

FLEXIBLE CABLES & CORDS

2

CONTENTS

Single Core PVC Insulated 2491X.....	2:2
Single Core PVC Insulated 6701X.....	2:4
Single Core PVC/PVC "6381Y" Flexible Power Cable.....	2:6
Single Core LSF Insulated 2491B/6701B.....	2:8
Single Core PVC Insulated Tri-Rated Wire.....	2:10
Single Core "UNIPREN" Flexible Aircraft Cable.....	2:12
DEF 61-12 Equipment Wire.....	2:14
PVC/PVC Flexible Cords 218*Y, 219*Y.....	2:16
PVC/PVC Flexible Cords 318*Y.....	2:18
PVC/PVC Heat Resistant Flexible Cords 309*Y.....	2:20
EPR/HOFR Flexible Cords 318*TQ.....	2:22
VR/PCP Flexible Cords 318*P.....	2:24
EPR/PCP Extensible Flexible Cables.....	2:26
EPR/HOFR Flexible Cables 638*TQ.....	2:28
VR/PCP Flexible Cables (H07RN-F).....	2:32
PVC/PVC/PCWB/PVC Flexible Cords 380*Y.....	2:36
VR/PCP/TCWB/PCP Flexible Cords 380*P.....	2:38
VR/PCP Flexible Cords (H07RN-F).....	2:40
Rubber Insulated Welding Cables.....	2:42
Rubber Insulated Coil Leads.....	2:44
<i>Technical Specifications</i>	2:48

Single Core PVC Insulated 2491X

70°C 300/500 Volts



APPLICATION

For fixed protected installation inside appliances and in/on light fittings, where increased flexibility is required to assist installation.

SPECIFICATIONS

- In accordance with BS6500 * and Cenelec code H05V-K1.
- **Conductors:** Flexible Class 5 copper conductors to BS6360.
- **Insulation:** PVC Insulation Type TI.1 to BS7655.
- Flame retardant to BS4066 Part 2.
- Normal colours available:
green/yellow, blue, black, brown, yellow, grey, orange, pink, red, turquoise, violet and white.
- **Temp Rating:** 70⁰C max conductor operating temperature.
- **Voltage Rating:** 300/500 volts.

Anixter Part No.	Cenelec Code	Nominal Conductor Area (mm ²)	Nominal Conductor Stranding #/mm	Insulation Thickness mm	Max O/D mm	Approx Weight kg/km
A4-I01-0005	H05V-K1	0.5	16/0.2	0.6	2.5	10
A4-I01-0075	H05V-K1	0.75	24/0.2	0.6	2.7	13
A4-I01-0010	H05V-K1	1.0	32/0.2	0.6	2.8	16

* These cables have now been transferred to BS6004.
 For further technical information refer to page 2:48.

Single Core PVC Insulated 6701X

70°C 450/750 Volts (also known as 2491X)



APPLICATION

For use in general purpose wiring applications where greater flexibility is required to assist installation.

SPECIFICATIONS

- In accordance with BS6004 and Cenelec code H07V-K1.
- **Conductors:** Flexible Class 5 copper conductors to BS6360.
- **Insulation:** PVC Insulation Type TI.1 to BS7655.
- Flame retardant to BS4066 Part 1.
- Normal colours available: see 2:2.
- **Temp Rating:** 70°C max conductor operating temperature.
- **Voltage Rating:** 450/750 volts.

Anixter Part No.	Cenelec Code	Nominal Conductor Area mm ²	Nominal Conductor Stranding #/mm	Insulation Thickness mm	Max O/D mm	Approx Weight kg/km
A4-I01-0015	H07V-K1	1.5	30/0.25	0.7	3.4	21
A4-I01-0025	H07V-K1	2.5	50/0.25	0.8	4.1	33
A4-I01-0040	H07V-K1	4.0	56/0.3	0.8	4.8	50
A4-I01-0060	H07V-K1	6.0	84/0.3	0.8	5.3	70
A4-I01-0100	H07V-K1	10	80/0.4	1.0	6.8	117
A4-I01-0160	H07V-K1	16	126/0.4	1.0	8.1	175
A4-I01-0250	H07V-K1	25	196/0.4	1.2	10.2	290
A4-I01-0350	H07V-K1	35	276/0.4	1.2	11.7	398
A4-I01-0500	H07V-K1	50	396/0.4	1.4	13.9	565
A4-I01-0700	H07V-K1	70	360/0.5	1.4	16.0	769
A4-I01-0950	H07V-K1	95	475/0.5	1.6	18.2	1010
A4-I01-1200	H07V-K1	120	608/0.5	1.6	20.2	1260
A4-I01-1500	H07V-K1	150	765/0.5	1.8	22.5	1570
A4-I01-1850	H07V-K1	185	925/0.5	2.0	24.9	1900
A4-I01-2400	H07V-K1	240	1221/0.5	2.2	28.4	2500

For further technical information see page 2:50.

Single Core PVC/PVC “6381Y” Flexible Power Cable 70°C 450/750 Volts



APPLICATION

Flexible single core power cables for d.c. power supply on telecommunications equipment. May also be used in other power applications where greater flexibility is required to assist installation.

SPECIFICATIONS

- Generally in accordance with BS6004
- **Conductors:** Flexible Class 5 copper conductors to BS6360.
- **Insulation:** PVC Insulation Type TI.1 to BS7655.
- **Outer Sheath:** PVC sheath Type TM.1 to BS7655 with oxygen index >30%
- Flame retardant to BS4066 Part 1. Meets requirements for flammability as required by BT specification M231.
- **Temp Rating:** 70⁰C max conductor operating temperature.
- **Voltage Rating:** 450/750 volts.

Anixter Part No.	Nominal Conductor Area mm ²	Nominal Conductor Stranding #/mm	Insulation Thickness mm	Sheath Thickness mm	Nom. O/D mm	Approx Cable Weight kg/km	Min Bending Radius (fixed bend) mm
Single Core							
A4-M01-0060-##-##	6.0	84/0.3	0.8	1.6	8.2	111	30
A4-M01-0100-##-##	10	80/0.4	1.0	1.9	9.7	176	30
A4-M01-0160-##-##	16	126/0.4	1.0	1.9	11.2	222	40
A4-M01-0350-##-##	35	276/0.4	1.2	2.2	15.5	519	60
A4-M01-0700-##-##	70	360/0.5	1.4	1.8	19.1	932	80
A4-M01-0950-##-##	95	475/0.5	1.6	2.0	22.1	1228	90
A4-M01-1200-##-##	120	608/0.5	1.6	3.0	25.4	1569	110
A4-M01-1850-##-##	185	925/0.5	2.0	3.4	30.6	2259	130

For further technical information refer to page 1:80

For conductor short-circuit ratings refer to page 13:28

##-## 02-02 black insulation, black sheath

06-06 blue insulation, blue sheath

09-09 grey insulation, grey sheath

Single Core LSF Insulated 6701B (2491B up to and including 1.0mm²)

90°C 300/500 & 450/750 Volts



APPLICATION

For use in applications where greater flexibility is required to assist installation. Incorporates low smoke zero halogen insulation for use in areas where dense smoke and toxic fumes may cause a threat to life and equipment.

SPECIFICATIONS

- In accordance with BS7211 and Cenelec Harmonised codes -
A05Z-K (300/500V cable)
H07Z-K (450/750V cable)
- **Conductors:** Flexible Class 5 copper conductors to BS6360.
- **Insulation:** Low smoke zero halogen thermosetting insulation Type EI.5 to BS7655 having following characteristics:
 - Min oxygen index: 30%
 - Max HCL Emission @ 800°C: 0.5%
- Flame retardant to BS4066 Part 2 (up to and incl. 1.0mm²) and BS4066 Part 1 (above 1.0mm²)
- Normal colours available: see 2:2.
- **Temp Rating:** 90⁰C max conductor operating temperature.
- **Voltage Rating:**
Up to and including 1.0mm² - 300/500V
1.5mm² and above - 450/750V

Anixter Part No.	Cenelec Codes	Nominal Conductor Area mm ²	Nominal Conductor Stranding #/mm	Insulation Thickness mm	Max O/D mm	Approx Weight kg/km
A3BS-0005*	A05Z-K1	0.5	16/0.2	0.6	2.6	10
A3BS-0007*	A05Z-K1	0.75	24/0.2	0.6	2.8	13
A3BS-0010*	A05Z-K1	1.0	32/0.2	0.6	2.9	16
A3BS-0015	H07Z-K1	1.5	30/0.25	0.7	3.5	22
A3BS-0025	H07Z-K1	2.5	50/0.25	0.8	4.3	33
A3BS-0040	H07Z-K1	4.0	56/0.3	0.8	4.9	49
A3BS-0060	H07Z-K1	6.0	84/0.3	0.8	5.5	69
A3BS-0100	H07Z-K1	10	80/0.4	1.0	7.1	116
A3BS-0160	H07Z-K1	16	126/0.4	1.0	8.4	175
A3BS-0250	H07Z-K1	25	196/0.4	1.2	10.6	273
A3BS-0350	H07Z-K1	35	276/0.4	1.2	12.1	367
A3BS-0500	H07Z-K1	50	396/0.4	1.4	14.4	474
A3BS-0700	H07Z-K1	70	360/0.5	1.4	16.6	749
A3BS-0950	H07Z-K1	95	475/0.5	1.6	18.8	987
A3BS-1200	H07Z-K1	120	608/0.5	1.6	20.9	1240
A3BS-1500	H07Z-K1	150	765/0.5	1.8	23.3	1540
A3BS-1850	H07Z-K1	185	925/0.5	2.0	25.8	1860
A3BS-2400	H07Z-K1	240	1221/0.5	2.2	29.4	2450

For further technical information see page 2:52.

* = National Types

Single Core PVC Insulated Tri-Rated Wire

105°C 600/1000 Volts



APPLICATION

For the internal wiring appliances and also the wiring of switch, control, metering and instrument panels of power switchgear.

SPECIFICATIONS

- In accordance with BS6231 Type CK.
- Conforms to UL subject 758 Appliance Wiring Material (AWM) for styles 1015, 1028, 1283 and 1284 as applicable.
- Canadian Standards Association (CSA) approved. Complies with standard C22.2 No.127, Type TEW.
- **Conductors:** Flexible Class 5 conductors to BS6360.
- **Insulation:** PVC insulation.
- Normal colours available: see 2:2.
- Flame retardant to BS4066 Part 1 and VW-1.
- **Temp Rating:** BS6231 specifies a maximum continuous conductor operating temperature of 90°C, and for limited use up to 105°C. UL and CSA rated 105°C.
- **Voltage Rating:** 600/1000V (BS), 600V (UL & CSA).

Anixter Part No.	Nominal Conductor Area mm ²	Nominal Conductor Stranding #/mm	Nominal O/D mm	Approx Weight kg/km	UL Style No.
A9-A01-1007	0.22*	7/0.2	2.2	8	1015
A9-A01-1016	0.5	16/0.2	2.6	12	1015
A9-A01-1024	0.75	24/0.2	2.8	15	1015
A9-A01-1032	1.0	32/0.2	3.0	18	1015
A9-A01-1030	1.5	30/0.25	3.3	23	1015
A9-A01-1050	2.5	50/0.25	3.7	34	1015
A9-A01-1056	4.0	56/0.3	4.4	50	1015
A9-A01-1084	6.0	84/0.3	5.1	71	1015
A9-A01-1080	10	80/0.4	6.9	123	1028
A9-A01-1012	16	126/0.4	8.6	207	1283
A9-A01-1019	25	196/0.4	10.5	303	1283
A9-A01-1027	35	276/0.4	11.9	412	1283
A9-A01-1039	50	396/0.4	14.4	607	1284
A9-A01-1036	70	360/0.5	16.7	837	1284
A9-A01-1047	95	475/0.5	19.0	1080	1284
A9-A01-1060	120	608/0.5	20.5	1280	1284

* UL and CSA approved only.

For more technical information see page 2:54.

Single Core “UNIPREN” Flexible Aircraft Cable

600 Volts 90°C

(NO PICTURE AVAILABLE)

APPLICATION

Flexible single core “UNIPREN” cables designed for aircraft wiring of circuits. For use where the voltage between conductors, or between conductor and metal braid or the aircraft structure does not exceed 600V rms and in circuits where operating frequency does not exceed 1600 Hz. Incorporates outer layer of PCP to provide protection from abrasion, mechanical impact, oils, greases etc. May also be used in other applications where flexible power cables may be required.

SPECIFICATIONS

- In accordance with BS 2E 21
- **Conductors:** Flexible tinned copper
- **Insulation/Sheath:** Glass braid applied directly over the conductor plus additional covering of PCP
- Flame retardant to BS4066 Part 1.
- **Temp Rating:** 90°C max conductor operating temperature, -70°C for fixed application and flexible down to -40°C
- **Voltage Rating:** 600V rms.

