

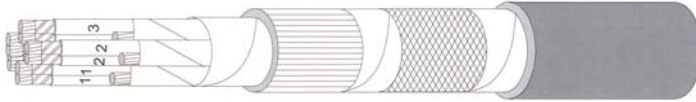


BFCU(i) 250V, Individual screen

Fire resistant and flame retardant halogen-free instrumentation cable. Enhanced oil-resistance.

BFCU(i) 250V

MGT/EPR/EPR/GSWB/LSF



Operating temperature : 90°C
Operating Voltage : 250V

Application

Fixed installation for instrumentation, communication, control and alarm systems in both EX- and safe areas. For installation in areas exposed to MUD and drilling/cleaning fluids.

Standards applied

BS 7917/ 6883 / UKOOA	- Design
BS 6360 class 5 or 2	- Conductor
BS 7655 section 1.2	- Insulation
BS 7655 section 2.6	- Sheath
IEC 60332-1	- Flame Retardant
IEC 60332-3-22	- Flame Retardant
IEC 60331-21	- Fire Resistant
IEC 600754-1,2	- Halogen Free
IEC 61034-1,2	- Low Smoke

Construction

	Code Letter	
Conductor		Tinned flexible circular copper (0,75, 1,0 and 1,5 mm ²), BS 6360, class 5, Tinned stranded copper (2,5 mm ²), BS6360 class 2
Insulation	B	Mica Glass Tape / EP-rubber, GP4 to BS 7655: section 1.2
Pair / Triple / Quad twisting		Color coded cores twisted together to a pair/triple/quad. Pairs/Triples/Quads are screened by aluminium backed polyester tape with tinned copper drain wire. Each pair/triple/quad is wrapped with polyester tape to prevent electrical contact with adjacent pairs/triples/quads. Pairs/triples/quads are identified by numbers printed directly on the insulated conductors
Lay up / Shielding		Individually shielded pairs/triples/quads are laid up in concentric layers and wrapped with a PETP tape.
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 + rubberized Polyamide tape
Outer sheath	U	Flame retardant, halogen-free, enhanced oil-resisting and mud resistant thermoset compound (LSF), SW4 to BS 7655 section 2.6
Marking text		E.g. "meter" "år" DRAKA NORSK KABEL BFCU(i) UKOOA TYPE 20P CODE GPL00 150/250V 20 PAIR X 0,75 MM2 BS 7917 IEC 60331-21 IEC 60332-3-22
Outer sheath colour		Grey or Blue



BFCU(i) 250V, Individual screen

Core identification instrumentation cables

Pair

Black - White

Triple

Black - White - Red

Quad

Black - White - Red - Blue

Pair/Triple/Quad identification

1 - One - 1 - One

Each core is identified by contrasting numerals and words, repeated along the whole length of the cable

2 - Two - 2 - Two - etc.

