

Halogen-free, mud resistant instrumentation cable RFOU(c) 150/250(300)V, S2/S6



Flame retardant halogen-free instrumentation cable. Mud resistant

RFOU(c) 150/250(300)V

EPR/EPR/TCWB/EVA

NEK TS 606 CodeS2/S6

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

Standards applied

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.

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

Construction

	Code Letter	
Conductor		Tinned annealed stranded circular copper (STCC), IEC 60228 class 2
Insulation	R	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 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 60092-360)
Marking text		E.g. "meter" "year" DRAKA 01 RFOU(c) 250V S2/S6 8 PAIR 0,75 mm2 IEC 60092-376 IEC 60332-3-22
Manufacturing unit		DRAKA 01 = Draka Norsk Kabel,
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	Mechanical cross-section of the braid, mm ²	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 ± 0.8	0.2	5.3	1.2	13 ± 0.8	270	81
2	2	0.75	1.1	0.6	1.1	10 ± 0.8	0.2	5.3	1.2	13 ± 0.8	270	81
4	2	0.75	1.1	0.6	1.1	11.5 ± 0.8	0.3	8.5	1.3	15 ± 0.8	390	138
4	2	0.75	1.1	0.6	1.1	11.5 ± 0.8	0.3	8.5	1.3	15 ± 0.8	390	139
8	2	0.75	1.1	0.6	1.1	15 ± 0.8	0.3	11.9	1.4	19 ± 0.8	600	223
8	2	0.75	1.1	0.6	1.1	15 ± 0.8	0.3	11.9	1.4	19 ± 0.8	600	223
12	2	0.75	1.1	0.6	1.4	18 ± 0.8	0.3	15.3	1.5	22 ± 1	820	307
12	2	0.75	1.1	0.6	1.4	18 ± 0.8	0.3	15.3	1.5	22 ± 1	820	307
16	2	0.75	1.1	0.6	1.9	20.5 ± 1	0.3	15.3	1.6	24.5 ± 1	1040	358
16	2	0.75	1.1	0.6	1.9	20.5 ± 1	0.3	15.3	1.6	24.5 ± 1	1040	358
19	2	0.75	1.1	0.6	1.9	21.5 ± 1	0.3	17.8	1.6	25.5 ± 1	1160	422
24	2	0.75	1.1	0.6	2.1	25 ± 1	0.3	20.4	1.8	29.5 ± 1	1450	510
24	2	0.75	1.1	0.6	2.1	25 ± 1	0.3	20.4	1.8	29.5 ± 1	1450	510
2	3	0.75	1.1	0.6	1.1	11 ± 0.8	0.2	5.3	1.2	14 ± 0.8	310	94
2	3	0.75	1.1	0.6	1.1	11 ± 0.8	0.2	5.3	1.2	14 ± 0.8	310	94
4	3	0.75	1.1	0.6	1.1	12.5 ± 0.8	0.3	10.2	1.3	16.5 ± 0.8	470	181
4	3	0.75	1.1	0.6	1.1	12.5 ± 0.8	0.3	10.2	1.3	16.5 ± 0.8	470	181
