

600/1000V, XLPE Insulated Cables according to IEC 60502-1



Single core(unarmoured)

Two core(unarmoured)

Three core(unarmoured)

Three core +1(unarmoured)

Four core(unarmoured)

Multi- core(unarmoured)

Single core(armoured)

Two core(armoured)

Three core(armoured)

Three core +1(armoured)

Four core(armoured)



600/1000V, XLPE Insulated Cables according to IEC 60502-1

Application:

These cables are used for electricity supply in low voltage installation system, They are suitable for installation in indoors and outdoors, in cable ducts, under ground, in power and switching stations, local energy distributions, industrial plants, where there is no risk of mechanical damage.

Construction:

Conductors Copper or Aluminium conductor, round stranded or Shaped, Class 2 to IEC 60228, BS EN 60228. For smaller sizes, a solid round conductor, Class 1 as per IEC 60228, BS EN 60228 can also be supplied upon request.

Insulation XLPE material and thickness shall be as per IEC 60502 or BS 5467 rated for 90°C continuous operation.

Colour Code Colour Code (1) :

- 1 Core : Red or Black
- 2 Cores : Red, Black
- 3 Cores : Red, Yellow, Blue
- 4 Cores : Red, Yellow, Blue, Black
- 5 Cores : Red, Yellow, Blue, Black, Green
- Above 5 Cores: Black Cores with White numerals

Colour Code (2) :

- 1 Core : Brown or Blue
- 2 Cores : Brown, Blue
- 3 Cores : Brown, Black, Grey
- 4 Cores : Blue, Brown, Black, Grey
- 5 Cores : Green/Yellow, Blue, Brown, Black, Grey
- Above 5 Cores: Black Cores with White numerals

Assembly / Inner Sheath

Two, Three or Four insulated conductors are laid-up together with non-hygroscopic fillers and the assembly is bedded with an extruded layer of PVC. In case of non-armoured cables, this layer may be omitted





Armour

Aluminum/Galvanized Steel Wires applied helically over the bedding as per IEC 60502 or as per BS 5467, BS 6346. Single core cables shall be Aluminium wire armour, Aluminum/Steel Tapes applied helically over the bedding of multi-core cables as per IEC 60502.

Outer Sheath

Outer sheath shall be of Extruded PVC Type ST2 as per IEC 60502-1 or Type 9 as BS 6346/5467.

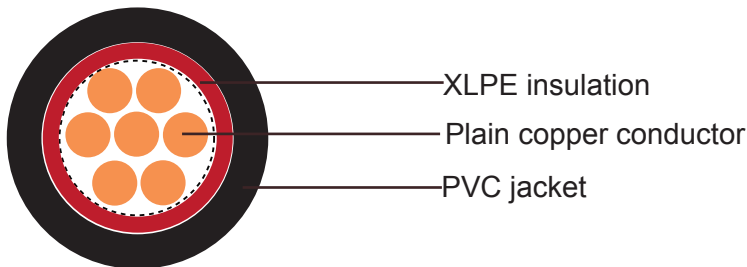
Special type of PVC sheathing material such as Fire Retardant PVC, Anti-Termite PVC, Anti-Rodent PVC, Sunlight resistant PVC, Oil Resistant PVC are available on special request. Also, special sheathing materials such as LLDPE, MDPE, HDPE, LSF, CPE are available on request.

Fire Performance of Cable Sheaths

Cables can be supplied with special flame retardant PVC outer sheath to comply with the flame test requirements of IEC 60332-3-22, IEC 60332-3-23 and IEC 60332-3-24, can also supply cables with Low Smoke Halogen Free (LSHF) material according to IEC 60502-1, BS 7211, BS 6724 or other equivalent standards.

