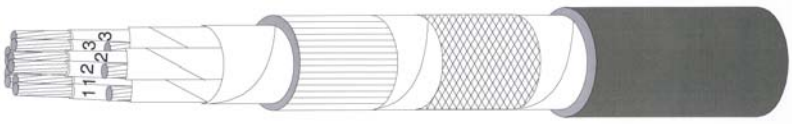
RFCU(i) 250V, Individual screen



Flame retardant halogen-free instrumentation cable. Enhanced oil-resistance.

RFCU(i) 250V

EPR/EPR/GSWB/LSF

Operating temperature : 90°C
Operating Voltage : 250V

Standards applied

BS 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 600754-1,2	- Halogen Free
IEC 61034-1,2	- Low Smoke

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.

Construction

	Code Letter	
Conductor		Tinned flexible circular copper (0,75, 1,0 and 1,5 mm²), BS 6360, class 5, Tinned stranded copper (2,5 mm²), BS6360 class 2
Insulation	**R**	Mica-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 thermoset 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" "year" DRAKA NORSK KABEL RFCU(i) UKOOA TYPE 12PS CODE KHK00 150/250V 12 PAIR X 0,75 MM2 BS 6883 IEC 60332-3-22
Outer sheath colour		Grey or Blue

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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, mm²	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	7.5 ± 0.5	0.3	1.2	11.5 ± 0.8	230	18
1	4	0.75	1.15	0.8	1.2	9 ± 0.5	0.3	1.3	13.5 ± 0.8	310	31
1	2	0.75	1.15	0.8	1	7.5 ± 0.5	0.3	1.2	11.5 ± 0.8	230	18
1	4	0.75	1.15	0.8	1.2	9 ± 0.5	0.3	1.3	13.5 ± 0.8	310	31
1	2	1	1.3	0.8	1	8 ± 0.5	0.3	1.2	12 ± 0.8	240	24
1	2	1	1.3	0.8	1	8 ± 0.5	0.3	1.2	12 ± 0.8	240	24
1	4	1	1.3	0.8	1.2	9.5 ± 0.5	0.3	1.4	14 ± 0.8	340	41
3	2	1	1.3	0.8	1.3	13 ± 0.8	0.3	1.4	17 ± 0.8	490	71
1	3	1	1.3	0.8	1.1	8.5 ± 0.5	0.3	1.2	12.5 ± 0.8	285	32
7	3	0.75	1.15	0.8	1.5	18.5 ± 0.8	0.3	1.7	23.5 ± 1	900	170
12	3	0.75	1.15	0.8	1.7	25 ± 1	0.45	2	31 ± 1.5	1530	293
7	2	0.75	1.15	0.8	1.4	16.5 ± 0.8	0.3	1.6	21 ± 1	720	124
7	2	0.75	1.15	0.8	1.4	16.5 ± 0.8	0.3	1.6	21 ± 1	720	124
12	2	0.75	1.15	0.8	1.6	22 ± 1	0.3	1.8	27 ± 1	1110	212
12	2	0.75	1.15	0.8	1.6	22 ± 1	0.3	1.8	27 ± 1	1110	212
3	3	0.75	1.15	0.8	1.3	14 ± 0.8	0.3	1.5	18.5 ± 0.8	530	73
3	2	0.75	1.15	0.8	1.2	12 ± 0.8	0.3	1.4	16.5 ± 0.8	430	53
3	2	0.75	1.15	0.8	1.2	12 ± 0.8	0.3	1.4	16.5 ± 0.8	430	53
20	2	1.5	1.6	0.8	2	31.5 ± 1.5	0.45	2.3	38 ± 1.5	2430	635
19	2	0.75	1.15	0.8	1.8	26 ± 1	0.45	2	32 ± 1.5	1660	336
12	3	0.75	1.15	0.8	1.7	25 ± 1	0.45	2	31 ± 1.5	1530	293
7	3	0.75	1.15	0.8	1.5	18.5 ± 0.8	0.3	1.7	23.5 ± 1	900	170
3	2	1.5	1.6	0.8	1.3	14 ± 0.8	0.3	1.5	18.5 ± 0.8	560	95
3	3	0.75	1.15	0.8	1.3	14 ± 0.8	0.3	1.5	18.5 ± 0.8	530	73
3	2	1.5	1.6	0.8	1.3	14 ± 0.8	0.3	1.5	18.5 ± 0.8	560	95

RFCU(i) 250V, Individual screen

Number of elements	No of cores in element	Cross section core, mm²	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	1.5	1.6	0.8	1.1	8.5 ± 0.5	0.3	1.2	12.5 ± 0.8	290	32
1	3	1.5	1.6	0.8	1.1	9 ± 0.5	0.3	1.2	13 ± 0.8	320	45
1	3	0.75	1.15	0.8	1	8 ± 0.5	0.3	1.2	12 ± 0.8	245	25
1	4	1	1.3	0.8	1.2	9.5 ± 0.5	0.3	1.4	14 ± 0.8	340	41
1	4	1.5	1.6	0.8	1.2	10 ± 0.8	0.3	1.4	14.5 ± 0.8	370	57
1	3	1.5	1.6	0.8	1.1	9 ± 0.5	0.3	1.2	13 ± 0.8	320	45

