

Halogen-free, mud resistant, fire resistant instrumentation cable BFOU(c) 250V, S4/S8

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

BFOU(c) 250V

MGT/EPR/EPR/TCWB/EVA

NEK 606 CodeS4/S8



Operating temperature : 90°C
Operating Voltage : 250V

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. Meets the mud resistant requirements in NEK 606.

Standards applied

IEC 60092-376 (2003-05)	- Design
IEC 60228 class 2	- Conductor
IEC 60092-351	- Insulation
IEC 60092-359	- 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 annealed stranded circular copper (STCC), IEC 60228 class 2
Insulation	B	Mica-tape + EP-rubber, IEC 60092-351 (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 mud resistant thermoset compound, SHF2 (IEC 60092-359)
Marking text		Eg. "meter" "år" DRAKA NORSK KABEL BFOU(c) 250V S4/S8 4 PAIR 0,75 mm ² FLEX - FLAME IEC 60092-376 IEC 60331-21 IEC 60332-3-22 ETL Classified No. 3067229
Outer sheath colour		Grey or Blue

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	116
2	2	0.75	1.1	0.6	1.1	10.5 ± 0.8	0.3	1.3	14.5 ± 0.8	340	116
4	2	0.75	1.1	0.6	1.1	12.5 ± 0.8	0.3	1.4	16 ± 0.8	450	160
4	2	0.75	1.1	0.6	1.1	12.5 ± 0.8	0.3	1.4	16 ± 0.8	450	160
8	2	0.75	1.1	0.6	1.1	17 ± 0.8	0.3	1.5	21 ± 1	710	249
8	2	0.75	1.1	0.6	1.1	17 ± 0.8	0.3	1.5	21 ± 1	710	249
12	2	0.75	1.1	0.6	1.3	19.5 ± 0.8	0.3	1.6	23.5 ± 1	930	346
12	2	0.75	1.1	0.6	1.3	19.5 ± 0.8	0.3	1.6	23.5 ± 1	930	346
16	2	0.75	1.1	0.6	1.4	21 ± 1	0.3	1.7	25.5 ± 1	1110	402
16	2	0.75	1.1	0.6	1.4	21 ± 1	0.3	1.7	25.5 ± 1	1110	402
19	2	0.75	1.1	0.6	1.4	22 ± 1	0.3	1.8	27 ± 1	1260	468
24	2	0.75	1.1	0.6	1.8	26.5 ± 1	0.3	2	31.5 ± 1.5	1610	563
24	2	0.75	1.1	0.6	1.8	26.5 ± 1	0.3	2	31.5 ± 1.5	1610	563
2	3	0.75	1.1	0.6	1.1	12 ± 0.8	0.3	1.3	15.5 ± 0.8	410	146
2	3	0.75	1.1	0.6	1.1	12 ± 0.8	0.3	1.3	15.5 ± 0.8	410	146
4	3	0.75	1.1	0.6	1.1	14 ± 0.8	0.3	1.4	18 ± 0.8	550	205
4	3	0.75	1.1	0.6	1.1	14 ± 0.8	0.3	1.4	18 ± 0.8	550	205
8	3	0.75	1.1	0.6	1.1	18.5 ± 0.8	0.3	1.6	23 ± 1	880	322
12	3	0.75	1.1	0.6	1.3	22 ± 1	0.3	1.8	26.5 ± 1	1180	431
12	3	0.75	1.1	0.6	1.3	22 ± 1	0.3	1.8	26.5 ± 1	1180	431
16	3	0.75	1.1	0.6	1.4	24 ± 1	0.3	1.9	29 ± 1	1460	540
16	3	0.75	1.1	0.6	1.4	24 ± 1	0.3	1.9	29 ± 1	1460	540
24	3	0.75	1.1	0.6	1.8	30 ± 1.5	0.4	2.1	35.5 ± 1.5	2210	862
2	2	1.5	1.6	0.7	1.1	13 ± 0.8	0.3	1.4	16.5 ± 0.8	450	162
2	2	1.5	1.6	0.7	1.1	13 ± 0.8	0.3	1.4	16.5 ± 0.8	450	162
4	2	1.5	1.6	0.7	1.1	15 ± 0.8	0.3	1.4	19 ± 0.8	600	234
4	2	1.5	1.6	0.7	1.1	15 ± 0.8	0.3	1.4	19 ± 0.8	600	234
8	2	1.5	1.6	0.7	1.1	20.5 ± 1	0.3	1.7	25 ± 1	1020	403
8	2	1.5	1.6	0.7	1.1	20.5 ± 1	0.3	1.7	25 ± 1	1020	403
12	2	1.5	1.6	0.7	1.3	23.5 ± 1	0.3	1.8	28.5 ± 1	1340	539
12	2	1.5	1.6	0.7	1.3	23.5 ± 1	0.3	1.8	28.5 ± 1	1340	539
16	2	1.5	1.6	0.7	1.4	26 ± 1	0.3	1.9	30.5 ± 1.5	1650	675
16	2	1.5	1.6	0.7	1.4	26 ± 1	0.3	1.9	30.5 ± 1.5	1650	675
24	2	1.5	1.6	0.7	1.8	32 ± 1.5	0.4	2.2	38.5 ± 1.5	2510	1026
24	2	1.5	1.6	0.7	1.8	32 ± 1.5	0.4	2.2	38.5 ± 1.5	2510	1026
2	3	1.5	1.6	0.7	1.1	14.5 ±	0.3	1.4	18.5 ±	540	207