Cable Parameters:

Single core(unarmoured)



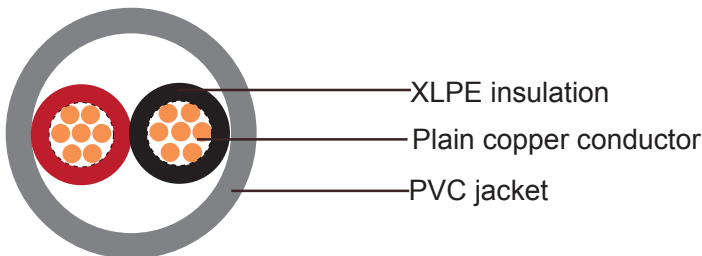
Nominal Cross Section	Diameter of Conductor (Approx.)	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Diameter (Approx.)	Cable Weight (Approx.)
mm ²	mm	mm	mm	mm	Kg/Km
1x1.5	1.6	0.7	1.4	6	50
1x2.5	2	0.7	1.4	6.5	70
1x4	2.6	0.7	1.4	7	80
1x6	3.1	0.7	1.4	7.5	110
1x10	4	0.7	1.4	8.5	150
1x16	5	0.7	1.4	9.5	215
1x25	6.3	0.9	1.4	11.5	315
1x35	7.4	0.9	1.4	12	415
1x50	8.8	1	1.4	13	555





Nominal Cross Section	Diameter of Conductor (Approx.)	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Diameter (Approx.)	Cable Weight (Approx.)
mm ²	mm	mm	mm	mm	Kg/Km
1x70	10.6	1.1	1.4	15	760
1x95	12.4	1.1	1.5	17	1025
1x120	14	1.2	1.5	18.5	1270
1x150	15.5	1.4	1.6	21.5	1575
1x185	17.4	1.6	1.6	23	1955
1x240	20.3	1.7	1.7	26	2470
1x300	22.7	1.8	1.8	28	3155
1x400	25.4	2	1.9	32	4049
1x500	28.8	2.2	2	36	5100
1x630	30.4	2.4	2.2	40	6410
1x800	□	2.6	2.3	47	8200
1x1000	□	2.8	2.4	52	10210

Two cores(unarmoured)



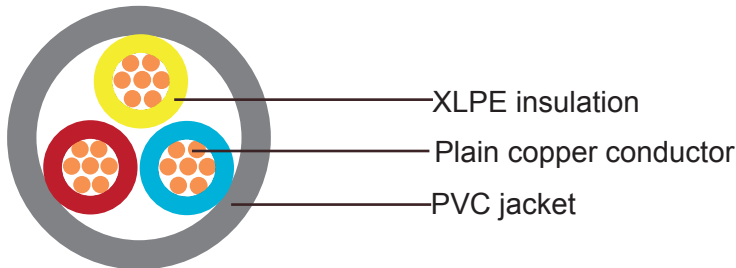
Nominal Cross Section	Diameter of Conductor (Approx.)	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Diameter (Approx.)	Cable Weight (Approx.)
mm ²	mm	mm	mm	mm	Kg/Km
2x1.5	1.6	0.7	1.8	10	125
2x2.5	2	0.7	1.8	11.5	155
2x4	2.6	0.7	1.8	12.5	195
2x6	3.1	0.7	1.8	13.5	255
2x10	4	0.7	1.8	15.5	370
2x16	5	0.7	1.8	17	500
2x25	6.3	0.9	1.8	20	700
2x35	7.4	0.9	1.8	22	900
2x50	8.8	1	1.8	25	1250
2x70	10.6	1.1	1.8	29	1600
2x95	12.4	1.1	1.9	32	2250





Nominal Cross Section	Diameter of Conductor (Approx.)	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Diameter (Approx.)	Cable Weight (Approx.)
mm ²	mm	mm	mm	mm	Kg/Km
2x120	14	1.2	2	36	2750
2x150	15.5	1.4	2.2	40	3510
2x185	17.4	1.6	2.3	44	4200
2x240	20.3	1.7	2.5	50	5500
2x300	22.5	1.8	2.6	55	6950
2x400	25.4	2	2.9	60	8400

