

Section 1 Power and Wiring Cables

1

Single-Core PVC 6491X . . . . . 1:2

Single-Core PVC/PVC 6181Y . . . . . 1:4

Flat Twin & Flat Three Core PVC 6242/3Y . . . . . 1:6

Multicore XLPE/LSF/SWA/LSF BS6724

Control Cable . . . . . 1:8

Single-Core XLPE/PVC . . . . . 1:10

Single-Core XLPE/PVC/AWA/PVC Power Cable . . . . . 1:12

Multicore XLPE/PVC/SWA/PVC Power Cable . . . . . 1:14

Single-Core LSF 6491B . . . . . 1:18

Single-Core XLPE/LSF 6181B . . . . . 1:20

Single-Core XLPE/LSF/AWA/LSF Power Cable . . . . . 1:22

Multicore XLPE/LSF/SWA/LSF Power &

Control Cable . . . . . 1:24

Single-Core XLPE/LSF/AWA/LSF 11 kV

Power Cable . . . . . 1:28

Three Core XLPE/LSF/SWA/LSF 11 kV

Power Cable . . . . . 1:30

BS7629 Fire Resistant Cable . . . . . 1:32

Fire Resistant Armoured Power Cable . . . . . 1:34

Fire Resistant Armoured Power

Cable - Enhanced . . . . . 1:38

Single-Core XLPE/PVC/AWA/PVC Power Cable . . . . . 1:40

Three Core XLPE/PVC/SWA/PVC Power Cable . . . . . 1:42

Flat Twin & Flat Three Core LSF 6242/3B . . . . . 1:44

Solar Cables for PV Applications . . . . . 1:46

Technical Information . . . . . 1:48

**Power and Wiring Cables**

# Single-Core PVC 6491X

450/750 V



## Application

PVC insulated only cable for fixed wiring purposes. Used in trunking or conduit, or may be surface mounted when used for earthing.

## Specifications

- In accordance with BS6004 and Cenelec Harmonised codes -
  - H07V-U (solid conductor)
  - H07V-R (stranded conductor)
- **Conductors:** Solid Class 1 or Stranded Class 2 copper conductors to BS EN 60228
- **Insulation:** PVC Insulation Type TI.1 to BS EN 50363-3
- Flame retardant to BS EN 60332-1-2
- Normal colours available: green/yellow, blue, black, brown and grey  
Other colours available if required
- **Temperature Rating:** 70°C maximum conductor operating temperature
- **Voltage Rating:** 450/750 V

## Single-Core PVC 6491X

450/750 V

Anixter Number	Cenelec Code	Nominal Conductor Area mm <sup>2</sup>	Conductor Class	Insulation Thickness mm	Maximum O/D mm	Approx Weight kg/km	Min Bending Radius (fixed bend) mm
A3-A01-0015-##	H07V-U1	1.5	1	0.7	3.2	21	10
A3-A07-0015-##	H07V-R1	1.5	2	0.7	3.3	23	11
A3-A01-0025-##	H07V-U1	2.5	1	0.8	3.9	33	12
A3-A77-0025-##	H07V-R1	2.5	2	0.8	4.0		13
A3-A07-0004-##	H07V-R1	4	2	0.8	4.6	51	15
A3-A07-0006-##	H07V-R1	6	2	0.8	5.2	71	17
A3-A07-0010-##	H07V-R1	10	2	1.0	6.7	120	21
A3-A07-0016-##	H07V-R1	16	2	1.0	7.8	180	25
A3-A07-0025-##	H07V-R1	25	2	1.2	9.7	285	30
A3-A07-0035-##	H07V-R1	35	2	1.2	10.9	380	50
A3-A19-0050-##	H07V-R1	50	2	1.4	12.8	510	60
A3-A19-0070-##	H07V-R1	70	2	1.4	14.6	720	60
A3-A19-0095-##	H07V-R1	95	2	1.6	17.1	990	70
A3-A37-0120-##	H07V-R1	120	2	1.6	18.8	1230	80
A3-A37-0150-##	H07V-R1	150	2	1.8	20.9	1510	90
A3-A37-0185-##	H07V-R1	185	2	2.0	23.3	1900	100
A3-A61-0240-##	H07V-R1	240	2	2.2	26.6	2490	160
A3-A61-0300-##	H07V-R1	300	2	2.4	29.6	3100	180
A3-A61-0400-##	H07V-R1	400	2	2.6	33.2	3950	210
A3-A61-0500-##	H07V-R1	500	2	2.8	36.9	4950	230
A3-A12-0630-##	H07V-R1	630	2	2.8	41.1	6300	250

-## = colour, -02 = black, -06 = blue, -07 = brown, -09 = grey, -60 = green/yellow.  
Other colours available upon request.

All dimensions are nominal unless otherwise stated.

For further technical information see page 1:48.

For conductor short-circuit ratings see page 20:27.



# Single-Core PVC/PVC 6181Y

300/500 V



## Application

PVC insulated and sheathed cable for fixed wiring purposes. Not suitable for direct burial.

## Specifications

- In accordance with BS6004
- **Conductors:** Solid Class 1 or stranded Class 2 copper conductors to BS EN 60228
- **Insulation:** PVC insulation Type TI.1 to BS EN 50363-3
- **Sheath:** PVC sheath Type 6 to BS7655
- Flame retardant to BS EN 60332-1-2
- Normal colours available. (See 6491X page 1:2)
- **Temperature Rating:** 70°C maximum conductor operating temperature
- **Voltage Rating:** 300/500 V

## Single-Core PVC/PVC 6181Y

300/500 V

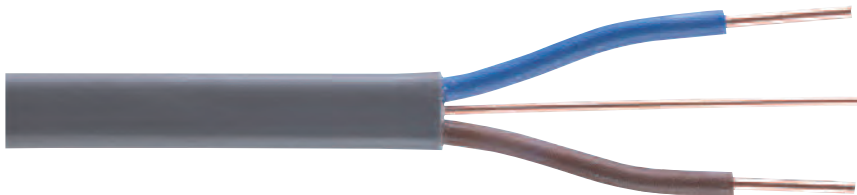
Anixter Number	Nominal Conductor Area mm <sup>2</sup>	Conductor Class	Insulation Thickness mm	Minimum O/D mm	Maximum O/D mm	Approx Weight kg/km	Minimum Bending Radius (fixed bend) mm
6181Y-0010-##-##	1.0	1	0.6	3.7	4.5	28	14
6181Y-0015-##-##	1.5	1	0.7	4.2	5.0	34	15
6181Y-0025-##-##	2.5	1	0.8	4.8	5.7	49	18
6181Y-0040-##-##	4	2	0.8	5.5	6.7	75	21
6181Y-0060-##-##	6	2	0.8	6.0	7.3	99	23
6181Y-0100-##-##	10	2	1.0	7.3	8.8	155	27
6181Y-0160-##-##	16	2	1.0	8.4	10.1	225	50
6181Y-0250-##-##	25	2	1.2	10.0	12.1	340	50
6181Y-0350-##-##	35	2	1.2	11.1	13.5	450	60

For further technical information see page 1:48.

For conductor short-circuit ratings see page 20:27.

# Flat Twin and Flat Three Core PVC 6242Y and 6243Y

Insulated and sheathed with uninsulated circuit protective conductor as option



## Application

PVC insulated and sheathed cable for installation clipped to flat surfaces, or embedded in plaster, etc. For domestic and industrial wiring.

## Specifications

- In accordance with BS6004
- **Conductors:** Solid Class 1 (up to 2.5mm<sup>2</sup>) and stranded Class 2 (above 2.5mm<sup>2</sup>) copper conductors to BS EN 60228
- **Insulation:** PVC insulation Type TI.1 to BS EN 50363-3
- **Core Identification:**  
2 core - brown, blue  
3 core - brown, black, grey
- PVC sheath Type 6 to BS7655
- **Position of Protective Conductor:**  
Twin - centrally placed between brown and blue cores  
Three core - centrally placed between black and grey cores
- Flame retardant to BS EN 60332-1-2
- **Temperature Rating:** 70°C maximum conductor operating temperature
- **Voltage Rating:** 300/500 V

## Flat Twin and Flat Three Core PVC 6242Y and 6243Y

Anixter Number	Nominal Conductor Area mm <sup>2</sup>	Conductor Class	Insulation Thickness mm	Minimum O/D mm	Maximum O/D mm	Nom earth Conductor Area mm <sup>2</sup>	Approx Weight kg/km	Min Bending Radius (fixed bend) mm
<b>6242Y - Flat Twin + Earth</b>								
6242Y-0010	1.0	1	0.6	4.0 x 7.2	4.7 x 8.6	1.0	69	26
6242Y-0015	1.5	1	0.7	4.4 x 8.2	5.4 x 9.6	1.0	85	29
6242Y-0025	2.5	1	0.8	5.2 x 9.8	6.2 x 11.5	1.5	120	50
6242Y-0040	4	2	0.8	5.6 x 10.5	7.2 x 13.0	1.5	175	60
6242Y-0060	6	2	0.8	6.4 x 12.5	8.0 x 15.0	2.5	240	60
6242Y-0100	10	2	1.0	7.8 x 15.5	9.6 x 19.0	4	390	80
6242Y-0160	16	2	1.0	9.0 x 18.0	11.0 x 22.5	6	560	90
<b>6243Y - Flat Three Core + Earth</b>								
6243Y-0010	1.0	1	0.6	4.0 x 9.0	4.7 x 11.0	1.0	92	50
6243Y-0015	1.5	1	0.7	4.4 x 10.5	5.4 x 12.5	1.0	115	50
6243Y-0025	2.5	1	0.8	5.2 x 12.5	6.2 x 14.5	1.0	170	60
6243Y-0040	4	2	0.8	5.8 x 14.5	7.4 x 18.0	1.5	255	80
6243Y-0060	6	2	0.8	6.4 x 16.5	8.0 x 20.0	2.5	340	80
6243Y-0100	10	2	1.0	7.8 x 21.0	9.6 x 25.5	4	550	160
6243Y-0160	16	2	1.0	9.0 x 24.5	11.0 x 29.5	6	790	180

For further technical information see page 1:52. For conductor short-circuit ratings see page 20:27.

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# Multicore XLPE/LSF/SWA/LSF Control Cable

600/1000 V



## Application

Sheathed, multicore control cable. Especially for use in areas where fire would create dense smoke and toxic fumes causing a major threat to life and equipment.

## Specifications

- In accordance with BS6724
- **Conductors:** Stranded Class 2 copper conductors to BS EN 60228
- **Insulation:** XLPE insulation Type GP8 to BS7655
- **Core Identification:**  
Number printed in black ink on white XLPE insulated cores
- **Inner Sheath:** LSF inner sheath Type LTS1 to BS7655
- Mild galvanised steel wires to BS EN 10257-1
- **Outer Sheath:** Black LSF outer sheath Type LTS1 to BS7655
- Flame retardant to BS EN 60332-3-24 & IEC60332-3-24 Cat. C as a minimum
- **Temperature Rating:** 90°C maximum conductor operating temperature
- **Voltage Rating:** 600/1000 V

## Multicore XLPE/LSF/SWA/LSF Control Cable

600/1000 V

Anixter Number	Number of Cores	Nominal Conductor Area mm <sup>2</sup>	Insulation Thickness mm	Diam under Armour mm	Armour Wire Size mm	Nominal O/D mm	Approx Weight kg/km	Min Bending Radius (fixed bend) mm
A2-AU-0015N	2	1.5	0.6	7.7	0.9	12.1	310	80
A2-AV-0015N	3	1.5	0.6	8.2	0.9	12.6	340	80
A2-AX-0015N	4	1.5	0.6	8.9	0.9	13.3	390	90
BS6724-5C-0015N	5	1.5	0.6	9.7	0.9	14.3	420	90
A3-03-C007	7	1.5	0.6	10.6	0.9	15.2	490	100
A3-03-C010	10	1.5	0.6	13.2	1.25	18.7	700	120
A3-03-C012	12	1.5	0.6	13.9	1.25	19.4	830	120
A3-03-C019	19	1.5	0.6	16.5	1.25	22.2	1070	140
A3-03-C027	27	1.5	0.6	20.1	1.6	26.7	1518	170
A3-03-C037	37	1.5	0.6	22.4	1.6	29.0	1880	180
A2-AU-0025N	2	2.5	0.7	9.0	0.9	13.6	360	90
A2-AV-0025N	3	2.5	0.7	9.5	0.9	14.1	400	90
A2-AX-0025N	4	2.5	0.7	10.4	0.9	15.0	470	90
BS6724-5C-0025N	5	2.5	0.7	11.5	0.9	16.1	510	100
A3-P3-C007	7	2.5	0.7	12.5	1.25	17.1	600	110
A3-P3-C010	10	2.5	0.7	15.8	1.25	21.5	890	130
A3-P3-C012	12	2.5	0.7	16.7	1.25	22.4	1020	140
A3-P3-C019	19	2.5	0.7	20.0	1.6	26.6	1530	160
A3-P3-C027	27	2.5	0.7	23.9	1.6	30.7	1960	190
A3-P3-C037	37	2.5	0.7	27.0	1.6	33.8	2530	190

For further technical information see page 1:64.

For conductor short-circuit ratings refer to page 20:28.

For armour short-circuit ratings refer to page 20:34.

# Single-Core XLPE/PVC

600/1000 V

## Application

XLPE insulated and PVC sheathed cable for fixed installation. Not suitable for direct burial.

## Specifications

- In accordance with BS7889
- **Conductors:** Stranded Class 2 copper conductors to BS EN 60228
- **Insulation:** XLPE insulation Type GP8 to BS7655
- **Sheath:** PVC sheath Type 9 to BS7655
- Flame retardant to BS EN 60332-1-2
- Normal colours available. (See 6491X page 1:2)
- **Temperature Rating:** 90°C maximum conductor operating temperature
- **Voltage Rating:** 600/1000 V

## Single-Core XLPE/PVC

600/1000 V

Anixter Number	Nominal Conductor Area mm <sup>2</sup>	Insulation Thickness mm	Nominal O/D mm	Approx Weight kg/km	Minimum Bending Radius (fixed bend) mm
6181XY-0500-##-##	50	1.0	14.2	540	60
6181XY-0700-##-##	70	1.1	16.2	750	70
6181XY-0950-##-##	95	1.1	18.3	1010	80
6181XY-1200-##-##	120	1.2	20.2	1250	90
6181XY-1500-##-##	150	1.4	22.4	1530	90
6181XY-1850-##-##	185	1.6	24.7	1900	100
6181XY-2400-##-##	240	1.7	27.7	2470	170
6181XY-3000-##-##	300	1.8	30.6	3080	190
6181XY-4000-##-##	400	2.0	34.2	3890	210
6181XY-5000-##-##	500	2.2	38.0	4970	230

All dimensions are nominal unless otherwise stated.  
 For further technical information see page 1:54.  
 For conductor short-circuit ratings refer to page 20:28.



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# Single-Core XLPE/PVC/AWA/PVC Power Cable

600/1000 V and 1900/3300 V



## Application

Armoured Single-Core cable for use in fixed installations, indoor, outdoor or direct burial.

## Specifications

- In accordance with BS5467
- **Conductors:** Stranded Class 2 copper conductors to BS EN 60228
- **Insulation:** Brown XLPE insulation Type GP8 to BS7655
- **Inner Sheath:** PVC inner sheath Type 9 to BS7655
- Aluminium wires to BS2627
- **Outer Sheath:** Black PVC outer sheath Type 9 to BS7655
- Flame retardant to BS EN 60332-1-2
- **Temperature Rating:** 90°C maximum conductor operating temperature
- **Voltage Rating:** 600/1000 & 1900/3300 V

## Single-Core XLPE/PVC/AWA/PVC Power Cable

600/1000 V and 1900/3300 V

Anixter Number	Number of Cores	Nominal Conductor Area mm <sup>2</sup>	Insulation Thickness mm	Diameter Under Armour mm	Armour Wire Size mm	Nominal O/D mm	Approx Weight kg/km	Min Bending Radius (fixed bend) mm
<b>600/1000 V Cables</b>								
BS5467-1C-0500	1	50	1.0	12.7	0.9	17.5	800	110
BS5467-1C-0700	1	70	1.1	14.7	1.25	20.2	940	130
BS5467-1C-0950	1	95	1.1	16.6	1.25	22.3	1220	140
BS5467-1C-1200	1	120	1.2	18.5	1.25	24.2	1490	150
BS5467-1C-1500	1	150	1.4	20.8	1.6	27.4	1870	170
BS5467-1C-1850	1	185	1.6	23.2	1.6	30.0	2290	180
BS5467-1C-2400	1	240	1.7	26.0	1.6	32.8	2880	200
BS5467-1C-3000	1	300	1.8	28.6	1.6	35.6	3520	220
BS5467-1C-4000	1	400	2.0	32.5	2.0	40.5	4500	250
BS5467-1C-5000	1	500	2.2	36.0	2.0	44.2	5680	270
BS5467-1C-6300	1	630	2.4	40.4	2.0	48.8	7160	300
BS5467-1C-8000	1	800	2.6	45.6	2.5	55.4	9400	340
BS5467-1C-10000	1	1000	2.8	50.6	2.5	60.6	11600	370
<b>1900/3300 V Cables</b>								
A2BX-0500	1	50	2.0	14.9	1.25	20.6	810	130
A2BX-0700	1	70	2.0	16.7	1.25	22.4	1040	140
A2BX-0950	1	95	2.0	18.6	1.25	24.3	1330	150
A2BX-1200	1	120	2.0	20.6	1.6	27.2	1680	170
A2BX-1500	1	150	2.0	22.2	1.6	28.8	1970	180
A2BX-1850	1	185	2.0	24.0	1.6	30.8	2370	190
A2BX-2400	1	240	2.0	26.7	1.6	33.5	2960	210
A2BX-3000	1	300	2.0	29.1	1.6	36.1	3610	220
A2BX-4000	1	400	2.0	32.5	2.0	40.5	4600	250
A2BX-5000	1	500	2.2	36.0	2.0	44.2	5680	270
A2BX-6300	1	630	2.4	40.4	2.0	48.8	7160	300
A2BX-8000	1	800	2.6	45.6	2.5	55.4	9400	340
A2BX-10000	1	1000	2.8	50.6	2.5	60.6	11600	370

For further technical information see page 1.58. (See 1.72 for technical information on 1900/3300 V cables).

For conductor and armour resistances refer to page 20.30.

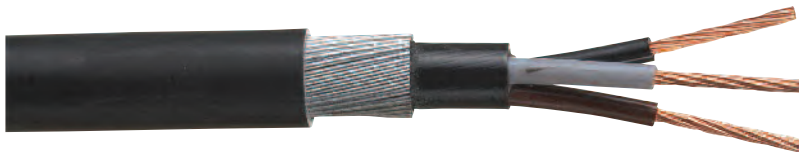
For gross cross-sectional area of armour refer to page 20.33.

For conductor short-circuit ratings refer to page 20.28.

For armour short-circuit ratings refer to page 20.35.

# Multicore XLPE/PVC/SWA/PVC Power Cable

600/1000 V and 1900/3300 V



## Application

Armoured cables for use in fixed installations for use indoor, outdoor or for direct burial.

## Specifications

- In accordance with BS5467
- **Conductors:** Stranded Class 2 copper conductors to BS EN 60228
- **Insulation:** XLPE insulation Type GP8 to BS7655
- **Core Identification:**
  - 2 core - brown, blue
  - 3 core - brown, black, grey
  - 4 core - brown, black, grey, blue
  - 5 core + above - number printed
- **Inner Sheath:** PVC inner sheath Type 9 to BS7655
- Mild galvanised steel wires to BS EN 10257-1
- **Outer Sheath:** Black PVC outer sheath Type 9 to BS7655
- Flame retardant to BS EN 60332-1-2
- **Temperature Rating:** 90°C maximum conductor operating temperature
- **Voltage Rating:** 600/1000 V

NB: 1900/3300V only available in 3 core.