Anixter Part Number	PREN Size/No.	N.S.N. 6145-99-	Nom. Cond. Area mm ²	Nominal Conductor Stranding #/mm	Nom O/D mm	Approx Cable Weight kg/km	Colour	Max. DC Conductor Resistance @ 20°C ohms/km
A9AB-1004-03	4	103-2389	0.35	19/0.152	2.54	12	Red	54.30
A9AB-1006-06	6	946-7424	0.55	19/0.193	2.67	14	Blue	33.80
A9AB-1012-05	12	943-4824	1.17	40/0.193	3.11	21	Yellow	16.10
A9AB-1018-06	18	-	2.05	70/0.193	3.62	30	Blue	9.20
A9AB-1024-06	24	-	3.22	110/0.193	4.13	45	Blue	5.85
A9AB-1035-06	35	-	5.35	73/0.305	4.89	75	Blue	3.53
A9AB-1050-06	50	955-9523	8.76	120/0.305	6.22	104	Blue	2.15
A9AB-1070-06	70	-	13.29	180/0.305	7.62	164	Blue	1.42
A9AB-1100-06	100	-	21.48	294/0.305	9.14	268	Blue	0.877
A9AB-1135-06	135	634-9026	33.3	203/0.457	11.05	387	Blue	0.560
A9AB-1150-06	150	105-4149	40.64	248/0.57	12.26	461	Blue	0.463
A9AB-1200-06	200	-	68.38	416/0.457	15.11	744	Blue	0.276
A9AB-2800-06	280	-	109	666/0.457	18.67	1161	Blue	0.173

For further technical information see page 2:55.

DEF 61-12 Equipment Wires



APPLICATION

For internal wiring of electronic and other equipment.

SPECIFICATIONS

- In accordance with DEF 61-12 Part 6 and BS4808 Part 2.
- **Conductors:** Tinned copper conductors to BS6360.
- **Insulation:**
 - PVC insulation Type 2 to BS7655 (Types 1 and 2 equipment wires).
 - PVC insulation Type TI.1 to BS7655 (Types 3, 7, 8, 9, 10 equipment wires).
- Normal colours available: red, blue, green, yellow, black, white, brown, violet, orange, grey, pink.
- **Temp Rating:** 85°C max conductor operating temperature.
- **Voltage Rating:** 750, 1000, 1500V a.c. and 3000V d.c.

Anixter Part No.	Nominal Conductor Area mm ²	Nominal Conductor Stranding #/mm	Insulation Thickness mm	Min O/D mm	Max O/D mm	Approx Weight kg/km
Type 1 - PVC hard grade working temp - 15°C to +85°C 750Vrms						
A4-SO1-1013	0.13	1/0.4	0.2	0.75	0.85	1.7
A4-SO1-1028	0.28	1/0.6	0.2	0.95	1.05	3.3
A4-SO1-1022	0.22	7/0.2	0.2	0.95	1.05	2.8
Type 2 - PVC hard grade working temp - 15°C to +85°C 1000Vrms						
A4-SO1-2013	0.13	1/0.4	0.3	0.9	1.1	2.1
A4-SO1-2028	0.28	1/0.6	0.3	1.1	1.3	3.8
A4-SO1-1064	0.64	1/0.9	0.3	1.4	1.6	7.4
A4-SO1-2022	0.22	7/0.2	0.3	1.1	1.3	3.3
A4-SO1-1050	0.50	16/0.2	0.3	1.45	1.65	6.4
A4-SO1-1075	0.75	24/0.2	0.45	1.95	2.15	10.3
Type 3 - PVC hard grade working temp - 20°C to +85°C 1500Vrms						
A4-SO1-3028	0.28	1/0.6	0.45	1.4	1.6	4.8
A4-SO1-1010	1.00	1/1.13	0.45	1.95	2.15	12.4
A4-SO1-2050	0.50	16/0.2	0.6	2.0	2.25	9.0
A4-SO1-2075	0.75	24/0.2	0.6	2.2	2.45	11.8
A4-SO1-2010	1.00	32/0.2	0.6	2.4	2.65	14.6
A4-SO1-1020	2.00	63/0.2	0.6	2.9	3.15	25.3
Type 7 - PVC hard grade working temp - 20°C to +85°C 3000V d.c.						
A4-SO1-1005	0.50	16/0.2	0.9	2.6	2.85	12.4

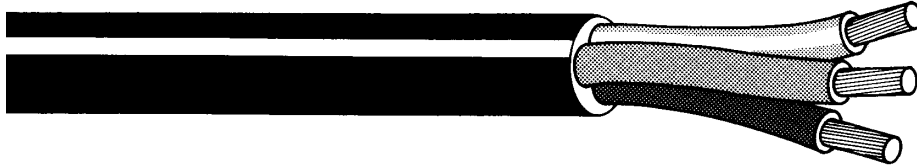
PVC hard grade and general purpose, available screened and PVC sheathed.

For further technical information see page 2:56.

For “LFH” equipment wire to DEF 61-12 Part 18 refer page 5:2

PVC Insulated & Sheathed Flexible Cords

70°C 300/300 Volts 218*Y, 219*Y



APPLICATION

For external supply connection of portable appliances for light duties in domestic or office equipment.

* denotes number of cores.

SPECIFICATIONS

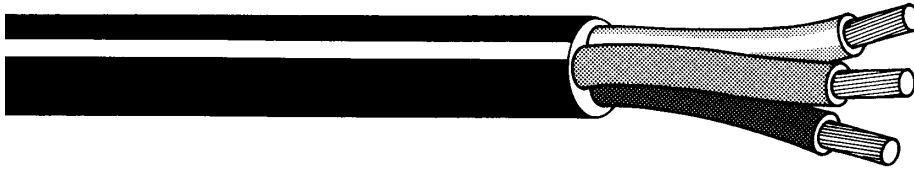
- In accordance with BS6500 and Cenelec codes H03VVH2-F2 (flat cords) and H03VV-F (circular cords).
- **Conductors:** Flexible Class 5 conductors to BS6360.
- **Insulation:** PVC insulation Type TI.2 to BS7655.
- **Core identification:**
 - 2 core - blue, brown
 - 3 core - green/yellow, blue, brown
 - 4 core - green/yellow, black, blue, brown.
- **Sheath:** PVC sheath Type TM-2 to BS7655 (black or white).
- Flame retardant to BS4066 Part 1.
- **Temp Rating:** 70°C max conductor operating temperature.
- **Voltage Rating:** 300/300V.

Anixter Part No.	Cenelec Code	Nominal Conductor Area mm ²	Nominal Conductor Stranding #/mm	Insulation Thickness mm	Min O/D mm	Max O/D mm	Approx Cable Weight kg/km
Flat twin type 2192Y							
A4-016-1005	H03VVH2-F2	0.5	16/0.2	0.5	3.0 x 4.9	3.7 x 5.9	27
A4-024-1075	H03VVH2-F2	0.75	24/0.2	0.5	3.2 x 5.2	3.8 x 6.3	34
Circular twin type 2182Y							
A4-016-2005	H03VV-F2	0.5	16/0.2	0.5	4.6	5.9	36
A4-024-2075	H03VV-F2	0.75	24/0.2	0.5	4.9	6.3	45
Three core type 2183Y							
A4-016-3005	H03VV-F3	0.5	16/0.2	0.5	4.9	6.3	44
A4-016-3075	H03VV-F3	0.75	24/0.2	0.5	5.2	6.7	55
Four core type 2184Y							
A4-016-4005	H03VV-F4	0.5	16/0.2	0.5	5.4	6.9	52
A4-016-4075	H03VV-F4	0.75	24/0.2	0.5	5.7	7.3	65

For further technical information see page 2:48.

PVC Insulated & Sheathed Flexible Cords

70°C 300/500 Volts 318*Y



APPLICATION

For external supply connection of portable appliances for medium duties in domestic or office environments.

* denotes number of cores.

SPECIFICATIONS

- In accordance with BS6500 and Genelec code H05VV-F.
- **Conductors:** Flexible Class 5 conductors to BS6360.
- **Insulation:** PVC insulation Type TI.2 to BS7655.
- **Core identification:**
 - 2 core - blue, brown
 - 3 core - green/yellow, blue, brown
 - 4 core - green/yellow, black, blue, brown.
 - 5 core - green/yellow, black, blue, brown, black.
- **Sheath:** PVC sheath Type TM-2 to BS7655 (black or white).
- Flame retardant to BS4066 Part 1.
- **Temp Rating:** 70°C max conductor operating temperature.
- **Voltage Rating:** 300/500V.

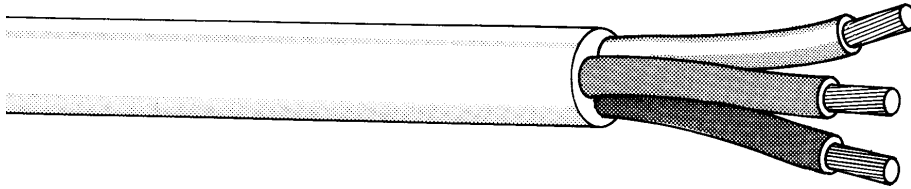
Anixter Part No.	Cenelec Code	Nominal Conductor Area mm ²	Nominal Conductor Stranding #/mm	Insulation Thickness mm	Min O/D mm	Max O/D mm	Approx Cable Weight kg/km
Twin core type 3182Y							
A4-J02-0075	H05VV-F2	0.75	24/0.20	0.6	5.7	7.2	63
A4-J02-0010	H05VV-F2	1.0	32/0.20	0.6	5.9	7.5	73
A4-J02-0125*		1.25	40/0.20	0.7	6.3	8.0	84
A4-J02-0015	H05VV-F2	1.5	30/0.25	0.7	6.8	8.6	95
A4-J02-0025	H05VV-F2	2.5	50/0.25	0.8	8.4	10.6	145
A4-J02-0004	H05VV-F2	4.0	56/0.30	0.8	10.1	12.0	200
Three core type 3183Y							
A4-J03-0075	H05VV-F3	0.75	24/0.20	0.6	6.0	7.6	74
A4-J03-0010	H05VV-F3	1.0	32/0.20	0.6	6.3	8.0	86
A4-J03-0125*		1.25	40/0.20	0.7	6.9	8.7	104
A4-J03-0015	H05VV-F3	1.5	30/0.25	0.7	7.4	9.4	120
A4-J03-0025	H05VV-F3	2.5	50/0.25	0.8	9.2	11.4	180
A4-J03-0004	H05VV-F3	4.0	56/0.30	0.8	11.0	13.0	250
Four core type 3184Y							
A4-J04-0075	H05VV-F4	0.75	24/0.20	0.6	6.6	8.3	78
A4-J04-0010	H05VV-F4	1.0	32/0.20	0.6	7.1	9.0	110
A4-J04-0015	H05VV-F4	1.5	30/0.25	0.7	8.4	10.5	150
A4-J04-0025	H05VV-F4	2.5	50/0.25	0.8	10.1	12.5	220
A4-J04-0004	H05VV-F4	4.0	56/0.30	0.8	12.0	14.0	305
Five core type 3185Y							
A4-J05-0075	H05VV-F5	0.75	24/0.20	0.6	7.4	9.3	98
A4-J05-0010	H05VV-F5	1.0	32/0.20	0.6	7.8	9.8	118
A4-J05-0015	H05VV-F5	1.5	30/0.25	0.7	9.3	11.6	180
A4-J05-0025	H05VV-F5	2.5	50/0.25	0.8	11.2	13.9	265
A4-J05-0004	H05VV-F5	4.0	56/0.30	0.8	13.5	15.5	380

* Not a harmonised type
 For further technical information see page 2:48.

Arctic grades also available. Details upon request.

PVC Insulated & Sheathed Heat Resistant Flexible Cords

*90°C 300/500 Volts 309*Y*



APPLICATION

For external supply connection of portable or fixed electrical appliances operating in elevated temperature zones.

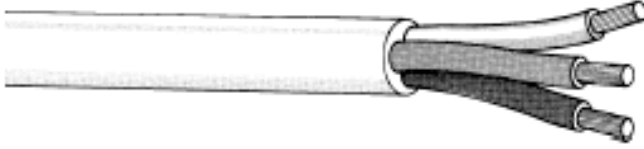
* denotes number of cores.