Three cores(unarmoured)

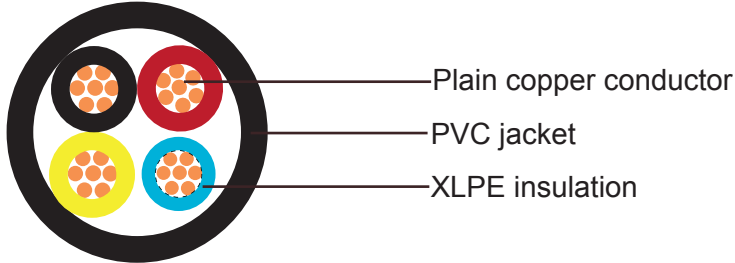


Nominal Cross Section	Diameter of Conductor (Approx.)	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Diameter (Approx.)	Cable Weight (Approx.)
mm ²	mm	mm	mm	mm	Kg/Km
3x1.5	1.6	0.7	1.8	10.5	150
3x2.5	2	0.7	1.8	11	190
3x4	2.6	0.7	1.8	12.5	250
3x6	3.1	0.7	1.8	14.5	320
3x10	4	0.7	1.8	15.5	465
3x16	5	0.7	1.8	18.5	670
3x25	6.3	0.9	1.8	19.5	965
3x35	7.4	0.9	1.8	22	1290
3x50	8.8	1	1.8	26	1750
3x70	10.6	1.1	1.9	28.5	2450
3x95	12.4	1.1	2	32.5	3200
3x120	14	1.2	2.1	35.5	4010
3x150	15.5	1.4	2.3	40	5050
3x185	17.4	1.6	2.4	44.5	6105
3x240	20.3	1.7	2.6	54	8050
3x300	22.5	1.8	2.7	60.5	9998
3x400	25.4	2	3	66	13210



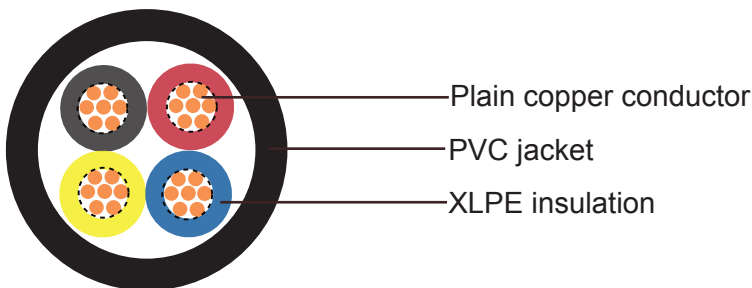


Three cores+1(unarmoured)



Nominal Cross Section mm ²	Diameter of Conductor (Approx.)		Nominal Insulation Thickness		Nominal Sheath Thickness mm	Overall Diameter (Approx.) mm	Cable Weight (Approx.) Kg/Km
	(3)mm	(1)mm	(3)mm	(1)mm			
3x 16/10	5	4	0.7	0.7	1.8	20	825
3x 25/16	6.3	5	0.9	0.7	1.8	22.8	1235
3x 35/16	7.4	5	0.9	0.7	1.8	24.8	1565
3x 50/25	8.8	6.3	1	0.9	1.8	28.5	2220
3x 70/35	10.6	7.4	1.1	0.9	1.9	32	2925
3x 95/50	12.4	8.8	1.1	1	2.1	37.5	3525
3x120/70	14	10.6	1.2	1.1	2.2	41.5	4940
3x150/70	15.5	10.6	1.4	1.1	2.3	45	6250
3x185/95	17.4	12.4	1.6	1.1	2.5	50.5	7450
3x240/120	20.3	14	1.7	1.2	2.6	56	9500
3x300/150	22.7	15.5	1.8	1.4	2.8	64.5	12100
3x400/185	25.4	17.4	2	1.6	3.1	70	18900

Four cores(unarmoured)