## Multicore XLPE/PVC/SWA/PVC Power Cable

600/1000 V and 1900/3300 V

Anixter Number	Number of Cores	Nominal Conductor Area mm <sup>2</sup>	Insulation Thickness mm	Diameter Under Armour mm	Armour Wire Size mm	Nominal O/D mm	Approx Weight kg/km	Min Bending Radius (fixed bend) mm
<b>600/1000 V</b>								
BS5467-2C-0015	2	1.5*	0.6	7.7	0.9	12.1	295	80
BS5467-2C-0025	2	2.5*	0.7	9.0	0.9	13.6	345	90
BS5467-2C-0040	2	4*	0.7	10.1	0.9	14.7	409	90
BS5467-2C-0060	2	6*	0.7	11.3	0.9	15.9	485	100
BS5467-2C-0100	2	10*	0.7	13.2	0.9	18.0	635	110
BS5467-2C-0160	2	16†	0.7	14.7	1.25	20.4	900	120
BS5467-2C-0250	2	25\\	0.9	14.7	1.25	20.4	938	170
BS5467-2C-0350	2	35	0.9	16.7	1.6	23.3	1373	190
BS5467-2C-0500	2	50	1.0	19.0	1.6	25.8	1800	210
BS5467-2C-0700	2	70	1.1	22.0	1.6	29.0	2320	240
BS5467-2C-0950	2	95	1.1	25.1	2.0	33.1	3160	270
BS5467-2C-1200	2	120	1.2	27.9	2.0	36.1	3790	290
BS5467-2C-1500	2	150	1.4	30.9	2.0	39.3	4500	320
BS5467-2C-1850	2	185	1.6	34.9	2.5	44.7	5820	360
BS5467-2C-2400	2	240	1.7	39.0	2.5	49.0	7220	400
BS5467-2C-3000	2	300	1.8	43.3	2.5	53.5	8710	430
BS5467-2C-4000	2	400	2.0	48.4	2.5	59.0	11100	480
<b>1900/3300 V</b>								
BS5467-3C-0015	3	1.5*	0.6	8.2	0.9	12.6	330	80
BS5467-3C-0025	3	2.5*	0.7	9.5	0.9	14.1	390	90
BS5467-3C-0040	3	4*	0.7	10.7	0.9	15.3	470	100
BS5467-3C-0060	3	6*	0.7	12.0	0.9	16.6	570	100
BS5467-3C-0100	3	10*	0.7	14.0	1.25	19.5	880	120
BS5467-3C-0160	3	16†	0.7	15.9	1.25	21.6	1070	130
BS5467-3C-0250	3	25†	0.9	20.1	1.6	26.7	1550	170
BS5467-3C-0350	3	35†	0.9	22.6	1.6	29.4	1940	180
BS5467-3C-0500	3	50\\	1.0	21.7	1.6	28.5	2360	230
BS5467-3C-0700	3	70	1.1	25.2	1.6	32.2	3120	260
BS5467-3C-0950	3	95	1.1	28.8	2.0	37.0	4310	300
BS5467-3C-1200	3	120	1.2	32.0	2.0	40.4	5160	330
BS5467-3C-1500	3	150	1.4	35.9	2.5	45.5	6610	370
BS5467-3C-1850	3	185	1.6	40.0	2.5	49.8	7920	400
BS5467-3C-2400	3	240	1.7	44.9	2.5	55.1	9930	450
BS5467-3C-3000	3	300	1.8	49.8	2.5	60.2	11970	490
BS5467-3C-4000	3	400	2.0	55.8	2.5	66.6	14770	540

\*Circular stranded conductors.

\\ Shaped stranded conductors on 25sqmm &amp; above (2 core), 50sqmm &amp; above (3 &amp; 4 core).

† Circular or circular compacted stranded conductors.

Continued overleaf...

# Multicore XLPE/PVC/SWA/PVC Power Cable

600/1000 V and 1900/3300 V (continued)

Anixter Number	Number of Cores	Nominal Conductor Area mm <sup>2</sup>	Insulation Thickness mm	Diameter Under Armour mm	Armour Wire Size mm	Nominal O/D mm	Approx Weight kg/km	Min Bending Radius (fixed bend) mm
<b>600/1000 V</b>								
B55467-4C-0015	4	1.5*	0.6	8.9	0.9	13.3	380	90
B55467-4C-0025	4	2.5*	0.7	10.4	0.9	15.0	450	90
B55467-4C-0040	4	4*	0.7	11.8	0.9	16.4	560	100
B55467-4C-0060	4	6*	0.7	13.2	1.25	18.7	790	120
B55467-4C-0100	4	10*	0.7	15.6	1.25	21.1	1040	130
B55467-4C-0160	4	16†	0.7	17.7	1.25	23.4	1300	140
B55467-4C-0250	4	25†	0.9	22.3	1.6	28.9	1880	180
B55467-4C-0350	4	35†	0.9	25.1	1.6	31.9	2350	200
B55467-4C-0500	4	50\\	1.0	25.0	1.6	32.0	2950	260
B55467-4C-0700	4	70	1.1	29.5	2.0	37.7	4230	320
B55467-4C-0950	4	95	1.1	33.3	2.0	41.7	5390	340
B55467-4C-1200	4	120	1.2	37.5	2.5	47.1	6890	380
B55467-4C-1500	4	150	1.4	41.6	2.5	51.4	8300	420
B55467-4C-1850	4	185	1.6	46.4	2.5	56.6	10070	460
B55467-4C-2400	4	240	1.7	52.6	2.5	63.0	12680	510
B55467-4C-3000	4	300	1.8	58.0	2.5	68.8	15380	560
B55467-4C-4000	4	400	2.0	65.4	3.15	78.1	19950	630
<b>1900/3300 V</b>								
A3AM-C007Q	7	1.5*	0.6	10.6	0.9	15.2	488	100
A3AM-C012Q	12	1.5*	0.6	13.9	1.25	19.4	817	120
A3AM-C019Q	19	1.5*	0.6	16.5	1.25	22.2	1225	140
A3AM-C027Q	27	1.5*	0.6	20.1	1.6	26.7	1553	170
A3AM-C037Q	37	1.5*	0.6	22.4	1.6	29.0	1859	180
<b>3300 V</b>								
A3AP-C007Q	7	2.5*	0.7	12.5	0.9	17.1	685	110
A3AP-C012Q	12	2.5*	0.7	16.7	1.25	22.4	910	140
A3AP-C019Q	19	2.5*	0.7	20.0	1.6	26.6	1500	160
A3AP-C027Q	27	2.5*	0.7	23.9	1.6	30.7	1928	190
A3AP-C037Q	37	2.5*	0.7	27.0	1.6	33.8	2360	210

# Multicore XLPE/PVC/SWA/PVC Power Cable

600/1000 V and 1900/3300 V

Anixter Number	Number of Cores	Nominal Conductor Area mm <sup>2</sup>	Insulation Thickness mm	Diameter Under Armour mm	Armour Wire Size mm	Nominal O/D mm	Approx Weight kg/km	Min Bending Radius (fixed bend) mm
<b>1900/3300 V Cables</b>								
A2BZ-0160	3	16†	2.0	22.1	1.6	29.3	1600	180
A2BZ-0250	3	25†	2.0	25.4	1.6	32.2	2060	200
A2BZ-0350	3	35†	2.0	27.8	1.6	34.8	2320	210
A2BZ-0500	3	50\\	2.0	26.7	2.0	34.7	3040	280
A2BZ-0700	3	70	2.0	29.8	2.0	38.0	3800	310
A2BZ-0950	3	95	2.0	33.0	2.0	41.4	4730	340
A2BZ-1200	3	120	2.0	36.1	2.5	45.7	6070	370
A2BZ-1500	3	150	2.0	38.7	2.5	48.5	7010	390
A2BZ-1850	3	185	2.0	41.9	2.5	51.9	8270	420
A2BZ-2400	3	240	2.0	46.7	2.5	56.9	10310	460
A2BZ-3000	3	300	2.0	50.8	2.5	61.2	12300	490
A2BZ-4000	3	400	2.0	55.8	2.5	66.6	15050	540

\*Circular stranded conductors.

\\ Cables having conductors of nominal area 50sqmm and above have shaped stranded conductors.

† Circular or circular compacted stranded conductors.

For further technical information see page 1:64. (See 1:72 for technical information on 1900/3300 V cables).

For conductor and armour resistances refer to page 20:31.

For gross cross-sectional area of armour refer to page 20:34.

For conductor short-circuit ratings refer to page 20:28.

For armour short-circuit ratings refer to page 20:36.

# Single-Core LSF 6491B

90°C 300/500 and 450/750 V



## Application

LSF insulated only cable for fixed wiring purposes. Used in trunking or conduit, or may be surface mounted when used for earthing. Especially for use in areas where fire would create dense smoke and toxic fumes causing a major threat to life and equipment.

## Specifications

- In accordance with BS7211 and Cenelec harmonised codes  
H07Z-U (Solid conductors)  
H07Z-R (Stranded conductors)
- **Conductors:** Solid Class 1 or Stranded Class 2 copper conductors to BS EN 60228
- **Insulation:** Low smoke zero halogen thermosetting insulation Type EI.5 to BS EN 50363-5, displaying following characteristics:  
Oxygen Index: 30% minimum  
HCL emission @ 800°C: 0.5% maximum
- Flame retardant to BS EN 60332-2-2 (up to and incl. 1.0mm<sup>2</sup>) and BS EN 60332-1-2 (above 1.0mm<sup>2</sup>)
- Normal colours available. (see 6491X page 1:2)
- **Temperature Rating:** 90°C maximum conductor operating temperature
- **Voltage Rating:** Up to and including 1.0mm<sup>2</sup> 300/500 V 1.5mm<sup>2</sup> and above - 450/750 V

## Single-Core LSF 6491B

90°C 300/500 and 450/750 V

Anixter Number	Cenelec Code	Nominal Conductor Area mm <sup>2</sup>	Conductor Class	Insulation Thickness mm	Maximum O/D mm	Approx Weight kg/km	Min Bending Radius (fixed bend) mm
A3BR-0015-##	H07Z-U1	1.5	1	0.7	3.3	20	10
A3BT-0015-##	H07Z-R1	1.5	2	0.7	3.4	22	11
A3BR-0025-##	H07Z-U1	2.5	1	0.8	4.0	31	12
A3BT-0025-##	H07Z-R1	2.5	2	0.8	4.1	33	13
A3BT-0040-##	H07Z-R1	4	2	0.8	4.7	49	15
A3BT-0060-##	H07Z-R1	6	2	0.8	5.4	69	17
A3BT-0100-##	H07Z-R1	10	2	1.0	7.0	116	21
A3BT-0160-##	H07Z-R1	16	2	1.0	8.0	175	24
A3BT-0250-##	H07Z-R1	25	2	1.2	10.1	273	30
A3BT-0350-##	H07Z-R1	35	2	1.2	11.3	367	50
A3BT-0500-##	H07Z-R1	50	2	1.4	13.2	495	60
A3BT-0700-##	H07Z-R1	70	2	1.4	15.1	699	60
A3BT-0950-##	H07Z-R1	95	2	1.6	17.6	968	70
A3BT-1200-##	H07Z-R1	120	2	1.6	19.4	1164	80
A3BT-1500-##	H07Z-R1	150	2	1.8	21.6	1413	90
A3BT-1850-##	H07Z-R1	185	2	2.0	24.1	1828	100
A3BT-2400-##	H07Z-R1	240	2	2.2	27.5	2320	160
A3BT-3000-##	H07Z-R1	300	2	2.4	30.6	2988	180
A3BT-4000-##	H07Z-R1	400	2	2.6	34.3	3800	210
A3BT-5000-##	H07Z-R1	500	2	2.8	38.2	4750	230
A3BT-6300-##	H07Z-R1	630	2	2.8	42.5	6050	250

-## = colour, -02 = black, -06 = blue, -07 = brown, -09 = grey, -60 = green/yellow.  
Other colours available upon request.

All dimensions are nominal unless otherwise stated.

For further technical information see page 1:54.

For conductor short-circuit ratings refer to page 20:28 for XLPE insulated cable.



# Single-Core XLPE/LSF 6181B

600/1000 V



## Application

XLPE insulated and LSF sheathed cable for fixed installation. Not suitable for direct burial.

## Specifications

- Generally in accordance with BS8573
- **Conductors:** Stranded Class 2 copper conductors to BS EN 60228
- **Insulation:** Brown XLPE insulation Type GP8 to BS7655
- **Sheath:** Black LSF sheath Type LTS1 to BS7655
- Flame retardant to BS EN 60332-3-24
- Other colours are available. (Details upon request)
- **Temperature Rating:** 90°C maximum conductor operating temperature
- **Voltage Rating:** 600/1000 V

## Single-Core XLPE/LSF 6181B

600/1000 V

Anixter Number	Nominal Conductor Area mm <sup>2</sup>	Insulation Thickness mm	Nominal O/D mm	Approx Weight kg/km	Minimum Bending Radius (fixed bend) mm
6181B-0500	50	1.0	14.2	540	60
6181B-0700	70	1.1	16.2	750	70
6181B-0950	95	1.1	18.3	1010	80
6181B-1200	120	1.2	20.2	1250	90
6181B-1500	150	1.4	22.4	1530	90
6181B-1850	185	1.6	24.7	1900	100
6181B-2400	240	1.7	27.7	2470	170
6181B-3000	300	1.8	30.6	3080	190
6181B-4000	400	2.0	34.2	3890	210
6181B-5000	500	2.2	38.0	4970	230
6181B-6300	630	2.4	42.9	6370	260
6181B-8000	800	2.6	47.8	8300	290
6181B-1000	1000	2.8	53.0	10341	320

Standard colours are brown/black.

All dimensions are nominal unless otherwise stated.

For further technical information see page 1:54.

For conductor short-circuit ratings refer to page 20:28 for XLPE insulated cable.

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# Single-Core XLPE/LSF/AWA/LSF Power Cable

600/1000 V and 1900/3300 V



## Application

LSF insulated, armoured and sheathed, Single-Core power cable for use in fixed installations. Especially for use in areas where fire would create dense smoke and toxic fumes causing a major threat to life and equipment.

## Specifications

- In accordance with BS6724
- **Conductors:** Stranded Class 2 copper conductors to BS EN 60228
- **Insulation:** Brown XLPE insulation Type GP8 to BS7655
- **Inner Sheath:** LSF inner sheath Type LTS1 to BS7655
- Aluminium wires to BS2627
- **Outer Sheath:** Black LSF outer sheath Type LTS1 to BS7655
- Flame retardant to BS EN 60332-3-24 & IEC60332-3-24 Cat. C as a minimum
- **Temperature Rating:** 90°C maximum conductor operating temperature
- **Voltage Rating:** 600/1000 & 1900/3300 V

## Single-Core XLPE/LSF/AWA/LSF Power Cable

600/1000 V and 1900/3300 V

Anixter Number	Number of Cores	Nominal Conductor Area mm <sup>2</sup>	Insulation Thickness mm	Diameter Under Armour mm	Armour Wire Size mm	Nominal O/D mm	Approx Weight kg/km	Min Bending Radius (fixed bend) mm
<b>600/1000 V Cables</b>								
BS6724-1C-0500	1	50	1.0	12.7	0.9	17.5	710	110
BS6724-1C-0700	1	70	1.1	14.7	1.25	20.2	940	130
BS6724-1C-0950	1	95	1.1	16.6	1.25	22.3	1220	140
BS6724-1C-1200	1	120	1.2	18.5	1.25	24.2	1480	150
BS6724-1C-1500	1	150	1.4	20.8	1.6	27.4	1870	150
BS6724-1C-1850	1	185	1.6	23.2	1.6	30.0	2280	180
BS6724-1C-2400	1	240	1.7	26.0	1.6	32.8	2880	200
BS6724-1C-3000	1	300	1.8	28.6	1.6	35.6	3520	220
BS6724-1C-4000	1	400	2.0	32.5	2.0	40.5	4520	250
BS6724-1C-5000	1	500	2.2	36.0	2.0	44.2	5640	270
BS6724-1C-6300	1	630	2.4	40.4	2.0	48.8	7110	300
BS6724-1C-10000	1	1000	2.8	50.6	2.5	60.6	11580	370
<b>1900/3300 V Cables</b>								
A2-AY-0500	1	50	2.0	14.9	1.25	20.6	800	130
A2-AY-0700	1	70	2.0	16.7	1.25	22.4	1020	140
A2-AY-0950	1	95	2.0	18.6	1.25	24.3	1300	150
A2-AY-1200	1	120	2.0	20.6	1.6	27.2	1650	170
A2-AY-1500	1	150	2.0	22.2	1.6	28.8	1930	180
A2-AY-1850	1	185	2.0	24.0	1.6	30.8	2330	190
A2-AY-2400	1	240	2.0	26.7	1.6	33.5	2910	210
A2-AY-3000	1	300	2.0	29.1	1.6	36.1	3540	220
A2-AY-4000	1	400	2.0	32.5	2.0	40.5	4520	250
A2-AY-5000	1	500	2.2	36.0	2.0	44.2	5640	270
A2-AY-6300	1	630	2.4	40.4	2.0	48.8	7110	300
A2-AY-8000	1	800	2.6	46.6	2.5	56.4	9390	340
A2-AY-10000	1	1000	2.8	50.6	2.5	60.6	11580	370

CONDUCTORS MAY BE CIRCULAR OR CIRCULAR COMPACTED.

For further technical information refer to page 1:58 (See 1:72 for technical information on 1900/3300 V cables).

For conductor and armour resistances refer to page 20:30.

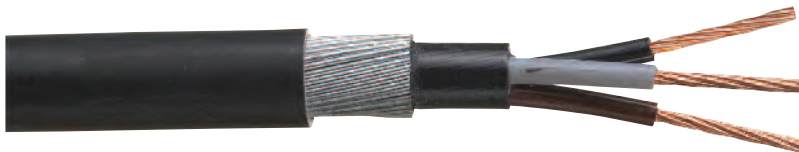
For gross cross-sectional area of armour refer to page 20:33.

For conductor short-circuit ratings refer to page 20:28.

For armour short-circuit ratings refer to page 20:35.

# Multicore XLPE/LSF/SWA/LSF Power and Control Cable

600/1000 and 1900/3300 V



## Application

LSF insulated, armoured and sheathed, multicore power cable. Especially for use in areas where fire would create dense smoke and toxic fumes causing a major threat to life and equipment.

## Specifications

- In accordance with BS6724
- **Conductors:** Stranded Class 2 copper conductors
- **Insulation:** XLPE insulation Type GP8 to BS7655
- **Core identification:**
  - 2 core - brown, blue
  - 3 core - brown, black, grey
  - 4 core - brown, black, grey, blue
  - 5 core - brown, black, grey, blue, green/yellow
- **Inner Sheath:** LSF inner sheath Type LTS1 to BS7655
- Mild galvanised steel wires to BS EN 10257-1
- **Outer Sheath:** Black LSF outer sheath Type LTS1 to BS7655
- Flame retardant to BS EN 60332-3-24 & IEC60332-3-24 Cat. C as a minimum
- **Temperature Rating:** 90°C maximum conductor operating temperature
- **Voltage Rating:** 600/1000 & 1900/3300 V

NB: 1900/3300 V only available in 3 core.

