

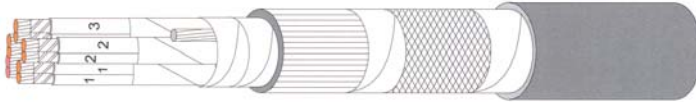


BFCU(c) 250V, Collective screen

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

BFCU(c) 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 and wrapped with polyester tape. Pairs/Triples are laid up collectively and screened by aluminium backed polyester tape with tinned copper drain wire. Pairs/triples are identified by numbers printed directly on the insulated conductors.
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(C) UKOOA TYPE 12P CODE GNK00 150/250V 12 PAIR X 0,75 MM2 BS 7917 IEC 60331-21 IEC 60332-3-22
Outer sheath colour		Grey or Blue



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Core identification instrumentation cables

Pair

Triple

Quad

Pair/Triple/Quad identification

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

Black - White

Black - White - Red

Black - White - Red - Blue

1 - One - 1 - One

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)
3	2	0.75	1.15	0.8	1.2	13 ± 0.8	0.3	1.4	17.5 ± 0.8	460	45
7	2	0.75	1.15	0.8	1.4	17.5 ± 0.8	0.3	1.5	22 ± 1	740	98
12	2	0.75	1.15	0.8	1.6	22.5 ± 1	0.3	1.7	27.5 ± 1	1120	164
19	2	0.75	1.15	0.8	1.7	26 ± 1	0.45	1.9	32 ± 1.5	1600	258
27	2	0.75	1.15	0.8	1.9	31 ± 1.5	0.45	2.2	37.5 ± 1.5	2190	360
3	2	0.75	1.15	0.8	1.2	13 ± 0.8	0.3	1.4	17.5 ± 0.8	460	45
7	2	0.75	1.15	0.8	1.4	17.5 ± 0.8	0.3	1.5	22 ± 1	740	98
12	2	0.75	1.15	0.8	1.6	22.5 ± 1	0.3	1.7	27.5 ± 1	1120	164
19	2	0.75	1.15	0.8	1.7	26 ± 1	0.45	1.9	32 ± 1.5	1600	258
27	2	0.75	1.15	0.8	1.9	31 ± 1.5	0.45	2.2	37.5 ± 1.5	2190	360
3	2	1	1.3	0.8	1.2	13.5 ± 0.8	0.3	1.4	18 ± 0.8	490	58
2	2	1.5	1.6	0.8	1.2	13.5 ± 0.8	0.3	1.4	18 ± 0.8	470	57
20	2	0.75	1.15	0.8	1.8	27 ± 1	0.45	2	33 ± 1.5	1720	271
3	2	1.5	1.6	0.8	1.3	14.5 ± 0.8	0.3	1.4	19 ± 0.8	570	82
7	2	1.5	1.6	0.8	1.4	19.5 ± 0.8	0.3	1.6	24 ± 1	920	183
12	2	1.5	1.6	0.8	1.7	26 ± 1	0.45	1.9	31.5 ± 1.5	1560	310
20	2	0.75	1.15	0.8	1.8	27 ± 1	0.45	2	33 ± 1.5	1720	271
20	2	1.5	1.6	0.8	1.9	31 ± 1.5	0.45	2.2	37.5 ± 1.5	2260	511
27	2	1.5	1.6	0.8	2.1	35.5 ± 1.5	0.45	2.4	42 ± 2	2820	688
7	3	0.75	1.15	0.8	1.4	19.5 ± 0.8	0.3	1.6	24.5 ± 1	930	144
12	3	0.75	1.15	0.8	1.7	26 ± 1	0.3	1.9	31.5 ± 1.5	1450	245
3	2	2.5	2	0.8	1.3	16 ± 0.8	0.3	1.5	20.5 ± 1	680	147
12	2	2.5	2	0.8	1.8	28.5 ± 1	0.45	2	34.5 ± 1.5	1960	565
2	2	0.75	1.15	0.8	1.2	12 ± 0.8	0.3	1.3	16.5 ± 0.8	390	31
3	3	0.75	1.15	0.8	1.3	15 ± 0.8	0.3	1.4	19 ± 0.8	550	65
7	3	1.5	1.6	0.8	1.5	22 ± 1	0.3	1.7	27 ± 1	1180	271

**BFCU(c) 250V, Collective 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)
12	3	1.5	1.6	0.8	1.8	29.5 ± 1	0.45	2	35.5 ± 1.5	2020	462
7	2	1.5	1.6	0.8	1.4	19.5 ± 0.8	0.3	1.6	24 ± 1	920	183
20	2	1.5	1.6	0.8	1.9	31 ± 1.5	0.45	2.2	37.5 ± 1.5	2260	511
2	2	1.5	1.6	0.8	1.2	13.5 ± 0.8	0.3	1.4	18 ± 0.8	470	57
3	2	1.5	1.6	0.8	1.3	14.5 ± 0.8	0.3	1.4	19 ± 0.8	570	82
5	2	1.5	1.6	0.8	1.4	18 ± 0.8	0.3	1.6	22.5 ± 1	780	133
5	2	1.5	1.6	0.8	1.4	18 ± 0.8	0.3	1.6	22.5 ± 1	780	133
7	2	1.5	1.6	0.8	1.4	19.5 ± 0.8	0.3	1.6	24 ± 1	920	183
2	2	0.75	1.15	0.8	1.2	12 ± 0.8	0.3	1.3	16.5 ± 0.8	390	31
3	2	1	1.3	0.8	1.2	13.5 ± 0.8	0.3	1.4	18 ± 0.8	490	58
5	2	0.75	1.15	0.8	1.3	15.5 ± 0.8	0.3	1.5	20 ± 1	620	71
5	2	0.75	1.15	0.8	1.3	15.5 ± 0.8	0.3	1.5	20 ± 1	620	71
12	2	1.5	1.6	0.8	1.7	26 ± 1	0.45	1.9	31.5 ± 1.5	1560	310

