Prysmian Group

PRYSMIAN

Draka

General Cable

Product Catalogue 2021

NEK TS 606

Oil & Gas Cables

Offshore Cables Basic Program
IEC / NEK TS 606:2016
and Cable Accessories

Index

NEK TS 606 : 2016 Cable types

List of all the cable types listed in NEK TS 606 : 2016 Fifth edition

NEK TS 606 2016 Codes	NEK TS 606 2009 Codes	NEK TS 606 Description	Draka Norsk Kabel's cable type
Power cables LV and MV			
P101	P1/P8	RFOU / TFOU 0,6/1 kV	RFOU M 0,6/1 kV
P102	P2/P9	RFOU / TFOU 3,6/6(7,2) kV	RFOU M 3,676(7,2) kV
P103	P3/P10	RFOU / TFOU 6/10(12) kV	RFOU M 6/10(12) kV
P104	P4/P11	RFOU / TFOU 8,7/15(17,5) kV	RFOU M 8,7/15(17,5) kV
P105	P5/P12	BFOU 0,6/1 kV	BFOU M 0,6/1 kV
P106	P6/P13	BFOU 3,6/6(7,2) kV	-
P107	P7/P14	BFOU 6/10(12) kV	-
P108	P15	UX 0,6/1 kV	UX M 0,6/1 kV
P109	P16	IFLI 250V	IFLI 250V
P110	P17	BU 0,6/1 kV	BU M 0,6/1 kV
P111	P18	RU 0,6/1 kV	RU M 0,6/1 kV
P112	P19/P21	RFOU / TFOU 12/20(24) kV	RFOU M 12/20(24) kV
P113	P20/P22	RFOU / TFOU 18/30(36) kV	RFOU M 18/30(36) kV
P114	P30	RFOU-HCF / TFOU-HCF 6/10(12) kV	RFOU-HCF 6/10(12) kV
P115	P31	RFOU-HCF / TFOU-HCF 8,7/15(17,5) kV	RFOU-HCF 8,7/15(17,5) kV
P116	P32	RFOU-HCF / TFOU-HCF 12/20(24) kV	RFOU-HCF 12/20(24) kV
P117	P33	RFOU-HCF / TFOU-HCF 18/30(36) kV	RFOU-HCF 18/30(36) kV
P118	P34	BFOU-HCF 0,6/1 kV	BFOU-HCF 0,6/1 kV
P119	-	RX/TX 0,6/1kV	
P120	-	RFOU/TFOU-Fire resistant 3,6/6(7,2)kV	RFOU-FR 3,6/6(7,2)kV
P121	-	RFOU/TFOU-Fire resistant 6/10(12)kV	RFOU-FR 6/10(12)kV
P122	-	RFOU/TFOU-Fire resistant 8,7/15(17,5)kV	RFOU-FR 8,7/15(17,5)kV
P123	-	RFOU/TFOU-Fire resistant 12/20(24)kV	RFOU-FR 12/20(24)kV
P124	-	RFOU/TFOU-Fire resistant 18/30(36)kV	RFOU-FR 18/30(36)kV
P125	-	SFOU 0,6/1kV	
Instrumentation and telecommunication cables			
S101	S1/S5	RFOU/TFOU(i) 250V	RFOU(i) M 250V
S102	S2/S6	RFOU(c) 250V	RFOU(c) M250V
S103	S3/S7	BFOU(i) 250V	BFOU(i) M 250V
S104	S4/S8	BFOU(c) 250V	BFOU(c) M 250V
S105	S11	RU/TU(i) 250V	RU(i) M 250V
S106	S12	RU/TU(c) 250V	RU(c) M 250V
S107	S13	BU(i) 250V	BU(i) M 250V
S108	S14	BU(c) 250V	BU(c) M 250V
S109	S15	BFOU-HCF(i) 250V	BFOU-HCF(i) 250V
S110	S16	BFOU-HCF(c) 250V	BFOU-HCF(c) 250V
S111	-	RX/TX 250V	
S112	-	SFOU(i) 250V	
S113	-	SFOU(c) 250V	
Optical Fibre Cable			
F101	F1	QFCI	QFCI
F102	F4	QFCI-HCF	QFCI-HCF

NEK TS 606 2016 Codes	NEK TS 606 2009 Codes	NEK TS 606 Description	Draka Norsk Kabel's cable type
F103	F5	QFCB	QFCI M
F104	F6	AICI	AICI

Sheath codes in NEK TS 606 : 2016

The cable shall be marked with a sheath code according to Table 9 in NEK TS 606:2016, which describes the cable type and Oil/mud performance.

Table 9 – Sheath Code

Marking letters	Combinations of sheath codes describing the Oil/mud performance according to Table 1:
"no marking"	Minimum requirements
E	Enhanced Oil resistant – category b
M	Enhanced Oil resistant – category b Mud resistant – category c
H	Enhanced Oil resistant – category b Hydraulic/gear Oil resistant – category d
H-M	Enhanced Oil resistant – category b Mud resistant – category c Hydraulic/gear Oil resistant – category d
NOTE For requirements to hydraulic test oil, see clause 4.5.3 in NEK TS 606:2016	

Flame Retardant Instrumentation cable RFOU(i) 150/250(300)V, S1/S5/S101

Flame retardant halogen-free instrumentation cable.

RFOU(i) 150/250(300)V

EPR/EPR/TCWB/EVA

RFOU(i) 250V NEK TS 606 Code S101
RFOU(i) M 250V NEK TS 606 Code S1/S5/S101

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

Application

Fixed installation for instrumentation, communication, Control and alarm systems in both EX (Zone 0, 1 & 2)- and safe areas.
RFOU(i) M 250V for installation in areas exposed to MUD and drilling/cleaning fluids. Meets the Oil & Mud resistance requirement in NEK TS 606:2016.

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 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. 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 extruded 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 thermoset compound, SHF2 (IEC 60092-360)
Marking text (example)		"meter" "year/week" DRAKA 01 Part no. <SAP code> RFOU(i) M 250V S1/S5/S101 4 PAIR 0,75 mm2 IEC 60092-376 IEC 60332-3-22 Production no. <Prod.ordre no.>
Manufacturing unit		DRAKA 01 = Prysmian Group Norge AS
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, 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	6.5 ± 0.5	0.2	3.8	1.1	9.5 ± 0.5	180	53
2	2	0.75	1.1	0.6	1.1	9.5 ± 0.5	0.2	5.3	1.2	12.5 ± 0.8	265	84
4	2	0.75	1.1	0.6	1.1	11 ± 0.8	0.3	10.2	1.3	14.5 ± 0.8	412	163
8	2	0.75	1.1	0.6	1.1	14.5 ± 0.8	0.3	13.6	1.5	18.5 ± 0.8	660	261
12	2	0.75	1.1	0.6	1.1	17 ± 0.8	0.3	15.3	1.6	21 ± 1	850	342
16	2	0.75	1.1	0.6	1.5	19.5 ± 0.8	0.3	17.8	1.7	24 ± 1	1120	431
24	2	0.75	1.1	0.6	1.5	24 ± 1	0.3	20.4	1.9	28.5 ± 1	1520	585
1	3	0.75	1.1	0.6	1.1	7 ± 0.5	0.2	3.8	1.1	10 ± 0.8	193	59
2	3	0.75	1.1	0.6	1.1	10.5 ± 0.8	0.3	8.5	1.3	14 ± 0.8	350	132
4	3	0.75	1.1	0.6	1.1	12 ± 0.8	0.3	10.2	1.4	16 ± 0.8	485	191
8	3	0.75	1.1	0.6	1.1	16 ± 0.8	0.3	15.3	1.6	20 ± 1	785	327
16	3	0.75	1.1	0.6	1.5	22 ± 1	0.3	20.4	1.8	26.5 ± 1	1375	556
24	3	0.75	1.1	0.6	1.5	27 ± 1	0.3	25.4	2	32 ± 1.5	1915	785
1	2	1.5	1.55	0.7	1.1	8 ± 0.5	0.2	4.5	1.1	11 ± 0.8	230	75
2	2	1.5	1.55	0.7	1.1	11.5 ± 0.8	0.3	10.2	1.3	15 ± 0.8	410	161
4	2	1.5	1.55	0.7	1.1	13.5 ± 0.8	0.3	11.9	1.4	17.5 ± 0.8	575	239
8	2	1.5	1.55	0.7	1.1	18.5 ± 0.8	0.3	15.3	1.6	22.5 ± 1	930	399
12	2	1.5	1.55	0.7	1.1	21.5 ± 1	0.3	17.8	1.8	26 ± 1	1255	552
16	2	1.5	1.55	0.7	1.5	25 ± 1	0.3	20.4	1.9	29.5 ± 1	1650	698
24	2	1.5	1.55	0.7	1.5	30.5 ± 1.5	0.4	36.2	2.2	36 ± 1.5	2440	1103
1	3	1.5	1.55	0.7	1.1	8.5 ± 0.5	0.2	4.5	1.2	11.5 ± 0.8	260	88
2	3	1.5	1.55	0.7	1.1	13 ± 0.8	0.3	11.9	1.4	16.5 ± 0.8	485	203
4	3	1.5	1.55	0.7	1.1	15 ± 0.8	0.3	13.6	1.5	19 ± 0.8	700	308
8	3	1.5	1.55	0.7	1.1	20 ± 1	0.3	17.8	1.7	24 ± 1	1150	525
24	3	1.5	1.55	0.7	1.5	34 ± 1.5	0.4	40.7	2.3	39.5 ± 1.5	3060	1454
1	2	2.5	1.9	0.7	1.1	8.5 ± 0.5	0.2	4.5	1.2	12 ± 0.8	268	93
2	2	2.5	1.9	0.7	1.1	12.5 ± 0.8	0.3	11.9	1.4	16.5 ± 0.8	485	212
4	2	2.5	1.9	0.7	1.1	15 ± 0.8	0.3	13.6	1.5	19 ± 1	700	326
1	3	2.5	1.9	0.7	1.1	9.5 ± 0.5	0.2	5.3	1.2	12.5 ± 0.8	309	120

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

Ordering information

Part number	Description	Sheath Colour	GTIN 1m	EL No.
20110590	RFOU(I) M 1P 0.75mm² S1/S5/S101 GY	GREY	7021528920000	1044620
20105042	RFOU(I) M 1P 0.75mm² S1/S5/S101 BU	BLUE	7021528920017	1044619
20110591	RFOU(I) M 2P 0.75mm² S1/S5/S101 GY	GREY	7021528920062	1044621
20110592	RFOU(I) M 2P 0.75mm² S1/S5/S101 BU	BLUE	7021528920079	1044622
20110593	RFOU(I) M 4P 0.75mm² S1/S5/S101 GY	GREY	7021528920185	1044623
20110849	RFOU(I) M 4P 0.75mm² S1/S5/S101 BU	BLUE	7021528920192	1044624
20110594	RFOU(I) M 8P 0.75mm² S1/S5/S101 GY	GREY	7021528920307	1044628
20104951	RFOU(I) M 8P 0.75mm² S1/S5/S101 BU	BLUE	7021528920314	1044629
20110850	RFOU(I) M 12P 0.75mm² S1/S5/S101 GY	GREY	7021528920369	1044630
20131006	RFOU(I) M 12P 0.75mm² S1/S5/S101 BU	BLUE	7021528920376	1044631
20139433	RFOU(I) M 16P 0.75mm² S1/S5/S101 GY	GREY	7021528920420	1044633
20195580	RFOU(I) M 16P 0.75mm² S1/S5/S101 BU	BLUE	7021528920437	1044632
20110595	RFOU(I) M 24P 0.75mm² S1/S5/S101 GY	GREY	7021528920482	1044636
20272645	RFOU(I) M 24P 0.75mm² S1/S5/S101 BU	BLUE	7021528920499	-
20104949	RFOU(I) M 1T 0.75mm² S1/S5/S101 GY	GREY	7021528920604	1044690
20110596	RFOU(I) M 1T 0.75mm² S1/S5/S101 BU	BLUE	7021528920611	1044689
20110851	RFOU(I) M 2T 0.75mm² S1/S5/S101 GY	GREY	7021528920666	1044691
20163220	RFOU(I) M 2T 0.75mm² S1/S5/S101 BU	BLUE	7021528920673	1044692
20110852	RFOU(I) M 4T 0.75mm² S1/S5/S101 GY	GREY	7021528920789	1044693
20166101	RFOU(I) M 4T 0.75mm² S1/S5/S101 BU	BLUE	7021528920796	1044694
20137753	RFOU(I) M 8T 0.75mm² S1/S5/S101 GY	GREY	7021528920901	1044697
20170926	RFOU(I) M 8T 0.75mm² S1/S5/S101 BU	BLUE	7021528920918	1044698
20137754	RFOU(I) M 16T 0.75mm² S1/S5/S101 GY	GREY	7021528921021	1044701
20137755	RFOU(I) M 24T 0.75mm² S1/S5/S101 GY	GREY	7021528921083	1044707
20110597	RFOU(I) M 1P 1.5mm² S1/S5/S101 GY	GREY	7021528922004	1044460
20110598	RFOU(I) M 1P 1.5mm² S1/S5/S101 BU	BLUE	7021528922011	1044459
20110599	RFOU(I) M 2P 1.5mm² S1/S5/S101 GY	GREY	7021528922066	1044661
20111211	RFOU(I) M 2P 1.5mm² S1/S5/S101 BU	BLUE	7021528922073	1044662
20110600	RFOU(I) M 4P 1.5mm² S1/S5/S101 GY	GREY	7021528922189	1044663
20110601	RFOU(I) M 4P 1.5mm² S1/S5/S101 BU	BLUE	7021528922196	1044664
20110602	RFOU(I) M 8P 1.5mm² S1/S5/S101 GY	GREY	7021528922301	1044668
20110603	RFOU(I) M 8P 1.5mm² S1/S5/S101 BU	BLUE	7021528922318	1044669
20110604	RFOU(I) M 12P 1.5mm² S1/S5/S101 GY	GREY	7021528922363	1044670
20110605	RFOU(I) M 12P 1.5mm² S1/S5/S101 BU	BLUE	7021528922370	1044671
20110606	RFOU(I) M 16P 1.5mm² S1/S5/S101 GY	GREY	7021528922424	1044673
20110607	RFOU(I) M 16P 1.5mm² S1/S5/S101 BU	BLUE	7021528922431	1044672
20110853	RFOU(I) M 24P 1.5mm² S1/S5/S101 BU	BLUE	7021528922493	1044679
20110608	RFOU(I) M 1T 1.5mm² S1/S5/S101 GY	GREY	7021528922608	1044560
20110609	RFOU(I) M 1T 1.5mm² S1/S5/S101 BU	BLUE	7021528922615	1044559
20163884	RFOU(I) M 2T 1.5mm² S1/S5/S101 GY	GREY	7021528922660	1044762
20159122	RFOU(I) M 2T 1.5mm² S1/S5/S101 BU	BLUE	7021528922677	-
20170928	RFOU(I) M 4T 1.5mm² S1/S5/S101 GY	GREY	7021528922783	1044764
20164156	RFOU(I) M 4T 1.5mm² S1/S5/S101 BU	BLUE	7021528922790	1044765
20110610	RFOU(I) M 8T 1.5mm² S1/S5/S101 GY	GREY	7021528922905	1044768
20164157	RFOU(I) M 8T 1.5mm² S1/S5/S101 BU	BLUE	7021528922912	1044769
20172658	RFOU(I) M 12T 1.5mm² S1/S5/S101 GY	GREY	7021528922967	1044770
20170935	RFOU(I) M 24T 1.5mm² S1/S5/S101 GY	GREY	7021528923087	1044779
20170940	RFOU(I) M 24T 1.5mm² S1/S5/S101 BU	BLUE	7021528923094	1044780

Part number	Description	Sheath Colour	GTIN 1m	EL No.
20110854	RFOU(I) M 1P 2.5mm² S1/S5/S101 GY	GREY	7021528924008	-
20110855	RFOU(I) M 2P 2.5mm² S1/S5/S101 GY	GREY	7021528924060	-
20110856	RFOU(I) M 4P 2.5mm² S1/S5/S101 GY	GREY	7021528924183	-
20169824	RFOU(I) M 1T 2.5mm² S1/S5/S101 GY	GREY	7021528924602	-

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 (mm²) of conductors	-20°C

Flame Retardant Instrumentation cable RFOU(c) 150/250(300)V, S2/S6/S102

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

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.

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 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 extruded 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 thermoset compound, SHF2 (IEC 60092-360)
Marking text (example)		"meter" "year/week" DRAKA 01 Part no. <SAP code> RFOU(c) M 250V S2/S6/S102 8 PAIR 0,75 mm2 IEC 60092-376 IEC 60332-3-22 Production no. <Prod.ordre no.>
Manufacturing unit		DRAKA 01 = Prysmian Group Norge AS
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, 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)
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

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 mm²	100	0,67	26,3	12,7
Unshielded triple 0,75 mm²	100	0,67	26,3	12,7
Unshielded Pair 1,5 mm²	110	0,63	12,9	24,4
Unshielded triple 1,5 mm²	110	0,63	12,9	24,4
Unshielded Pair 2,5 mm²	125	0,59	8,02	36,8
Unshielded triple 2,5 mm²	125	0,59	8,02	36,8

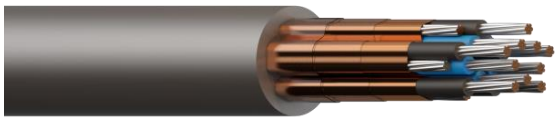
Ordering information

Part number	Description	Sheath Colour	GTIN 1m	EL No.
20110611	RFOU(C) M 2P 0.75mm² S2/S6/S102 GY	GREY	7021528926064	1044421
20110857	RFOU(C) M 2P 0.75mm² S2/S6/S102 BU	BLUE	7021528926071	1044422
20110612	RFOU(C) M 4P 0.75mm² S2/S6/S102 GY	GREY	7021528926187	1044423
20110613	RFOU(C) M 4P 0.75mm² S2/S6/S102 BU	BLUE	7021528926194	1044424
20110614	RFOU(C) M 8P 0.75mm² S2/S6/S102 GY	GREY	7021528926309	1044428
20110772	RFOU(C) M 8P 0.75mm² S2/S6/S102 BU	BLUE	7021528926316	1044429
20110615	RFOU(C) M 12P 0.75mm² S2/S6/S102 GY	GREY	7021528926361	1044430
20114583	RFOU(C) M 12P 0.75mm² S2/S6/S102 BU	BLUE	7021528926378	1044431
20109493	RFOU(C) M 16P 0.75mm² S2/S6/S102 GY	GREY	7021528926422	1044433
20170934	RFOU(C) M 16P 0.75mm² S2/S6/S102 BU	BLUE	7021528926439	1044432
20109494	RFOU(C) M 24P 0.75mm² S2/S6/S102 GY	GREY	7021528926484	1044438
20110858	RFOU(C) M 2T 0.75mm² S2/S6/S102 GY	GREY	7021528926668	1044490
20110616	RFOU(C) M 2T 0.75mm² S2/S6/S102 BU	BLUE	7021528926675	1044491
20110859	RFOU(C) M 4T 0.75mm² S2/S6/S102 GY	GREY	7021528926781	1044492
20135680	RFOU(C) M 4T 0.75mm² S2/S6/S102 BU	BLUE	7021528926798	1044493
20120514	RFOU(C) M 8T 0.75mm² S2/S6/S102 GY	GREY	7021528926903	1044496
20347227	RFOU(C) M 12T 0.75mm² S2/S6/S102 BU	BLUE	7021528926972	-
20110617	RFOU(C) M 2P 1.5mm² S2/S6/S102 GY	GREY	7021528928068	1044461
20110618	RFOU(C) M 2P 1.5mm² S2/S6/S102 BU	BLUE	7021528928075	1044462
20110619	RFOU(C) M 4P 1.5mm² S2/S6/S102 GY	GREY	7021528928181	1044463
20110620	RFOU(C) M 4P 1.5mm² S2/S6/S102 BU	BLUE	7021528928198	1044464
20110621	RFOU(C) M 8P 1.5mm² S2/S6/S102 GY	GREY	7021528928303	1044468
20164158	RFOU(C) M 8P 1.5mm² S2/S6/S102 BU	BLUE	7021528928310	1044469
20110622	RFOU(C) M 12P 1.5mm² S2/S6/S102 GY	GREY	7021528928365	1044470
20109495	RFOU(C) M 16P 1.5mm² S2/S6/S102 GY	GREY	7021528928426	1044472
20110860	RFOU(C) M 24P 1.5mm² S2/S6/S102 GY	GREY	7021528928488	1044478
20110861	RFOU(C) M 2T 1.5mm² S2/S6/S102 GY	GREY	7021528928662	1044561
20138640	RFOU(C) M 2T 1.5mm² S2/S6/S102 BU	BLUE	7021528928679	-
20347228	RFOU(C) M 4T 1.5mm² S2/S6/S102 BU	BLUE	7021528928792	-
20347229	RFOU(C) M 8T 1.5mm² S2/S6/S102 BU	BLUE	7021528928914	-
20347230	RFOU(C) M 12T 1.5mm² S2/S6/S102 BU	BLUE	7021528928976	-
20195591	RFOU(C) M 2P 2.5mm² S2/S6/S102 GY	GREY	7021528930061	-
20120742	RFOU(C) M 4P 2.5mm² S2/S6/S102 GY	GREY	7021528930184	-
20110862	RFOU(C) M 4P 2.5mm² S2/S6/S102 BU	BLUE	7021528930191	-
20151457	RFOU(C) M 8P 2.5mm² S2/S6/S102 GY	GREY	7021528930306	-
20110863	RFOU(C) M 12P 2.5mm² S2/S6/S102 GY	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 x total cross section (mm²) of conductors	-20°C

Flame Retardant, instrumentation cable RU(i) 150/250(300)V, S11/S105



Flame retardant halogen-free instrumentation cable.

RU(I) M 150/250(300)V

EPR/EVA

RU(i) 250V NEK TS 606 Code S105
RU(i) M 250V NEK TS 606 Code S11/S105

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.
RU(i) M 250V meets the Oil & Mud resistance requirement in NEK TS 606:2016.

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 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. 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		No inner covering. (Additional tapes may be applied)
Armour/screen		No armour.
Outer sheath	**U**	Flame retardant, halogen-free thermoset compound, SHF2 (IEC 60092-360)
Marking text (example)		"meter" "year/week" DRAKA 01 Part no. <SAP code> RU(I) M 250V S11/S105 2 pair 0,75 mm2 IEC 60092-376 IEC 60332-3-22 Production no. <Prod.ordre no.>
Manufacturing unit		DRAKA 01 = Prysmian Group Norge AS
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, mm²	Conductor Diameter, mm	Insulation Thickness, mm	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	6.5 ± 0.5	82	17
2	2	0.75	1.1	0.6	1.1	9 ± 0.5	133	33
1	3	0.75	1.1	0.6	1	7 ± 0.5	93	23
1	2	1.5	1.55	0.7	1	8 ± 0.5	115	32
2	2	1.5	1.55	0.7	1.2	11.5 ± 0.8	205	62
4	2	1.5	1.55	0.7	1.3	14 ± 0.8	340	125
8	2	1.5	1.55	0.7	1.5	19 ± 0.8	638	250
12	2	1.5	1.55	0.7	1.6	22.5 ± 1	895	376
24	2	1.5	1.55	0.7	2	31 ± 1.5	1730	753
8	3	1.5	1.55	0.7	1.6	20.5 ± 1	818	353

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

Ordering information

Part number	Description	Sheath Colour	EAN No. DNK	EL No.
20111817	RU(I) M 250V 1P 0.75mm² S11/S105 GY	GREY	7021528950007	1062100
20109512	RU(I) M 250V 1P 0.75mm² S11/S105 BU	BLUE	7021528950014	1062101
20112238	RU(I) M 250V 2P 0.75mm² S11/S105 BU	BLUE	7021528950076	1062107
20112177	RU(I) M 250V 1T 0.75mm² S11/S105 GY	GREY	7021528950601	1062160
20149208	RU(I) M 250V 1P 1.5mm² S11/S105 GY	GREY	7021528952001	1062200
20110870	RU(I) M 250V 2P 1.5mm² S11/S105 GY	GREY	7021528952063	1062206
20110871	RU(I) M 250V 2P 1.5mm² S11/S105 BU	BLUE	7021528952070	1062207
20110782	RU(I) M 250V 4P 1.5mm² S11/S105 GY	GREY	7021528952186	1062218
20205502	RU(I) M 250V 8P 1.5mm² S11/S105 GY	GREY	7021528952308	1062230
20205503	RU(I) M 250V 12P 1.5mm² S11/S105 GY	GREY	7021528952360	1062236
20205504	RU(I) M 250V 24P 1.5mm² S11/S105 GY	GREY	7021528952483	1062248
20205505	RU(I) M 250V 8T 1.5mm² S11/S105 GY	GREY	7021528952902	1062290

Installation recommendations

Overall diameter of cable (D)	Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
≤25 mm	8 x D	4 x D	50 N x total cross section (mm²) of conductors	-20°C
>25 mm		6 x D		

Flame Retardant instrumentation cable RU(c) 150/250(300)V, S12/S106

Flame retardant halogen-free instrumentation cable.

RU(c) 150/250(300)V

EPR/EVA

RU(c) 250V NEK TS 606 Code S106
RU(c) M 250V NEK TS 606 Code S12/S106

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

Standards applied

IEC 60092-376 (2003-05)	- Design
IEC 60228 class 2	- Conductor
IEC 60092-360	- 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

Application

Fixed installation for instrumentation, communication, Control and alarm systems in both EX- and safe areas.
RU(c) M 250V meets the Oil & Mud resistance requirement in NEK TS 606:2016.

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		No inner covering. (Additional tapes may be applied)
Armour/screen		No armour.
Outer sheath	**U**	Flame retardant, halogen-free thermoset compound, SHF2 (IEC 60092-360)
Marking text (example)		"meter" "year/week" DRAKA 01 Part no. <SAP code> RU(c) M 250V S12/S106 2 pair 0,75 mm2 IEC 60092-376 IEC 60332-3-22 Production no. <Prod.ordre no.>
Manufacturing unit		DRAKA 01 = Prysmian Group Norge AS
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, mm²	Conductor Diameter, mm	Insulation Thickness, 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	9.5 ± 0.8	128	29
4	2	0.75	1.1	0.6	1.1	10.5 ± 0.8	185	54
8	2	0.75	1.1	0.6	1.3	14.5 ± 0.8	340	104
16	2	0.75	1.1	0.6	1.5	18.5 ± 0.8	580	203
24	2	0.75	1.1	0.6	1.6	22.5 ± 1	825	303
2	3	0.75	1.1	0.6	1.1	10.5 ± 0.8	158	41
4	3	0.75	1.1	0.6	1.2	12 ± 0.8	249	78
8	3	0.75	1.1	0.6	1.4	16.5 ± 0.8	440	154
2	2	1.5	1.55	0.7	1.2	11.5 ± 0.8	195	57
4	2	1.5	1.55	0.7	1.2	13.5 ± 0.8	295	107
6	2	1.5	1.55	0.7	1.4	16.5 ± 0.8	450	158

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 mm²	100	0,67	26,3	12,7
Unshielded triple 0,75 mm²	100	0,67	26,3	12,7
Unshielded pair 1,5 mm²	110	0,63	12,9	24,4
Unshielded triple 1,5 mm²	110	0,63	12,9	24,4
Unshielded pair 2,5 mm²	125	0,59	8,02	36,8
Unshielded triple 2,5 mm²	125	0,59	8,02	36,8

Ordering information

Part number	Description	Sheath Colour	EAN No. DNK	EL No.
20205506	RU(C) M 250V 2P 0.75mm² S12/S106 GY	GREY	7021528956061	1062506
20205507	RU(C) M 250V 4P 0.75mm² S12/S106 GY	GREY	7021528956184	1062518
20205508	RU(C) M 250V 8P 0.75mm² S12/S106 GY	GREY	7021528956306	1062530
20132983	RU(C) M 250V 16P 0.75mm² S12/S106 GY	GREY	7021528956429	1062542
20132984	RU(C) M 250V 24P 0.75mm² S12/S106 GY	GREY	7021528956481	1062548
20205509	RU(C) M 250V 2T 0.75mm² S12/S106 GY	GREY	7021528956665	1062566
20110873	RU(C) M 250V 4T 0.75mm² S12/S106 GY	GREY	7021528956788	1062578
20205510	RU(C) M 250V 8T 0.75mm² S12/S106 GY	GREY	7021528956900	1062590
20109513	RU(C) M 250V 2P 1.5mm² S12/S106 GY	GREY	7021528958065	1062706
20205511	RU(C) M 250V 4P 1.5mm² S12/S106 GY	GREY	7021528958188	1062718
20226515	RU(C) M 250V 6P 1.5mm² S12/S106 GY	GREY	7021528958225	-

Installation recommendations

Overall diameter of cable (D)	Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
≤25 mm	8 x D	4 x D	50 N x total cross section (mm²) of conductors	-20°C
>25 mm		6 x D		

Flame Retardant power cable RFOU 0,6/1(1,2)kV, P1/P8/P101

Flame retardant halogen-free power cable.

RFOU 0.6/1(1,2)kV

EPR/EPR/TCWB/EVA

RFOU 1kV **NEK TS 606 Code P101**
RFOU M 1kV **NEK TS 606 Code P1/P8/P101**

Operating temperature : 90°C
Operating Voltage : 0,6/1(1,2)kV

Application

Fixed installation for power,control and lighting in both EX (Zone 0, 1 & 2)- and safe areas, general purposes.
RFOU M 1kV for installation in areas exposed to MUD and drilling/cleaning fluids. Meets the Oil & Mud resistance requirement in NEK TS 606:2016.

Standards applied

IEC 60092-353	- 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)
Lay up / Shielding		Cores laid up in concentric layers
Inner covering	**F**	Flame retardant and halogen-freeextruded 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 thermoset compound, SHF2 (IEC 60092-360)
Marking text (example)		"meter" "year/week" DRAKA 01 Part no. <SAP code> RFOU M 1kV P1/P8/P101 3 x 35/16 mm2 IEC 60332-3-22 Production no. <Prod.ordre no.>
Manufacturing unit		DRAKA 01 = Prysmian Group Norge AS
Outer sheath colour		Black

Core identification power cables

Single core – Black
Two cores - Blue – Brown
Three cores - Brown - Black – Grey
Four cores - Blue - Brown - Black – Grey
Five cores - Blue - Brown - Black - Grey – Black
Seven cores and above - White with black numbers
Two cores + earth (3G) - Yellow/green - Blue – Brown
Three cores + earth (4G) - Yellow/green - Brown - Black – Grey
Four cores + earth (5G) - Yellow/green - Blue - Brown - Black – Grey
G / X in cable description - G = One of the cores are yellow/green - X = no yellow/green core
Core identification - to HD308S2 - and IEC 60445 Ed 5.0 2010-08

Range and dimensions

Number of elements	Cross section core, mm²	Electrical Cross section braid, 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	16	4	5.05	1.0	1.1	9 ± 0.5	0.2	5.3	1.2	12.5 ± 0.8	355	191
1	25	4	6.3	1.2	1.1	11 ± 0.8	0.2	6.0	1.2	14 ± 0.8	475	279
1	35	6	7.4	1.2	1.1	12 ± 0.8	0.3	10.2	1.3	15.5 ± 0.8	630	401
1	50	6	8.75	1.4	1.1	14 ± 0.8	0.3	10.2	1.4	17.5 ± 0.8	785	511
1	70	10	10.6	1.4	1.1	15.5 ± 0.8	0.3	12.7	1.4	19.5 ± 0.8	1050	731
1	95	10	12.4	1.6	1.1	18 ± 0.8	0.3	15.3	1.5	21.5 ± 1	1355	967
1	120	10	14.0	1.6	1.1	19.5 ± 0.8	0.3	15.3	1.6	23.5 ± 1	1640	1207
1	150	10	15.45	1.8	1.1	21.5 ± 1	0.3	15.3	1.6	25.5 ± 1	1945	1435
1	185	16	17.3	2.0	1.1	24 ± 1	0.3	17.8	1.7	27.5 ± 1	2365	1768
1	240	16	19.85	2.2	1.1	27 ± 1	0.3	20.4	1.8	30.5 ± 1.5	3000	2303
1	300	16	22.25	2.4	1.1	29.5 ± 1	0.3	22.9	1.9	33.5 ± 1.5	3685	2966
1	400	25	26.0	2.6	1.1	33.5 ± 1.5	0.4	31.7	2.1	38.5 ± 1.5	4980	3983
1	500	25	29.0	2.8	1.1	36.5 ± 1.5	0.4	36.2	2.2	42 ± 2	6080	4947
1	630	35	32.8	2.8	1.1	40.5 ± 2	0.4	40.7	2.3	46 ± 2	7500	6221
2	1.5	4	1.6	1.0	1.1	9 ± 0.5	0.2	5.3	1.2	12.5 ± 0.8	262	78
3	1.5	4	1.6	1.0	1.1	10 ± 0.8	0.2	5.3	1.2	13 ± 0.8	288	92
4	1.5	6	1.6	1.0	1.1	10.5 ± 0.8	0.3	8.5	1.3	14.5 ± 0.8	365	136
5	1.5	6	1.6	1.0	1.1	11.5 ± 0.8	0.3	10.2	1.3	15 ± 0.8	430	165
7	1.5	6	1.6	1.0	1.1	12.5 ± 0.8	0.3	10.2	1.3	16 ± 0.8	480	192
12	1.5	10	1.6	1.0	1.1	16 ± 0.8	0.3	13.6	1.5	20 ± 1	705	291
19	1.5	10	1.6	1.0	1.1	19 ± 0.8	0.3	15.3	1.6	23 ± 1	950	400
24	1.5	16	1.6	1.0	1.1	22.5 ± 1	0.3	17.8	1.8	26.5 ± 1	1180	492
27	1.5	16	1.6	1.0	1.1	23 ± 1	0.3	17.8	1.8	27 ± 1	1270	536
37	1.5	16	1.6	1.0	1.1	25.5 ± 1	0.3	20.4	1.9	30 ± 1.5	1610	692
3G	1.5	-	1.6	1.0	1.1	10 ± 0.8	0.2	5.3	1.2	13 ± 0.8	288	92
4G	1.5	-	1.6	1.0	1.1	10.5 ± 0.8	0.3	8.5	1.3	14.5 ± 0.8	365	136
5G	1.5	-	1.6	1.0	1.1	11.5 ± 0.8	0.3	10.2	1.3	15 ± 0.8	430	165
8G	1.5	-	1.6	1.0	1.1	14 ± 0.8	0.3	11.9	1.4	17.5 ± 0.8	565	222
20G	1.5	-	1.6	1.0	1.2	20 ± 1	0.3	17.8	1.7	24.5 ± 1	1060	438
28G	1.5	-	1.6	1.0	1.1	23.5 ± 1	0.3	20.4	1.8	28 ± 1	1355	569
2	2.5	4	2.0	1.0	1.1	10 ± 0.8	0.2	5.3	1.2	13 ± 0.8	305	94
3	2.5	6	2.0	1.0	1.1	10.5 ± 0.8	0.3	8.5	1.3	14.5 ± 0.8	380	146
4	2.5	6	2.0	1.0	1.1	11.5 ± 0.8	0.3	10.2	1.3	15.5 ± 0.8	445	184
5	2.5	6	2.0	1.0	1.1	13 ± 0.8	0.3	10.2	1.4	16.5 ± 0.8	510	205
7	2.5	10	2.0	1.0	1.1	13.5 ± 0.8	0.3	11.9	1.4	17.5 ± 0.8	595	264
12	2.5	10	2.0	1.0	1.1	18 ± 0.8	0.3	15.3	1.6	22 ± 1	875	403
19	2.5	16	2.0	1.0	1.1	21 ± 1	0.3	17.8	1.7	25.5 ± 1	1220	576
27	2.5	16	2.0	1.0	1.1	25.5 ± 1	0.3	20.4	1.9	30 ± 1.5	1630	771
37	2.5	16	2.0	1.0	1.1	29.5 ± 1	0.3	22.9	2	34 ± 1.5	1890	883
3G	2.5	-	2.0	1.0	1.1	10.5 ± 0.8	0.3	8.5	1.3	14.5 ± 0.8	380	146
4G	2.5	-	2.0	1.0	1.1	11.5 ± 0.8	0.3	10.2	1.3	15.5 ± 0.8	445	184
5G	2.5	-	2.0	1.0	1.1	13 ± 0.8	0.3	10.2	1.4	16.5 ± 0.8	510	205
7G	2.5	-	2.0	1.0	1.1	13.5 ± 0.8	0.3	11.9	1.4	17.5 ± 0.8	590	264
2	4	6	2.5	1.0	1.1	11 ± 0.8	0.3	8.5	1.3	14.5 ± 0.8	405	153
3	4	6	2.5	1.0	1.1	12 ± 0.8	0.3	10.2	1.3	15.5 ± 0.8	470	202
4	4	6	2.5	1.0	1.1	13 ± 0.8	0.3	10.2	1.4	16.5 ± 0.8	540	236
5	4	10	2.5	1.0	1.1	14 ± 0.8	0.3	11.9	1.4	18 ± 0.8	635	287