## Multicore XLPE/LSF/SWA/LSF Power and Control Cable

600/1000 and 1900/3300 V

Anixter Number	Number of Cores	Nominal Conductor Area mm <sup>2</sup>	Insulation Thickness mm	Diameter Under Armour mm	Armour Wire Size mm	Nominal O/D mm	Approx Weight kg/km	Min Bending Radius (fixed bend) mm
<b>600/1000 V Cables</b>								
BS6724-2C-0015	2	1.5*	0.6	7.7	0.9	12.1	310	80
BS6724-2C-0025	2	2.5*	0.7	9.0	0.9	13.6	360	90
BS6724-2C-0040	2	4*	0.7	10.1	0.9	14.7	420	90
BS6724-2C-0060	2	6*	0.7	11.3	0.9	15.9	500	100
BS6724-2C-0100	2	10*	0.7	13.2	0.9	18.0	800	110
BS6724-2C-0160	2	16†	0.7	14.7	1.25	20.4	940	120
BS6724-2C-0250	2	25\\	0.9	14.7	1.25	20.4	1250	170
BS6724-2C-0350	2	35	0.9	16.7	1.6	23.3	1720	190
BS6724-2C-0500	2	50	1.0	19.0	1.6	25.8	1800	210
BS6724-2C-0700	2	70	1.1	22.0	1.6	29.0	2330	240
BS6724-2C-0950	2	95	1.1	25.1	2.0	33.1	3170	270
BS6724-2C-1200	2	120	1.2	27.9	2.0	36.1	3810	290
BS6724-2C-1500	2	150	1.4	30.9	2.0	39.3	4530	320
BS6724-2C-1850	2	185	1.6	34.9	2.5	44.7	5860	360
BS6724-2C-2400	2	240	1.7	39.0	2.5	49.0	7300	400
BS6724-2C-3000	2	300	1.8	43.3	2.5	53.5	8790	430
BS6724-2C-4000	2	400	2.0	48.4	2.5	59.0	10770	480
BS6724-3C-0015	3	1.5*	0.6	8.2	0.9	12.6	340	80
BS6724-3C-0025	3	2.5*	0.7	9.5	0.9	14.1	400	90
BS6724-3C-0040	3	4*	0.7	10.7	0.9	15.3	500	100
BS6724-3C-0060	3	6*	0.7	12.0	0.9	16.6	770	100
BS6724-3C-0100	3	10*	0.7	14.0	1.25	19.5	900	120
BS6724-3C-0160	3	16†	0.7	15.9	1.25	21.6	1180	130
BS6724-3C-0250	3	25†	0.9	20.1	1.6	26.7	1720	170
BS6724-3C-0350	3	35†	0.9	22.6	1.6	29.4	2130	180
BS6724-3C-0500	3	50\\	1.0	21.7	1.6	28.5	2380	230
BS6724-3C-0700	3	70	1.1	25.2	1.6	32.2	3150	260
BS6724-3C-0950	3	95	1.1	28.8	2.0	37.0	4320	300
BS6724-3C-1200	3	120	1.2	32.0	2.0	40.4	5200	330
BS6724-3C-1500	3	150	1.4	35.9	2.5	45.5	6630	370
BS6724-3C-1850	3	185	1.6	40.0	2.5	49.8	7980	400
BS6724-3C-2400	3	240	1.7	44.9	2.5	55.1	9960	450
BS6724-3C-3000	3	300	1.8	49.8	2.5	60.2	12060	490
BS6724-3C-4000	3	400	2.0	55.8	2.5	66.6	14980	540

\*Circular stranded conductors.

\\ Shaped stranded conductors on 25sqmm &amp; above (2 core), 50sqmm &amp; above (3 &amp; 4 core).

† Circular or circular compacted stranded conductors.

Continued overleaf..

# Multicore XLPE/LSF/SWA/LSF Power and Control Cable

600/1000 and 1900/3300 V (continued)

Anixter Number	Number of Cores	Nominal Conductor Area mm <sup>2</sup>	Insulation Thickness mm	Diameter Under Armour mm	Armour Wire Size mm	Nominal O/D mm	Approx Weight kg/km	Min Bending Radius (fixed bend) mm
BS6724-4C-0015	4	1.5*	0.6	8.9	0.9	13.3	390	90
BS6724-4C-0025	4	2.5*	0.7	10.4	0.9	15.0	470	90
BS6724-4C-0040	4	4*	0.7	11.8	0.9	16.4	580	100
BS6724-4C-0060	4	6*	0.7	13.2	1.25	18.7	820	120
BS6724-4C-0100	4	10*	0.7	15.6	1.25	21.1	1060	130
BS6724-4C-0160	4	16†	0.7	17.7	1.25	23.4	1410	140
BS6724-4C-0250	4	25†	0.9	22.3	1.6	28.9	2090	180
BS6724-4C-0350	4	35†	0.9	25.1	1.6	31.9	2590	200
BS6724-4C-0500	4	50\\	1.0	25.0	1.6	32.0	2960	260
BS6724-4C-0700	4	70	1.1	29.5	2.0	37.7	4240	310
BS6724-4C-0950	4	95	1.1	33.3	2.0	41.7	5410	340
BS6724-4C-1200	4	120	1.2	37.5	2.5	47.1	6980	380
BS6724-4C-1500	4	150	1.4	41.6	2.5	51.4	8320	420
BS6724-4C-1850	4	185	1.6	46.4	2.5	56.6	10080	460
BS6724-4C-2400	4	240	1.7	52.6	2.5	63.0	12690	510
BS6724-4C-3000	4	300	1.8	58.0	2.5	68.8	15420	560
A3-03-C007	7	1.5*	0.6	10.6	0.9	15.2	490	100
A3-03-C012	12	1.5*	0.6	13.9	1.25	19.4	830	120
A3-03-C019	19	1.5*	0.6	16.5	1.25	22.2	1070	140
A3-03-C027	27	1.5*	0.6	20.1	1.6	26.7	1580	170
A3-03-C037	37	1.5*	0.6	22.4	1.6	29.0	1880	180
A3-P3-C007	7	2.5*	0.7	12.5	0.9	17.1	600	110
A3-P3-C012	12	2.5*	0.7	16.7	1.25	22.4	1020	140
A3-P3-C019	19	2.5*	0.7	20.0	1.6	26.6	1530	160
A3-P3-C027	27	2.5*	0.7	23.9	1.6	30.7	1960	190
A3-P3-C037	37	2.5*	0.7	27.0	1.6	33.8	2370	210
A3-Q3-C007	7	4*	0.7	14.2	1.25	19.7	830	120
A3-Q3-C012	12	4*	0.7	19.3	1.6	25.7	1440	160
A3-Q3-C019	19	4*	0.7	22.7	1.6	29.3	1930	180
A3-Q3-C027	27	4*	0.7	27.4	1.6	34.4	2530	210
A3-Q3-C037	37	4*	0.7	31.2	2.0	39.2	3470	240

# Multicore XLPE/LSF/SWA/LSF Power and Control Cable

600/1000 and 1900/3300 V (continued)

Anixter Number	Number of Cores	Nominal Conductor Area mm <sup>2</sup>	Insulation Thickness mm	Diameter Under Armour mm	Armour Wire Size mm	Nominal O/D mm	Approx Weight kg/km	Min Bending Radius (fixed bend) mm
<b>600/1000 V Five Core Cables</b>								
BS6724-5C-0015N	5	1.5*	0.6	9.7	0.9	14.3	380	90
BS6724-5C-0025N	5	2.5*	0.7	11.5	0.9	16.1	500	100
BS6724-5C-0040N	5	4*	0.7	13.0	0.9	17.8	617	110
BS6724-5C-0060N	5	6*	0.7	14.5	1.25	20.0	875	120
BS6724-5C-0100N	5	10*	0.7	17.2	1.25	22.9	1180	140
BS6724-5C-0160N	5	16†	0.7	20.0	1.6	26.6	1720	160
BS6724-5C-0250	5	25†	0.9	24.7	1.6	31.5	2400	190
BS6724-5C-0350	5	35†	0.9	27.8	1.6	34.8	2930	210
BS6724-5C-0500	5	50†	1.0	32.4	2.0	40.4	4050	250
BS6724-5C-0700	5	70†	1.1	37.9	2.0	46.3	5320	280
BS6724-5C-0950	5	95†	1.1	42.7	2.5	52.5	7280	320
BS6724-5C-1200	5	120†	1.2	46.3	2.5	56.5	8745	340
<b>1900/3300 V Cables</b>								
A2-AZ-0250	3	25†	2.0	25.4	1.6	32.2	2100	200
A2-AZ-0350	3	35†	2.0	28.0	1.6	35.0	2520	210
A2-AZ-0500	3	50\\	2.0	26.7	2.0	34.7	3030	280
A2-AZ-0700	3	70	2.0	29.8	2.0	38.0	3810	310
A2-AZ-0950	3	95	2.0	33.0	2.5	41.4	4730	340
A2-AZ-1200	3	120	2.0	36.1	2.5	45.7	6020	360
A2-AZ-1500	3	150	2.0	38.7	2.5	48.5	6980	390
A2-AZ-1850	3	185	2.0	41.9	2.5	51.9	8250	420
A2-AZ-2400	3	240	2.0	46.7	2.5	56.9	10200	460
A2-AZ-3000	3	300	2.0	50.8	2.5	61.2	12210	490
A2-AZ-4000	3	400	2.0	55.8	2.5	66.6	15160	540

N.B. Part numbers for 5 core cable ending in a letter N, e.g. BS6724-5C-0015N, indicate that the cable has number printed cores. All cables containing 7, 12, 19, 27 and 37 cores also have number printed core identification.

\* Circular stranded conductors.

† Circular or circular compacted stranded conductors.

\\ Cables having conductors of nominal area 50sqmm and above have shaped stranded conductors (with the exception of 5 core cables).

For more technical information see page 1:64 (See 1:72 for technical information on 1900/3300 V cables).

For conductor and armour resistances refer to page 20:31.

For gross cross-sectional area of armour refer to page 20:34.

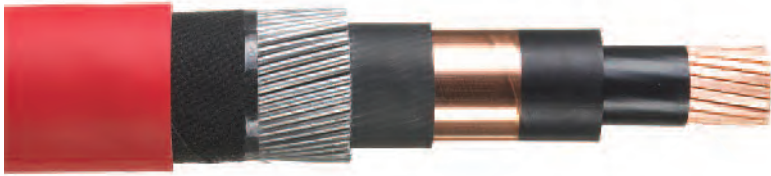
For conductor short-circuit ratings refer to page 20:28.

For armour short-circuit ratings refer to page 20:36.



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Single-Core XLPE/LSF/AWA/LSF Power Cable

6.35/11 kV



## Application

LSF armoured power cable for use in fixed installations. Especially for use in areas where fire would create dense smoke and toxic fumes causing a major threat to life and equipment.

## Specifications

- In accordance with BS7835
- **Conductors:** Stranded Class 2 copper conductors to BS EN 60228
- Extruded semi-conducting layer
- **Insulation:** XLPE insulation
- Extruded semi-conducting layer
- Plain copper tape screen
- **Inner Sheath:** LSF inner sheath Type LTS1 to BS7655
- Aluminium wires to BS2627
- **Outer Sheath:** Red LSF outer sheath Type LTS1 to BS7655
- Flame retardant to BS EN 60332-3-24 & IEC60332-3-24 Cat. C as a minimum
- **Temperature Rating:** 90°C maximum conductor operating temperature
- **Voltage Rating:** 6350/11000 V

For further technical information refer to page 1:76.

## Single-Core XLPE/LSF/AWA/LSF Power Cable

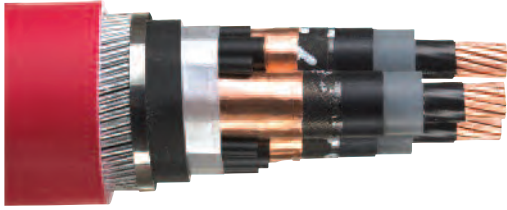
6.35/11 kV

Anixter Number	Number of Cores	Nominal Conductor Area mm <sup>2</sup>	Insulation Thickness mm	Diameter Under Armour mm	Armour Wire Size mm	Nominal O/D mm	Approx Weight kg/km	Minimum Bending Radius	
								mm	Adjacent to joints and Termination
<b>6350/11000 V Cable</b>									
A2EN-1050-03	1	50	3.4	20.9	1.6	27.7	1300	420	340
A2EN-1070-03	1	70	3.4	22.7	1.6	29.7	1600	450	360
A2EN-1095-03	1	95	3.4	24.4	1.6	31.4	1900	480	390
A2EN-1120-03	1	120	3.4	25.9	1.6	33.1	2200	500	400
A2EN-1150-03	1	150	3.4	27.2	2.0	35.4	2600	540	430
A2EN-1185-03	1	185	3.4	29.0	2.0	37.2	3000	560	450
A2EN-1240-03	1	240	3.4	31.4	2.0	39.8	3600	600	480
A2EN-1300-03	1	300	3.4	33.7	2.0	42.3	4300	640	510
A2EN-1400-03	1	400	3.4	36.4	2.0	45.2	5200	680	550
A2EN-1500-03	1	500	3.4	39.5	2.5	49.5	6500	750	600
A2EN-1630-03	1	630	3.4	43.1	2.5	53.3	7900	800	640

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# Three Core XLPE/LSF/SWA/LSF Power Cable

6.35/11 kV



## Application

LSF armoured power cable for use in fixed installations. Especially for use in areas where fire would create dense smoke and toxic fumes causing a major threat to life and equipment.

## Specifications

- In accordance with BS7835
- **Conductors:** Stranded Class 2 copper conductors to BS EN 60228
- Extruded semi-conducting layer
- **Insulation:** XLPE insulation
- Extruded semi-conducting layer
- Plain copper tape screen
- **Inner Sheath:** LSF inner sheath Type LTS1 to BS7655
- Mild galvanised steel wires to BS EN 10257-1
- **Outer Sheath:** Red LSF outer sheath Type LTS1 to BS7655
- Flame retardant to BS EN 60332-3-24 & IEC60332-3-24 Cat. C as a minimum
- **Temperature Rating:** 90°C maximum conductor operating temperature
- **Voltage Rating:** 6350/11000 V

For further technical information refer to page 1:76.

## Three Core XLPE/LSF/SWA/LSF Power Cable

6.35/11 kV

Anixter Number	Number of Cores	Nominal Conductor Area mm <sup>2</sup>	Insulation Thickness mm	Diameter Under Armour mm	Armour Wire Size mm	Nominal O/D mm	Approx Weight kg/km	Minimum Bending Radius	
								mm	mm
								During Installation	Adjacent to joints and Termination
A2EN-3016-03	3	16	3.4	35.6	2.0	44.2	3400	540	450
A2EN-3025-03	3	25	3.4	38.1	2.5	47.9	4300	580	480
A2EN-3035-03	3	35	3.4	40.3	2.5	50.3	4700	610	510
A2EN-3050-03	3	50	3.4	42.9	2.5	53.1	5500	640	540
A2EN-3070-03	3	70	3.4	46.7	2.5	57.1	6400	690	580
A2EN-3095-03	3	95	3.4	50.6	2.5	61.2	7500	740	620
A2EN-3120-03	3	120	3.4	54.0	2.5	65.0	8600	780	650
A2EN-3150-03	3	150	3.4	56.8	2.5	68.0	9600	820	680
A2EN-3185-03	3	185	3.4	60.9	2.5	72.3	11200	870	730
A2EN-3240-03	3	240	3.4	65.9	3.15	79.0	14200	950	790
A2EN-3300-03	3	300	3.4	71.0	3.15	84.5	16500	1020	850
A2EN-3400-03	3	400	3.4	77.0	3.15	90.9	19700	1100	910

# BS7629 Fire Resistant Cable

Incorporating circuit protective conductor (CPC) 300/500 V



## Application

Unarmoured fire resistant cable for use in fixed wiring installations where it is necessary for the cable to retain circuit integrity in the event of a fire, e.g. emergency services, alarm systems, lighting.

## Specifications

- In accordance with BS7629 Part 1
- BASEC Approved
- **Conductors:** Solid Class 1 or stranded Class 2 copper conductors to BS EN 60228
- **Insulation:** Silicone rubber insulation type EI2 to BS EN 50363-1
- **Core Identification:**
  - 2 core - brown, blue
  - 3 core - brown, black, grey
  - 4 core - brown, black, grey, blue
  - 7, 12, 19 core brown and black marker cores in each layer, remaining cores grey
- Woven glass tape to BS EN 61067
- Tinned copper CPC (Class 1, 2 or 5) under and in contact with aluminium/mylar tape
- Low smoke zero halogen sheath Type LTS3 to BS7655 (red or white)
- Fire resistant to IEC60331 and categories CWZ of BS6387. Meets BS5839 26.2, pH30 BS EN 50200 (Standard)
- Flame retardant to BS EN 60332-1-2
- Meets BS7622 and IEC 61034 3m cube smoke emission test
- **Temperature Rating:** 70°C maximum conductor operating temperature
- **Voltage Rating:** 300/500 V

## BS7629 Fire Resistant Cable

Incorporating circuit protective conductor (CPC) 300/500 V

Anixter Number	Number of Cores	Nominal Conductor Area mm <sup>2</sup>	Nominal Conductor Stranding #/mm	Nominal C.P.C. Area mm <sup>2</sup>	Nominal C.P.C. Stranding #/mm	Insulation Thickness mm	Nom O/D mm	Approx Weight kg/km	Min Bending Radius (fixed bend) mm
<b>Solid Conductors</b>									
BS7629-2C10-***	2	1.0	1/1.13	1.0	1/1.13	0.6	7.0	83	50
BS7629-2C15-***	2	1.5	1/1.38	1.5	1/1.38	0.7	7.9	110	50
BS7629-2C25-***	2	2.5	1/1.78	2.5	1/1.78	0.8	9.3	160	60
BS7629-3C10-***	3	1.0	1/1.13	1.0	1/1.13	0.6	7.3	91	50
BS7629-3C15-***	3	1.5	1/1.38	1.5	1/1.38	0.7	8.3	128	50
BS7629-3C25-***	3	2.5	1/1.78	2.5	1/1.78	0.8	9.9	160	60
BS7629-4C10-***	4	1.0	1/1.13	1.0	1/1.13	0.6	8.2	115	60
BS7629-4C15-***	4	1.5	1/1.38	1.5	1/1.38	0.7	9.5	160	60
BS7629-4C25-***	4	2.5	1/1.78	2.5	1/1.78	0.8	11.3	235	70
BS7629-7C10-***	7	1.0	1/1.13	1.0	32/0.2	0.6	10.5	175	70
BS7629-12C10-***	12	1.0	1/1.13	1.0	32/0.2	0.6	13.5	275	80
BS7629-19C10-***	19	1.0	1/1.13	1.0	32/0.2	0.6	15.7	405	90
BS7629-7C15-***	7	1.5	1/1.38	1.5	30/0.25	0.7	12.2	250	70
BS7629-12C15-***	12	1.5	1/1.38	1.5	30/0.25	0.7	15.2	390	100
BS7629-19C15-***	19	1.5	1/1.38	1.5	30/0.25	0.7	18.2	560	110
BS7629-7C25-***	7	2.5	1/1.78	2.5	50/0.25	0.8	14.6	375	90
BS7629-12C25-***	12	2.5	1/1.78	2.5	50/0.25	0.8	19.5	610	120
BS7629-19C25-***	19	2.5	1/1.78	2.5	50/0.25	0.8	22.8	900	140
<b>Stranded Conductors</b>									
BS7629-2C15-***-S	2	1.5	7/0.53	1.5	7/0.53	0.7	8.4	125	60
BS7629-2C25-***-S	2	2.5	7/0.67	2.5	7/0.67	0.8	9.7	175	60
BS7629-2C40-***-S	2	4.0	7/0.85	4.0	7/0.85	0.8	11.1	243	70
BS7629-3C15-***-S	3	1.5	7/0.53	1.5	7/0.53	0.7	8.9	142	60
BS7629-3C25-***-S	3	2.5	7/0.67	2.5	7/0.67	0.8	10.6	210	70
BS7629-3C40-***-S	3	4.0	7/0.85	4.0	7/0.85	0.8	12.2	297	80
BS7629-4C15-***-S	4	1.5	7/0.53	1.5	7/0.53	0.7	10.2	177	70
BS7629-4C25-***-S	4	2.5	7/0.67	2.5	7/0.67	0.8	12.3	265	80
BS7629-4C40-***-S	4	4.0	7/0.85	4.0	7/0.85	0.8	13.8	365	90
BS7629-7C15-***-S	7	1.5	7/0.53	1.5	30/0.25	0.7	12.9	275	80
BS7629-7C25-***-S	7	2.5	7/0.67	2.5	50/0.25	0.8	15.0	400	90
BS7629-12C15-***-S	12	1.5	7/0.53	1.5	30/0.25	0.7	16.7	427	110
BS7629-12C25-***-S	12	2.5	7/0.67	2.5	50/0.25	0.8	19.8	640	120
BS7629-19C15-***-S	19	1.5	7/0.53	1.5	30/0.25	0.7	19.4	617	120
BS7629-19C25-***-S	19	2.5	7/0.67	2.5	50/0.25	0.8	23.1	930	140

Above details are based on Draka Firetuf cables. For further technical information see page 1:68.