SPECIFICATIONS

- In accordance with BS6141.
- **Conductors:** Flexible Class 5 conductors to BS6360.
- **Insulation:** PVC insulation Type TI.3 to BS7655.
- **Core identification:**
 - 2 core - blue, brown
 - 3 core - green/yellow, blue, brown
 - 4 core - green/yellow, black, blue, brown.
- **Sheath:** PVC sheath Type 4 to BS7655 (white).
- Flame retardant to BS4066 Part 1.
- **Temp Rating:** 90°C max conductor operating temperature.
- **Voltage Rating:** 300/500V

Anixter Part No.	Nominal Conductor Area mm ²	Nominal Conductor Stranding #/mm	Insulation Thickness mm	Min O/D mm	Max O/D mm	Approx Cable Weight kg/km
Twin core type 3092Y						
A4-L16-2050	0.5	16/0.20	0.6	5.6	7.0	46
A4-L24-2075	0.75	24/0.20	0.6	6.0	7.6	55
A4-L32-2010	1.0	32/0.20	0.6	6.4	8.0	65
A4-L30-2015	1.5	30/0.25	0.7	7.4	9.0	80
A4-L50-2025	2.5	50/0.25	0.8	8.9	11.0	125
Three core type 3093Y						
A4-L16-3050	0.5	16/0.20	0.6	5.8	7.2	55
A4-L24-3075	0.75	24/0.20	0.6	6.4	8.0	70
A4-L32-3010	1.0	32/0.20	0.6	6.8	8.4	80
A4-L30-3015	1.5	30/0.25	0.7	8.0	9.8	100
A4-L50-3025	2.5	50/0.25	0.8	9.6	12.0	155
Four core type 3094Y						
A4-L16-4050	0.5	16/0.20	0.6	6.4	7.8	70
A4-L24-4075	0.75	24/0.20	0.6	6.8	8.6	85
A4-L32-4010	1.0	32/0.20	0.6	7.6	9.4	100
A4-L30-4015	1.5	30/0.25	0.7	9.0	11.0	130
A4-L50-4025	2.5	50/0.25	0.8	10.5	13.0	195

For further technical information see page 2:48.

EPR Insulated, HOFR Sheathed Flexible Cords**85°C 300/500 Volts 318*TQ****APPLICATION**

For mains supply or extension lead for portable or fixed equipment operating in high temperature zones. Particularly suitable for applications where contamination by oil and grease may occur.

*denotes number of cores.

SPECIFICATIONS

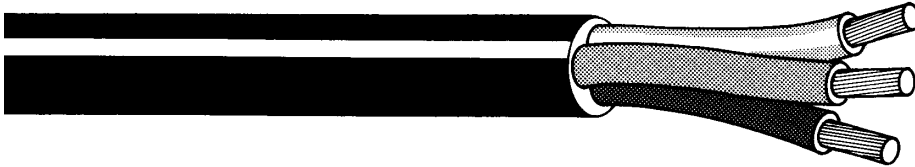
- In accordance with BS6500 and Cenelec Code H05BN4-F
- **Conductors:** Flexible Class tinned copper conductors to BS6360.
- **Insulation:** EPR insulation Type GP.1 to BS7655.
- **Core identification:**
 - 2 core - blue, brown.
 - 3 core - green/yellow, blue, brown.
 - 4 core - green/yellow, black, blue, brown.
 - 5 core- green/yellow, black, blue, brown, black.
 - 7 core and above – number printed.
- **Sheath:** H.O.F.R sheath Type RS3 to BS7655 (white).
- Flame retardant to BS4066 Part 1.
- **Temp Rating:** 85°C max conductor operating temperature.
- Voltage Rating: 300/500V.

Anixter Part No.	Nominal Conductor Area mm ²	Nominal Conductor Stranding #/mm	Insulation Thickness mm	Min O/D mm	Max O/D mm	Approx Cable Weight kg/km
Twin core type 3182TQ						
A4-E01-2016	0.5	16/0.2	0.6	5.4	7.1	51
A4-E01-2024	0.75	24/0.2	0.6	5.7	7.4	61
A4-E01-2032	1.0	32/0.2	0.6	6.1	8.0	74
A4-E01-2030	1.5	30/0.25	0.8	7.6	9.8	110
A4-E01-2050	2.5	50/0.25	0.9	9.0	11.6	156
Three core type 3183TQ						
A4-E01-3016	0.5	16/0.2	0.6	5.7	7.5	60
A4-E01-3024	0.75	24/0.2	0.6	6.2	8.1	76
A4-E01-3032	1.0	32/0.2	0.6	6.5	8.5	88
A4-E01-3030	1.5	30/0.25	0.8	8.0	10.4	132
A4-E01-3050	2.5	50/0.25	0.9	9.6	12.4	189
Four core type 3184TQ						
A4-E01-4024	0.75	24/0.2	0.6	6.8	8.8	91
A4-E01-4032	1.0	32/0.2	0.6	7.1	9.3	107
A4-E01-4030	1.5	30/0.25	0.8	9.0	11.6	166
A4-E01-4050	2.5	50/0.25	0.9	10.7	13.8	240
Seven core type 3187TQ						
A4-E01-7030-02	1.5	30/0.25	0.8	13.1	14.3	270
A4-E01-7050-02	2.5	50/0.25	0.9	15.3	16.6	360
Twelve core type 3180/12TQ						
A4-E01-1230-02	1.5	30/0.25	0.8	15.9	17.2	410
A4-E01-1250-02	2.5	50/0.25	0.9	18.6	19.9	570
Nineteen Core Type 3180/19TQ						
A4-E01-1930-02	1.5	30/0.25	0.8	18.8	20.1	580
A4-E01-1950-02	2.5	50/0.25	0.9	22.2	23.8	890
Nineteen Core Type 3180/27TQ						
A4-E01-1930-02	1.5	30/0.25	0.8	22.9	24.5	820
A4-E01-1950-02	2.5	50/0.25	0.9	26.8	28.4	1210

For further technical information see page 2:48.

Vulcanised Rubber Insulated, PCP Sheathed Flexible Cords

60°C 300/500 Volts 318*P



APPLICATION

For mains supply or extension lead for portable or fixed equipment operating indoors or outdoors (domestic or industrial) under conditions of frequent handling, trailing or flexing.

* denotes number of cores.

SPECIFICATIONS

- In accordance with BS6500 and Cenelec code H05RN-F (0.5, 0.75 and 1.0mm², 2 and 3 core only)
- **Conductors:** Flexible Class 5 tinned copper conductors to BS6360.
- **Insulation:** Rubber insulation Type EI.4 to BS7655.
- **Core identification:**
 - 2 core - blue, brown
 - 3 core - green/yellow, blue, brown
 - 4 core - green/yellow, black, blue, brown.
 - 5 core- green/yellow, black, blue, brown, black.
- **Sheath:** PCP sheath Type EM2 to BS7655 (black).
- Flame retardant to BS4066 Part 1.
- **Temp Rating:** 60°C max conductor operating temperature.
- **Voltage Rating:** 300/500V.

Anixter Part No.	Nominal Conductor Area mm ²	Nominal Conductor Stranding #/mm	Insulation Thickness mm	Min O/D mm	Max O/D mm	Approx Cable Weight kg/km
Twin core type 3182P						
A4-BD01-2016-02	0.5	16/0.20	0.6	5.4	7.1	50
A4-BD01-2024-02	0.75	24/0.20	0.6	5.7	7.4	61
A4-BD01-2032-02	1.0	32/0.20	0.6	6.1	8.0	74
A4-BD01-2030-02	1.5	30/0.25	0.8	7.6	9.8	109
A4-BD01-2050-02	2.5	50/0.25	0.9	9.0	11.6	155
Three core type 3183P						
A4-BD01-3016-02	0.5	16/0.20	0.6	5.1	7.5	59
A4-BD01-3024-02	0.75	24/0.20	0.6	6.2	8.1	75
A4-BD01-3032-02	1.0	32/0.20	0.6	6.5	8.5	87
A4-BD01-3030-02	1.5	30/0.25	0.8	8.0	10.4	130
A4-BD01-3050-02	2.5	50/0.25	0.9	9.6	12.4	187
Four core type 3184P						
A4-BD01-4024-02	0.75	24/0.20	0.6	6.8	8.8	90
A4-BD01-4032-02	1.0	32/0.20	0.6	7.1	9.3	106
A4-BD01-4030-02	1.5	30/0.25	0.8	9.0	11.6	163
A4-BD01-4050-02	2.5	50/0.25	0.9	10.7	13.8	236
Five core type 3185P						
A4-BD01-5024-02	0.75	24/0.20	0.6	7.6	9.9	112
A4-BD01-5032-02	1.0	32/0.20	0.6	8.0	10.3	131
A4-BD01-5030-02	1.5	30/0.25	0.8	9.8	12.7	197
A4-BD01-5050-02	2.5	50/0.25	0.9	11.9	15.3	280

For further technical information see page 2:48.

Extensible Flexible Cables

APPLICATION

These “spiral” cables are specifically designed for use in applications where the cable is intended to extend and retract frequently e.g. sliding doors on trains, vehicle tail lifts, etc. They incorporate an OFR (Oil resisting Flame Retardant) outer sheath, providing good resistance to oil, water, chemicals and abrasion.

SPECIFICATIONS

- Generally in accordance with BS6500
- **Conductors:** Flexible Class 5 tinned copper conductors to BS6360.
- **Insulation:** EPR insulation Type GP1 to BS7655
- **Core identification:**
 - 2 core - blue, brown
 - 3 core - green/yellow, blue, brown
 - 4 core - green/yellow, black, blue, brown.
 - 5 core- green/yellow, black, blue, brown, black.
- **Sheath:** PCP sheath Type EM2 to BS7655 (black).
- Flame retardant to BS4066 Part 1.
- **Temp Rating:** 60°C max conductor operating temperature.
- **Voltage Rating:** 300/500V.

Anixter Part No.	No. of Cores	Nominal Conductor Area mm ²	Nominal Conductor Stranding #/mm	Insulation Thickness mm	Nom Cable O/D mm	Nom Coil Diam. mm	Retracted Length m	Approx Weight kg
514357	2	1.5	30/0.25	0.8	10.5	33.0	4.6	4.5
514358	3	1.5	30/0.25	0.8	11.0	34.0	4.6	5.5
514359	3	2.5	50/0.25	0.9	13.0	40.0	4.6	8.0
514360	4	0.75	24/0.20	0.6	9.6	31.0	4.6	4.0
514361	4	1.0	32/0.20	0.6	10.0	32.0	4.6	4.5
514362	4	1.5	30/0.25	0.8	12.5	39.0	4.6	7.0
514363	4	2.5	50/0.25	0.9	14.0	42.0	4.6	9.5

NB. Approx extended length = 5 x retracted length
 For further technical information see page 2:27.

Technical Specifications for Extensible Flexible Cords

CURRENT CARRYING CAPACITY (Amperes):

Conductor cross-sectional area 1	Current-carrying capacity	
	single-phase a.c. 2	Three-phase a.c. 3
mm ²	A	A
0.75	6	6
1	10	10
1.5	16	16
2.5	25	20

VOLTAGE DROP (per ampere per metre):

Conductor operating temperature: 60°C

Conductor cross-sectional area 1	d.c. or single-phase a.c. 2	Three-phase a.c. 3
mm ²	mV	mV
0.75	62	54
1	46	40
1.5	32	27
2.5	19	16

NB. The voltage drop values are in mV per ampere per metre. The length of the cable in the spiral is approx 40m. The current ratings quoted are for the spiral fully extended. For retracted spiral a derating factor of 0.85 should be applied.

Correction Factor for Ambient Temperature

Ambient air temp °C	35	40	45	50	55
Rating factor	0.91	0.82	0.71	0.58	0.41

EPR Insulated, Heavy Duty HOFR Sheathed Flexible Cables

*85°C 450/750 Volts 638*TQ*



APPLICATION

For power/lighting services and mains supply or extension leads in situations requiring frequent handling, trailing and flexing applications. Incorporates heavy duty HOFR (Heat resisting Oil resisting Flame Retardant) outer sheath.

*denotes number of cores.

SPECIFICATIONS

- In accordance with BS7919 and Cenelec Code H07BN4-F
- **Conductors:** Flexible Class tinned copper conductors to BS6360.
- **Insulation:** EPR insulation Type GP.1 to BS7655.
- **Core identification:**
 - 2 core - blue, brown.
 - 3 core - green/yellow, blue, brown.
 - 4 core - green/yellow, black, blue, brown.
 - 5 core- green/yellow, black, blue, brown, black.
- **Sheath:** Heavy duty HOFR Sheath Type RS4 to BS7655.
- Flame retardant to BS4066 Part 1.
- **Temp Rating:** 85°C max conductor operating temperature.
- **Voltage Rating:** 450/750V.