Number of elements	Cross section core, mm²	Electrical Cross section braid, 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)
3G	4	-	2.5	1.0	1.1	12 ± 0.8	0.3	10.2	1.3	15.5 ± 0.8	465	202
4G	4	-	2.5	1.0	1.1	13 ± 0.8	0.3	10.2	1.4	16.5 ± 0.8	540	236
5G	4	-	2.5	1.0	1.1	14 ± 0.8	0.3	11.9	1.4	18 ± 0.8	635	287
2	6	6	3.1	1.0	1.1	12.5 ± 0.8	0.3	10.2	1.3	16 ± 0.8	495	207
3	6	6	3.1	1.0	1.1	13 ± 0.8	0.3	10.2	1.4	17 ± 0.8	575	261
4	6	10	3.1	1.0	1.1	14.5 ± 0.8	0.3	11.9	1.4	18 ± 0.8	680	331
5	6	10	3.1	1.0	1.1	15.5 ± 0.8	0.3	11.9	1.5	19.5 ± 1	800	387
3G	6	-	3.1	1.0	1.1	13 ± 0.8	0.3	10.2	1.4	17 ± 0.8	570	261
4G	6	-	3.1	1.0	1.1	14.5 ± 0.8	0.3	11.9	1.4	18 ± 0.8	680	331
5G	6	-	3.1	1.0	1.1	15.5 ± 0.8	0.3	11.9	1.5	19.5 ± 1	800	387
2	10	10	4.0	1.0	1.1	14 ± 0.8	0.3	11.9	1.4	18 ± 0.8	650	290
3	10	10	4.0	1.0	1.1	15 ± 0.8	0.3	11.9	1.4	19 ± 0.8	760	377
4	10	10	4.0	1.0	1.1	16.5 ± 0.8	0.3	13.6	1.5	20.5 ± 1	925	481
3G	10	-	4.0	1.0	1.1	15 ± 0.8	0.3	11.9	1.4	19 ± 0.8	755	377
4G	10	-	4.0	1.0	1.1	16.5 ± 0.8	0.3	13.6	1.5	20.5 ± 1	925	481
5G	10	-	4.0	1.0	1.1	18 ± 0.8	0.3	15.3	1.5	22 ± 1	1095	585
2	16	16	5.05	1.0	1.1	16 ± 0.8	0.4	18.1	1.5	20.5 ± 1	905	455
3	16	16	5.05	1.0	1.1	17.5 ± 0.8	0.4	18.1	1.5	21.5 ± 1	1070	595
4	16	16	5.05	1.0	1.1	19 ± 0.8	0.3	17.8	1.6	23 ± 1	1285	732
3G	16	-	5.05	1.0	1.1	17.5 ± 0.8	0.3	13.6	1.5	21 ± 1	1025	551
4G	16	-	5.05	1.0	1.1	19 ± 0.8	0.3	15.3	1.6	23 ± 1	1255	707
5G	16	-	5.05	1.0	1.1	21 ± 1	0.3	17.8	1.6	25 ± 1	1495	871
3	25	16	6.3	1.2	1.1	21 ± 1	0.3	17.8	1.6	25 ± 1	1460	834
4	25	16	6.3	1.2	1.1	23.5 ± 1	0.3	17.8	1.7	27.5 ± 1	1780	1054
5	25	16	6.3	1.2	1.1	25.5 ± 1	0.3	20.4	1.8	30 ± 1.5	2130	1299
3G	25	-	6.3	1.2	1.1	21 ± 1	0.3	15.3	1.6	25 ± 1	1435	811
4G	25	-	6.3	1.2	1.1	23.5 ± 1	0.3	17.8	1.7	27.5 ± 1	1780	1054
5G	25	-	6.3	1.2	1.1	25.5 ± 1	0.3	20.4	1.8	30 ± 1.5	2130	1299
3	35	16	7.4	1.2	1.1	23.5 ± 1	0.3	17.8	1.7	27.5 ± 1	1820	1081
4	35	16	7.4	1.2	1.1	26 ± 1	0.3	20.4	1.8	30.5 ± 1.5	2265	1408
3G	35	-	7.4	1.2	1.1	23.5 ± 1	0.3	17.8	1.7	27.5 ± 1	1820	1081
4G	35	-	7.4	1.2	1.1	26 ± 1	0.3	20.4	1.8	30.5 ± 1.5	2265	1408
5G	35	-	7.4	1.2	1.1	29 ± 1.5	0.3	22.9	1.9	33.5 ± 1.5	2705	1735
2	50	25	8.75	1.4	1.1	25 ± 1	0.4	27.1	1.8	30 ± 1.5	1990	1086
3	50	25	8.75	1.4	1.1	27 ± 1	0.4	27.1	1.9	32 ± 1.5	2440	1498
4	50	25	8.75	1.4	1.1	30 ± 1.5	0.4	27.1	2	35 ± 1.5	3010	1909
4G	50	-	8.75	1.4	1.1	30 ± 1.5	0.3	22.9	2	34.5 ± 1.5	2960	1867
5G	50	-	8.75	1.4	1.1	33 ± 1.5	0.4	36.2	2.1	38.5 ± 1.5	3720	2408
2	70	35	10.6	1.4	1.1	29 ± 1.5	0.5	42.4	1.9	34 ± 1.5	2760	1630
3	70	35	10.6	1.4	1.1	31 ± 1.5	0.5	42.4	2	36.5 ± 1.5	3410	2239
4	70	35	10.6	1.4	1.1	34.5 ± 1.5	0.4	40.7	2.2	40 ± 2	4195	2832
5	70	35	10.6	1.4	1.1	38 ± 1.5	0.4	40.7	2.3	44 ± 2	5050	3442
4G	70	-	10.6	1.4	1.1	34.5 ± 1.5	0.4	40.7	2.2	40 ± 2	4195	2832
5G	70	-	10.6	1.4	1.1	38 ± 1.5	0.4	40.7	2.3	44 ± 2	5050	3442
2	95	50	12.4	1.6	1.4	34 ± 1.5	0.5	49.5	2.1	39.5 ± 1.5	3650	2123
3	95	50	12.4	1.6	1.4	36.5 ± 1.5	0.5	49.5	2.2	42 ± 2	4525	2944
4	95	50	12.4	1.6	1.4	40.5 ± 2	0.5	49.5	2.4	46.5 ± 2	5590	3767
4G	95	-	12.4	1.6	1.4	40.5 ± 2	0.4	40.7	2.4	46 ± 2	5500	3681
5G	95	-	12.4	1.6	1.4	45 ± 2	0.4	45.2	2.5	51 ± 2.5	6680	4546
2	120	60	14.0	1.6	1.4	37 ± 1.5	0.61	63.1	2.2	43 ± 2	4530	2736
3	120	60	14.0	1.6	1.4	40 ± 2	0.61	63.1	2.3	46 ± 2	5640	3798
4	120	60	14.0	1.6	1.4	44.5 ± 2	0.61	63.1	2.5	51± 2.5	6970	4860
4G	120	-	14.0	1.6	1.4	44.5 ± 2	0.4	45.2	2.5	50.5 ± 2.5	6775	4687
5G	120	-	14.0	1.6	1.4	49.5 ± 2	0.5	49.5	2.7	56 ± 2.5	8330	5793

Number of elements	Cross section core, mm²	Electrical Cross section braid, 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)
3G	150	-	15.45	1.8	1.4	44.5 ± 2	0.4	45.2	2.5	50 ± 2.5	6520	4302
4G	150	-	15.45	1.8	1.4	49 ± 2	0.5	56.5	2.7	56 ± 2.5	8325	5702
5G	150	-	15.45	1.8	1.4	55 ± 2.5	0.5	56.5	2.9	62 ± 3	10050	6999
4G	185	-	17.3	2.0	1.4	54.5 ± 2.5	0.5	56.5	2.9	61.5 ± 3	10120	6960

Ordering information

Part Number	Description	Sheath Colour	GTIN 1m	EL No.
20194476	RFOU M 1kV 1X 16/4mm2 P1/P8/P101 BK	BLACK	7021528000009	-
20139734	RFOU M 1kV 1X 25/4mm² P1/P8/P101 BK	BLACK	7021528000016	1044206
20183111	RFOU M 1kV 1X 35/6mm² P1/P8/P101 BK	BLACK	7021528000023	1044207
20204253	RFOU M 1kV 1X 50/6mm² P1/P8/P101 BK	BLACK	7021528000030	1044208
20151455	RFOU M 1kV 1X 70/10mm² P1/P8/P101 BK	BLACK	7021528000047	-
20151456	RFOU M 1kV 1X 95/10mm² P1/P8/P101 BK	BLACK	7021528000054	1044210
20132989	RFOU M 1kV 1X 120/10mm2 P1/P8/P101 BK	BLACK	7021528000061	-
20133004	RFOU M 1kV 1X 150/10mm2 P1/P8/P101 BK	BLACK	7021528000078	1044211
20136468	RFOU M 1kV 1X 185/16mm2 P1/P8/P101 BK	BLACK	7021528000085	1044213
20110465	RFOU M 1kV 1X 240/16mm2 P1/P8/P101 BK	BLACK	7021528000092	1044214
20110466	RFOU M 1kV 1X 300/16mm2 P1/P8/P101 BK	BLACK	7021528000108	1044215
20110761	RFOU M 1kV 1X 400/25mm2 P1/P8/P101 BK	BLACK	7021528000115	-
20204254	RFOU M 1kV 1X 500/25mm2 P1/P8/P101 BK	BLACK	7021528000122	-
20204255	RFOU M 1kV 1X 630/35mm2 P1/P8/P101 BK	BLACK	7021528000139	-
20110467	RFOU M 1kV 2X 1.5/4mm² P1/P8/P101 BK	BLACK	7021528000153	1044220
20110469	RFOU M 1kV 3X 1.5/4mm² P1/P8/P101 BK	BLACK	7021528000184	1044240
20110470	RFOU M 1kV 4X 1.5/6mm² P1/P8/P101 BK	BLACK	7021528000191	1044260
20111209	RFOU M 1kV 5X 1.5/6mm² P1/P8/P101 BK	BLACK	7021528000207	1044305
20110471	RFOU M 1kV 7X 1.5/6mm² P1/P8/P101 BK	BLACK	7021528000214	1044307
20104950	RFOU M 1kV 12X 1.5/10mm2 P1/P8/P101 BK	BLACK	7021528000221	1044312
20110472	RFOU M 1kV 19X 1.5/10mm2 P1/P8/P101 BK	BLACK	7021528000238	1044319
20326834	RFOU M 1kV 24X 1.5/16mm2 P1/P8/P101 BK	BLACK	7021528001242	-
20204256	RFOU M 1kV 27X 1.5/16mm2 P1/P8/P101 BK	BLACK	7021528000245	1044327
20204257	RFOU M 1kV 37X 1.5/16mm2 P1/P8/P101 BK	BLACK	7021528000252	1044337
20110468	RFOU M 1kV 3G 1.5mm² P1/P8/P101 BK	BLACK	7021528000160	-
20170924	RFOU M 1kV 4G 1.5mm² P1/P8/P101 BK	BLACK	7021528000177	-
20204149	RFOU M 1kV 5G 1.5mm² P1/P8/P101 BK	BLACK	7021528000269	-
20327978	RFOU M 1kV 8G 1.5mm² P1/P8/P101 BK	BLACK	7021528001211	-
20328155	RFOU M 1kV 20G 1.5mm² P1/P8/P101 BK	BLACK	7021528001228	-
20328156	RFOU M 1kV 28G 1.5mm² P1/P8/P101 BK	BLACK	7021528001235	-
20110473	RFOU M 1kV 2X 2.5/4mm² P1/P8/P101 BK	BLACK	7021528000290	1044221
20110475	RFOU M 1kV 3X 2.5/6mm² P1/P8/P101 BK	BLACK	7021528000320	1044241
20110476	RFOU M 1kV 4X 2.5/6mm² P1/P8/P101 BK	BLACK	7021528000351	1044261
20222521	RFOU M 1kV 5X 2.5/6mm² P1/P8/P101 BK	BLACK	7021528000368	1044355
20156200	RFOU M 1kV 7X 2.5/6mm² P1/P8/P101 BK	BLACK	7021528000375	1044357
20109423	RFOU M 1kV 12X 2.5/10mm2 P1/P8/P101 BK	BLACK	7021528000382	1044362
20120716	RFOU M 1kV 19X 2.5/10mm2 P1/P8/P101 BK	BLACK	7021528000399	1044369
20183112	RFOU M 1kV 27X 2.5/16mm2 P1/P8/P101 BK	BLACK	7021528000405	1044377
20114663	RFOU M 1kV 37X 2.5/16mm2 P1/P8/P101 BK	BLACK	7021528000412	1044387
20110474	RFOU M 1kV 3G 2.5mm² P1/P8/P101 BK	BLACK	7021528000306	-
20171027	RFOU M 1kV 4G 2.5mm² P1/P8/P101 BK	BLACK	7021528000337	-
20114348	RFOU M 1kV 5G 2.5mm² P1/P8/P101 BK	BLACK	7021528000344	-
20172517	RFOU M 1kV 7G 2.5mm² P1/P8/P101 BK	BLACK	7021528000443	-
20110477	RFOU M 1kV 2X 4/6mm² P1/P8/P101 BK	BLACK	7021528000450	1044222
20110478	RFOU M 1kV 3X 4/6mm² P1/P8/P101 BK	BLACK	7021528000467	1044242
20110479	RFOU M 1kV 4X 4/6mm² P1/P8/P101 BK	BLACK	7021528000474	1044262
20204162	RFOU M 1kV 5X 4/10mm² P1/P8/P101 BK	BLACK	7021528000481	-

Part Number	Description	Sheath Colour	GTIN 1m	EL No.
20110480	RFOU M 1kV 3G 4mm² P1/P8/P101 BK	BLACK	7021528000498	-
20133496	RFOU M 1kV 4G 4mm² P1/P8/P101 BK	BLACK	7021528000436	-
20204161	RFOU M 1kV 5G 4mm² P1/P8/P101 BK	BLACK	7021528000504	-
20110481	RFOU M 1kV 2X 6/6mm² P1/P8/P101 BK	BLACK	7021528000511	1044223
20110482	RFOU M 1kV 3X 6/6mm² P1/P8/P101 BK	BLACK	7021528000528	1044243
20110483	RFOU M 1kV 4X 6/10mm² P1/P8/P101 BK	BLACK	7021528000535	1044263
20217564	RFOU M 1kV 5X 6/10mm² P1/P8/P101 BK	BLACK	7021528001174	-
20132988	RFOU M 1kV 3G 6mm² P1/P8/P101 BK	BLACK	7021528000559	-
20117131	RFOU M 1kV 4G 6mm² P1/P8/P101 BK	BLACK	7021528000542	-
20204188	RFOU M 1kV 5G 6mm² P1/P8/P101 BK	BLACK	7021528000566	-
20110484	RFOU M 1kV 2X 10/10mm² P1/P8/P101 BK	BLACK	7021528000573	1044224
20110485	RFOU M 1kV 3X 10/10mm² P1/P8/P101 BK	BLACK	7021528000580	1044244
20110486	RFOU M 1kV 4X 10/10mm² P1/P8/P101 BK	BLACK	7021528000597	1044264
20172573	RFOU M 1kV 3G 10mm² P1/P8/P101 BK	BLACK	7021528000603	-
20172232	RFOU M 1kV 4G 10mm² P1/P8/P101 BK	BLACK	7021528000627	-
20170625	RFOU M 1kV 5G 10mm² P1/P8/P101 BK	BLACK	7021528000610	-
20110487	RFOU M 1kV 2X 16/16mm² P1/P8/P101 BK	BLACK	7021528000634	1044225
20110488	RFOU M 1kV 3X 16/16mm² P1/P8/P101 BK	BLACK	7021528000641	1044245
20110489	RFOU M 1kV 4X 16/16mm² P1/P8/P101 BK	BLACK	7021528000658	1044265
20172574	RFOU M 1kV 3G 16mm² P1/P8/P101 BK	BLACK	7021528000689	-
20172267	RFOU M 1kV 4G 16mm² P1/P8/P101 BK	BLACK	7021528000665	-
20204189	RFOU M 1kV 5G 16mm² P1/P8/P101 BK	BLACK	7021528000672	-
20110490	RFOU M 1kV 3X 25/16mm² P1/P8/P101 BK	BLACK	7021528000702	1044246
20110491	RFOU M 1kV 4X 25/16mm² P1/P8/P101 BK	BLACK	7021528000719	1044266
20227783	RFOU M 1kV 5X 25/16mm² P1/P8/P101 BK	BLACK	7021528001204	-
20180325	RFOU M 1kV 3G 25mm² P1/P8/P101 BK	BLACK	7021528000733	-
20172269	RFOU M 1kV 4G 25mm² P1/P8/P101 BK	BLACK	7021528000726	-
20181998	RFOU M 1kV 5G 25mm² P1/P8/P101 BK	BLACK	7021528000740	-
20110492	RFOU M 1kV 3X 35/16mm² P1/P8/P101 BK	BLACK	7021528000764	1044247
20110493	RFOU M 1kV 4X 35/16mm² P1/P8/P101 BK	BLACK	7021528000771	1044267
20224950	RFOU M 1kV 3G 35mm² P1/P8/P101 BK	BLACK	7021528001181	-
20172341	RFOU M 1kV 4G 35mm² P1/P8/P101 BK	BLACK	7021528000788	-
20204190	RFOU M 1kV 5G 35mm² P1/P8/P101 BK	BLACK	7021528000795	-
20183090	RFOU M 1kV 2X 50/25mm² P1/P8/P101 BK	BLACK	7021528000818	-
20110494	RFOU M 1kV 3X 50/25mm² P1/P8/P101 BK	BLACK	7021528000825	1044248
20110495	RFOU M 1kV 4X 50/25mm² P1/P8/P101 BK	BLACK	7021528000832	1044268
20172466	RFOU M 1kV 4G 50mm² P1/P8/P101 BK	BLACK	7021528000849	-
20285228	RFOU M 1kV 5G 50mm² P1/P8/P101 BK	BLACK	7021528000856	-
20172571	RFOU M 1kV 2X 70/35mm² P1/P8/P101 BK	BLACK	7021528000870	-
20109424	RFOU M 1kV 3X 70/35mm² P1/P8/P101 BK	BLACK	7021528000887	1044249
20136469	RFOU M 1kV 4X 70/35mm² P1/P8/P101 BK	BLACK	7021528000894	1044269
20221402	RFOU M 1kV 5X 70/35mm² P1/P8/P101 BK	BLACK	7021528000924	-
20172467	RFOU M 1kV 4G 70mm² P1/P8/P101 BK	BLACK	7021528000900	-
20204194	RFOU M 1kV 5G 70mm² P1/P8/P101 BK	BLACK	7021528000917	-
20172572	RFOU M 1kV 2X 95/50mm² P1/P8/P101 BK	BLACK	7021528000948	-
20109426	RFOU M 1kV 3X 95/50mm² P1/P8/P101 BK	BLACK	7021528000955	1044250
20109427	RFOU M 1kV 4X 95/50mm² P1/P8/P101 BK	BLACK	7021528000962	1044270
20138643	RFOU M 1kV 4G 95mm² P1/P8/P101 BK	BLACK	7021528000979	-
20285229	RFOU M 1kV 5G 95mm² P1/P8/P101 BK	BLACK	7021528000986	-

Part Number	Description	Sheath Colour	GTIN 1m	EL No.
20109428	RFOU M 1kV 2X 120/60mm2 P1/P8/P101 BK	BLACK	7021528001006	-
20109429	RFOU M 1kV 3X 120/60mm2 P1/P8/P101 BK	BLACK	7021528001013	1044251
20132986	RFOU M 1kV 4X 120/60mm2 P1/P8/P101 BK	BLACK	7021528001051	-
20204196	RFOU M 1kV 4G 120mm² P1/P8/P101 BK	BLACK	7021528001068	-
20204195	RFOU M 1kV 5G 120mm² P1/P8/P101 BK	BLACK	7021528000993	-
20224951	RFOU M 1kV 3G 150mm² P1/P8/P101 BK	BLACK	7021528001198	-
20114321	RFOU M 1kV 4G 150mm² P1/P8/P101 BK	BLACK	7021528001082	-
20132887	RFOU M 1kV 5G 150mm² P1/P8/P101 BK	BLACK	7021528001150	-
20204197	RFOU M 1kV 4G 185mm² P1/P8/P101 BK	BLACK	7021528001105	-

Electrical values power cables

Number of elements	Cross section core, mm²	Electrical Cross section braid, mm²	Conductor type 2	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
1	16	4	STCC	1.16	1.48	0.117	0.141	96	2240
1	25	4	STCC	0.734	0.936	0.111	0.133	127	3500
1	35	6	STCC	0.529	0.675	0.107	0.129	157	4900
1	50	6	STCC	0.391	0.499	0.106	0.127	196	7000
1	70	10	STCC	0.27	0.344	0.100	0.120	242	9800
1	95	10	STCC	0.195	0.249	0.097	0.117	293	13300
1	120	10	STCC	0.154	0.196	0.095	0.114	339	16800
1	150	10	STCC	0.126	0.161	0.094	0.112	389	21000
1	185	16	STCC	0.1	0.128	0.092	0.110	444	25900
1	240	16	STCC	0.0762	0.0972	0.090	0.108	522	33600
1	300	16	STCC	0.0607	0.0774	0.088	0.105	601	42000
1	400	25	STCC	0.0475	0.0606	0.087	0.105	690 dc / 670 ac	56000
1	500	25	STCC	0.0369	0.0471	0.086	0.103	780 dc / 720 ac	70000
1	630	35	STCC	0.0286	0.0365	0.084	0.100	890 dc / 780 ac	88200
2	1.5	4	STCC	12.2	15.6	0.110	0.132	20	210
3	1.5	4	STCC	12.2	15.6	0.110	0.132	16	210
4	1.5	6	STCC	12.2	15.6	0.110	0.132	16	210
5	1.5	6	STCC	12.2	15.6	0.110	0.132	13.5	210
7	1.5	6	STCC	12.2	15.6	0.110	0.132	12	210
12	1.5	10	STCC	12.2	15.6	0.110	0.132	10	210
19	1.5	10	STCC	12.2	15.6	0.110	0.132	8.5	210
24	1.5	16	STCC	12.2	15.6	0.110	0.132	8	210
27	1.5	16	STCC	12.2	15.6	0.110	0.132	7.5	210
37	1.5	16	STCC	12.2	15.6	0.110	0.132	7	210
3G	1.5	-	STCC	12.2	15.6	0.110	0.132	20	210
4G	1.5	-	STCC	12.2	15.6	0.110	0.132	16	210
5G	1.5	-	STCC	12.2	15.6	0.110	0.132	16	210
8G	1.5	-	STCC	12.2	15.6	0.110	0.132	12	210
20G	1.5	-	STCC	12.2	15.6	0.110	0.132	9	210
28G	1.5	-	STCC	12.2	15.6	0.110	0.132		210
2	2.5	4	STCC	7.56	9.64	0.103	0.123	26	350
3	2.5	6	STCC	7.56	9.64	0.103	0.123	21	350
4	2.5	6	STCC	7.56	9.64	0.103	0.123	21	350
7	2.5	6	STCC	7.56	9.64	0.103	0.123	15.5	350
12	2.5	10	STCC	7.56	9.64	0.103	0.123	13	350
19	2.5	10	STCC	7.56	9.64	0.103	0.123	11	350
27	2.5	16	STCC	7.56	9.64	0.103	0.123	10	350
37	2.5	16	STCC	7.56	9.64	0.103	0.123	9	350

Number of elements	Cross section core, mm²	Electrical Cross section braid, mm²	Conductor type 2	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
3G	2.5	-	STCC	7.56	9.64	0.103	0.123	26	350
4G	2.5	-	STCC	7.56	9.64	0.103	0.123	21	350
5G	2.5	-	STCC	7.56	9.64	0.103	0.123	21	350
7G	2.5	-	STCC	7.56	9.64	0.103	0.123	16.5	350
2	4	6	STCC	4.7	5.99	0.096	0.115	34	560
3	4	6	STCC	4.7	5.99	0.096	0.115	28	560
4	4	6	STCC	4.7	5.99	0.096	0.115	28	560
5	4	10	STCC	4.7	5.99	0.096	0.115	23.5	560
3G	4	-	STCC	4.7	5.99	0.096	0.115	34	560
4G	4	-	STCC	4.7	5.99	0.096	0.115	28	560
5G	4	-	STCC	4.7	5.99	0.096	0.115	28	560
2	6	6	STCC	3.11	3.97	0.091	0.109	44	840
3	6	6	STCC	3.11	3.97	0.091	0.109	36	840
4	6	10	STCC	3.11	3.97	0.091	0.109	36	840
5	6	10	STCC	3.11	3.97	0.091	0.109	30.5	840
3G	6	-	STCC	3.11	3.97	0.091	0.109	44	840
4G	6	-	STCC	3.11	3.97	0.091	0.109	36	840
5G	6	-	STCC	3.11	3.97	0.091	0.109	36	840
2	10	10	STCC	1.84	2.35	0.085	0.102	61	1400
3	10	10	STCC	1.84	2.35	0.085	0.102	50	1400
4	10	10	STCC	1.84	2.35	0.085	0.102	50	1400
3G	10	-	STCC	1.84	2.35	0.085	0.102	61	1400
4G	10	-	STCC	1.84	2.35	0.085	0.102	50	1400
5G	10	-	STCC	1.84	2.35	0.085	0.102	50	1400
2	16	16	STCC	1.16	1.48	0.080	0.096	80	2240
3	16	16	STCC	1.16	1.48	0.080	0.096	67	2240
4	16	16	STCC	1.16	1.48	0.080	0.096	67	2240
3G	16	-	STCC	1.16	1.48	0.080	0.096	80	2240
4G	16	-	STCC	1.16	1.48	0.080	0.096	67	2240
5G	16	-	STCC	1.16	1.48	0.080	0.096	67	2240
3	25	16	STCC	0.734	0.936	0.080	0.095	89	3500
4	25	16	STCC	0.734	0.936	0.080	0.095	89	3500
5	25	16	STCC	0.734	0.936	0.080	0.095	74	3500
3G	25	-	STCC	0.734	0.936	0.080	0.095	108	3500
4G	25	-	STCC	0.734	0.936	0.080	0.095	89	3500
5G	25	-	STCC	0.734	0.936	0.080	0.095	89	3500
3	35	16	STCC	0.529	0.675	0.077	0.092	110	4900
4	35	16	STCC	0.529	0.675	0.077	0.092	110	4900
3G	35	-	STCC	0.529	0.675	0.077	0.092	133	4900
4G	35	-	STCC	0.529	0.675	0.077	0.092	110	4900
5G	35	-	STCC	0.529	0.675	0.077	0.092	110	4900
2	50	25	STCC	0.391	0.499	0.077	0.092	167	7000
3	50	25	STCC	0.391	0.499	0.077	0.092	137	7000
4	50	25	STCC	0.391	0.499	0.077	0.092	137	7000
4G	50	-	STCC	0.391	0.499	0.077	0.092	137	7000
5G	50	-	STCC	0.391	0.499	0.077	0.092	137	7000
2	70	35	STCC	0.27	0.344	0.074	0.089	206	9800

Number of elements	Cross section core, mm²	Electrical Cross section braid, mm²	Conductor type 2	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
3	70	35	STCC	0.27	0.344	0.074	0.089	169	9800
4	70	35	STCC	0.27	0.344	0.074	0.089	169	9800
5	70	35	STCC	0.27	0.344	0.074	0.089	141.5	9800
4G	70	-	STCC	0.27	0.344	0.074	0.089	169	9800
5G	70	-	STCC	0.27	0.344	0.074	0.089	169	9800
2	95	50	STCC	0.195	0.249	0.074	0.088	249	13300
3	95	50	STCC	0.195	0.249	0.074	0.088	205	13300
4	95	50	STCC	0.195	0.249	0.074	0.088	205	13300
4G	95	-	STCC	0.195	0.249	0.074	0.088	205	13300
5G	95	-	STCC	0.195	0.249	0.074	0.088	205	13300
2	120	60	STCC	0.154	0.196	0.072	0.087	288	16800
3	120	60	STCC	0.154	0.196	0.072	0.087	237	16800
4	120	60	STCC	0.154	0.196	0.072	0.087	237	16800
4G	120	-	STCC	0.154	0.196	0.072	0.087	237	16800
5G	120	-	STCC	0.154	0.196	0.072	0.087	237	16800
3G	150	-	STCC	0.126	0.161	0.072	0.087	331	21000
4G	150	-	STCC	0.126	0.161	0.072	0.087	272	21000
5G	150	-	STCC	0.126	0.161	0.072	0.087	272	21000
4G	185	-	STCC	0.1	0.128	0.072	0.087	311	25900

Ambient temperature correction factors

Ambient Temp °C	35	40	45	50	55	60	65	70	75	80
Rating factor	1.10	1.05	1.00	0.94	0.88	0.82	0.74	0.67	0.58	0.47

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 (mm²) of conductors	-20°C

Flame Retardant power cable RFOU 0,6/1(1,2)kV, P1/P8/P101, double braided

Flame retardant halogen-free power cable. Double braided.

RFOU 0.6/1(1,2)kV

EPR/EPR/TCWB/EVA

RFOU 1kV NEK TS 606 Code P101
RFOU M 1kV NEK TS 606 Code P1/P8/P101

Operating temperature : 90°C
Operating Voltage : 0,6/1(1,2)kV

Application

Fixed installation for power,control and lighting in both EX (Zone 0, 1 & 2)- and safe areas, general purposes. RFOU M 1kV for installation in areas exposed to MUD and drilling/cleaning fluids. Meets the MUD resistance requirement in NEK TS 606:2009.

Standards applied

IEC 60092-353	- 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)
Lay up / Shielding		Cores laid up in concentric layers
Inner covering	**F**	Flame retardant and halogen-free extruded compound
Tape over inner covering		PET tape + rubberized Polyamide tape
Armour/screen	**O**	Two layers of tinned copper wire braid (double braid)
Tape over armour/screen		PET tape + rubberized Polyamide tape
Outer sheath	**U**	Flame retardant, halogen-free thermoset compound, SHF2 (IEC 60092-360)
Marking text (example)		"meter" "year/week" DRAKA 01 Part no. <SAP code> RFOU M 1kV P1/P8/P101 3 x 185/95 mm2 IEC 60332-3-22 Production no. <Prod.ordre no.>
Manufacturing unit		DRAKA 01 = Prysmian Group Norge AS
Outer sheath colour		Black

Core identification power cables

Single core – Black
Two cores - Blue – Brown
Three cores - Brown - Black – Grey
Four cores - Blue - Brown - Black – Grey
Five cores - Blue - Brown - Black - Grey – Black
Seven cores and above - White with black numbers
Two cores + earth (3G) - Yellow/green - Blue – Brown
Three cores + earth (4G) - Yellow/green - Brown - Black – Grey
Four cores + earth (5G) - Yellow/green - Blue - Brown - Black – Grey
G / X in cable description - G = One of the cores are yellow/green - X = no yellow/green core
Core identification - to HD308S2 - and IEC 60445 ED 5.0 2010-08

Range and dimensions

Number of elements	Cross section core, mm²	Electrical Cross section braid, 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)
3	150	75	15.45	1.8	1.4	44.5 ± 2	0.4	90.5	2.6	52 ± 2.5	7030	4747
4	150	75	15.45	1.8	1.4	49 ± 2	0.4	90.5	2.8	57 ± 3	8720	6043
3	185	95	17.3	2.0	1.4	49 ± 2	0.5	113.1	2.7	57.5 ± 2.5	8650	5918
4	185	95	17.3	2.0	1.4	54.5 ± 2.5	0.5	113.1	3	63.5 ± 3	10750	7539
3	240	120	19.85	2.2	1.4	55.5 ± 2.5	0.61	147.2	3	65 ± 3	11260	7823

Ordering information

Part number	Description	Sheath Colour	GTIN 1m	Norwegian EL No.
20109430	RFOU M 1kV 3X 150/75mm2 P1/P8/P101 BK	BLACK	7021528001020	1044252
20138527	RFOU M 1kV 4X 150/75mm2 P1/P8/P101 BK	BLACK	7021528001099	-
20109425	RFOU M 1kV 3X 185/95mm2 P1/P8/P101 BK	BLACK	7021528000931	-
20150519	RFOU M 1kV 4X 185/95mm2 P1/P8/P101 BK	BLACK	7021528001112	-
20109431	RFOU M 1kV 3X 240/120mm2 P1/P8/P101 BK	BLACK	7021528001129	-

Electrical values power cables

Number of elements	Cross section core, mm²	Electrical Cross section braid, mm²	Conductor type 2	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
3	150	75	STCC	0.126	0.161	0.072	0.087	272	21000
4	150	75	STCC	0.126	0.161	0.072	0.087	272	21000
3	185	95	STCC	0.1	0.128	0.072	0.086	311	25900
4	185	95	STCC	0.1	0.128	0.072	0.086	311	25900
3	240	120	STCC	0.0762	0.0972	0.072	0.086	365	33600

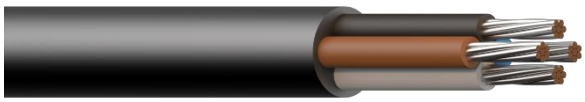
Ambient temperature correction factors

Ambient Temp °C	35	40	45	50	55	60	65	70	75	80
Rating factor	1.10	1.05	1.00	0.94	0.88	0.82	0.74	0.67	0.58	0.47

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 (mm²) of conductors	-20°C

Flame Retardant power cable, RU 0,6/1(1,2)kV, P18/P111



Flame retardant halogen-free power cable.