\*\*\* WTE = white sheath, RED = red sheath.

# Fire Resistant Armoured Power Cable

600/1000V



## Application

Armoured fire resistant cable for use in fixed wiring installations where it is necessary for the cable to retain circuit integrity in the event of a fire, e.g. emergency services, alarm systems, lighting, etc., and in situations where power must be maintained to allow controlled shutdown of equipment.

## Specifications

- In accordance with BS7846

- BASEC Approved

- **Conductors:** Stranded Class 2 copper conductors to BS EN 60228

- Mica/glass tape (S)

- **Core Identification:**

2 core - brown, blue

3 core - brown, black, grey

4 core - brown, black, grey, blue

5 core + above - number printed

- **Inner Sheath:** LSF inner sheath Type LTS1 to BS7655

- Mild galvanised steel wires to BS EN 10257-1

- **Outer Sheath:** Black LSF outer sheath Type LTS1 to BS7655

- Fire resistant to IEC60331 and categories CWZ of BS6387 and BS5839 Clause 26.2

- Flame retardant to BS EN 60332-3-24 & IEC60332-3-24 Cat. C as a minimum

- Meets BS7622 and IEC 61034 smoke emission test and pH30 BS EN 50200

- **Temperature Rating:** 90°C maximum conductor operating temperature

- **Voltage Rating:** 600/1000 V

## Fire Resistant Armoured Power Cable

600/1000 V

Anixter Number	Number of Cores	Nominal Conductor Area mm <sup>2</sup>	Insulation Thickness mm	Diameter Under Armour mm	Armour Wire Size mm	Nominal O/D mm	Approx Weight kg/km	Min Bending Radius (fixed bend) mm
<b>Two Core</b>								
BS7846-2C-0015	2	1.5*	0.6	8.6	0.9	13.0	313	90
BS7846-2C-0025	2	2.5*	0.7	9.9	0.9	14.5	384	90
BS7846-2C-0040	2	4.0*	0.7	10.9	0.9	15.5	434	100
BS7846-2C-0060	2	6.0*	0.7	11.9	0.9	16.5	505	110
BS7846-2C-0100	2	10*	0.7	14.2	0.9	19.0	808	120
BS7846-2C-0160	2	16†	0.7	16.0	1.25	21.5	949	130
BS7846-2C-0250	2	25†	0.9	19.3	1.25	25.0	1263	150
BS7846-2C-0350	2	35†	0.9	21.9	1.6	28.5	1737	170
BS7846-2C-0500	2	50//	1.0	19.7	1.6	26.5	1826	220
BS7846-2C-0700	2	70	1.1	23.0	1.6	30.0	2342	250
BS7846-2C-0950	2	95	1.1	26.0	2.0	34.0	3234	280
BS7846-2C-1200	2	120	1.2	28.8	2.0	37.0	4064	300
BS7846-2C-1500	2	150	1.4	31.6	2.0	40.0	4668	320
BS7846-2C-1850	2	185	1.6	36.2	2.5	46.0	5974	360
BS7846-2C-2400	2	240	1.7	40.0	2.5	50.0	7614	400
BS7846-2C-3000	2	300	1.8	44.8	2.5	55.0	8967	440
BS7846-2C-4000	2	400	2.0	49.4	2.5	60.0	10930	480
<b>Three Core</b>								
BS7846-3C-0015	3	1.5*	0.6	9.1	0.9	13.5	343	90
BS7846-3C-0025	3	2.5*	0.7	10.4	0.9	15.0	414	100
BS7846-3C-0040	3	4.0*	0.7	11.9	0.9	16.4	505	100
BS7846-3C-0060	3	6.0*	0.7	12.9	0.9	17.5	778	110
BS7846-3C-0100	3	10*	0.7	15.0	1.25	20.5	909	120
BS7846-3C-0160	3	16†	0.7	16.8	1.25	22.5	1192	140
BS7846-3C-0250	3	25†	0.9	20.9	1.6	27.5	1737	170
BS7846-3C-0350	3	35†	0.9	24.2	1.6	31.0	2151	180
BS7846-3C-0500	3	50 //	1.0	23.2	1.6	30.0	2516	250
BS7846-3C-0700	3	70	1.1	26.0	1.6	33.0	3273	280
BS7846-3C-0950	3	95	1.1	29.8	2.0	38.0	4513	320
BS7846-3C-1200	3	120	1.2	33.6	2.0	42.0	5533	350
BS7846-3C-1500	3	150	1.4	37.4	2.5	47.0	6912	390
BS7846-3C-1850	3	185	1.6	41.2	2.5	51.0	8306	420
BS7846-3C-2400	3	240	1.7	45.8	2.5	56.0	10504	460
BS7846-3C-3000	3	300	1.8	50.6	2.5	61.0	12431	510
BS7846-3C-4000	3	400	2.0	57.2	2.5	68.0	15280	560

Continued overleaf...



# Fire Resistant Armoured Power Cable

600/1000 V (continued)

Anixter Number	Number of Cores	Nominal Conductor Area mm <sup>2</sup>	Insulation Thickness mm	Diameter Under Armour mm	Armour Wire Size mm	Nominal O/D mm	Approx Weight kg/km	Min Bending Radius (fixed bend) mm
<b>Four Core</b>								
BS7846-4C-0015	4	1.5*	0.6	10.1	0.9	14.5	394	90
BS7846-4C-0025	4	2.5*	0.7	11.4	0.9	16.0	475	100
BS7846-4C-0040	4	4.0*	0.7	12.9	0.9	17.5	586	110
BS7846-4C-0060	4	6.0*	0.7	14.5	1.25	20.0	828	130
BS7846-4C-0100	4	10*	0.7	17.0	1.25	22.5	1071	140
BS7846-4C-0160	4	16†	0.7	18.8	1.25	24.5	1424	160
BS7846-4C-0250	4	25†	0.9	23.4	1.6	30.0	2111	180
BS7846-4C-0350	4	35†	0.9	26.2	1.6	33.0	2616	200
BS7846-4C-0500	4	50//	1.0	26.0	1.6	33.0	3161	270
BS7846-4C-0700	4	70	1.1	38.0	2.0	39.0	4430	320
BS7846-4C-0950	4	95	1.1	34.6	2.0	43.0	5706	350
BS7846-4C-1200	4	120	1.2	38.4	2.5	48.0	7422	390
BS7846-4C-1500	4	150	1.4	43.2	2.5	53.0	8797	430
BS7846-4C-1850	4	185	1.6	47.8	2.5	58.0	10629	470
BS7846-4C-2400	4	240	1.7	53.6	2.5	64.0	13556	520
BS7846-4C-3000	4	300	1.8	59.2	2.5	70.0	15953	560
BS7846-4C-4000	4	400	2.0	66.3	3.15	79.0	20372	640
<b>7C+ 1.5sqmm</b>								
A2EF-070015-02	7	1.5*	0.6	11.9	0.9	16.5	561	110
A2EF-120015-02	12	1.5*	0.6	16.0	1.25	21.5	962	140
A2EF-190015-02	19	1.5*	0.6	19.2	1.25	24.5	1217	160
A2EF-270015-02	27	1.5*	0.6	22.9	1.6	29.5	1722	190
A2EF-370015-02	37	1.5*	0.6	26.4	1.6	33.0	2132	210

## Fire Resistant Armoured Power Cable

600/1000 V (continued)

Anixter Number	Number of Cores	Nominal Conductor Area mm <sup>2</sup>	Insulation Thickness mm	Diameter Under Armour mm	Armour Wire Size mm	Nominal O/D mm	Approx Weight kg/km	Min Bending Radius (fixed bend) mm
<b>7C+ 2.5sqmm</b>								
A2EF-070025-02	7	2.5*	0.7	13.9	0.9	18.5	638	120
A2EF-120025-02	12	2.5*	0.7	18.4	1.25	24.5	1086	150
A2EF-190025-02	19	2.5*	0.7	22.4	1.6	29.0	1641	180
A2EF-270025-02	27	2.5*	0.7	27.2	1.6	34.0	2122	210
A2EF-370025-02	37	2.5*	0.7	29.2	1.6	36.0	2605	230
<b>7C+ 4.0sqmm</b>								
A2EF-070040-02	7	4.0*	0.7	15.5	1.25	21.0	922	130
A2EF-120040-02	12	4.0*	0.7	21.1	1.6	27.5	1593	170
A2EF-190040-02	19	4.0*	0.7	25.0	1.6	32.0	2076	190
A2EF-270040-02	27	4.0*	0.7	31.0	1.6	38.0	2732	230
A2EF-370040-02	37	4.0*	0.7	35.0	2.0	43.0	3751	260

\*Circular stranded conductors.

// Cables having conductors of nominal area 50sqmm and above will have shaped stranded conductors.

† Circular or circular compacted stranded conductors.

For more technical information refer to page 1:70.

For conductor and armour resistances refer to page 20:31 and 20:32.

For gross cross-sectional area of armour refer to page 20:34.

For conductor short-circuit ratings refer to page 20:28.

For armour short-circuit ratings refer to page 20:36.

NB: 25mm<sup>2</sup> and 35mm<sup>2</sup> cables may be supplied with SHAPED conductors. Details on dimensions, weights etc., available on request.

# Fire Resistant Armoured Power Cable - Enhanced

600/1000 V



## Application

Enhanced armoured fire resistant cable for use in fixed wiring installations where it is necessary for the cable to retain circuit integrity in the event of a fire, e.g. emergency services, alarm systems, lighting, etc., and in situations where power must be maintained to allow controlled shutdown of equipment.

## Specifications

- In accordance with BS7846

- BASEC and LPCB approved

- Conductors: Stranded plain annealed copper wire (Class 2) to BS EN 60228

- Insulation: Mica-glass fire resistant tapes, covered by an extruded layer of XLPE

- Binder: Polyester tape, glass tape where performance requires

- Bedding: Zero Halogen, Low Smoke (OHLS®)

- Armour: Galvanised Steel Wire Armour

- Sheath: Zero Halogen, Low Smoke (OHLS®)

- Circuit Integrity: BS7846 F120, BS 8491 30, 60 and 120mins

- Acid Gas Emission: BS EN 50267-2-1

- Flame Propagation: BS EN 60332-1-2, BS EN 60332-3-24

- Smoke Emission: BS EN 61034-2

- Temperature Rating: -25°C to +90°C (the cable should not be installed when either the ambient temperature or cable temperature is below 0°C)

- Voltage Rating: 600/1000 V

# Fire Resistant Armoured Power Cable - Enhanced

600/1000 V

Anixter Number	Number of Cores	Nominal Conductor Area mm <sup>2</sup>	Insulation Thickness mm	Diameter Under Armour mm	Armour Wire Size mm	Nominal O/D mm	Approx Weight kg/km	Min Bending Radius (fixed bend) mm
BS7846-4C-0040-E	4	4*	0.7	15.0	1.25	20.5	795	164
BS7846-4C-0060-E	4	6*	0.7	16.2	1.25	22.0	930	129
BS7846-4C-0100-E	4	10*	0.7	18.7	1.25	24.4	1200	149
BS7846-4C-0160-E	4	16*	0.7	20.2	1.25	26.1	1460	208
BS7846-4C-0250-E	4	25*	0.9	24.0	1.6	30.8	2150	246
BS7846-4C-0350-E	4	35*	0.9	26.6	1.6	33.6	2635	268
BS7846-4C-0500-E	4	50 //	1.0	29.0	1.6	36.2	3275	289
BS7846-4C-0700-E	4	70 //	1.1	31.9	2.0	40.2	4555	321
BS7846-4C-0950-E	4	95 //	1.1	35.4	2.0	43.9	5770	351
BS7846-4C-1200-E	4	120 //	1.2	39.4	2.5	49.1	7380	392
BS7846-4C-1500-E	4	150 //	1.4	43.3	2.5	53.2	8720	425
BS7846-4C-1850-E	4	185 //	1.6	48.1	2.5	58.4	10535	467
BS7846-4C-2400-E	4	240 //	1.7	53.6	2.5	64.0	13115	512

\* Circular stranded conductors

// Shaped stranded conductors

For more technical information refer to page 1:70

For conductor and armour resistances refer to page 20:31

For gross cross-sectional area of armour refer to page 20:34

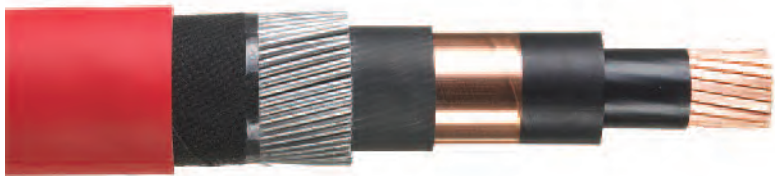
For conductor short-circuit ratings refer to page 20:34

For armour short-circuit ratings refer to page 20:36

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# Single-Core XLPE/PVC/AWA/PVC Power Cable

3.8/6.6, 6.35/11 and 8.7/15 kV



## Application

Power cable for use on fixed installations, indoor, outdoor or direct burial.

## Specifications

- In accordance with BS6622
- **Conductors:** Stranded Class 2 copper conductors to BS EN 60228
- Extruded semi-conducting layer
- **Insulation:** XLPE insulation
- Extruded semi-conducting layer
- Plain copper tape screen
- **Inner Sheath:** PVC inner sheath Type 9 to BS7655
- Aluminium wires to BS2627
- **Outer Sheath:** PVC outer sheath Type 9 to BS7655
- Flame retardant to BS EN 60332-1-2
- **Temperature Rating:** 90°C maximum conductor operating temperature
- **Voltage Rating:** 3800/6600, 6350/11000, & 8700/15000 V

For black sheath add suffix -02, for red sheath -03.  
For further technical information refer to page 1:76.

## Single-Core XLPE/PVC/AWA/PVC Power Cable

6.35/11 kV

Anixter Number	Number of Cores	Nominal Conductor Area mm <sup>2</sup>	Insulation Thickness mm	Diameter Under Armour mm	Armour Wire Size mm	Nominal O/D mm	Approx Weight kg/km	Minimum Bending Radius	
								mm	During Installation
<b>3800/6600 V Cables</b>									
A2CJ-1050	1	50	2.5	18.9	1.6	25.7	1200	390	310
A2CJ-1070	1	70	2.5	20.7	1.6	27.5	1400	420	330
A2CJ-1095	1	95	2.5	22.4	1.6	29.4	1800	450	360
A2CJ-1120	1	120	2.5	23.9	1.6	30.9	2000	470	380
A2CJ-1150	1	150	2.5	25.2	1.6	32.4	2300	490	390
A2CJ-1185	1	185	2.5	27.0	2.0	35.0	2800	530	420
A2CJ-1240	1	240	2.6	29.4		37.6	3500	570	460
A2CJ-1300	1	300	2.8	32.4	2.0	40.8	4200	620	490
A2CJ-1400	1	400	3.0	35.5	2.0	44.1	5100	670	530
A2CJ-1500	1	500	3.2	39.0	2.5	49.0	6400	740	590
A2CJ-1630	1	630	3.2	42.6	2.5	52.8	7400	800	640
<b>6350/11000 V Cable</b>									
A2CT-1050-03	1	50	3.4	20.9	1.6	27.7	1300	420	340
A2CT-1070-03	1	70	3.4	22.7	1.6	29.7	1600	450	360
A2CT-1095-03	1	95	3.4	24.4	1.6	31.4	1900	480	390
A2CT-1120-03	1	120	3.4	25.9	1.6	33.1	2200	500	400
A2CT-1150-03	1	150	3.4	27.2	2.0	35.4	2600	540	430
A2CT-1185-03	1	185	3.4	29.0	2.0	37.2	3000	560	450
A2CT-1240-03	1	240	3.4	31.4	2.0	39.8	3600	600	480
A2CT-1300-03	1	300	3.4	33.7	2.0	42.3	4300	640	510
A2CT-1400-03	1	400	3.4	36.4	2.0	45.2	5200	680	550
A2CT-1500-03	1	500	3.4	39.5	2.5	49.5	6500	750	600
A2CT-1630-03	1	630	3.4	43.1	2.5	53.3	7900	800	640
<b>8700/15000 V Cables</b>									
A2DE-1050	1	50	4.5	23.3	1.6	30.3	1400	460	370
A2DE-1070	1	70	4.5	25.1	1.6	32.1	1700	490	390
A2DE-1095	1	95	4.5	26.8	2.0	34.8	2100	530	420
A2DE-1120	1	120	4.5	28.3	2.0	36.5	2400	550	440
A2DE-1150	1	150	4.5	29.6	2.0	37.8	2700	570	460
A2DE-1185	1	185	4.5	31.6	2.0	40.0	3200	600	480
A2DE-1240	1	240	4.5	33.8	2.0	42.4	3800	640	510
A2DE-1300	1	300	4.5	36.1	2.0	44.7	4500	680	540
A2DE-1400	1	400	4.5	39.0	2.5	49.0	5600	740	590
A2DE-1500	1	500	4.5	41.9	2.5	52.1	6700	90	630
A2DE-1630	1	630	4.5	45.5	2.5	55.9	8200	840	680

# 2 Three Core XLPE/PVC/SWA/PVC Power Cable

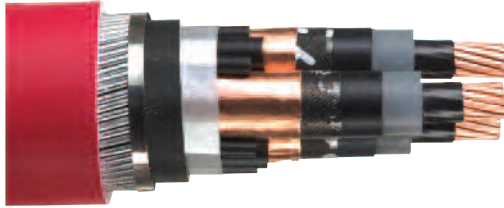
3.8/6.6, 6.35/11 and 8.7/15 kV

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## Application

Multicore power cable for use on fixed installations. Indoor or outdoor use, or for direct burial.

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## Specifications

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- In accordance with BS6622
- **Conductors:** Stranded Class 2 copper conductors to BS EN 60228
- Extruded semi-conducting layer
- **Insulation:** XLPE insulation
- Extruded semi-conducting layer
- Plain copper tape screen
- **Inner Sheath:** PVC inner sheath Type 9 to BS7655
- Mild galvanised steel wires to BS EN 10257-1
- **Outer Sheath:** PVC outer sheath Type 9 to BS7655
- Flame retardant to BS EN 60332-1-2
- **Temperature Rating:** 90°C maximum conductor operating temperature
- **Voltage Rating:** 3800/6600, 6350/11000, & 8700/15000 V

For black sheath add suffix -02, for red sheath -03 to part number.