For further technical information see page 2:58 (Single core), and page 2:62 (Multicore)

FLEXIBLE CABLES & CORDS

Anixter Part No.	Nominal Conductor Area mm ²	Nominal Conductor Stranding #/mm	Insulation Thickness mm	Min O/D mm	Max O/D mm	Approx Weight kg/km
Single Core Type 6381TQ						
A4-Q56-1004	4.0	56/0.3	1.0	7.2	9.0	107
A4-Q84-1006	6.0	84/0.3	1.0	7.9	9.8	145
A4-Q80-1010	10	80/0.4	1.2	9.5	11.9	220
A4-Q12-1016	16	126/0.4	1.2	10.8	13.4	330
A4-Q19-1025	25	196/0.4	1.4	12.7	15.8	425
A4-Q27-1035	35	276/0.4	1.4	14.3	17.9	560
A4-Q39-1050	50	396/0.4	1.6	16.5	20.6	760
A4-Q36-1070	70	360/0.5	1.6	18.6	23.3	1000
A4-Q47-1095	95	475/0.5	1.8	20.8	26.0	1300
A4-Q60-1120	120	608/0.5	1.8	22.8	28.6	1600
A4-Q75-1150	150	756/0.5	2.0	25.2	31.4	2000
A4-Q92-1185	185	925/0.5	2.2	27.6	34.4	2400
A4-Q01-1240	240	1221/0.5	2.4	30.6	38.3	3050
A4-Q15-1300	300	1525/0.5	2.6	33.5	41.9	3750
A4-Q20-1400	400	2013/0.5	2.8	37.4	46.8	4850
A4-Q17-1500	500	1769/0.5	3.0	41.3	52.0	6000
A4-Q22-1630	630	2257/0.6	3.0	45.5	56.5	7450
Two Core Type 6382TQ						
A4-Q56-2004	4.0	56/0.3	1.0	11.8	15.1	280
A4-Q84-2006	6.0	84/0.3	1.0	13.1	16.8	395
A4-Q80-2010	10	80/0.4	1.2	17.7	22.6	680
A4-Q12-2016	16	126/0.4	1.2	20.2	25.7	905
A4-Q19-2025	25	196/0.4	1.4	24.3	30.7	1300
Three Core Type 6383TQ						
A4-R56-3004	4.0	56/0.3	1.0	12.7	16.2	340
A4-R84-3006	6.0	84/0.3	1.0	14.1	18.0	480
A4-R80-3010	10	80/0.4	1.2	19.1	24.2	840
A4-R12-3016	16	126/0.4	1.2	21.8	27.6	1150
A4-R19-3025	25	196/0.4	1.4	26.1	33.0	1600
A4-R27-3035	35	276/0.4	1.4	29.3	37.1	2100
A4-R39-3050	50	396/0.4	1.6	34.1	42.9	2900
A4-R36-3070	70	360/0.5	1.6	38.4	48.3	3700
A4-R47-3095	95	475/0.5	1.8	43.3	54.0	4850
A4-R60-3120	120	608/0.5	1.8	47.4	60.0	5950
A4-R75-3150	150	756/0.5	2.0	52.0	66.0	7300
A4-R92-3185	185	925/0.5	2.2	57.8	72.0	8800
A4-R01-3240	240	1221/0.5	2.4	65.0	82.0	11450
A4-R15-3300	300	1525/0.5	2.6	72.0	90.0	14000

Continued overleaf. . .

EPR Insulated, Heavy Duty HOFR Sheathed Flexible Cables

85°C 450/750 Volts 638*TQ Continued. . .

Anixter Part No.	Nominal Conductor Area mm ²	Nominal Conductor Stranding #/mm	Insulation Thickness mm	Min O/D mm	Max O/D mm	Approx Weight kg/km
Four Core Type 6384TQ						
A4-R56-4004	4.0	56/0.3	1.0	14.0	17.9	425
A4-R84-4006	6.0	84/0.3	1.0	15.7	20.0	605
A4-R80-4010	10	80/0.4	1.2	20.9	26.5	1050
A4-R12-4016	16	126/0.4	1.2	23.8	30.1	1400
A4-R19-4025	25	196/0.4	1.4	28.9	36.6	2050
A4-R27-4035	35	276/0.4	1.4	32.5	41.1	2700
A4-R39-4050	50	396/0.4	1.6	37.7	47.5	3650
A4-R36-4070	70	360/0.5	1.6	42.7	54.0	4750
A4-R47-4095	95	475/0.5	1.8	48.4	61.0	6200
A4-R60-4120	120	608/0.5	1.8	53.0	66.0	7600
A4-R75-4150	150	756/0.5	2.0	58.0	73.0	9350
A4-R92-4185	185	925/0.5	2.2	64.0	80.0	11350
A4-R01-4240	240	1221/0.5	2.4	72.0	91.0	14700
Five Core Type 6385TQ						
A4-R56-5004	4.0	56/0.3	1.0	15.6	19.9	490
A4-R84-5006	6.0	84/0.3	1.0	17.5	22.2	660
A4-R80-5010	10	80/0.4	1.2	22.9	29.1	1086
A4-R12-5016	16	126/0.4	1.2	26.4	33.3	1508
A4-R19-5025	25	196/0.4	1.4	32.0	40.4	2350

Vulcanised Rubber Insulated, PCP Sheathed Flexible Cables

60°C 450/750 Volts H07RN-F



APPLICATION

For power/lighting services and mains supply or extension leads in situations requiring frequent handling, trailing and flexing applications.

Incorporates heavy duty OFR (Oil resisting Flame Retardant) outer sheath.

* denotes number of cores.

SPECIFICATIONS

- In accordance with Cenelec code H07RN-F
- **Conductors:** Flexible Class 5 tinned copper conductors to BS6360.
- **Insulation:** Rubber insulation Type EI.4 to BS7655.
- **Core identification:**
 - 2 core - blue, brown
 - 3 core - green/yellow, blue, brown
 - 4 core - green/yellow, black, blue, brown.
 - 5 core- green/yellow, black, blue, brown, black.
- **Sheath:** PCP sheath Type EM2 to BS7655 (black).
- Flame retardant to BS4066 Part 1.
- **Temp Rating:** 60°C max conductor operating temperature.
- **Voltage Rating:** 450/750V.

* Not a harmonised type.

For further technical information see page 2:66.

FLEXIBLE CABLES & CORDS

Anixter Part No.	Cenelec Code	Nominal Conductor Area mm ²	Nominal Conductor Stranding #/mm	Insulation Thickness mm	Min O/D mm	Max O/D mm	Approx Weight kg/km
Single Core Type							
HDJN-F1-F-02	H07RN-F1	4.0	56/0.3	1.0	7.2	9.0	105
HDJN-F1-G-02	H07RN-F1	6.0	84/0.3	1.0	7.9	9.8	125
HDJN-F1-H-02	H07RN-F1	10	80/0.4	1.2	9.5	11.9	190
HDJN-F1-I-02	H07RN-F1	16	126/0.4	1.2	10.8	13.4	265
HDJN-F1-J-02	H07RN-F1	25	196/0.4	1.4	12.7	15.8	380
HDJN-F1-K-02	H07RN-F1	35	276/0.4	1.4	14.3	17.9	515
HDJN-F1-L-02	H07RN-F1	50	396/0.4	1.6	16.5	20.6	710
HDJN-F1-M-02	H07RN-F1	70	360/0.5	1.6	18.6	23.3	955
HDJN-F1-N-02	H07RN-F1	95	475/0.5	1.8	20.8	26.0	1240
HDJN-F1-P-02	H07RN-F1	120	608/0.5	1.8	22.8	28.6	1540
HDJN-F1-Q-02	H07RN-F1	150	756/0.5	2.0	25.2	31.4	1920
HDJN-F1-R-02	H07RN-F1	185	925/0.5	2.2	27.6	34.4	2330
HDJN-F1-S-02	H07RN-F1	240	1221/0.5	2.4	30.6	38.3	3040
HDJN-F1-T-02	H07RN-F1	300	1525/0.5	2.6	33.5	41.9	3720
HDJN-F1-U-02	H07RN-F1	400	2013/0.5	2.8	37.4	46.8	4790
HDJN-F1-V-02	H07RN-F1	500	1769/0.5	3.0	41.3	52.0	5970
ADJN-F1-W-02*	A07RN-F1	630	2257/0.6	3.0	45.5	56.5	7360
Two Core Type							
HDJN-F2-F-02	H07RN-F2	4.0	56/0.3	1.0	12.0	15.0	275
HDJN-F2-G-02	H07RN-F2	6.0	84/0.3	1.0	13.5	18.5	350
HDJN-F2-H-02	H07RN-F2	10	80/0.4	1.2	18.5	24.0	640
HDJN-F2-I-02	H07RN-F2	16	126/0.4	1.2	21.0	27.5	850
HDJN-F2-J-02	H07RN-F2	25	196/0.4	1.4	25.0	31.5	1210
Three Core Type							
HDJN-F3-F-02	H07RN-F3	4.0	56/0.3	1.0	13.0	16.0	335
HDJN-F3-G-02	H07RN-F3	6.0	84/0.3	1.0	14.0	20.0	425
HDJN-F3-H-02	H07RN-F3	10	80/0.4	1.2	20.0	25.5	785
HDJN-F3-I-02	H07RN-F3	16	126/0.4	1.2	22.5	29.5	1060
HDJN-F3-J-02	H07RN-F3	25	196/0.4	1.4	26.5	34.0	1510
HDJN-F3-K-02	H07RN-F3	35	276/0.4	1.4	29.5	38.0	1970
HDJN-F3-L-02	H07RN-F3	50	396/0.4	1.6	34.5	44.0	2750
HDJN-F3-M-02	H07RN-F3	70	360/0.5	1.6	39.0	49.5	3680
HDJN-F3-N-02	H07RN-F3	95	475/0.5	1.8	44.0	54.0	4750
HDJN-F3-P-02	H07RN-F3	120	608/0.5	1.8	47.5	59.0	5860
HDJN-F3-Q-02	H07RN-F3	150	756/0.5	2.0	52.5	66.5	7380
HDJN-F3-R-02	H07RN-F3	185	925/0.5	2.2	58.0	71.5	8960
HDJN-F3-S-02	H07RN-F3	240	1221/0.5	2.4	65.5	81.0	11540
HDJN-F3-T-02	H07RN-F3	300	1525/0.5	2.6	72.5	89.5	14290

Continued overleaf. . .

Vulcanised Rubber Insulated, PCP Sheathed Flexible Cables

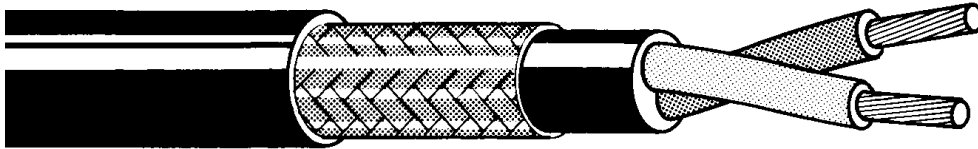
60°C 450/750 Volts 638*P Continued. . .

Anixter Part No.	Cenelec Code	Nominal Conductor Area mm ²	Nominal Conductor Stranding #/mm	Insulation Thickness mm	Min O/D mm	Max O/D mm	Approx Weight kg/km
Four Core Type							
HDJN-F4-F-02	H07RN-F4	4.0	56/0.3	1.0	14.5	18.0	420
HDJN-F4-G-02	H07RN-F4	6.0	84/0.3	1.0	16.5	22.0	540
HDJN-F4-H-02	H07RN-F4	10	80/0.4	1.2	21.5	28.0	960
HDJN-F4-I-02	H07RN-F4	16	126/0.4	1.2	24.5	32.0	1310
HDJN-F4-J-02	H07RN-F4	25	196/0.4	1.4	29.5	37.5	2020
HDJN-F4-K-02	H07RN-F4	35	276/0.4	1.4	33.0	42.0	2490
HDJN-F4-L-02	H07RN-F4	50	396/0.4	1.6	38.0	48.5	3490
HDJN-F4-M-02	H07RN-F4	70	360/0.5	1.6	43.0	54.5	4670
HDJN-F4-N-02	H07RN-F4	95	475/0.5	1.8	49.0	60.5	6120
HDJN-F4-P-02	H07RN-F4	120	608/0.5	1.8	53.0	65.5	7450
HDJN-F4-Q-02	H07RN-F4	150	756/0.5	2.0	58.5	74.0	9400
HDJN-F4-R-02	H07RN-F4	185	925/0.5	2.2	64.5	79.5	11440
HDJN-F4-S-02	H07RN-F4	240	1221/0.5	2.4	73.0	90.0	14750
HDJN-F4-T-02	H07RN-F4	300	1525/0.5	2.6	80.5	99.5	18310
Five Core Type							
HDJN-F5-F-02	H07RN-F5	4.0	56/0.3	1.0	16.0	19.5	515
HDJN-F5-G-02	H07RN-F5	6.0	84/0.3	1.0	18.0	24.5	660
HDJN-F5-H-02	H07RN-F5	10	80/0.4	1.2	24.0	30.5	1170
HDJN-F5-I-02	H07RN-F5	16	126/0.4	1.2	27.0	35.5	1610
HDJN-F5-J-02	H07RN-F5	25	196/0.4	1.4	32.5	41.5	2350

For sizes below 4.0mm² refer to page 2:40

PVC Insulated & Sheathed, Copper Wire Braided Flexible Cords

70°C 300/500 Volts 380*Y



APPLICATION

For mains supply or extension leads for portable or fixed equipment in mechanically arduous conditions where the lead requires a degree of mechanical protection and/or earth leakage protection.

