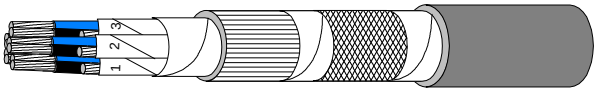
FlexFlame RFOU(i) 150/250(300)V S1/S5 Instr. cable



Flame retardant halogen-free instrumentation cable. Mud resistant

RFOU(i) 150/250(300)V

EPR/EPR/TCWB/EVA

NEK TS 606 CodeS1/S5

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

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 60754-1,2	- Halogen Free
IEC 61034-1,2	- Low Smoke

Application

Fixed installation for instrumentation, communication, Control and alarm systems in both EX (Zone 0, 1 & 2)- and safe areas. Meets the mud resistant requirements in NEK TS 606:2009.

Construction

	Code Letter	
Conductor		Tinned annealed stranded circular copper (STCC), IEC 60228 class 2
Insulation	**R**	EP-rubber, IEC 60092-351 (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.
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 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		E.g. "meter" "year" DRAKA 01 RFOU(i) 250V S1/S5 4 PAIR 0,75 mm2 IEC 60092-376 IEC 60332-3-22
Manufacturing unit		DRAKA 01 = Draka Norsk Kabel,
Outer sheath colour		Grey or Blue

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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, mm²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Inner covering, mm	Diameter inner covering, mm	Diameter Braid Wire, mm	Mechanical cross-section of the braid, mm²	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
1	2	0.75	1.1	0.6	1.1	7 ± 0.5	0.2	3.8	1.1	10 ± 0.8	185	54
1	2	0.75	1.1	0.6	1.1	7 ± 0.5	0.2	3.8	1.1	10 ± 0.8	185	54
2	2	0.75	1.1	0.6	1.1	10 ± 0.8	0.2	5.3	1.2	13 ± 0.8	275	85
2	2	0.75	1.1	0.6	1.1	10 ± 0.8	0.2	5.3	1.2	13 ± 0.8	275	85
4	2	0.75	1.1	0.6	1.1	11.5 ± 0.8	0.3	10.2	1.3	15 ± 0.8	430	166
4	2	0.75	1.1	0.6	1.1	11.5 ± 0.8	0.3	10.2	1.3	15 ± 0.8	430	166
8	2	0.75	1.1	0.6	1.1	15.5 ± 0.8	0.3	13.6	1.5	19.5 ± 0.8	690	265
8	2	0.75	1.1	0.6	1.1	15.5 ± 0.8	0.3	13.6	1.5	19.5 ± 0.8	690	265
12	2	0.75	1.1	0.6	1.4	18.5 ± 0.8	0.3	15.3	1.6	23 ± 1	940	348
12	2	0.75	1.1	0.6	1.4	18.5 ± 0.8	0.3	15.3	1.6	23 ± 1	940	348
16	2	0.75	1.1	0.6	1.9	21.5 ± 1	0.3	17.8	1.7	26 ± 1	1240	439
16	2	0.75	1.1	0.6	1.9	21.5 ± 1	0.3	17.8	1.7	26 ± 1	1240	439
19	2	0.75	1.1	0.6	1.9	22.5 ± 1	0.3	17.8	1.7	27 ± 1	1360	489
19	2	0.75	1.1	0.6	1.9	22.5 ± 1	0.3	17.8	1.7	27 ± 1	1360	489
24	2	0.75	1.1	0.6	2.1	26.5 ± 1	0.3	20.4	1.9	31.5 ± 1.5	1720	596
24	2	0.75	1.1	0.6	2.1	26.5 ± 1	0.3	20.4	1.9	31.5 ± 1.5	1720	596
1	3	0.75	1.1	0.6	1.1	7.5 ± 0.5	0.2	3.8	1.1	10.5 ± 0.8	200	60
1	3	0.75	1.1	0.6	1.1	7.5 ± 0.5	0.2	3.8	1.1	10.5 ± 0.8	200	60
2	3	0.75	1.1	0.6	1.1	11 ± 0.8	0.3	8.5	1.3	14.5 ± 0.8	360	130
2	3	0.75	1.1	0.6	1.1	11 ± 0.8	0.3	8.5	1.3	14.5 ± 0.8	360	130
4	3	0.75	1.1	0.6	1.1	12.5 ± 0.8	0.3	10.2	1.4	16.5 ± 0.8	510	192
4	3	0.75	1.1	0.6	1.1	12.5 ± 0.8	0.3	10.2	1.4	16.5 ± 0.8	510	192
8	3	0.75	1.1	0.6	1.1	17 ± 0.8	0.3	13.6	1.5	21.5 ± 1	800	317
8	3	0.75	1.1	0.6	1.1	17 ± 0.8	0.3	13.6	1.5	21.5 ± 1	800	317
12	3	0.75	1.1	0.6	1.4	21 ± 1	0.3	17.8	1.7	25.5 ± 1	1160	450
12	3	0.75	1.1	0.6	1.4	21 ± 1	0.3	17.8	1.7	25.5 ± 1	1160	450
16	3	0.75	1.1	0.6	2.1	24.5 ± 1	0.3	17.8	1.8	29.5 ± 1	1540	542
16	3	0.75	1.1	0.6	2.1	24.5 ± 1	0.3	17.8	1.8	29.5 ± 1	1540	542
19	3	0.75	1.1	0.6	2.1	25.5 ± 1	0.3	20.4	1.8	30 ± 1.5	1720	636
24	3	0.75	1.1	0.6	2.5	30.5 ± 1.5	0.3	22.9	2	36 ± 1.5	2240	776
24	3	0.75	1.1	0.6	2.5	30.5 ± 1.5	0.3	22.9	2	36 ± 1.5	2240	776
1	2	1.5	1.6	0.7	1.1	8 ± 0.5	0.2	3.8	1.1	11 ± 0.8	230	71
1	2	1.5	1.6	0.7	1.1	8 ± 0.5	0.2	3.8	1.1	11 ± 0.8	230	71
2	2	1.5	1.6	0.7	1.1	12 ± 0.8	0.3	10.2	1.3	15.5 ± 0.8	420	168
2	2	1.5	1.6	0.7	1.1	12 ± 0.8	0.3	10.2	1.3	15.5 ± 0.8	420	168
4	2	1.5	1.6	0.7	1.1	14 ± 0.8	0.3	11.9	1.4	18 ± 0.8	600	252