For further technical information refer to page 1:76.

## Three Core XLPE/PVC/SWA/PVC Power Cable

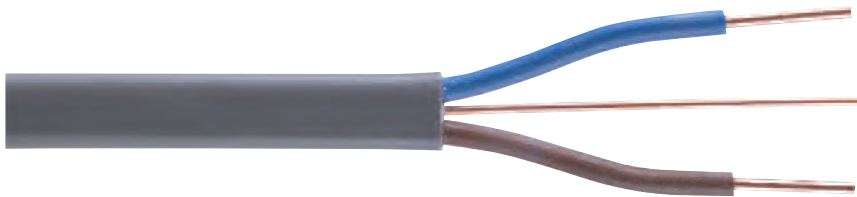
3.8/6.6, 6.35/11 and 8.7/15 kV

Anixter Number	Number of Cores	Nominal Conductor Area mm <sup>2</sup>	Insulation Thickness mm	Diameter Under Armour mm	Armour Wire Size mm	Nominal O/D mm	Approx Weight kg/km	Minimum Bending Radius	
								mm	During Installation
<b>3800/6600 V Cables</b>									
A2CM-3016	3	16	2.5	31.3	2.0	39.7	2900	480	400
A2CM-3025	3	25	2.5	33.6	2.0	42.0	3300	510	420
A2CM-3035	3	35	2.5	35.8	2.0	44.4	3700	540	440
A2CM-3050	3	50	2.5	38.4	2.5	48.4	4900	590	490
A2CM-3070	3	70	2.5	42.2	2.5	52.4	5800	630	530
A2CM-3095	3	95	2.5	46.1	2.5	56.5	6900	680	570
A2CM-3120	3	120	2.5	49.5	2.5	60.1	7900	730	610
A2CM-3150	3	150	2.5	52.2	2.5	63.1	8900	760	640
A2CM-3185	3	185	2.5	56.4	2.5	67.4	10400	810	680
A2CM-3240	3	240	2.6	61.8	2.5	73.2	12700	880	740
A2CM-3300	3	300	2.8	68.0	3.15	81.3	16000	980	820
A2CM-3400	3	400	3.0	75.1	3.15	88.8	19400	1070	890
<b>6350/11000 V Cables</b>									
A2CW-3016	3	16	3.4	35.6	2.0	44.2	3400	540	450
A2CW-3025	3	25	3.4	38.1	2.5	47.9	4300	580	480
A2CW-3035	3	35	3.4	40.3	2.5	50.3	4700	610	510
A2CW-3050	3	50	3.4	42.9	2.5	53.1	5500	640	540
A2CW-3070	3	70	3.4	46.7	2.5	57.1	6400	690	580
A2CW-3095	3	95	3.4	50.6	2.5	61.2	7500	740	620
A2CW-3120	3	120	3.4	54.0	2.5	65.0	8600	780	650
A2CW-3150	3	150	3.4	56.8	2.5	68.0	9600	820	680
A2CW-3185	3	185	3.4	60.9	2.5	72.3	11200	870	730
A2CW-3240	3	240	3.4	65.9	3.15	79.0	14200	950	790
A2CW-3300	3	300	3.4	71.0	3.15	84.5	16500	1020	850
A2CW-3400	3	400	3.4	77.0	3.15	90.9	19700	1100	910
<b>8700/15000 V Cables</b>									
A2DH-3025	3	25	4.5	43.5	2.5	53.7	5000	650	540
A2DH-3035	3	35	4.5	45.7	2.5	56.1	5500	680	570
A2DH-3050	3	50	4.5	48.2	2.5	58.8	6100	710	590
A2DH-3070	3	70	4.5	52.1	2.5	62.9	7100	760	630
A2DH-3095	3	95	4.5	56.0	2.5	67.0	8300	810	670
A2DH-3120	3	120	4.5	59.4	2.5	70.6	9400	850	710
A2DH-3150	3	150	4.5	62.2	2.5	73.6	10500	890	740
A2DH-3185	3	185	4.5	66.3	3.15	79.4	12900	960	800
A2DH-3240	3	240	4.5	71.2	3.15	84.7	15200	1020	850
A2DH-3300	3	300	4.5	76.4	3.15	90.1	17600	1090	910
A2DH-3400	3	400	4.5	82.4	3.15	96.7	20800	1170	970



# Flat Twin and Flat Three Core LSF 6242B and 6243B

Insulated and sheathed with uninsulated circuit protective conductor as option



## Application

LSF insulated and sheathed cable for installation clipped to flat surfaces, or embedded in plaster, etc. For domestic and industrial wiring.

## Specifications

- In accordance with BS7211
- **Conductors:** Solid Class 1 (up to 2.5mm<sup>2</sup>) and stranded Class 2 (above 2.5mm<sup>2</sup>) copper conductors to BS EN 60228
- **Insulation:** XLPE insulation Type GP 8 to BS7655
- **Core Identification:**  
2 core - brown, blue  
3 core - brown, black, grey
- **Position of protective conductor:**  
Twin - centrally placed between brown and blue cores  
Three core - centrally placed between black and grey cores
- **Outer Sheath:** LSF Sheath Type LTS2 to BS7655
- Flame retardant to BS EN 60332-1-2
- **Temperature Rating:** 70°C maximum conductor operating temperature
- **Voltage Rating:** 300/500 V

## Flat Twin and Flat Three Core LSF 6242B and 6243B

Anixter Number	Nominal Conductor Area mm <sup>2</sup>	Conductor Class	Insulation Thickness mm	Minimum O/D mm	Maximum O/D mm	Nom Earth Conductor Area mm <sup>2</sup>	Approx Weight kg/km	Min Bending Radius (fixed bend) mm
<b>6242B - Flat Twin + Earth</b>								
6242B-0010	1.0	1	0.7	4.1 x 7.6	5.0 x 9.1	1.0	69	26
6242B-0015	1.5	1	0.7	4.4 x 8.1	5.3 x 9.7	1.0	85	29
6242B-0025	2.5	1	0.7	4.9 x 9.3	6.0 x 11.2	1.5	120	50
6242B-0040	4	2	0.7	5.5 x 10.4	6.7 x 12.6	1.5	175	60
6242B-0060	6	2	0.7	6.2 x 12.0	7.5 x 14.6	2.5	240	60
6242B-0100	10	2	0.7	7.3 x 14.5	8.8 x 17.6	4	390	80
6242B-0160	16	2	0.7	8.4 x 17.0	10.1 x 20.5	6	560	90
<b>6242B - Flat Three Core + Earth</b>								
6243B-0010	1.0	1	0.7	4.1 x 10.0	5.1 x 12.1	1.0	92	50
6243B-0015	1.5	1	0.7	4.4 x 10.7	5.3 x 12.9	1.0	115	50
6243B-0025	2.5	1	0.7	4.9 x 12.0	6.0 x 14.6	1.0	170	60
6243B-0040	4	2	0.7	5.5 x 14.0	6.7 x 16.9	1.5	255	80
6243B-0060	6	2	0.7	6.2 x 16.2	7.5 x 19.5	2.5	340	80
6243B-0100	10	2	0.7	7.3 x 19.5	8.8 x 23.6	4	550	160
6243B-0160	16	2	0.7	8.4 x 22.8	10.1 x 27.6	6	790	180

For further technical information see page 1:80.  
For conductor short-circuit ratings see page 20:28.

# Solar Cable



## Application

Used on both off-grid applications or grid connected PV-Systems.

## TÜV Approved

### Construction

Conductor	Flexible Tinned Copper
Insulation	Halogen Free special Copolymer
Sheath	Halogen Free special Copolymer
Colours	Black and red. Others available on request

### Technical Specification

Nominal Voltage	0.6/1kV a.c. 0.9/1.5kV d.c.
Test Voltage	6.5kV a.c.
Operating Temperature	-40°C to + 90°C
Max Core Temperature	+ 120°C (for 20,000 hours)
Minimum Bending Radius	5 x outer diameter
Approval	TÜV 2 Pfg 1169/08.2007

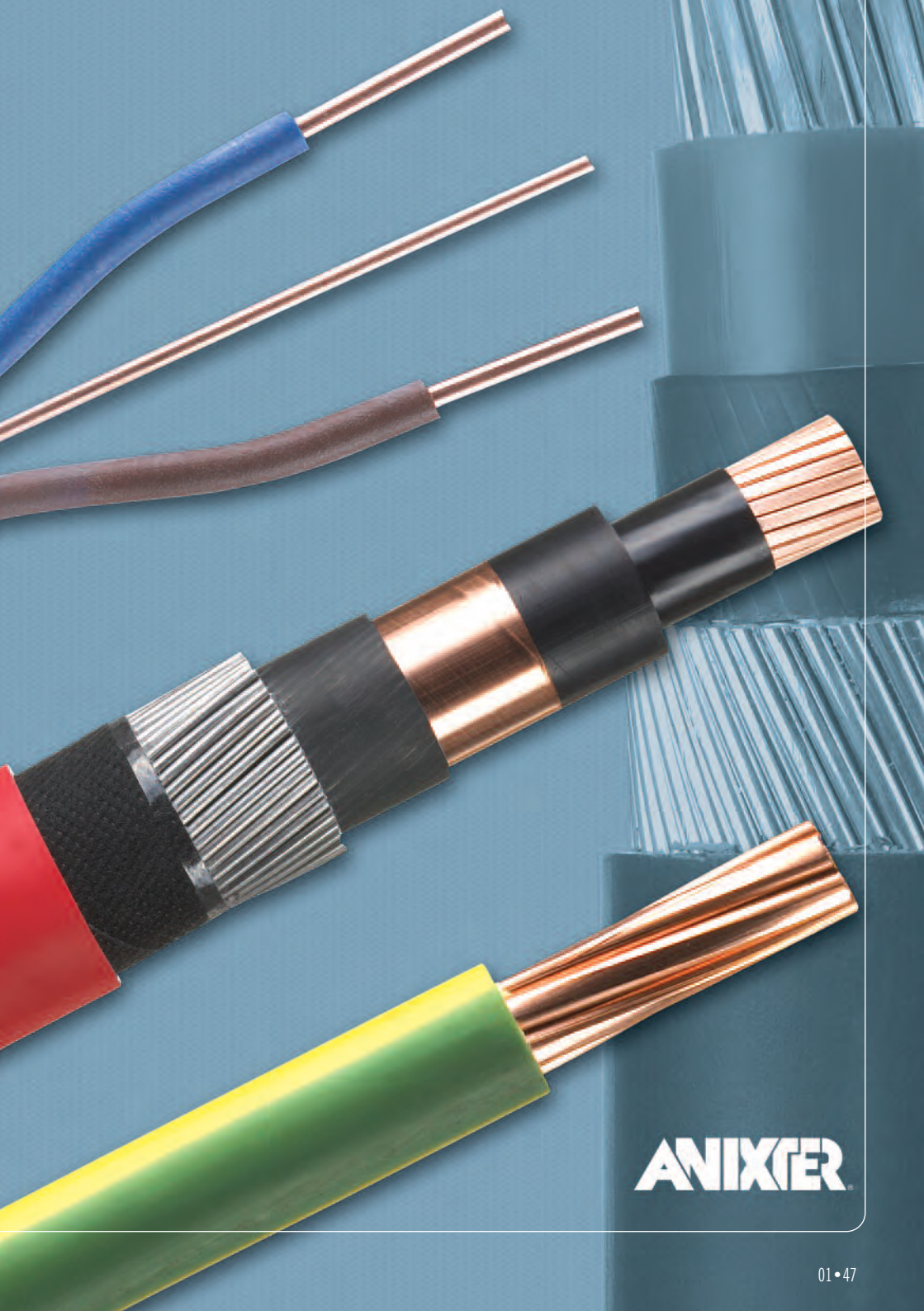
Anixter Number	Nominal Conductor Area mm <sup>2</sup>	Nominal Outer Diameter mm	Approximate Cable Weight kg/km
SOLAR-TUV-0040-02	4	6.0	70
SOLAR-TUV-0060-02	6	6.8	97
SOLAR-TUV-0100-02	10	8.4	168

For Red use suffix -03

## Not TÜV Approved

A range to the above construction and technical specification is also available but without TÜV approval.

Anixter Number	Nominal Conductor Area mm <sup>2</sup>	Nominal Outer Diameter mm	Approximate Cable Weight kg/km
SOLAR-0025-02	2.5	5	46
SOLAR-0040-02	4	5.4	62
SOLAR-0060-02	6	6.2	86
SOLAR-0100-02	10	7.4	132
SOLAR-0160-02	16	8.6	194
SOLAR-0250-02	25	10.5	298
SOLAR-0350-02	35	11.6	396
SOLAR-0500-02	50	14.6	561
SOLAR-0700-02	70	16.6	758
SOLAR-0950-02	95	18.4	997
SOLAR-1200-02	120	20.4	1241



**ANIXTER**

# Technical Information

- Single-Core PVC
- Single-Core PVC/PVC (300/500 V)
- Single-Core PVC/PVC (6181Y Types - 600/1000 V)
- Single-Core PVC/PVC (6381Y Types - 450/750 V)

## CURRENT - CARRYING CAPACITY (Amperes):

Conductor Cross Sectional Area	Reference Method A (enclosed in conduit in thermally insulating wall etc.)		Reference Method B (enclosed in conduit on a wall or in trunking etc.)		Reference Method C ("clipped direct")	
	2 Cables, Single Phase a.c. or d.c.	3 or 4 Cables Three Phase a.c.	2 Cables, Single Phase a.c. or d.c.	3 or 4 Cables Three Phase a.c.	2 Cables, Single Phase a.c. or d.c. Flat and Touching	3 or 4 Cables Three Phase a.c. Flat and Touching or Trefoil
1	2	3	4	5	6	7
mm <sup>2</sup>	A	A	A	A	A	A
1	11	10.5	13.5	12	15.5	14
1.5	14.5	13.5	17.5	15.5	20	18
2.5	20.0	18	24	21	27	25
4	26	24	32	28	37	33
6	34	31	41	36	47	43
10	46	42	57	50	65	59
16	61	56	76	68	87	79
25	80	73	101	89	114	104
35	99	89	125	110	141	129
50	119	108	151	134	182	167
70	151	136	192	171	234	214
95	182	164	232	207	284	261
120	210	188	269	239	330	303
150	240	216	300	262	381	349
185	273	245	341	296	436	400
240	321	286	400	346	515	472
300	367	328	458	394	594	545
400	-	-	546	467	694	634
500	-	-	626	533	792	723
630	-	-	720	611	904	826
800	-	-	-	-	1030	943
1000	-	-	-	-	1154	1058

# Technical Information

If cables are to be used in ambient air temperatures other than 30°C the following rating factors should be applied:

Ambient air temp °C	25	30	35	40	45	50	55	60
Rating factor	1.02	1.0	0.94	0.87	0.79	0.71	0.61	0.50

Reference Method F (in free air or on perforated cable tray horizontal or vertical)		Reference Method F (in free air or on perforated cable tray horizontal, vertical or trefoil)		
2 Cables, Single Phase a.c. or d.c. Flat and Touching	3 or 4 Cables Three Phase a.c. Flat and Touching	Horizontal Flat Spaced	Vertical Flat Spaced	Trefoil
		2 Cables, Single Phase a.c. or d.c. or 3 Cables Three Phase a.c.	2 Cables, Single Phase a.c. or d.c. or 3 Cables Three Phase a.c. Three Phase a.c.	3 Cables Trefoil Three Phase a.c.
8	9	10	11	12
A	A	A	A	A
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
131	114	146	130	110
162	143	181	162	137
196	174	219	197	167
251	225	281	254	216
304	275	341	311	264
352	321	396	362	308
406	372	456	419	356
463	427	521	480	409
546	507	615	569	485
629	587	709	659	561
754	689	852	795	656
868	789	982	920	749
1005	905	1138	1070	855
1086	1020	1265	1188	971
1216	1149	1420	1337	1079

# Technical Information

- Single-Core PVC
- Single-Core PVC/PVC (300/500 V)
- Single-Core PVC/PVC (6181Y Types - 600/1000 V)
- Single-Core PVC/PVC (6381Y Types - 450/750 V)

VOLTAGE DROP (per Ampere per metre):

## 2 Cables - Single Phase a.c.

Conductor Cross Sectional Area	2 Cables d.c.	Reference Methods A & B (enclosed in conduit etc. in or on a wall)				Reference Methods C & F (clipped direct or on trays, touching)			Reference Method C & F (spaced*)		
		1	2	3	4	4	5	5	r	x	z
mm <sup>2</sup>	mV	mV				mV			mV		
1	44	44				44			44		
1.5	29	29				29			29		
2.5	18	18				18			18		
4	11	11				11			11		
6	7.3	7.3				7.3			7.3		
10	4.4	4.4				4.4			4.4		
16	2.8	2.8				2.8			2.8		
		r	x	z	r	x	z	r	x	z	
25	1.75	1.80	0.33	1.80	1.75	0.20	1.75	1.75	0.29	1.80	
35	1.25	1.30	0.31	1.30	1.25	0.195	1.25	1.25	0.28	1.30	
50	0.93	0.95	0.30	1.00	0.93	0.19	0.95	0.93	0.28	0.97	
70	0.63	0.65	0.29	0.72	0.63	0.185	0.66	0.63	0.27	0.69	
95	0.46	0.49	0.28	0.56	0.47	0.180	0.50	0.47	0.27	0.54	
120	0.36	0.39	0.27	0.47	0.37	0.175	0.41	0.37	0.26	0.45	
150	0.29	0.31	0.27	0.41	0.30	0.175	0.34	0.29	0.26	0.39	
185	0.23	0.25	0.27	0.37	0.24	0.170	0.29	0.24	0.26	0.35	
240	0.18	0.195	0.26	0.33	0.185	0.165	0.25	0.185	0.25	0.31	
300	0.145	0.16	0.26	0.31	0.15	0.165	0.22	0.150	0.25	0.29	
400	0.105	0.13	0.26	0.29	0.12	0.160	0.20	0.115	0.25	0.27	
500	0.086	0.11	0.26	0.28	0.098	0.155	0.185	0.093	0.24	0.26	
630	0.068	0.094	0.25	0.27	0.081	0.155	0.175	0.076	0.24	0.25	
800	0.053	-	-	-	0.068	0.150	0.165	0.061	0.24	0.25	
1000	0.042	-	-	-	0.059	0.150	0.160	0.050	0.24	0.24	

# Technical Information

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3 or 4 Cables - Three Phase a.c.											
Reference Methods A & B (enclosed in conduit etc. in or on wall)			Reference Methods C & F (in trefoil)			Reference Methods C & F (flat touching)			Reference Methods C & F (flat spaced*)		
6			7			8			9		
mV			mV			mV			mV		
38			38			38			38		
25			25			25			25		
15			15			15			15		
9.5			9.5			9.5			9.5		
6.4			6.4			6.4			6.4		
3.8			3.8			3.8			3.8		
2.4			2.4			2.4			2.4		
r	x	z	r	x	z	r	x	z	r	x	z
1.50	0.29	1.55	1.50	0.175	1.50	1.50	0.25	1.55	1.50	0.32	1.55
1.10	0.27	1.10	1.10	0.170	1.10	1.10	0.24	1.10	1.10	0.32	1.15
0.81	0.26	0.85	0.80	0.165	0.82	0.80	0.24	0.84	0.80	0.32	0.86
0.56	0.25	0.61	0.55	0.160	0.57	0.55	0.24	0.60	0.55	0.31	0.63
0.42	0.24	0.48	0.41	0.155	0.43	0.41	0.23	0.47	0.40	0.31	0.51
0.33	0.23	0.41	0.32	0.150	0.36	0.32	0.23	0.40	0.32	0.30	0.44
0.27	0.23	0.36	0.26	0.150	0.30	0.26	0.23	0.34	0.26	0.30	0.40
0.22	0.23	0.32	0.21	0.145	0.26	0.21	0.22	0.31	0.21	0.30	0.36
0.17	0.23	0.29	0.16	0.145	0.22	0.16	0.22	0.27	0.16	0.29	0.34
0.14	0.23	0.27	0.13	0.140	0.19	0.13	0.22	0.25	0.13	0.29	0.32
0.12	0.22	0.25	0.105	0.14	0.175	0.105	0.21	0.24	0.10	0.29	0.31
0.10	0.22	0.25	0.086	0.135	0.16	0.086	0.21	0.23	0.081	0.29	0.30
0.08	0.22	0.24	0.072	0.135	0.15	0.072	0.21	0.22	0.066	0.28	0.29
-	-	-	0.06	0.130	0.145	0.06	0.21	0.22	0.053	0.28	0.29
-	-	-	0.052	0.130	0.140	0.052	0.20	0.21	0.044	0.28	0.28

For further guidance refer to the BS7671 (IEE Wiring Regulations - latest edition).