RU 0.6/1kV

EPR/EVA

RU 1kV NEK TS 606 Code P111
RU M 1kV NEK TS 606 Code P18/P111

Operating temperature : 90°C
Operating Voltage : 0,6/1kV

Application

Fixed installation for power, control and lighting in both safe areas, general purposes.
RU M 1kv meets the Oil & Mud resistance requirement in NEK TS 606:2016.
These cables are double-insulated and Single core cables are used as battery cables.

Standards applied

IEC 60092-353	- 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-RU Mbber, IEC 60092-360 (EPR)
Lay up / Shielding		Cores laid up in concentric layers
Inner covering		No inner covering. (Additional tapes may be applied)
Armour/screen		No armour.
Outer sheath	**U**	Flame retardant, halogen-free thermoset compound, SHF2 (IEC 60092-360)
Marking text (example)		"meter" "year/week" DRAKA 01 Part no. <SAP code> RU M 1KV P18/P111 3 x 2,5mm² IEC 60332-3-22 Production no. <Prod.ordre no.>
Manufacturing unit		DRAKA 01 = Prysmian Group Norge AS
Outer sheath colour		Black

Core identification power cables

Single core – Black
Two cores - Blue – Brown
Three cores - Brown - Black – Grey
Four cores - Blue - Brown - Black – Grey
Five cores - Blue - Brown - Black - Grey – Black
Seven cores and above - White with black numbers
Two cores + earth (3G) - Yellow/green - Blue – Brown
Three cores + earth (4G) - Yellow/green - Brown - Black - Grey
Four cores + earth (5G) - Yellow/green - Blue - Brown - Black - Grey
G / X in cable description - G = One of the cores are yellow/green - X = no yellow/green core
Core identification - to HD308S2 - and IEC 60445 Ed 5.0 2010-08

Range and dimensions

Number of elements	Cross section core, mm²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
1	6	3.1	1.0	1.0	7 ± 0.5	110	54
1	10	4.0	1.0	1.0	8 ±0.5	154	87
1	16	5.05	1.0	1.1	9 ± 0.8	221	140
1	70	10.6	1.4	1.3	16 ± 0.8	795	608
1	120	14.0	1.6	1.4	20 ± 1	1320	1060
1	240	19,85	2,2	1.7	27.5 ± 1	2570	2105
1	300	22.2	2.4	1.8	30.5 ± 1.5	3210	2644
2	1.5	1.6	1.0	1.1	9 ± 0.5	130	27
3	1.5	1.6	1.0	1.1	9.5 ± 0.8	155	40
4	1.5	1.6	1.0	1.1	10.5 ± 0.8	185	53
5	1.5	1.6	1.0	1.2	12 ± 0.8	235	67
7	1.5	1.6	1.0	1.2	12.5 ± 0.8	275	94
3G	1.5	1.6	1.0	1.1	9.5 ± 0.8	155	40
2	2.5	2.0	1.0	1.1	10 ± 0.8	165	43
3	2.5	2.0	1.0	1.1	10.5 ± 0.8	195	64
7	2.5	2.0	1.0	1.3	14 ± 0.8	370	149
3G	2.5	2.0	1.0	1.1	10.5 ± 0.8	195	64
4G	2.5	2.0	1.0	1.2	11.5 ± 0.8	245	85
5G	2.5	2.0	1.0	1.2	13 ± 0.8	300	106
2	4	2.5	1.0	1.1	11 ± 0.8	215	69
3	4	2.5	1.0	1.2	12 ± 0.8	265	104
3G	4	2.5	1.0	1.2	12 ± 0.8	265	104
4G	4	2.5	1.0	1.2	13 ± 0.8	325	138
2	6	3.1	1.0	1.2	12.5 ± 0.8	285	108
3	6	3.1	1.0	1.2	13 ± 0.8	355	162
4	6	3.1	1.0	1.3	14.5 ± 0.8	445	216
3G	6	3.1	1.0	1.2	13 ± 0.8	355	162
5G	6	3.1	1.0	1.3	16.5 ± 0.8	543	270
2	10	4.0	1.0	1.2	14 ± 0.8	405	175
3	10	4.0	1.0	1.3	15 ± 0.8	515	262
4	10	4.0	1.0	1.3	17 ± 0.8	640	350
4G	10	4.0	1.0	1.3	17 ± 0.8	640	350
2	16	5.05	1.0	1.3	16.5 ± 0.8	580	280
3	16	5.05	1.0	1.4	17.5 ± 0.8	740	420
4	16	5.05	1.0	1.4	19.5 ± 0.8	940	559

Number of elements	Cross section core, mm²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
4G	16	5.05	1.0	1.4	19.5 ± 0.8	940	559
2	25	6.3	1.2	1.4	20 ± 1	865	441
3	25	6.3	1.2	1.5	21.5 ± 1	1110	661
4	25	6.3	1.2	1.6	24 ± 1	1402	882
4G	25	6.3	1.2	1.6	24 ± 1	1420	882
2	35	7.4	1.2	1.5	22.5 ± 1	1125	606
4	35	7.4	1.2	1.7	27 ± 1	1855	1211
3	70	10.6	1.4	1.9	32 ± 1.5	2720	1828
4	70	10.6	1.4	2	36 ± 1.5	3480	2438
5G	70	10.6	1.4	2.1	40 ± 2	4300	3047
3	95	12.35	1.6	2.0	37 ± 1.5	3630	2465
4	95	12.35	1.6	2.2	41.5 ± 2	4655	3287
4	150	15.45	1.8	2.5	50.5 ± 2.5	7210	5150

Ordering information

Part number	Description	Sheath Colour	EAN No. DNK	EL No.
20196475	RU M 1kV 1X 6mm² P18/P111 BK	BLACK	7021528317145	-
20214327	RU M 1kV 1X 10mm² P18/P111 BK	BLACK	7021528317138	-
20214325	RU M 1kV 1X 16mm² P18/P111 BK	BLACK	7021528317008	-
20214326	RU M 1KV 1X 70mm² P18/P111 BK	BLACK	7021528317046	-
20317523	RU M 1KV 1X120mm² P18/P111 BK	BLACK	7021528317062	-
	RU M 1kV 1X 240mm² P18/P111 BK	BLACK	-	-
20157883	RU M 1kV 1X 300mm² P18/P111 BK	BLACK	7021528317107	-
20153849	RU M 1kV 2X 1.5mm² P18/P111 BK	BLACK	7021528317152	-
20115552	RU M 1kV 3X 1.5mm² P18/P111 BK	BLACK	7021528317183	-
20130984	RU M 1kV 4X 1.5mm² P18/P111 BK	BLACK	7021528317213	-
20153850	RU M 1kV 5X 1.5mm² P18/P111 BK	BLACK	7021528317244	-
20153851	RU M 1kV 7X 1.5mm² P18/P111 BK	BLACK	7021528317251	-
20109463	RU M 1kV 3G 1.5mm² P18/P111 BK	BLACK	7021528317169	-
	RU M 1kV 4G 1.5mm² P18/P111 BK	BLACK	7021528317190	-
20153852	RU M 1kV 2X 2.5mm² P18/P111 BK	BLACK	7021528317336	-
20115556	RU M 1kV 3X 2.5mm² P18/P111 BK	BLACK	7021528317367	-
20155413	RU M 1kV 7X 2.5mm² P18/P111 BK	BLACK	7021528317435	-
20109464	RU M 1kV 3G 2.5mm² P18/P111 BK	BLACK	7021528317343	1061434
20128690	RU M 1kV 4G 2.5mm² P18/P111 BK	BLACK	7021528317374	1061437
20142389	RU M 1kV 5G 2.5mm² P18/P111 BK	BLACK	7021528317404	-
20154725	RU M 1kV 2X 4mm² P18/P111 BK	BLACK	7021528317510	-
20154726	RU M 1kV 3X 4mm² P18/P111 BK	BLACK	7021528317534	-
20109465	RU M 1kV 3G 4mm² P18/P111 BK	BLACK	7021528317527	-
20217825	RU M 1kV 4G 4mm² P18/P111 BK	BLACK	7021528317545	-
20195578	RU M 1KV 2X 6mm² P18/P111 BK	BLACK	7021528317596	-
20195579	RU M 1kV 3X 6mm² P18/P111 BK	BLACK	7021528317619	-
20182000	RU M 1kV 4X 6mm² P18/P111 BK	BLACK	7021528317626	-
20109466	RU M 1kV 3G 6mm² P18/P111 BK	BLACK	7021528317602	-
20142388	RU M 1kV 5G 6mm² P18/P111 BK	BLACK	7021528317633	-

Part number	Description	Sheath Colour	EAN No. DNK	EL No.
20172559	RU M 1KV 2X 10mm² P18/P111 BK	BLACK	7021528317664	-
20154727	RU M 1kV 3X 10mm² P18/P111 BK	BLACK	7021528317671	-
20154728	RU M 1kV 4X 10mm² P18/P111 BK	BLACK	7021528317688	-
20172600	RU M 1kV 4G 10mm² P18/P111 BK	BLACK	7021528317695	-
20172601	RU M 1kV 2X 16mm² P18/P111 BK	BLACK	7021528317725	-
20154729	RU M 1kV 3X 16mm² P18/P111 BK	BLACK	7021528317732	-
20154730	RU M 1KV 4X 16mm² P18/P111 BK	BLACK	7021528317749	-
20109467	RU M 1kV 4G 16mm² P18/P111 BK	BLACK	7021528317763	-
20154731	RU M 1kV 2X 25mm² P18/P111 BK	BLACK	7021528317794	-
20152382	RU M 1kV 3X 25mm² P18/P111 BK	BLACK	7021528317800	-
20154732	RU M 1KV 4X 25mm² P18/P111 BK	BLACK	7021528317817	-
20172602	RU M 1kV 4G 25mm² P18/P111 BK	BLACK	7021528317824	-
20154733	RU M 1KV 2X 35mm² P18/P111 BK	BLACK	7021528317855	-
	RU M 1kV 3X 35mm² P18/P111 BK	BLACK	7021528317862	-
20154734	RU M 1kV 4X 35mm² P18/P111 BK	BLACK	7021528317879	-
20154736	RU M 1kV 3X 70mm² P18/P111 BK	BLACK	7021528317985	-
20154735	RU M 1kV 4X 70mm² P18/P111 BK	BLACK	7021528317947	
20221404	RU M 1kV 5G 70mm² P18/P111 BK	BLACK	7021528317992	-
20154737	RU M 1kV 3X 95mm² P18/P111 BK	BLACK	7021528318050	-
20154738	RU M 1kV 4X 95mm² P18/P111 BK	BLACK	7021528318074	-
20154739	RU M 1kV 4X 150mm² P18/P111 BK	BLACK	7021528318203	-

Electrical values power cables

Number of elements	Cross section core, mm²	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
1	6	3.11	3.97	0.113	0.136	52	840
1	70	0.27	0.344	0.087	0.104	242	9800
1	120	0.154	0.196	0.081	0.097	339	16800
1	240	0,0762	0,0972	0,080	0,096	522	33600
1	300	0.0607	0.0774	0.080	0.096	601	42000
2	1.5	12.2	15.6	0.110	0.132	20	210
3	1.5	12.2	15.6	0.110	0.132	16	210
4	1.5	12.2	15.6	0.110	0.132	16	210
5	1.5	12.2	15.6	0.110	0.132	13.5	210
7	1.5	12.2	15.6	0.110	0.132	12	210
3G	1.5	12.2	15.6	0.110	0.132	20	210
2	2.5	7.56	9.64	0.103	0.123	26	350
3	2.5	7.56	9.64	0.103	0.123	21	350
7	2.5	7.56	9.64	0.103	0.123	15.5	350
3G	2.5	7.56	9.64	0.103	0.123	26	350
4G	2.5	7.56	9.64	0.103	0.123	21	350
5G	2.5	7.56	9.64	0.103	0.123	21	350
2	4	4.7	5.99	0.096	0.115	34	560
3	4	4.7	5.99	0.096	0.115	28	560
3G	4	4.7	5.99	0.096	0.115	34	560

Number of elements	Cross section core, mm²	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
2	6	3.11	3.97	0.091	0.109	44	840
3	6	3.11	3.97	0.091	0.109	36	840
4	6	3.11	3.97	0.091	0.109	36	840
3G	6	3.11	3.97	0.091	0.109	44	840
5G	6	3.11	3.97	0.091	0.109	36	840
2	10	1.84	2.35	0.085	0.102	61	1400
3	10	1.84	2.35	0.085	0.102	50	1400
4	10	1.84	2.35	0.085	0.102	50	1400
4G	10	1.84	2.35	0.085	0.102	50	1400
2	16	1.16	1.48	0.08	0.096	80	2240
3	16	1.16	1.48	0.08	0.096	67	2240
4	16	1.16	1.48	0.08	0.096	67	2240
4G	16	1.16	1.48	0.08	0.096	67	2240
2	25	0.734	0.936	0.08	0.095	108	3500
3	25	0.734	0.936	0.08	0.095	89	3500
4	25	0.734	0.936	0.08	0.095	89	3500
4G	25	0.734	0.936	0.08	0.095	89	3500
2	35	0.529	0.675	0.077	0.092	133	4900
4	35	0.529	0.675	0.077	0.092	110	4900
3	70	0.27	0.344	0.074	0.089	169	9800
4	70	0.27	0.344	0.074	0.089	169	9800
3	95	0.195	0.249	0,074	0,088	205	13300
4	95	0.195	0.249	0,074	0,088	205	13300
4	150	0.126	0.161	0,072	0,087	273	21000

Ambient temperature correction factors

Ambient Temp °C	35	40	45	50	55	60	65	70	75	80
Rating factor	1.10	1.05	1.00	0.94	0.88	0.82	0.74	0.67	0.58	0.47

Installation recommendations

Overall diameter of cable (D)	Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
≤25 mm	8 x D	4 x D	50 N /mm²	-20°C
>25 mm		6 x D		

Flame Retardant earthing wire UX 1000V, P15/P108

Flame retardant conductors
UX 1000V

Halogen-free

UX 1000V NEK TS 606 Code P108
UX M 1000V NEK TS 606 Code P15/P108

Maximum operating
Conductor temperature : 90°C
Operating voltage : 1000V

Application

Insulated conductor for earthing and bonding services.
UX M 1000V meets the Oil & Mud resistance requirement in NEK TS 606:2016.

Standards applied

IEC:60092-353 &	
NEK TS 606:2016	- Design guidelines
IEC:60228 class 2	- Conductor
IEC:60332-1	- Flame retardance
IEC:60332-3-22	- Flame retardance
IEC:60754-1,2	- Halogen-free properties
IEC:61034-1,2	- Smoke density

CONSTRUCTION

	CODE LETTER	
Conductor		Tinned, stranded copper, IEC 60228 class 2 PETP-tape.
Insulation	**U**	Flame retardant halogen-free thermoset compound, HF90 / SHF2 (IEC 60092-360).
Unsheathed	**X**	
Marking text **(example)**		”meter” ”year/week” DRAKA 01 Part no. <SAP code> UX M 1000V P15/P108 1x 95 mm² IEC 332-3-22 Production no. <Prod.ordre no.>
Colour		Yellow/green

RANGE AND DIMENSIONS: UX M 1000V Insulated conductor, P15/P108

Conductor area (mm²)	Conductor diameter approx. (mm)	Insulation thickness (mm)	Diameter over insulation (mm)	Weight of conductor approx. (kg/km)	Copper content approx. (kg/km)
6	3,1	1,0	5,0±0,5	78	54
10	4,0	1,0	6,0±0,5	115	87
16	5,05	1,0	7,0±0,5	173	140
25	6,3	1,2	9,0±0,5	270	220
35	7,4	1,2	10,0±0,8	365	302
50	8,75	1,4	12,0±0,8	500	411
70	10,6	1,4	13.5±0,8	710	608
95	12,35	1,6	15.5±0,8	950	820
120	14,0	1,6	17,5±0,8	1210	1060
150	15,4	1,8	19,5±0,8	1465	1284
185	17,3	2,0	21,5±1,0	1820	1596
240	19,85	2,2	24,5±1,0	2385	2105
300	22,25	2,4	27,0±1,0	2985	2644
400	26,0	2,6	31 ± 1,5	4080	3660
630	32,80	2,8	38,5±1,5	6350	5800

Electrical characteristics:

Conductor area (mm²)	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating at 1 second, Ampere
6	3.11	3.97	52	840
10	1.84	2.35	72	1400
16	1.16	1.48	96	2240
25	0.734	0.936	127	3500
35	0.529	0.675	157	4900
50	0.391	0.499	196	7000
70	0.27	0.344	242	9800
95	0.195	0.249	293	13300
120	0.154	0.196	339	16800
150	0.126	0.161	389	21000
185	0.100	0.128	444	25900
240	0.0762	0.0972	522	33600
300	0.0607	0.0774	601	42000
400	0.0475	0.0606	690 dc / 670 ac	56000
630	0.0286	0.0359	890 dc / 780 ac	88200

Installation recommendations:

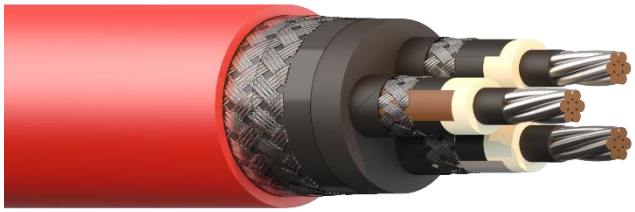
In accordance with IEC 60092-352

Minimum bending radius		Maximum pulling tension	Minium installation temperature
During installation	Fixed installed	25N x total	
8 x cable diameter	6 x cable diameter	cross section (mm²) of conductors	- 20 °C

Ordering information:

New Part number	Old Part number	Description	El-number (Norway only)
20109530		UX M 1000V 1x 6mm² P15/P108 YE/GN	1045541
20109531		UX M 1000V 1x 10mm² P15/P108 YE/GN	1045542
20109532		UX M 1000V 1x 16mm² P15/P108 YE/GN	1045543
20109533		UX M 1000V 1x 25mm² P15/P108 YE/GN	1045553
20109534		UX M 1000V 1x 35mm² P15/P108 YE/GN	1045563
20109535		UX M 1000V 1x 50mm² P15/P108 YE/GN	1045573
20109536		UX M 1000V 1x 70mm² P15/P108 YE/GN	1045583
20109537		UX M 1000V 1x 95mm² P15/P108 YE/GN	1045593
20121097		UX M 1000V 1x 120mm² P15/P108 YE/GN	1045603
20109538		UX M 1000V 1x 150mm² P15/P108 YE/GN	1045604
20139738		UX M 1000V 1x 185mm² P15/P108 YE/GN	1045605
20139739		UX M 1000V 1x 240mm² P15/P108 YE/GN	1045606
20204198		UX M 1000V 1x 300mm² P15/P108 YE/GN	1045607
	800813	UX M 1000V 1x 400mm² P15/P108 YE/GN	-
	800815	UX M 1000V 1x 630mm² P15/P108 YE/GN	-

Flame Retardant MV power cable, RFOU 6/10(12)kV, P3/P10/P103



Flame retardant halogen-free medium voltage (MV) cable.

RFOU 6/10(12) kV

EPR/EPR/TCWB/EVA

RFOU 10kV NEK 606 Code P103
RFOU M 10kV NEK 606 Code P3/P10/P103

Operating temperature : 90°C
Operating Voltage : 6/10(12) kV

Application

Fixed installation for medium voltage (MV) power in both EX- and safe areas, general purposes.
RFOU M 10kV for installation in areas exposed to MUD and drilling/cleaning fluids. Meets the Oil & Mud resistance requirement in NEK TS 606:2016.

Standards applied

IEC 60092-354	- 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 stranded and compressed copper (STCC), IEC 60228 class 2
Conductor screen semiconductive		Semiconductive layer (EP-rubber)
Insulation	**R**	EP-rubber, IEC 60092-360 (EPR)
Insulation screen semicoductive		Semiconductive layer (EP-rubber)
Metallic screen		Tinned copper wire braid
Lay up		Cores are laid up together. Cores are identified by Brown, Black or Grey threads over the metallic screen on each conductor.
Inner covering	**F**	Flame retardant and halogen-free extruded 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 thermoset compound, SHF2 (IEC 60092-360)
Marking text (example)		"meter" "year/week" DRAKA 04 Part no. <SAP-code> RFOU M 6/10(12)KV P3/P10/P103 3x 95/50 mm2 IEC 60332-3-22 Production no. <Production order number>
Manufacturing unit		DRAKA 04 = Draka Industrial Cable, Germany
Outer sheath colour		Red

Range and dimensions

Number of elements	Cross section core, mm²	Electrical Cross section braid, 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	35	11	7.2	3.4	1.5	21.5 ± 1.5	0.3	17.8	1.7	26 ± 1.5	1320	633
1	50	11	8.5	3.4	1.5	22.5 ± 1.0	0.3	20.4	1.9	28 ± 1.5	1525	782
1	70	16	10.3	3.4	1.5	24.5 ± 1.5	0.3	25.4	1.8	30 ± 2.0	1820	1032
1	95	16	12.1	3.4	1.5	26.5 ± 1.5	0.3	22.6	1.9	32.0 ± 2.0	2210	1325
1	120	20	13.5	3.4	1.5	27.5 ± 1.5	0.3	28	1.9	34 ± 2.0	2435	1497
1	150	15	14.7	3.4	1.5	28.5 ±1.5	0.3	25.4	2.0	35 ± 2.0	2600	1793
1	185	18	16.8	3.4	1.5	30 ±1.5	0.3	30.5	2.0	36.5 ± 2.0	3265	2171
1	240	21	19.1	3.4	1.5	33 ± 1.5	0.3	30.5	2.1	39 ± 2.0	4030	2823
1	300	29	21.6	3.4	1.5	36 ± 2	0.4	40.7	2.2	41.5 ± 2.5	4910	3572
1	400	35	24.2	3.4	1.5	38 ±1.5	0.4	49.8	2.4	45.5 ± 2.5	5875	4321
3	16	32	5.2	3.4	1.8	39.5 ± 1.5	0.4	49.8	2.4	46 ± 2.5	3550	1358
3	25	31	6.3	3.4	1.8	42 ± 1.5	0.4	45.2	2.5	49.5 ± 2.5	4015	1589
3	35	35	7.2	3.4	1.8	43.5 ± 2.0	0.4	54.3	2.6	51.5 ± 3	4550	1916
3	50	31	8.5	3.4	1.6	47 ± 2.0	0.4	54.3	2.8	55 ± 3	5000	2124
3	70	35	10.3	3.4	1.8	50 ± 2.0	0.4	54.3	2.8	58.5 ± 3	6040	2949
3	95	50	12.1	3.4	1.8	54.5 ± 2.0	0.5	77.7	3.0	63 ± 3	7970	4204
3	120	60	13.5	3.4	1.8	57.5 ± 2.0	0.5	77.7	3.1	66.5 ± 3.0	8473	4570
3	150	75	14.7	3.4	1.8	60 ± 2	0.6	101.8	3,1	70.5 ± 3	9782	5572
3	185	45	16.8	3.4	1.8	64.5 ± 2.5	0.5	77.7	3.3	74 ± 3.5	11245	6534
3	300	55	21.6	3.4	1.8	75 ± 3.0	0.5	84.8	3.7	85.0± 4	16050	9718

Ordering information

Part number	Description	Sheath Colour	EAN No. DNK	EL No.
	RFOU M 10KV 1X 35/11mm² P3/P10/P103 RD	RED	7021528040029	1061000
20080191	RFOU M 10KV 1X 50/11mm² P3/P10/P103 RD	RED	7021528040036	1061001
20113313	RFOU M 10KV 1X 70/16mm² P3/P10/P103 RD	RED	7021528040043	1061002
20091031	RFOU M 10KV 1X 95/16mm² P3/P10/P103 RD	RED	7021528040050	1061003
20076157	RFOU M 10KV 1X 120/20mm² P3/P10/P103 RD	RED	7021528040067	1061004
20195583	RFOU M 10KV 1X 150/15mm² P3/P10/P103 RD	RED	7021528040074	1061005
20098204	RFOU M 10KV 1X185/18mm² P3/P10/P103 RD	RED	7021528040081	1061006
20077819	RFOU M 10KV 1X 240/21mm² P3/P10/P103 RD	RED	7021528040098	1061007
20076156	RFOU M 10KV 1X 300/29mm² P3/P10/P103 RD	RED	7021528040104	1061008
	RFOU M 10KV 1X 400/35mm² P3/P10/P103 RD	RED	7021528040111	1061022
20168234	RFOU M 10KV 3X 16/32mm² P3/P10/P103 RD	RED	7021528040203	1061009
20175564	RFOU M 10KV 3X 25/31mm² P3/P10/P103 RD	RED	7021528040210	1061010
20151690	RFOU M 10KV 3X 35/35mm² P3/P10/P103 RD	RED	7021528040227	1061011
20203807	RFOU M 10KV 3X 50/31mm² P3/P10/P103 RD	RED	7021528040234	1061012
20076430	RFOU M 10KV 3X 70/35mm² P3/P10/P103 RD	RED	7021528040241	1061013
20076152	RFOU M 10KV 3X 95/50mm² P3/P10/P103 RD	RED	7021528040258	1061014
20086406	RFOU M 10KV 3X 120/60mm² P3/P10/P103 RD	RED	7021528040265	1061015
20076162	RFOU M 10KV 3X 150/75mm² P3/P10/P103 RD	RED	7021528040272	1061016
20077823	RFOU M 10KV 3X 185/45mm² P3/P10/P103 RD	RED	7021528040289	1061017
	RFOU M 10KV 3X 300/55mm² P3/P10/P103 RD	RED	7021528040302	1061019

Part number	Description	Sheath Colour	EAN No. DNK	EL No.

Electrical values power cables

Number of elements	Cross section core, mm²	Electrical Cross section braid, mm²	Conductor type 2	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Capacitans per phase, nF/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
1	35	11	STCC	0.529	0.675	0.138	0.166	270	157	4900
1	50	11	STCC	0.391	0.499	0.132	0.158	300	196	7000
1	70	16	STCC	0.270	0.344	0.125	0.150	340	242	9800
1	95	16	STCC	0.195	0.249	0.119	0.142	380	293	13300
1	120	20	STCC	0.154	0.196	0.116	0.139	410	339	16800
1	150	15	STCC	0.126	0.161	0.111	0.133	450	389	21000
1	185	18	STCC	0.100	0.128	0.108	0.130	480	444	25900
1	240	21	STCC	0.0762	0.0972	0.104	0.125	540	522	33600
1	300	29	STCC	0.0607	0.0774	0.104	0.124	590	601	42000
1	400	35	STCC	0.0475	0.0606	0.090	0.118	660	690 dc / 670 ac	56000
3	16	32	STCC	1.16	1.48	0.128	0.154	220	67	2240
3	25	31	STCC	0.734	0.936	0.119	0.143	250	89	3500
3	35	35	STCC	0.529	0.675	0.114	0.137	270	110	4900
3	50	31	STCC	0.391	0.499	0.108	0.130	300	137	7000
3	70	35	STCC	0.270	0.344	0.103	0.124	340	169	9800
3	95	50	STCC	0.195	0.249	0.098	0.118	380	205	13300
3	120	60	STCC	0.154	0.196	0.095	0.114	410	237	16800
3	150	75	STCC	0.126	0.161	0.092	0.111	450	272	21000
3	185	45	STCC	0.100	0.128	0.092	0.111	480	311	25900
3	300	55	STCC	0.0607	0.0774	0.084	0.101	590	421	42000

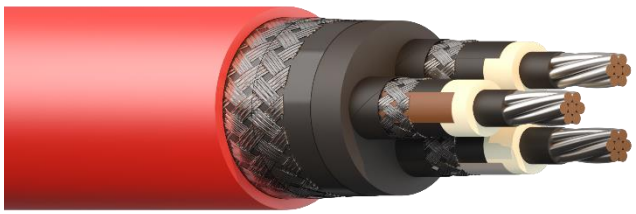
Ambient temperature correction factors

Ambient Temp °C	35	40	45	50	55	60	65	70	75	80
Rating factor	1.10	1.05	1.00	0.94	0.88	0.82	0.74	0.67	0.58	0.47

Installation recommendations

Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
15 x D	9 x D	50 N x total cross section (mm²) of conductors	-20°C

Flame Retardant MV power cable, RFOU 8,7/15(17,5)kV, P4/P11/P104



Flame retardant halogen-free medium voltage (MV) cable.

RFOU 8,7/15(17,5) kV

EPR/EPR/TCWB/EVA

RFOU 15kV NEK 606 Code P104
RFOU M 15kV NEK 606 Code P4/P11/P104

Operating temperature : 90°C
Operating Voltage : 8,7/15(17,5) kV

Application

Fixed installation for medium voltage (MV) power in both EX- and safe areas, general purposes.
RFOU M 15kV for installation in areas exposed to MUD and drilling/cleaning fluids. Meets the Oil & Mud resistance requirement in NEK TS 606:2016.

Standards applied

IEC 60092-354	- 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 stranded and compressed copper (STCC), IEC 60228 class 2
Conductor screen semiconductive		Semiconductive layer (EP-rubber)
Insulation	**R**	EP-rubber, IEC 60092-360 (EPR)
Insulation screen semicoductive		Semiconductive layer (EP-rubber)
Metallic screen		Tinned copper wire braid
Lay up		Cores are laid up together. Cores are identified by Brown, Black or Grey threads over the metallic screen on each conductor.
Inner covering	**F**	Flame retardant and halogen-free extruded 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 thermoset compound, SHF2 (IEC 60092-360)
Marking text (example)		"meter" "year/week" DRAKA 04 Part no. <SAP-code> RFOU M 8,7/15(17,5)KV P4/P11/P104 1x 300/29 mm2 IEC 60332-3-22 Production no. <Production order number>
Manufacturing unit		DRAKA 04 = Draka Industrial Cable, Germany
Outer sheath colour		Red

Range and dimensions

Number of elements	Cross section core, mm²	Electrical Cross section braid, 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	25	20	6.3	4.5	1.5	22 ± 1.5	0.4	31.7	1.8	28 ± 1.5	1485	694
1	50	20	8.5	4.5	1.5	25 ± 1.5	0.4	27.1	1.9	30.5 ± 1.5	1795	885
1	70	20	10.3	4.5	1.5	26.5 ± 1.5	0.4	31.7	1.9	32 ± 1.5	2150	1155
1	95	20	12.1	4.5	1.5	28 ± 1.5	0.4	31.7	2.0	34.5 ± 2.0	2550	1455
1	120	20	13.5	4.5	1.5	30 ± 2	0.4	36.2	2.0	36 ± 2	2800	1639
1	150	20	14.7	4.5	1.5	31 ±1.5	0.4	40.7	2.1	38 ± 2	3165	1930
1	185	20	16.8	4.5	1.5	33 ± 1.5	0.4	40.7	2.2	39.5 ± 2.5	3700	2340
1	240	25	19.1	4.5	1.5	35.5 ± 1.5	0.4	40.7	2.2	42 ±2.5	4435	2965
1	300	29	21.6	4.5	1.5	38 ±1.5	0.4	40.7	2.3	44.5 ± 2.5	4960	3341
1	400	30	24.2	4.5	1.5	40.5 ± 2	0.4	49.8	2.6	49.5 ± 2.5	6180	4355
1	500	30	27.3	4.5	1.5	44 ± 2	0.4	49.8	2.5	51 ± 3	7270	5303
3	25	35	6.3	4.5	1.8	46.5 ± 2	0.5	56.5	2.7	55 ± 3	4770	1744
3	35	35	7.2	4.5	1.8	48.5 ± 2	0.5	49.5	2.8	57 ± 3	5310	2061
3	50	40	8.5	4.5	1.8	52 ± 2	0.5	70.7	2.9	61 ± 3	6070	2508
3	70	40	10.3	4.5	1.8	55 ± 2.5	0.5	77.7	3.0	64.5 ± 3	7210	3198
3	95	55	12.1	4.5	1.8	59 ± 2.5	0.5	84.8	3.2	68.5 ± 3.0	8810	4297
3	120	60	13.5	4.5	1.8	62.5 ± 2.5	0.5	84.8	3.3	72 ± 3.5	9590	4708
3	150	80	14.7	4.5	1.8	66 ± 2.5	0.6	122.1	3.5	76 ± 3.5	11120	5846
3	185	95	16.8	4.5	1.8	69.5 ± 2.5	0.6	122.1	3.5	80 ± 4.0	12530	6708
3	240	95	19.1	4.5	1.8	74 ± 2.5	0.6	122.1	3.9	85.5 ± 4	15670	8925
3	300	95	21.5	4.5	1.8	80.0 ± 3.0	0.6	122.1	4.0	91.0 ± 4.0	17800	10420

Ordering information

Part number	Description	Sheath Colour	EAN No. DNK	EL No.
	RFOU M 8.7/15KV 1X 25/20mm² P4/P11/P104 RD	RED	7021528045017	-
	RFOU M 8.7/15KV 1X 50/20mm² P4/P11/P104 RD	RED	7021528045031	-
20160673	RFOU M 8.7/15KV 1X 70/20mm² P4/P11/P104 RD	RED	7021528045048	-
	RFOU M 8.7/15KV 1X 95/20mm² P4/P11/P104 RD	RED	7021528045055	-
20130709	RFOU M 8.7/15KV 1X 120/20mm² P4/P11/P104 RD	RED	7021528045062	-
	RFOU M 8.7/15KV 1X150/20mm² P4/P11/P104 RD	RED	7021528045079	-
20218193	RFOU M 8.7/15KV 1X 185/20mm² P4/P11/P104 RD	RED	7021528045086	-
20154057	RFOU M 8.7/15KV 1X 240/25mm² P4/P11/P104 RD	RED	7021528045093	-
20076154	RFOU M 8.7/15KV 1X 300/29mm² P4/P11/P104 RD	RED	7021528045109	-
	RFOU M 8.7/15KV 1X 400/30mm² P4/P11/P104 RD	RED	7021528045116	-
	RFOU M 8.7/15KV 1X 500/30mm² P4/P11/P104 RD	RED		-
	RFOU M 8.7/15KV 3X 25/35mm² P4/P11/P104 RD	RED	7021528045215	-
	RFOU M 8.7/15KV 3X 35/35mm² P4/P11/P104 RD	RED	7021528045222	-
20162331	RFOU M 8.7/15KV 3X 50/40mm² P4/P11/P104 RD	RED	7021528045239	-
	RFOU M 8.7/15KV 3X 70/40mm² P4/P11/P104 RD	RED	7021528045246	-
20160674	RFOU M 8.7/15KV 3X 95/50mm² P4/P11/P104 RD	RED	7021528045253	-
20160300	RFOU M 8.7/15KV 3X 120/60mm² P4/P11/P104 RD	RED	7021528045260	-
20161737	RFOU M 8.7/15KV 3X 150/80mm² P4/P11/P104 RD	RED	7021528045277	-
	RFOU M 8.7/15KV 3X 185/95mm² P4/P11/P104 RD	RED	7021528045284	-
	RFOU M 8.7/15KV 3X 240/95mm² P4/P11/P104 RD	RED	7021528045291	-
	RFOU M 8.7/15KV 3X 300/95mm² P4/P11/P104 RD	RED	7021528045307	-

Part number	Description	Sheath Colour	EAN No. DNK	EL No.