Range and dimensions

Number of elements	No of cores in element	Cross section core, mm ²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Inner Sheath, mm	Diameter Inner Sheath, mm	Diameter Braid Wire, mm	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
1	2	0.75	1.15	0.8	1	8 ± 0.5	0.3	1.2	12 ± 0.8	260	18
1	4	0.75	1.15	0.8	1.2	10 ± 0.8	0.3	1.3	14 ± 0.8	330	31
1	3	0.75	1.15	0.8	1	8.5 ± 0.5	0.3	1.2	12.5 ± 0.8	280	25
3	3	0.75	1.15	0.8	1.3	14.5 ± 0.8	0.3	1.5	19 ± 0.8	590	73
7	3	0.75	1.15	0.8	1.5	20 ± 1	0.3	1.7	24.5 ± 1	990	171
12	3	0.75	1.15	0.8	1.7	26.5 ± 1	0.45	2	32.5 ± 1.5	1640	293
1	2	0.75	1.15	0.8	1	8 ± 0.5	0.3	1.2	12 ± 0.8	245	18
1	4	0.75	1.15	0.8	1.2	10 ± 0.8	0.3	1.3	14 ± 0.8	330	31
1	3	0.75	1.15	0.8	1	8.5 ± 0.5	0.3	1.2	12.5 ± 0.8	280	25
3	3	0.75	1.15	0.8	1.3	14.5 ± 0.8	0.3	1.5	19 ± 0.8	590	73
7	3	0.75	1.15	0.8	1.5	20 ± 1	0.3	1.7	24.5 ± 1	990	171
12	3	0.75	1.15	0.8	1.7	26.5 ± 1	0.45	2	32.5 ± 1.5	1640	293
1	2	1.5	1.6	0.8	1.1	9.5 ± 0.5	0.3	1.2	13 ± 0.8	300	32
1	4	1.5	1.6	0.8	1.2	11 ± 0.8	0.3	1.4	15.5 ± 0.8	410	57
1	2	1.5	1.6	0.8	1.1	9.5 ± 0.5	0.3	1.2	13 ± 0.8	300	32
1	4	1.5	1.6	0.8	1.2	11 ± 0.8	0.3	1.4	15.5 ± 0.8	410	57
1	3	1.5	1.6	0.8	1.1	10 ± 0.8	0.3	1.2	14 ± 0.8	330	45
1	2	1	1.3	0.8	1	8.5 ± 0.5	0.3	1.2	12.5 ± 0.8	270	24
1	2	1	1.3	0.8	1	8.5 ± 0.5	0.3	1.2	12.5 ± 0.8	270	24
7	2	0.75	1.15	0.8	1.4	18 ± 0.8	0.3	1.6	22.5 ± 1	800	124
1	3	1	1.3	0.8	1.1	9 ± 0.5	0.3	1.2	13 ± 0.8	310	32
1	3	1.5	1.6	0.8	1.1	10 ± 0.8	0.3	1.2	14 ± 0.8	330	45
7	2	1.5	1.6	0.8	1.5	20.5 ± 1	0.3	1.7	25 ± 1	1030	222
7	2	1.5	1.6	0.8	1.5	20.5 ± 1	0.3	1.7	25 ± 1	1030	222
2	2	1.5	1.6	0.8	1.3	14 ± 0.8	0.3	1.4	18.5 ± 0.8	500	64
1	4	1	1.3	0.8	1.2	10 ± 0.8	0.3	1.4	14.5 ± 0.8	360	41
1	4	1	1.3	0.8	1.2	10 ± 0.8	0.3	1.4	14.5 ± 0.8	360	41
1	3	1	1.3	0.8	1.1	9 ± 0.5	0.3	1.2	13 ± 0.8	310	32



BFCU(i) 250V, Individual screen

Number of elements	No of cores in element	Cross section core, mm ²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Inner Sheath, mm	Diameter Inner Sheath, mm	Diameter Braid Wire, mm	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
7	2	0.75	1.15	0.8	1.4	18 ± 0.8	0.3	1.6	22.5 ± 1	800	124
20	2	0.75	1.15	0.8	1.9	30 ± 1.5	0.45	2.1	36.5 ± 1.5	2040	354
1	4	2.5	2	0.8	1.3	12 ± 0.8	0.3	1.5	16.5 ± 0.8	500	100
3	2	0.75	1.15	0.8	1.2	13.5 ± 0.8	0.3	1.4	17.5 ± 0.8	480	53
3	2	1	1.3	0.8	1.3	14 ± 0.8	0.3	1.4	18.5 ± 0.8	520	71
3	2	0.75	1.15	0.8	1.2	13.5 ± 0.8	0.3	1.4	17.5 ± 0.8	480	53
12	2	0.75	1.15	0.8	1.6	24 ± 1	0.3	1.8	29 ± 1	1240	213
20	2	0.75	1.15	0.8	1.9	30 ± 1.5	0.45	2.1	36.5 ± 1.5	2040	354
5	2	0.75	1.15	0.8	1.3	16 ± 0.8	0.3	1.5	20.5 ± 1	660	89
3	2	1.5	1.6	0.8	1.3	15 ± 0.8	0.3	1.5	19.5 ± 0.8	600	96
5	2	0.75	1.15	0.8	1.3	16 ± 0.8	0.3	1.5	20.5 ± 1	660	89
20	2	1.5	1.6	0.8	2	34 ± 1.5	0.45	2.3	41 ± 2	2640	636
1	4	1.5	1.6	0.8	1.2	11 ± 0.8	0.3	1.4	15.5 ± 0.8	410	57
5	2	1.5	1.6	0.8	1.4	18.5 ± 0.8	0.3	1.6	23 ± 1	840	159
5	2	1.5	1.6	0.8	1.4	18.5 ± 0.8	0.3	1.6	23 ± 1	840	159
12	2	0.75	1.15	0.8	1.6	24 ± 1	0.3	1.8	29 ± 1	1240	213
2	2	0.75	1.15	0.8	1.2	12.5 ± 0.8	0.3	1.4	17 ± 0.8	430	36
2	2	1.5	1.6	0.8	1.3	14 ± 0.8	0.3	1.4	18.5 ± 0.8	500	64
2	2	0.75	1.15	0.8	1.2	12.5 ± 0.8	0.3	1.4	17 ± 0.8	430	36
2	3	0.75	1.15	0.8	1.3	14 ± 0.8	0.3	1.4	18 ± 0.8	490	49
2	3	1	1.3	0.8	1.3	14.5 ± 0.8	0.3	1.5	19 ± 0.8	530	65
2	3	1.5	1.6	0.8	1.3	15.5 ± 0.8	0.3	1.5	20 ± 1	600	89
3	3	1	1.3	0.8	1.3	15.5 ± 0.8	0.3	1.5	20 ± 1	630	97
3	3	1.5	1.6	0.8	1.4	16.5 ± 0.8	0.3	1.5	21 ± 1	730	134
3	2	1	1.3	0.8	1.3	14 ± 0.8	0.3	1.4	18.5 ± 0.8	520	71
3	2	1.5	1.6	0.8	1.3	15 ± 0.8	0.3	1.5	19.5 ± 0.8	600	96
12	2	1.5	1.6	0.8	1.8	27.5 ± 1	0.45	2	33.5 ± 1.5	1750	382
12	2	1.5	1.6	0.8	1.8	27.5 ± 1	0.45	2	33.5 ± 1.5	1750	382
20	2	1.5	1.6	0.8	2	34 ± 1.5	0.45	2.3	41 ± 2	2640	636



