15	20	25	30	35	40	45
PVC insulated cables	1.25	1.19	1.12	1.06	1.0	0.92	0.85
XLPE insulated cables	1.16	1.13	1.08	1.03	1.0	0.95	0.90

L.V. POWER AND CONTROL CABLES

Rating Factors for Depths of Laying for Cables

Laid Direct in Ground or in Ducts

For installation in Ground and Duct Only

Depths of Laying	Cables Laid Direct in Ground			Cables Laid in Ducts	
Metro	Upto 50 mm ²	to 300 mm ²	Above 300 mm ²	Single core	Multicore
0.5	1.000	1.000	1.000	1.000	1.000
0.6	0.990	0.985	0.971	0.980	0.990
0.75	0.976	0.965	0.952	0.958	0.987
0.8	0.971	0.960	0.945	0.950	0.979
1.0	0.951	0.930	0.924	0.930	0.960
1.25	0.941	0.920	0.894	0.900	0.950
1.5	0.931	0.901	0.874	0.891	0.940
1.75	0.921	0.890	0.864	0.880	0.940
2.0	0.910	0.880	0.854	0.871	0.930
2.5	0.900	0.871	0.844	0.860	0.930
3.0 or more	0.891	0.849	0.824	0.851	0.920

Group Rating Factors for more than one twin or Multicore or

Ucarmoured Cables in horizontal formation

Laid in Direct ground

for Installation Ground only

N o . o f cables	2	3	4	5	6	7	8	9	10	11	12
Cables laid touching	0.8/1	0.7	0.63	0.59	0.55	0.52	0.50	0.48	0.47	0.45	0.44
Cables laid 15 cm apart	0.87	0.78	0.74	0.70	0.68	0.66	0.64	0.63	0.62	0.61	0.60
Cables laid 30 cm apart	0.91	0.84	0.81	0.78	0.77	0.75	0.75	0.74	0.73	0.73	0.72
Cables laid 45 cm apart	0.93	0.88	0.86	0.84	0.83	0.82	0.81	0.81	0.80	0.80	0.80
Cables laid 60 cm apart	0.95	0.90	0.89	0.87	0.87	0.86	0.86	0.85	0.85	0.85	0.84

Rating factors for laying in ground only

L.V. POWER AND CONTROL CABLES

Rating Factors for Variation in Thermal Resistivity of soil for Two or Three Single-core Cables
Laid Direct in Ground
For Installation Ground only



Nominal area of
conductor

Thermal Resistivity of Soil in Km/W

mm ²	0.7	0.8	0.9	1.0	1.2	1.5	2.0	2.5	3.0	3.5	4.0
50	1.21	1.16	1.11	1.07	1.0	0.91	0.81	0.73	0.68	0.63	0.59
70	1.22	1.16	1.12	1.07	1.0	0.91	0.81	0.73	0.68	0.63	0.59
95	1.22	1.16	1.12	1.07	1.0	0.91	0.81	0.73	0.68	0.63	0.59
10	1.22	1.16	1.12	1.07	1.0	0.91	0.81	0.73	0.68	0.63	0.59
150	1.22	1.16	1.12	1.07	1.0	0.91	0.81	0.73	0.68	0.63	0.59
185	1.22	1.17	1.12	1.07	1.0	0.91	0.81	0.73	0.68	0.62	0.59
240	1.23	1.17	1.12	1.07	1.0	0.91	0.80	0.73	0.68	0.62	0.59
300	1.23	1.17	1.12	1.07	1.0	0.91	0.80	0.73	0.68	0.62	0.59
400	1.23	1.17	1.12	1.07	1.0	0.91	0.80	0.73	0.67	0.62	0.58
500	1.23	1.17	1.12	1.07	1.0	0.91	0.80	0.73	0.67	0.62	0.58
360	1.23	1.17	1.12	1.07	1.0	0.91	0.80	0.73	0.7	0.61	0.58
800	1.23	1.17	1.12	1.07	1.0	0.91	0.80	0.72	0.66	0.61	0.58
1000	1.25	1.18	1.12	1.07	1.0	0.91	0.80	0.72	0.66	0.61	0.58

L.V. POWER AND CONTROL CABLES

Rating Factors for Variation in Thermal Resistivity of soil for Two or
Three Single-core Cables
Laid Direct in Ground
For Installation Ground only