Electrical values power cables

Number of elements	Cross section core, mm²	Electrical Cross section braid, mm²	Conductor type 2	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Capacitans per phase, nF/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
1	25	20	STCC	0.734	0.936	0.151	0.181	210	127	3500
1	35	20	STCC	0.529	0.675	0.145	0.174	230	157	4900
1	50	20	STCC	0.391	0.499	0.137	0.165	250	196	7000
1	70	20	STCC	0.270	0.344	0.130	0.156	280	242	9800
1	95	20	STCC	0.195	0.249	0.125	0.150	310	293	13300
1	120	20	STCC	0.154	0.196	0.120	0.144	340	339	16800
1	150	20	STCC	0.126	0.161	0.116	0.140	370	389	21000
1	185	20	STCC	0.100	0.128	0.113	0.135	400	444	25900
1	240	25	STCC	0.0762	0.0972	0.109	0.130	440	522	33600
1	300	29	STCC	0.0607	0.0774	0.105	0.126	480	601	42000
1	400	30	STCC	0.047	0.059	0.101	0.121	550	690 dc / 670 ac	56000
1	500	30	STCC	0.0369	0.047	0.099	0.118		780 dc / 720 ac	70000
3	25	35	STCC	0.734	0.936	0.127	0.152	210	89	3500
3	35	35	STCC	0.529	0.675	0.122	0.146	230	110	4900
3	50	40	STCC	0.391	0.499	0.115	0.138	250	137	7000
3	70	40	STCC	0.270	0.344	0.109	0.131	280	169	9800
3	95	55	STCC	0.195	0.249	0.104	0.125	310	205	13300
3	120	60	STCC	0.154	0.196	0.100	0.121	340	237	16800
3	150	80	STCC	0.126	0.161	0.097	0.117	370	272	21000
3	185	95	STCC	0.100	0.128	0.097	0.117	400	311	25900
3	240	95	STCC	0.0762	0.0972	0.091	0.109	440	365	33600
3	300	95	STCC	0.0607	0.0774	0.088	0.106	480	421	42000

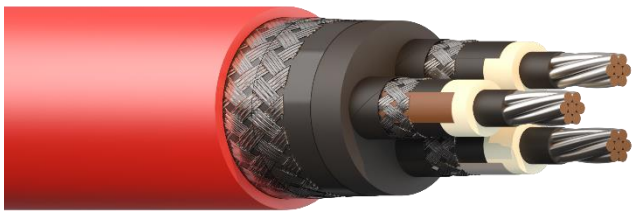
Ambient temperature correction factors

Ambient Temp °C	35	40	45	50	55	60	65	70	75	80
Rating factor	1.10	1.05	1.00	0.94	0.88	0.82	0.74	0.67	0.58	0.47

Installation recommendations

Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
15 x D	9 x D	50 N x total cross section (mm²) of conductors	-20°C

Flame Retardant MV power cable, RFOU 12/20(24)kV, P19/P21/P112



Flame retardant halogen-free medium voltage (MV) cable.

RFOU 12/20(24) kV

EPR/EPR/TCWB/EVA

RFOU 20kV NEK 606 Code P112
RFOU M 20kV NEK 606 Code P19/P21/P112

Operating temperature : 90°C
Operating Voltage : 12/20(24) kV

Application

Fixed installation for medium voltage (MV) power in both EX- and safe areas, general purposes.
RFOU M 20kV for installation in areas exposed to MUD and drilling/cleaning fluids. Meets the Oil & Mud resistance requirement in NEK TS 606:2016.

Standards applied

IEC 60092-354	- 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 stranded and compressed copper (STCC), IEC 60228 class 2
Conductor screen semiconductive		Semiconductive layer (EP-rubber)
Insulation	**R**	EP-rubber, IEC 60092-360 (EPR)
Insulation screen semicoductive		Semiconductive layer (EP-rubber)
Metallic screen		Tinned copper wire braid
Lay up		Cores are laid up together. Cores are identified by Brown, Black or Grey threads over the metallic screen on each conductor.
Inner covering	**F**	Flame retardant and halogen-free extruded 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 thermoset compound, SHF2 (IEC 60092-360)
Marking text (example)		"meter" "year/week" DRAKA 04 Part no. <SAP-code> RFOU M 12/20(24)KV P19/P21/P112 3x 95/50 mm2 IEC 60332-3-22 Production no. <Production order number>
Manufacturing unit		DRAKA 04 = Draka Industrial Cable, Germany
Outer sheath colour		Red

Range and dimensions

Number of elements	Cross section core, mm²	Electrical Cross section braid, 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	35	13	7.2	5.5	1.5	25.5 ±1.5	0.3	20.4	1.9	31 ± 2	1665	691
1	70	13	10.3	5.5	1.5	28.5 ± 1.5	0.3	25.4	2.0	34 ± 2	2210	1109
1	95	17	12.1	5.5	1.5	30.5 ±1.5	0.3	25.4	2.0	36 ± 2	2590	1385
1	120	15	13.5	5.5	1.5	32 ±1.5	0.3	28	2.1	38 ± 2	2890	1557
1	150	15	14.7	5.5	1.5	33 ±1.5	0.3	30.5	2.2	40 ± 2.5	3220	1847
1	185	18	16.8	5.5	1.5	35 ±1.5	0.3	28	2.3	41.5 ± 2.5	3690	2188
1	240	23	19.1	5.5	1.5	37.5 ±1.5	0.3	30.5	2.3	44 ± 2.5	4480	2861
1	300	28	21.6	5.5	1.5	40 ±2.0	0.4	49.8	2.4	47 ± 3	5460	3678
1	400	38	24.2	5.5	1.5	42.5 ±2.0	0.4	54.3	2.6	51.5 ± 3	6470	4433
1	500	50	27.3	5.5	1.5	45.5 ± 2	0.5	77.7	2.8	54 ± 3.5	7920	5620
3	50	35	8.5	5.5	1.8	56 ± 2	0.4	54.3	3.1	65.5 ± 3.5	6700	2420
3	95	50	12.1	5.5	2.0	64 ± 3	0.5	84.8	3.3	73.5 ± 4	9650	4350
3	150	75	14.7	5.5	2.0	69.5 ± 3	0.6	112	3.6	80 ± 4.5	11970	5836
3	185	55	16.8	5.5	1.8	74 ± 3	0.5	84.8	3.7	84 ± 4.5	13080	6696
3	300	45	21.6	5.5	2.2	85 ± 4	0.5	77.7	4.1	95 ± 5	18290	9760
3	400	65	24.2	5.5	2.4	93.5 ± 3.5	0.6	112	4.7	106 ± 5	23000	13000

Ordering information

Part number	Description	Sheath Colour	EAN No. DNK	EL No.
	RFOU M 20KV 1X 35/13mm² P19/P21/P112 RD	RED	7021528041026	-
20076155	RFOU M 20KV 1X 70/13mm² P19/P21/P112 RD	RED	7021528041040	-
20076158	RFOU M 20KV 1X 95/17mm² P19/P21/P112 RD	RED	7021528041057	-
	RFOU M 20KV 1X120/15mm² P19/P21/P112 RD	RED	7021528041064	-
20099891	RFOU M 20KV 1X150/15mm² P19/P21/P112 RD	RED	7021528041071	1061035
20092205	RFOU M 20KV 1X185/18mm² P19/P21/P112 RD	RED	7021528041088	-
20077821	RFOU M 20KV 1X240/23mm² P19/P21/P112 RD	RED	7021528041095	-
20076160	RFOU M 20KV 1X300/28mm² P19/P21/P112 RD	RED	7021528041101	1061038
20089316	RFOU M 20KV 1X400/35mm² P19/P21/P112 RD	RED	7021528041118	-
	RFOU M 20KV 1X500/50mm² P19/P21/P112 RD	RED	7021528041125	-
	RFOU M 20KV 3X 50/35mm² P19/P21/P112 RD	RED	7021528041231	-
20132431	RFOU M 20KV 3X 95/50mm² P19/P21/P112 RD	RED	7021528041255	-
20132432	RFOU M 20KV 3X150/75mm² P19/P21/P112 RD	RED	7021528041279	-
20077822	RFOU M 20kV 3X 185/55mm² P19/P21/P112 RD	RED	7021528041286	-
	RFOU M 20KV 3X300/45mm² P19/P21/P112 RD	RED	7021528041309	-
	RFOU M 20KV 3X400/65mm² P19/P21/P112 RD	RED	-	-

Electrical values power cables

Number of elements	Cross section core, mm²	Electrical Cross section braid, mm²	Conductor type 2	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Capacitans per phase, nF/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
1	35	13	STCC	0.529	0.675	0.149	0.178	200	157	4900
1	70	13	STCC	0.270	0.344	0.133	0.160	250	242	9800
1	95	17	STCC	0.195	0.249	0.127	0.152	270	293	13300
1	120	15	STCC	0.154	0.196	0.124	0.149	300	339	16800
1	150	15	STCC	0.126	0.161	0.119	0.142	320	389	21000
1	185	18	STCC	0.100	0.128	0.116	0.139	340	444	25900
1	240	23	STCC	0.0762	0.0972	0.112	0.134	380	522	33600

Number of elements	Cross section core, mm²	Electrical Cross section braid, mm²	Conductor type 2	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Capacitans per phase, nF/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
1	300	28	STCC	0.0607	0.0774	0.108	0.130	410	601	42000
1	400	35	STCC	0,0475	0,0606	0.105	0.126	490	690 dc / 670 ac	56000
1	500	50	STCC	0.0369	0.0463	0.102	0.123		780 dc / 720 ac	70000
3	50	35	STCC	0.391	0.499	0.121	0.145	220	137	7000
3	95	50	STCC	0.195	0.249	0.109	0.131	270	205	13300
3	150	75	STCC	0.126	0.161	0.102	0.122	320	272	21000
3	185	55	STCC	0.100	0.128	0.099	0.118	340	311	25900
3	300	45	STCC	0.0607	0.0774	0.090	0.108	410	421	42000
3	400	65	STCC	0.0475	0.0606	0.089	0.107	490	483 dc / 469 ac	56000

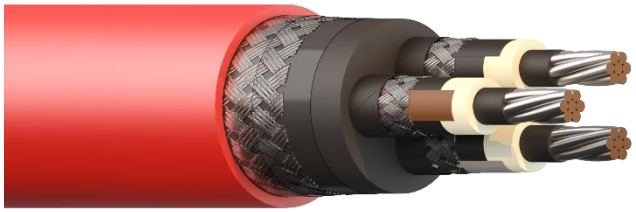
Ambient temperature correction factors

Ambient Temp °C	35	40	45	50	55	60	65	70	75	80
Rating factor	1.10	1.05	1.00	0.94	0.88	0.82	0.74	0.67	0.58	0.47

Installation recommendations

Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
15 x D	9 x D	50 N x total cross section (mm²) of conductors	-20°C

Flame Retardant MV power cable, RFOU 18/30(36)kV, P20/P22/P113



Flame retardant halogen-free medium voltage (MV) cable.

RFOU 18/30(36) kV

EPR/EPR/TCWB/EVA

RFOU 30kV NEK 606 Code P113
RFOU M 30kV NEK 606 Code P20/P22/P113

Operating temperature : 90°C
Operating Voltage : 18/30(36) kV

Application

Fixed installation for medium voltage (MV) power in both EX- and safe areas, general purposes.
RFOU M 30kV for installation in areas exposed to MUD and drilling/cleaning fluids. Meets the Oil & Mud resistance requirement in NEK TS 606:2016.

Standards applied

IEC 60092-354	- 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 stranded and compressed copper (STCC), IEC 60228 class 2
Conductor screen semiconductive		Semiconductive layer (EP-rubber)
Insulation	**R**	EP-rubber, IEC 60092-360 (EPR)
Insulation screen semicoductive		Semiconductive layer (EP-rubber)
Metallic screen		Tinned copper wire braid
Lay up		Cores are laid up together. Cores are identified by Brown, Black or Grey threads over the metallic screen on each conductor.
Inner covering	**F**	Flame retardant and halogen-free extruded 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 thermoset compound, SHF2 (IEC 60092-360)
Marking text (example)		"meter" "year/week" DRAKA 04 Part no. <SAP-code> RFOU M 18/30(36)KV P20/P22/P113 3x 120/60 mm2 IEC 60332-3-22 Production no. <Production order number>
Manufacturing unit		DRAKA 04 = Draka Industrial Cable, Germany
Outer sheath colour		Red

Range and dimensions

Number of elements	Cross section core, mm²	Cross section screen, 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	70	30	10.3	8.0	1,5	33.5 ± 2	0,4	45.2	2.2	40 ± 3	2950	1350
1	95	30	12.1	8.0	1.5	35 ± 2	0.4	40.7	2.3	42 ± 3	3380	1591
1	120	20	13.5	8.0	1.5	37 ± 2.5	0.4	40.7	2.3	44 ± 3	3620	1753
1	150	30	14.7	8.0	1.5	38 ± 2	0.4	49.8	2.4	45.5 ± 3	4040	2075
1	240	40	19.1	8.0	1.5	42 ± 2	0.4	54.3	2.5	50 ± 3	5370	3165
1	300	35	21.6	8.0	1.5	45 ± 2	0.4	54.3	2.6	53 ± 3,5	5960	3530
1	400	35	24.2	8.0	1.6	48 ± 2.5	0.4	54.3	2.7	57.5 ± 3.5	7220	4457
1	630	30	31	8.0	1.8	55 ± 3	0.4	54.3	3.0	63 ± 3.5	10370	7059
3	50	45	8.5	8.0	1.8	66.5 ± 2.5	0.5	84.8	3.5	76 ± 3.5	8880	2857
3	300	60	21.6	8.0	2.0	95 ± 3	0.6	112	4.5	107 ± 5	21300	10226

Ordering information

Part number	Description	Sheath Colour	EAN No. DNK	EL No.
	RFOU M 30KV 1x 70/30mm² P20/P22/P113 RD	RED	7021528043044	-
20195582	RFOU M 30KV 1x 95/30mm² P20/P22/P113 RD	RED	7021528043051	-
20099892	RFOU M 30KV 1x 120/20mm² P20/P22/P113 RD	RED	7021528043068	-
20195581	RFOU M 30KV 1x 150/ 30mm² P20/P22/P113 RD	RED	7021528043075	-
20271658	RFOU M 30KV 1x 240/40mm² P20/P22/P113 RD	RED	7021528043099	-
20077940	RFOU M 30KV 1x 300/35mm² P20/P22/P113 RD	RED	7021528043105	-
	RFOU M 30KV 1x 400/35mm² P20/P22/P113 RD	RED	7021528043112	-
	RFOU M 30KV 1x 630/30mm² P20/P22/P113 RD	RED	7021528043136	-
	RFOU M 30KV 3x 50/45mm² P20/P22/P113 RD	RED	7021528043235	-
	RFOU M 30KV 3x 300/60mm² P20/P22/P113 RD	RED	-	-

Electrical values power cables

Number of elements	Cross section core, mm²	Cross section screen, mm²	Conductor type 2	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Capacitans per phase, nF/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
1	70	30	STCC	0.270	0.344	0.145	0.174	190	242	9800
1	95	30	STCC	0.195	0.249	0.138	0.165	210	293	13300
1	120	20	STCC	0.154	0.193	0.133	0.160	190	339	16800
1	150	30	STCC	0.126	0.161	0,129	0,154	250	389	21000
1	240	40	STCC	0,0762	0,0972	0.120	0.143	290	522	33600
1	300	35	STCC	0.0607	0.0774	0.115	0.135	270	601	42000
1	400	35	STCC	0.0475	0.0606	0,111	0,134	360	690 dc / 670 ac	56000
1	630	30	STCC	0,0286	0,0359	0.104	0.125	414	890 dc / 780 ac	88200
3	50	45	STCC	0.391	0.499			180	137	7000
3	300	60	STCC	0.0607	0.0774			270	420	42000

Ambient temperature correction factors

Ambient Temp °C	35	40	45	50	55	60	65	70	75	80
Rating factor	1.10	1.05	1.00	0.94	0.88	0.82	0.74	0.67	0.58	0.47

Installation recommendations

Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
15 x D	9 x D	50 N x total cross section (mm²) of conductors	-20°C

Fire Resistant instrumentation cable BFOU(i) 150/250(300)V, S3/S7/S103

Fire resistant, flame retardant halogen-free instrumentation cable.

BFOU(I) 150/250(300)V

MGT/EPR/EPR/TCWB/EVA

BFOU(i) 250V **NEK TS 606 Code S103**
BFOU(i) M 250V **NEK TS 606 Code S3/S7/S103**

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

Application

Fixed installation for instrumentation, communication, control and alarm systems in both EX (Zone 0, 1 & 2)- and safe areas, emergency and critical systems where requirement for fire resistance exists.
BFOU(i) M 250V for installation in areas exposed to MUD and drilling/cleaning fluids. Meets the Oil & Mud resistance requirement in NEK TS 606:2016.

Standards applied

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 60331-1, -2, -21	- Fire Resistant
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	**B**	Mica-tape + EP-rubber, IEC 60092-360 (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 extruded 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 thermoset compound, SHF2 (IEC 60092-360)
Marking text (example)		"meter" "year/week" DRAKA 01 Part no. <SAP code> BFOU(I) M 250V S3/S7/S103 16 PAIR 0,75 mm2 FLEX - FLAME IEC 60092-376 IEC 60331-1*) or IEC 60331-2*) IEC 60331-21**) IEC 60332-3-22 Production no. <Prod.ordre no.>
Manufacturing unit		DRAKA 01 = Prysmian Group Norge AS
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

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	8 ± 0.5	0.2	4.5	1.1	11 ± 0.8	228	60
1	4	0.75	1.1	0.6	1.1	9 ± 0.5	0.2	4.5	1.2	12.5 ± 0.8	275	73
2	2	0.75	1.1	0.6	1.1	11.5 ± 0.8	0.3	10.2	1.3	15 ± 0.8	400	131
4	2	0.75	1.1	0.6	1.1	12.5 ± 0.8	0.3	11.9	1.4	16 ± 0.8	480	180
8	2	0.75	1.1	0.6	1.1	17 ± 0.8	0.3	15.3	1.6	21 ± 1	760	277
12	2	0.75	1.1	0.6	1.1	19.5 ± 0.8	0.3	17.8	1.7	24 ± 1	995	367
16	2	0.75	1.1	0.6	1.5	23 ± 1	0.3	20.4	1.8	27 ± 1	1295	458
24	2	0.75	1.1	0.6	1.5	27.5 ± 1	0.4	31.7	2.1	33 ± 1.5	1870	700
1	3	0.75	1.1	0.6	1.1	8.5 ± 0.5	0.2	4.5	1.1	11.5 ± 0.8	242	67
2	3	0.75	1.1	0.6	1.1	13 ± 0.8	0.3	10.2	1.4	16.5 ± 0.8	460	144
4	3	0.75	1.1	0.6	1.1	14 ± 0.8	0.3	11.9	1.4	17.5 ± 0.8	555	205
8	3	0.75	1.1	0.6	1.1	18.5 ± 0.8	0.3	17.8	1.7	23 ± 1	965	352
12	3	0.75	1.1	0.6	1.1	22 ± 1	0.3	20.4	1.8	26.5 ± 1	1225	467
16	3	0.75	1.1	0.6	1.5	25.5 ± 1	0.3	22.9	1.9	30 ± 1.5	1615	582
24	3	0.75	1.1	0.6	1.5	31 ± 1.5	0.4	36.2	2.2	36.5 ± 1.5	2325	891
1	2	1.5	1.55	0.7	1.1	9.5 ± 0.5	0.2	4.5	1.2	12.5 ± 0.8	270	75
2	2	1.5	1.55	0.7	1.1	14 ± 0.8	0.3	11.9	1.4	17.5 ± 0.8	485	178
4	2	1.5	1.55	0.7	1.1	15 ± 0.8	0.3	13.6	1.5	19 ± 0.8	645	256
8	2	1.5	1.55	0.7	1.1	20.5 ± 1	0.3	17.8	1.7	25 ± 1	1050	423
12	2	1.5	1.55	0.7	1.1	24.5 ± 1	0.3	20.4	1.9	29 ± 1	1400	575
16	2	1.5	1.55	0.7	1.5	28 ± 1	0.3	22.9	2	33 ± 1.5	1855	727
24	2	1.5	1.55	0.7	1.5	34.5 ± 1.5	0.4	40.7	2.3	40 ± 2	2720	1147
32	2	1.5	1.55	0.7	1.5	38 ± 1.5	0.4	45.2	2.5	44 ± 2	3355	1442
1	3	1.5	1.55	0.7	1.1	10 ± 0.8	0.2	5.3	1.2	13 ± 0.8	305	95
2	3	1.5	1.55	0.7	1.1	15 ± 0.8	0.3	11.9	1.5	19 ± 0.8	565	205
4	3	1.5	1.55	0.7	1.1	16.5 ± 0.8	0.3	15.3	1.6	20.5 ± 1	785	325
8	3	1.5	1.55	0.7	1.1	22.5 ± 1	0.3	20.4	1.8	27 ± 1	1335	551
12	3	1.5	1.55	0.7	1.1	27 ± 1	0.3	22.9	2	31.5 ± 1.5	1775	759
16	3	1.5	1.55	0.9	1.5	34 ± 1.5	0.4	36.2	2.2	39.5 ± 1.5	2700	1061
24	3	1.5	1.55	0.9	1.5	42 ± 2	0.4	45.2	2.5	48 ± 2	3760	1507
1	2	2.5	1.9	0.7	1.1	9.5 ± 0.5	0.2	5.3	1.2	12.5 ± 0.8	290	100
2	2	2.5	1.9	0.7	1.1	14 ± 0.8	0.3	11.9	1.5	18 ± 0.8	530	213
4	2	2.5	1.9	0.7	1.1	16.5 ± 0.8	0.3	15.3	1.6	20.5 ± 1	775	342
8	2	2.5	1.9	0.7	1.1	22.5 ± 1	0.3	20.4	1.8	27 ± 1	1285	587
12	2	2.5	1.9	0.7	1.5	27.5 ± 1	0.3	22.9	2	32.5 ± 1.5	1830	811
16	2	2.5	1.9	0.9	1.5	35 ± 1.5	0.4	36.2	2.2	40 ± 2	2630	1135

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	3	2.5	1.9	0.7	1.1	10 ± 0.8	0.2	6.0	1.2	13 ± 0.8	335	127
2	3	2.5	1.9	0.7	1.1	15.5 ± 0.8	0.3	13.6	1.5	19.5 ± 0.8	630	269
4	3	2.5	1.9	0.7	1.1	18.5 ± 0.8	0.3	15.3	1.6	22.5 ± 1	935	430
8	3	2.5	1.9	0.7	1.3	25 ± 1	0.3	22.9	2	29.5 ± 1	1670	772
16	3	2.5	1.9	0.9	1.5	38 ± 1.5	0.40	40.7	2.4	43.5 ± 2	3360	1506

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
Shielded 16 and 24 triple 1,5 mm²	105	0,71	12,9	24,4
Shielded 16 pair/triple 2,5 mm²	110	0,66	8,02	41,1

Ordering information

Part number	Description	Sheath Colour	GTIN 1m	EL No.
20110623	BFOU(I) M 250V 1PAIR 0.75mm² S3/S7/S103 GY	GREY	7021528932003	1043820
20110624	BFOU(I) M 250V 1PAIR 0.75mm² S3/S7/S103 BU	BLUE	7021528932010	1043819
20110625	BFOU(I) M 250V 1QUAD 0.75mm² S3/S7/S103 GY	GREY	7021528932034	-
20311221	BFOU(I) M 250V 1QUAD 0.75mm² S3/S7/S103 BU	BLUE	7021528932041	-
20110626	BFOU(I) M 250V 2PAIR 0.75mm² S3/S7/S103 GY	GREY	7021528932065	1044020
20104969	BFOU(I) M 250V 2PAIR 0.75mm² S3/S7/S103 BU	BLUE	7021528932072	1044019
20110627	BFOU(I) M 250V 4PAIR 0.75mm² S3/S7/S103 GY	GREY	7021528932188	1044021
20110628	BFOU(I) M 250V 4PAIR 0.75mm² S3/S7/S103 BU	BLUE	7021528932195	1044022
20109496	BFOU(I) M 250V 8PAIR 0.75mm² S3/S7/S103 GY	GREY	7021528932300	1044028
20110773	BFOU(I) M 250V 8PAIR 0.75mm² S3/S7/S103 BU	BLUE	7021528932317	1044029
20110629	BFOU(I) M 250V 12PAIR 0.75mm² S3/S7/S103 GY	GREY	7021528932362	1044030
20110630	BFOU(I) M 250V 12PAIR 0.75mm² S3/S7/S103 BU	BLUE	7021528932379	1044031
20110631	BFOU(I) M 250V 16PAIR 0.75mm² S3/S7/S103 GY	GREY	7021528932423	1044033
20110632	BFOU(I) M 250V 16PAIR 0.75mm² S3/S7/S103 BU	BLUE	7021528932430	1044034
20110633	BFOU(I) M 250V 24PAIR 0.75mm² S3/S7/S103 GY	GREY	7021528932485	1044036
20166157	BFOU(I) M 250V 24PAIR 0.75mm² S3/S7/S103 BU	BLUE	7021528932492	1044037
20110634	BFOU(I) M 250V 1T 0.75mm² S3/S7/S103 GY	GREY	7021528932607	1043920
20110635	BFOU(I) M 250V 1T 0.75mm² S3/S7/S103 BU	BLUE	7021528932614	1043919
20110636	BFOU(I) M 250V 2T 0.75mm² S3/S7/S103 GY	GREY	7021528932669	1044121
20110864	BFOU(I) M 250V 2T 0.75mm² S3/S7/S103 BU	BLUE	7021528932676	1044122
20111212	BFOU(I) M 250V 4T 0.75mm² S3/S7/S103 GY	GREY	7021528932782	1044123
20110865	BFOU(I) M 250V 4T 0.75mm² S3/S7/S103 BU	BLUE	7021528932799	1044124
20110637	BFOU(I) M 250V 8T 0.75mm² S3/S7/S103 GY	GREY	7021528932904	1044128
20112240	BFOU(I) M 250V 8T 0.75mm² S3/S7/S103 BU	BLUE	7021528932911	1044129
20110878	BFOU(I) M 250V 12T 0.75mm² S3/S7/S103 GY	GREY	7021528932966	1044130
20170930	BFOU(I) M 250V 12T 0.75mm² S3/S7/S103 BU	BLUE	7021528932973	1044131
20110774	BFOU(I) M 250V 16T 0.75mm² S3/S7/S103 GY	GREY	7021528933024	1044132
20170932	BFOU(I) M 250V 16T 0.75mm² S3/S7/S103 BU	BLUE	7021528933031	-
20131938	BFOU(I) M 250V 24T 0.75mm² S3/S7/S103 GY	GREY	7021528933086	1044138
20110638	BFOU(I) M 250V 1PAIR 1.5mm² S3/S7/S103 GY	GREY	7021528934007	1043860
20110639	BFOU(I) M 250V 1PAIR 1.5mm² S3/S7/S103 BU	BLUE	7021528934014	1043859
20110640	BFOU(I) M 250V 2PAIR 1.5mm² S3/S7/S103 GY	GREY	7021528934069	1044060

Part number	Description	Sheath Colour	GTIN 1m	EL No.
20111213	BFOU(I) M 250V 2PAIR 1.5mm² S3/S7/S103 BU	BLUE	7021528934076	1044061
20110641	BFOU(I) M 250V 4PAIR 1.5mm² S3/S7/S103 GY	GREY	7021528934182	1044063
20110642	BFOU(I) M 250V 4PAIR 1.5mm² S3/S7/S103 BU	BLUE	7021528934199	1044064
20110643	BFOU(I) M 250V 8PAIR 1.5mm² S3/S7/S103 GY	GREY	7021528934304	1044068
20110644	BFOU(I) M 250V 8PAIR 1.5mm² S3/S7/S103 BU	BLUE	7021528934311	1044069
20110645	BFOU(I) M 250V 12PAIR 1.5mm² S3/S7/S103 GY	GREY	7021528934366	1044070
20110646	BFOU(I) M 250V 12PAIR 1.5mm² S3/S7/S103 BU	BLUE	7021528934373	1044071
20109497	BFOU(I) M 250V 16PAIR 1.5mm² S3/S7/S103 GY	GREY	7021528934427	1044073
20109498	BFOU(I) M 250V 16PAIR 1.5mm² S3/S7/S103 BU	BLUE	7021528934434	1044074
20109499	BFOU(I) M 250V 24PAIR 1.5mm² S3/S7/S103 GY	GREY	7021528934489	1044076
20109500	BFOU(I) M 250V 24PAIR 1.5mm² S3/S7/S103 BU	BLUE	7021528934496	-
20272644	BFOU(I) M 250V 32PAIR 1.5mm² S3/S7/S103 GY	GREY	7021528934540	-
20110647	BFOU(I) M 250V 1T 1.5mm² S3/S7/S103 GY	GREY	7021528934601	1044170
20110648	BFOU(I) M 250V 1T 1.5mm² S3/S7/S103 BU	BLUE	7021528934618	1044169
20110866	BFOU(I) M 250V 2T 1.5mm² S3/S7/S103 GY	GREY	7021528934663	1044171
20109501	BFOU(I) M 250V 4T 1.5mm² S3/S7/S103 GY	GREY	7021528934786	1044173
20117428	BFOU(I) M 250V 4T 1.5mm² S3/S7/S103 BU	BLUE	7021528934793	1044174
20110649	BFOU(I) M 250V 8T 1.5mm² S3/S7/S103 GY	GREY	7021528934908	1044177
20117424	BFOU(I) M 250V 8T 1.5mm² S3/S7/S103 BU	BLUE	7021528934915	1044178
20109502	BFOU(I) M 250V 12T 1.5mm² S3/S7/S103 GY	GREY	7021528934960	1044179
20170933	BFOU(I) M 250V 12T 1.5mm² S3/S7/S103 BU	BLUE	7021528934977	1044180
20109503	BFOU(I) M 250V 16T 1.5mm² S3/S7/S103 GY	GREY	7021528935028	1044181
20170929	BFOU(I) M 250V 16T 1.5mm² S3/S7/S103 BU	BLUE	7021528935035	1044182
20210038	BFOU(I) M 250V 24T 1.5mm² S3/S7/S103 GY	GREY	7021528935097	-
20210039	BFOU(I) M 250V 24T 1.5mm² S3/S7/S103 BU	BLUE	7021528936001	-
20110650	BFOU(I) M 250V 1PAIR 2.5mm² S3/S7/S103 GY	GREY	7021528936001	1044140
20110867	BFOU(I) M 250V 1PAIR 2.5mm² S3/S7/S103 BU	BLUE	7021528936018	-
20142038	BFOU(I) M 250V 2PAIR 2.5mm² S3/S7/S103 GY	GREY	7021528936063	-
20110868	BFOU(I) M 250V 4PAIR 2.5mm² S3/S7/S103 GY	GREY	7021528936186	-
20161616	BFOU(I) M 250V 8PAIR 2.5mm² S3/S7/S103 GY	GREY	7021528936308	-
20195592	BFOU(I) M 250V 8PAIR 2.5mm² S3/S7/S103 BU	BLUE	7021528936315	-
20139737	BFOU(I) M 250V 12PAIR 2.5mm² S3/S7/S103 GY	GREY	7021528936360	-
20109504	BFOU(I) M 250V 16PAIR 2.5mm² S3/S7/S103 GY	GREY	7021528936421	-
20110869	BFOU(I) M 250V 1T 2.5mm² S3/S7/S103 GY	GREY	7021528936605	-
20195593	BFOU(I) M 250V 2T 2.5mm² S3/S7/S103 GY	GREY	7021528936667	-
20195594	BFOU(I) M 250V 4T 2.5mm² S3/S7/S103 GY	GREY	7021528936780	-
20152769	BFOU(I) M 250V 8T 2.5mm² S3/S7/S103 GY	GREY	7021528936902	-
20195595	BFOU(I) M 250V 16T 2.5mm² S3/S7/S103 GY	GREY	7021528937022	-

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 (mm²) of conductors	-20°C

Fire Resistant instrumentation cable BFOU(c) 150/250(300)V, S4/S8/S104

Fire resistant, flame retardant halogen-free instrumentation cable.

BFOU(c) 150/250(300)V

MGT/EPR/EPR/TCWB/EVA

BFOU(c) 250V NEK TS 606 Code S104
BFOU(c) M 250V NEK TS 606 Code S4/S8/S104

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

Application

Fixed installation for instrumentation, communication, control and alarm systems in both EX (Zone 0, 1 & 2)- and safe areas, emergency and critical systems where requirement for fire resistance exists.
BFOU(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.