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)
Unshielded pair 0,75 mm ²	80	0,75	26,7	14	940
Unshielded triple 0,75 mm ²	80	0,75	26,7	14	940
Unshielded pair 1,0 mm ²	85	0,73	20,0	18	840
Unshielded triple 1,0 mm ²	85	0,73	20,0	18	840
Unshielded pair 1,5 mm ²	90	0,68	13,7	24,8	730
Unshielded triple 1,5 mm ²	90	0,68	13,7	24,8	730
Unshielded pair 2,5 mm ²	90	0,70	7,56	46,3	620
Unshielded triple 2,5 mm ²	90	0,70	7,56	46,3	620

Ordering information

Part number	Description	Sheath Colour	Design standard	UKOOA Code
840011	BFCU(C) 250V 3PAIR 0.75mm ²	GREY	BS 7917 : 1999	GNH00
840012	BFCU(C) 250V 7PAIR 0.75mm ²	GREY	BS 7917 : 1999	GNJ00
840013	BFCU(C) 250V 12PAIR 0.75mm ²	GREY	BS 7917 : 1999	GNK00
840014	BFCU(C) 250V 19PAIR 0.75mm ²	GREY	BS 6883 : 1991	-
840015	BFCU(C) 250V 27PAIR 0.75mm ²	GREY	BS 7917 : 1999	GNM00
840031	BFCU(C) 250V 3PAIR 0.75mm ²	BLUE	BS 7917 : 1999	GLH00
840032	BFCU(C) 250V 7PAIR 0.75mm ²	BLUE	BS 7917 : 1999	GLJ00
840033	BFCU(C) 250V 12PAIR 0.75mm ²	BLUE	BS 7917 : 1999	GLK00
840034	BFCU(C) 250V 19PAIR 0.75mm ²	BLUE	BS 6883 : 1991	-
840035	BFCU(C) 250V 27PAIR 0.75mm ²	BLUE	BS 7917 : 1999	GLM00

**BFCU(c) 250V, Collective screen**

Part number	Description	Sheath Colour	Design standard	UKOOA Code
840090	BFCU(C) 250V 3PAIR 1mm ²	BLUE	BS 7917 : 1999	GLH01
840111	BFCU(C) 250V 2PAIR 1.5mm ²	BLUE	BS 6883 : 1991	-
840124	BFCU(C) 250V 20PAIR 0.75mm ²	GREY	BS 7917 : 1999	GNL00
840132	BFCU(C) 250V 3PAIR 1.5mm ²	GREY	BS 6883 : 1991	GNH02
840133	BFCU(C) 250V 7PAIR 1.5mm ²	GREY	BS 6883 : 1991	GNJ02
840134	BFCU(C) 250V 12PAIR 1.5mm ²	GREY	BS 6883 : 1991	GNK02
840144	BFCU(C) 250V 20PAIR 0.75mm ²	BLUE	BS 7917 : 1999	GLL00
840171	BFCU(C) 250V 20PAIR 1.5mm ²	GREY	BS 6883 : 1991	GNL02
840172	BFCU(C) 250V 27PAIR 1.5mm ²	GREY	BS 6883 : 1991	GNM02
840173	BFCU(C) 250V 7TRIP 0.75mm ²	GREY	BS 7917 : 1999	GNT00
840174	BFCU(C) 250V 12TRIP 0.75mm ²	GREY	BS 7917 : 1999	GNU00
840203	BFCU(C) 250V 3PAIR 2.5mm ²	GREY	BS 6883 : 1991	GNH03
840205	BFCU(C) 250V 12PAIR 2.5mm ²	GREY	BS 6883 : 1991	GNK03
840220	BFCU(C) 250V 2PAIR 0.75mm ²	GREY	BS 6883 : 1991	-
840255	BFCU(C) 250V 3TRIP 0.75mm ²	GREY	BS 7917 : 1999	GNS00
840260	BFCU(C) 250V 7TRIP 1.5mm ²	GREY	BS 6883 : 1991	GNT02
840261	BFCU(C) 250V 12TRIP 1.5mm ²	GREY	BS 6883 : 1991	GNU02
840265	BFCU(C) 250V 7PAIR 1.5mm ²	BLUE	BS 6883 : 1991	GLJ02
840266	BFCU(C) 250V 20PAIR 1.5mm ²	BLUE	BS 6883 : 1991	GLL02
840285	BFCU(C) 250V 2PAIR 1.5mm ²	GREY	BS 6883 : 1991	-
840286	BFCU(C) 250V 3PAIR 1.5mm ²	BLUE	BS 6883 : 1991	GLH02
840287	BFCU(C) 250V 5PAIR 1.5mm ²	GREY	BS 6883 : 1991	-
840288	BFCU(C) 250V 5PAIR 1.5mm ²	BLUE	BS 6883 : 1991	-
840289	BFCU(C) 250V 7PAIR 1.5mm ²	BLUE	BS 6883 : 1991	GLJ02
840317	BFCU(C) 250V 2PAIR 0.75mm ²	BLUE	BS 6883 : 1991	-
840318	BFCU(C) 250V 3PAIR 1mm ²	GREY	BS 7917 : 1999	GNH01
840319	BFCU(C) 250V 5PAIR 0.75mm ²	GREY	BS 6883 : 1991	-
840320	BFCU(C) 250V 5PAIR 0.75mm ²	BLUE	BS 6883 : 1991	-
840321	BFCU(C) 250V 12PAIR 1.5mm ²	BLUE	BS 6883 : 1991	GLK02

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