



# Draka

Marine, Oil & Gas

## BFCU 0.6/1KV Fire resistant Power, Control or Lighting cable



Fire resistant, Flame retardant halogen-free power cable. Enhanced oil-resistance.

## BFCU 0.6/1kV

Operating temperature : 90°C

Operating Voltage : 0.6/1kV

### Application

Armoured cable for fixed installation for power, control or lighting in both EX and safe areas, emergency and critical systems where there is a requirement for fire resistant cables.

Enhanced MUD resistant version also available for use in areas exposed to mud and drilling / cleaning fluids, meeting the mud resistance requirement in NEK 606.

### Standards applied

BS7917/BS6883/UK00A	-	Design
BS6360 class 2	-	Conductor
BS7655 section 1.2	-	Insulation
BS7655 section 2.6	-	Sheath
IEC 60332-1 & 3-22	-	Flame Retardant
IEC60331-21	-	Fire Resistant
IEC60754-1,2	-	Halogen Free
IEC 61034-1,2	-	Low Smoke

### Construction

	Code Letter	
Conductor		Tinned stranded circular copper, BS 6360, class 2
Insulation	B	Mica glass tape / EP-rubber, GP4 to BS 7655: section 1.2
Lay up / Shielding		Cores laid up in concentric layers
Inner covering	F	Flame retardant and halogen-free thermoplastic EP-rubber based compound
Tape over inner covering		PET tape + rubberized Polyamide tape
Armour/screen	C	Galvanized steel wire braid
Tape over armour/ screen		PET tape + rubberised Polyamide tape
Outer sheath	U	Flame retardant, halogen-free, enhanced oil-resisting thermoset compound (LSF), SW4 to BS 7655 section 2.6
Marking text		"metre mark" "year" "DRAKA" "BFCU" "UK00A code" "600/1000V" "number of cores" "conductor size" "BS7917" "IEC60331-21" "IEC60332-3-22" (marking may differ on cable actually supplied)
Outer sheath colour		Black

### Core identification

All cores are offwhite with black numbers No 1,2,3.....



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### Range and dimensions

Number of cores	Cross section core, mm <sup>2</sup>	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Inner Sheath, mm	Approx Diameter Inner Sheath, mm	Diameter Braid Wire, mm	Thickness Outer Sheath, mm	Approx Overall Diameter, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
2	2.5	2.0	0.8	1.1	10	0.3	1.2	14	350	46
3	1.5	1.6	0.8	1.1	10	0.3	1.2	14	340	42
3	2.5	2.0	0.8	1.1	10.5	0.3	1.3	15	410	69
4	1.5	1.6	0.8	1.1	11	0.3	1.3	15	400	56
4	2.5	2.0	0.8	1.1	11.5	0.3	1.3	16	450	92
7	2.5	2.0	0.8	1.2	14	0.3	1.4	18.5	620	161
12	2.5	2.0	0.8	1.4	19	0.3	1.6	24	960	275
27	2.5	2.0	0.8	1.7	27.5	0.45	1.9	33.5	1900	618
19	2.5	2.0	0.8	1.5	22.5	0.3	1.7	27.5	1360	435
4	70	10.85	1.4	2.1	38	0.45	2.4	45	4650	2484
3	4	2.55	1.0	1.2	13	0.3	1.3	17	540	110
2	1.5	1.6	0.8	1.1	9.5	0.3	1.2	13	295	28
12	1.5	1.6	0.8	1.3	17.5	0.3	1.5	22	770	167
3	6	3.15	1.0	1.2	14.5	0.3	1.4	18.5	650	164
2	4	2.55	1.0	1.2	12.5	0.3	1.3	16.5	470	74
3	10	4.05	1.0	1.3	16.5	0.3	1.5	21	840	271
2	10	4.05	1.0	1.3	15.5	0.3	1.4	20	710	181
3	25	6.45	1.2	1.6	23.5	0.3	1.8	28.5	1710	688
2	6	3.15	1.0	1.2	13.5	0.3	1.4	18	570	109
2	16	5.15	1.0	1.4	18	0.3	1.5	22.5	780	289
4	6	3.15	1.0	1.3	16	0.3	1.5	20.5	790	218
4	35	7.65	1.2	1.8	29	0.45	2	35	2700	1236
2	35	7.65	1.2	1.6	24.5	0.3	1.8	29.5	1740	618
3	35	7.65	1.2	1.7	26	0.45	1.9	32	2210	927
3	16	5.15	1.0	1.4	19	0.3	1.6	24	1160	434
3	50	9.0	1.4	1.8	30.5	0.45	2	36.5	2890	1293
3	70	10.85	1.4	2	34.5	0.45	2.2	41	3810	1863
4	4	2.55	1.0	1.2	14.5	0.3	1.4	18.5	630	147
3	95	12.60	1.6	2.2	39.5	0.45	2.4	46.5	4950	2513
7	1.5	1.6	0.8	1.2	13	0.3	1.3	17	520	98