Standards applied

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 60331-1, -2, -21	- Fire Resistant
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	**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 extruded 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 thermoset compound, SHF2 (IEC 60092-360)
Marking text (example)		"meter" "year/week" DRAKA 01 Part no. <SAP code> BFOU(C) M 250V S4/S8/S104 4 PAIR 0,75 mm2 FLEX - FLAME IEC 60092-376 IEC 60331-1*) or IEC 60331-2*) IEC 60331-21**) IEC 60332-3-22 Production no. <Prod.ordre no.>
Manufacturing unit		DRAKA 01 = Prysmian Group Norge AS
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

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)
2	2	0.75	1.1	0.6	1.1	11.5 ± 0.8	0.3	8.5	1.3	15 ± 0.8	380	112
4	2	0.75	1.1	0.6	1.1	12 ± 0.8	0.3	10.2	1.4	16 ± 0.8	435	152
8	2	0.75	1.1	0.6	1.1	16 ± 0.8	0.3	13.6	1.5	20 ± 1	670	235
12	2	0.75	1.1	0.6	1.1	18.5 ± 0.8	0.3	15.3	1.6	22.5 ± 1	845	306
16	2	0.75	1.1	0.6	1.5	21 ± 1	0.3	17.8	1.7	25 ± 1	1090	376
24	2	0.75	1.1	0.6	1.5	25.5 ± 1	0.3	22.9	2	30 ± 1.5	1500	525
2	3	0.75	1.1	0.6	1.1	13 ± 0.8	0.3	10.2	1.3	16.5 ± 0.8	455	140
4	3	0.75	1.1	0.6	1.1	14 ± 0.8	0.3	11.9	1.4	17.5 ± 0.8	530	193
8	3	0.75	1.1	0.6	1.1	19 ± 0.8	0.3	15.3	1.6	23 ± 1	875	301
12	3	0.75	1.1	0.6	1.1	21.5 ± 1	0.3	17.8	1.8	26 ± 1	1105	402
16	3	0.75	1.1	0.6	1.5	24 ± 1	0.3	20.4	1.9	28.5 ± 1	1435	501
24	3	0.75	1.1	0.6	1.5	29 ± 1	0.4	36.2	2.1	34.5 ± 1.5	2055	805
2	2	1.5	1.55	0.7	1.1	13.5 ± 0.8	0.3	10.2	1.4	17.5 ± 0.8	455	155
4	2	1.5	1.55	0.7	1.1	14.5 ± 0.8	0.3	11.9	1.4	18.5 ± 0.8	575	222
8	2	1.5	1.55	0.7	1.1	20 ± 1	0.3	17.8	1.7	24 ± 1	955	382
12	2	1.5	1.55	0.7	1.1	23 ± 1	0.3	20.4	1.8	27 ± 1	1225	509
16	2	1.5	1.55	0.7	1.5	25.5 ± 1	0.3	22.9	1.9	30 ± 1.5	1585	635
24	2	1.5	1.55	0.7	1.5	31 ± 1.5	0.4	36.2	2.2	36.5 ± 1.5	2290	969
2	3	1.5	1.55	0.7	1.1	15.5 ± 0.8	0.3	11.9	1.4	19 ± 0.8	550	197
4	3	1.5	1.55	0.7	1.1	16.5 ± 0.8	0.3	13.6	1.5	20.5 ± 1	730	289
8	3	1.5	1.55	0.7	1.1	22.5 ± 1	0.3	20.4	1.8	27 ± 1	1250	509
12	3	1.5	1.55	0.7	1.1	26.5 ± 1	0.3	22.9	1.9	31 ± 1.5	1605	688
16	3	1.5	1.55	0.7	1.5	29.5 ± 1	0.4	36.2	2.1	34.5 ± 1.5	2225	971
24	3	1.5	1.55	0.7	1.5	36 ± 1.5	0.4	40.7	2.4	41.5 ± 2	3030	1326
2	2	2.5	1.9	0.7	1.1	14 ± 0.8	0.3	11.9	1.4	17.5 ± 0.8	500	204
4	2	2.5	1.9	0.7	1.1	16 ± 0.8	0.3	13.6	1.5	20 ± 1	705	301
8	2	2.5	1.9	0.7	1.1	21.5 ± 1	0.3	17.8	1.8	26 ± 1	1145	502
12	2	2.5	1.9	0.7	1.5	26 ± 1	0.3	22.9	1.9	30.5 ± 1.5	1620	718
16	2	2.5	1.9	0.9	1.5	31.5 ± 1.5	0.4	31.7	2.1	36.5 ± 1.5	2265	971
24	2	2.5	1.9	0.9	1.5	38 ± 1.5	0.4	40.7	2.4	43.5 ± 2	3155	1382
4	3	2.5	1.9	0.7	1.1	18.5 ± 0.8	0.3	15.3	1.6	22.5 ± 1	900	400
8	3	2.5	1.9	0.7	1.1	25.5 ± 1	0.3	20.4	1.9	30 ± 1.5	1550	692
12	3	2.5	1.9	0.7	1.5	30 ± 1.5	0.4	31.7	2.1	35 ± 1.5	2235	1058
16	3	2.5	1.9	0.9	1.5	35.5 ± 1.5	0.4	36.2	2.3	41.5 ± 2	3050	1343

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 mm²	100	0,67	26,3	12,7
Unshielded triple 0,75 mm²	100	0,67	26,3	12,7
Unshielded pair 1,5 mm²	110	0,63	12,9	24,4
Unshielded triple 1,5 mm²	110	0,63	12,9	24,4
Unshielded pair 2,5 mm²	125	0,59	8,02	36,8
Unshielded triple 2,5 mm²	125	0,59	8,02	36,8
Unshielded 16 and 24 pair 2,5 mm²	95	0,66	8,02	41,1
Unshielded 16 triple 2,5 mm²	95	0,66	8,02	41,1

Ordering information

Part number	Description	Sheath Colour	GTIN 1m	EL No.
20110651	BFOU(C) M 250V 2P 0.75mm² S4/S8/S104 GY	GREY	7021528938067	1043821
20110652	BFOU(C) M 250V 2P 0.75mm² S4/S8/S104 BU	BLUE	7021528938074	1043822
20110653	BFOU(C) M 250V 4P 0.75mm² S4/S8/S104 GY	GREY	7021528938180	1043823
20110654	BFOU(C) M 250V 4P 0.75mm² S4/S8/S104 BU	BLUE	7021528938197	1043824
20110655	BFOU(C) M 250V 8P 0.75mm² S4/S8/S104 GY	GREY	7021528938302	1043828
20110656	BFOU(C) M 250V 8P 0.75mm² S4/S8/S104 BU	BLUE	7021528938319	1043829
20110657	BFOU(C) M 250V 12P 0.75mm² S4/S8/S104 GY	GREY	7021528938364	1043830
20110658	BFOU(C) M 250V 12P 0.75mm² S4/S8/S104 BU	BLUE	7021528938371	1043831
20110659	BFOU(C) M 250V 16P 0.75mm² S4/S8/S104 GY	GREY	7021528938425	1043833
20110660	BFOU(C) M 250V 16P 0.75mm² S4/S8/S104 BU	BLUE	7021528938432	1043834
20109505	BFOU(C) M 250V 24P 0.75mm² S4/S8/S104 GY	GREY	7021528938487	1043836
20118235	BFOU(C) M 250V 24P 0.75mm² S4/S8/S104 BU	BLUE	7021528938494	1043837
20110661	BFOU(C) M 250V 2T 0.75mm² S4/S8/S104 GY	GREY	7021528938661	1043921
20154488	BFOU(C) M 250V 2T 0.75mm² S4/S8/S104 BU	BLUE	7021528938678	1043922
20110662	BFOU(C) M 250V 4T 0.75mm² S4/S8/S104 GY	GREY	7021528938784	1043924
20118161	BFOU(C) M 250V 4T 0.75mm² S4/S8/S104 BU	BLUE	7021528938791	1043925
20110663	BFOU(C) M 250V 8T 0.75mm² S4/S8/S104 GY	GREY	7021528938906	1043928
20113359	BFOU(C) M 250V 8T 0.75mm² S4/S8/S104 BU	BLUE	7021528938913	1043929
20110664	BFOU(C) M 250V 12T 0.75mm² S4/S8/S104 GY	GREY	7021528938968	1043930
20110665	BFOU(C) M 250V 16T 0.75mm² S4/S8/S104 GY	GREY	7021528939026	1043933
20163603	BFOU(C) M 250V 24T 0.75mm² S4/S8/S104 GY	GREY	7021528939088	1043936
20110666	BFOU(C) M 250V 2P 1.5mm² S4/S8/S104 GY	GREY	7021528940060	1043862
20110667	BFOU(C) M 250V 2P 1.5mm² S4/S8/S104 BU	BLUE	7021528940077	1043861
20110668	BFOU(C) M 250V 4P 1.5mm² S4/S8/S104 GY	GREY	7021528940183	1043863
20110669	BFOU(C) M 250V 4P 1.5mm² S4/S8/S104 BU	BLUE	7021528940190	1043864
20110670	BFOU(C) M 250V 8P 1.5mm² S4/S8/S104 GY	GREY	7021528940305	1043868
20110671	BFOU(C) M 250V 8P 1.5mm² S4/S8/S104 BU	BLUE	7021528940312	1043869
20110672	BFOU(C) M 250V 12P 1.5mm² S4/S8/S104 GY	GREY	7021528940367	1043870
20110673	BFOU(C) M 250V 12P 1.5mm² S4/S8/S104 BU	BLUE	7021528940374	1043871
20109506	BFOU(C) M 250V 16P 1.5mm² S4/S8/S104 GY	GREY	7021528940428	1043873
20109507	BFOU(C) M 250V 16P 1.5mm² S4/S8/S104 BU	BLUE	7021528940435	1043874
20109508	BFOU(C) M 250V 24P 1.5mm² S4/S8/S104 GY	GREY	7021528940480	1043876
20109509	BFOU(C) M 250V 24P 1.5mm² S4/S8/S104 BU	BLUE	7021528940497	1043877
20110775	BFOU(C) M 250V 2T 1.5mm² S4/S8/S104 GY	GREY	7021528940664	1043971
20170931	BFOU(C) M 250V 2T 1.5mm² S4/S8/S104 BU	BLUE	7021528940671	1043972
20110674	BFOU(C) M 250V 4T 1.5mm² S4/S8/S104 GY	GREY	7021528940787	1043973
20170943	BFOU(C) M 250V 4T 1.5mm² S4/S8/S104 BU	BLUE	7021528940794	1043974
20110675	BFOU(C) M 250V 8T 1.5mm² S4/S8/S104 GY	GREY	7021528940909	1043977
20109510	BFOU(C) M 250V 12T 1.5mm² S4/S8/S104 GY	GREY	7021528940961	1043979
20109511	BFOU(C) M 250V 16T 1.5mm² S4/S8/S104 GY	GREY	7021528941029	1043981
20110776	BFOU(C) M 250V 24T 1.5mm² S4/S8/S104 GY	GREY	7021528941081	1043987
20110676	BFOU(C) M 250V 2P 2.5mm² S4/S8/S104 GY	GREY	7021528942064	-
20110677	BFOU(C) M 250V 4P 2.5mm² S4/S8/S104 GY	GREY	7021528942187	-

Part number	Description	Sheath Colour	GTIN 1m	EL No.
20110678	BFOU(C) M 250V 8P 2.5mm² S4/S8/S104 GY	GREY	7021528942309	-
20122326	BFOU(C) M 250V 12P 2.5mm² S4/S8/S104 GY	GREY	7021528942361	-
20110777	BFOU(C) M 250V 16P 2.5mm² S4/S8/S104 GY	GREY	7021528942422	-
20140778	BFOU(C) M 250V 24P 2.5mm² S4/S8/S104 GY	GREY	7021528942484	-
20165410	BFOU(C) M 250V 4TRIP 2.5mm² S4/S8/S104 GY	GREY	7021528942781	-
20165421	BFOU(C) M 250V 8TRIP 2.5mm² S4/S8/S104 GY	GREY	7021528942903	-
20234353	BFOU(C) M 250V 12TRIP 2.5mm² S4/S8/S104 GY	GREY	7021528942965	-
20210040	BFOU(C) M 250V 16TRIP 2.5mm² S4/S8/S104 GY	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 x total cross section (mm²) of conductors	-20°C

Fire Resistant instrumentation cable BU(i) 150/250(300)V, S13/S107

Fire resistant, flame retardant halogen-free instrumentation cable.

BU(i) 150/250(300)V

MGT/EPR/EVA

BU(i) 250V NEK TS 606 Code S107
BU(i) M 250V NEK TS 606 Code S13/S107

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.
BU(i) M 250V meets the Oil & Mud resistance requirements in NEK TS 606:2016.

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 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	**B**	Mica-tape + EP-rubber, IEC 60092-360 (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		No inner covering. (Additional tapes may be applied)
Armour/screen		No armour.
Outer sheath	**U**	Flame retardant, halogen-free thermoset compound, SHF2 (IEC 60092-360)
Marking text (example)		"meter" "year/week" DRAKA 01 Part no. <SAP code> BU(i) M 250V S13/S107 8 PAIR 0,75 mm2 FLEX - FLAME IEC 60092-376 IEC 60331-1*) or IEC 60331-2*) IEC 60331-21**) IEC 60332-3-22 Production no. <Prod.ordre no.>
Manufacturing unit		DRAKA 01 = Prysmian Group Norge AS
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

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 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	1.0	7 ± 0.5	95	17
2	2	0.75	1.1	0.6	1.2	11 ± 0.8	165	33
4	2	0.75	1.1	0.6	1.2	12.5 ± 0.8	252	65
8	2	0.75	1.1	0.6	1.4	17 ± 0.8	470	130
16	2	0.75	1.1	0.6	1.7	23 ± 1	865	259
24	2	0.75	1.1	0.6	1.9	28 ± 1	1255	389
1	3	0.75	1.1	0.6	1	7.5 ± 0.5	110	23
8	3	0.75	1.1	0.6	1.5	19.5 ± 0.8	630	179
12	3	0.75	1.1	0.6	1.7	23 ± 1	880	270
1	2	1.5	1.55	0.7	1.1	9.5 ± 0.5	142	32
2	2	1.5	1.55	0.7	1.3	14 ± 0.8	255	63
4	2	1.5	1.55	0.7	1.4	15.5 ± 0.8	385	125
1	2	2.5	1.9	0.7	1.1	9.5 ± 0.5	160	149
4	2	2.5	1.9	0.7	1.4	17 ± 0.8	485	195
16	2	2.5	1.9	0.7	2.0	31.5 ± 1.5	1725	782

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

Ordering information

Part number	Description	Sheath Colour	GTIN 1m	EL No.
20109514	BU(I) M 250V 1P 0.75mm² S13/S107 GY	GREY	7021528962000	1063500
20137137	BU(I) M 250V 1P 0.75mm² S13/S107 BU	BLUE	7021528962017	1063501
20157493	BU(I) M 250V 2P 0.75mm² S13/S107 GY	GREY	7021528962062	1063506
20176718	BU(I) M 250V 4P 0.75mm² S13/S107 GY	GREY	7021528962185	1063518
20161612	BU(I) M 250V 4P 0.75mm² S13/S107 BU	BLUE	7021528962192	-
20176720	BU(I) M 250V 8P 0.75mm² S13/S107 GY	GREY	7021528962307	1063530
20161613	BU(I) M 250V 8P 0.75mm² S13/S107 BU	BLUE	7021528962314	-
20176719	BU(I) M 250V 16P 0.75mm² S13/S107 GY	GREY	7021528962420	1063542
20161615	BU(I) M 250V 16P 0.75mm² S13/S107 BU	BLUE	7021528962437	-
20161610	BU(I) M 250V 24P 0.75mm² S13/S107 BU	BLUE	7021528962499	-
20119107	BU(I) M 250V 1T 0.75mm² S13/S107 GY	GREY	7021528962604	1063560
20161614	BU(I) M 250V 8T 0.75mm² S13/S107 GY	GREY	7021528962901	1063590
20161609	BU(I) M 250V 12T 0.75mm² S13/S107 GY	GREY	7021528962963	1063596
20109515	BU(I) M 250V 1P 1.5mm² S13/S107 GY	GREY	7021528964004	1063700
20109516	BU(I) M 250V 1P 1.5mm² S13/S107 BU	BLUE	7021528964011	1063701
20109517	BU(I) M 250V 2P 1.5mm² S13/S107 GY	GREY	7021528964066	1063706
	BU(I) M 250V 2P 1.5mm² S13/S107 BU	BLUE	7021528964073	1063707
20109518	BU(I) M 250V 4P 1.5mm² S13/S107 GY	GREY	7021528964189	1063718

Part number	Description	Sheath Colour	GTIN 1m	EL No.
20156709	BU(I) M 250V 1P 2.5mm² S13/S107 GY	GREY	7021528966008	1063900
20180299	BU(I) M 250V 4P 2.5mm² S13/S107 GY	GREY	7021528966183	
20161611	BU(I) M 250V 16P 2.5mm² S13/S107 GY	GREY	7021528966428	

Installation recommendations

Overall diameter of cable (D)	Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
≤25 mm	8 x D	4 x D	50 N x total cross section (mm²) of conductors	-20°C
>25 mm		6 x D		

Fire Resistant instrumentation cable BU(c) 150/250(300)V, S14/S108

Fire resistant, flame retardant halogen-free instrumentation cable.

BU(c) 150/250(300)V

MGT/EPR/EVA

BU(c) 250V NEK TS 606 Code S108
BU(c) M 250V NEK TS 606 Code S14/S108

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.
BU(c) M 250V meets the Oil & Mud resistance requirements in NEK TS 606:2016.

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 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	**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		No inner covering. (Additional tapes may be applied)
Armour/screen		No armour.
Outer sheath	**U**	Flame retardant, halogen-free thermoset compound, SHF2 (IEC 60092-360)
Marking text (example)		"meter" "year/week" DRAKA 01 Part no. <SAP code> BU(c) M 250V S14/S108 8 PAIR 0,75 mm2 FLEX - FLAME IEC 60092-376 IEC 60331-1*) or IEC 60331-2*) IEC 60331-21**) IEC 60332-3-22 Production no. <Prod.ordre no.>
Manufacturing unit		DRAKA 01 = Prysmian Group Norge AS
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

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 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	145	29
4	2	0.75	1.1	0.6	1.2	12 ± 0.8	225	54
8	2	0.75	1.1	0.6	1.4	16.5 ± 0.8	405	104
12	2	0.75	1.1	0.6	1.5	19 ± 0.8	555	154
16	2	0.75	1.1	0.6	1.6	21 ± 1	695	204
19	2	0.75	1.1	0.6	1.7	22 ± 1	810	241
24	2	0.75	1.1	0.6	1.8	25.5 ± 1	1000	304
2	3	0.75	1.1	0.6	1.2	12 ± 0.8	200	41
4	3	0.75	1.1	0.6	1.3	14 ± 0.8	305	79
8	3	0.75	1.1	0.6	1.5	19.5 ± 0.8	580	153
12	3	0.75	1.1	0.6	1.6	22.5 ± 1	765	248
16	3	0.75	1.1	0.6	1.7	24.5 ± 1	975	304
4	2	1.5	1.55	0.7	1.3	15 ± 0.8	340	107
2	2	2.5	1.9	0.7	1.3	14 ± 0.8	275	89

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 mm²	100	0,67	26,3	12,7
Unshielded triple 0,75 mm²	100	0,67	26,3	12,7
Unshielded pair 1,5 mm²	110	0,63	12,9	24,4
Unshielded triple 1,5 mm²	110	0,63	12,9	24,4
Unshielded pair 2,5 mm²	125	0,59	8,02	36,8
Unshielded triple 2,5 mm²	125	0,59	8,02	36,8

Ordering information

Part Number	Description	Sheath Colour	GTIN 1m	EL No.
20110778	BU(C) M 250V 2P 0.75mm² S14/S108 GY	GREY	7021528968064	1064106
20115554	BU(C) M 250V 4P 0.75mm² S14/S108 GY	GREY	7021528968187	1064118
20109519	BU(C) M 250V 8P 0.75mm² S14/S108 GY	GREY	7021528968309	1064130
20119162	BU(C) M 250V 12P 0.75mm² S14/S108 GY	GREY	7021528968361	1064136
20119164	BU(C) M 250V 16P 0.75mm² S14/S108 GY	GREY	7021528968422	1064142
20163420	BU(C) M 250V 19P 0.75mm² S14/S108 GY	GREY	7021528968453	1064145
20115190	BU(C) M 250V 24P 0.75mm² S14/S108 GY	GREY	7021528968484	1064148
20109520	BU(C) M 250V 2T 0.75mm² S14/S108 GY	GREY	7021528968668	1064166
20109521	BU(C) M 250V 4T 0.75mm² S14/S108 GY	GREY	7021528968781	1064178
20109522	BU(C) M 250V 8T 0.75mm² S14/S108 GY	GREY	7021528968903	1064190
Tba	BU(C) M 250V 12T 0.75mm² S14/S108 GY	GREY	-	-
20119166	BU(C) M 250V 16T 0.75mm² S14/S108 GY	GREY	7021528969023	1064203
20204200	BU(C) M 250V 4P 1.5mm² S14/S108 GY	GREY	7021528970180	1064318
20109523	BU(C) M 250V 2P 2.5mm² S14/S108 GY	GREY	7021528972061	-

Installation recommendations

Overall diameter of cable (D)	Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
≤25 mm	8 x D	4 x D	50 N x total cross section (mm²) of conductors	-20°C
>25 mm		6 x D		

Fire Resistant power cable, BFOU 0,6/1(1,2)kV, P5/P12/P105

Fire resistant, flame retardant halogen-free power cable.

BFOU 0,6/1(1,2)kV

MGT/EPR/EPR/TCWB/EVA

BFOU 1kV NEK TS 606 Code P105
BFOU M 1kV NEK TS 606 Code P5/P12/P105

Operating temperature : 90°C
Operating Voltage : 0,6/1(1,2)kV

Application

Fixed installation for power, control and lighting in both EX (Zone 0, 1 & 2)- and safe areas, emergency and critical systems where requirement for fire resistance exists.
BFOU M 1kV for installation in areas exposed to MUD and drilling/cleaning fluids. Meets the Oil & Mud resistance requirement in NEK TS 606:2016.

Standards applied

IEC 60092-353	- 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 60754-1,2	- Halogen Free
IEC 61034-1,2	- Low Smoke

Construction

	Code Letter	
Conductor		Tinned annealed stranded circular copper, IEC 60228 class 2
Insulation	**B**	Mica-tape + EP-rubber, IEC 60092-360 (EPR)
Lay up / Shielding		Cores laid up in concentric layers
Inner covering	**F**	Flame retardant and halogen-free extruded 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 thermoset compound, SHF2 (IEC 60092-360)
Marking text (example)		"meter" "year/week" DRAKA 01 Part no. <SAP code> BFOU M 0,6/1kV P5/P12/P105 3 x 25/16 mm2 FLEX - FLAME IEC 60092-353 IEC 60331-1*) or IEC 60331-2*) IEC 60331-21**) IEC 60332-3-22 Production no. <Prod.ordre no.>
Manufacturing unit		DRAKA 01 = Prysmian Group Norge AS
Outer sheath colour		Black

*) 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

Core identification power cables

Single core - Black
Two cores - Blue - Brown
Three cores - Brown - Black - Grey
Four cores - Blue - Brown - Black - Grey
Five cores - Blue - Brown - Black - Grey - Black
Seven cores and above - White with black numbers
Two cores + earth (3G) - Yellow/green - Blue - Brown
Three cores + earth (4G) - Yellow/green - Brown - Black – Grey
Four cores + earth (5G) - Yellow/green - Blue - Brown - Black - Grey
G / X in cable description - G = One of the cores are yellow/green - X = no yellow/green core
Core identification - to HD308S2 - and IEC 60445 Ed 5.0 2010-08

Range and dimensions

Number of elements	Cross section core, mm²	Electrical Cross section braid, 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	16	4	5.0	1.0	1.1	9.5 ± 0.5	0.2	5.3	1.2	12.5 ± 0.8	351	191
1	25	4	6.3	1.2	1.1	11.5 ± 0.8	0.2	6.0	1.2	14.5 ± 0.8	479	278
1	35	6	7.40	1.2	1.1	12.5 ± 0.8	0.3	10.2	1.3	16 ± 0.8	640	401
1	50	10	8.75	1.4	1.1	14 ± 0.8	0.3	12.7	1.4	18 ± 0.8	825	534
1	70	10	10.6	1.4	1.1	16 ± 0.8	0.3	12.7	1.4	19.5 ± 0.8	1060	731
1	95	10	12.35	1.6	1.1	18 ± 0.8	0.3	15.3	1.5	22 ± 1	1365	967
1	120	10	14.00	1.6	1.1	19.5 ± 1	0.3	15.3	1.6	23.5 ± 1	1650	1207
1	150	16	15.45	1.8	1.1	21.5 ± 1	0.3	17.8	1.6	26 ± 1	1975	1457
1	185	16	17.3	2.0	1.1	23.5 ± 1	0.3	17.8	1.7	28 ± 1	2370	1768
1	240	16	19.85	2.2	1.1	26.5 ± 1	0.3	20.4	1.8	31,5 ± 1.5	3010	2302
1	300	16	22.25	2.4	1.1	29.5 ± 1	0.3	22.9	1.9	34 ± 1.5	3690	2866
1	400	25	26.0	2.6	1.1	33.5 ± 1.5	0.4	31.7	2.1	39 ± 1.5	5000	3983
1	500	35	29.0	2.8	1.1	37 ± 1.5	0.4	40.7	2.2	42.5 ± 2	6150	4991
1	630	35	32.80	2.8	1.1	40.5 ± 2	0.4	40.7	2.3	46.5 ± 2	7530	6220
2	1.5	4	1.6	1.0	1.1	9.5 ± 0.5	0.2	5.3	1.2	13 ± 0.8	275	78
3	1.5	4	1.6	1.0	1.1	10.5 ± 0.8	0.2	5.3	1.2	13.5 ± 0.8	300	91
4	1.5	6	1.6	1.0	1.1	11.5 ± 0.8	0.3	8.5	1.3	15 ± 0.8	380	135
5	1.5	6	1.6	1.0	1.1	12.5 ± 0.8	0.3	10.2	1.3	16 ± 0.8	455	165
7	1.5	6	1.6	1.0	1.1	13.5 ± 0.8	0.3	10.2	1.3	17 ± 0.8	505	192
12	1.5	10	1.6	1.0	1.1	17.5 ± 0.8	0.3	13.6	1.5	21.5 ± 1	745	291
19	1.5	10	1.6	1.0	1.2	20.5 ± 0.8	0.3	15.3	1.6	24.5 ± 1	1025	400
27	1.5	16	1.6	1.0	1.2	25 ± 1	0.3	20.4	1.8	29 ± 1	1390	556
37	1.5	16	1.6	1.0	1.2	28 ± 1	0.3	22.9	1.9	32.5 ± 1.5	1760	714
3G	1.5	-	1.6	1.0	1.1	10.5 ± 0.8	0.2	5.3	1.2	13.5 ± 0.8	300	91
4G	1.5	-	1.6	1.0	1.1	11.5 ± 0.8	0.3	8.5	1.3	15 ± 0.8	380	135
5G	1.5	-	1.6	1.0	1.1	12.5 ± 0.8	0.3	10.2	1.3	16 ± 0.8	455	165
2	2.5	4	2.0	1.0	1.1	10.5 ± 0.8	0.2	5.3	1.2	14 ± 0.8	320	94

Number of elements	Cross section core, mm²	Electrical Cross section braid, 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)
3	2.5	6	2.0	1.0	1.1	11 ± 0.8	0.3	8.5	1.3	15 ± 0.8	390	146
4	2.5	6	2.0	1.0	1.1	12.5 ± 0.8	0.3	10.2	1.3	16 ± 0.8	460	183
5	2.5	6	2.0	1.0	1.1	13.5 ± 0.8	0.3	10.2	1.4	17.5 ± 0.8	535	204
7	2.5	10	2.0	1.0	1.1	14.5 ± 0.8	0.3	11.9	1.4	18 ± 0.8	620	264
12	2.5	10	2.0	1.0	1.2	19.5 ± 0.8	0.3	15.3	1.6	23.5 ± 1	935	402
19	2.5	16	2.0	1.0	1.2	23 ± 1	0.3	17.8	1.7	27 ± 1	1295	576
27	2.5	16	2.0	1.0	1.2	27.5 ± 1	0.3	20.4	1.9	32 ± 1.5	1725	770
37	2.5	16	2.0	1.0	1.4	31.5 ± 1.5	0.30	22.9	2.0	36 ± 1.5	2260	1010
3G	2.5	-	2.0	1.0	1.1	11 ± 0.8	0.3	8.5	1.3	15 ± 0.8	390	146
4G	2.5	-	2.0	1.0	1.1	12.5 ± 0.8	0.3	10.2	1.3	16 ± 0.8	460	183
5G	2.5	-	2.0	1.0	1.1	13.5 ± 0.8	0.3	10.2	1.4	17.5 ± 0.8	535	204
7G	2.5	-	2.0	1.0	1.1	14.5 ± 0.8	0.3	11.9	1.4	18 ± 0.8	615	264
2	4	6	2.5	1.0	1.1	11.5 ± 0.8	0.3	8.5	1.3	15.5 ± 0.8	420	152
3	4	6	2.5	1.0	1.1	12.5 ± 0.8	0.3	10.2	1.3	16 ± 0.8	490	202
4	4	6	2.5	1.0	1.1	13.5 ± 0.8	0.3	10.2	1.4	17.5 ± 0.8	555	236
3G	4	-	2.5	1.0	1.1	12.5 ± 0.8	0.3	10.2	1.3	16 ± 0.8	490	202
4G	4	-	2.5	1.0	1.1	13.5 ± 0.8	0.3	10.2	1.4	17.5 ± 0.8	555	236
5G	4	-	2.5	1.0	1.1	15 ± 0.8	0.3	11.9	1.4	18.5 ± 0.8	660	287
2	6	6	3.1	1.0	1.1	13 ± 0.8	0.3	10.2	1.3	16.5 ± 0.8	510	206
3	6	6	3.1	1.0	1.1	13.5 ± 0.8	0.3	10.2	1.4	17.5 ± 0.8	585	260
4	6	10	3.1	1.0	1.1	15 ± 0.8	0.3	11.9	1.4	18.5 ± 0.8	695	331
3G	6	-	3.1	1.0	1.1	13.5 ± 0.8	0.3	10.2	1.4	17.5 ± 0.8	585	260
4G	6	-	3.1	1.0	1.1	15 ± 0.8	0.3	11.9	1.4	18.5 ± 0.8	695	331
5G	6	-	3.1	1.0	1.1	16.5 ± 0.8	0.3	13.6	1.5	20.5 ± 1	835	401
2	10	10	4.0	1.0	1.1	14.5 ± 0.8	0.3	11.9	1.4	18.5 ± 0.8	660	290
3	10	10	4.0	1.0	1.1	15.5 ± 0.8	0.3	11.9	1.4	19.5 ± 0.8	770	377
4	10	10	4.0	1.0	1.1	17.5 ± 0.8	0.3	13.6	1.5	21 ± 1	940	481
3G	10	-	4.0	1.0	1.1	15.5 ± 0.8	0.3	11.9	1.4	19.5 ± 0.8	770	377
4G	10	-	4.0	1.0	1.1	17.5 ± 0.8	0.3	13.6	1.5	21 ± 1	970	481
5G	10	-	4.0	1.0	1.2	19 ± 0.8	0.3	15.3	1.5	23 ± 1	1125	585
2	16	16	5.05	1.0	1.1	17 ± 0.8	0.4	18.1	1.5	21 ± 1	915	455
3	16	16	5.05	1.0	1.1	18 ± 0.8	0.4	18.1	1.5	22 ± 1	1080	595

Number of elements	Cross section core, mm²	Electrical Cross section braid, 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	16	16	5.05	1.0	1.2	20 ± 1	0.3	17.8	1.6	24 ± 1	1300	732
3G	16	-	5.05	1.0	1.1	18 ± 0.8	0.3	13.6	1.5	22 ± 1	1030	551
4G	16	-	5.05	1.0	1.2	20 ± 1	0.3	15.3	1.6	24 ± 1	1275	707
5G	16	-	5.05	1.0	1.2	22 ± 1	0.3	17.8	1.6	26 ± 1	1520	871
2	25	16	6.3	1.2	1.2	20.5 ± 1	0.3	17.8	1.6	24.5 ± 1	1255	614
3	25	16	6.3	1.2	1.2	22 ± 1	0.3	17.8	1.6	26 ± 1	1505	834
4	25	16	6.3	1.2	1.2	24.5 ± 1	0.3	17.8	1.7	28.5 ± 1	1835	1054
3G	25	-	6.3	1.2	1.2	22 ± 1	0.3	17.8	1.6	26 ± 1	1505	834
4G	25	-	6.3	1.2	1.2	24.5 ± 1	0.3	17.8	1.7	28.5 ± 1	1845	1054
5G	25	-	6.3	1.2	1.2	27 ± 1	0.3	20.4	1.8	31 ± 1.5	2190	1299
2	35	16	7.4	1.2	1.1	22.5 ± 1	0.3	17.8	1.7	26.5 ± 1	1525	778
3	35	16	7.4	1.2	1.1	24.5 ± 1	0.3	17.8	1.7	28.5 ± 1.5	1860	1081
4	35	16	7.4	1.2	1.1	27 ± 1	0.3	20.4	1.8	31 ± 1.5	2320	1408
3G	35	-	7.4	1.2	1.1	24 ± 1	0.3	17.8	1.7	28.5 ± 1.5	1860	1081
4G	35	-	7.4	1.2	1.1	27 ± 1	0.3	20.4	1.8	31 ± 1.5	2320	1408
5G	35	-	7.4	1.2	1.1	29.5 ± 1	0.3	22.9	1.9	34 ± 1.5	2770	1735
2	50	25	8.75	1.4	1.1	26 ± 1	0.4	27.1	1.8	30.5 ± 1.5	2030	1086
3	50	25	8.75	1.4	1.1	27.5 ± 1	0.4	27.1	1.9	32.5 ± 1.5	2500	1497
4	50	25	8.75	1.4	1.1	30.5 ± 1.5	0.4	27.1	2	35.5 ± 1.5	3065	1909
4G	50	-	8.75	1.4	1.1	30.5 ± 1.5	0.3	22.9	2	35.5 ± 1.5	3020	1867
5G	50	-	8.75	1.4	1.1	34 ± 1.5	0.4	36.2	2.1	39 ± 1.5	3790	2407
2	70	35	10.60	1.4	1.1	29.5 ± 1	0.5	42.4	1.9	34.5 ± 1.5	2810	1630
3	70	35	10.60	1.4	1.1	31.5 ± 1.5	0.5	42.4	2	37 ± 1.5	3470	2239
4	70	35	10.60	1.4	1.1	35 ± 1.5	0.4	40.7	2.2	40.5 ± 2	4260	2833
5	70	35	10.60	1.4	1.1	39 ± 1.5	0.4	40.7	2.3	44.5 ± 2	5125	3442
3G	70	-	10.60	1.4	1.1	31.5 ± 1.5	0.3	22.9	2	36.5 ± 1.5	3270	2051
4G	70	-	10.60	1.4	1.1	35 ± 1.5	0.4	36.2	2.2	40.5 ± 2	4220	2789
5G	70	-	10.60	1.4	1.1	39 ± 1.5	0.4	40.7	2.3	44.5 ± 2	5125	3442
2	95	50	12.35	1.6	1.4	34.5 ± 1.5	0.61	52.6	2.1	40.5 ± 2	3750	2153
3	95	50	12.35	1.6	1.4	37 ± 1.5	0.5	49.5	2.2	42.5 ± 2	4585	2944
4	95	50	12.35	1.6	1.4	41 ± 2	0.5	49.5	2.4	47 ± 2	5655	3766
4G	95	-	12.35	1.6	1.4	41 ± 2	0.4	40.7	2.4	47 ± 2	5568	3680
5G	95	-	12.35	1.6	1.4	45.5 ± 2	0.4	45.2	2.5	51.5 ± 2.5	6820	4546
2	120	60	14.0	1.6	1.4	37.5 ± 1.5	0.61	63.1	2.2	44 ± 2	4125	2734
3	120	60	14.0	1.6	1.4	40.5 ± 2	0.61	63.1	2.3	47 ± 2	5715	3798
4	120	60	14.0	1.6	1.4	45 ± 2	0.61	63.1	2.5	51.5 ± 2.5	7050	4860
4G	120	-	14.0	1.6	1.4	45 ± 2	0.4	45.2	2.5	51 ± 2.5	6856	4687
5G	120	-	14.0	1.6	1.4	50 ± 2.5	0.5	49.5	2.7	57 ± 2.5	8394	5795