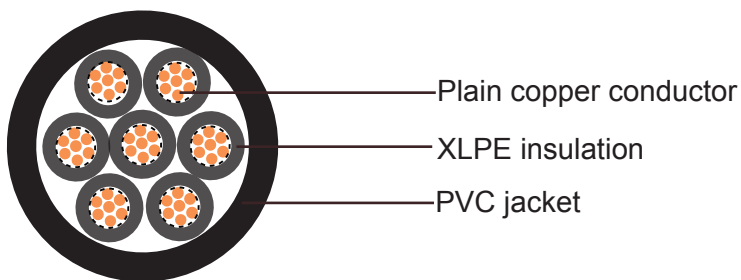
Nominal Cross Section mm ²	Diameter of Conductor (Approx.) mm	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Overall Diameter (Approx.) mm	Cable Weight (Approx.) Kg/Km
4x1.5	1.6	0.7	1.8	11	170
4x2.5	2	0.7	1.8	12	230





Nominal Cross Section	Diameter of Conductor (Approx.)	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Diameter (Approx.)	Cable Weight (Approx.)
mm ²	mm	mm	mm	mm	Kg/Km
4x4	2.6	0.7	1.8	14	305
4x6	3.1	0.7	1.8	15.5	400
4x10	4	0.7	1.8	18	585
4x16	5	0.7	1.8	20	835
4x25	6.3	0.9	1.8	22	1210
4x35	7.4	0.9	1.8	24.5	1670
4x50	8.8	1	1.8	26.5	2250
4x70	10.6	1.1	2	32	3015
4x95	12.4	1.1	2.1	36.5	4085
4x120	14	1.2	2.3	40.5	5320
4x150	15.5	1.4	2.4	44.5	6510
4x185	17.4	1.6	2.6	51	8050
4x240	20.3	1.7	2.8	58.5	10520
4x300	22.7	1.8	3	64.5	13130
4x400	25.4	2	3.3	73.5	16850

Multi-cores(unarmoured)



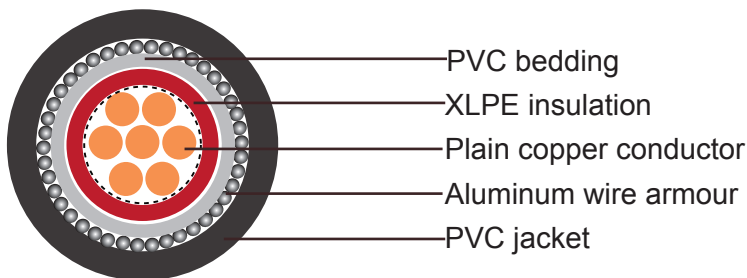
Nominal Cross Section	Diameter of Conductor (Approx.)	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Diameter (Approx.)	Cable Weight (Approx.)
mm ²	mm	mm	mm	mm	Kg/Km
5x1.5	1.6	0.7	1.4	14	260
7x1.5	1.6	0.7	1.4	15	310
10x1.5	1.6	0.7	1.4	18	395
12x1.5	1.6	0.7	1.4	18.5	440
14x1.5	1.6	0.7	1.4	19	485
19x1.5	1.6	0.7	1.4	21	600
21x1.5	1.6	0.7	1.4	22	650





Nominal Cross Section	Diameter of Conductor (Approx.)	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Diameter (Approx.)	Cable Weight (Approx.)
mm ²	mm	mm	mm	mm	Kg/Km
24x1.5	1.6	0.7	1.4	24	730
30x1.5	1.6	0.7	1.4	25	860
40x1.5	1.6	0.7	1.4	28	1080
48x1.5	1.6	0.7	1.4	30	1250
61x1.5	1.6	0.7	1.4	33	1570
5x2.5	2	0.7	1.4	15	330
7x2.5	2	0.7	1.4	16	400
10x2.5	2	0.7	1.4	19.5	515
12x2.5	2	0.7	1.4	20	580
14x2.5	2	0.7	1.4	21	650
19x2.5	2	0.7	1.4	23	810
21x2.5	2	0.7	1.4	24	890
24x2.5	2	0.7	1.4	26	1000
30x2.5	2	0.7	1.4	28	1190
40x2.5	2	0.7	1.4	31	1525
48x2.5	2	0.7	1.4	34	1820
61x2.5	2	0.7	1.4	37	2240