Nominal area of conductor	Thermal Resistivity of Soil in Km/W										
	0.7	0.8	0.9	1.0	1.2	1.5	2.0	2.5	3.0	3.5	4.0
mm2											
1.5/2.5	1.12	1.09	1.07	1.04	1.0	0.94	0.86	0.80	0.75	0.70	0.66
4	1.13	1.10	1.07	1.05	1.0	0.94	0.85	0.79	0.74	0.69	0.65
6	1.14	1.10	1.07	1.05	1.0	0.93	0.85	0.79	0.74	0.68	0.64
10	1.15	1.11	1.08	1.05	1.0	0.93	0.85	0.78	0.73	0.67	0.63
16	1.16	1.12	1.08	1.05	1.0	0.93	0.84	0.77	0.72	0.66	0.62
25	1.17	1.13	1.09	1.05	1.0	0.93	0.83	0.77	0.71	0.65	0.61
35	1.17	1.13	1.09	1.06	1.0	0.92	0.83	0.76	0.71	0.65	0.61
50	1.17	1.13	1.09	1.06	1.0	0.92	0.83	0.76	0.71	0.65	0.61
70	1.18	1.14	1.09	1.06	1.0	0.92	0.83	0.75	0.70	0.64	0.60
95	1.18	1.14	1.09	1.06	1.0	0.92	0.83	0.75	0.70	0.64	0.60
120	1.19	1.14	1.10	1.06	1.0	0.92	0.82	0.75	0.69	0.63	0.59
150	1.19	1.14	1.10	1.06	1.0	0.92	0.82	0.75	0.69	0.63	0.59
185	1.19	1.14	1.10	1.06	1.0	0.92	0.81	0.74	0.69	0.63	0.59
240	1.20	1.15	1.10	1.07	1.0	0.92	0.81	0.74	0.69	0.63	0.59

L.V. POWER AND CONTROL CABLES

Current Rating Factors

Rating Factors for variation in Thermal Resistivity of soil for Two or Single-CORE Cables in Ducts
For Installation In Duct Only

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Nominal area of conductor	Thermal Resistivity of Soil in Km/W										
	0.7	0.8	0.9	1.0	1.2	1.5	2.0	2.5	3.0	3.5	4.0
mm2											
50	1.08	1.06	1.04	1.03	1.0	0.96	0.90	0.85	0.81	0.77	0.74
70	1.08	1.06	1.05	1.03	1.0	0.96	0.90	0.84	0.80	0.76	0.73
95	1.08	1.07	1.05	1.03	1.0	0.96	0.89	0.84	0.80	0.75	0.72
120	1.09	1.07	1.05	1.03	1.0	0.95	0.89	0.83	0.79	0.75	0.71
150	1.09	1.07	1.05	1.03	1.0	0.95	0.88	0.83	0.79	0.74	0.71
185	1.09	1.07	1.05	1.03	1.0	0.95	0.88	0.83	0.78	0.74	0.70
240	1.10	1.08	1.05	1.04	1.0	0.95	0.88	0.82	0.78	0.73	0.70
300	1.10	1.08	1.06	1.04	1.0	0.95	0.87	0.82	0.77	0.72	0.69
400	1.11	1.08	1.06	1.04	1.0	0.95	0.87	0.82	0.77	0.72	0.68
500	1.12	1.08	1.06	1.04	1.0	0.94	0.87	0.81	0.76	0.71	0.68
630	1.12	1.09	1.06	1.04	1.0	0.94	0.87	0.81	0.76	0.71	0.67
800	1.13	1.10	1.07	1.04	1.0	0.94	0.86	0.80	0.75	0.71	0.67
1000	1.13	1.10	1.07	1.04	1.0	0.94	0.86	0.80	0.75	0.71	0.66

L.V. POWER AND CONTROL CABLES

Current Rating Factors

Rating Factors for variation in Thermal Resistivity of soil for Two or Single-CORE Cables in Ducts
For Installation In Duct Only

Nominal area of conductor	Thermal Resistivity of Soil in Km/W										
	0.7	0.8	0.9	1.0	1.2	1.5	2.0	2.5	3.0	3.5	4.0
mm ²											
50	1.11	1.08	1.06	1.04	1.0	0.94	0.87	0.82	0.77	0.73	0.69
70	1.12	1.09	1.06	1.04	1.0	0.94	0.87	0.81	0.76	0.72	0.68
95	1.12	1.09	1.06	1.04	1.0	0.94	0.87	0.81	0.76	0.72	0.68
120	1.13	1.10	1.07	1.04	1.0	0.94	0.86	0.80	0.75	0.72	0.67
150	1.13	1.10	1.07	1.04	1.0	0.94	0.86	0.80	0.75	0.71	0.67
185	1.13	1.10	1.07	1.04	1.0	0.93	0.86	1.79	0.75	0.70	0.67
240	1.14	1.11	1.07	1.04	1.0	0.93	0.86	0.79	0.74	0.70	0.66
300	1.14	1.11	1.08	1.05	1.0	0.93	0.85	0.79	0.74	0.69	0.65
400	1.14	1.11	1.08	1.05	1.0	0.93	0.85	0.78	0.73	0.68	0.65
500	1.15	1.11	1.08	1.05	1.0	0.93	0.85	0.78	0.73	0.68	0.64
630	1.15	1.12	1.09	1.05	1.0	0.93	0.84	0.78	0.72	0.68	0.64
800	1.16	1.12	1.09	1.05	1.0	0.93	0.84	0.77	0.72	0.67	0.64
1000	1.16	1.13	1.09	1.05	1.0	0.92	0.84	0.77	0.71	0.67	0.63





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