Number of elements	Cross section core, mm²	Electrical Cross section braid, 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)
4G	150	-	15.45	1.8	1.4	49.5 ± 2	0.5	56.5	2.7	56 ± 2.5	8390	5703
5G	150	-	15.45	1.8	1.4	55 ± 2.5	0.5	56.5	2.9	62 ± 3	10120	7003
4G	185	-	17.3	2.0	1.4	55 ± 2.5	0.5	56.5	2.9	62 ± 3	10190	6961

Ordering information

Part number	Description	Sheath Colour	GTIN 1m	EL No.
20120052	BFOU M 1kV 1X 16/4mm² P5/P12/P105 BK	BLACK	7021528002003	1043605
20110496	BFOU M 1kV 1X 25/4mm² P5/P12/P105 BK	BLACK	7021528002010	-
20167406	BFOU M 1kV 1X 35/6mm² P5/P12/P105 BK	BLACK	7021528002027	-
20110497	BFOU M 1kV 1X 50/10mm2 P5/P12/P105 BK	BLACK	7021528002034	1043608
20110498	BFOU M 1kV 1X 70/10mm2 P5/P12/P105 BK	BLACK	7021528002041	1043609
20110499	BFOU M 1kV 1X 95/10mm2 P5/P12/P105 BK	BLACK	7021528002058	1043610
20110500	BFOU M 1kV 1X 120/10mm2 P5/P12/P105 BK	BLACK	7021528002065	1043611
20110501	BFOU M 1kV 1X 150/16mm2 P5/P12/P105 BK	BLACK	7021528002072	1043612
20110502	BFOU M 1kV 1X 185/16mm2 P5/P12/P105 BK	BLACK	7021528002089	1043613
20110503	BFOU M 1kV 1X 240/16mm2 P5/P12/P105 BK	BLACK	7021528002096	-
20109432	BFOU M 1kV 1X 300/16mm2 P5/P12/P105 BK	BLACK	7021528002102	1043615
20132148	BFOU M 1kV 1X 400/25mm2 P5/P12/P105 BK	BLACK	7021528002119	-
20298574	BFOU M 1kV 1X 500/35mm2 P5/P12/P105 BK	BLACK	7021528002126	-
20204148	BFOU M 1kV 1X 630/35mm2 P5/P12/P105 BK	BLACK	7021528002133	-
20110504	BFOU M 1kV 2X 1.5/4mm2 P5/P12/P105 BK	BLACK	7021528002157	1043620
20110507	BFOU M 1kV 3X 1.5/4mm2 P5/P12/P105 BK	BLACK	7021528002188	1043640
20110508	BFOU M 1kV 4X 1.5/6mm2 P5/P12/P105 BK	BLACK	7021528002195	1043660
20110509	BFOU M 1kV 5X 1.5/6mm2 P5/P12/P105 BK	BLACK	7021528002201	1043705
20110510	BFOU M 1kV 7X 1.5/6mm2 P5/P12/P105 BK	BLACK	7021528002218	1043707
20109433	BFOU M 1kV 12X 1.5/10mm2 P5/P12/P105 BK	BLACK	7021528002225	1043712
20110511	BFOU M 1kV 19X 1.5/10mm2 P5/P12/P105 BK	BLACK	7021528002232	1043719
20110512	BFOU M 1kV 27X 1.5/16mm2 P5/P12/P105 BK	BLACK	7021528002249	1043727
20109434	BFOU M 1kV 37X 1.5/16mm2 P5/P12/P105 BK	BLACK	7021528002256	1043737
20110505	BFOU M 1kV 3G 1.5mm² P5/P12/P105 BK	BLACK	7021528002164	1043619
20110506	BFOU M 1kV 4G 1.5mm² P5/P12/P105 BK	BLACK	7021528002171	-
20110513	BFOU M 1kV 5G 1.5mm² P5/P12/P105 BK	BLACK	7021528002263	-
20110515	BFOU M 1kV 2X 2.5/4mm2 P5/P12/P105 BK	BLACK	7021528002294	1043621
20110517	BFOU M 1kV 3X 2.5/6mm2 P5/P12/P105 BK	BLACK	7021528002324	1043641
20110519	BFOU M 1kV 4X 2.5/6mm2 P5/P12/P105 BK	BLACK	7021528002355	1043661
20121182	BFOU M 1kV 5X 2.5/6mm2 P5/P12/P105 BK	BLACK	7021528002348	-
20110520	BFOU M 1kV 7X 2.5/10mm2 P5/P12/P105 BK	BLACK	7021528002379	1043757
20110521	BFOU M 1kV 12X 2.5/10mm2 P5/P12/P105 BK	BLACK	7021528002386	1043762
20110522	BFOU M 1kV 19X 2.5/16mm2 P5/P12/P105 BK	BLACK	7021528002393	1043769
20112294	BFOU M 1kV 27X 2.5/16mm2 P5/P12/P105 BK	BLACK	7021528002409	1043777
20109435	BFOU M 1kV 37X 2.5/16mm2 P5/P12/P105 BK	BLACK	7021528002416	1043787
20110516	BFOU M 1kV 3G 2.5mm² P5/P12/P105 BK	BLACK	7021528002300	1043639
20110518	BFOU M 1kV 4G 2.5mm² P5/P12/P105 BK	BLACK	7021528002331	1043659
20110523	BFOU M 1kV 5G 2.5mm² P5/P12/P105 BK	BLACK	7021528002423	1043755
20110514	BFOU M 1kV 7G 2.5mm² P5/P12/P105 BK	BLACK	7021528002287	-
20110526	BFOU M 1kV 2X 4/6mm² P5/P12/P105 BK	BLACK	7021528002454	1043622
20110527	BFOU M 1kV 3X 4/6mm² P5/P12/P105 BK	BLACK	7021528002461	1043642
20110528	BFOU M 1kV 4X 4/6mm² P5/P12/P105 BK	BLACK	7021528002478	1043662
20110529	BFOU M 1kV 3G 4mm² P5/P12/P105 BK	BLACK	7021528002508	-
20110524	BFOU M 1kV 4G 4mm² P5/P12/P105 BK	BLACK	7021528002430	-

Part number	Description	Sheath Colour	GTIN 1m	EL No.
20110525	BFOU M 1kV 5G 4mm² P5/P12/P105 BK	BLACK	7021528002447	-
20110530	BFOU M 1kV 2X 6/6mm² P5/P12/P105 BK	BLACK	7021528002515	1043623
20110531	BFOU M 1kV 3X 6/6mm² P5/P12/P105 BK	BLACK	7021528002522	1043643
20110532	BFOU M 1kV 4X 6/10mm² P5/P12/P105 BK	BLACK	7021528002539	1043663
20110533	BFOU M 1kV 3G 6mm² P5/P12/P105 BK	BLACK	7021528002546	-
20110534	BFOU M 1kV 4G 6mm² P5/P12/P105 BK	BLACK	7021528002553	-
20110535	BFOU M 1kV 5G 6mm² P5/P12/P105 BK	BLACK	7021528002560	-
20110536	BFOU M 1kV 2X 10/10mm2 P5/P12/P105 BK	BLACK	7021528002577	1043624
20110537	BFOU M 1kV 3X 10/10mm2 P5/P12/P105 BK	BLACK	7021528002584	1043644
20110538	BFOU M 1kV 4X 10/10mm2 P5/P12/P105 BK	BLACK	7021528002591	1043664
20110539	BFOU M 1kV 3G 10mm² P5/P12/P105 BK	BLACK	7021528002607	-
20110540	BFOU M 1kV 4G 10mm² P5/P12/P105 BK	BLACK	7021528002614	-
20110541	BFOU M 1kV 5G 10mm² P5/P12/P105 BK	BLACK	7021528002621	-
20109436	BFOU M 1kV 2X 16/16mm2 P5/P12/P105 BK	BLACK	7021528002638	1043625
20110542	BFOU M 1kV 3X 16/16mm2 P5/P12/P105 BK	BLACK	7021528002645	1043645
20110543	BFOU M 1kV 4X 16/16mm2 P5/P12/P105 BK	BLACK	7021528002652	1043665
20110544	BFOU M 1kV 3G 16mm² P5/P12/P105 BK	BLACK	7021528002669	-
20110546	BFOU M 1kV 4G 16mm² P5/P12/P105 BK	BLACK	7021528002683	-
20110545	BFOU M 1kV 5G 16mm² P5/P12/P105 BK	BLACK	7021528002676	-
20110547	BFOU M 1kV 2X 25/16mm2 P5/P12/P105 BK	BLACK	7021528002690	1043626
20110548	BFOU M 1kV 3X 25/16mm2 P5/P12/P105 BK	BLACK	7021528002706	1043646
20110549	BFOU M 1kV 4X 25/16mm2 P5/P12/P105 BK	BLACK	7021528002713	1043666
20158156	BFOU M 1kV 3G 25mm² P5/P12/P105 BK	BLACK	7021528002744	-
20172200	BFOU M 1kV 4G 25mm² P5/P12/P105 BK	BLACK	7021528002720	-
20133369	BFOU M 1kV 5G 25mm² P5/P12/P105 BK	BLACK	7021528002737	-
20110762	BFOU M 1kV 2X 35/16mm2 P5/P12/P105 BK	BLACK	7021528002751	1043627
20110550	BFOU M 1kV 3X 35/16mm2 P5/P12/P105 BK	BLACK	7021528002768	1043647
20110551	BFOU M 1kV 4X 35/16mm2 P5/P12/P105 BK	BLACK	7021528002775	1043667
20204127	BFOU M 1kV 3G 35mm² P5/P12/P105 BK	BLACK	7021528002782	-
20158157	BFOU M 1kV 4G 35mm² P5/P12/P105 BK	BLACK	7021528002799	-
20110763	BFOU M 1kV 5G 35mm² P5/P12/P105 BK	BLACK	7021528002805	-
20121221	BFOU M 1kV 2X 50/25mm2 P5/P12/P105 BK	BLACK	7021528002812	-
20110552	BFOU M 1kV 3X 50/25mm2 P5/P12/P105 BK	BLACK	7021528002829	1043648
20110553	BFOU M 1kV 4X 50/25mm2 P5/P12/P105 BK	BLACK	7021528002836	1043668
20196609	BFOU M 1kV 4G 50mm² P5/P12/P105 BK	BLACK	7021528002850	-
20204128	BFOU M 1kV 5G 50mm² P5/P12/P105 BK	BLACK	7021528002843	-
20110554	BFOU M 1kV 2X 70/35mm2 P5/P12/P105 BK	BLACK	7021528002874	1043629
20109437	BFOU M 1kV 3X 70/35mm2 P5/P12/P105 BK	BLACK	7021528002881	1043649
20109438	BFOU M 1kV 4X 70/35mm2 P5/P12/P105 BK	BLACK	7021528002898	1043669
20109439	BFOU M 1kV 5X 70/35mm2 P5/P12/P105 BK	BLACK	7021528002935	-
20221403	BFOU M 1kV 3G 70mm² P5/P12/P105 BK	BLACK	7021528002928	-
20184102	BFOU M 1kV 4G 70mm² P5/P12/P105 BK	BLACK	7021528002904	-
20204129	BFOU M 1kV 5G 70mm² P5/P12/P105 BK	BLACK	7021528002911	-
20115558	BFOU M 1kV 2X 95/50mm2 P5/P12/P105 BK	BLACK	7021528002942	-
20109440	BFOU M 1kV 3X 95/50mm2 P5/P12/P105 BK	BLACK	7021528002959	1043650
20109441	BFOU M 1kV 4X 95/50mm2 P5/P12/P105 BK	BLACK	7021528002966	1043670
20110764	BFOU M 1kV 4G 95mm² P5/P12/P105 BK	BLACK	7021528002973	-
20109442	BFOU M 1kV 5G 95mm² P5/P12/P105 BK	BLACK	7021528002980	-
20132308	BFOU M 1kV 2X 120/60mm2 P5/P12/P105 BK	BLACK	7021528003000	-

Part number	Description	Sheath Colour	GTIN 1m	EL No.
20109443	BFOU M 1kV 3X 120/60mm2 P5/P12/P105 BK	BLACK	7021528003017	1043651
20120715	BFOU M 1kV 4X 120/60mm2 P5/P12/P105 BK	BLACK	7021528003048	-
20204134	BFOU M 1kV 4G 120mm² P5/P12/P105 BK	BLACK	7021528003062	-
Tba	BFOU M 1kV 5G 120mm² P5/P12/P105 BK	BLACK	7021528003208	-
20204147	BFOU M 1kV 4G 150mm² P5/P12/P105 BK	BLACK	7021528003079	-
20132888	BFOU M 1kV 5G 150mm² P5/P12/P105 BK	BLACK	7021528003185	-
20121096	BFOU M 1kV 4G 185mm² P5/P12/P105 BK	BLACK	7021528003109	-

Electrical values power cables

Number of elements	Cross section core, mm²	Electrical Cross section braid, mm²	Conductor type 2	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
1	16	4	STCC	1.16	1.48	0.119	0.142	96	2240
1	25	4	STCC	0.734	0.936	0.112	0.135	127	3500
1	35	6	STCC	0.529	0.675	0.109	0.131	157	4900
1	50	10	STCC	0.391	0.499	0.106	0.128	196	7000
1	70	10	STCC	0.27	0.344	0.101	0.121	242	9800
1	95	10	STCC	0.195	0.249	0.098	0.117	293	13300
1	120	10	STCC	0.154	0.196	0.095	0.114	339	16800
1	150	16	STCC	0.126	0.161	0.094	0.113	389	21000
1	185	16	STCC	0.1	0.128	0.092	0.111	444	25900
1	240	16	STCC	0.0762	0.0972	0.09	0.108	522	33600
1	300	16	STCC	0.0607	0.0774	0.088	0.106	601	42000
1	400	25	STCC	0.0475	0.0606	0.088	0.105	690 dc / 670 ac	56000
1	500	35	STCC	0.0369	0.0471	0.086	0.103	780 dc / 720 ac	70000
1	630	35	STCC	0.0286	0.0365	0.084	0.101	890 dc / 780 ac	88200
2	1.5	4	STCC	12.2	15.6	0.115	0.138	20	210
3	1.5	4	STCC	12.2	15.6	0.115	0.138	16	210
4	1.5	6	STCC	12.2	15.6	0.115	0.138	16	210
5	1.5	6	STCC	12.2	15.6	0.115	0.138	13.5	210
7	1.5	6	STCC	12.2	15.6	0.115	0.138	12	210
12	1.5	10	STCC	12.2	15.6	0.115	0.138	10	210
19	1.5	10	STCC	12.2	15.6	0.115	0.138	8.5	210
27	1.5	16	STCC	12.2	15.6	0.115	0.138	7.5	210
37	1.5	16	STCC	12.2	15.6	0.115	0.138	7	210
3G	1.5	-	STCC	12.2	15.6	0.115	0.138	20	210
4G	1.5	-	STCC	12.2	15.6	0.115	0.138	16	210
5G	1.5	-	STCC	12.2	15.6	0.115	0.138	16	210
2	2.5	4	STCC	7.56	9.64	0.107	0.129	26	350
3	2.5	6	STCC	7.56	9.64	0.107	0.129	21	350
5	2.5	6	STCC	7.56	9.64	0.107	0.129	17.5	350
4	2.5	6	STCC	7.56	9.64	0.107	0.129	21	350
7	2.5	10	STCC	7.56	9.64	0.107	0.129	15.5	350
12	2.5	10	STCC	7.56	9.64	0.107	0.129	13	350
19	2.5	16	STCC	7.56	9.64	0.107	0.129	11	350
27	2.5	16	STCC	7.56	9.64	0.107	0.129	10	350
37	2.5	16	STCC	7.56	9.64	0.107	0.129	9	350
3G	2.5	-	STCC	7.56	9.64	0.107	0.129	26	350
4G	2.5	-	STCC	7.56	9.64	0.107	0.129	21	350
5G	2.5	-	STCC	7.56	9.64	0.107	0.129	21	350
7G	2.5	-	STCC	7.56	9.64	0.107	0.129	16.5	350
2	4	6	STCC	4.7	5.99	0.100	0.120	34	560

Number of elements	Cross section core, mm²	Electrical Cross section braid, mm²	Conductor type 2	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
3	4	6	STCC	4.7	5.99	0.100	0.120	28	560
4	4	6	STCC	4.7	5.99	0.100	0.120	28	560
5	4	6	STCC	4.7	5.99	0.100	0.120	23.5	560
3G	4	-	STCC	4.7	5.99	0.100	0.120	34	560
4G	4	-	STCC	4.7	5.99	0.100	0.120	28	560
5G	4	-	STCC	4.7	5.99	0.100	0.120	28	560
2	6	6	STCC	3.11	3.97	0.094	0.113	44	840
3	6	6	STCC	3.11	3.97	0.094	0.113	36	840
4	6	10	STCC	3.11	3.97	0.094	0.113	36	840
3G	6	-	STCC	3.11	3.97	0.094	0.113	44	840
4G	6	-	STCC	3.11	3.97	0.094	0.113	36	840
5G	6	-	STCC	3.11	3.97	0.094	0.113	36	840
2	10	10	STCC	1.84	2.35	0.088	0.105	61	1400
3	10	10	STCC	1.84	2.35	0.088	0.105	50	1400
4	10	10	STCC	1.84	2.35	0.088	0.105	50	1400
3G	10	-	STCC	1.84	2.35	0.088	0.105	61	1400
4G	10	-	STCC	1.84	2.35	0.088	0.105	50	1400
5G	10	-	STCC	1.84	2.35	0.088	0.105	50	1400
2	16	16	STCC	1.16	1.48	0.083	0.099	82	2240
3	16	16	STCC	1.16	1.48	0.083	0.099	67	2240
4	16	16	STCC	1.16	1.48	0.083	0.099	67	2240
3G	16	-	STCC	1.16	1.48	0.083	0.099	82	2240
4G	16	-	STCC	1.16	1.48	0.083	0.099	67	2240
5G	16	-	STCC	1.16	1.48	0.083	0.099	67	2240
2	25	16	STCC	0.734	0.936	0.082	0.098	108	3500
3	25	16	STCC	0.734	0.936	0.082	0.098	89	3500
4	25	16	STCC	0.734	0.936	0.082	0.098	89	3500
3G	25	-	STCC	0.734	0.936	0.082	0.098	108	3500
4G	25	-	STCC	0.734	0.936	0.082	0.098	89	3500
5G	25	-	STCC	0.734	0.936	0.08	0.098	89	3500
2	35	16	STCC	0.529	0.675	0.079	0.095	133	4900
3	35	16	STCC	0.529	0.675	0.079	0.095	110	4900
4	35	16	STCC	0.529	0.675	0.079	0.095	110	4900
3G	35	-	STCC	0.529	0.675	0.079	0.095	133	4900
4G	35	-	STCC	0.529	0.675	0.079	0.095	110	4900
5G	35	-	STCC	0.529	0.675	0.079	0.095	110	4900
2	50	25	STCC	0.391	0.499	0.078	0.094	167	7000
3	50	25	STCC	0.391	0.499	0.078	0.094	137	7000
4	50	25	STCC	0.391	0.499	0.078	0.094	137	7000
4G	50	-	STCC	0.391	0.499	0.078	0.094	137	7000
5G	50	-	STCC	0.391	0.499	0.078	0.094	137	7000
2	70	35	STCC	0.27	0.344	0.075	0.090	206	9800
3	70	35	STCC	0.27	0.344	0.075	0.090	169	9800
4	70	35	STCC	0.27	0.344	0.075	0.090	169	9800
5	70	35	STCC	0.27	0.344	0.075	0.090	169	9800
3G	70	-	STCC	0.27	0.344	0.075	0.090	206	9800
4G	70	-	STCC	0.27	0.344	0.075	0.090	169	9800
5G	70	-	STCC	0.27	0.344	0.075	0.090	169	9800

Number of elements	Cross section core, mm²	Electrical Cross section braid, mm²	Conductor type 2	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
2	95	50	STCC	0.195	0.249	0.075	0.090	249	13300
3	95	50	STCC	0.195	0.249	0.075	0.090	205	13300
4	95	50	STCC	0.195	0.249	0.075	0.090	205	13300
3G	95	-	STCC	0.195	0.249	0.075	0.090	249	13300
4G	95	-	STCC	0.195	0.249	0.075	0.090	205	13300
5G	95	-	STCC	0.195	0.249	0.075	0.090	205	13300
2	120	60	STCC	0.154	0.196	0.073	0.088	288	16800
3	120	60	STCC	0.154	0.196	0.073	0.088	237	16800
4	120	60	STCC	0.154	0.196	0.073	0.088	237	16800
4G	120	-	STCC	0.154	0.196	0.073	0.088	237	16800
5G	120	-	STCC	0.154	0.196	0.073	0.088	237	16800
4G	150	-	STCC	0.126	0.161	0.073	0.088	272	21000
5G	150	-	STCC	0.126	0.161	0.073	0.088	272	21000
4G	185	-	STCC	0.1	0.128	0.073	0.088	311	25900

Ambient temperature correction factors

Ambient Temp °C	35	40	45	50	55	60	65	70	75	80
Rating factor	1.10	1.05	1.00	0.94	0.88	0.82	0.74	0.67	0.58	0.47

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 (mm²) of conductors	-20°C

Fire Resistant power cable, BFOU 0,6/1(1,2)kV, P5/P12/P105, double braided

Fire resistant, flame retardant halogen-free power cable. Double braided.

BFOU 0,6/1(1,2)kV

MGT/EPR/EPR/TCWB/EVA

BFOU 1kV NEK TS 606 Code P105
BFOU M 1kV NEK TS 606 Code P5/P12/P105

Operating temperature : 90°C
Operating Voltage : 0,6/1(1,2)kV

Application

Fixed installation for power, control and lighting in both EX (Zone 0, 1 & 2)- and safe areas, emergency and critical systems where requirement for fire resistance exists.
BFOU M 1kV for installation in areas exposed to MUD and drilling/cleaning fluids. Meets the MUD resistance requirement in NEK TS 606:2016.

Standards applied

IEC 60092-353	- 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 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	**B**	Mica-tape + EP-rubber, IEC 60092-360 (EPR)
Lay up / Shielding		Cores laid up in concentric layers
Inner covering	**F**	Flame retardant and halogen-free extruded compound
Tape over inner covering		PET tape + rubberized Polyamide tape
Armour/screen	**O**	Two layers of tinned copper wire braid (double braid)
Tape over armour/screen		PET tape + rubberized Polyamide tape
Outer sheath	**U**	Flame retardant, halogen-free and mud resistant thermoset compound, SHF2 (IEC 60092-360)
Marking text (example)		"meter" "year/week" DRAKA 01 Part no. <SAP code> BFOU M 0,6/1kV P5/P12/P105 3 x 240/120 mm2 FLEX - FLAME IEC 60331-1*) or IEC 60331-2*) IEC 60331-21**) IEC 60332-3-22 Production no. <Prod.ordre no.>
Manufacturing unit		DRAKA 01 = Draka Norsk Kabel
Outer sheath colour		Black

*) 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

Core identification power cables

Single core - Black
Two cores - Blue - Brown
Three cores - Brown - Black - Grey
Four cores - Blue - Brown - Black - Grey
Five cores - Blue - Brown - Black - Grey - Black
Seven cores and above - White with black numbers
Two cores + earth (3G) - Yellow/green - Blue - Brown
Three cores + earth (4G) - Yellow/green - Brown - Black - Grey
Four cores + earth (5G) - Yellow/green - Blue - Brown - Black - Grey
G / X in cable description - G = One of the cores are yellow/green - X = no yellow/green core
Core identification - to HD308S2 - and IEC 60445 Ed 5.0 2010-08

Range and dimensions

Number of elements	Cross section core, mm²	Electrical Cross section braid, 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)
3	150	75	15.45	1.8	1.4	44.5 ± 2	0.4	90.5	2.6	52 ± 2.5	7075	4745
4	150	75	15.45	1.8	1.4	49.5 ± 2	0.5	99	2.8	58 ± 2.5	8880	6128
3	185	95	17.3	2.0	1.4	49.5 ± 2	0.5	113	2.7	57.5 ± 3	8700	5917
4	185	95	17.3	2.0	1.4	55 ± 2.5	0.61	113	3	63.5 ± 3	10820	7539
3	240	120	19.85	2.2	1.4	56 ± 2.5	0.61	147.2	3	65.5 ± 3	11340	7825

Ordering information

Part number	Description	Sheath Colour	GTIN 1m	EL No.
20109444	BFOU M 1kV 3X 150/75mm2 P5/P12/P105 BK	BLACK	7021528003024	1043652
20117948	BFOU M 1kV 4X 150/75mm2 P5/P12/P105 BK	BLACK	7021528003093	-
20110765	BFOU M 1kV 3X 185/95mm2 P5/P12/P105 BK	BLACK	7021528003925	-
20118466	BFOU M 1kV 4X 185/95mm2 P5/P12/P105 BK	BLACK	7021528003918	-
20164029	BFOU M 1kV 3X 240/120mm2 P5/P12/P105 BK	BLACK	7021528003147	-

Electrical values power cables

Number of elements	Cross section core, mm²	Electrical Cross section braid, mm²	Conductor type	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
3	150	75	KGTFR	0.126	0.161	0.073	0.088	272	21000
4	150	75	KGTFR	0.126	0.161	0.073	0.088	272	21000
3	185	95	KGTFR	0.1	0.128	0.073	0.088	311	25900
4	185	95	KGTFR	0.1	0.128	0.073	0.088	311	25900
3	240	120	KGTFR	0.0762	0.0972	0.073	0.087	365	33600

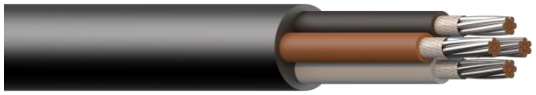
Ambient temperature correction factors

Ambient Temp °C	35	40	45	50	55	60	65	70	75	80
Rating factor	1.10	1.05	1.00	0.94	0.88	0.82	0.74	0.67	0.58	0.47

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 (mm²) of conductors	-20°C

Fire Resistant power cable, BU 0,6/1(1,2)kV, P17/P110



Fire resistant, flame retardant halogen-free power cable.

BU 0,6/1(1,2)kV

MGT/EPR/EVA

BU 1kV NEK TS 606 Code P110
BU M 1kV NEK TS 606 Code P17/P110

Operating temperature : 90°C
Operating Voltage : 0,6/1(1,2)kV

Application

Fixed installation for power, control and lighting in safe areas, emergency and critical systems where requirement for fire resistance exists.
BU M 1kV meets the Oil & Mud resistance requirement in NEK TS 606:2016.
These cables are double-insulated and Single core cables are used as battery cables.

Standards applied

IEC 60092-353	- 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 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	**B**	Mica-tape + EP-rubber, IEC 60092-360 (EPR)
Lay up / Shielding		Cores laid up in concentric layers
Inner covering		No inner covering. (Additional tapes may be applied)
Armour/screen		No armour.
Outer sheath	**U**	Flame retardant, halogen-free thermoset compound, SHF2 (IEC 60092-360)
Marking text (example)		"meter" "year/week" DRAKA 01 Part no. <SAP code> BU M 0,6/1kV P17/P110 1 x 70 mm2 IEC 60092-353 IEC 60331-1*) or IEC 60331-2*) IEC 60331-21**) IEC 60332-3-22 Production no. <Prod.ordre no.>
Manufacturing unit		DRAKA 01 = Prysmian Group Norge AS
Outer sheath colour		Black

*) 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

Core identification power cables

Single core – Black
Two cores - Blue – Brown
Three cores - Brown - Black – Grey
Four cores - Blue - Brown - Black – Grey
Five cores - Blue - Brown - Black - Grey – Black
Seven cores and above - White with black numbers
Two cores + earth (3G) - Yellow/green - Blue – Brown
Three cores + earth (4G) - Yellow/green - Brown - Black – Grey
Four cores + earth (5G) - Yellow/green - Blue - Brown - Black – Grey
G / X in cable description - G = One of the cores are yellow/green - X = no yellow/green core
Core identification - to HD308S2 - and IEC 60445 Ed 5.0 2010-08

Range and dimensions

Number of elements	Cross section core, mm²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
1	10	4.0	1.0	1	8.5 ± 0.5	157	87
1	16	5.05	1.0	1.1	9.5 ± 0.5	223	139
1	25	6.3	1.2	1.1	11.5 ± 0.8	331	220
1	35	7.4	1.2	1.2	12.5 ± 0.8	434	302
1	50	8.75	1.4	1.2	14.5 ± 0.8	577	410
1	70	10.6	1.4	1.3	16.5 ± 0.8	809	608
1	95	12.35	1.6	1.4	19 ± 0.8	1070	819
1	120	14.0	1.6	1.4	20.5 ± 1	1338	1059
1	150	15.4	1.8	1.5	22.5 ± 1	1618	1284
1	185	17.3	2.0	1.6	24.5 ± 1	1989	1595
1	240	19.85	2.2	1.7	28 ± 1	2593	2105
2	1.5	1.6	1.0	1.1	9.5 ± 0.5	138	27
4	1.5	1.6	1.0	1.1	11 ± 0.8	195	53
7	1.5	1.6	1.0	1.2	13.5 ± 0.8	295	93
12	1.5	1.6	1.0	1.4	18 ± 0.8	470	159
19	1.5	1.6	1.0	1.5	21 ± 1	705	252
24	1.5	1.6	1.0	1.6	25 ± 1	885	319
3G	1.5	1.6	1.0	1.1	10 ± 0.8	161	40
2	2.5	2.0	1.0	1.1	10.5 ± 0.8	173	43
3	2.5	2.0	1.0	1.1	11 ± 0.8	204	64
7	2.5	2.0	1.0	1.3	15 ± 0.8	385	149
3G	2.5	2.0	1.0	1.1	11 ± 0.8	204	64
4G	2.5	2.0	1.0	1.2	12.5 ± 0.8	252	85
5G	2.5	2.0	1.0	1.2	13.5 ± 0.8	309	106
2	4	2.5	1.0	1.1	11.5 ± 0.8	223	69
3	4	2.5	1.0	1.2	12.5 ± 0.8	277	103
3G	4	2.5	1.0	1.2	12.5 ± 0.8	277	103
4G	4	2.5	1.0	1.2	13.5 ± 0.8	337	138
5G	4	2.5	1.0	1.3	15.5 ± 0.8	418	172
2	6	3.1	1.0	1.2	13 ± 0.8	297	108
3	6	3.1	1.0	1.2	13.5 ± 0.8	363	162
4G	6	3.1	1.0	1.3	15.5 ± 0.8	454	216
2	10	4.0	1.0	1.2	14.5 ± 0.8	411	175
3	10	4.0	1.0	1.3	16 ± 0.8	535	272
4G	10	4.0	1.0	1.3	17.5 ± 0.8	645	349
3	16	5.05	1.0	1.4	18.5 ± 0.8	743	419
4G	16	5.05	1.0	1.4	20 ± 1	936	559

Number of elements	Cross section core, mm²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
4G	25	6.3	1.2	1.6	25 ± 1	1455	882
4G	35	7.4	1.2	1.7	27.5 ± 1	1888	1211
4	50	8.75	1.4	1.8	31.5 ± 1.5	2506	1645
3	70	10.6	1.4	1.9	33 ± 1.5	2760	1829
3	120	14.0	1.6	2.1	41.5 ± 2	4607	3187
4G	150	15.4	1.8	2.5	51 ± 2.5	7220	5149

Ordering information

Part number	Description	Sheath Colour	GTIN 1m	EL No.
20130809	BU M 0.6/1kV 1X 10mm² P17/P110 BK	BLACK	7021528012149	-
20157866	BU M 0.6/1kV 1X 16mm² P17/P110 BK	BLACK	7021528012002	-
20147973	BU M 0.6/1kV 1X 25mm² P17/P110 BK	BLACK	7021528012019	1061201
20110766	BU M 0.6/1kV 1X 35mm² P17/P110 BK	BLACK	7021528012026	-
20121092	BU M 0.6/1kV 1X 50mm² P17/P110 BK	BLACK	7021528012033	1061203
20110767	BU M 0.6/1kV 1X 70mm² P17/P110 BK	BLACK	7021528012040	-
20139920	BU M 0.6/1kV 1X 95mm² P17/P110 BK	BLACK	7021528012057	1061205
20121093	BU M 0.6/1kV 1X 120mm² P17/P110 BK	BLACK	7021528012064	-
20109454	BU M 0.6/1kV 1X 150mm² P17/P110 BK	BLACK	7021528012071	1061207
20132893	BU M 0.6/1kV 1X 185mm² P17/P110 BK	BLACK	7021528012088	-
20140646	BU M 0.6/1kV 1X 240mm² P17/P110 BK	BLACK	7021528012095	-
20109455	BU M 0.6/1kV 2X 1.5mm² P17/P110 BK	BLACK	7021528012156	-
20326952	BU M 0.6/1kV 4X 1.5mm² P17/P110 BK	BLACK	7021528012194	-
20169924	BU M 0.6/1kV 7X 1.5mm² P17/P110 BK	BLACK	7021528012255	-
20155435	BU M 0.6/1kV 12X 1.5mm² P17/P110 BK	BLACK	7021528012262	-
20204199	BU M 0.6/1kV 19X 1.5mm² P17/P110 BK	BLACK	7021528012286	-
20326953	BU M 0.6/1kV 24X 1.5mm² P17/P110 BK	BLACK	7021528012293	-
20112689	BU M 0.6/1kV 3G 1.5mm² P17/P110 BK	BLACK	7021528012163	-
20170925	BU M 0.6/1kV 2X 2.5mm² P17/P110 BK	BLACK	7021528012330	-
20134055	BU M 0.6/1kV 3X 2.5mm² P17/P110 BK	BLACK	7021528012361	-
20172950	BU M 0.6/1kV 7X 2.5mm² P17/P110 BK	BLACK	7021528012446	-
20096771	BU M 0.6/1kV 3G 2.5mm² P17/P110 BK	BLACK	7021528012347	-
20117121	BU M 0.6/1kV 4G 2.5mm² P17/P110 BK	BLACK	7021528012378	-
20131218	BU M 0.6/1kV 5G 2.5mm² P17/P110 BK	BLACK	7021528012408	-
20154740	BU 0,6/1KV 2X 4 MM2 P17/P110 BK	BLACK	7021528012521	-
20109456	BU 0,6/1KV 3X 4 MM2 P17/P110 BK	BLACK	7021528012538	-
20184101	BU M 0.6/1kV 3G 4mm² P17/P110 BK	BLACK	7021528012545	-
20109457	BU M 0.6/1kV 4G 4mm² P17/P110 BK	BLACK	7021528012569	-
20149812	BU M 0.6/1kV 5G 4mm² P17/P110 BK	BLACK	7021528012583	-
20109458	BU 0,6/1KV 2X 6 MM2 P17/P110 BK	BLACK	7021528012590	-
20169925	BU M 0.6/1kV 3X 6mm² P17/P110 BK	BLACK	7021528012613	-
20109459	BU M 0.6/1kV 4G 6mm² P17/P110 BK	BLACK	7021528012620	-
20184612	BU M 0.6/1kV 2X 10mm² P17/P110 BK	BLACK	7021528012668	-
20109460	BU M 0.6/1kV 4G 10mm² P17/P110 BK	BLACK	7021528012699	-
20121091	BU M 0.6/1kV 3X 16mm² P17/P110 BK	BLACK	7021528012736	-

Part number	Description	Sheath Colour	GTIN 1m	EL No.
20113144	BU M 0.6/1kV 4G 16mm² P17/P110 BK	BLACK	7021528012750	-
20296759	BU M 0.6/1kV 4G 25mm² P17/P110 BK	BLACK	7021528012826	-
20109461	BU M 0.6/1kV 4G 35mm² P17/P110 BK	BLACK	7021528012897	-
20154741	BU 0,6/1KV 4X 50 mm² P17/P110 BK	BLACK	7021528012934	-
20154742	BU 0,6/1KV 3X 70 mm² P17/P110 BK	BLACK	7021528012941	-
20194465	BU 0,6/1KV 3X 120 mm² P17/P110 BK	BLACK	7021528012972	-
20109462	BU M 0.6/1kV 4G 150mm² P17/P110 BK	BLACK	7021528013078	-

Electrical values power cables

Number of elements	Cross section core, mm²	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
1	10	1.84	2.35	0.107	0.128	72	1400
1	16	1.16	1.48	0.101	0.121	96	2240
1	25	0.734	0.936	0.097	0.116	127	3500
1	35	0.529	0.675	0.094	0.112	157	4900
1	50	0.391	0.499	0.092	0.111	196	7000
1	70	0.27	0.344	0.088	0.106	242	9800
1	95	0.195	0.249	0.087	0.104	293	13300
1	120	0.154	0.196	0.084	0.101	339	16800
1	150	0.126	0.161	0.084	0.101	389	21000
1	185	0.1	0.128	0.083	0.100	444	25900
1	240	0.0762	0.128	0.082	0.099	522	33600
2	1.5	12.2	15.6	0.115	0.138	20	210
4	1.5	12.2	15.6	0.115	0.138	16	210
7	1.5	12.2	15.6	0.115	0.138	12	210
12	1.5	12.2	15.6	0.115	0.138	10	210
19	1.5	12.2	15.6	0.115	0.138	8.5	210
24	1.5	12.2	15.6	0.115	0.138	8	210
3G	1.5	12.2	15.6	0.115	0.138	20	210
2	2.5	7.56	9.64	0.107	0.129	26	350
3	2.5	7.56	9.64	0.107	0.129	21	350
7	2.5	7.56	9.64	0.107	0.129	16	350
3G	2.5	7.56	9.64	0.107	0.129	26	350
4G	2.5	7.56	9.64	0.107	0.129	21	350
5G	2.5	7.56	9.64	0.107	0.129	21	350
3	4	4.7	5.99	0.100	0.120	28	560
3G	4	4.7	9.64	0.100	0.120	34	560
4G	4	4.7	9.64	0.100	0.120	28	560
2	6	3.11	3.97	0.094	0.113	44	840
3	6	3.11	3.97	0.094	0.113	36	840
4G	6	3.11	3.97	0.094	0.113	36	840
2	10	1.84	3.97	0.088	0.105	61	1400
3	10	1.84	2.35	0.088	0.105	50	1400
4G	10	1.84	2.35	0.088	0.105	50	1400

Number of elements	Cross section core, mm²	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
3	16	1.16	1.48	0.083	0.099	67	2240
4G	16	1.16	1.48	0.083	0.099	67	2240
4G	25	0,734	0,936	0,082	0,098	89	3500
4G	35	0.529	0.675	0.079	0.095	110	4900
4	50	0.391	0.499	0.078	0.094	137	7000
3	120	0.154	0.196	0.073	0.088	237	16800
4G	150	0.126	0.161	0.073	0.088	272	21000

Ambient temperature correction factors

Ambient Temp °C	35	40	45	50	55	60	65	70	75	80
Rating factor	1.10	1.05	1.00	0.94	0.88	0.82	0.74	0.67	0.58	0.47

Installation recommendations

Overall diameter of cable (D)	Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
≤25 mm	8 x D	4 x D	50 N x total cross section (mm²) of conductors	-20°C
>25 mm		6 x D		

Fire Resistant MV power cable, RFOU-FR 6/10(12)kV, P121

Drawing for indication only

Fire Resistant halogen-free medium voltage (MV) cable. Mud resistant

RFOU-FR 6/10(12) kV

EPR/EPR/TCWB/HBC/EVA

NEK TS 606:2016 Code P121

Operating temperature : 90°C
Operating Voltage : 6/10(12) kV

Application

Fixed installation for medium voltage (MV) power in both EX- and safe areas, general purposes. For installation in areas exposed to MUD and drilling/cleaning fluids. Meets the MUD resistance requirement in NEK TS 606:2016.