Single core(aluminum wire armoured)



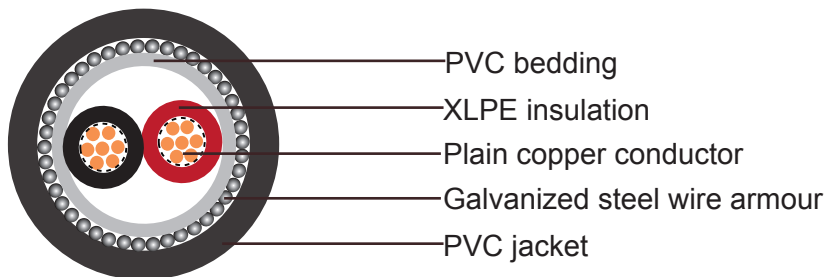
Nominal Cross Section	Diameter of Conductor (Approx.)	Nominal Insulation thickness	Nominal bedding thickness	Nominal Alum Wire dia.	Nominal Sheath thickness	Overall Diameter (Approx.)	Cable Weight (Approx.)
mm ²	mm	mm	mm	mm	mm	mm	Kg/Km
1x50	8.8	1	1	1.25	1.8	19.5	730
1x70	10.6	1.1	1	1.25	1.8	21.5	970
1x95	12.4	1.1	1	1.6	1.8	24	1220
1x120	14	1.2	1	1.6	1.8	25.5	1520
1x150	15.5	1.4	1	1.6	1.8	27.5	1920
1x185	17.4	1.6	1	1.6	1.8	30	2320





Nominal Cross Section	Diameter of Conductor (Approx.)	Nominal Insulation thickness	Nominal bedding thickness	Nominal Alum Wire dia.	Nominal Sheath thickness	Overall Diameter (Approx.)	Cable Weight (Approx.)
mm ²	mm	mm	mm	mm	mm	mm	Kg/Km
1x240	20.3	1.7	1	1.6	1.9	33	2920
1x300	22.7	1.8	1	1.6	1.9	35	3650
1x400	25.4	2	1.2	2	2.1	40.5	4670
1x500	28.8	2.2	1.2	2	2.2	44.5	5870
1x630	30.4	2.4	1.2	2	2.3	49	7360
1x800	□	2.6	1.4	2.5	2.5	55.5	9360
1x1000	□	2.8	1.4	2.5	2.7	61	11350

Two cores(Galvanized steel wire armoured)