8	3	0.75	1.1	0.6	1.1	17 ± 0.8	0.3	13.6	1.5	21 ± 1	740	291
8	3	0.75	1.1	0.6	1.1	17 ± 0.8	0.3	13.6	1.5	21 ± 1	740	291
12	3	0.75	1.1	0.6	1.4	20 ± 1	0.3	15.3	1.6	24.5 ± 1	1010	384
12	3	0.75	1.1	0.6	1.4	20 ± 1	0.3	15.3	1.6	24.5 ± 1	1010	384
16	3	0.75	1.1	0.6	2.1	23 ± 1	0.3	17.8	1.7	27.5 ± 1	1350	486
24	3	0.75	1.1	0.6	2.3	28 ± 1	0.3	20.4	1.9	33 ± 1.5	1860	664
24	3	0.75	1.1	0.6	2.3	28 ± 1	0.3	20.4	1.9	33 ± 1.5	1860	664
2	2	1.5	1.6	0.7	1.1	12 ± 0.8	0.3	10.2	1.3	15.5 ± 0.8	410	162
2	2	1.5	1.6	0.7	1.1	12 ± 0.8	0.3	10.2	1.3	15.5 ± 0.8	410	162
4	2	1.5	1.6	0.7	1.1	14 ± 0.8	0.3	11.9	1.4	18 ± 0.8	560	234
4	2	1.5	1.6	0.7	1.1	14 ± 0.8	0.3	11.9	1.4	18 ± 0.8	560	234
8	2	1.5	1.6	0.7	1.1	18.5 ± 0.8	0.3	15.3	1.6	23 ± 1	890	379
8	2	1.5	1.6	0.7	1.1	18.5 ± 0.8	0.3	15.3	1.6	23 ± 1	890	379
10	2	1.5	1.6	0.7	1.2	21 ± 1	0.3	17.8	1.7	25.5 ± 1	1070	459
10	2	1.5	1.6	0.7	1.2	21 ± 1	0.3	17.8	1.7	25.5 ± 1	1070	459
12	2	1.5	1.6	0.7	1.4	22 ± 1	0.3	17.8	1.7	26.5 ± 1	1210	515
12	2	1.5	1.6	0.7	1.4	22 ± 1	0.3	17.8	1.7	26.5 ± 1	1210	515
16	2	1.5	1.6	0.7	1.9	25 ± 1	0.3	20.4	1.8	29.5 ± 1	1580	651
16	2	1.5	1.6	0.7	1.9	25 ± 1	0.3	20.4	1.8	29.5 ± 1	1580	651
19	2	1.5	1.6	0.7	1.9	26.5 ± 1	0.3	20.4	1.9	31 ± 1.5	1750	735
24	2	1.5	1.6	0.7	2.3	31 ± 1.5	0.3	25.4	2.1	36.5 ± 1.5	2270	924
32	2	1.5	1.6	0.7	2.4	34 ± 1.5	0.4	36.2	2.2	40 ± 2	2890	1252
32	2	1.5	1.6	0.7	2.4	34 ± 1.5	0.4	36.2	2.2	40 ± 2	2890	1252
2	3	1.5	1.6	0.7	1.1	13 ± 0.8	0.3	10.2	1.4	17 ± 0.8	480	190
2	3	1.5	1.6	0.7	1.1	13 ± 0.8	0.3	10.2	1.4	17 ± 0.8	480	190
4	3	1.5	1.6	0.7	1.1	15.5 ± 0.8	0.3	11.9	1.4	19.5 ± 0.8	670	290
8	3	1.5	1.6	0.7	1.1	21 ± 1	0.3	17.8	1.7	25.5 ± 1	1130	516
12	3	1.5	1.6	0.7	1.4	24.5 ± 1	0.3	20.4	1.8	29.5 ± 1	1560	708
12	3	1.5	1.6	0.7	1.4	24.5 ± 1	0.3	20.4	1.8	29.5 ± 1	1560	708
16	3	1.5	1.6	0.7	2.1	28 ± 1	0.3	22.9	1.9	33 ± 1.5	2080	900
16	3	1.5	1.6	0.7	2.1	28 ± 1	0.3	22.9	1.9	33 ± 1.5	2080	900
24	3	1.5	1.6	0.7	2.5	35 ± 1.5	0.4	36.2	2.2	41 ± 2	3110	1365