Standards applied

IEC 60092-354	- Design
IEC 60228 class 2	- Conductor
IEC 60092-360	- Insulation
IEC 60092-360	- Sheath
IEC 60331-21 (830°C / 2 hours)	- Fire Resistant
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 stranded and compressed copper, IEC 60228 class 2
Conductor screen semiconductive		Semi-conductive layer (EP-rubber)
Insulation	**R**	EP-rubber, IEC 60092-360 (EPR)
Insulation screen semicoductive		Semi-conductive layer (EP-rubber) Semi-conductive tape
Metallic screen		Tinned copper wire braid
Tape over screen		PET tape + Fire Resistant tape
Lay up		Single core cables
Inner covering	**F**	Flame retardant and halogenfree extruded compound
Tape over inner covering		PET tape
Armour	**O**	Tinned annealed copper wire braid
Tape over armour		PET tape + Fire Resistant tape
Heat Block Barrier		Extruded Heat Block Compound
Tape over Heat Block Barrier		Fire Resistant tape
Outer sheath	**U**	Flame retardant, halogen-free and mud resistant thermoset compound, SHF2 (IEC 60092-360)

Marking text **(example)**		"meter" "year/week" DRAKA 01 Part no. <SAP-code> RFOU-FR 6/10(12)KV P121 1 x 120/16 mm2 IEC 60092-354 IEC 60331-21 (830 DEG. C) IEC 60332-3-22 Production no. <Production order number>
Manufacturing unit		DRAKA 01 = Prysmian Group Norge AS
Outer sheath colour		Red

Range and dimensions

Number of elements	Cross section core, mm²	Electrical Cross section braided armour, mm²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Inner covering, mm	Diameter inner covering, mm	Diameter Braid Wire, mm	Mechanical cross-section of the braided armour, mm²	Thickness of Heat Block Barrier mm	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
1	95	16	12.1	3.4	1.1	25.5 ± 1	0.30	20.4	5.0	1.9	42 ± 2	3225	1296
1	120	16	13.5	3.4	1.1	27 ± 1	0.30	20.4	5.0	2.0	43.5 ± 2	3465	1417
1	150	16	14.7	3.4	1.2	28.5 ± 1	0.30	22.9	5.0	2.1	45.5 ± 2	3875	1698
1	185	16	16.8	3.4	1.2	30.5 ± 1.5	0.30	22.9	5.0	2.1	47.5 ± 2	4410	2079
1	240	25	19.1	3.4	1.2	32.5 ± 1.5	0.40	36.2	5.0	2.2	50 ± 2.5	5390	2861
1	300	25	21.6	3.4	1.2	35 ± 1.5	0.40	36.2	5.0	2.3	53 ± 2.5	5970	3231

Ordering information

Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
20269620	RFOU-FR 6/10KV 1X 95/16mm² P121 RD	RED	-	7021528878592	-
20269621	RFOU-FR 6/10KV 1X 120/16mm² P121 RD	RED	-	7021528878608	-
20269622	RFOU-FR 6/10KV 1X 150/16mm² P121 RD	RED	-	7021528878615	-
20269623	RFOU-FR 6/10KV 1X185/16mm² P121 RD	RED	-	7021528878622	-
20269624	RFOU-FR 6/10KV 1X 240/25mm² P121 RD	RED	-	7021528878639	-
20269625	RFOU-FR 6/10KV 1X 300/25mm² P121 RD	RED	-	7021528878646	-

Electrical values power cables

Number of elements	Cross section core, mm²	Electrical Cross section braid, mm²	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Capacitans per phase, nF/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
1	95	16	0.195	0.249	0.116	0.139	380	293	13300
1	120	16	0.154	0.196	0.120	0.144	410	339	16800
1	150	16	0.126	0.161	0.124	0.149	450	389	21000
1	185	16	0.100	0.128	0.130	0.156	480	444	25900
1	240	25	0.0762	0.0972	0.133	0.160	540	522	33600
1	300	25	0.0607	0.0774	0.138	0.165	590	601	42000

Ambient temperature correction factors

Ambient Temp °C	35	40	45	50	55	60	65	70	75	80
Rating factor	1.10	1.05	1.00	0.94	0.88	0.82	0.74	0.67	0.58	0.47

Installation recommendations

Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
18 x D	12 x D	50 N x total cross section (mm²) of conductors	-20°C

Hydro Carbon Fire Resistant Cables

Draka Norsk Kabel, part of the **Prysmian Group**, is a global solution supplier in cables, combining innovation with technological leadership. **Draka Norsk Kabel** has developed a unique product range for use in critical areas.

- a complete range of **Hydro Carbon Fire (HCF) resistant cables**

The design is based on a fire proof elastomeric cable covered with our unique protective composite. Due to its cooling and thermal properties this construction is capable of withstanding hydro carbon fires at 1100°C (2000°F).

Excellence centre

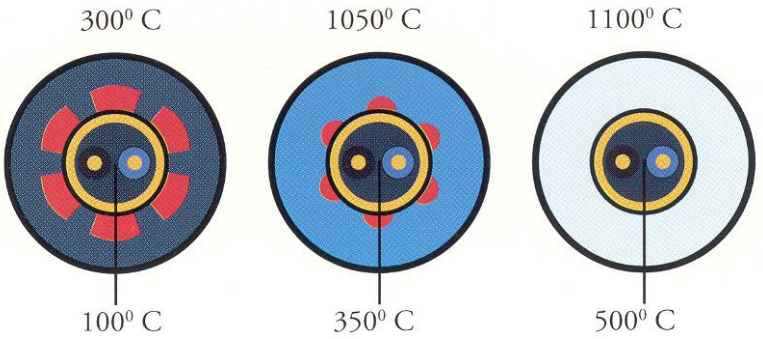
Research and development is a continuous process at **Prysmian Group** and **Draka Norsk Kabel**, the excellence centre in the overall group of specially designed products for Offshore applications, such as the ***"Hydro Carbon Fire (HCF) resistant cables"***. **Draka Norsk Kabel** has developed considerable expertise in the area of fire resistant cables. Introduced in 1975, the first elastomeric cables were marketed under the name BFOH. In the early eighties, they were replaced by the halogen-free BFOU, part of the Flex-Flame range.

Flexible and cost saving installation

The *"FLEX-FLAME HCF"* cable is flexible, easy to install and terminate whereas; similar products, e.g. cables protected with extra thermal insulation, have the disadvantage of a higher derating factor as well as higher installation costs. Mineral insulated cables have the disadvantage of alloy conductors, requiring larger conductor cross-sectional areas, complex, time consuming installation and a limited range.

Properties of the design

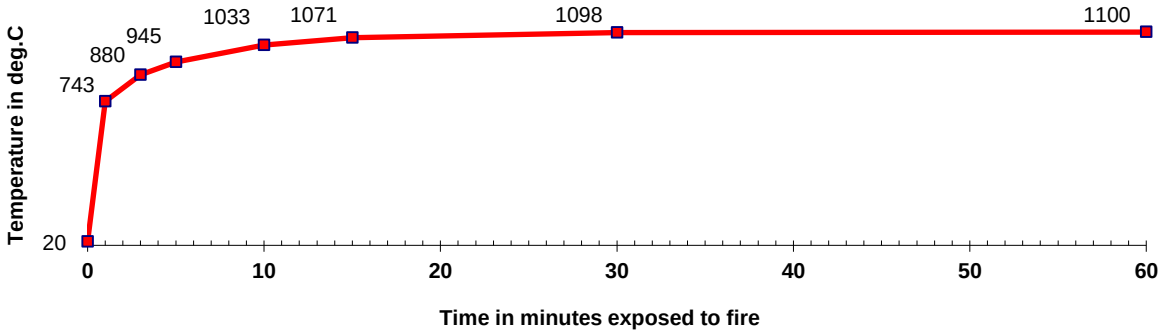
The unique design of the cable gives good heat transmission during normal operating temperature, thus reducing the requirement for derating. If the cable is exposed to a hydrocarbon fire, rapid changes in the material state will give a cooling effect, which is maintained during the critical period.



When this process is completed, the layer will turn into a firm, ceramic substance which provides heat insulation. Consequently, this is why the conductor temperature can be kept at a low level (approx. 500°C/900°F) even if the temperature should exceed 1100°C (2000°F). For Instrument and Communications applications, the values of Capacitance, Inductance, Resistance and Attenuation are not unduly affected.

Certifications and approvals

According to most current requirements, the cables shall pass the IEC 60331 part 21 gas flame test at 750°C (1350°F) for minimum 90 minutes without short circuit. This test temperature however, is more typical to cellulose fires, not to hydrocarbon fires, the latter being more common in Refineries, Petrochemical Industry and Production/Drilling Rigs.
The HCF cables will function in hydrocarbon fires exceeding 1100°C / 2000°F for a period of 30 minutes, in accordance with EN 1363-2 / ISO 834. See fig. below.



Considering this important fact may be more crucial than enduring 90 minutes at lower temperatures (750 – 1000°C / 1350 – 1850°F). The outstanding performance of the HCF cable from Draka Norsk Kabel satisfies both requirements.

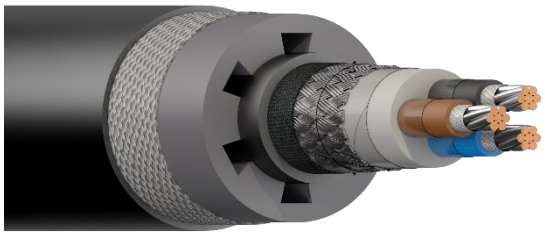
The product portfolio range

The *"FLEX-FLAME HCF"* 1100°C (2000°F) cables cover the entire range from Instrument and Telecommunications cables to Medium Voltage and High Voltage Power cables as described below.

Application:	Cable type/voltage:	Fire class:
Instrument and Telecommunication	BFOU HCF 250 V	H-30
Control	BFOU HCF 0,6/1 kV	H-30
Power L.V.	BFOU HCF 0,6/1 kV	H-30
Power M.V.	RFOU HCF 6/10 (12) kV	H-30
	RFOU HCF 8,7/15 (17.5) kV	H-30
	RFOU HCF 12/20 (24) kV	H-30
	RFOU HCF 18/30 (36) kV	H-30
Power H.V.	RFOU HCF 26/45 (52) kV	H-30
Optical fibre cable	QFCI HCF	H-30

Our state-of-the-art cable systems support many major customers in the oil, gas and petrochemical industry. Now years of research and development within Draka Norsk Kabel has resulted in a range of cables, specially designed for the Hydrocarbon Processing Industry's most critical systems: Fire and Gas Detection, Emergency Shutdown, Communications Systems etc.

Hydro Carbon Fire Resistant power cable, BFOU-HCF 0,6/1(1,2)kV, P118



This drawing is for indication only and may not necessarily be 100% correct according to design, number of cores and colour.

HydroCarbon Fire resistant, flame retardant halogen-free power cable.

BFOU-HCF 0,6/1kV

MGT/EPR/EPR/TCWB/EVA/HCF/SHF1

NEK TS 606:2016 Code P118
NEK TS 606:2009 Code P34

FlexFlame | HCF
Draka
1100°C / 2000°F / 200 kW/m²

Operating temperature : 90°C
Operating Voltage : 0,6/1kV

Application

Fixed installation for power, control and lightning in both EX- and safe areas, emergency and critical systems where requirement for fire resistance is vital.

Standards applied

IEC 60092-353	- Design
Draka Norsk Kabel	- HCF protection
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 60331-21	- Fire Resistant
IEC 61892-4 and NEK TS 606	- HC Fire resistance
IEC 600754-1,2	- Halogen Free
IEC 61034-1,2	- Low Smoke
ISO 4892	- UV resistance

Construction

	Code Letter	
Conductor		Tinned stranded circular copper, IEC 60228 class 2
Insulation	**B**	Mica-tape + EP-rubber, IEC 60092-360 (EPR)
Lay up / Shielding		Cores laid up in concentric layers
Inner covering	**F**	Flame retardant and halogen-free thermoplastic compound
Tape over bedding		PET tape
Armour/screen	**O**	Tinned 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)
HCF protection	**-HCF**	Extruded heatblock compound
Tape		Lapped glassfibre tape
Overall sheath		Flame retardant, halogen-free thermoplastic compound, SHF1 (IEC 60092-360)
Marking text		Eg. "meter" "year/week" DRAKA 01 Part no.<SAP-code> BFOU-HCF 0,6/1kV P118 12 x 2,5/10 mm2 HCF 1100/30 FLEX - FLAME IEC 60331-21 IEC 60332-3-22 Production no. <Production order number>
Manufacturing unit		DRAKA 01 = Draka Norsk Kabel,
Outer sheath colour		Black

Core identification power cables

Single core	Black
Two cores	Blue – Brown
Two cores + earth	Blue - Brown - Yellow/green
Three cores	Brown - Black – Grey
Three cores + earth	Brown - Black - Grey - Yellow/green
Four cores	Blue - Brown - Black – Grey
Four cores + earth	Blue - Brown - Black - Grey - Yellow/green
Five cores	Blue - Brown - Black - Grey - Black
Above five cores	Black numbers on white base

Range and dimensions

Part number	Type [mm2]	Diameter over bedding [mm]	Thickness of armour wires [mmØ]	Diameter sheath [mm]	Diameter overall HCF-protection (mm)	Weight of cable approx. [kg/km]
	1x 50/10	14 ± 0,8	0,30	18 ± 0,8	43,5 ± 2,5	2630
	1x 70/10	16 ± 0,8	0,30	19.5 ± 0.8	45,5 ± 2,5	3000
	1x 95/10	18 ± 0,8	0,30	22 ± 1,0	48 ± 2,5	3430
	1x 120/10	19.5 ± 0,8	0,30	23.5 ± 1,0	50 ± 3,0	3840
	1x 150/16	21.5 ± 1,0	0,30	25.5 ± 1,0	52 ± 3,0	4280
	1x 185/16	23.5 ± 1,0	0,30	28 ± 1,0	54,5 ± 3,0	4830
	1x 240/16	26.5 ± 1,0	0,30	31 ± 1,5	62 ± 3,5	6390
	1x 300/16	29.5 ± 1,0	0,30	34 ± 1,5	65,5 ± 3,5	7320
	2x 1,5/4	9,5 ± 0,5	0,20	13 ± 0,8	38 ± 2,0	1740
20135330	2x 2,5/4	10.5 ± 0,8	0,20	13,5 ± 0,8	38,5 ± 2,0	1835
	3x 1,5/4	10,5 ± 0,8	0,20	13,5 ± 0,8	38,5 ± 2,0	1800
20158562	3x 2,5/6	11 ± 0,8	0,30	15 ± 0,8	40 ± 2,5	1970
20161514	3x 4/6	12,5 ± 0,8	0,30	16 ± 0,8	41,5 ± 2,5	2160
20136227	3x 6/6	13,5 ± 0,8	0,30	17,5 ± 0,8	43 ± 2,5	2350
20151723	3x 10/10	15,5 ± 0,8	0,30	19,5 ± 0,8	45 ± 2,5	2645
	3x 16/16	18 ± 0,8	0,40	22 ± 1,0	47,5 ± 2,5	3125
	3x 25/16	22 ± 1	0,30	26 ± 1	52 ± 3	3810
	3x 35/16	24 ± 1,0	0,30	28,5 ± 1,0	54,5 ± 3,0	4330
	3x 50/25	27,5 ± 1	0,40	32,5 ± 1,5	63,5 ± 3,5	5950
	3x 70/35	31,5 ± 1,5	0,50	37 ± 1,5	68 ± 3,5	7320
Tba	3x 95/50	37 ± 1,5	0,50	42,5 ± 2	74,5 ± 4	8910
	3x 120/60	40,5 ± 2,0	0,61	47 ± 2,0	79 ± 4,0	10410
	3x 150/75	44,5 ± 2,0	0,40 *	52 ± 2,5	84.5 ± 4,5	12210
	3x 185/95	49,5 ± 2,0	0,50 *	57,5 ± 2,5	90,5 ± 5,0	14350
	4G 2,5	12.5 ± 0.8	0.30	16 ± 0.8	41 ± 2.5	2115
20209977	4G 4	13,5 ± 0.8	0.30	17.5 ± 0.8	42.5 ± 2.5	2290
	4G 6	15 ± 0.8	0.30	18,5 ± 0.8	44 ± 2.5	2525
	4G 10	17,5 ± 0.8	0.30	21 ± 1.0	47 ± 2,5	2935

Part number	Type [mm2]	Diameter over bedding [mm]	Thickness of armour wires [mmØ]	Diameter sheath [mm]	Diameter overall HCF-protection (mm)	Weight of cable approx. [kg/km]
	4G 16	20 ± 1.0	0.30	24 ± 1.0	50 ± 3,0	3455
	4x 1,5/6	11,5 ± 0,8	0.30	15 ± 0.8	40 ± 2,5	1975
20135345	4x 2,5/6	12.5 ± 0.8	0.30	16 ± 0.8	41 ± 2,5	2115
20353276	4x 4/6	13,5 ± 0.8	0.30	17,5 ± 0.8	42,5 ± 2,5	2300
20213862	4x 6/10	15 ± 0.8	0.30	18,5 ± 0.8	44 ± 2,5	2530
	4x 10/10	17,5 ± 0.8	0.30	21 ± 1.0	47 ± 2.5	2935
	4x 16/16	20 ± 1.0	0.30	24 ± 1.0	50 ± 3,0	3475
	4x 25/16	24,5 ± 1.0	0.30	28,5 ± 1.0	54,5 ± 3.0	4325
	4x 35/16	27 ± 1.0	0.30	31 ± 1.5	62 ± 3.5	5685
	4x 50/25	30.5 ± 1.5	0.40	35.5 ± 1.5	66.5 ± 3.5	6795
	4x 70/35	35 ± 1.5	0.40	40.5 ± 2.0	72 ± 4.0	8425
	4x 95/50	41 ± 2.0	0.40	47 ± 2.0	79 ± 4.0	10400
	4x 120/60	45 ± 2.0	0.61	51.5 ± 2.5	84 ± 4.5	12200
	4x 150/75	49.5 ± 2.0	0.50 *	58 ± 2.5	91 ± 5.0	14490
	5G 4	15 ± 0,8	0,30	18,5 ± 0,8	44 ± 2,5	2500
	5G 10	19 ± 0,8	0.30	23 ± 1.0	48,5 ± 2,5	3230
	5G 35	29,5 ± 1,0	0,30	34 ± 2,0	65 ± 3,5	6400
	5G 50	34 ± 2,0	0,40	39 ± 2,0	70,5 ± 4,0	7830
	5G 70	39 ± 2,0	0,40	44,5 ± 2,5	76,5 ± 4,0	9630
	5G 95	45,5 ± 2,5	0,40	51,5 ± 3,0	84 ± 4,5	11950
	5G 120	50 ± 3,0	0,50	57 ± 3,0	89,5 ± 4,5	14020
	5x 1,5/6	12,5 ± 0.8	0.30	16 ± 0.8	41,5 ± 2.5	2120
20158563	7x 1,5/6	13,5 ± 0,8	0,30	17 ± 0,8	42 ± 2,5	2220
	10x 1,5/10	16,5 ± 0,8	0,30	20 ± 1,0	46 ± 2,5	2620
20161550	12x 1,5/10	17,5 ± 0,8	0,30	21,5 ± 1,0	47 ± 2,5	2750
20308935	27x 1,5/16	25 ± 1.0	0.30	29 ±1,0	55,5 ± 3,0	3915
20213863	37x 1,5/16	28 ± 1.0	0.30	32,5 ± 1.5	63 ± 3.5	5225
	7x 2,5/6	14 ± 0,8	0,30	17,5 ± 0,8	43 ± 2,5	2375
20160154	8x 2,5/10	18,5 ± 0,8	0,30	23 ± 1,0	48,5 ± 2,5	2895
20136235	12x 2,5/10	19,5 ± 0,8	0,30	23.5 ± 1,0	49 ± 2.5	3085
20160155	8x 4/10	18 ± 0.8	0.30	22 ± 1.0	47,5 ± 2.5	2965

* This cable has a double braid (two layers of wires)

ELECTRICAL DATA

No. of cores x cross section	Conductor resistance DC [Ω/km] at 20 °C	at 90 °C	Reactance [Ω/km] at 50 / 60 Hz	Impedance [Ω/km] at 90 °C At 50 / 60 Hz	Continous current rating at 45 °C	Short circuit [Ampere] 1 sec	0,3 sec
1 X 50/10	0,391	0,4986	0,161/0,193	0,524/0,535	196	7000	12780
1 X 70/10	0,270	0,344	0,152/0,182	0,376/0,390	242	9800	17892
1 X 95/10	0,195	0,2486	0,146/0,176	0,289/0,305	293	13300	24282
1 X 120/10	0,154	0,1964	0,141/0,170	0,242/0,260	339	16800	30672
1 X 150/16	0,126	0,161	0,137/0,164	0,211/0,223	389	21000	38340
1 X 185/16	0,100	0,128	0,133/0,160	0,185/0,205	444	25900	47286
1 X 240/16	0,0762	0,0972	0,133/0,159	0,165/0,187	522	3360	61344
1 X 300/16	0,0607	0,0774	0,128/0,154	0,150/0,173	601	42000	76681
2x 1,5/4	12,2	15,56	0,115/0,138	15,556/15,567	20	210	383
2x 2,5/4	7,56	9,64	0,107/0,129	9,640/9,641	26	350	639
3x 1,5/4	12,2	15,56	0,115/0,138	15,556/15,567	16	210	383
3x 2,5/6	7,56	9,64	0,107/0,129	9,640/9,641	21	350	639
3x 4/6	4,70	5,99	0,100/0,120	5,993/5,994	28	560	1022
3x 6/6	3,11	3,97	0,094/0,112	3,967/3,9672	36	840	1534
3x 10/10	1.84	2.35	0.088/0.105	2.351/2.352	50	1400	2556
3x 16/16	1,16	1,46	0082/0,099	1,481/1,482	67	2240	4089
3x 25/16	0.734	0.936	0.082/0,098	0,9395/0,941	89	3500	6390
3x 35/16	0,529	0,675	0,078/0,094	0,679/0,681	110	4900	8946
3x 50/25	0,391	0,499	0,078/0,094	0,505/0,507	137	7000	12780
3x 70/35	0,270	0,344	0,077/0,092	0,352/0,356	169	9800	17892
3x 95/50	0,195	0,249	0,075/0,090	0,2597/0,2644	205	13300	24282
3x 120/60	0,154	0,196	0,073/0,088	0,209/0,215	237	16800	30672
3x 150/75	0,126	0,161	0,073/0,088	0,177/0,183	272	21000	38340
3x 185/95	0,100	0,128	0,073/0,088	0,147/0,1548	311	25900	47286
3x 2,5 + E	7,56	9,64	0,107/0,129	9,640/9,641	21	350	639
3x 4 + E	4,70	5,99	0,100/0,120	5,993/5,994	28	560	1022
3x 6 + E	3,11	3,97	0,094/0,112	3,967/3,9672	36	840	1534
3x 10 + E	1.84	2.35	0.088/0.105	2.351/2.352	50	1400	2556
3x 16 + E	1,16	1,46	0082/0,099	1,481/1,482	67	2240	4089
4x 1,5/6	12,2	15,56	0,115/0,138	15,556/15,567	16	210	383
4x 2,5/6	7,56	9,64	0,107/0,129	9,640/9,641	21	350	639
4x 4/6	4,70	5,99	0.100/0.120	5,991/5,9912	28	560	1022
4x 6/10	3,11	3,97	0,094/0,112	3,967/3,9672	36	840	1534
4x 10/10	1.84	2.35	0.088/0.105	2.351/2.352	50	1400	2556
4x 16/16	1,16	1,46	0083/0,099	1,481/1,482	67	2240	4089
4x 25/16	0.734	0.936	0.082/0,098	0,9395/0,941	89	3500	6390
4x 35/16	0,529	0,675	0,078/0,094	0,679/0,681	110	4900	8946
4x 50/25	0,391	0,499	0,078/0,093	0,5047/0,5073	137	7000	12780
4x 70/35	0,270	0,344	0,077/0,092	0,352/0,356	169	9800	17892
4x 95/50	0,195	0,249	0,075/0,090	0,2597/0,2644	205	13300	24282
4x 120/60	0,154	0,196	0,073/0,088	0,209/0,215	237	16800	30672
4x 150/75	0,126	0,161	0,073/0,088	0,177/0,183	272	21000	38340
4x 185/95	0,100	0,128	0,073/0,088	0,147/0,1548	311	25900	47286
4x 4 + E	4,70	5,99	0.100/0.120	5,991/5,9912	28	560	1022

No. of cores x cross section	Conductor resistance DC [Ω/km] at 20 °C	at 90 °C	Reactance [Ω/km] at 50 / 60 Hz	Impedance [Ω/km] at 90 °C At 50 / 60 Hz	Continous current rating at 45 °C	Short circuit [Ampere] 1 sec	0,3 sec
4x 10 + E	1.84	2.35	0.088/0.105	2.351/2.352	50	1400	2556
4x 35 + E	0,529	0,675	0,078/0,094	0,679/0,681	110	4900	8946
4x 50 + E	0,391	0,499	0,078/0,093	0,5047/0,5073	137	7000	12780
4x 70 + E	0,270	0,344	0,077/0,092	0,352/0,356	169	9800	17892
4x 95 + E	0,195	0,249	0,075/0,090	0,2597/0,2644	205	13300	24282
4x 120 + E	0,126	0,161	0,073/0,088	0,177/0,183	272	21000	38340
5x 1,5/6	12,2	15,56	0,115/0,138	15,556/15,567	13	210	383
7x 1,5/6	12,2	15,56	0,115/0,138	15,556/15,567	12	210	383
10x 1,5/10	12,2	15,56	0,115/0,138	15,556/15,567	10,5	210	383
12x 1,5/10	12,2	15,56	0,115/0,138	15,556/15,567	10	210	383
27x 1,5/16	12,2	15,56	0,115/0,138	15,556/15,567	7,5	210	383
37x 1,5/16	12,2	15,56	0,115/0,138	15,556/15,567	7	210	383
7x 2,5/6	7,56	9,64	0,107/0,129	9,640/9,641	15,5	350	639
8x 2,5/10	7,56	9,64	0,107/0,129	9,640/9,641	15	350	639
12x 2,5/10	7,56	9,64	0,107/0,129	9,640/9,641	13	350	639
8x 4/10	4,70	5,99	0.100/0.120	5,991/5,9912	20	560	1022

INSTALLATION DATA

TYPE [mm^2]	Overall Diameter [mmØ]	Minimum bending radius During Installation	Fixed Installed	Maximum pulling tension [N]
		[mm]		
		20 x D	**12 x D**	
1x 50/6	43,5 ± 2,5	870	522	2500
1x 70/6	45,5 ± 2,5	910	546	3500
1x 95/10	48 ± 2,5	960	576	4750
1x 120/10	50 ± 3,0	1000	600	6000
1x 150/10	52 ± 3,0	1040	624	7500
1x 185/10	54,5 ± 3,0	1090	654	9250
1x 240/16	62 ± 3,5	1240	744	12000
1x 300/16	65,5 ± 3,5	1310	786	15000
2x 1,5/4	38 ± 2,0	760	456	150
2x 2,5/4	38,5 ± 2,5	770	462	250
3x 1,5/4	38.5 ± 2,0	770	462	225
3x 2,5/6	40 ± 2,5	800	480	375
3x 4/6	41,5 ± 2,5	830	498	600
3x 6/6	43 ± 2,0	860	516	900
3x 10/10	45 ± 2,5	930	540	1500
3x 16/16	47,5 ± 2,5	950	570	2400
3x 25/16	52 ± 3	1040	624	3750
3x 35/16	54,5 ± 3,0	1090	654	5250
3x 50/25	63,5 ± 3,5	1270	762	7500
3x 70/35	68 ± 3,5	1360	816	10500

TYPE [mm^2]	Overall Diameter [mmØ]	Minimum bending radius During Installation [mm]	Minimum bending radius Fixed Installed [mm]	Maximum pulling tension [N]
		20 x D	**12 x D**	
3x 95/50	74,5 ± 4	1490	894	14250
3x 120/60	79 ± 4,0	1580	948	18000
3x 150/75	84,5 ± 4,5	1690	1014	20000
4G 2,5	41 ± 2,5	820	492	500
4G 4	42.5 ± 2.5	850	510	800
4G 6	44 ± 2.5	880	528	1200
4G 10	47 ± 2,5	940	564	2000
4G 16	50 ± 3,0	1000	600	3200
4x 1,5/6	40 ± 2,5	800	480	300
4x 2,5/6	41 ± 2,5	820	492	500
4x 4/6	42,5 ± 2,5	850	510	800
4x 6/10	44 ± 2,5	880	528	1200
4x 10/10	47 ± 2.5	940	564	2000
4x 16/16	50 ± 3,0	1000	600	3200
4x 25/16	54,5 ± 3.0	1090	564	5000
4x 35/16	62 ± 3.5	1240	744	7000
4x 50/25	66.5 ± 3.5	1330	798	10000
4x 70/35	72 ± 4.0	1440	864	14000
4x 95/50	79 ± 4.0	1580	948	19000
4x 120/60	84 ± 4.5	1680	1008	20000
4x 150/75	91 ± 5.0	1820	1092	20000
5G 4	44 ± 2,5	880	528	1000
5G 10	48,5 ± 2,5	970	582	2500
5G 35	65 ± 3,5	1300	780	8750
5G 50	70,5 ± 4,0	1410	846	12500
5G 70	76,5 ± 4,0	1530	918	17500
5G 95	84 ± 4,5	1680	1008	20000
5G 120	89,5 ± 4,5	1790	1074	20000
5x 1,5/6	41,5 ± 2,5	830	498	375
7x 1,5/6	42 ± 2,5	840	504	525
10 x 1,5/10	46 ± 2,5	920	552	750
12 x 1,5/10	47 ± 2,5	940	564	900
27x 1,5/16	55,5 ± 3,0	1110	666	2025
37x 1.5/16	63 ± 3.5	1260	756	2775
7x 2,5/6	43 ± 2,5	860	516	875
8x 2,5/10	48,5 ± 2,5	970	582	1000
12x 2,5/10	49 ± 2.5	980	588	1500
8x 4/10	47,5 ± 2.0	950	570	1600

Minimum installation temperature: - 10 °C

Hydro Carbon Fire Resistant instrumentation cable, BFOU-HCF(i) 250V, S15/S109

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

BFOU-HCF(i) 250V

MGT/EPR/EPR/TCWB/EVA/HCF/SHF1

NEK TS 606:2016 Code S109
NEK TS 606:2009 Code S15

FlexFlame | HCF
Draka

1100°C / 2000°F / 200 kW/m²

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 hydrocarbon fire resistance is vital.