BFCU(i) 250V, Individual screen

Electrical values instrumentation cables

Type	Capacitance, approx. (nF/km)	Inductance, approx (mH/km)	Resistance at 20°C, max. (Ohm/km)	L/R ratio, (microH/Ohm)	Insulation resistance (Minimum MOhm x km)
Shielded pair 0,75 mm ²	90	0,75	26,7	14	940
Shielded triple 0,75 mm ²	90	0,75	26,7	14	940
Shielded quad 0,75 mm ²	60	0,91	26,7	14	940
Shielded pair 1 mm ²	100	0,73	20,0	18	840
Shielded triple 1 mm ²	100	0,73	20,0	18	840
Shielded quad 1 mm ²	70	0,95	20,0	18	840
Shielded pair 1,5 mm ²	110	0,68	13,7	24,8	730
Shielded triple 1,5 mm ²	110	0,68	13,7	24,8	730
Shielded quad 1,5 mm ²	80	0,99	13,7	24,8	730
Shielded pair 2,5 mm ²	120	0,70	7,56	46,3	620

Ordering information

Part number	Description	Sheath Colour	Design standard	UKOOA Code
840009	BFCU(I) 250V 1PAIR 0.75mm ²	GREY	BS 7917 : 1999	GPF00
840010	BFCU(I) 250V 1QUAD 0.75mm ²	GREY	BS 7917 : 1999	GPX00
840017	BFCU(I) 250V 1TRIP 0.75mm ²	GREY	BS 7917 : 1999	GPR00
840018	BFCU(I) 250V 3TRIP 0.75mm ²	GREY	BS 7917 : 1999	GPS00
840019	BFCU(I) 250V 7TRIP 0.75mm ²	GREY	BS 7917 : 1999	GPT00
840020	BFCU(I) 250V 12TRIP 0.75mm ²	GREY	BS 7917 : 1999	GPU00
840029	BFCU(I) 250V 1PAIR 1.5mm ²	BLUE	BS 7917 : 1999	GMF00
840030	BFCU(I) 250V 1QUAD 1.5mm ²	BLUE	BS 7917 : 1999	GMX00
840037	BFCU(I) 250V 1TRIP 1.5mm ²	BLUE	BS 7917 : 1999	GMR00
840038	BFCU(I) 250V 3TRIP 1.5mm ²	BLUE	BS 7917 : 1999	GMS00
840039	BFCU(I) 250V 7TRIP 1.5mm ²	BLUE	BS 7917 : 1999	GMT00
840040	BFCU(I) 250V 12TRIP 1.5mm ²	BLUE	BS 7917 : 1999	GMU00
840041	BFCU(I) 250V 1PAIR 1.5mm ²	GREY	BS 6883 : 1991	GPF02
840042	BFCU(I) 250V 1QUAD 1.5mm ²	GREY	BS 6883 : 1991	GPX02
840045	BFCU(I) 250V 1PAIR 1.5mm ²	BLUE	BS 6883 : 1991	GMF02
840046	BFCU(I) 250V 1QUAD 1.5mm ²	BLUE	BS 6883 : 1991	GMX02
840087	BFCU(I) 250V 1TRIP 1.5mm ²	BLUE	BS 6883 : 1991	GMR02
840089	BFCU(I) 250V 1PAIR 1mm ²	BLUE	BS 7917 : 1999	GMF01
840123	BFCU(I) 250V 1PAIR 1mm ²	GREY	BS 7917 : 1999	GPF01
840125	BFCU(I) 250V 7PAIR 0.75mm ²	GREY	BS 7917 : 1999	GPJ00
840127	BFCU(I) 250V 1TRIP 1mm ²	GREY	BS 7917 : 1999	GPR01
840131	BFCU(I) 250V 1TRIP 1.5mm ²	GREY	BS 6883 : 1991	GPR02
840138	BFCU(I) 250V 7PAIR 1.5mm ²	GREY	BS 6883 : 1991	GPJ02
840139	BFCU(I) 250V 7PAIR 1.5mm ²	BLUE	BS 6883 : 1991	GMJ02
840140	BFCU(I) 250V 2PAIR 1.5mm ²	BLUE	BS 6883 : 1991	-
840141	BFCU(I) 250V 1QUAD 1mm ²	GREY	BS 7917 : 1999	GPX01
840142	BFCU(I) 250V 1QUAD 1mm ²	BLUE	BS 7917 : 1999	GMX01
840157	BFCU(I) 250V 1TRIP 1mm ²	BLUE	BS 7917 : 1999	GMR01
840175	BFCU(I) 250V 7PAIR 0.75mm ²	BLUE	BS 7917 : 1999	GMJ00
840200	BFCU(I) 250V 20PAIR 0.75mm ²	GREY	BS 7917 : 1999	GPL00
840202	BFCU(I) 250V 1QUAD 2.5mm ²	GREY	BS 6883 : 1991	GPX03
840217	BFCU(I) 250V 3PAIR 0.75mm ²	BLUE	BS 7917 : 1999	GMH00
840218	BFCU(I) 250V 3PAIR 1mm ²	GREY	BS 7917 : 1999	GPH01
840240	BFCU(I) 250V 3PAIR 0.75mm ²	GREY	BS 7917 : 1999	GPH00
840253	BFCU(I) 250V 12PAIR 0.75mm ²	GREY	BS 7917 : 1999	GPK00