\* spaced by one cable diameter.



## Technical Information

- Flat Twin, Flat Twin & Earth
- Flat Three core, Flat Three core & Earth

Multicore PVC-insulated flat cables, non-armoured, with or without protective conductor (copper conductors)

BS6004 - Flat Twin, Flat Three core

Ambient temperature: 30°C. Conductor operating temperature: 70°C

### CURRENT - CARRYING CAPACITY (Amperes)

Conductor Cross Sectional Area	Reference Method 100# (above a plasterboard ceiling covered by thermal insulation NOT EXCEEDING 100mm in thickness)	Reference Method 101# (above a plasterboard ceiling covered by thermal insulation EXCEEDING 100mm in thickness)	Reference Method 102# (in a stud wall with thermal insulation with cable TOUCHING the inner wall surface)	Reference Method 103# (in a stud wall with thermal insulation with cable NOT TOUCHING the inner wall surface)	Reference Method C* (clipped direct)	Reference Method A* (enclosed in conduit in an insulated wall)
1	2	3	4	5	6	7
mm <sup>2</sup>	(A)	(A)	(A)	(A)	(A)	(A)
1	13	10.5	13	8	16	11.5
1.5	16	13	16	10	20	14.5
2.5	21	17	21	13.5	27	20
4	27	22	27	17.5	37	26
6	34	27	35	23.5	47	32
10	45	36	47	32	64	44
16	57	46	63	42.5	85	57

A\* For full installation method refer to Table 4A2 Installation Method 2 but for flat twin and earth cable

C\* For full installation method refer to Table 4A2 Installation Method 20 but for flat twin and earth cable

100# For full installation method refer to Table 4A2 Installation Method 100

101# For full installation method refer to Table 4A2 Installation Method 101

102# For full installation method refer to Table 4A2 Installation Method 102

103# For full installation method refer to Table 4A2 Installation Method 103

Wherever practicable, a cable is to be fixed in a position such that it will not be covered with thermal insulation.

Regulation 523.7, BS 5803-5: Appendix C: Avoidance of overheating of electric cables.

Building Regulations Approved document B and Thermal insulation: avoiding risks, BR 262, BRE, 2001 refer.

# Technical Information

## VOLTAGE DROP (per Ampere per metre):

Conductor Cross Sectional Area	Two Core Cable d.c.	Two Core Cable Single Phase a.c.	Three or Four Core Cable Three Phase a.c.
1	2	3	4
mm <sup>2</sup>	mV	mV	mV
1	44	44	38
1.5	29	29	25
2.5	18	18	15
4	11	11	9.5
6	7.3	7.3	6.4
10	4.4	4.4	3.8
16	2.8	2.8	2.4

If cables are to be used in ambient air temperatures other than 30°C the following rating factors should be applied:

Ambient air temp °C	25	30	35	40	45	50	55	60	65
Rating factor	1.03	1.0	0.94	0.87	0.79	0.71	0.61	0.50	0.35

For further guidance refer to BS7671 (IEE Wiring Regulations - latest edition).

\* With or without protective conductor.

# Technical Information

- Single-Core LSF
- Single-Core XLPE/PVC, XLPE/LSF (6181) Types 600/1000 V

## CURRENT - CARRYING CAPACITY (Amperes):

Conductor Cross Sectional Area	Reference Method A (enclosed in conduit in thermally insulating wall etc.)		Reference Method B (enclosed in conduit on a wall or in trunking etc.)		Reference Method C ("clipped direct")	
	2 Cables, Single Phase a.c. or d.c.	3 or 4 Cables Three Phase a.c.	2 Cables, Single Phase a.c. or d.c.	3 or 4 Cables Three Phase a.c.	2 Cables, Single Phase a.c. or d.c. Flat and Touching	3 or 4 Cables Three Phase a.c. Flat and Touching or Trefoil
1	2	3	4	5	6	7
mm <sup>2</sup>	A	A	A	A	A	A
1	14	13	17	15	19	17.5
1.5	19	17	23	20	25	23
2.5	26	23	31	28	34	31
4	35	31	42	37	46	41
6	45	40	54	48	59	54
10	61	54	75	66	81	74
16	81	73	100	88	109	99
25	106	95	133	117	143	130
35	131	117	164	144	176	161
50	158	141	198	175	228	209
70	200	179	253	222	293	268
95	241	216	306	269	355	326
120	278	249	354	312	413	379
150	318	285	393	342	476	436
185	362	324	449	384	545	500
240	424	380	528	450	644	590
300	486	435	603	514	743	681
400	-	-	683	584	868	793
500	-	-	783	666	990	904
630	-	-	900	764	1130	1033
800	-	-	-	-	1288	1179
1000	-	-	-	-	1443	1323

# Technical Information

For ambient air temperatures other than 30°C, the following rating factors should be applied:

Ambient air temp °C	25	30	35	40	45	50	55	60	65	70	75	80	85
Rating factor	1.04	1.0	0.96	0.91	0.87	0.82	0.76	0.71	0.65	0.58	0.50	0.41	0.29

Reference Method F (on a perforated cable tray horizontal or vertical)		Reference Method G (Free air)		
		Horizontal Flat Spaced	Vertical Flat Spaced	Trefoil
2 Cables, Single Phase a.c. or d.c. Flat and Touching	3 or 4 Cables Three Phase a.c. Flat and Touching	2 Cables, Single Phase a.c. or d.c. or 3 Cables Three Phase a.c.	2 Cables, Single Phase a.c. or d.c. or 3 Cables Three Phase a.c.	3 Cables Trefoil Three Phase a.c.
8	9	10	11	12
A	A	A	A	A
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
161	141	182	161	135
200	176	226	201	169
242	216	275	246	207
310	279	353	318	268
377	342	430	389	328
437	400	500	454	383
504	464	577	527	444
575	533	661	605	510
679	634	781	719	607
783	736	902	833	703
940	868	1085	1008	823
1083	998	1253	1169	946
1254	1151	1454	1362	1088
1358	1275	1581	1485	1214
1520	1436	1775	1671	1349

Ratings shown in Column 12, also apply to cables in trefoil formation on a perforated cable tray, Reference Method F.

# Technical Information

- Single-Core LSF
- Single-Core XLPE/PVC, XLPE/LSF (6181) Types 600/1000 V

Continued...

## VOLTAGE DROP (per Ampere per metre):

2 Cables - Single Phase a.c.										
Conductor Cross Sectional Area	2 Cables d.c.	Reference Methods A & B (enclosed in conduit etc. in or on a wall)			Reference Methods C, F & G (clipped direct or on trays, touching)			Reference Method C, F & G (spaced*)		
1	2	3			4			5		
mm <sup>2</sup>	mV	mV			mV			mV		
1	46	46			46			46		
1.5	31	31			31			31		
2.5	19	19			19			19		
4	12	12			12			12		
6	7.9	7.9			7.9			7.9		
10	4.7	4.7			4.7			4.7		
16	2.9	2.9			2.9			2.9		
		r	x	z	r	x	z	r	x	z
25	1.85	1.85	0.31	1.90	1.85	0.19	1.85	1.85	0.28	1.85
35	1.35	1.35	0.29	1.35	1.35	0.18	1.35	1.35	0.27	1.35
50	0.99	1.00	0.29	1.05	0.99	0.18	1.00	0.99	0.27	1.00
70	0.68	0.70	0.28	0.75	0.68	0.175	0.71	0.68	0.26	0.73
95	0.49	0.51	0.27	0.58	0.49	0.170	0.52	0.49	0.26	0.56
120	0.39	0.41	0.26	0.48	0.39	0.165	0.43	0.39	0.25	0.47
150	0.32	0.33	0.26	0.43	0.32	0.165	0.36	0.32	0.25	0.41
185	0.25	0.27	0.26	0.37	0.26	0.165	0.30	0.25	0.25	0.36
240	0.19	0.21	0.26	0.33	0.20	0.160	0.25	0.195	0.25	0.31
300	0.155	0.175	0.25	0.31	0.16	0.160	0.22	0.155	0.25	0.29
400	0.120	0.140	0.25	0.29	0.13	0.155	0.20	0.125	0.24	0.27
500	0.093	0.12	0.25	0.28	0.105	0.155	0.185	0.098	0.24	0.26
630	0.072	0.10	0.25	0.27	0.086	0.155	0.175	0.078	0.24	0.25
800	0.056	-	-	-	0.072	0.150	0.170	0.064	0.24	0.25
1000	0.045	-	-	-	0.063	0.150	0.165	0.054	0.24	0.24

\*Spaced by one cable diameter.

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3 or 4 Cables - Three Phase a.c.											
Reference Methods A & B (enclosed in conduit etc. in or on wall)			Reference Methods C, F & G (in trefoil)			Reference Methods C, F & G (flat touching)			Reference Methods C, F & G (flat spaced*)		
6			7			8			9		
mV			mV			mV			mV		
40			40			40			40		
27			27			27			27		
16			16			16			16		
10			10			10			10		
6.8			6.8			6.8			6.8		
4			4			4			4		
2.5			2.5			2.5			2.5		
r	x	z	r	x	z	r	x	z	r	x	z
1.60	0.27	1.65	1.60	0.165	1.60	1.60	0.19	1.60	1.60	0.27	1.65
1.15	0.25	1.15	1.15	0.155	1.15	1.15	0.18	1.15	1.15	0.26	1.20
0.87	0.25	0.90	0.86	0.155	0.87	0.86	0.18	0.87	0.86	0.26	0.89
0.60	0.24	0.65	0.59	0.150	0.61	0.59	0.175	0.62	0.59	0.25	0.65
0.44	0.23	0.50	0.43	0.145	0.45	0.43	0.170	0.46	0.43	0.25	0.49
0.35	0.23	0.42	0.34	0.140	0.37	0.34	0.165	0.38	0.34	0.24	0.42
0.29	0.23	0.37	0.28	0.140	0.31	0.28	0.165	0.32	0.28	0.24	0.37
0.23	0.23	0.32	0.22	0.140	0.26	0.22	0.165	0.28	0.22	0.24	0.33
0.185	0.22	0.29	0.17	0.140	0.22	0.17	0.165	0.24	0.17	0.24	0.29
0.15	0.22	0.27	0.14	0.140	0.195	0.135	0.160	0.21	0.135	0.24	0.27
0.125	0.22	0.25	0.11	0.135	0.175	0.11	0.160	0.195	0.11	0.24	0.26
0.10	0.22	0.24	0.09	0.135	0.16	0.088	0.160	0.180	0.085	0.24	0.25
0.088	0.21	0.23	0.074	0.135	0.150	0.071	0.160	0.170	0.068	0.23	0.24
-	-	-	0.062	0.130	0.145	0.059	0.155	0.165	0.055	0.23	0.24
-	-	-	0.055	0.130	0.140	0.050	0.155	0.165	0.047	0.23	0.24

For further guidance refer to the BS7671 (IEE Wiring Regulations - latest edition).

# Technical Information

- XLPE/PVC/AWA/PVC Single-Core
- XLPE/LSF/AWA/LSF 600/1000 V

## CURRENT - CARRYING CAPACITY (Amperes):

Direct Buried BS5467					
Nominal Conductor Area	2 Cables		3 Cables		
	Touching	Spaced	Trefoil	Touching	Spaced
mm <sup>2</sup>	Arm'd	Arm'd	Arm'd	Arm'd	Arm'd
50	274	279	231	231	242
70	337	342	284	283	295
95	403	408	340	337	350
120	458	461	386	381	395
150	510	508	431	424	434
185	574	566	485	474	482
240	661	643	558	542	545
300	739	709	623	601	597
400	820	761	691	657	637
500	910	825	765	720	688
630	1001	887	841	781	737
800	1055	909	888	816	760
1000	1115	952	942	860	797

Air BS5467 & BS6724						
Nominal Conductor Area	2 Cables				Trefoil	
	Horizontally Spaced		Vertically Spaced		Unarm'd	Arm'd
mm <sup>2</sup>	Unarm'd	Arm'd	Unarm'd	Arm'd	Unarm'd	Arm'd
50	289	297	268	280	223	231
70	366	376	342	355	284	295
95	452	459	423	434	352	362
120	527	530	495	502	412	420
150	604	596	570	567	475	483
185	699	677	662	646	551	555
240	835	788	792	752	658	654
300	966	886	919	847	761	745
400	1129	978	1077	936	887	851
500	1315	1086	1257	1041	1027	963
630	1533	1199	1469	1149	1186	1084
800	1765	1267	1694	1216	1327	1178
1000	1993	1357	1916	1303	1503	1278

# Technical Information

Standard depth of laying 0.5m  
 Thermal resistivity of soil 1.2°C m/W  
 Standard ground temperature 15°C  
 Ambient air temperature 25°C  
 Maximum conductor temperature 90°C

In Single-Way Duct BS5467				
Nominal Conductor Area	2 Cables		3 Cables	
	Flat	Flat	Trefoil	Flat
mm <sup>2</sup>	Arm'd	Arm'd	Arm'd	Arm'd
50	252		231	232
70	305		278	279
95	360		327	328
120	404		366	367
150	439		396	398
185	486		437	438
240	546		489	490
300	597		534	534
400	638		567	567
500	694		615	613
630	752		664	661
800	788		692	690
1000	839		735	732

For further guidance refer to the BS7671 (IEE Wiring Regulations - latest edition) and ERA 69-30 Part 5.

Ratings do not apply if the cable is protected by a semi-enclosed fuse to BS3036.

3 Cables			
Vertically Spaced		Horizontally Spaced	
Unarm'd	Arm'd	Unarm'd	Arm'd
260	271	289	296
331	342	366	373
411	417	452	452
482	480	527	519
554	536	604	577
644	604	699	649
772	694	834	745
896	770	965	825
1050	829	1127	887
1226	906	1312	968
1434	983	1529	1049
1655	1029	1761	1097
1878	1096	1993	1168

Continued overleaf...



# Technical Information

- XLPE/PVC/AWA/PVC Single-Core
- XLPE/LSF/AWA/LSF 600/1000 V

For ambient air and ground temperatures other than those specified, the following rating factors should be applied:

### Cables laid in air (25°C ambient):

Ambient air temp °C	25	30	35	40	45	50	55
Rating factor	1.0	0.96	0.92	0.88	0.83	0.78	0.73

### Cables laid direct in ground and in single-way ducts (15°C ground):

Ground temp °C	10	15	20	25	30	35	40
Rating factor	1.03	1.0	0.97	0.93	0.89	0.86	0.82

### VOLTAGE DROP (per Ampere per metre):

#### 2 Cables - Single Phase a.c.

Conductor Cross Sectional Area	2 Cables d.c.	Reference Methods 1 & 11 (touching)			Reference Methods 12 (spaced*)		
		3			4		
1	2	3			4		
mm <sup>2</sup>	mV	r	x	z	r	x	z
50	0.98	0.99	0.21	1.00	0.98	0.29	1.00
70	0.67	0.68	0.200	0.71	0.69	0.29	0.75
95	0.49	0.51	0.195	0.55	0.53	0.28	0.60
120	0.39	0.41	0.190	0.45	0.43	0.27	0.51
150	0.31	0.33	0.185	0.38	0.36	0.27	0.45
185	0.25	0.27	0.185	0.33	0.30	0.26	0.40
240	0.195	0.21	0.180	0.28	0.24	0.26	0.35
300	0.155	0.170	0.175	0.25	0.195	0.25	0.32
400	0.115	0.145	0.170	0.22	0.180	0.24	0.30
500	0.093	0.125	0.170	0.21	0.165	0.24	0.29
630	0.073	0.105	0.165	0.195	0.150	0.23	0.27
800	0.056	0.090	0.160	0.190	0.145	0.23	0.27
1000	0.045	0.092	0.155	0.180	0.140	0.21	0.25

\* spaced by one cable diameter.

