



## BS 6346 PVC Insulated Cables, 1900/3300V

### Application

These cables are used for power and control circuits, they can offer excellent protection through the use of a heavy galvanized steel wire armour, so they are well adapted to underground use in industrial applications, in moist areas.

### Construction

<b>Conductor</b>	Solid Aluminum or Copper conductor, round stranded or shaped, Class 2 to BS 6460, IEC 60228.
<b>Insulation</b>	PVC(Polyvinyl Chloride) type T11
<b>Colour Code</b>	1 Core :           Brown 2 Cores:           Brown or Blue 3 Cores:           Brown, Black, Grey 4 Cores:           Blue, Brown, Black, Grey 5 Cores:           Green-yellow, Blue, Brown, Black, Grey Above 5 Cores: White Cores with black numbers
<b>Filler(optional)</b>	PVC or Polypropylene yarn
<b>Binder Tape(optional)</b>	Polyester (Mylar) tape
<b>Inner Sheath/ Bedding</b>	PVC (Polyvinyl Chloride)
<b>Armour</b>	Single Core: AWA (Aluminum Wire Armour) Multi Core: SWA (Steel Wire or Tape Armour)
<b>Outer Sheath</b>	PVC(Polyvinyl Chloride), type TM1

### Technical Information

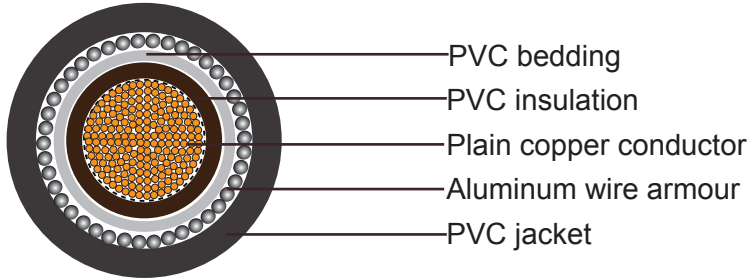
<b>Voltage rating</b>	1900/3300V
<b>Temperature rating</b>	-20°C to +60°C
<b>Bending radius</b>	Single core: 10 x overall diameter Multicores: 8 x overall diameter
<b>Flame retardant</b>	IEC60332 part 1, BS4066 part 1





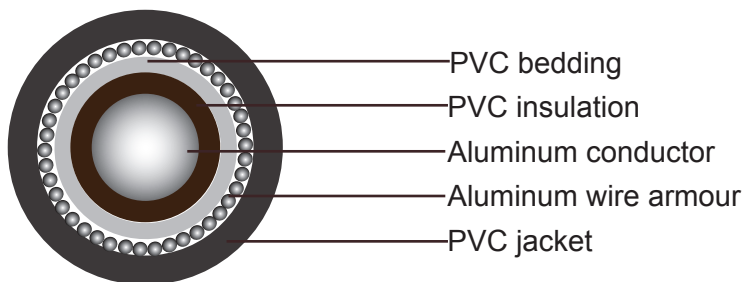
## Cable Parameter

### Single-core 1900/3300 V cables with circular stranded copper conductor



Nominal cross-sectional area mm <sup>2</sup>	Number/wire No./mm	Nominal insulation thickness mm	Nominal bedding thickness mm	Nominal alum wire armor dia. mm	Nominal sheath thickness mm	Approx. overall diameter mm	Approx. cable weight kg/mm
1x50	19/1.78	2.2	0.8	1.25	1.6	21.0	840
1x70	19/2.14	2.2	0.8	1.25	1.6	22.8	1070
1x95	19/2.52	2.2	1.0	1.6	1.7	26.0	1445
1x120	37/2.03	2.2	1.0	1.6	1.7	27.7	1715
1x150	37/2.25	2.2	1.0	1.6	1.8	29.4	2010
1x185	37/2.52	2.2	1.0	1.6	1.8	31.3	2380
1x240	61/2.25	2.2	1.0	1.6	1.9	34.1	2975
1x300	61/2.52	2.4	1.0	1.6	1.9	37.0	3615
1x400	61/2.85	2.6	1.2	2.0	2.1	42.0	4655
1x500	61/3.20	2.8	1.2	2.0	2.1	45.6	5725
1x630	61/3.65	2.8	1.2	2.0	2.2	49.7	7150
1x800	127/2.85	2.8	1.4	2.5	2.4	55.8	9160
1x1000	127/3.20	3.0	1.4	2.5	2.5	61.0	11400

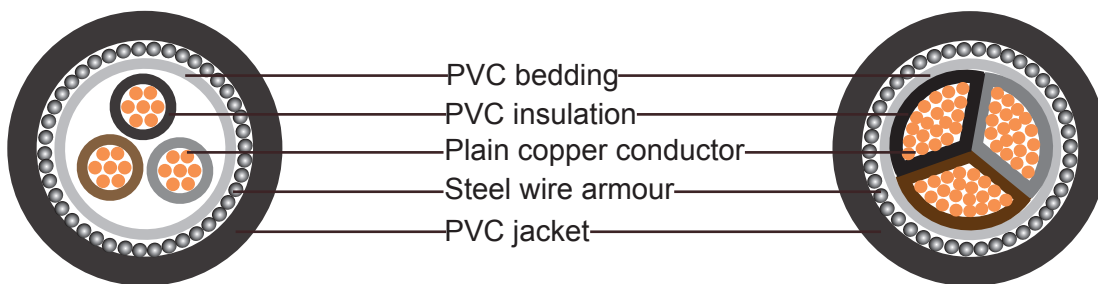
### Single-core 1900/3300 V cables with solid aluminum conductor