* denotes number of cores.

SPECIFICATIONS

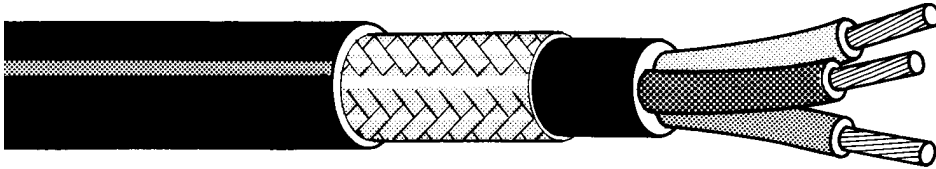
- In accordance with BS6004.
- **Conductors:** Flexible Class 5 copper conductors to BS6360.
- **Insulation:** PVC insulation Type TI.2 to BS7655.
- **Core identification:**
 - 2 core - blue, brown
 - 3 core - green/yellow, blue, brown
 - 4 core - green/yellow, black, blue, brown.
- **Inner Sheath:** PVC inner sheath Type TM.2 to BS7655.
- Plain copper wire braid (0.6 min filling factor).
- **Outer Sheath:** PVC outer sheath Type TM.2 to BS7655 (black).
- Flame retardant to BS4066 Part 1.
- **Temp Rating:** 70°C max conductor operating temperature.
- **Voltage Rating:** 300/500V

Anixter Part No.	Nominal Conductor Area mm ²	Nominal Conductor Stranding #/mm	Insulation Thickness mm	Size of Copper wire braid (mm)	Min O/D mm	Max O/D mm	Approx Weight kg/km
Twin Core Type 3802Y							
A4K-2075	0.75	24/0.20	0.6	0.2	8.8	11.0	150
A4K-2010	1.0	32/0.20	0.6	0.2	9.2	11.0	165
A4K-2015	1.5	30/0.25	0.7	0.2	10.0	12.5	185
A4K-2025	2.5	50/0.25	0.8	0.2	12.0	14.5	255
Three Core Type 3803Y							
A4K-3075	0.75	24/0.20	0.6	0.2	9.2	11.0	165
A4K-3010	1.0	32/0.20	0.6	0.2	9.6	11.5	185
A4K-3015	1.5	30/0.25	0.7	0.2	11.0	13.0	220
A4K-3025	2.5	50/0.25	0.8	0.2	13.0	15.5	300
Four Core Type 3804Y							
A4K-4075	0.75	24/0.20	0.6	0.2	10.0	12.0	190
A4K-4010	1.0	32/0.20	0.6	0.2	10.5	12.5	220
A4K-4015	1.5	30/0.25	0.7	0.2	12.0	14.5	245
A4K-4025	2.5	50/0.25	0.8	0.2	14.0	16.5	375

For further technical information see page 2:48

Vulcanised Rubber Insulated, PCP Sheathed, Copper Wire Braided Flexible Cords

60°C 300/500 Volts 380*P



APPLICATION

For mains supply or extension leads for portable or fixed equipment in mechanically arduous conditions where the cable requires a degree of mechanical protection and/or earth leakage protection.

* denotes number of cores.

SPECIFICATIONS

- In accordance with BS6500.
- **Conductors:** Flexible Class 5 tinned copper conductors to BS6360.
- **Insulation:** Rubber insulation Type EI.4 to BS7655.
- **Core identification:**
 - 2 core - blue, brown
 - 3 core - green/yellow, blue, brown
 - 4 core - green/yellow, black, blue, brown.
- **Inner Sheath:** PCP inner sheath Type EM.1 to BS7655.
- Tinned copper wire braid (0.6 min filling factor).
- **Outer Sheath:** PCP outer sheath Type EM.3 to BS7655 (black).
- Flame retardant to BS4066 Part 1.
- **Temp Rating:** 60°C max conductor operating temperature.
- **Voltage Rating:** 300/500V

Anixter Part No.	Nominal Conductor Area mm ²	Nominal Conductor Stranding #/mm	Insulation Thickness mm	Size of Copper wire braid (mm)	Min O/D mm	Max O/D mm	Approx Weight kg/km
Twin Core Type 3802P							
A4-D16-2005	0.5	16/0.2	0.6	0.2	8.2	10.7	142
A4-D24-2075	0.75	24/0.2	0.6	0.2	8.7	11.3	164
A4-D32-2010	1.0	32/0.2	0.6	0.2	9.2	11.9	177
A4-D30-2015	1.5	30/0.25	0.8	0.2	10.8	13.9	240
A4-D50-2025	2.5	50/0.25	0.9	0.2	12.5	16.0	302
Three Core Type 3803P							
A4-D16-3005	0.5	16/0.2	0.6	0.2	8.6	11.1	151
A4-D24-3075	0.75	24/0.2	0.6	0.2	9.3	12.0	179
A4-D32-3010	1.0	32/0.2	0.6	0.2	9.6	12.4	199
A4-D30-3015	1.5	30/0.25	0.8	0.2	11.3	14.5	270
A4-D50-3025	2.5	50/0.25	0.9	0.2	13.0	16.7	350
Four Core Type 3804P							
A4-D16-4005	0.5	16/0.2	0.6	0.2	9.5	12.2	179
A4-D24-4075	0.75	24/0.2	0.6	0.2	9.8	12.7	204
A4-D32-4010	1.0	32/0.2	0.6	0.2	10.4	13.4	235
A4-D30-4015	1.5	30/0.25	0.8	0.2	12.3	15.7	315
A4-D50-4025	2.5	50/0.25	0.9	0.2	14.2	18.1	415

For further technical information see page 2:48.

Vulcanised Rubber Insulated, PCP Sheathed Flexible Heavy Duty Cords

60°C 450/750 Volts H07RN-F



APPLICATION

For mains supply or extension leads for portable or fixed equipment operating indoors or outdoors (domestic or industrial under conditions of frequent handling trailing or flexing.

Incorporates heavy duty OFR (Oil resisting Flame Retardant) outer sheath.

* denotes number of cores.

SPECIFICATIONS

- In accordance with Cenelec code H07RN-F.
- **Conductors:** Flexible Class 5 tinned copper conductors to BS6360.
- **Insulation:** Rubber insulation Type EI.4 to BS7655.
- **Core identification:**
 - 2 core - blue, brown
 - 3 core - green/yellow, blue, brown
 - 4 core - green/yellow, black, blue, brown.
 - 5 core- green/yellow, black, blue, brown, black.
- **Outer Sheath:** Black PCP outer sheath Type EM.2 to BS7655.
- Flame retardant to BS4066 Part 1.
- **Temp Rating:** 60°C max conductor operating temperature.
- **Voltage Rating:** 450/750V

Anixter Part No.	Cenelec Code	Nominal Conductor Area mm ²	Nominal Conductor Stranding #/mm	Insulation Thickness mm	Min O/D mm	Max O/D mm	Approx Weight kg/km
Single Core Type							
HDJN-F1-D-02	H07RN-F1	1.5	30/0.25	0.8	5.7	7.1	65
HDJN-F1-E-02	H07RN-F1	2.5	50/0.25	0.9	6.3	7.9	82
Two Core Type							
HDJN-F2-C-02	H07RN-F2	1.0	32/0.20	0.8	7.7	10.0	116
HDJN-F2-D-02	H07RN-F2	1.5	30/0.25	0.8	8.5	11.0	147
HDJN-F2-E-02	H07RN-F2	2.5	50/0.25	0.9	10.2	13.1	210
Three Core Type							
HDJN-F3-C-02	H07RN-F3	1.0	32/0.20	0.8	8.3	10.7	139
HDJN-F3-D-02	H07RN-F3	1.5	30/0.25	0.8	9.2	11.9	176
HDJN-F3-E-02	H07RN-F3	2.5	50/0.25	0.9	10.9	14.0	250
Four Core Type							
HDJN-F4-C-02	H07RN-F4	1.0	32/0.20	0.8	9.2	11.9	170
HDJN-F4-D-02	H07RN-F4	1.5	30/0.25	0.8	10.2	13.1	220
HDJN-F4-E-02	H07RN-F4	2.5	50/0.25	0.9	12.1	15.5	295
Five Core Type							
HDJN-F5-C-02	H07RN-F5	1.0	32/0.20	0.8	10.2	13.1	198
HDJN-F5-D-02	H07RN-F5	1.5	30/0.25	0.8	11.2	14.4	255
HDJN-F5-E-02	H07RN-F5	2.5	50/0.25	0.9	13.3	17.0	350
Seven Core Type							
HDJN-F7-D-02	H07RN-F7	1.5	30/0.25	0.8	13.4	17.2	310
HDJN-F7-E-02	H07RN-F7	2.5	50/0.25	0.9	15.7	20.0	460
Twelve Core Type							
HDJN-F12-D-02	H07RN-F12	1.5	30/0.25	0.8	17.6	22.4	500
HDJN-F12-E-02	H07RN-F12	2.5	50/0.25	0.9	20.6	26.2	750

For further technical information see page 2:48.

Rubber Insulated Welding Cables

85°C 100 Volts



APPLICATION

Primary use is for the secondary (high current) connection to automatic or hand-held metal arc welding electrodes. May also be used for non-welding applications such as earth/return leads, flexible tails on power supplies, busbar connections, etc.

SPECIFICATIONS

- In accordance with BS638 Part 4.
- Flexible Class 6 copper (plain/tinned) conductors to BS6360.
- Paper or PETP tape separator
- **Insulation:** May be single or dual layer
 - 0361TQ Dual layer insulation
 - EPR inner layer
 - HOFR outer layer
 - 0361T Single layer insulation
 - ordinary duty rubber type GP3.
- **Temp Rating:** 85°C max conductor operating temperature.
Minimum handling temp: -20°C
- **Voltage:** 100V rating when used for welding purposes. For non-welding applications, cables may be used at voltages up to and including 450V rms phase - phase provided that the cables are adequately protected from damage to the insulation eg. in panels etc.

Anixter Part No. mm ²	Nominal Conductor Area #/mm	Nominal Conductor Stranding mm	Thickness of covering mm	Min O/D mm	Max O/D kg/km	Approx Weight	Colour
Type 0361T - Tinned Copper Conductors							
A6-B51-1016-09	16	513/0.2	2.0	8.8	11.0	215	Grey
A6-B78-1025-09	25	783/0.2	2.0	10.1	12.7	305	Grey
A6-B11-1035-09	35	1107/0.2	2.0	11.4	14.2	405	Grey
A6-B15-1050-09	50	1566/0.2	2.2	13.2	16.5	560	Grey
A6-B22-1070-09	70	2214/0.2	2.4	15.3	19.2	780	Grey
A6-B29-1095-09	95	2997/0.2	2.6	17.1	21.4	1040	Grey
A6-B60-1012-09	120	608/0.5	2.8	19.2	24.0	1300	Grey
A6-B92-1018-09	185	925/0.5	3.2	23.1	28.9	1950	Grey
Type 0361TQ - Plain Copper Conductors							
A6-B51-3016P	16	513/0.2	2.0	8.8	11.0	240	Black
A6-B78-3025P	25	783/0.2	2.2	10.1	12.7	350	Black
A6-B11-3035P	35	1107/0.2	2.0	11.4	14.2	450	Black
A6-B15-3050P	50	1566/0.2	2.2	13.2	16.5	625	Black
A6-B22-3070P	70	2214/0.2	2.4	15.3	19.2	825	Black
A6-B29-3095P	95	2997/0.2	2.6	17.1	21.4	1125	Black
A6-B60-3012P	120	608/0.5	2.8	19.2	24.0	1400	Black
A6-B92-3018P	185	925/0.5	3.2	23.1	28.9	2050	Black
Type 0361TQ - Tinned Copper Conductors							
A6-B51-3016-08	16	513/0.2	2.0	8.8	11.0	240	Orange
A6-B78-3025-08	25	783/0.2	2.0	10.1	12.7	350	Orange
A6-B11-3035-08	35	1107/0.2	2.0	11.4	14.2	450	Orange
A6-B15-3050-08	50	1566/0.2	2.2	13.2	16.5	625	Orange
A6-B22-3070-08	70	2214/0.2	2.4	15.3	19.2	825	Orange
A6-B29-3095-08	95	2997/0.2	2.6	17.1	21.4	1125	Orange
A6-B60-3012-08	120	608/0.5	2.8	19.2	24.0	1400	Orange
A6-B92-3018-08	185	925/0.5	3.2	23.1	28.9	2050	Orange

Aluminum conductor cable also available, details upon request
 For further technical information see page 2:68.