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### Ordering information

Part number	Description	Sheath Colour	Design standard	UKOOA Code
840073	BFCU 0.6/1kV 2X 2.5mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD203
840074	BFCU 0.6/1kV 3X 1.5mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD302
840075	BFCU 0.6/1kV 3X 2.5mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD303
840076	BFCU 0.6/1kV 4X 1.5mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD402
840077	BFCU 0.6/1kV 4X 2.5mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD403
840078	BFCU 0.6/1kV 7X 2.5mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD703
840079	BFCU 0.6/1kV 12X 2.5mm <sup>2</sup>	BLACK	BS 7917 : 1999	YDA03
840108	BFCU 0.6/1kV 27X 2.5mm <sup>2</sup>	BLACK	BS 6883 : 1991	YDC03
840136	BFCU 0.6/1kV 19X 2.5mm <sup>2</sup>	BLACK	BS 7917 : 1999	YDB03
840151	BFCU 0,6/1kV 4X 70 MM <sup>2</sup>	BLACK	BS 7917 : 1999	YD470
840153	BFCU 0.6/1kV 3X 4mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD304
840162	BFCU 0.6/1kV 2X 1.5mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD202
840165	BFCU 0,6/1kV 12X 1,5mm <sup>2</sup>	BLACK	BS 7917 : 1999	YDA02
840167	BFCU 0.6/1kV 3X 6mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD306
840230	BFCU 0.6/1kV 2X 4mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD204
840233	BFCU 0.6/1kV 3X 10mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD310
840243	BFCU 0,6/1kV 2X 10MM <sup>2</sup>	BLACK	BS 7917 : 1999	YD210
840248	BFCU 0.6/1kV 3X 25mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD325
840249	BFCU 0.6/1kV 2X 6mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD206
840250	BFCU 0,6/1kV 2X 16 MM <sup>2</sup>	BLACK	BS 7917 : 1999	YD216
840257	BFCU 0.6/1kV 4X 6mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD406
840259	BFCU 0.6/1kV 4X 35mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD435
840270	BFCU 0.6/1kV 2X 35mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD235
840273	BFCU 0.6/1kV 3X 35mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD335
840297	BFCU 0.6/1kV 3X 16mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD316
840298	BFCU 0.6/1kV 3X 50mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD350
840299	BFCU 0.6/1kV 3X 70mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD370
840308	BFCU 0.6/1kV 4X 4mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD404
840309	BFCU 0.6/1kV 3X 95mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD370
840310	BFCU 0.6/1kV 7X 1.5mm <sup>2</sup>	BLACK	BS 7917 : 1999	YD702



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### Electrical values

Number of cores	Cross section core, mm <sup>2</sup>	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
2	2.5	7.56	9.64	0.101	0.121	26	350
3	1.5	12.2	15.6	0.108	0.130	16	210
3	2.5	7.56	9.64	0.101	0.121	21	350
4	1.5	12.2	15.6	0.108	0.130	16	210
4	2.5	7.56	9.64	0.101	0.121	21	350
7	2.5	7.56	9.64	0.101	0.121	15.5	350
12	2.5	7.56	9.64	0.101	0.121	13	350
27	2.5	7.56	9.64	0.101	0.121	10	350
19	2.5	7.56	9.64	0.101	0.121	11	350
4	70	0.27	0.344	0.075	0.090	169	9800
3	4	4.7	5.99	0.100	0.120	28	560
2	1.5	12.2	15.6	0.108	0.130	20	210
12	1.5	12.2	15.6	0.108	0.130	10	210
3	6	3.11	3.97	0.094	0.112	36	840
2	4	4.7	5.99	0.100	0.120	34	560
3	10	1.84	2.35	0.088	0.105	50	1400
2	10	1.84	2.35	0.088	0.105	61	1400
3	25	0.734	0.936	0.081	0.097	89	3500
2	6	3.11	3.97	0.094	0.112	44	840
2	16	1.16	1.48	0.082	0.099	80	2240
4	6	3.11	3.97	0.094	0.112	36	840
4	35	0.529	0.675	0.078	0.094	110	4900
2	35	0.529	0.675	0.078	0.094	133	4900
3	35	0.529	0.675	0.078	0.094	110	4900
3	16	1.16	1.48	0.082	0.099	67	2240
3	50	0.391	0.499	0.078	0.093	137	7000
3	70	0.27	0.344	0.075	0.090	169	9800
4	4	4.7	5.99	0.100	0.120	28	560
3	95	0.195	0.249	0.075	0.090	205	13300
7	1.5	12.2	15.6	0.108	0.130	12	210

### Ambient temperature correction factors

Ambient Temp °C	35	40	45	50	55	60	65	70	75	80
Rating factor	1.11	1.05	1.00	0.94	0.88	0.82	0.75	0.67	0.50	0.47

### Installation recommendations

Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
8 x D	OD < 25 mm - 4 x D, OD > 25 mm - 6 x D	50 N/mm <sup>2</sup>	-20°C