Subject to change without prior notice

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Number of elements	No of cores in element	Cross section core, mm²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Inner covering, mm	Diameter inner covering, mm	Diameter Braid Wire, mm	Mechanical cross-section of the braid, mm²	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
4	2	1.5	1.6	0.7	1.1	14 ± 0.8	0.3	11.9	1.4	18 ± 0.8	600	252
8	2	1.5	1.6	0.7	1.1	19 ± 0.8	0.3	15.3	1.6	23.5 ± 1	980	420
8	2	1.5	1.6	0.7	1.1	19 ± 0.8	0.3	15.3	1.6	23.5 ± 1	980	420
12	2	1.5	1.6	0.7	1.4	23 ± 1	0.3	17.8	1.8	28 ± 1	1380	580
12	2	1.5	1.6	0.7	1.4	23 ± 1	0.3	17.8	1.8	28 ± 1	1380	580
16	2	1.5	1.6	0.7	1.9	26.5 ± 1	0.3	20.4	1.9	31.5 ± 1.5	1830	740
16	2	1.5	1.6	0.7	1.9	26.5 ± 1	0.3	20.4	1.9	31.5 ± 1.5	1830	740
19	2	1.5	1.6	0.7	1.9	27.5 ± 1	0.3	22.9	1.9	32.5 ± 1.5	2040	866
19	2	1.5	1.6	0.7	1.9	27.5 ± 1	0.3	22.9	1.9	32.5 ± 1.5	2040	866
24	2	1.5	1.6	0.7	2.3	33 ± 1.5	0.4	36.2	2.2	39 ± 1.5	2790	1165
24	2	1.5	1.6	0.7	2.3	33 ± 1.5	0.4	36.2	2.2	39 ± 1.5	2790	1165
32	2	1.5	1.6	0.7	2.4	37 ± 1.5	0.4	40.7	2.3	43 ± 2	3440	1480
1	3	1.5	1.6	0.7	1.1	8.5 ± 0.5	0.2	4.5	1.1	11.5 ± 0.8	260	93
1	3	1.5	1.6	0.7	1.1	8.5 ± 0.5	0.2	4.5	1.1	11.5 ± 0.8	260	93
2	3	1.5	1.6	0.7	1.1	13.5 ± 0.8	0.3	11.9	1.4	17.5 ± 0.8	510	212
4	3	1.5	1.6	0.7	1.1	15.5 ± 0.8	0.3	13.6	1.5	20 ± 1	740	325
4	3	1.5	1.6	0.7	1.1	15.5 ± 0.8	0.3	13.6	1.5	20 ± 1	740	325
8	3	1.5	1.6	0.7	1.1	21.5 ± 1	0.3	17.8	1.7	26 ± 1	1230	557
8	3	1.5	1.6	0.7	1.1	21.5 ± 1	0.3	17.8	1.7	26 ± 1	1230	557
12	3	1.5	1.6	0.7	1.4	26 ± 1	0.3	20.4	1.9	31 ± 1.5	1740	774
12	3	1.5	1.6	0.7	1.4	26 ± 1	0.3	20.4	1.9	31 ± 1.5	1740	774
16	3	1.5	1.6	0.7	2.3	31 ± 1.5	0.3	22.9	2	36 ± 1.5	2420	990
16	3	1.5	1.6	0.7	2.3	31 ± 1.5	0.3	22.9	2	36 ± 1.5	2420	990
24	3	1.5	1.6	0.7	2.5	38 ± 1.5	0.4	40.7	2.3	44 ± 2	3570	1547
24	3	1.5	1.6	0.7	2.5	38 ± 1.5	0.4	40.7	2.3	44 ± 2	3570	1547
1	2	2.5	2	0.7	1.1	9 ± 0.5	0.2	4.5	1.1	12 ± 0.8	280	99
2	2	2.5	2	0.7	1.1	13.5 ± 0.8	0.3	11.9	1.4	17.5 ± 0.8	530	225
2	2	2.5	2	0.7	1.1	13.5 ± 0.8	0.3	11.9	1.4	17.5 ± 0.8	530	225
4	2	2.5	2	0.7	1.1	16 ± 0.8	0.3	13.6	1.5	20 ± 1	770	350

