

## FlexFlame RFOU(c) 250V S2/S6/S102 Instr. cable

Flame retardant halogen-free instrumentation cable.

**RFOU(c) 150/250(300)V**  
 EPR/EPR/TCWB/EVA



RFOU(c) 250V    NEK TS 606 Code S102  
 RFOU(c) M 250V    NEK TS 606 Code S2/S6/S102

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. RFOU(c) M 250V for installation in areas exposed to MUD and drilling/cleaning fluids. Meets the Oil & Mud resistance requirement in NEK TS 606:2016.

IEC 60092-376 (2017-05)	- 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	
<b>Conductor</b>		Tinned annealed stranded circular copper (STCC), IEC 60228 class 2
<b>Insulation</b>	<b>R</b>	EP-rubber, IEC 60092-360 (EPR)
<b>P / Triple / Quad twisting</b>		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.
<b>Inner covering</b>	<b>F</b>	Flame retardant and halogen-free extruded compound
<b>Tape over inner covering</b>		PET tape
<b>Armour/screen</b>	<b>O</b>	Tinned annealed copper wire braid
<b>Tape over armour/screen</b>		PET tape
<b>Outer sheath</b>	<b>U</b>	Flame retardant, halogen-free thermoset compound, SHF2 (IEC 60092-360)
<b>Marking text (example)</b>		"meter" "year/week" DRAKA 01 Part no. <SAP code> RFOU(c) M 250V S2/S6/S102 8 PAIR 0,75 mm <sup>2</sup> IEC 60092-376 IEC 60332-3-22 Production no. <Prod.ordre no.>
<b>Manufacturing unit</b>		DRAKA 01 = Prysmian Group Norge AS
<b>Outer sheath colour</b>		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, mm <sup>2</sup>	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 <sup>2</sup>	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	9.5 ± 0.5	0.2	5.3	1.2	12.5 ± 0.8	262	80
4	2	0.75	1.1	0.6	1.1	11 ± 0.8	0.3	10.2	1.3	14.5 ± 0.8	386	152
8	2	0.75	1.1	0.6	1.1	14.5 ± 0.8	0.3	11.9	1.4	18 ± 0.8	572	218
12	2	0.75	1.1	0.6	1.1	16.5 ± 0.8	0.3	13.6	1.5	20.5 ± 1	720	286
16	2	0.75	1.1	0.6	1.5	18.5 ± 0.8	0.3	15.3	1.6	22.5 ± 1	920	351
24	2	0.75	1.1	0.6	1.5	22.5 ± 1	0.3	20.4	1.8	27 ± 1	1260	500
2	3	0.75	1.1	0.6	1.1	10.5 ± 0.8	0.3	8.5	1.3	14 ± 0.8	340	123
4	3	0.75	1.1	0.6	1.1	12 ± 0.8	0.3	10.2	1.3	15.5 ± 0.8	452	177
8	3	0.75	1.1	0.6	1.1	16 ± 0.8	0.3	13.6	1.5	20 ± 1	705	285
12	3	0.75	1.1	0.7	1.1	18.5 ± 0.8	0.3	15.3	1.6	22.5 ± 1	915	379
2	2	1.5	1.55	0.7	1.1	11.5 ± 0.8	0.3	10.2	1.3	15 ± 0.8	395	155
4	2	1.5	1.55	0.7	1.1	13.5 ± 0.8	0.3	11.9	1.4	17 ± 0.8	530	222
8	2	1.5	1.55	0.7	1.1	18 ± 0.8	0.3	15.3	1.6	22 ± 1	842	357
12	2	1.5	1.55	0.7	1.1	21 ± 1	0.3	17.8	1.7	25 ± 1	1090	484
16	2	1.5	1.55	0.7	1.5	23.5 ± 1	0.3	20.4	1.8	28 ± 1	1415	611
24	2	1.5	1.55	0.7	1.5	28 ± 1	0.3	25.4	2.1	33 ± 1.5	1940	863
2	3	1.5	1.55	0.7	1.1	12.5 ± 0.8	0.3	10.2	1.4	16.5 ± 0.8	460	180
4	3	1.5	1.55	0.7	1.1	15 ± 0.8	0.3	11.9	1.4	18.5 ± 0.8	635	273
8	3	1.5	1.55	0.7	1.1	20 ± 1	0.3	17.8	1.7	24 ± 1	1070	484
12	3	1.5	1.55	0.7	1.1	23 ± 1	0.3	20.4	1.8	27.5 ± 1	1415	663
2	2	2.5	1.9	0.7	1.1	12.5 ± 0.8	0.3	10.2	1.4	16.5 ± 0.8	460	188
4	2	2.5	1.9	0.7	1.1	15 ± 0.8	0.3	11.9	1.4	18.5 ± 0.8	630	285
8	2	2.5	1.9	0.7	1.1	20 ± 1	0.3	17.8	1.7	24.5 ± 1	1070	505
12	2	2.5	1.9	0.7	1.5	24 ± 1	0.3	20.4	1.8	28.5 ± 1.5	1475	693

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### 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 <sup>2</sup>	100	0,67	26,3	12,7
Unshielded triple 0,75 mm <sup>2</sup>	100	0,67	26,3	12,7
Unshielded Pair 1,5 mm <sup>2</sup>	110	0,63	12,9	24,4
Unshielded triple 1,5 mm <sup>2</sup>	110	0,63	12,9	24,4
Unshielded Pair 2,5 mm <sup>2</sup>	125	0,59	8,02	36,8
Unshielded triple 2,5 mm <sup>2</sup>	125	0,59	8,02	36,8