Nominal cross-sectional area	Nominal insulation thickness	Nominal bedding thickness	Nominal alum wire armor dia.	Nominal sheath thickness	Approx. overall diameter	Approx. cable weight
mm <sup>2</sup>	mm	mm	mm	mm	mm	kg/mm
1x50	2.2	0.8	1.25	1.6	19.8	625
1x70	2.2	0.8	1.25	1.6	21.3	735
1x95	2.2	1.0	1.6	1.7	24.3	965
1x120	2.2	1.0	1.6	1.7	25.6	1090
1x150	2.2	1.0	1.6	1.8	27.1	1250
1x185	2.2	1.0	1.6	1.8	28.8	1415
1x240	2.2	1.0	1.6	1.9	31.2	1680
1x300	2.4	1.0	1.6	1.9	33.7	1935

## Three-core 1900/3300 V cables with stranded copper conductors



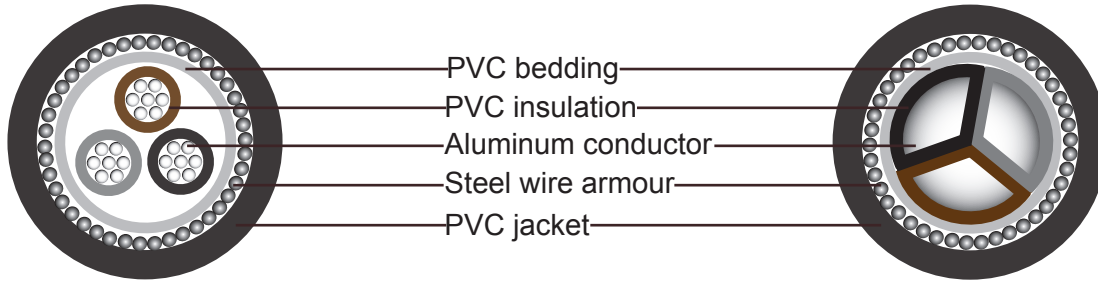
Nominal cross-sectional area	Number/wire	Nominal insulation thickness	Nominal bedding thickness	Nominal wire armor dia.	Nominal sheath thickness	Approx. overall diameter	Approx. cable weight
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	mm	kg/mm
3x16	7/1.70	2.2	1.0	1.6	1.8	30.3	1700
3x25	7/2.14	2.2	1.0	1.6	1.8	33.1	2085
3x35	19/1.53	2.2	1.0	1.6	1.9	35.8	2405
3x35*	19/1.53	2.2	1.0	1.6	1.9	32.1	2405
3x50*	19/1.78	2.2	1.2	2.0	2.0	35.6	3160
3x70*	19/2.14	2.2	1.2	2.0	2.1	38.9	3925
3x95*	19/2.52	2.2	1.2	2.0	2.2	42.3	4860
3x120*	37/2.03	2.2	1.4	2.5	2.3	46.6	6205
3x150*	37/2.25	2.2	1.4	2.5	2.4	49.4	7175
3x185*	37/2.52	2.2	1.4	2.5	2.5	52.8	8320
3x240*	61/2.25	2.2	1.6	2.5	2.6	57.8	10395
3x300*	61/2.52	2.4	1.6	2.5	2.8	63.2	12575
3x400*	61/2.85	2.6	1.6	2.5	3.0	69.6	15325

\*Shaped stranded conductor (class 2)





## Three-core 1900/3300 V cables with solid aluminum conductors



Nominal cross-sectional area	Nominal insulation thickness	Nominal bedding thickness	Nominal Armor dia.	Nominal sheath thickness	Approx. overall diameter	Approx. cable weight
mm <sup>2</sup>	mm	mm	mm	mm	mm	kg/mm
3x16	2.2	1.0	1.6	1.8	28.9	1630
3x25	2.2	1.0	1.6	1.8	31.3	1880
3x35	2.2	1.0	1.6	1.9	33.7	2145
3x35*	2.2	1.0	1.6	1.9	30.6	2145
3x50*	2.2	1.2	2.0	2.0	33.9	2880
3x70*	2.2	1.2	2.0	2.1	36.9	3340
3x95*	2.2	1.2	2.0	2.2	40.0	3870
3x120*	2.2	1.4	2.5	2.3	44.0	4980
3x150*	2.2	1.4	2.5	2.4	46.5	5585
3x185*	2.2	1.4	2.5	2.5	49.6	6250
3x240*	2.2	1.6	2.5	2.6	54.2	7315
3x300*	2.4	1.6	2.5	2.8	59.2	8365

\*Shaped conductor (class 1)