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	3	1.5	1.6	0.7	1.1	0.8 14.5 ± 0.8	0.3	1.4	0.8 18.5 ± 0.8	540	207
4	3	1.5	1.6	0.7	1.1	17 ± 0.8	0.3	1.5	21 ± 1	760	307
4	3	1.5	1.6	0.7	1.1	17 ± 0.8	0.3	1.5	21 ± 1	760	307
8	3	1.5	1.6	0.7	1.1	22.5 ± 1	0.3	1.8	27 ± 1	1280	515
8	3	1.5	1.6	0.7	1.1	22.5 ± 1	0.3	1.8	27 ± 1	1280	515
12	3	1.5	1.6	0.7	1.3	27 ± 1	0.3	1.9	32 ± 1.5	1750	733
16	3	1.5	1.6	0.7	1.6	30 ± 1.5	0.4	2.1	35.5 ± 1.5	2370	1030
24	3	1.5	1.6	0.7	2	37 ± 1.5	0.4	2.4	43.5 ± 2	3390	1412
2	2	2.5	2	0.7	1.1	14 ± 0.8	0.3	1.4	18 ± 0.8	530	216
4	2	2.5	2	0.7	1.1	16.5 ± 0.8	0.3	1.5	20.5 ± 1	740	324
8	2	2.5	2	0.7	1.1	22.5 ± 1	0.3	1.8	27 ± 1	1250	549
16	2	2.5	2	0.7	1.6	29 ± 1	0.4	2.1	35 ± 1.5	2230	1050
24	2	2.5	2	0.7	2	36 ± 1.5	0.4	2.4	42.5 ± 2	3270	1504
8	3	2.5	2	0.7	1.1	25 ± 1	0.3	1.9	30 ± 1.5	1620	759
16	3	2.5	2	0.7	1.6	33 ± 1.5	0.4	2.3	39.5 ± 1.5	2990	1466

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	24,8	14,3
Unshielded triple 0,75 mm ²	100	0,67	24,8	14,3
Unshielded pair 1,5 mm ²	110	0,63	12,2	26,6
Unshielded triple 1,5 mm ²	110	0,63	12,2	26,6
Unshielded pair 2,5 mm ²	125	0,59	7,56	39,0
Unshielded triple 2,5 mm ²	125	0,59	7,56	39,0

Ordering information

Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
893806	BFOU(C) 2PAIR 0.75mm ² S4/S8	GREY	Yes	7021528938067	1043821
893807	BFOU(C) 2PAIR 0.75mm ² S4/S8	BLUE	Yes	7021528938074	1043822
893818	BFOU(C) 4PAIR 0.75mm ² S4/S8	GREY	Yes	7021528938180	1043823
893819	BFOU(C) 4PAIR 0.75mm ² S4/S8	BLUE	Yes	7021528938197	1043824
893830	BFOU(C) 8PAIR 0.75mm ² S4/S8	GREY	Yes	7021528938302	1043828
893831	BFOU(C) 8PAIR 0.75mm ² S4/S8	BLUE	Yes	7021528938319	1043829
893836	BFOU(C) 12PAIR 0.75mm ² S4/S8	GREY	Yes	7021528938364	1043830
893837	BFOU(C) 12PAIR 0.75mm ² S4/S8	BLUE	-	7021528938371	1043831
893842	BFOU(C) 16PAIR 0.75mm ² S4/S8	GREY	Yes	7021528938425	1043833
893843	BFOU(C) 16PAIR 0.75mm ² S4/S8	BLUE	Yes	7021528938432	1043834
893845	BFOU(C) 19PAIR 0.75mm ² S4/S8	GREY	-	7021528938456	-
893848	BFOU(C) 24PAIR 0.75mm ² S4/S8	GREY	Yes	7021528938487	1043836
893849	BFOU(C) 24PAIR 0.75mm ² S4/S8	BLUE	Yes	7021528938494	1043837
893866	BFOU(C) 2TRIP 0.75mm ² S4/S8	GREY	Yes	7021528938661	1043921
893867	BFOU(C) 2TRIP 0.75mm ² S4/S8	BLUE	Yes	7021528938678	1043922
893878	BFOU(C) 4TRIP 0.75mm ² S4/S8	GREY	Yes	7021528938784	1043923
893879	BFOU(C) 4TRIP 0.75mm ² S4/S8	BLUE	-	7021528938791	1043924
893890	BFOU(C) 8TRIP 0.75mm ² S4/S8	GREY	-	7021528938906	1043928
893896	BFOU(C) 12TRIP 0.75mm ² S4/S8	GREY	-	7021528938968	1043930
893897	BFOU(C) 12TRIP 0.75mm ² S4/S8	BLUE	-	7021528938975	1043931
893902	BFOU(C) 16TRIP 0.75mm ² S4/S8	GREY	Yes	7021528939026	1043933



Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
893903	BFOU(C) 16TRIP 0.75mm ² S4/S8	BLUE	-	7021528939033	1043934
893908	BFOU(C) 24TRIP 0.75mm ² S4/S8	GREY	-	7021528939088	1043936
894006	BFOU(C) 2PAIR 1.5mm ² S4/S8	GREY	Yes	7021528940060	1043862
894007	BFOU(C) 2PAIR 1.5mm ² S4/S8	BLUE	-	7021528940077	1043861
894018	BFOU(C) 4PAIR 1.5mm ² S4/S8	GREY	Yes	7021528940183	1043863
894019	BFOU(C) 4PAIR 1.5mm ² S4/S8	BLUE	-	7021528940190	1043864
894030	BFOU(C) 8PAIR 1.5mm ² S4/S8	GREY	Yes	7021528940305	1043868
894031	BFOU(C) 8PAIR 1.5mm ² S4/S8	BLUE	-	7021528940312	1043869
894036	BFOU(C) 12PAIR 1.5mm ² S4/S8	GREY	Yes	7021528940367	1043870
894037	BFOU(C) 12PAIR 1.5mm ² S4/S8	BLUE	-	7021528940374	1043871
894042	BFOU(C) 16PAIR 1.5mm ² S4/S8	GREY	Yes	7021528940428	1043873
894043	BFOU(C) 16PAIR 1.5mm ² S4/S8	BLUE	-	7021528940435	1043874
894048	BFOU(C) 24PAIR 1.5mm ² S4/S8	GREY	Yes	7021528940480	1043876
894049	BFOU(C) 24PAIR 1.5mm ² S4/S8	BLUE	-	7021528940497	1043877
894066	BFOU(C) 2TRIP 1.5mm ² S4/S8	GREY	Yes	7021528940664	1043971
894067	BFOU(C) 2TRIP 1.5mm ² S4/S8	BLUE	Yes	7021528940671	1043972
894078	BFOU(C) 4TRIP 1.5mm ² S4/S8	GREY	-	7021528940787	1043973
894079	BFOU(C) 4TRIP 1.5mm ² S4/S8	BLUE	-	7021528940794	1043974
894090	BFOU(C) 8TRIP 1.5mm ² S4/S8	GREY	Yes	7021528940909	1043977
894091	BFOU(C) 8TRIP 1.5mm ² S4/S8	BLUE	-	7021528940916	1043978
894096	BFOU(C) 12TRIP 1.5mm ² S4/S8	GREY	-	7021528940961	1043979
894102	BFOU(C) 16TRIP 1.5mm ² S4/S8	GREY	-	7021528941029	1043981
894108	BFOU(C) 24TRIP 1.5mm ² S4/S8	GREY	-	7021528941081	1043987
894206	BFOU(C) 2PAIR 2.5mm ² S4/S8	GREY	-	7021528942064	-
894218	BFOU(C) 4PAIR 2.5mm ² S4/S8	GREY	-	7021528942187	-
894230	BFOU(C) 8PAIR 2.5mm ² S4/S8	GREY	-	7021528942309	-
894242	BFOU(C) 16PAIR 2.5mm ² S4/S8	GREY	-	7021528942422	-
894248	BFOU(C) 24PAIR 2.5mm ² S4/S8	GREY	-	7021528942484	-
894290	BFOU(C) 8TRIP 2.5mm ² S4/S8	GREY	-	7021528942903	-
894302	BFOU(C) 16TRIP 2.5mm ² S4/S8	GREY	-	7021528943023	-

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