

Hydro Carbon Fire resistant instrument cable BFOU-HCF(i) 150/250(300)V, S15

HydroCarbon Fire resistant, flame retardant halogen-free instrumentation cable.

BFOU-HCF(i) 150/250(300)V

MGT/EPR/EPR/TCWB/EVA/HCF/SHF1

NEK 606 Code S15

FlexFlame | HCF

Draka
1100°C / 2000°F / 200 kW/m²

Operating temperature : 90°C
Operating Voltage : 150/250(300)V

Standards applied

IEC 60092-376 (2003-05)	- Design
Draka Norsk Kabel	- HCF protection
IEC 60228 class 2	- Conductor
IEC 60092-360	- Insulation
IEC 60092-360	- Sheath
IEC 60332-1	- Flame Retardant
IEC 60332-3-22	- Flame Retardant
IEC 60331-21	- Fire Resistant
EN 1363-2 / ISO 834	- HC Fire resistance
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, emergency and critical systems where requirement for hydrocarbon fire resistance is vital.

Construction

	Code Letter	
Conductor		Tinned stranded circular copper, IEC 60228 class 2
Insulation	B	Mica-tape + EP-rubber, IEC 60092-360 (EPR)
Pair / Triple / Quad twisting		Color coded cores twisted together. Pairs/Triples are screened by copper backed polyester tape with tinned copper drain wire. Each pair/triple is wrapped with polyester tape to prevent electrical contact with adjacent pairs/triples. Pairs/triples are identified by numbered tape or by numbers printed directly on the insulated conductors.
Inner covering	F	Flame retardant and halogen-free thermoplastic compound
Tape over bedding		PET tape
Armour/screen	O	Tinned copper wire braid
Tape over armour/screen		PET tape
Outer sheath	U	Flame retardant, halogen-free and mud resistant thermoset compound, SHF2 (IEC 60092-360)
HCF protection	-HCF	Extruded heatblock compound
Tape		Lapped glassfibre tape
Overall sheath		Flame retardant, halogen-free thermoplastic compound, SHF1 (IEC 60092-360)
Marking text		Eg. "meter" "år" DRAKA NORSK KABEL BFOU-HCF(i) 250V S15 4 PAIR 1,5 mm2 HCF 1100/30 FLEX - FLAME IEC 60331-21 IEC 60332-3-22
Outer sheath colour		Grey, Blue or Black



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Core identification instrumentation cables

Pair Black - Light Blue
 Triple Black - Light Blue - Brown

Range and dimensions

New Part number	Old Part number	Type [mm ²]	Diameter over bedding [mm]	Thickness of armour wires [mmØ]	Diameter sheath [mm]	Diameter overall HCF-protection (mm)	Weight of cable approx. [kg/km]
	886723 Grey	1 pair 0,75	7.5 ± 0.5	0.2	10.5 ± 0.8	37.0 ± 1,5	1500
	887086 Blue	1 pair 0,75	7.5 ± 0.5	0.2	10.5 ± 0.8	37.0 ± 1,5	1500
	886722 Blue	1 triple 0,75	8,0 ± 0,5	0,2	11,0 ± 0,8	37,5 ± 1,5	1640
	886563 Grey	1 pair 1,5	9,0±0,5	0,2	12,0±0,8	38,5±1,5	1880
	886714 Blue	1 pair 1,5	9,0±0,5	0,2	12,0±0,8	38,5±1,5	1880
	886751 Black	1 pair 1,5	9,0±0,5	0,2	12,0±0,8	38,5±1,5	1880
	Grey	2 pair 1,5	13,0±0,8	0,3	17,0±0,8	44,0±2,0	2360
	886802 Grey	4 pair 1,5	15,5±0,8	0,3	19,5±0,8	47,0±2,0	2730
	Grey	5 pair 1,5	17,0±0,8	0,3	21,0±1,0	48,5±2,0	2950
	886803 Grey	8 pair 1,5	21,0±1,0	0,3	25,5±1,0	53,0±2,5	3570
	886804 Grey	10 pair 1,5	24,0±1,0	0,3	29,0±1,0	57,0±2,5	
	886805 Grey	12 pair 1,5	25,0±1,0	0,3	30,0±1,5	63,0±3,0	5060
	886710 Grey	1 triple 1,5	9,5 ± 0,5	0,2	12,5±0,8	39,5±1,5	1870
	Grey	12 triple 1.5	28.5 ± 1	0.3	33.5 ± 1.5	66.5 ± 3.0	5770
20118210	Grey	1 pair 2.5	9.5 ± 0.5	0.2	13.0 ± 0.8	39.5 ± 1.5	1900

Other no. of cores and cross sectional area are available on request.

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)
Shielded pair 0,75 mm ²	110	0,67	26,3	12,7
Shielded triple 0,75 mm ²	110	0,67	26,3	12,7
Shielded pair 1,5 mm ²	125	0,63	12,9	24,4
Shielded triple 1,5 mm ²	125	0,63	12,9	24,4
Shielded pair 2,5 mm ²	145	0,59	8,02	36,8
Shielded triple 2,5 mm ²	145	0,59	8,02	36,8

Installation recommendations

TYPE [mm ²]	Overall Diameter [mmØ]	Minimum bending radius		Maximum pulling tension [N]
		During Installation [mm]	Fixed Installed [mm]	
		20 x D	12 x D	
1 pair 0,75	37.0 ± 1,5	740	444	75
1 triple 0,75	37,5 ± 1,5	750	450	112,5
1 pair 1,5	38,5±1,5	770	462	150
2 pair 1,5	44.0±2,0	880	528	300
4 pair 1,5	47,0±2,0	940	564	600
5 pair 1,5	48,5±2,0	970	582	750
8 pair 1,5	53.0±2,5	1060	636	1200
10 pair 1,5	57,0±2,5	1140	684	1500
12 pair 1,5	63,0±3.0	1260	756	1800
1 triple 1,5	39.5 ± 1.5	790	474	225
12 triple 1.5	66.5 ± 3.0	1330	798	2700
1 pair 2.5	39.5 ± 1.5	790	474	250

Minimum installation temperature: - 10 °C



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