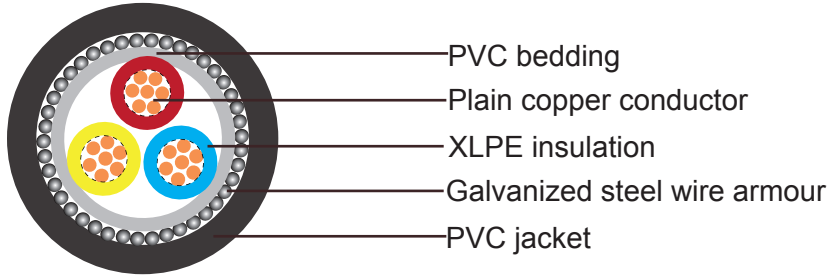


Nominal Cross Section	Diameter of Conductor (Approx.)	Nominal Insulation thickness	Nominal bedding thickness	Nominal Steel Wire dia.	Nominal Sheath thickness	Overall Diameter (Approx.)	Cable Weight (Approx.)
mm ²	mm	mm	mm	mm	mm	mm	Kg/Km
2x1.5	1.6	0.7	1	0.9	1.8	13.5	360
2x2.5	2	0.7	1	0.9	1.8	14.5	405
2x4	2.6	0.7	1	0.9	1.8	15.8	470
2x6	3.1	0.7	1	0.9	1.8	17	505
2x10	4	0.7	1	1.25	1.8	19.3	900
2x16	5	0.7	1	1.25	1.8	21.2	950
2x25	6.3	0.9	1	1.6	1.8	24	1205
2x35	7.4	0.9	1	1.6	1.8	24.8	1800
2x50	8.8	1	1	1.6	1.8	26	1850
2x70	10.6	1.1	1	2	2	29	2335
2x95	12.4	1.1	1.2	2	2.1	33.2	3165
2x120	14	1.2	1.2	2	2.3	36.1	3750
2x150	15.5	1.4	1.2	2.5	2.3	39.3	4410
2x185	17.4	1.6	1.3	2.5	2.5	44.8	5710
2x240	20.3	1.7	1.4	2.5	2.7	53.5	7150
2x300	22.5	1.8	1.5	2.5	2.9	58	8565
2x400	25.4	2	1.6	2.5	3.1	63	10695



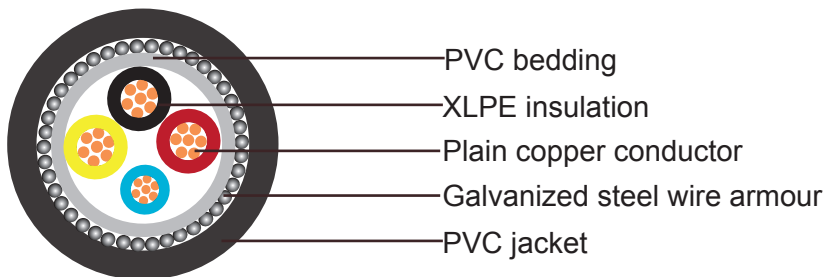


Three cores(Galvanized steel wire armoured)



Nominal Cross Section	Diameter of Conductor (Approx.)	Nominal Insulation thickness	Nominal bedding thickness	Nominal Steel Wire dia.	Nominal Sheath thickness	Overall Diameter (Approx.)	Cable Weight (Approx.)
mm ²	mm	mm	mm	mm	mm	mm	Kg/Km
3x1.5	1.6	0.7	1.2	0.9	1.8	15	380
3x2.5	2	0.7	1.2	0.9	1.8	15.5	400
3x4	2.6	0.7	1.2	0.9	1.8	16.5	460
3x6	3.1	0.7	1.2	0.9	1.8	18	540
3x10	4	0.7	1.2	0.9	1.8	19.5	750
3x16	5	0.7	1.2	1.25	1.8	22.5	1000
3x25	6.3	0.9	1.2	1.6	1.8	26	1510
3x35	7.4	0.9	1.2	1.6	1.8	28	1950
3x50	8.8	1	1.2	1.6	1.9	32	2350
3x70	10.6	1.1	1.2	2	2	35	3230
3x95	12.4	1.1	1.2	2	2.1	39	4050
3x120	14	1.2	1.2	2	2.3	43	5230
3x150	15.5	1.4	1.4	2.5	2.4	47	6750
3x185	17.4	1.6	1.4	2.5	2.6	52	8230
3x240	20.3	1.7	1.5	2.5	2.7	59	10510
3x300	22.5	1.8	1.6	2.5	2.9	64	13210
3x400	25.4	2	1.6	2.5	3.2	74	16100

