

Hydraulic and Turbine oils resistant, instrumentation cable BFOV(c) 150/250(300)V

Fire resistant, flame retardant halogen-free instrumentation cable. Resistant to turbine and hydraulic oils.

BFOV(c) 150/250(300)V

MGT/EPR/EPR/TCWB/HNBR



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

Application

Fixed installation for instrumentation, communication, control and alarm systems in both EX- and safe areas, emergency and critical systems where requirement for fire resistance exists.

Especially resistant to the following hydraulic oils:
HydraWay HVXA 46, Nyco Turbonycoil 600, Nyco Turbonycoil 610, Mobil Glygoyle 11 and Turbway 32.

Standards applied

IEC 60092-376 (2003-05)	- Design
IEC 60228 class 2	- Conductor
IEC 60092-360	- Insulation
IEC 60092-360	- Sheath
IEC 60332-1-2	- Flame Retardant
IEC 60332-3-22	- Flame Retardant
IEC 60331-1, -2, -21	- Fire Resistant
IEC 600754-1,2	- Halogen Free
IEC 61034-1,2	- Low Smoke

Construction

	Code Letter	
Conductor		Tinned annealed stranded circular copper (STCC), IEC 60228 class 2
Insulation	B	Mica-tape + EP-rubber, IEC 60092-360 (EPR)
Pair / Triple / Quad twisting		Color coded cores twisted together and wrapped with polyester tape. Pairs/Triples are laid up collectively and screened by copper backed polyester tape with tinned copper drain wire. 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 inner covering		PET tape
Armour/screen	O	Tinned annealed copper wire braid
Tape over armour/screen		PET tape
Outer sheath	U	Flame retardant, halogen-free and oil resistant thermoset compound (Therban), SHF2 (IEC 60092-360)
Marking text		Eg. "meter" "year" DRAKA NORSK KABEL BFOV(c) 250V 4 PAIR 0,75 mm ² FLEX - FLAME IEC 60092-376 IEC 60331-1*) or IEC 60331-2*) IEC 60331-21**) IEC 60332-3-22
Outer sheath colour		Grey or Blue

*) IEC 60331-1 for cables with an overall diameter exceeding 20 mm and IEC 60331-2 for cables with an overall diameter not exceeding 20 mm

**) IEC 60331-21 also at enhanced temperature 1000°C for 180 minutes



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Core identification instrumentation cables

Pair Black - Light Blue
 Triple Black - Light Blue - Brown
 Quad Black - Light Blue - Brown - Grey

Range and dimensions

Number of elements	No of cores in element	Cross section core, mm ²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Inner covering, mm	Diameter inner covering, mm	Diameter Braid Wire, mm	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
2	2	0.75	1.1	0.6	1.1	10.5 ± 0.8	0.3	1.3	14.5 ± 0.8	340	113
4	2	0.75	1.1	0.6	1.1	12.5 ± 0.8	0.3	1.3	16 ± 0.8	440	155
4	2	0.75	1.1	0.6	1.1	12.5 ± 0.8	0.3	1.3	16 ± 0.8	440	155
8	2	0.75	1.1	0.6	1.1	16.5 ± 0.8	0.3	1.5	20.5 ± 1	680	240
8	2	0.75	1.1	0.6	1.1	16.5 ± 0.8	0.3	1.5	20.5 ± 1	680	240
12	2	0.75	1.1	0.6							
8	3	0.75	1.1	0.6	1.1	18.5 ± 0.8	0.3	1.6	23 ± 1	870	308
8	3	0.75	1.1	0.6	1.1	18.5 ± 0.8	0.3	1.6	23 ± 1	870	308
2	2	1.5	1.6	0.7	1.1	13 ± 0.8	0.3	1.4	16.5 ± 0.8	440	162
4	2	1.5	1.6	0.7							
4	2	1.5	1.6	0.7							
8	2	1.5	1.6	0.7							
8	3	1.5	1.6	0.7	1.1	22.5 ± 1	0.3	1.8	27 ± 1	1270	517

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)
Unshielded pair 0,75 mm ²	100	0,67	26,3	12,7
Unshielded triple 0,75 mm ²	100	0,67	26,3	12,7
Unshielded pair 1,5 mm ²	110	0,63	12,9	24,4
Unshielded triple 1,5 mm ²	110	0,63	12,9	24,4
Unshielded pair 2,5 mm ²	125	0,59	8,02	36,8
Unshielded triple 2,5 mm ²	125	0,59	8,02	36,8
Unshielded 16 and 24 pair 2,5 mm ²	95	0,66	8,02	41,1
Unshielded 16 triple 2,5 mm ²	95	0,66	8,02	41,1

Ordering information

New Part number	Old Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
	887204	BFOV(C) 2PAIR 0.75mm ²	GREY	-	7021528872040	-
20114112		BFOV(C) 4PAIR 0.75mm ²	GREY	Yes	7021528872514	-
	886769	BFOV(C) 4PAIR 0.75mm ²	BLUE	-	7021528867695	-
20114046		BFOV(C) 8PAIR 0.75mm ²	GREY	-	7021528872545	-
20115142		BFOV(C) 8PAIR 0.75mm ²	BLUE	-	7021528873023	-
20115143		BFOV(C) 12PAIR 0.75mm ²	BLUE	-	7021528873030	-
20113991		BFOV(C) 8TRIP 0.75mm ²	GREY	-	7021528872552	-
20115144		BFOV(C) 8TRIP 0.75mm ²	BLUE	-	7021528873047	-
	886449	BFOV(C) 2PAIR 1.5mm ²	GREY	-	7021528864496	-

New Part number	Old Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
20115151		BFOV(C) 4PAIR 1.5mm ²	GREY	-	7021528873061	-
20115152		BFOV(C) 4PAIR 1.5mm ²	BLUE	-	7021528873078	-
20115155		BFOV(C) 8PAIR 1.5mm ²	GREY	-	7021528873085	-
	886451	BFOV(C) 8TRIP 1.5mm ²	GREY	-	7021528864519	-

Other no. of pairs/triples and cross sectional area are available on request.

Installation recommendations

Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
8 x D	6 x D	50 N /mm ²	-20°C



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