Rubber Insulated Coil Leads

90°C/180°C



APPLICATION

Coil leads are designed for direct and permanent connection to coil winding of motors and other electrical apparatus. When used in coil lead applications, cable may also be required to withstand high temperatures or immersion in varnish or compound.

May also be used for other applications such as flexible power leads.

SPECIFICATIONS

- In accordance with BS6195.
- **Conductors:** Flexible Class 5 tinned copper conductors.
- **Insulation:**
 - Type 3** - Rubber insulation Type OR1 to BS7655 (HOFR Type)
 - Type 4** - Composite insulation Type FR1 (Voltage Categories A & C) or Type FR2 (Voltage Categories D, E & F) to BS7655. Inner Layer EPR or Butyl, Outer Layer HOFR)
 - Type 5** - Silicone rubber insulation Type EI.1 to BS7655.
- **Temp Rating:**
 - 90°C max conductor operating temperature (Types 3 & 4).
 - 180°C max conductor operating temperature (Type 5).
- **Voltage Rating:**

Voltage ratings for coil leads are divided into categories and define the maximum voltage between conductor and earth, to which the cable is liable to be subjected during a 1 minute test of the equipment to which it is connected.

The nominal voltage rating denotes the continuous operating voltage that the cable may be used at during service.

Voltage Category	Maximum equipment test voltage (a.c. rms)	Nominal Voltage Ratings of Cable Uo/U
A	2.5	300/500V
C	4.0	600/1000V
D	9.5	1900/3300V
E	17	3800/6600V
F	27	6350/11000V

Anixter Part No.*	Nominal Conductor Area mm ²	Nominal Conductor Stranding #/mm	Insulation Thickness (mm)			Max O/D (mm)		
			VOLTAGE CATEGORY			VOLTAGE CATEGORY		
			A	C	D	A	C	D
TYPE 3 COIL LEAD								
A6-F16-1050	0.5	16/0.2	0.8	1.4	-	3.3	4.5	-
A6-F24-1075	0.75	24/0.2	0.8	1.4	-	3.5	4.7	-
A6-F32-1010	1.0	32/0.2	0.8	1.4	-	3.7	4.9	-
A6-F30-1015	1.5	30/0.25	0.8	1.4	-	4.0	5.2	-
A6-F50-1025	2.5	50/0.25	0.9	1.4	2.8	4.6	5.6	8.5
A6-F56-1004	4.0	56/0.3	1.0	1.4	2.8	5.4	6.3	9.1
A6-F84-1006	6.0	84/0.3	1.0	1.5	2.8	6.5	7.5	10.3
A6-F80-1010	10	80/0.4	1.2	1.5	2.8	7.9	8.5	11.3
A6-F12-1016	16	126/0.4	-	1.5	2.8	-	9.6	12.4
A6-F19-1025	25	196/0.4	-	1.6	2.8	-	11.4	13.8
A6-F27-1035	35	276/0.4	-	1.6	2.8	-	12.8	15.2
A6-F39-1050	50	396/0.4	-	1.7	2.8	-	14.8	17.1
A6-F36-1070	70	360/0.5	-	1.8	2.8	-	17.2	19.2
A6-F47-1095	95	475/0.5	-	2.0	3.0	-	19.7	22.0
A6-F60-1012	120	608/0.5	-	2.2	3.0	-	21.9	23.5
A6-F75-1015	150	756/0.5	-	2.3	3.0	-	24.1	25.5
A6-F92-1018	185	925/0.5	-	2.4	3.0	-	26.3	27.5
A6-F12-1024	240	1221/0.5	-	2.4	3.0	-	28.3	30.6
A6-F15-1030	300	1525/0.5	-	2.6	3.0	-	33.0	33.8
A6-F20-1040	400	2013/0.5	-	2.8	3.0	-	37.4	37.8

* For voltage categories, add suffix A, C or D to part number

For further technical information see page 2:72.

Continued overleaf. . .

Rubber Insulated Coil Leads

90°C/180°C Continued...

Anixter Part No.*	Nominal Conductor Area mm ²	Nominal Conductor Stranding #/mm	Insulation Thickness (mm)					Max O/D (mm)				
			VOLTAGE CATEGORY					VOLTAGE CATEGORY				
			A	C	D	E	F	A	C	D	E	F
TYPE 4 COIL LEAD												
A6-G16-3050	0.5	16/0.2	0.8	1.4	-	-	-	3.3	4.5	-	-	-
A6-G24-3075	0.75	24/0.2	0.8	1.4	-	-	-	3.5	4.7	-	-	-
A6-G32-3010	1.0	32/0.2	0.8	1.4	-	-	-	3.7	4.9	-	-	-
A6-G30-3015	1.5	30/0.25	0.8	1.4	-	-	-	4.0	5.2	-	-	-
A6-G50-3025	2.5	50/0.25	0.9	1.4	2.8	-	-	4.6	5.6	8.5	-	-
A6-G56-3004	4.0	56/0.3	1.0	1.4	2.8	-	-	5.4	6.3	9.1	-	-
A6-G84-3006	6.0	84/0.3	1.0	1.5	2.8	-	-	6.5	7.5	10.3	-	-
A6-G80-3010	10	80/0.4	1.2	1.5	2.8	-	-	7.9	8.5	11.3	-	-
A6-G12-3016	16	126/0.4	-	1.5	2.8	5.0	-	-	9.6	12.4	17.2	-
A6-G19-3025	25	196/0.4	-	1.6	2.8	5.0	7.6	-	11.4	13.8	18.6	24.1
A6-G27-3035	35	276/0.4	-	1.6	2.8	5.0	7.6	-	12.8	15.2	20.0	25.5
A6-G39-3050	50	396/0.4	-	1.7	2.8	5.0	7.6	-	14.8	17.1	22.1	27.3
A6-G36-3070	70	360/0.5	-	1.8	2.8	5.0	7.6	-	17.2	19.2	24.2	29.4
A6-G47-3095	95	475/0.5	-	2.0	3.0	5.0	7.6	-	19.7	22.0	26.3	31.5
A6-G60-3012	120	608/0.5	-	2.2	3.0	5.0	7.6	-	21.9	23.5	27.8	33.3
A6-G75-3015	150	756/0.5	-	2.3	3.0	5.0	7.6	-	24.1	25.5	29.8	35.3
A6-G92-3024	185	925/0.5	-	2.4	3.0	5.0	7.6	-	26.3	27.5	32.1	37.3
A6-G12-3024	240	1221/0.5	-	2.4	3.0	5.0	7.6	-	28.3	30.6	35.1	40.3
A6-G15-3030	300	1525/0.5	-	2.6	3.0	-	-	-	33.0	33.8	-	-
A6-G20-3040	400	2013/0.5	-	2.8	3.0	-	-	-	37.4	37.8	-	-

* For EPR inner layer add suffix E, for butyl inner layer suffix B.

For voltage categories add suffix A, C, D, E or F.

For further technical information see page 2:72.

Anixter Part No.*	Nominal Conductor Area mm ²	Nominal Conductor Stranding #/mm	Insulation Thickness (mm)					Max O/D (mm)				
			VOLTAGE CATEGORY					VOLTAGE CATEGORY				
			A	C	D	E	F	A	C	D	E	F
TYPE 5 COIL LEAD												
A6-G16-2050	0.5	16/0.2	0.8	1.4	-	-	-	3.3	4.5	-	-	-
A6-G24-2075	0.75	24/0.2	0.8	1.4	-	-	-	3.5	4.7	-	-	-
A6-G32-2010	1.0	32/0.2	0.8	1.4	-	-	-	3.7	4.9	-	-	-
A6-G30-2015	1.5	30/0.25	0.8	1.4	-	-	-	4.0	5.2	-	-	-
A6-G50-2025	2.5	50/0.25	0.9	1.4	2.8	-	-	4.6	5.6	8.5	-	-
A6-G56-2004	4.0	56/0.3	1.0	1.4	2.8	-	-	5.4	6.3	9.1	-	-
A6-G84-2006	6.0	84/0.3	1.0	1.5	2.8	-	-	6.5	7.5	10.3	-	-
A6-G80-2010	10	80/0.4	1.2	1.5	2.8	-	-	7.9	8.5	11.3	-	-
A6-G12-2016	16	126/0.4	-	1.5	2.8	5.0	-	-	9.6	12.4	17.2	-
A6-G19-2025	25	196/0.4	-	1.6	2.8	5.0	7.6	-	11.4	13.8	18.6	24.1
A6-G27-2035	35	276/0.4	-	1.6	2.8	5.0	7.6	-	12.8	15.2	20.0	25.5
A6-G39-2050	50	396/0.4	-	1.7	2.8	5.0	7.6	-	14.8	17.1	22.1	27.3
A6-G36-2070	70	360/0.5	-	1.8	2.8	5.0	7.6	-	17.2	19.2	24.2	29.4
A6-G47-2095	95	475/0.5	-	2.0	3.0	5.0	7.6	-	19.7	22.0	26.3	31.5
A6-G60-2012	120	608/0.5	-	2.2	3.0	5.0	7.6	-	21.9	23.5	27.8	33.3
A6-G75-2015	150	756/0.5	-	2.3	3.0	5.0	7.6	-	24.1	25.5	29.8	35.3
A6-G92-2018	185	925/0.5	-	2.4	3.0	5.0	7.6	-	26.3	27.5	32.1	37.3
A6-G12-2024	240	1221/0.5	-	2.4	3.0	5.0	7.6	-	28.3	30.6	35.1	40.3
A6-G15-2030	300	1525/0.5	-	2.6	3.0	-	-	-	33.0	33.8	-	-
A6-G20-2040	400	2013/0.5	-	2.8	3.0	-	-	-	37.4	37.8	-	-

* For voltage categories add suffix A, C, D, E or F.
For further technical information see page 2:72.

Technical Specifications for Flexible Cords

Applicable to: 318*Y 218*Y
 2491X 309*Y
 318*P/TQ 398*P
 380*Y 380*P
 380*TQ 219*Y

Correction Factor for Ambient Temperature

60°C rubber and PVC cords:

Ambient air temp °C	35	40	45	50	55
Rating factor	0.91	0.82	0.71	0.58	0.41

85°C rubber cords having a HOFR sheath or a heat-resisting PVC sheath and for 90°C heat-resisting PVC cords:

Ambient air temp °C	35 - 50	55	60	65	70
Rating factor	1.0	0.96	0.83	0.67	0.47

180°C rubber cords:

Ambient air temp °C	35 - 150	155	160	165	170	175
Rating factor	1.0	0.92	0.82	0.71	0.57	0.40

* denotes number of cores.

For cables where four or more cores or loaded, the following factors should be applied:-

No. of cores loaded	4	5	6	7	10	12	14	19	24
Rating factor	0.78	0.72	0.67	0.63	0.56	0.53	0.51	0.45	0.42
No. of cores loaded	27	30	37	-	-	-	-	-	-
Rating factor	0.40	0.39	0.36	-	-	-	-	-	-

These factors need not be applied if the number of cores loaded does not exceed the square root of the total number of cores in the cable.

BS6141
BS6500

CURRENT CARRYING CAPACITY (Amperes):

Conductor cross-sectional area 1	Current-carrying capacity	
	single-phase a.c. 2	Three-phase a.c. 3
mm ²	A	A
0.5	3	3
0.75	6	6
1	10	10
1.25	13	-
1.5	16	16
2.5	25	20
4	32	25

VOLTAGE DROP (per ampere per metre):

Conductor operating temperature: 60°C*

Conductor cross-sectional area 1	d.c. or single-phase a.c. 2	Three-phase a.c. 3
mm ²	mV	mV
0.5	93	80
0.75	62	54
1	46	40
1.25	37	-
1.5	32	27
2.5	19	16
4	12	10

*NOTE: The tabulated values above are for 60°C rubber insulated and PVC-insulated flexible cords and for other types of flexible cords they are to be multiplied by the following factors:

For 85°C rubber or PVC insulated 1.09
180°C rubber insulated 1.31

Technical Specifications for 6701X

2

CURRENT CARRYING CAPACITY (Amperes):

Conductor cross-sectional area	Reference Method 4 (enclosed in conduit in thermally insulating wall etc)		Reference Method 3 (enclosed in conduit on a wall or in trunking etc)	
	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.
1	2	3	4	5
mm ²	A	A	A	A
1	11	10.5	13.5	12
1.5	14.5	13.5	17.5	15.5
2.5	19.5	18	24	21
4	26	24	32	28
6	34	31	41	36
10	46	42	57	50
16	61	56	76	68
25	80	73	101	89
35	99	89	125	110
50	119	108	151	134
70	151	136	192	171
95	182	164	232	207
120	210	188	269	239
150	240	216	300	262
185	273	245	341	296
240	320	286	400	346
300	367	328	458	394
400	-	-	546	467
500	-	-	626	533
630	-	-	720	611

BS6004 - 6701X Types, PVC insulated only

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

FLEXIBLE CABLES & CORDS

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
Rating factor	1.03	1.0	0.94	0.87	0.79	0.71	0.61	0.50	0.35