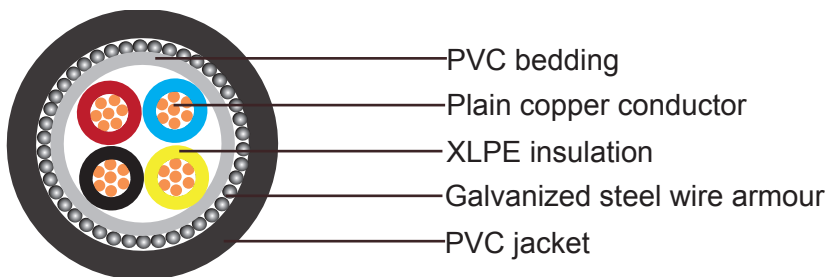
Three cores+1(Galvanized steel wire armoured)





Nominal Cross Section	Diameter of Conductor (Approx.)		Nominal Insulation thickness		Nominal bedding thickness	Nominal Steel Wire dia.	Nominal Sheath thickness	Overall Diameter (Approx.)	Cable Weight (Approx.)
	mm ²	(3) mm	(1) mm	(3) mm					
3x 16/10	5	4	0.7	0.7	1	1.6	1.8	25.5	1550
3x 25/16	6.3	5	0.9	0.7	1	1.6	1.8	27.5	2010
3x 35/16	7.4	5	0.9	0.7	1	1.6	1.8	29	2375
3x 50/25	8.8	6.3	1	0.9	1	1.6	2	33	3100
3x 70/35	10.6	7.4	1.1	0.9	1.2	2	2.1	38	4290
3x 95/50	12.4	8.8	1.1	1	1.2	2	2.3	43.5	5540
3x120/70	14	10.6	1.2	1.1	1.2	2	2.4	49	7150
3x150/70	15.5	10.6	1.4	1.1	1.4	2.5	2.5	52	8330
3x185/95	17.4	12.4	1.6	1.1	1.4	2.5	2.7	57.2	10110
3x240/120	20.3	14	1.7	1.2	1.6	2.5	3	64	12740
3x300/150	22.7	15.5	1.8	1.4	1.6	2.5	3	69.8	15430
3x400/185	25.4	17.4	2	1.6	1.6	3.15	3.3	78.6	19990

Four cores(Galvanized steel wire armoured)



Nominal Cross Section	Diameter of Conductor (Approx.)	Nominal Insulation thickness	Nominal bedding thickness	Nominal Steel Wire dia.	Nominal Sheath thickness	Overall Diameter (Approx.)	Cable Weight (Approx.)
mm ²	mm	mm	mm	mm	mm	mm	Kg/Km
4x1.5	1.6	0.7	1	0.9	1.8	15	415
4x2.5	2	0.7	1	0.9	1.8	17.5	490
4x4	2.6	0.7	1	0.9	1.8	19	600
4x6	3.1	0.7	1	0.9	1.8	20	730
4x10	4	0.7	1	1.25	1.8	23	970
4x16	5	0.7	1	1.6	1.8	26	1520
4x25	6.3	0.9	1	1.6	1.8	29	2010
4x35	7.4	0.9	1	1.6	1.9	31	2560
4x50	8.8	1	1	1.6	2.1	36	3350
4x70	10.6	1.1	1.2	2	2.2	40	4680





Caledonian

Any inquiries, please feel free to contact

kitty@caledonian-cables.com or kitty@caledonian-cables.co.uk



Nominal Cross Section	Diameter of Conductor (Approx.)	Nominal Insulation thickness	Nominal bedding thickness	Nominal Steel Wire dia.	Nominal Sheath thickness	Overall Diameter (Approx.)	Cable Weight (Approx.)
mm ²	mm	mm	mm	mm	mm	mm	Kg/Km
4x95	12.4	1.1	1.2	2	2.4	44	5710
4x120	14	1.2	1.4	2.5	2.5	50	7500
4x150	15.5	1.4	1.4	2.5	2.6	55	9010
4x185	17.4	1.6	1.4	2.5	2.8	61	10820
4x240	20.3	1.7	1.6	2.5	3.1	69	13630
4x300	22.7	1.8	1.6	2.5	3.2	75	16820
4x400	25.4	2	1.8	3.15	3.4	83	22230