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 mm²	110	0,67	26,3	12,7
Shielded triple 0,75 mm²	110	0,67	26,3	12,7
Shielded pair 1,5 mm²	125	0,63	12,9	24,4
Shielded triple 1,5 mm²	125	0,63	12,9	24,4
Shielded pair 2,5 mm²	145	0,59	8,02	36,8
Shielded triple 2,5 mm²	145	0,59	8,02	36,8

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Ordering information

Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
892000	RFOU(I) 1PAIR 0.75mm² S1/S5	GREY	Yes	7021528920000	1044620
892001	RFOU(I) 1PAIR 0.75mm² S1/S5	BLUE	Yes	7021528920017	1044619
892006	RFOU(I) 2PAIR 0.75mm² S1/S5	GREY	Yes	7021528920062	1044621
892007	RFOU(I) 2PAIR 0.75mm² S1/S5	BLUE	-	7021528920079	1044622
892018	RFOU(I) 4PAIR 0.75mm² S1/S5	GREY	Yes	7021528920185	1044623
892019	RFOU(I) 4PAIR 0.75mm² S1/S5	BLUE	-	7021528920192	1044624
892030	RFOU(I) 8PAIR 0.75mm² S1/S5	GREY	Yes	7021528920307	1044628
892031	RFOU(I) 8PAIR 0.75mm² S1/S5	BLUE	-	7021528920314	1044629
892036	RFOU(I) 12PAIR 0.75mm² S1/S5	GREY	-	7021528920369	1044630
892037	RFOU(I) 12PAIR 0.75mm² S1/S5	BLUE	-	7021528920376	1044631
892042	RFOU(I) 16PAIR 0.75mm² S1/S5	GREY	-	7021528920420	1044633
892043	RFOU(I) 16PAIR 0.75mm² S1/S5	BLUE	-	7021528920437	1044632
892045	RFOU(I) 19PAIR 0.75mm² S1/S5	GREY	-	7021528920451	1044634
892046	RFOU(I) 19PAIR 0.75mm² S1/S5	BLUE	-	7021528920468	1044635
892048	RFOU(I) 24PAIR 0.75mm² S1/S5	GREY	-	7021528920482	1044636
892049	RFOU(I) 24PAIR 0.75mm² S1/S5	BLUE	-	7021528920499	1044637
892060	RFOU(I) 1TRIP 0.75mm² S1/S5	GREY	Yes	7021528920604	1044690
892061	RFOU(I) 1TRIP 0.75mm² S1/S5	BLUE	-	7021528920611	1044689
892066	RFOU(I) 2TRIP 0.75mm² S1/S5	GREY	-	7021528920666	1044691
892067	RFOU(I) 2TRIP 0.75mm² S1/S5	BLUE	-	7021528920673	1044692
892078	RFOU(I) 4TRIP 0.75mm² S1/S5	GREY	-	7021528920789	1044693
892079	RFOU(I) 4TRIP 0.75mm² S1/S5	BLUE	-	7021528920796	1044694
892090	RFOU(I) 8TRIP 0.75mm² S1/S5	GREY	-	7021528920901	1044697
892091	RFOU(I) 8TRIP 0.75mm² S1/S5	BLUE	-	7021528920918	1044698
892096	RFOU(I) 12TRIP 0.75mm² S1/S5	GREY	-	7021528920963	1044699
892097	RFOU(I) 12TRIP 0.75mm² S1/S5	BLUE	-	7021528920970	1044700
892102	RFOU(I) 16TRIP 0.75mm² S1/S5	GREY	-	7021528921021	1044701
892103	RFOU(I) 16TRIP 0.75mm² S1/S5	BLUE	-	7021528921038	1044702
892106	RFOU(I) 19TRIP 0.75mm² S1/S5	GREY	-	7021528921069	-
892108	RFOU(I) 24TRIP 0.75mm² S1/S5	GREY	-	7021528921083	1044707