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 MOhmx km)
Shielded pair 0,75 mm²	90	0,75	26,7	14	940
Shielded triple 0,75 mm²	90	0,75	26,7	14	940
Shielded quad 0,75 mm²	60	0,91	26,7	14	940
Shielded pair 1 mm²	100	0,73	20,0	18	840
Shielded triple 1 mm²	100	0,73	20,0	18	840
Shielded quad 1 mm²	70	0,95	20,0	18	840
Shielded pair 1,5 mm²	110	0,68	13,7	24,8	730
Shielded triple 1,5 mm²	110	0,68	13,7	24,8	730
Shielded quad 1,5 mm²	80	0,99	13,7	24,8	730
Shielded pair 2,5 mm²	120	0,70	7,56	46,3	620

Ordering information

Part number	Description	Sheath Colour	Design standard	UKOOA Code
840001	RFCU(I) 250V 1PAIR 0.75mm²	GREY	BS 6883 : 1999	KKF00
840002	RFCU(I) 250V 1QUAD 0.75mm²	GREY	BS 6883 : 1999	KKX00
840021	RFCU(I) 250V 1PAIR 0.75mm²	BLUE	BS 6883 : 1999	KHF00
840022	RFCU(I) 250V 1QUAD 0.75mm²	BLUE	BS 6883 : 1999	KHX00
840094	RFCU(I) 250V 1PAIR 1mm²	GREY	BS 6883 : 1999	KKF01
840095	RFCU(I) 250V 1PAIR 1mm²	BLUE	BS 6883 : 1999	KHF01
840096	RFCU(I) 250V 1QUAD 1mm²	BLUE	BS 6883 : 1999	KHX01
840100	RFCU(I) 250V 3PAIR 1mm²	BLUE	BS 6883 : 1999	KHH01
840121	RFCU(I) 250V 1TRIP 1mm²	GREY	BS 6883 : 1999	KKR01
840211	RFCU(I) 250V 7TRIP 0.75mm²	BLUE	BS 6883 : 1999	KHT00
840212	RFCU(I) 250V 12TRIP 0.75mm²	BLUE	BS 6883 : 1999	KHU00
840214	RFCU(I) 250V 7PAIR 0.75mm²	GREY	BS 6883 : 1999	KKJ00
840215	RFCU(I) 250V 7PAIR 0.75mm²	BLUE	BS 6883 : 1999	KHJ00
840216	RFCU(I) 250V 12PAIR 0.75mm²	GREY	BS 6883 : 1999	KKK00
840221	RFCU(I) 250V 12PAIR 0.75mm²	BLUE	BS 6883 : 1999	KHK00
840224	RFCU(I) 250V 3TRIP 0.75mm²	BLUE	BS 6883 : 1999	KHS00
840226	RFCU(I) 250V 3PAIR 0.75mm²	GREY	BS 6883 : 1999	KKH00
840227	RFCU(I) 250V 3PAIR 0.75mm²	BLUE	BS 6883 : 1999	KHH00
840235	RFCU(I) 250V 20PAIR 1.5mm²	GREY	BS 6883 : 1991	KKL02
840238	RFCU(I) 250V 19PAIR 0.75mm²	BLUE	BS 6883 : 1991	-
840239	RFCU(I) 250V 12TRIP 0.75mm²	GREY	BS 6883 : 1999	KKU00
840272	RFCU(I) 250V 7TRIP 0.75mm²	GREY	BS 6883 : 1999	KKT00
840275	RFCU(I) 250V 3PAIR 1.5mm²	GREY	BS 6883 : 1991	KKH02

RFCU(i) 250V, Individual screen

Part number	Description	Sheath Colour	Design standard	UKOOA Code
840276	RFCU(I) 250V 3TRIP 0.75mm²	GREY	BS 6883 : 1999	KKS00
840278	RFCU(I) 250V 3PAIR 1.5mm²	BLUE	BS 6883 : 1991	KHH02
840293	RFCU(I) 250V 1PAIR 1.5mm²	GREY	BS 6883 : 1991	KKF02
840296	RFCU(I) 250V 1TRIP 1.5mm²	GREY	BS 6883 : 1991	KKR02
840335	RFCU(I) 250V 1TRIP 0.75mm²	GREY	BS 6883 : 1999	KKR00
840336	RFCU(I) 250V 1QUAD 1mm²	GREY	BS 6883 : 1999	KKX01
840337	RFCU(I) 250V 1QUAD 1.5mm²	GREY	BS 6883 : 1991	KKX02
840339	RFCU(I) 250V 1TRIP 1.5mm²	BLUE	BS 6883 : 1991	KHR02

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 /mm²	-20°C