BFCU(i) 250V, Individual screen

Part number	Description	Sheath Colour	Design standard	UKOOA Code
840254	BFCU(I) 250V 20PAIR 0.75mm ²	BLUE	BS 7917 : 1999	GML00
840267	BFCU(I) 250V 5PAIR 0.75mm ²	BLUE	BS 6883 : 1991	-
840268	BFCU(I) 250V 3PAIR 1.5mm ²	GREY	BS 6883 : 1991	GPH02
840271	BFCU(I) 250V 5PAIR 0.75mm ²	GREY	BS 6883 : 1991	-
840280	BFCU(I) 250V 20PAIR 1.5mm ²	GREY	BS 6883 : 1991	GPL02
840281	BFCU(I) 250V 1QUAD 1.5mm ²	GREY	BS 6883 : 1991	GPX02
840290	BFCU(I) 250V 5PAIR 1.5mm ²	GREY	BS 6883 : 1991	-
840291	BFCU(I) 250V 5PAIR 1.5mm ²	BLUE	BS 6883 : 1991	-
840292	BFCU(I) 250V 12PAIR 0.75mm ²	BLUE	BS 7917 : 1999	GMK00
840314	BFCU(I) 250V 2PAIR 0.75mm ²	GREY	BS 6883 : 1991	-
840315	BFCU(I) 250V 2PAIR 1.5mm ²	GREY	BS 6883 : 1991	-
840316	BFCU(I) 250V 2PAIR 0.75mm ²	BLUE	BS 6883 : 1991	-
840322	BFCU(I) 250V 2TRIP 0.75mm ²	GREY	BS 6883 : 1991	-
840323	BFCU(I) 250V 2TRIP 1mm ²	GREY	BS 6883 : 1991	-
840324	BFCU(I) 250V 2TRIP 1.5mm ²	GREY	BS 6883 : 1991	-
840325	BFCU(I) 250V 3TRIP 1mm ²	GREY	BS 7917 : 1999	GPS01
840326	BFCU(I) 250V 3TRIP 1.5mm ²	GREY	BS 6883 : 1991	GPS02
840327	BFCU(I) 250V 3PAIR 1mm ²	BLUE	BS 7917 : 1999	GMH01
840328	BFCU(I) 250V 3PAIR 1.5mm ²	BLUE	BS 6883 : 1991	GMH02
840329	BFCU(I) 250V 12PAIR 1.5mm ²	GREY	BS 6883 : 1991	GPK02
840330	BFCU(I) 250V 12PAIR 1.5mm ²	BLUE	BS 6883 : 1991	GMK02
840331	BFCU(I) 250V 20PAIR 1.5mm ²	BLUE	BS 6883 : 1991	GML02

Installation recommendations

Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
10 x D	8 x D	50 N /mm ²	-20°C