892109	RFOU(I) 24TRIP 0.75mm² S1/S5	BLUE	-	7021528921090	1044708
892200	RFOU(I) 1PAIR 1.5mm² S1/S5	GREY	Yes	7021528922004	1044460
892201	RFOU(I) 1PAIR 1.5mm² S1/S5	BLUE	Yes	7021528922011	1044459
892206	RFOU(I) 2PAIR 1.5mm² S1/S5	GREY	-	7021528922066	1044661
892207	RFOU(I) 2PAIR 1.5mm² S1/S5	BLUE	-	7021528922073	1044662
892218	RFOU(I) 4PAIR 1.5mm² S1/S5	GREY	Yes	7021528922189	1044663
892219	RFOU(I) 4PAIR 1.5mm² S1/S5	BLUE	-	7021528922196	1044664
892230	RFOU(I) 8PAIR 1.5mm² S1/S5	GREY	Yes	7021528922301	1044668
892231	RFOU(I) 8PAIR 1.5mm² S1/S5	BLUE	Yes	7021528922318	1044669
892236	RFOU(I) 12PAIR 1.5mm² S1/S5	GREY	Yes	7021528922363	1044670
892237	RFOU(I) 12PAIR 1.5mm² S1/S5	BLUE	-	7021528922370	1044671
892242	RFOU(I) 16PAIR 1.5mm² S1/S5	GREY	Yes	7021528922424	1044673
892243	RFOU(I) 16PAIR 1.5mm² S1/S5	BLUE	-	7021528922431	1044672
892245	RFOU(I) 19PAIR 1.5mm² S1/S5	GREY	-	7021528922455	1044674
892246	RFOU(I) 19PAIR 1.5mm² S1/S5	BLUE	-	7021528922462	1044675
892248	RFOU(I) 24PAIR 1.5mm² S1/S5	GREY	-	7021528922486	1044678
892249	RFOU(I) 24PAIR 1.5mm² S1/S5	BLUE	-	7021528922493	1044679
892254	RFOU(I) 32PAIR 1.5mm² S1/S5	GREY	-	7021528922547	-
892260	RFOU(I) 1TRIP 1.5mm² S1/S5	GREY	-	7021528922608	1044560
892261	RFOU(I) 1TRIP 1.5mm² S1/S5	BLUE	-	7021528922615	1044559
892266	RFOU(I) 2TRIP 1.5mm² S1/S5	GREY	-	7021528922660	1044762
892278	RFOU(I) 4TRIP 1.5mm² S1/S5	GREY	-	7021528922783	1044764
892279	RFOU(I) 4TRIP 1.5mm² S1/S5	BLUE	-	7021528922790	1044765
892290	RFOU(I) 8TRIP 1.5mm² S1/S5	GREY	-	7021528922905	1044768
892291	RFOU(I) 8TRIP 1.5mm² S1/S5	BLUE	-	7021528922912	1044769
892296	RFOU(I) 12TRIP 1.5mm² S1/S5	GREY	-	7021528922967	1044770
892297	RFOU(I) 12TRIP 1.5mm² S1/S5	BLUE	-	7021528922974	1044771
892302	RFOU(I) 16TRIP 1.5mm² S1/S5	GREY	-	7021528923025	1044773
892303	RFOU(I) 16TRIP 1.5mm² S1/S5	BLUE	-	7021528923032	1044772
892308	RFOU(I) 24TRIP 1.5mm² S1/S5	GREY	-	7021528923087	1044779
892309	RFOU(I) 24TRIP 1.5mm² S1/S5	BLUE	-	7021528923094	1044780

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Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
892400	RFOU(I) 1PAIR 2.5mm² S1/S5	GREY	-	7021528924008	-
892406	RFOU(I) 2PAIR 2.5mm² S1/S5	GREY	-	7021528924060	-
892407	RFOU(I) 2PAIR 2.5mm² S1/S5	BLUE	-	7021528924077	-
892418	RFOU(I) 4PAIR 2.5mm² S1/S5	GREY	-	7021528924183	-

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 /mm²	-20°C