### Ordering information

Part number	Description	Sheath Colour	GTIN 1m	EL No.
20110611	RFOU(C) M 2P 0.75mm <sup>2</sup> S2/S6/S102 GY	GREY	7021528926064	1044421
20110857	RFOU(C) M 2P 0.75mm <sup>2</sup> S2/S6/S102 BU	BLUE	7021528926071	1044422
20110612	RFOU(C) M 4P 0.75mm <sup>2</sup> S2/S6/S102 GY	GREY	7021528926187	1044423
20110613	RFOU(C) M 4P 0.75mm <sup>2</sup> S2/S6/S102 BU	BLUE	7021528926194	1044424
20110614	RFOU(C) M 8P 0.75mm <sup>2</sup> S2/S6/S102 GY	GREY	7021528926309	1044428
20110772	RFOU(C) M 8P 0.75mm <sup>2</sup> S2/S6/S102 BU	BLUE	7021528926316	1044429
20110615	RFOU(C) M 12P 0.75mm <sup>2</sup> S2/S6/S102 GY	GREY	7021528926361	1044430
20114583	RFOU(C) M 12P 0.75mm <sup>2</sup> S2/S6/S102 BU	BLUE	7021528926378	1044431
20109493	RFOU(C) M 16P 0.75mm <sup>2</sup> S2/S6/S102 GY	GREY	7021528926422	1044433
20170934	RFOU(C) M 16P 0.75mm <sup>2</sup> S2/S6/S102 BU	BLUE	7021528926439	1044432
20109494	RFOU(C) M 24P 0.75mm <sup>2</sup> S2/S6/S102 GY	GREY	7021528926484	1044438
20110858	RFOU(C) M 2T 0.75mm <sup>2</sup> S2/S6/S102 GY	GREY	7021528926668	1044490
20110616	RFOU(C) M 2T 0.75mm <sup>2</sup> S2/S6/S102 BU	BLUE	7021528926675	1044491
20110859	RFOU(C) M 4T 0.75mm <sup>2</sup> S2/S6/S102 GY	GREY	7021528926781	1044492
20135680	RFOU(C) M 4T 0.75mm <sup>2</sup> S2/S6/S102 BU	BLUE	7021528926798	1044493
20120514	RFOU(C) M 8T 0.75mm <sup>2</sup> S2/S6/S102 GY	GREY	7021528926903	1044496
20347227	RFOU(C) M 12T 0.75mm <sup>2</sup> S2/S6/S102 BU	BLUE	7021528926972	-
20110617	RFOU(C) M 2P 1.5mm <sup>2</sup> S2/S6/S102 GY	GREY	7021528928068	1044461
20110618	RFOU(C) M 2P 1.5mm <sup>2</sup> S2/S6/S102 BU	BLUE	7021528928075	1044462
20110619	RFOU(C) M 4P 1.5mm <sup>2</sup> S2/S6/S102 GY	GREY	7021528928181	1044463
20110620	RFOU(C) M 4P 1.5mm <sup>2</sup> S2/S6/S102 BU	BLUE	7021528928198	1044464
20110621	RFOU(C) M 8P 1.5mm <sup>2</sup> S2/S6/S102 GY	GREY	7021528928303	1044468
20164158	RFOU(C) M 8P 1.5mm <sup>2</sup> S2/S6/S102 BU	BLUE	7021528928310	1044469
20110622	RFOU(C) M 12P 1.5mm <sup>2</sup> S2/S6/S102 GY	GREY	7021528928365	1044470
20109495	RFOU(C) M 16P 1.5mm <sup>2</sup> S2/S6/S102 GY	GREY	7021528928426	1044472
20110860	RFOU(C) M 24P 1.5mm <sup>2</sup> S2/S6/S102 GY	GREY	7021528928488	1044478
20110861	RFOU(C) M 2T 1.5mm <sup>2</sup> S2/S6/S102 GY	GREY	7021528928662	1044561
20138640	RFOU(C) M 2T 1.5mm <sup>2</sup> S2/S6/S102 BU	BLUE	7021528928679	-
20347228	RFOU(C) M 4T 1.5mm <sup>2</sup> S2/S6/S102 BU	BLUE	7021528928792	-
20347229	RFOU(C) M 8T 1.5mm <sup>2</sup> S2/S6/S102 BU	BLUE	7021528928914	-
20347230	RFOU(C) M 12T 1.5mm <sup>2</sup> S2/S6/S102 BU	BLUE	7021528928976	-
20195591	RFOU(C) M 2P 2.5mm <sup>2</sup> S2/S6/S102 GY	GREY	7021528930061	-
20120742	RFOU(C) M 4P 2.5mm <sup>2</sup> S2/S6/S102 GY	GREY	7021528930184	-
20110862	RFOU(C) M 4P 2.5mm <sup>2</sup> S2/S6/S102 BU	BLUE	7021528930191	-
20151457	RFOU(C) M 8P 2.5mm <sup>2</sup> S2/S6/S102 GY	GREY	7021528930306	-
20110863	RFOU(C) M 12P 2.5mm <sup>2</sup> S2/S6/S102 GY	GREY	7021528930368	-

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### 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 x total cross section (mm <sup>2</sup> ) of conductors	-20°C

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