VOLTAGE DROP (per ampere per metre):

Conductor cross sectional area	2 cables d.c.	Reference Methods 3 & 4 (Enclosed in conduit etc in or on a wall) 2 cables Single phase a.c.			Reference Methods 3 & 4 (Enclosed in conduit etc in or on a wall) 3/4 cables Three phase a.c.		
		1	2	3	4	5	6
mm ²	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		
		r	x	z	r	x	z
25	1.75	1.80	0.33	1.80	1.50	0.29	1.55
35	1.25	1.30	0.31	1.30	1.10	0.27	1.10
50	0.93	0.95	0.30	1.00	0.81	0.26	0.85
70	0.63	0.65	0.29	0.72	0.56	0.25	0.61
95	0.46	0.49	0.28	0.56	0.42	0.24	0.48
120	0.36	0.39	0.27	0.47	0.33	0.23	0.41
150	0.29	0.31	0.27	0.41	0.27	0.23	0.36
185	0.23	0.25	0.27	0.37	0.22	0.23	0.32
240	0.180	0.195	0.26	0.33	0.17	0.23	0.29
300	0.145	0.160	0.26	0.31	0.14	0.23	0.27
400	0.105	0.130	0.26	0.29	0.12	0.22	0.25
500	0.086	0.110	0.26	0.28	0.10	0.22	0.25
630	0.068	0.094	0.25	0.27	0.08	0.22	0.24

Technical Specifications for 6701B

2

CURRENT CARRYING CAPACITY (Amperes):

Conductor cross-sectional area	Reference Method 4 (enclosed in conduit in thermally insulating wall etc)		Reference Method 3 (enclosed in conduit on a wall or in trunking etc)	
	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.
1	2	3	4	5
mm ²	A	A	A	A
1	14	13	17	15
1.5	18	17	22	19
2.5	24	23	30	26
4	33	30	40	35
6	43	39	51	45
10	58	53	71	63
16	76	70	95	85
25	100	91	126	111
35	124	111	156	138
50	149	135	189	168
70	189	170	240	214
95	228	205	290	259
120	263	235	336	299
150	300	270	375	328
185	341	306	426	370
240	400	358	500	433

BS7211

Ambient temperature: 30°C Conductor operating temperature: 90°C

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
Rating factor	1.04	1.0	0.96	0.91	0.87	0.82	0.76	0.71
Ambient air temp °C	65	70	75	80	85			
Rating factor	0.65	0.58	0.50	0.41	0.29			

VOLTAGE DROP (per ampere per metre):

Conductor cross sectional area	2 cables d.c.	Reference Methods 3 & 4 (Enclosed in conduit etc in or on a wall) 2 cables Single Phase a.c.			Reference Methods 3 & 4 (Enclosed in conduit etc in or on a wall) 3/4 cables Three phase a.c		
1	2	3			4		
mm ²	mV	mV			mV		
1	46	46			40		
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	0.31	1.90	1.60	0.27	1.65
35	1.35	1.35	0.29	1.35	1.15	0.25	1.15
50	0.99	1.00	0.29	1.05	0.87	0.25	0.90
70	0.68	0.70	0.28	0.75	0.60	0.24	0.65
95	0.49	0.51	0.27	0.58	0.44	0.23	0.50
120	0.39	0.41	0.26	0.48	0.35	0.23	0.42
150	0.32	0.33	0.26	0.43	0.29	0.23	0.37
185	0.25	0.27	0.26	0.37	0.23	0.23	0.32
240	0.190	0.21	0.26	0.33	0.185	0.22	0.29

Technical Specifications for Tri-Wire

2

Nominal Conductor Area	Nominal Conductor Stranding	Current Rating	Nominal Voltage Drop*
mm ²	#/mm	A	mV/A/m
0.5	16/0.2	11	46.0
0.75	24/0.2	14	31.0
1.0	32/0.2	17	22.0
1.5	30/0.25	21	15.0
2.5	50/0.25	30	9.1
4.0	56/0.3	41	5.7
6.0	84/0.3	53	3.8
10	80/0.4	75	2.2
16	126/0.4	100	1.4
25	196/0.4	136	0.89
35	276/0.4	167	0.64
50	396/0.4	204	0.45
70	360/0.5	259	0.32
95	475/0.5	321	0.24
120	608/0.5	374	0.19
150	756/0.5	429	0.15
185	925/0.5	496	0.13
240	1221/0.5	595	0.092

Current ratings are based on a conductor operating temperature of 85°C and an ambient air temperature of 45°C and assumes single cable isolated in free air.

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

For further guidance refer to the 16th Edition IEE Wiring regulations.

For ambient air temperature other than 45°C the following rating factors should be applied:

Ambient air temp °C	45	50	55	60	65	70	75
Rating Factor	1.0	0.97	0.90	0.82	0.73	0.63	0.52

Where cables are to be grouped, the following factors should be applied:

Number of cables in group	2	3	4	5	6	7	8
Rating Factor	0.80	0.70	0.65	0.60	0.56	0.53	0.50

* The voltage drop figures quoted are for one cable only. For other circuit arrangements they should be adjusted as follows:

Single phase 50Hz a.c. or 2-wire d.c. x 2

Three phase a.c. x 1.732

Technical Specifications for UNIPREN

Current Rating

The PREN number indicates the approximate current rating of the cable with all cables 18A and above coloured blue.

Resistance to fluids

Fluid Represented	Test Fluid	Test Temperature °C	Maximum Change In Diameter %
Fuel	70% iso-octane and 30% toluene, by volume	20 +/- 5	20
Hydraulic Fluid	80% ethylene glycol monoethyl ether + 20% castor oil, by volume	50 +/- 5	5

N.B.

Cables are not suitable for use in areas where ester-based fluids are present.

Technical Specifications for Equipment Wires

The upper temperature limits in the table opposite refer to the maximum continuous temperature of the conductor due to the combination of ambient temperature and temperature rise due to current flow. The lower values quoted are the minimum temperatures for equipment wire which may be subject to slight flexing during their normal operating life.

The current carrying capacities quoted are for wires carrying a continuous current in free air at an ambient temperature.

Note:

Current carrying capacities will depend on circumstances but for general guidance the quoted current values will give a temperature rise of about 15°C in ambient temperatures up to 70°C for single, freely ventilated, insulated wires. Different values will apply when equipment wires are bunched.

Type of Equipment wire	Description	Maximum	
		a.c.(rms)	d.c.
1	Hard PVC insulated	750	-
2	Hard PVC insulated	1,000	-
2SB	As Type 2, screened	1,000	-
2SBM	As Type 2SB, with PVC sheath	1,000	-
3	General purpose PVC insulated	1,500	-
3SB	As Type 3, screened	1,500	-
3SBM	As Type 3SB with PVC sheath	1,500	-
4	Polyethylene insulated	1,500	-
4SB	As Type 4, screened	1,500	-
5	Silicone rubber insulated	750	-
5SB	As Type 5, screened	750	-
7	General purpose PVC insulated	-	3,000
8	General purpose, PVC insulated	-	5,000
9	General purpose, PVC insulated	-	10,000
10	General purpose, PVC insulated	-	15,000
11	Polyethylene insulated	-	7,500
12	Polyethylene insulated	-	15,000
13	Polyethylene insulated	-	30,000
14	Silicone rubber insulated	-	12,000

Type of Insulation	Temperature Range	Current Ratings	
PVC Hard grade	-15° to +85°C	1/0.4	0.8A
PVC General purpose	-20° to +85°C	7/0.2	1.4A
Polyethylene	-50° to +85°C	1/0.6	1.8A
Silicone rubber	-60° to +150°C	16/0.2	3.0A
		1/0.9	4.0A
		24/0.2	4.5A
		1/1.13	6.0A
		32/0.2	6.0A
		63/0.2	11.0A

Technical Specifications for 6381TQ

2

Single core, EPR insulated, HOFr sheathed. BS7919 - 6381TQ
 Ambient temperature: 30°C Conductor operating temperature: 85°C

CURRENT CARRYING

Conductor cross-sectional area	Reference Method 3 (enclosed in conduit etc. in or on a wall)		Reference Method 1 (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. flat and touching	3 or 4 cables three-phase a.c. flat and touching or trefoil
1	2	3	4	5
mm ²	A	A	A	A
4	40	36	45	42
6	52	46	59	54
10	72	63	81	75
16	96	85	108	100
25	127	112	143	133
35	157	138	177	164
50	190	167	215	199
70	242	213	274	254
95	293	258	332	308
120	339	298	384	357
150	372	334	442	411
185	428	379	519	469
240	510	443	607	553
300	593	506	695	636
400	719	602	827	755
500	835	689	946	865
630	975	791	1088	996

FLEXIBLE CABLES & CORDS

Ratings do not apply if the cable is protected by a semi-enclosed fuse to BS3036. For further guidance refer to the 16th Edition IEE wiring regulations.

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
Rating factor	1.02	1.0	0.95	0.90	0.85	0.80	0.74	0.67	0.60
	70	75	80						
	0.52	0.43	0.30						

CAPACITY (Amperes):

Reference Method 11 (on a perforated cable tray) Horizontal or Vertical		Reference Method 12 (free air)	
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	single-phase a.c. or d.c. or 3 or 4 cables three-phase a.c. flat spaced horizontal or vertical	3 cables trefoil three-phase a.c.
6	7	8	9
A	A	A	A
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
153	140	154	134
189	174	192	167
229	211	235	204
293	269	303	262
356	327	370	320
412	379	431	373
475	437	499	432
542	499	573	495
639	589	679	587
735	679	786	680
860	798	929	799
989	918	1081	919
1143	1062	1263	1060

Continued overleaf. . .

Technical Specifications for 6381TQ

Continued. . .

2

VOLTAGE DROP

2 cables - single phase a.c.										
Conductor cross-sectional area	2 cables d.c.	Reference Method 3 (Enclosed in conduit etc in or on a wall)			Reference Methods 1 & 11 (Clipped direct or on trays, touching)			Reference Method 12 (spaced*)		
1	2	3			4			5		
mm ²	mV	mV			mV			mV		
		r	x	z	r	x	z	r	x	z
4	12	12			12			-		
6	7.7	7.7			7.7			-		
10	4.6	4.6			4.6			-		
16	2.9	2.9			2.9			-		
25	1.80	1.85	0.32	1.90	1.85	0.20	1.85	1.85	0.29	1.85
35	1.30	1.35	0.31	1.40	1.30	0.195	1.35	1.30	0.28	1.35
50	0.95	1.00	0.30	1.05	0.97	0.190	0.99	0.97	0.28	1.00
70	0.65	0.68	0.29	0.74	0.66	0.185	0.69	0.66	0.27	0.72
95	0.48	0.51	0.28	0.58	0.49	0.180	0.52	0.49	0.27	0.56
120	0.38	0.40	0.27	0.49	0.39	0.175	0.43	0.39	0.26	0.47
150	0.30	0.33	0.27	0.42	0.31	0.175	0.36	0.31	0.26	0.40
185	0.25	0.27	0.27	0.38	0.25	0.170	0.30	0.25	0.26	0.36
240	0.190	0.21	0.26	0.33	0.195	0.165	0.26	0.195	0.25	0.32
300	0.150	0.170	0.26	0.31	0.155	0.165	0.23	0.155	0.25	0.29
400	0.115	0.140	0.26	0.30	0.125	0.160	0.20	0.120	0.25	0.28
500	0.091	0.115	0.26	0.28	0.100	0.155	0.185	0.097	0.24	0.26
630	0.072	0.100	0.25	0.27	0.082	0.155	0.175	0.077	0.24	0.25

* spaced by one cable diameter

Conductor operating temperature: 85°C

(per amperes per metre):

3 or 4 cables - three-phase a.c.											
Reference Method 3 (Enclosed in conduit etc in or on a wall)			Reference Methods 1, 11 & 12 (In trefoil touching)			Reference Methods 1 & 11 (Flat touching)			Reference Method 12 (Flat spaced*)		
6			7			8			9		
mV			mV			mV			mV		
10			10			10			-		
6.7			6.7			6.7			-		
4.0			4.0			4.0			-		
2.5			2.5			2.5			-		
r	x	z	r	x	z	r	x	z	r	x	z
1.60	0.28	1.65	1.60	0.175	1.60	1.60	0.25	1.60	1.60	0.32	1.65
1.15	0.27	1.20	1.15	0.170	1.15	1.15	0.24	1.15	1.15	0.32	1.20
0.87	0.26	0.91	0.84	0.165	0.86	0.84	0.24	0.88	0.84	0.32	0.90
0.60	0.25	0.65	0.57	0.160	0.60	0.57	0.24	0.62	0.57	0.31	0.65
0.44	0.25	0.51	0.43	0.155	0.45	0.43	0.23	0.48	0.42	0.31	0.52
0.35	0.24	0.43	0.34	0.155	0.37	0.34	0.23	0.41	0.34	0.30	0.45
0.29	0.24	0.37	0.27	0.150	0.31	0.27	0.23	0.35	0.27	0.30	0.40
0.23	0.23	0.33	0.22	0.150	0.26	0.22	0.22	0.31	0.22	0.30	0.37
0.180	0.23	0.29	0.170	0.145	0.22	0.170	0.22	0.28	0.170	0.30	0.34
0.150	0.23	0.27	0.135	0.140	0.195	0.135	0.22	0.26	0.135	0.29	0.32
0.130	0.22	0.26	0.110	0.140	0.175	0.110	0.21	0.24	0.105	0.29	0.31
0.105	0.22	0.24	0.089	0.135	0.165	0.089	0.21	0.23	0.085	0.29	0.30
0.085	0.22	0.24	0.073	0.135	0.155	0.073	0.21	0.22	0.067	0.28	0.29

*Technical Specifications for 638*TQ*

CURRENT CARRYING CAPACITY (Amperes):

Conductor cross-sectional area	d.c. or single-phase a.c. (1 two-core cable, with or without protective conductor)	Three-phase a.c. (1 three-core, four-core or five-core cable)	Single-phase a.c. or d.c. 2 single-core cables touching
mm²	A	A	A
4	41	36	-
6	53	47	-
10	73	64	-
16	99	86	-
25	131	114	-
35	-	140	192
50	-	170	240
70	-	216	297
95	-	262	354
120	-	303	414
150	-	348	476
185	-	397	540
240	-	467	645
300	-	537	741
400	-	-	885
500	-	-	1017
630	-	-	1190

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

For further guidance refer to the 16th Edition IEE Wiring regulations.