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	Mechanical cross-section of the braid, mm ²	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
24	3	1.5	1.6	0.7	2.5	35 ± 1.5	0.4	36.2	2.2	41 ± 2	3110	1365
2	2	2.5	2	0.7	1.1	13.5 ± 0.8	0.3	10.2	1.4	17.5 ± 0.8	490	200
4	2	2.5	2	0.7	1.1	16 ± 0.8	0.3	11.9	1.4	19.5 ± 0.8	680	309
4	2	2.5	2	0.7	1.1	16 ± 0.8	0.3	11.9	1.4	19.5 ± 0.8	680	309
12	2	2.5	2	0.7	2.1	27 ± 1	0.3	20.4	1.8	31.5 ± 1.5	1740	759

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

Ordering information

New Part number	Old Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
20110611		RFOU(C) 2PAIR 0.75mm ² S2/S6	GREY	Yes	7021528926064	1044421
20110857		RFOU(C) 2PAIR 0.75mm ² S2/S6	BLUE	-	7021528926071	1044422
20110612		RFOU(C) 4PAIR 0.75mm ² S2/S6	GREY	Yes	7021528926187	1044423
20110613		RFOU(C) 4PAIR 0.75mm ² S2/S6	BLUE	-	7021528926194	1044424
20110614		RFOU(C) 8PAIR 0.75mm ² S2/S6	GREY	-	7021528926309	1044428
20110772		RFOU(C) 8PAIR 0.75mm ² S2/S6	BLUE	-	7021528926316	1044429
20110615		RFOU(C) 12PAIR 0.75mm ² S2/S6	GREY	-	7021528926361	1044430
	892637	RFOU(C) 12PAIR 0.75mm ² S2/S6	BLUE	-	7021528926378	1044431
20109493		RFOU(C) 16PAIR 0.75mm ² S2/S6	GREY	-	7021528926422	1044433
	892643	RFOU(C) 16PAIR 0.75mm ² S2/S6	BLUE	-	7021528926439	1044432
	892645	RFOU(C) 19PAIR 0.75mm ² S2/S6	GREY	-	7021528926453	1044434
20109494		RFOU(C) 24PAIR 0.75mm ² S2/S6	GREY	-	7021528926484	1044438
	892649	RFOU(C) 24PAIR 0.75mm ² S2/S6	BLUE	-	7021528926491	1044437
20110858		RFOU(C) 2TRIP 0.75mm ² S2/S6	GREY	-	7021528926668	1044490
20110616		RFOU(C) 2TRIP 0.75mm ² S2/S6	BLUE	-	7021528926675	1044491
20110859		RFOU(C) 4TRIP 0.75mm ² S2/S6	GREY	-	7021528926781	1044492
	892679	RFOU(C) 4TRIP 0.75mm ² S2/S6	BLUE	-	7021528926798	1044493
20120514		RFOU(C) 8TRIP 0.75mm ² S2/S6	GREY	-	7021528926903	1044496
	892691	RFOU(C) 8TRIP 0.75mm ² S2/S6	BLUE	-	7021528926910	1044497
	892696	RFOU(C) 12TRIP 0.75mm ² S2/S6	GREY	-	7021528926965	1044499
	892697	RFOU(C) 12TRIP 0.75mm ² S2/S6	BLUE	-	7021528926972	1044500
	892702	RFOU(C) 16TRIP 0.75mm ² S2/S6	GREY	-	7021528927023	1044501
	892708	RFOU(C) 24TRIP 0.75mm ² S2/S6	GREY	-	7021528927085	1044507
	892709	RFOU(C) 24TRIP 0.75mm ² S2/S6	BLUE	-	7021528927092	1044508
20110617		RFOU(C) 2PAIR 1.5mm ² S2/S6	GREY	Yes	7021528928068	1044461
20110618		RFOU(C) 2PAIR 1.5mm ² S2/S6	BLUE	-	7021528928075	1044462
20110619		RFOU(C) 4PAIR 1.5mm ² S2/S6	GREY	Yes	7021528928181	1044463
20110620		RFOU(C) 4PAIR 1.5mm ² S2/S6	BLUE	-	7021528928198	1044464
20110621		RFOU(C) 8PAIR 1.5mm ² S2/S6	GREY	Yes	7021528928303	1044468
	892831	RFOU(C) 8PAIR 1.5mm ² S2/S6	BLUE	-	7021528928310	1044469
	892834	RFOU(C) 10PAIR 1.5mm ² S2/S6	GREY	-	7021528928341	-
	892835	RFOU(C) 10PAIR 1.5mm ² S2/S6	BLUE	-	7021528928358	-
20110622		RFOU(C) 12PAIR 1.5mm ² S2/S6	GREY	-	7021528928365	1044470
	892837	RFOU(C) 12PAIR 1.5mm ² S2/S6	BLUE	-	7021528928372	-
20109495		RFOU(C) 16PAIR 1.5mm ² S2/S6	GREY	Yes	7021528928426	1044472
	892843	RFOU(C) 16PAIR 1.5mm ² S2/S6	BLUE	-	7021528928433	1044473
	892845	RFOU(C) 19PAIR 1.5mm ² S2/S6	GREY	-	7021528928457	1044474
20110860		RFOU(C) 24PAIR 1.5mm ² S2/S6	GREY	-	7021528928488	1044478
	892854	RFOU(C) 32PAIR 1.5mm ² S2/S6	GREY	-	7021528928549	-

New Part number	Old Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
	892855	RFOU(C) 32PAIR 1.5mm ² S2/S6	BLUE	-	7021528928556	-
20110861		RFOU(C) 2TRIP 1.5mm ² S2/S6	GREY	-	7021528928662	1044561
	892867	RFOU(C) 2TRIP 1.5mm ² S2/S6	BLUE	-	7021528928679	-
	892878	RFOU(C) 4TRIP 1.5mm ² S2/S6	GREY	-	7021528928785	1044563
	892891	RFOU(C) 8TRIP 1.5mm ² S2/S6	BLUE	-	7021528928914	1044568
	892896	RFOU(C) 12TRIP 1.5mm ² S2/S6	GREY	-	7021528928969	1044569
	892897	RFOU(C) 12TRIP 1.5mm ² S2/S6	BLUE	-	7021528928976	1044570
	892902	RFOU(C) 16TRIP 1.5mm ² S2/S6	GREY	-	7021528929027	1044571
	892903	RFOU(C) 16TRIP 1.5mm ² S2/S6	BLUE	-	7021528929034	1044572
	892908	RFOU(C) 24TRIP 1.5mm ² S2/S6	GREY	-	7021528929089	1044577
	892909	RFOU(C) 24TRIP 1.5mm ² S2/S6	BLUE	-	7021528929096	1044578
	893006	RFOU(C) 2PAIR 2.5mm ² S2/S6	GREY	-	7021528930061	-
20120742		RFOU(C) 4PAIR 2.5mm ² S2/S6	GREY	-	7021528930184	-
20110862		RFOU(C) 4PAIR 2.5mm ² S2/S6	BLUE	-	7021528930191	-
20110863		RFOU(C) 12PAIR 2.5mm ² S2/S6	GREY	-	7021528930368	-

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