**Cables laid in air (30°C ambient):**

Ambient air temp °C	25	30	35	40	45	50	55
Rating factor	1.04	1.0	0.96	0.91	0.87	0.82	0.76

**Cables laid direct in ground and in single-way ducts (20°C ground):**

Ground temp °C	10	15	20	25	30	35	40
Rating factor	1.07	1.04	1.0	0.96	0.93	0.89	0.85

**3 or 4 Cables - Three Phase a.c.**

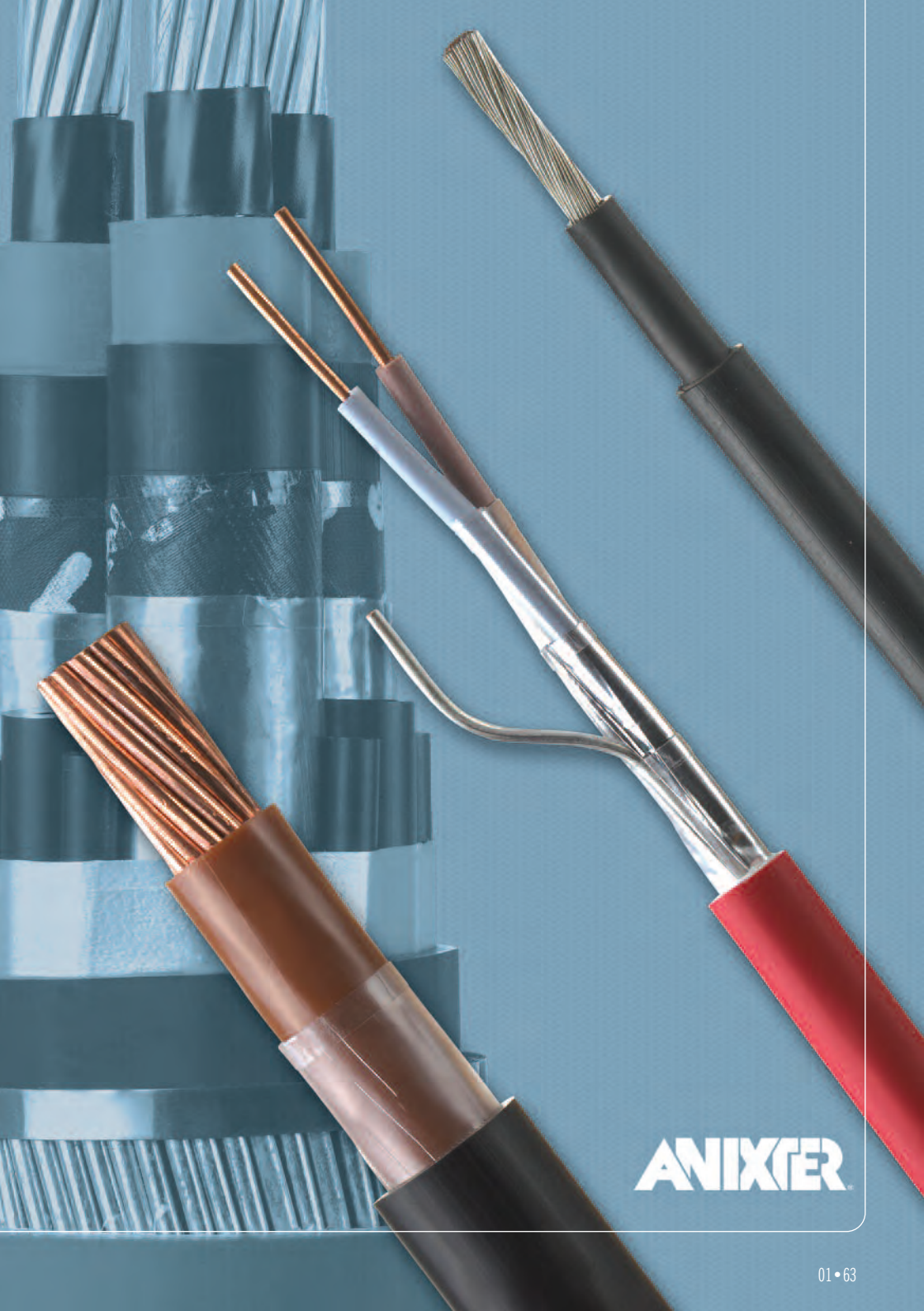
Reference Methods 1, 11 & 12 (in trefoil touching)			Reference Methods 1 & 11 (flat touching)			Reference Methods 12 (flat spaced*)		
5			6			7		
mV			mV			mV		
r	x	z	r	x	z	r	x	z
0.86	0.180	0.87	0.84	0.25	0.88	0.84	0.33	0.90
0.59	0.170	0.62	0.60	0.25	0.65	0.62	0.32	0.70
0.44	0.170	0.47	0.46	0.24	0.52	0.49	0.31	0.58
0.35	0.165	0.39	0.38	0.24	0.44	0.41	0.30	0.51
0.29	0.160	0.33	0.31	0.23	0.39	0.34	0.29	0.45
0.23	0.160	0.28	0.26	0.23	0.34	0.29	0.29	0.41
0.180	0.155	0.24	0.21	0.22	0.30	0.24	0.28	0.37
0.145	0.150	0.21	0.170	0.22	0.28	0.20	0.27	0.34
0.125	0.150	0.195	0.160	0.21	0.27	0.20	0.27	0.33
0.105	0.145	0.180	0.145	0.20	0.25	0.190	0.24	0.31
0.092	0.145	0.170	0.135	0.195	0.24	0.175	0.23	0.29
0.086	0.140	0.165	0.130	0.180	0.23	0.175	0.195	0.26
0.080	0.135	0.155	0.125	0.170	0.21	0.165	0.180	0.24

# Technical Information

- Single-Core XLPE/PVC 600/1000 V to BS7889 & XLPE/LSF 600/1000 V
- Single-Core PCU/XLPE/PVC/AWA/PVC 600/1000 V to BS5467
- Single-Core PCU/XLPE/LSF/AWA/LSF 600/1000 V to BS6724

## ELECTRICAL CHARACTERISTICS

Conductor Size	Maximum d.c. Conductor Resistance @ 20°C	Maximum a.c. Conductor Resistance @ 90°C		Reactance @ 50Hz		Impedance @ 90°C, 50Hz	
				Single-Core Cables in Trefoil		Single-Core Cables in Trefoil	
		Unarm'd	Arm'd	Unarm'd	Arm'd	Unarm'd	Arm'd
mm <sup>2</sup>	ohms/km	ohms/km	ohms/km	ohms/km	ohms/km	ohms/km	ohms/km
50	0.387	0.494	0.494	0.0904	0.104	0.502	0.505
70	0.268	0.342	0.342	0.0871	0.101	0.353	0.357
95	0.193	0.247	0.246	0.0845	0.0969	0.261	0.264
120	0.153	0.196	0.196	0.0822	0.0920	0.213	0.217
150	0.124	0.160	0.160	0.0823	0.0945	0.180	0.186
185	0.0991	0.128	0.128	0.0812	0.0932	0.152	0.158
240	0.0754	0.0990	0.0985	0.0798	0.0902	0.127	0.134
300	0.0601	0.0802	0.0799	0.0790	0.0883	0.113	0.119
400	0.0470	0.0645	0.0639	0.0782	0.0886	0.101	0.109
500	0.0366	0.0523	0.0513	0.0776	0.0870	0.0936	0.101
630	0.0283	0.0430	0.0420	0.0768	0.0847	0.0880	0.0945
800	0.0221	0.0364	0.0349	0.0758	0.0850	0.0841	0.0919
1000	0.0176	0.0318	0.0303	0.0750	0.0840	0.0815	0.0893



**ANIXTER**

# Technical Information

- Multicore XLPE/PVC/SWA/PVC 600/1000 V
- Multicore XLPE/LSF/SWA/LSF 600/1000 V
- Multicore XLPE/LG/PVC/SWA/PVC 600/1000 V

## CURRENT CARRYING CAPACITY (Amperes)

Reference Method D (direct in ground or in ducting in ground, in or around buildings)			Reference Method E (in free air or on a perforated cable tray etc., horizontal or vertical)		
Area	2 Core	3 & 4 Core	Nominal Conductor Area	2 Core	3 & 4 Core
mm <sup>2</sup>	Arm'd	Arm'd	mm <sup>2</sup>	Arm'd	Arm'd
1.5	38 (25)	32 (21)	1.5	31 (29)	26 (25)
2.5	49 (33)	42 (28)	2.5	41 (39)	34 (33)
4	65 (43)	55 (36)	4	53 (52)	45 (44)
6	81(53)	69 (44)	6	67 (66)	56 (56)
10	109 (71)	92 (58)	10	89 (90)	75 (78)
16	141 (91)	119 (75)	16	115 (115)	96 (99)
25	183 (116)	152 (96)	25	148 (152)	124 (131)
35	219 (139)	182 (115)	35	178 (188)	149 (162)
50	259 (164)	217 (135)	50	211 (228)	177 (197)
70	317 (203)	266 (167)	70	260 (291)	218 (251)
95	381 (239)	319 (197)	95	313 (354)	263 (304)
120	433 (271)	363 (223)	120	357 (410)	300 (353)
150	485 (306)	406 (251)	150	401 (472)	338 (406)
185	547 (343)	458 (281)	185	455 (539)	382 (463)
240	632 (395)	529 (324)	240	527 (636)	442 (546)
300	708 (446)	592 (365)	300	592 (732)	496 (628)
400	799 (-)	667 (-)	400	669 (847)	570 (728)

Standard depth of laying 0.5m (figures in brackets are based on 0.7m depth)

Thermal resistivity of soil 1.2°C m/W (figures in brackets are based on 2.5°C m/W)

Standard ground temperature 15°C (figures in brackets are based on 20°C)

Ambient air temperature 25°C (figures clipped direct and in brackets are based on 30°C)

Maximum conductor temperature 90°C

2 core - single phase a.c. 3 & 4 core - three phase a.c.

Ratings do not apply if the cable is protected by a semi-enclosed fuse to BS3036.

For further guidance refer to the BS7671 (IEE Wiring Regulations - latest edition) and ERA publication 69-30 Part 5.

**3 & 4 core ratings also apply to 5 core cables.**

# Technical Information

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Reference Method C (clipped direct)		
Nominal Conductor Area	2 Core	3 & 4 Core
mm <sup>2</sup>	Arm'd	Arm'd
1.5	27	23
2.5	36	31
4	49	42
6	62	53
10	85	73
16	110	94
25	146	124
35	180	154
50	219	187
70	279	238
95	338	289
120	392	335
150	451	386
185	515	441
240	607	520
300	698	599
400	787	673

For cables of five core and above it is assumed only two cores are loaded simultaneously (i.e. live and neutral) and the two core rating should be taken. In instances where several cores are loaded simultaneously, the following rating factors should be applied to the two core current rating:

Number of cores	2	3	4	5	6	7	10	12
Factor	1.0	0.87	0.78	0.72	0.67	0.63	0.56	0.53

Number of cores	14	19	24	27	30	37	44	46	48
Factor	0.51	0.45	0.42	0.4	0.39	0.36	0.34	0.33	0.33

# Technical Information

- XLPE/PVC/SWA/PVC
- XLPE/LSF/SWA/LSF
- XLPE/LC/PVC/SWA/PVC 600/1000 V

Conductor operating temperature 90°C

NB. for ambient air and ground temperatures other than those specified the following rating factors should be applied:

## Cables Laid in Air

Ambient air temp °C	25	30	35	40	45	50	55
Rating factor	1.0	0.96	0.92	0.88	0.83	0.78	0.73

## Cables laid direct in ground and in single-way ducts

Ground temp °C	10	15	20	25	30	35	40
Rating factor	1.03	1.0	0.97	0.93	0.89	0.86	0.82

## VOLTAGE DROP (per Ampere per metre):

Conductor Cross Sectional Area	2 Core Cable d.c.	2 Core Cable Single Phase a.c.			3, 4 or 5 Core Cable Three Phase a.c.		
1	2	3			4		
mm <sup>2</sup>	mV	mV			mV		
1.5	31	31			27		
2.5	19	19			16		
4	12	12			10		
6	7.9	7.9			6.8		
10	4.7	4.7			4.0		
16	2.9	2.9			2.5		
		r	x	z	r	x	z
25	1.85	1.85	0.160	1.90	1.60	0.140	1.65
35	1.35	1.35	0.155	1.35	1.15	0.135	1.15
50	0.98	0.99	0.155	1.00	0.86	0.135	0.87
70	0.67	0.67	0.150	0.69	0.59	0.130	0.60
95	0.49	0.50	0.150	0.52	0.43	0.130	0.45
120	0.39	0.40	0.145	0.42	0.34	0.130	0.37
150	0.31	0.32	0.145	0.35	0.28	0.125	0.30
185	0.25	0.26	0.145	0.29	0.22	0.125	0.26
240	0.195	0.20	0.140	0.24	0.175	0.125	0.21
300	0.155	0.16	0.140	0.21	0.140	0.120	0.185
400	0.120	0.13	0.145	0.195	0.115	0.125	0.170

# Technical Information

- Multicore PCU/XLPE/PVC 600/1000 V to BS5467
- Multicore PCU/XLPE/PVC/SWA/PVC 600/1000 V to BS5467
- Multicore PCU/XLPE/LSF/SWA/LSF 600/1000 V to BS6724
- Multicore PCU/XLPE/LC/PVC/SWA/PVC 600/1000 V

## ELECTRICAL CHARACTERISTICS

Conductor Size mm <sup>2</sup>	Maximum d.c. Conductor Resistance @ 20°C ohms/km	Maximum a.c. Conductor Resistance @ 90°C ohms/km	Reactance @ 50Hz ohms/km	Impedance @ 90°C, 50Hz ohms/km
1.5	12.1	15.4	0.103	15.4
2.5	7.41	9.45	0.101	9.45
4.0	4.61	5.88	0.0929	5.88
6.0	3.08	3.93	0.0885	3.93
10	1.83	2.33	0.0835	2.33
16	1.15	1.47	0.0815	1.47
25	0.727	0.927	0.0818	0.931
35	0.524	0.668	0.0771	0.672
50	0.387	0.494	0.0765	0.500
70	0.268	0.342	0.0754	0.350
95	0.193	0.247	0.0727	0.257
120	0.153	0.197	0.0723	0.210
150	0.124	0.160	0.0728	0.176
185	0.0991	0.128	0.073	0.147
240	0.0754	0.0989	0.0722	0.122
300	0.0601	0.0802	0.0717	0.108
400	0.047	0.0656	0.0715	0.0970



## Technical Information

- BS7629 Fire Resistant Cable

Ratings do not apply if the cable is protected by a semi-enclosed fuse to BS3036.

For further guidance refer to the BS7671 (IEE Wiring Regulations - latest edition).

For cables of five core and above it is assumed only two cores are loaded simultaneously (i.e. live and neutral) and the two core rating should be taken.

For ambient air temperatures other than 30°C, the following factors should be applied.

Ambient air temp °C	25	35	40	45	50	55	60	65
Rating factor	1.03	0.94	0.87	0.79	0.71	0.61	0.50	0.35



# Technical Information

## CURRENT CARRYING CAPACITY (Amperes) & VOLTAGE DROP (per Ampere per metre)

Nominal Cross Sectional Area of Conductor	Installation Method							
	('Enclosed') in Trunking				Clipped Direct			
	One Twin Cable a.c. or d.c.		One 3 or 4 Core Cable 3 Phase a.c.		One Twin Cable a.c. or d.c.		One 3 or 4 Core Cable 3 Phase a.c.	
	Current Carrying Capacity	Volt Drop per amp per m	Current Carrying Capacity	Volt Drop per amp per m	Current Carrying Capacity	Volt Drop per amp per m	Current Carrying Capacity	Volt Drop per amp per m
mm <sup>2</sup>	A	mV	A	mV	A	mV	A	mV
1.0	13	44	11.5	38	15	44	13.5	38
1.5	16.5	29	15	25	19.5	29	17.5	25
2.5	23	18	20	15	27	18	24	15
4.0	30	11	27	9.5	36	11	32	9.5

Ambient air temperature 30°C

Conductor operating temperature 70°C

## ADDITIONAL TECHNICAL INFORMATION ON BS7629 CABLES

Conductor Size mm <sup>2</sup>	Capacitance Core-Core pF/m	Capacitance Core-Screen pF/m	L/R Ratio $\mu\text{H}/\Omega$
1.0	100	175	25
1.5	102	180	40
2.5	115	205	50
4.0	125	230	65

## Technical Information

- Fire Resistant Armoured Cables to BS7846 600/1000 V

For further guidance refer to the BS7671 (IEE Wiring Regulations - latest edition).

For cables of seven core and above it is assumed only two cores are loaded simultaneously (i.e. live and neutral) and the two core rating should be taken.

For ambient air temperatures other than 30°C, the following factors should be applied.

Ambient air temp °C	25	30	35	40	45	50	55	60	65	70	75	80
Rating factor	1.04	1.0	0.94	0.91	0.87	0.82	0.76	0.71	0.65	0.58	0.50	0.41

### VOLTAGE DROP (per Ampere per metre):

Nominal Cross Sectional Area of Conductor	One Twin		One 3 or 4 Core Cable 3 Phase a.c.
	a.c.	d.c.	
mm <sup>2</sup>	mV	mV	mV
1.5	31	31	27
2.5	19	19	16
4	12	12	10
6	7.9	7.9	6.8
10	4.7	4.7	4.0
16	2.9	2.9	2.5
25	1.90	1.85	1.65
35	1.35	1.35	1.15
50	1.00	0.98	0.87
70	0.69	0.67	0.60
95	0.52	0.49	0.45
120	0.42	0.39	0.37
150	0.35	0.31	0.30
185	0.29	0.25	0.25
240	0.24	0.195	0.21
300	0.21	0.155	0.185
400	0.19	0.120	0.165

# Technical Information

## CURRENT CARRYING CAPACITY (Amperes)

Nominal Cross Sectional Area of Conductor	Installation Method			
	In Free Air or on Perforated Cable Tray		Clipped Direct	
	One Twin Cable a.c. or d.c.	One, 3 or 4 Core Cable 3 Phase a.c.	One Twin Cable a.c. or d.c.	One, 3 or 4 Core Cable 3 Phase a.c.
mm <sup>2</sup>	A	A	A	A
1.5	29	25	27	23
2.5	39	33	36	31
4	52	44	49	42
6	66	56	62	53
10	90	78	85	73
16	115	99	110	94
25	152	131	146	124
35	188	162	180	154
50	228	197	219	187
70	291	251	279	238
95	354	304	338	289
120	410	353	392	335
150	472	406	451	386
185	539	463	515	441
240	636	546	607	520
300	732	628	698	599
400	847	728	787	673

Conductor operating temperature 90°C

Ambient air temperature 30°C

If ratings for these cables buried direct in ground or in single-way duct are required, refer to ratings for XLPE/SWA cables detailed on page 1.64.

# Technical Information

- 1.9/3.3 kV 1 core & 3 cores XLPE Insulated, Armoured Cables BS5467 & BS6724

For further guidance refer to the BS7671 (IEE Wiring Regulations - latest edition) and ERA 69-30 Part 5.

For ambient air and ground temperatures other than those specified, the following factors should be applied.

## Cables laid in air

Ambient air temp °C	25	30	35	40	45	50	55
Rating factor	1.0	0.96	0.92	0.88	0.83	0.78	0.73

## Cables laid direct in ground and in single-way ducts

Ground temp °C	10	15	20	25	30	35	40
Rating factor	1.03	1.0	0.97	0.93	0.89	0.86	0.82

## CURRENT CARRYING CAPACITY (Amperes)

Single-Core 1900/3300 V 50Hz

### Direct Buried - BS5467

### In Single-Way Duct - BS5467

Nominal Conductor Area	Trefoil	3 Cables Touching	Spaced	Nominal Conductor	3 Cables	
	Arm'd	Arm'd	Arm'd		Trefoil	Flat
mm <sup>2</sup>	Arm'd	Arm'd	Arm'd	mm <sup>2</sup>	Arm'd	Arm'd
50	222	221	230	50	219	220
70	271	269	279	70	264	265
95	324	321	331	95	310	311
120	366	361	369	120	342	342
150	409	402	409	150	376	376
185	460	449	454	185	414	414
240	528	513	512	240	464	463
300	589	568	560	300	506	504
400	651	619	595	400	535	532
500	720	677	641	500	579	574
630	789	733	684	630	624	618
800	831	763	703	800	650	644
1000	880	802	735	1000	689	682

# Technical Information

## CURRENT CARRYING CAPACITY (Amperes)

3 Core 1900/3300 V 50Hz XLPE/PVC/SWA/PVC, XLPE/LSF/SWA/LSF

Direct Buried - BS5467		In Single-Way Duct - BS5467		Air - BS5467 & BS6724	
Nominal Conductor Area	3 Core	Nominal Conductor Area	3 Core	Nominal Conductor Area	3 Core
mm <sup>2</sup>	Arm'd	mm <sup>2</sup>	Arm'd	mm <sup>2</sup>	Arm'd
16	114	16	96	16	112
25	147	25	124	25	149
35	175	35	147	35	177
50	207	50	174	50	213
70	254	70	214	70	268
95	304	95	257	95	328
120	345	120	293	120	380
150	387	150	328	150	432
185	436	185	371	185	496
240	502	240	428	240	583
300	563	300	480	300	667
400	633	400	549	400	765

XLPE/PVC/AWA/PVC XLPE/LSF/AWA/LSF

Air - BS5467 & 6724			
Nominal Conductor Area	Trefoil	3 Cables Vertical Spaced	Horizontally Spaced
mm <sup>2</sup>	Arm'd	Arm'd	Arm'd
50	240	277	299
70	300	345	372
95	368	420	452
120	428	478	513
150	487	536	576
185	556	604	648
240	656	695	745
300	747	771	826
400	851	829	887
500	963	906	968
630	1084	983	1049
800	1178	1030	1098
1000	1278	1096	1168

Standard depth of laying 0.8m  
 Thermal resistivity of soil 1.2°C m/W  
 Standard ground temperature 15°C  
 Ambient air temperature 25°C  
 Maximum conductor temperature 90°C

# Technical Information

- Single-Core PCU/XLPE/PVC/AWA/PVC 1900/3300 V to BS5467
- Single-Core PCU/XLPE/LSF/AWA/LSF 1900/3300 V to BS6724

## ELECTRICAL CHARACTERISTICS

Conductor Size mm <sup>2</sup>	Maximum d.c. Conductor Resistance @ 20°C ohms/km	Maximum a.c. Conductor Resistance @ 90°C ohms/km	Reactance @ 50Hz Single-Core Cables in Trefoil ohms/km	Impedance @ 90°C, 50Hz Single-Core Cables in Trefoil ohms/km
50	0.387	0.493	0.116	0.506
70	0.268	0.342	0.110	0.359
95	0.193	0.246	0.104	0.267
120	0.153	0.195	0.104	0.221
150	0.124	0.160	0.100	0.189
185	0.0991	0.128	0.098	0.161
240	0.0754	0.0984	0.094	0.136
300	0.0601	0.0795	0.091	0.121
400	0.0470	0.0639	0.0886	0.109
500	0.0366	0.0513	0.0870	0.101
630	0.0283	0.0420	0.0847	0.0945
800	0.0221	0.0349	0.0850	0.0919
1000	0.0176	0.0303	0.0840	0.0893

# Technical Information

- Multicore PCU/XLPE/PVC 1900/3300 V to BS5467
- Multicore PCU/XLPE/PVC/SWA/PVC 1900/3300 V to BS5467
- Multicore PCU/XLPE/LSF/SWA/LSF 1900/3300 V to BS6724

## ELECTRICAL CHARACTERISTICS

Conductor Size mm <sup>2</sup>	Maximum d.c. Conductor Resistance @ 20°C ohms/km	Maximum a.c. Conductor Resistance @ 90°C ohms/km	Reactance @ 50Hz ohms/km	Impedance @ 90°C, 50Hz ohms/km
16	1.15	1.47	0.104	1.47
25	0.727	0.927	0.094	0.932
35	0.524	0.668	0.091	0.674
50	0.387	0.494	0.088	0.502
70	0.268	0.342	0.084	0.352
95	0.193	0.247	0.081	0.260
120	0.153	0.197	0.079	0.212
150	0.124	0.160	0.077	0.178
185	0.0991	0.128	0.076	0.149
240	0.0754	0.0989	0.074	0.124
300	0.0601	0.0802	0.073	0.108
400	0.047	0.0656	0.0717	0.0972



## Technical Information

- 1 and 3 core XLPE Insulated Cables 3800/6600 V, 6350/11000 V & 8700/15000 V

For further guidance refer to the BS7671 (IEE Wiring Regulations - latest edition).