For ambient air temperature 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	1.02	1.0	0.95	0.90	0.85	0.80	0.74	0.67	0.60
	70	75	80						
	0.52	0.43	0.30						

Ambient temperature: 30°C

Conductor operating temperature: 85°C

NOTE: The current ratings tabulated are for cables in free air but may also be used for cables resting on a surface.

See overleaf for Voltage Drops. . .

Technical Specifications for 638*TQ

Continued. . .

VOLTAGE DROP (per ampere per metre):

Conductor cross-sectional area mm ²	1 two-core or 2 single-core cables d.c.	Two-core cable single-phase a.c.			1 three-core, four-core or five-core cable three-phase a.c.		
	mV	mV			mV		
		r	x	z	r	x	z
4	13	13			11		
6	8.4	8.4			7.3		
10	5.0	5.0			4.3		
16	3.1	3.1			2.7		
25	2.0	2.00	0.175	2.00	1.70	0.150	1.70
35	1.42		-		1.20	0.150	1.20
50	0.99		-		0.90	0.145	0.91
70	0.70		-		0.61	0.140	0.63
95	0.53		-		0.46	0.135	0.48
120	0.41		-		0.36	0.135	0.39
150	0.33		-		0.29	0.130	0.32
185	0.27		-		0.24	0.130	0.27
240	0.21		-		0.185	0.130	0.22
300	0.165		-		0.145	0.125	0.195
400	0.125		-		-	-	-
500	0.098		-		-	-	-
630	0.073		-		-	-	-

* A larger voltage drop will result if cables are spaced

Conductor operating temperature: 85°C

Two single-core cables Touching

Single phase a.c.*

mV

-	-	-
-	-	-
-	-	-
-	-	-
r	x	z
-	-	-
1.42	0.21	1.43
0.99	0.21	1.01
0.70	0.20	0.72
0.53	0.195	0.56
0.41	0.190	0.46
0.33	0.190	0.38
0.27	0.190	0.33
0.21	0.185	0.28
0.170	0.180	0.25
0.130	0.175	0.22
0.105	0.170	0.20
0.084	0.170	0.190

Technical Specifications for "H07RNF"

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

For further guidance refer to the 16th Edition IEE Wiring regulations.

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

Ambient air temp °C	25	30	35	40	45	50	55
Rating Factor	1.04	1.0	0.91	0.82	0.71	0.58	0.41

Ambient temperature: 30°C

Conductor operating temperature: 60°C

NOTE: The current ratings tabulated are for cables in free air but may also be used for cables resting on a surface.

VOLTAGE DROP (per ampere per metre):

Conductor cross-sectional mm ²	Two-core cable d.c.	Two-core cable single-phase a.c.			1 three-core, four-core or five-core cable three-phase a.c.		
	mV	mV			mV		
		r	x	z	r	x	z
4	12	12			10		
6	7.8	7.8			6.7		
10	4.6	4.6			4.0		
16	2.9	2.9			2.5		
25	1.80	1.80	0.175	1.85	1.55	0.150	1.55
35	-		-		1.10	0.150	1.15
50	-		-		0.83	0.145	0.84
70	-		-		0.57	0.140	0.58
95	-		-		0.42	0.135	0.44
120	-		-		0.33	0.135	0.36
150	-		-		0.27	0.130	0.30
185	-		-		0.22	0.130	0.26
240	-		-		0.170	0.130	0.21
300	-		-		0.135	0.125	0.185
400	-		-		-	-	-
500	-		-		-	-	-
630	-		-		-	-	-

CURRENT CARRYING CAPACITY (Amperes):

Conductor cross-sectional area	Single-phase a.c or d.c 1 two-core cable - with or without protective conductor	Three-phase a.c 1 three-core, four-core or five- core cable	Single-phase a.c or d.c 2 single core cables touching
mm ²	A	A	A
4	30	26	-
6	39	34	-
10	51	47	-
16	73	63	-
25	97	83	-
35	-	102	140
50	-	124	175
70	-	158	216
95	-	192	258
120	-	222	302
150	-	255	347
185	-	291	394
240	-	343	471
300	-	394	541
400	-	-	644
500	-	-	738
630	-	-	861

Two single core cables touching

d.c.	Single phase a.c.*		
mV	mV		
-	-		
-	-		
-	-		
-	-		
	r	x	z
-	-	-	-
1.31	1.31	0.21	1.32
0.91	0.91	0.21	0.93
0.64	0.64	0.20	0.67
0.49	0.49	0.195	0.53
0.38	0.38	0.190	0.43
0.31	0.31	0.190	0.43
0.25	0.25	0.190	0.32
0.190	0.195	0.185	0.27
0.150	0.155	0.180	0.24
0.115	0.120	0.175	0.21
0.090	0.099	0.170	0.20
0.068	0.079	0.170	0.185

* A larger voltage drop will result if cables are spaced

Technical Specifications for Welding Cables

2

Welding cables are now used for many duties ranging from automatic welding machines where the current is carried continuously, to hand welding equipment which is used intermittently and where the cable has time to cool between the periods on load.

In order to provide current ratings for intermittently loaded cables, the term 'duty cycle', sometimes called 'arcing time factor' or 'load factor' has been introduced. Duty cycle is defined as the ratio of the duration of operation under load to the duration of a complete cycle. This ratio, lying between 0 and 1, may be expressed as a percentage.

For example, if a cable carries its load current for six minutes followed by a period of four minutes off load and this cycle is repeated, every ten minutes, this gives a duty cycle of 60%.

Welding equipment to BS638 is rated for repeat cycle operation based on a ten minute period. When authorised, a repeat cycle based on a five minute period may be used.

The current rating tables give ratings corresponding to various duty cycles in common use. The following are typical duty cycles for various welding processes and applications.

Automatic welding	up to 100%
Semi-Automatic welding	30-85%
Manual welding	30-60%
Very intermittent or occasional welding	up to 20%

Current Ratings of cables with copper conductors for repeat cycle based on a 10 minute period

Nominal cross-sectional area of cond. mm ²	Current rating at a maximum duty cycle of						
	100%	85%	80%	60%	35%	20%	8%
	A	A	A	A	A	A	A
16	135	136	136	139	150	174	243
25	180	182	183	190	213	254	366
35	225	229	231	243	279	338	497
50	285	293	296	316	371	457	681
70	355	367	373	403	482	602	908
95	430	448	456	498	606	765	1164
120	500	524	534	587	721	917	1404
150	580	610	622	689	853	1090	1676
185	665	702	717	797	995	1277	1971

Ambient air temperature 25°C Conductor operating temperature: 85°C

Derating factors for higher ambient temperatures:

30°C	35°C	40°C	45°C
0.96	0.91	0.87	0.82

NOTE: Cables operating at conductor temperatures of 85°C, with the outer surface of the covering approximately 5°C lower, could cause injury if carelessly handled after a period of use at the maximum rated current.

Current Ratings of cables with copper conductors for repeat cycle based on a 5 minute period

Nominal cross-sectional area of cond. mm ²	Current rating at a maximum duty cycle of						
	100%	85%	80%	60%	35%	20%	8%
	A	A	A	A	A	A	A
16	135	138	140	148	173	212	314
25	180	186	189	204	244	305	460
35	225	235	239	260	317	400	608
50	285	299	305	336	415	529	811
70	355	375	383	426	531	682	1053
95	430	456	467	523	658	850	1319
120	500	532	545	613	776	1006	1565
150	580	619	634	716	911	1184	1845
185	665	711	729	826	1054	1374	2145

Ambient air temperature 25°C Conductor operating temperature: 85°C

Derating factors for higher ambient temperatures:

30°C	35°C	40°C	45°C
0.96	0.91	0.87	0.82

NOTE: Cables operating at conductor temperatures of 85°C, with the outer surface of the covering approximately 5°C lower, could cause injury if carelessly handled after a period of use at the maximum rated current.

Voltage drop in copper conductors at normal and elevated temperatures

Nominal cross-sectional area of cond.	DC* voltage drop/100A/10m of cable at		
	20°C	60°C	85°C
mm ²	V	V	V
16	1.24	1.430	1.560
25	0.795	0.920	0.998
35	0.565	0.654	0.709
50	0.393	0.455	0.493
70	0.277	0.321	0.348
95	0.210	0.243	0.264
120	0.164	0.190	0.206
185	0.108	0.125	0.136

The voltage drop values given above are for 10 metres of cable carrying 100 amperes. For longer lengths of cable and heavier currents, the voltage drop value should be increased proportionally.

*The corresponding values when using a.c. may be much higher depending on the inductance of the circuit.

Technical Specifications for Coil Leads

2

For ambient air temperatures other than 40/100°C, the following factors should be applied.

Types 3 and 4:

Ambient temp °C	25	30	35	40	45	50	55	60	65	70	75	80
Rating factor	1.14	1.10	1.05	1.0	0.945	0.89	0.835	0.775	0.705	0.603	0.545	0.445

Type 5:

Ambient temp °C	80	85	90	95	100	105	110	115	120	125	130	135
Rating factor	1.18	1.14	1.10	1.05	1.0	0.945	0.89	0.835	0.775	0.705	0.63	0.545

Where cables are to be grouped in free air, the following factors should be applied:

Number of cables in group	2	3	4	5	6	7	8
Rating factor	0.8	0.7	0.65	0.6	0.56	0.53	0.5

Ambient air temperature 40°C, Conductor operating temperature 90°C

Conductor resistances and current ratings

Nominal Conductor area	Nominal Conductor Stranding	Maximum d.c. resistance at 20°C	Max. continuous current ratings (BS6195) types
mm ²	#/mm	ohm/km	amp
0.5	16/0.20	38.2	13
0.75	24/0.20	25.4	17
1.0	32/0.20	19.1	20
1.5	30/0.25	13.0	26
2.5	50/0.25	7.82	36
4	56/0.30	4.85	49
6	84/0.30	3.23	64
10	80/0.40	1.85	90
16	126/0.40	1.18	120
25	196/0.40	0.757	163
35	276/0.40	0.538	203
50	396/0.40	0.375	267
70	360/0.50	0.264	324
95	475/0.50	0.200	391
120	608/0.50	0.156	455
150	756/0.50	0.126	525
185	925/0.50	0.103	600
240	1121/0.50	0.0778	725
300	1525/0.50	0.0623	840
400	2013/0.50	0.0472	1010

Guide to Minimum Bending Radii on Flexible Cords and Cables

Cable Type	Cable Diameter (mm)			
	≤ 8	> 8 ≤ 12	> 12 ≤ 20	>20
	M.B.R. (Minimum Bending Radius)			
Flexible Cable Thermoplastic (e.g. PVC)				
Fixed installation	3D	3D	4D	4D
Free movement*	5D	5D	6D	6D
Flexible Cable Elastomeric (e.g. rubber)				
Fixed installation	3D	3D	4D	4D
Free movement*	4D	4D	5D	6D

Where D = cable diameter.

The above values are based on recommendations given in BS7540 "Use of cables with a rated voltage not exceeding 450/750V"

*These values do not apply to cables used on festoon, reeling drum, cranes, robotics, etc where repetitive flexing and/or twisting is anticipated. For further details refer to BS7540.