NB. High voltage cables are not specifically covered in IEE Wiring Regulations but reference should be made to ensure compliance.

For ambient air and ground temperatures other than those specified, the following factors should be applied.

### Cables laid in air

Ambient air temp °C	25	30	35	40	45	50	55
Rating factor	1.0	0.96	0.92	0.88	0.83	0.78	0.73

### Cables laid direct in ground and in single-way ducts

Ground temp °C	10	15	20	25	30	35	40
Rating factor	1.03	1.0	0.97	0.93	0.89	0.86	0.82

Standard depth of laying 0.8m

Thermal resistivity of soil 1.2°C m/W

Standard ground temperature 15°C

Ambient air temperature 25°C

Maximum conductor temperature 90°C

#### NOTE:

All circuits thermally independent.

Cables in trefoil group are solidly bonded.

Cables in flat formation are single point bonded.

# Technical Information

## CURRENT CARRYING CAPACITY (Amperes)

Single-Core 3.8/6.6 kV, 6.35/11 kV, 8.7/15 kV 50Hz

Direct Burial			Duct					Air				
Nominal Conductor Area	3 Cables		Nominal Conductor Area	3 Cables				Nominal Conductor Area	3 Cables			
	Trefoil	Flat Spaced		Trefoil		Flat Touching			Trefoil		Flat Spaced	
mm <sup>2</sup>	Arm'd	Arm'd	mm <sup>2</sup>	Unarm'd	Arm'd	Unarm'd	Arm'd	mm <sup>2</sup>	Unarm'd	Arm'd	Unarm'd	Arm'd
25	-	-	25	-	-	-	-	25	-	-	-	-
35	-	-	35	-	-	-	-	35	-	-	-	-
50	220	230	50	225	220	220	220	50	235	250	295	300
70	270	280	70	270	260	270	270	70	285	310	370	370
95	320	335	95	320	305	325	325	95	360	375	455	460
120	360	380	120	360	340	370	370	120	415	430	520	530
150	410	430	150	400	375	415	410	150	470	490	600	600
185	455	485	185	440	410	465	460	185	540	550	690	690
240	520	560	240	505	470	540	540	240	640	650	820	820
300	580	640	300	560	500	610	610	300	740	740	940	940
400	650	730	400	610	530	690	690	400	840	840	1100	1100
500	710	830	500	680	570	790	780	500	980	930	1280	1280
630	760	940	630	750	620	890	890	630	1110	1040	1500	1480

3 Core 3.8/6.6 kV, 6.35/11 kV, 8.7/15 kV 50Hz XLPE/PVC/SWA/PVC & XLPE/LSF/SWA/LSF

Direct Burial		In Single-Way Duct		Air	
Nominal Conductor Area	3 Core	Nominal Conductor Area	3 Core	Nominal Conductor Area	3 Core
mm <sup>2</sup>	Arm'd	mm <sup>2</sup>	Arm'd	mm <sup>2</sup>	Arm'd
25	140	25	125	25	145
35	170	35	150	35	175
50	210	50	180	50	220
70	255	70	215	70	270
95	300	95	255	95	330
120	340	120	290	120	375
150	380	150	330	150	430
185	430	185	370	185	490
240	490	240	425	240	570
300	540	300	470	300	650
400	600	400	530	400	740

# Technical Information

- Single-Core PCU/XLPE/PVC 3800/6600 V to BS6622
- Single-Core PCU/XLPE/AWA/PVC 3800/6600 V to BS6622

## ELECTRICAL CHARACTERISTICS

Conductor Size	Maximum d.c. Conductor Resistance @ 20°C	Maximum a.c. Conductor Resistance @ 90°C		Reactance @ 50Hz		Impedance @ 90°C, 50Hz	
		Unarm'd	Arm'd	Single-Core Cables in Trefoil Unarm'd	Single-Core Cables in Trefoil Arm'd	Single-Core Cables in Trefoil Unarm'd	Single-Core Cables in Trefoil Arm'd
mm <sup>2</sup>	ohms/km	ohms/km	ohms/km	ohms/km	ohms/km	ohms/km	ohms/km
50	0.387	0.494	0.494	0.118	0.134	0.507	0.511
70	0.268	0.343	0.343	0.111	0.125	0.360	0.364
95	0.193	0.248	0.248	0.105	0.119	0.268	0.274
120	0.153	0.196	0.196	0.101	0.114	0.220	0.227
150	0.124	0.159	0.159	0.0991	0.111	0.187	0.193
185	0.0991	0.128	0.128	0.0958	0.109	0.160	0.167
240	0.0754	0.098	0.098	0.0933	0.105	0.135	0.143
300	0.0601	0.080	0.080	0.0917	0.103	0.122	0.130
400	0.0470	0.064	0.064	0.0898	0.0999	0.110	0.118
500	0.0366	0.057	0.057	0.088	0.0992	0.102	0.111
630	0.0283	0.042	0.042	0.0855	0.0959	0.095	0.104

- Three core PCU/XLPE/PVC 3800/6600 V to BS6622
- Three core PCU/XLPE/PVC/SA/PVC 3800/6600 V to BS6622

## ELECTRICAL CHARACTERISTICS

Conductor Size	Maximum d.c. Conductor Resistance @ 20°C	Maximum a.c. Conductor Resistance @ 90°C	Reactance @ 50Hz	Impedance @ 90°C, 50Hz
mm <sup>2</sup>	ohms/km	ohms/km	ohms/km	ohms/km
16	1.15	1.47	0.128	1.48
25	0.727	0.927	0.121	0.935
35	0.524	0.668	0.113	0.677
50	0.387	0.494	0.108	0.506
70	0.268	0.343	0.102	0.358
95	0.193	0.248	0.0962	0.266
120	0.153	0.196	0.0931	0.217
150	0.124	0.159	0.0908	0.183
185	0.0991	0.128	0.0881	0.155
240	0.0754	0.098	0.0859	0.130
300	0.0601	0.080	0.0847	0.117
400	0.047	0.064	0.0832	0.105

Also applicable to LSF sheathed versions to BS7835.

# Technical Information

- Single-Core PCU/XLPE/PVC 6350/11000 V to BS6622
- Single-Core PCU/XLPE/AWA/PVC 6350/11000 V to BS6622

## ELECTRICAL CHARACTERISTICS

Conductor Size	Maximum d.c. Conductor Resistance @ 20°C	Maximum a.c. Conductor Resistance @ 90°C		Reactance @ 50Hz		Impedance @ 90°C, 50Hz	
		Unarm'd	Arm'd	Single-Core Cables in Trefoil Unarm'd	Single-Core Cables in Trefoil Arm'd	Single-Core Cables in Trefoil Unarm'd	Single-Core Cables in Trefoil Arm'd
mm <sup>2</sup>	ohms/km	ohms/km	ohms/km	ohms/km	ohms/km	ohms/km	ohms/km
50	0.387	0.494	0.494	0.124	0.138	0.508	0.512
70	0.268	0.343	0.343	0.117	0.130	0.361	0.366
95	0.193	0.248	0.248	0.110	0.123	0.270	0.276
120	0.153	0.196	0.196	0.107	0.118	0.223	0.229
150	0.124	0.159	0.159	0.104	0.117	0.190	0.197
185	0.0991	0.128	0.128	0.100	0.112	0.162	0.169
240	0.0754	0.0980	0.098	0.0972	0.109	0.138	0.146
300	0.0601	0.0800	0.080	0.0940	0.105	0.123	0.131
400	0.0470	0.0640	0.064	0.0912	0.101	0.111	0.119
500	0.0366	0.0510	0.051	0.0888	0.0998	0.102	0.112
630	0.0283	0.0420	0.042	0.0862	0.0965	0.0959	0.105

- Three core PCU/XLPE/PVC 6350/11000 V to BS6622
- Three core PCU/XLPE/PVC/SAW/PVC 6350/11000 V to BS6622

## ELECTRICAL CHARACTERISTICS

Conductor Size	Maximum d.c. Conductor Resistance @ 20°C	Maximum a.c. Conductor Resistance @ 90°C	Reactance @ 50Hz	Impedance @ 90°C, 50Hz
mm <sup>2</sup>	ohms/km	ohms/km	ohms/km	ohms/km
16	1.15	1.47	0.137	1.48
25	0.727	0.927	0.129	0.936
35	0.524	0.668	0.121	0.679
50	0.387	0.494	0.115	0.506
70	0.268	0.343	0.108	0.360
95	0.193	0.248	0.102	0.268
120	0.153	0.196	0.0988	0.220
150	0.124	0.159	0.0962	0.186
185	0.0991	0.128	0.0931	0.158
240	0.0754	0.098	0.090	0.134
300	0.0601	0.080	0.0874	0.119
400	0.047	0.064	0.0849	0.106

Also applicable to LSF sheathed versions to BS7835.

# Technical Information

- 600/1000 V XLPE/LSF 90°C, 6242B/6243B

## CURRENT RATING & VOLTAGE DROP

Conductor Size	Reference Method B (enclosed in conduit/ trunking etc.)		Reference Method C (clipped direct)		Reference Method E (in cable tray/free air)		Voltage Drop	
	Single Phase a.c./d.c.	Three Phase a.c.	Single Phase a.c./d.c.	Three Phase a.c.	Single Phase a.c./d.c.	Three Phase a.c.	Single Phase a.c./d.c.	Three Phase a.c./d.c.
mm <sup>2</sup>	A	A	A	A	A	A	mV/A/m	mV/A/m
1.5	22	19.5	24	22	26	23	31	27
2.5	30	26	33	30	36	32	19	16
4.0	40	35	45	40	49	42	12	10
6.0	51	44	58	52	63	54	7.9	6.8
10	69	60	80	71	86	75	4.7	4.0
16	91	80	107	96	115	100	2.9	2.5
25	119	105	138	119	149	127	1.9	1.65

Ambient air temperature: 30°C

Conductor operating temperature: 90°C

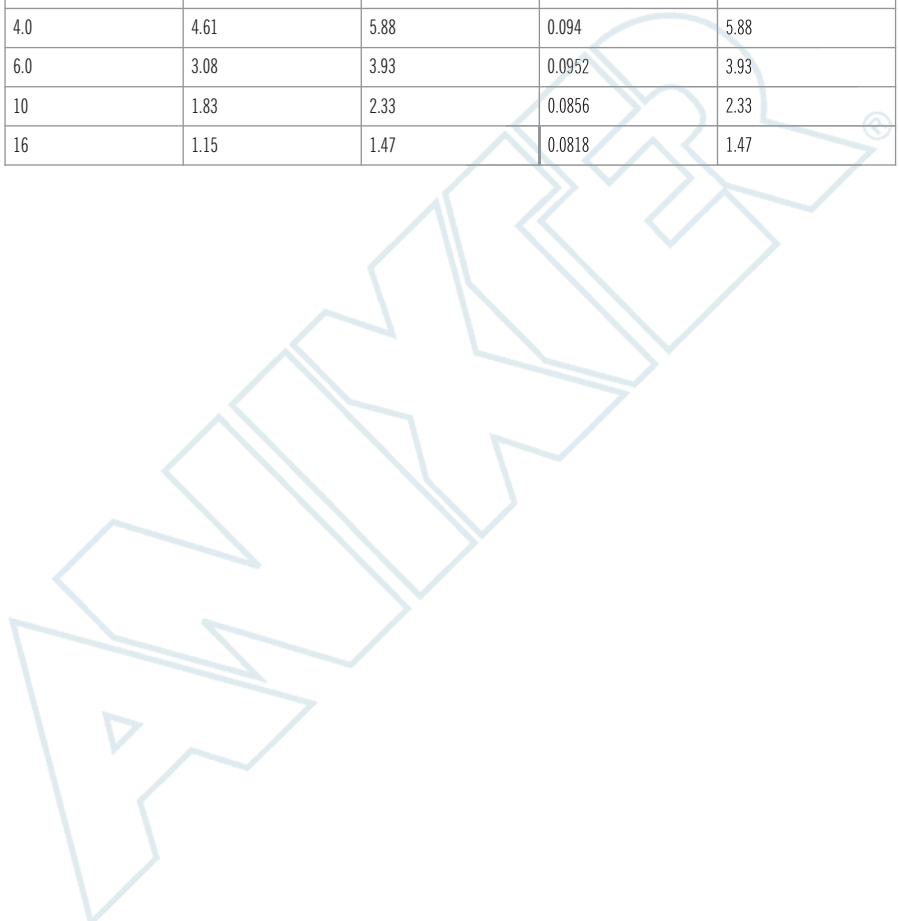
For ambient temperatures other than 30°C, the following factors should be applied:

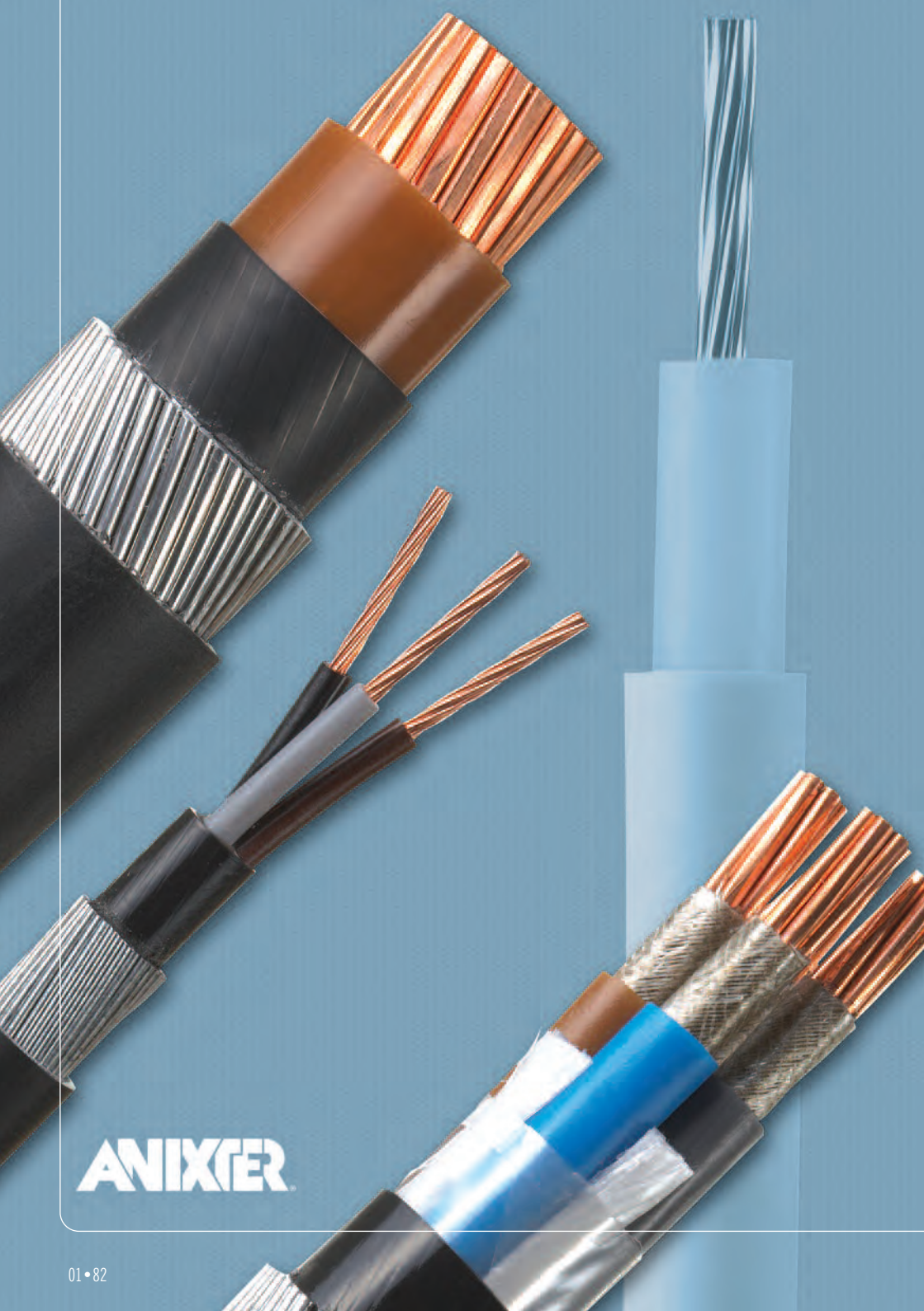
Ambient air temp °C	20	25	30	35	40	45	50	55
Rating factor	1.08	1.04	1.0	0.96	0.91	0.87	0.82	0.76

# Technical Information

## ELECTRICAL CHARACTERISTICS

Conductor Size mm <sup>2</sup>	Electrical Characteristics			
	Maximum d.c. Conductor Resistance @ 20°C ohms/km	Maximum a.c. Conductor Resistance @ 90°C ohms/km	Reactance @ 50Hz ohms/km	Impedance @ 90°C, 50Hz ohms/km
1.5	12.1	15.4	0.104	15.4
2.5	7.41	9.45	0.101	9.45
4.0	4.61	5.88	0.094	5.88
6.0	3.08	3.93	0.0952	3.93
10	1.83	2.33	0.0856	2.33
16	1.15	1.47	0.0818	1.47





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