Standards applied

IEC 60092-376 (2003-05)	- Design
Draka Norsk Kabel	- HCF protection
IEC 60228 class 2	- Conductor
IEC 60092-360	- Insulation
IEC 60092-360	- Sheath
IEC 60332-1	- Flame Retardant
IEC 60332-3-22	- Flame Retardant
IEC 60331-21	- Fire Resistant
IEC 61892-4 and NEK TS 606	- HC Fire resistance test
IEC 600754-1,2	- Halogen Free
IEC 61034-1,2	- Low Smoke

Construction

	Code Letter	
Conductor		Tinned stranded circular copper, IEC 60228 class 2
Insulation	**B**	Mica-tape + EP-rubber, IEC 60092-360 (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.
Inner covering	**F**	Flame retardant and halogen-free thermoplastic compound
Tape over bedding		PET tape
Armour/screen	**O**	Tinned 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)
HCF protection	**-HCF**	Extruded heatblock compound
Tape		Lapped glassfibre tape
Overall sheath		Flame retardant, halogen-free thermoplastic compound, SHF1 (IEC 60092-360)
Marking text		Eg. "meter" "year/week" DRAKA 01 Part no. <SAP-code> BFOU-HCF(i) 250V S15/S109 4 PAIR 1,5 mm2 HCF 1100/30 FLEX - FLAME IEC 60331-21 IEC 60332-3-22 Production no. <Production order number>
Outer sheath colour		Grey or Blue

Core identification instrumentation cables

Pair	Black - Light Blue
Triple	Black - Light Blue - Brown

Range and dimensions

Part number	Colour	Type [mm2]	Diameter over bedding [mm]	Thickness of armour wires [mmØ]	Diameter sheath [mm]	Diameter overall HCF-protection (mm)	Weight of cable approx. [kg/km]
Tba	Grey or Blue	1 pair 0,75	7.5 ± 0.5	0.2	10.5 ± 0.8	36 ± 1,5	1610
Tba	Blue	1 triple 0,75	8 ± 0,5	0,2	11 ± 0,8	36,5 ± 1,5	1650
Tba	Grey or Blue	1 pair 1,5	9 ± 0,5	0,2	12 ± 0,8	37,5±1,5	1740
20165924	Grey	2 pair 1,5	13 ± 0,8	0,3	17 ± 0,8	43 ± 2	2285
20165925	Grey	4 pair 1,5	15 ± 0,8	0,3	19,5 ± 0,8	45,5 ± 2	2640
Tba	Grey	5 pair 1,5	16,5 ± 0,8	0,3	20,5 ± 1	46 ± 2	2720
20165926	Grey	6 pair 1,5	18.5 ± 0.8	0.3	22.5 ± 1	49 ± 2	3070
20161515	Grey	8 pair 1,5	20,5 ± 1,0	0,3	25 ± 1	52 ± 2,5	3040
Tba	Grey	12 pair 1,5	25 ± 1,0	0,3	30 ± 1,5	61,5 ± 3	4900
Tba	Grey	1 triple 1,5	9,5 ± 0,5	0,2	12,5 ± 0.8	38,5 ± 1,5	1825
Tba	Grey	12 triple 1.5	28 ± 1	0.3	33 ± 1.5	65.5 ± 3	5570
20118210	Grey	1 pair 2.5	9.5 ± 0.5	0.2	12,5 ± 0.8	38.5 ± 1.5	1830
20349645	Grey	8 pair 2,5	22,5 ± 1	0,3	27 ± 1	53 ± 2,5	3665

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

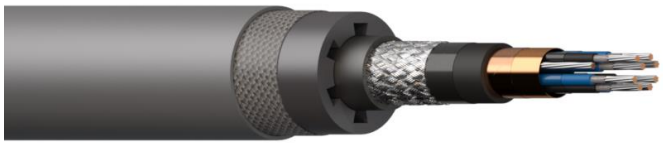
Installation recommendations

TYPE [mm^2]	Overall Diameter [mmØ]	Minimum bending radius During Installation / Fixed Installed [mm]		Maximum pulling tension [N]
		20 x D	**12 x D**	
1 pair 0,75	36 ± 1,5	720	432	75
1 triple 0,75	36,5 ± 1,5	730	438	112,5
1 pair 1,5	37,5 ± 1,5	750	450	150
2 pair 1,5	43 ± 2	860	516	300

TYPE [mm^2]	Overall Diameter [mmØ]	Minimum bending radius During Installation [mm]	Fixed Installed	Maximum pulling tension [N]
		20 x D	**12 x D**	
4 pair 1,5	45,5 ± 2	910	546	600
5 pair 1,5	46 ± 2	920	552	750
6 pair 1,5	49 ± 2	980	588	900
8 pair 1,5	52 ± 2,5	1040	624	1200
12 pair 1,5	61,5 ± 3	1230	738	1800
1 triple 1,5	38.5 ± 1.5	770	462	225
12 triple 1.5	65.5 ± 3	1310	786	2700
1 pair 2.5	38.5 ± 1.5	770	462	250
8 pair 2,5	53 ± 2,5	1060	636	2000

Minimum installation temperature: - 10 °C

Hydro Carbon Fire Resistant instrumentation cable, BFOU-HCF(c) 250V, S16/S110



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

BFOU-HCF(c) 250V

MGT/EPR/EPR/TCWB/EVA/HCF/SHF1

NEK TS 606:2016 Code S110
NEK TS 606:2009 Code S16

FlexFlame | HCF
Draka
1100°C / 2000°F / 200 kW/m²

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 hydrocarbon fire resistance is vital.

Standards applied	
IEC 60092-376 (2003-05)	- Design
Draka Norsk Kabel	- HCF protection
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 60331-21	- Fire Resistant
IEC 61892-4 and NEK TS 606	- HC Fire resistance
IEC 60754-1,2	- Halogen Free
IEC 61034-1,2	- Low Smoke

Construction

	Code Letter	
Conductor		Tinned stranded circular copper, 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 bedding		PET tape
Armour/screen	**O**	Tinned 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)
HCF protection	**-HCF**	Extruded heatblock compound
Tape		Lapped glassfibre tape
Overall sheath		Flame retardant, halogen-free thermoplastic compound, SHF1 (IEC 60092-360)
Marking text		Eg. "meter" "year/week" DRAKA 01 Part no. <SAP-code> BFOU-HCF(c) 250V S16/S110 4 PAIR 2,5 mm2 HCF 1100/30 FLEX - FLAME IEC 60331-21 IEC 60332-3-22 Production no. <Production order number>

	Code Letter	
Outer sheath colour		**Grey or Blue**

Core identification instrumentation cables

Pair	Black - Light Blue
Triple	Black - Light Blue - Brown

Range and dimensions

Part number	Sheath colour	Type [mm2]	Diameter over bedding [mm]	Thickness of armour wires [mmØ]	Diameter sheath [mm]	Diameter overall HCF-protection (mm)	Weight of cable approx. [kg/km]
	Grey	8 pair 0,75	16.5 ± 0.8	0.3	20.5 ± 1	47 ± 2,0	2760
20151806	Grey	2 pair 1,5	13,5 ± 0,8	0,3	17,5 ± 0,8	42,5 ± 2,0	2195
	Blue	2 pair 1,5	13,5 ± 0,8	0,3	16,5 ± 0,8	42,5 ± 2,0	2210
	Grey	4 pair 1,5	14,5 ± 0,8	0,3	18,5 ± 0,8	44,5 ± 2,0	2510
	Grey	8 pair 1,5	20,0 ± 1,0	0,3	24,5 ± 1,0	51 ± 2,5	3300
	Grey	12 pair 1,5	23,5 ± 1,0	0,3	28 ± 1,0	55 ± 2,5	3895
	Grey	24 pair 1,5	33 ± 1,5	0,4	39 ± 1,5	71 ± 3,5	6750
20160151	Grey	2 pair 2,5	14 ± 0,8	0,3	17,5 ± 0,8	43 ± 2,0	2275
20160152	Grey	3 pair 2,5	14,5 ± 0,8	0,3	18,5 ± 0,8	44 ± 2,0	2440
20160153	Grey	4 pair 2,5	16 ± 0,8	0,3	20 ± 1,0	45,5 ± 2,0	2630

Electrical values instrumentation cables

TYPE [mm2]	Capacitance approx. [nF/km]	Inductance approx. [mH/km]	Resist. 20°C [Max.ohm/km]	L/R ratio, (microH/Ohm)
Unshielded pair 0.75mm²	100	0.67	26.3	12.7
Unshielded pair 1,5	110	0,63	12,9	24,4
Unshielded pair 2,5	125	0,59	8,02	36,8

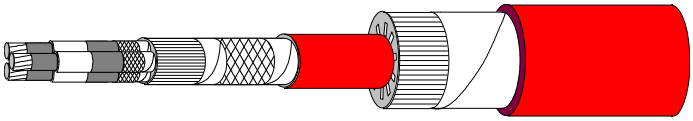
Installation recommendations

TYPE [mm^2]	Overall Diameter [mmØ]	Minimum bending radius During Installation [mm]	Minimum bending radius Fixed Installed [mm]	Maximum pulling tension [N]
		20 x D	**12 x D**	
8 pair 0.75	47 ± 2.0	940	564	600
2 pair 1,5	42,5 ± 2,0	850	510	300
4 pair 1,5	44,5 ± 2,0	890	534	600
8 pair 1,5	51 ± 2,5	1020	612	1200

TYPE [mm^2]	Overall Diameter [mmØ]	Minimum bending radius [mm] During Installation	Fixed Installed	Maximum pulling tension [N]
12 pair 1,5	55 ± 2,5	1100	660	1800
24 pair 1,5	71 ± 3,5	1420	852	3600
2 pair 2,5	43 ± 2,0	860	516	500
3 pair 2,5	44 ± 2,0	880	528	750
4 pair 2,5	45,5 ± 2,0	910	546	1000

Minimum installation temperature: - 10°C

Hydro Carbon Fire Resistant MV power cable, RFOU-HCF 10kV, P30/P114



HydroCarbon Fire resistant, flame retardant halogen-free medium voltage power cable.

RFOU-HCF 6/10(12)kV

EPR/EPR/TCWB/EVA/HCF/SHF1

NEK TS 606:2016 Code P114
NEK TS 606:2009 Code P30

FlexFlame | HCF
Draka

1100°C / 2000°F / 200 kW/m²

Operating temperature : 90°C
Operating Voltage : 6/10(12)kV

Application

Fixed installation for medium voltage (MV) power in both EX- and safe areas, emergency and critical systems where requirement for fire resistance is vital.

Standards applied

IEC 60092-354	- Design
Draka Norsk Kabel	- HCF protection
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 60331-21 and -31	- Fire Resistant
IEC 61892-4 and NEK TS 606	- HC Fire resistance
IEC 600754-1,2	- Halogen Free
IEC 61034-1,2	- Low Smoke

Construction

	Code Letter	
Conductor		Tinned stranded and compressed copper (STCC), IEC 60228 class 2
Conductor screen semiconductive		Semiconductive layer (EP-rubber)
Insulation	**R**	EP-rubber, IEC 60092-360 (EPR)
Insulation screen semicoductive		Semiconductive layer (EP-rubber)
Metallic screen		Tinned copper wire braid
Lay up		Cores are laid up together. Cores are identified by Brown, Black or Grey threads over the metallic screen on each conductor.
Inner covering	**F**	Flame retardant and halogen-free thermoset compound
Tape over bedding		PET tape
Armour/screen	**O**	Tinned 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)
HCF protection	**-HCF**	Extruded heatblock compound
Tape		Lapped glassfibre tape
Overall sheath		Flame retardant, halogen-free thermoplastic compound, SHF1 (IEC 60092-360)

	Code Letter	
Marking text		Eg. "meter" "year/week" Part no. <SAP-code> DRAKA 01 RFOU-HCF 6/10(12)kV P30 / P114 1x 95/16 mm2 HCF 1100/30 FLEX - FLAME Production no. <Prod.ordre no.>
Outer sheath colour		Red

Range and dimensions

Part number	Type [mm2]	Diameter over bedding [mm]	Thickness of armour wires [mmØ]	Diameter sheath [mm]	Diameter overall HCF-protection (mm)	Weight of cable approx. [kg/km]
20165775	1x 95/16	26,5 ± 1,5	0,3	32 ± 2,0	63 ± 3,0	5660
20126563	1x 120/20	27,5 ± 1,5	0,3	34 ± 2,0	64,5 ± 3,0	5950
20224487	1x 150/15	28,5 ± 1,5	0,3	35 ± 2,0	66 ± 3,0	6440
20110680	1x 185/18	30 ± 1,5	0,3	36,5 ± 2,0	67,5 ± 3,0	6940
20155549	1x 240/21	33 ± 1,5	0,3	39 ± 2,0	72,5 ± 3,5	8230

Other no. of cores and cross sectional area are available on request.

Range and dimensions continue

Type (mm^2)	Diameter of copper conductor approx. mmØ	Insulation thickness, nominal mm	Semi-conducting layer thickness approx. mm	Diameter over insulated, screened conductor, approx. mm
1x 95/16	12,1	3,4	0,6	21,3
1x 120/20	13,5	3,4	0,6	22,7
1x 150/15	14,7	3,4	0,6	23,9
1x 185/18	16,8	3,4	0,6	26,0
1x 240/21	19,1	3,4	0,6	28,3

ELECTRICAL DATA

No. of cores x cross section [mm2]	Conductor resistance DC [Ω/km] at 20 °C	at 90 °C	Reactance [Ω/km] at 50 Hz	Impedance [Ω/km] at 90 °C at 50 Hz	Continous current rating at 45 °C	Short circuit (conductor) [Ampere] 1 sec	0,3 sec
1x 95/16	0,195	0,249	0,163	0,298	293	13300	24282
1x 120/20	0,154	0,196	0,158	0,252	339	16800	30672
1x 150/15	0,126	0,161	0,154	0,222	389	21000	38340
1x 185/18	0,100	0,128	0,148	0,195	444	25900	47286
1x 240/21	0,0762	0,0972	0,144	0,174	522	33600	61344

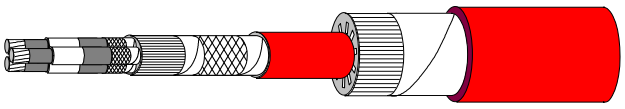
INSTALLATION DATA

TYPE [mm^2]	Overall Diameter [mmØ]	Minimum bending radius During Installation [mm]	Minimum bending radius Fixed Installed [mm]	Maximum pulling tension [N]
		20 x D	**12 x D**	
1x 95/16	63 ± 3,0	1260	756	4750
1x 120/20	64,5 ± 3,0	1290	774	6000
1x 150/15	66 ± 3,0	1320	792	7500
1x 185/18	67,5 ± 3,0	1350	810	9250
1x 240/21	72,5 ± 3,5	1450	870	12000

Minimum installation temperature: - 10 °C

The RFOU-HCF MV cables are available on request in all voltage levels from 3,6/6(7,2)kV up to and including 26/45(52)kV. Please be aware that we have a limitation on the cable diameter which allows us to manufacture mainly single core cables on these voltage levels

Hydro Carbon Fire Resistant MV power cable, RFOU-HCF 15kV, P31/P115



HydroCarbon Fire resistant, flame retardant halogen-free medium voltage power cable.

RFOU-HCF 8,7/15(17,5)kV

EPR/EPR/TCWB/EVA/HCF/SHF1

NEK TS 606:2016 Code P115
NEK TS 606:2009 Code P31

FlexFlame | HCF

Draka

1100°C / 2000°F / 200 kW/m²

Operating temperature : 90°C
Operating Voltage : 8,7/15(17,5)kV

Application

Fixed installation for medium voltage (MV) power in both EX- and safe areas, emergency and critical systems where requirement for fire resistance is vital.

Standards applied	
IEC 60092-354	- Design
Draka Norsk Kabel	- HCF protection
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 60331-21	- Fire Resistant
IEC 61892-4 and NEK TS 606	- HC Fire resistance
IEC 600754-1,2	- Halogen Free
IEC 61034-1,2	- Low Smoke

Construction

	Code Letter	
Conductor		Tinned stranded and compressed copper (STCC), IEC 60228 class 2
Conductor screen semiconductive		Semiconductive layer (EP-rubber)
Insulation	**R**	EP-rubber, IEC 60092-360 (EPR)
Insulation screen semicoductive		Semiconductive layer (EP-rubber)
Metallic screen		Tinned copper wire braid
Lay up		Cores are laid up together. Cores are identified by Brown, Black or Grey threads over the metallic screen on each conductor.
Inner covering	**F**	Flame retardant and halogen-free thermoset compound
Tape over bedding		PET tape
Armour/screen	**O**	Tinned 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)
HCF protection	**-HCF**	Extruded heatblock compound
Tape		Lapped glassfibre tape
Overall sheath		Flame retardant, halogen-free thermoplastic compound, SHF1 (IEC 60092-360)

	Code Letter	
Marking text		Eg. "meter" "year/week" DRAKA 01 Part no. <SAP-code> RFOU-HCF 8,7/15(17,5)kV P115 1x 70/20 mm2 HCF 1100/30 FLEX - FLAME Prodution order <Prod. Order no.>
Outer sheath colour		Red

Range and dimensions

New Part number	Type [mm2]	Diameter over bedding [mm]	Thickness of armour wires [mmØ]	Diameter sheath [mm]	Diameter overall HCF-protection (mm)	Weight of cable approx. [kg/km]
Tba	1x 50/20	24 ± 1.5	0.4	30.5 ± 1.5	63 ± 3	5260
Tba	1x 70/20	26.5 ± 1.5	0.4	32 ± 1.5	64.5 ± 3	5750
20133539	1x 120/20	30 ± 1.5	0.4	37 ± 2	68 ± 3	6610
Tba	1x 150/20	31 ± 1.5	0.4	38 ± 2	71.5 ± 3.5	7220
Tba	1x 185/20	33 ± 1.5	0.4	39.5 ± 2.5	73.5 ± 3.5	7920
Tba	1x 240/25	35.5 ± 1.5	0.4	42 ± 2.5	75.5 ± 3.5	8950
Tba	1x 300/29	38 ± 1.5	0.4	45 ± 2.5	79 ± 3.5	10020
Tba	3x 35/35	48.5 ± 2	0,5	57,5 ± 3	92 ± 4,5	11600

Type (mm^2)	Diameter of copper conductor approx. mmØ	Insulation thickness, nominal mm	Semi-conducting layer thickness approx. mm	Diameter over insulated, screened conductor, approx. mm
1x 50/20	8.5	4.5	0.6	20.0
1x 70/20	10.0	4.5	0.6	21.5
1x 120/20	13.5	4.5	0.6	25.0
1x 150/20	14.7	4.5	0.6	26.2
1x 185/20	16.8	4.5	0.6	28.3
1x 240/25	19.1	4.5	0.6	30.6
1x 300/29	21.6	4.5	0.6	33.1
3x 35/35	7.2	4.5	0.6	18.7

ELECTRICAL DATA

No. of cores x cross section [mm2]	Conductor resistance DC [Ω/km] at 20 °C	at 90 °C	Reactance [Ω/km] at 50 Hz	Impedance [Ω/km] at 90 °C at 50 Hz	Continous current rating at 45 °C	Short circuit (conductor) [Ampere] 1 sec	0,3 sec
1x 50/20	0.391	0.499	0.185	0.5318	196	7000	12780
1x 70/20	0.270	0.339	0.176	0.3868	242	9800	17892
1x 120/20	0.154	0.196	0.162	0.2544	339	16800	30672
1x 150/20	0.126	0.161	0.157	0.2246	389	21000	38341
1x 185/20	0.100	0.128	0.152	0.1984	444	25900	47286

No. of cores x cross section [mm2]	Conductor resistance DC [Ω/km] at 20 °C	at 90 °C	Reactance [Ω/km] at 50 Hz	Impedance [Ω/km] at 90 °C at 50 Hz	Continous current rating at 45 °C	Short circuit (conductor) [Ampere] 1 sec	0,3 sec
1x 240/25	0.0762	0.0972	0.146	0.1751	522	33600	61345
1x 300/29	0.0607	0.0774	0.141	0.1606	301	42000	76681
3x 35/35	0.529	0.675	0.119	0.6849	100	4900	8946

INSTALLATION DATA

TYPE [mm^2]	Overall Diameter [mmØ]	Minimum bending radius During Installation	Fixed Installed	Maximum pulling tension [N]
		[mm] **20 x D**	**12 x D**	
1x 50/20	63 ± 3	1260	756	
1x 70/20	64.5 ± 3	1290	774	3500
1x 120/20	68 ± 3	1360	816	6000
1x 150/20	71.5 ± 3.5	1430	858	
1x 185/20	73.5 ± 3.5	1470	882	9250
1x 240/25	75.5 ± 3.5	1510	906	
1x 300/29	79.0 ± 3.5	1580		
3x 35/35	92,0±4,5	1840	1104	5250

Minimum installation temperature: - 10°C

The RFOU-HCF MV cables are available on request in all voltage levels from 3,6/6(7,2)kV up to and including 26/45(52)kV. Please be aware that we have a limitation on the cable diameter which allows us to manufacture mainly single core cables on these voltage levels.

Jet Fire cables

Designed for the extreme

Extreme environments call for exceptional cables. And our unique Jet Fire cables are literally speaking one of a kind. They will withstand 250 kW/m² jet fires and temperatures exceeding 1200 °C for half an hour. That is what we call performing under pressure!

Jet Fire cables

Draka Norsk Kabel AS is proud to present and offer the new and unique cable design for jet fires to the offshore market. The newly developed Jet Fire cables have the right properties to withstand 250 kW/m2 jet fires and temperatures exceeding 1200 °C for half an hour.

Our Jet Fire cables give good heat transmission during normal operating temperatures, thus reducing the requirement for derating. Furthermore, all cables rated as Jet Fire will also pass the circuit integrity test under fire conditions for at least 180 minutes, both 750°C and 1000 °C (IEC 60311-21).

Once a Jet Fire cable is exposed to a jet fire, rapid changes in the material state will give a cooling effect, which is maintained during the critical period. When this process is completed, the layer will turn into a firm, ceramic substance which provides heat insulation that is *'Powered by Favuseal'*.

This one of a kind cable solution is the result of research and development, which is considered as a continuous process within Draka Norsk Kabel, a part of Prysmian Group.
A global organization — built to serve Prysmian Group does more than manufacture the highest quality cable solutions.

We have a global team of engineers who aid in system design and project management. Drawing on over 130 year's experience and continuously investing in R&D, we apply excellence, understanding and integrity to everything we do, meeting and exceeding the precise needs of our customers across all continents, at the same time shaping the evolution of our industry.
Discover why our customers make Draka Norsk Kabel their preferred partner!

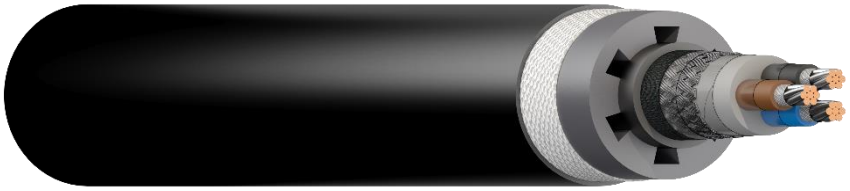
Standards

Our new designed cables will withstand 250 kW/m² jet fires and temperatures exceeding 1200 °C for half an hour, in accordance with ISO 22899-1.

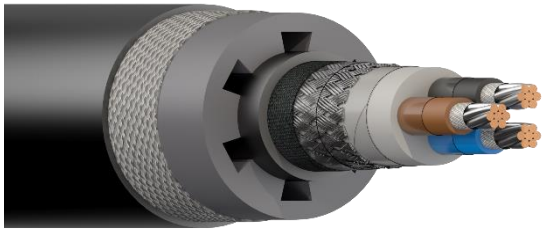
Product range

Application	Cable type/voltage	Fire class
Instrument	BFOU-JF 250V *	JF-30
Control	BFOU-JF 0,6/1kV	JF-30
Power	BFOU-JF 0,6/1kV	JF-30

*** Instrument development is ongoing and expected soon.**



Jet Fire Resistant power cable, BFOU-JF 0,6/1(1,2)kV



Jet Fire protected and resistant, flame retardant halogen-free power cable, that is:

Rated and certified by Det Norsk Veritas for withstanding 30 minutes.

BFOU-JF 0,6/1kV

MGT/EPR/EPR/TCWB/EVA/JF/SHF1

1200°C / 250 kW/m²

Operating temperature : 90°C
Operating Voltage : 0,6/1kV

Standards applied

IEC 60092-353	- Design
Draka Norsk Kabel	- JF protection
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 60331-21	- Fire Resistant
ISO 22899-1	- Jet Fire resistance
IEC 600754-1,2	- Halogen Free
IEC 61034-1,2	- Low Smoke

Application

Fixed installation for power, control and lightning in both EX- and safe areas, emergency and critical systems where requirement for fire resistance is vital.

Construction

	Code Letter	
Conductor		Tinned stranded circular copper, IEC 60228 class 2
Insulation	**B**	Mica-tape + EP-rubber, IEC 60092-360 (EPR)
Lay up / Shielding		Cores laid up in concentric layers
Inner covering	**F**	Flame retardant and halogen-free extruded compound
Tape over bedding		PET tape
Armour/screen	**O**	Tinned copper wire braid / PET tape
Outer sheath	**U**	Flame retardant, halogen-free and mud resistant thermoset compound, SHF2 (IEC 60092-360)
JF protection	**JF**	Extruded heatblock compound
Tape		Lapped glassfibre tape
Overall sheath		Flame retardant, halogen-free thermoplastic compound, SHF1 (IEC 60092-360)
Marking text (example)		"meter" "year/week" Part no. <SAP-code> DRAKA 01 BFOU-JF 0,6/1kV 12 x 2,5/10 mm2 ISO 22899-1 FLEX - FLAME IEC 60092-353/DRAKA IEC 60331-21 IEC 60332-3-22 Production no. <Prod.ordre no.>
Manufacturing unit		DRAKA 01 = Prysmian Group Norge AS
Outer sheath colour		Black or Orange

Core identification

Single core	Black
Two cores	Blue – Brown
Two cores + earth	Blue - Brown - Yellow/green
Three cores	Brown - Black – Grey
Three cores + earth	Brown - Black - Grey - Yellow/green
Four cores	Blue - Brown - Black – Grey
Four cores + earth	Blue - Brown - Black - Grey - Yellow/green
Five cores	Blue - Brown - Black - Grey - Black
Above five cores	Black numbers on white base

Range and dimensions

New Part number	Type [mm2]	Diameter over bedding [mm]	Thickness of armour wires [mmØ]	Diameter sheath [mm]	Diameter overall HCF-protection (mm)	Weight of cable approx. [kg/km]
Black	1x 50/10	14,5 ± 0,8	0,30	18,5 ± 0,8	44,5 ± 2,5	2800
Black	1x 70/10	16,5 ± 0,8	0,30	20,5 ± 1,0	47 ± 2,5	3190
Black	1x 95/10	18,5 ± 0,8	0,30	23 ± 1,0	49,5 ± 2,5	3675
Black	1x 120/10	20,5 ± 1,0	0,30	25 ± 1,0	52 ± 3,0	4130
Black	1x 150/16	22,5 ± 1,0	0,30	27 ± 1,0	54 ± 3,0	4570
Black	1x 185/16	24,5 ± 1,0	0,30	29,5 ± 1,0	56,5 ± 3,0	5155
Black	1x 240/16	27,5 ± 1,0	0,30	32,5 ± 1,5	64 ± 3,5	6750
Black	1x 300/16	30,5 ± 1,5	0,30	35,5 ± 1,5	67,5 ± 3,5	7700
Black	2x 1,5/4	10,0 ± 0,8	0,20	13 ± 0,8	39 ± 2,0	1890
20153271 Black	2x 2,5/4	10,5 ± 0,8	0,20	14 ± 0,8	40,5 ± 2,5	1955
20340300 Orange	3G 2,5	11 ± 0,8	0,30	15 ± 0,8	41,5 ± 2,5	2095
Black	3x 1,5/4	10,5 ± 0,8	0,20	13,5 ± 0,8	39.5 ± 2,0	1930
Black	3x 2,5/6	11,5 ± 0,8	0,30	15 ± 0,8	41 ± 2,5	2130
Black	3x 4/6	12,5 ± 0,8	0,30	16,5 ± 0,8	42,5 ± 2,5	2320
20153272 Black	3x 6/6	13,5 ± 0,8	0,30	17,5 ± 0,8	44,5 ± 2,0	2485
20153273 Black	3x 10/10	15,5 ± 0,8	0,30	19,5 ± 0,8	46,5 ± 2,5	2790
Black	3x 16/16	18,0 ± 0,8	0,40	22,5 ± 1,0	49 ± 2,5	3355
Black	3x 35/16	24,5 ± 1,0	0,30	29 ± 1,0	56 ± 3,0	4590
Black	3x 70/35	32,5 ± 1,5	0,50	38,5 ± 1,5	70,5 ± 4,0	7810
Black	3x 95/50	37,0 ± 1,5	0,61	43,5 ± 2,0	76 ± 4,0	9465
Black	3x 120/60	40,5 ± 2,0	0,50	47,5 ± 2,0	80,5 ± 4,5	10750
Black	3x 150/75	45,5 ± 2,0	0,40 *	53,5 ± 2,5	87 ± 4,5	12850
Black	5G 4	14 ± 0.8	0.30	17.5 ± 0.8	43.5 ± 2.5	2490

New Part number	Type [mm2]	Diameter over bedding [mm]	Thickness of armour wires [mmØ]	Diameter sheath [mm]	Diameter overall HCF-protection (mm)	Weight of cable approx. [kg/km]
Black	5G 6	15.5 ± 0.8	0.30	19.0 ± 0.8	45 ± 2.5	2700
Black	5G 10	17,5 ± 0.8	0.30	21,5 ± 1.0	48 ± 2,5	3120
Black	5G 16	20.5 ± 1.0	0.30	24,5 ± 1.0	51 ± 3,0	3675
20153270 Black	4x 2,5/6	12.5 ± 0.8	0.30	16.5 ± 0.8	43 ± 2,5	2250
Black	4x 4/6	14.0 ± 0.8	0.30	17,5 ± 0.8	43,5 ± 2,5	2475
Black	4x 6/10	15.5 ± 0.8	0.30	19.0 ± 0.8	45 ± 2,5	2700
Black	4x 10/10	17,5 ± 0.8	0.30	21.5 ± 1.0	48 ± 2.5	3120
Black	4x 16/16	20.5 ± 1.0	0.30	24,5 ± 1.0	51 ± 3,0	3700
Black	4x 25/16	24,5 ± 1.0	0.30	29.0 ± 1.0	56 ± 3.0	4570
20339482 Orange	5G 6	16,5 ± 0,8	0,30	20,5 ± 1	48 ± 2,5	2940
Black	5G 10	19,5 ± 0,8	0.30	23,5 ± 1.0	50 ± 3.0	3450
Black	7x 1,5/6	13 ± 0,8	0,30	16,5 ± 0,8	42,5 ± 2,5	2320
Black	12x 1,5/10	17 ± 0,8	0,30	21,0 ± 1,0	47,5 ± 2,5	2885
Black	7x 2,5/6	14 ± 0,8	0,30	18,0 ± 0,8	44 ± 2,5	2550
20153269 Black	12x 2,5/10	20 ± 1	0,30	24,0 ± 1	51.5 ± 3	3320
Black	19x 2,5/16	23 ± 1	0,30	27 ± 1	54,5 ± 3	3830
Black	27x 1,5/16	24±1	0.30	28,5 ± 1	55,5 ± 3	4075
Black	37x 1,5/16	27 ± 1	0.30	32 ± 1.5	63,5 ± 3.5	5440

* This cable has a double braid (two layers of wires)

ELECTRICAL DATA

No. of cores x cross section	Conductor resistance DC [Ω/km] at 20 °C	at 90 °C	Reactance [Ω/km] at 50 / 60 Hz	Impedance [Ω/km] at 90 °C At 50 / 60 Hz	Continous current rating at 45 °C	Short circuit [Ampere] 1 sec	0,3 sec
1 X 50/10	0,391	0,4986	0,161/0,193	0,524/0,535	196	7000	12780
1 X 70/10	0,270	0,344	0,152/0,182	0,376/0,390	242	9800	17892
1 X 95/10	0,195	0,2486	0,146/0,176	0,289/0,305	293	13300	24282
1 X 120/10	0,154	0,1964	0,141/0,170	0,242/0,260	339	16800	30672
1 X 150/16	0,126	0,161	0,137/0,164	0,211/0,223	389	21000	38340
1 X 185/16	0,100	0,128	0,133/0,160	0,185/0,205	444	25900	47286
1 X 240/16	0,0762	0,0972	0,133/0,159	0,165/0,187	522	3360	61344
1 X 300/16	0,0607	0,0774	0,128/0,154	0,150/0,173	601	42000	76681
2x 1,5/4	12,2	15,56	0,115/0,138	15,556/15,567	20	210	383
2x 2,5/4	7,56	9,64	0,107/0,129	9,640/9,641	26	350	639
3G 2,5	7,56	9,64	0,107/0,129	9,640/9,641	26	350	639
3x 1,5/4	12,2	15,56	0,115/0,138	15,556/15,567	16	210	383

No. of cores x cross section	Conductor resistance DC [Ω/km] at 20 °C	at 90 °C	Reactance [Ω/km] at 50 / 60 Hz	Impedance [Ω/km] at 90 °C At 50 / 60 Hz	Continous current rating at 45 °C	Short circuit [Ampere] 1 sec	0,3 sec
3x 2,5/6	7,56	9,64	0,107/0,129	9,640/9,641	21	350	639
3x 4/6	4,70	5,99	0,100/0,120	5,993/5,994	28	560	1022
3x 6/6	3,11	3,97	0,094/0,112	3,967/3,9672	36	840	1534
3x 10/10	1.84	2.35	0.088/0.105	2.351/2.352	50	1400	2556
3x 16/16	1,16	1,46	0082/0,099	1,481/1,482	67	2240	4089
3x 35/16	0,529	0,675	0,078/0,094	0,679/0,681	110	4900	8946
3x 70/35	0,270	0,344	0,077/0,092	0,352/0,356	169	9800	17892
3x 95/50	0,195	0,249	0,075/0,090	0,26/0,264	205	13300	24282
3x 120/60	0,154	0,196	0,073/0,088	0,209/0,215	237	16800	30672
3x 150/75	0,126	0,161	0,073/0,088	0,177/0,183	272	21000	38340
4G 4	4,70	5,99	0,100/0,120	5,993/5,994	28	560	1022
4G 6	3,11	3,97	0,094/0,112	3,967/3,9672	36	840	1534
4G 10	1.84	2.35	0.088/0.105	2.351/2.352	50	1400	2556
4G 16	1,16	1,46	0082/0,099	1,481/1,482	67	2240	4089
4x 2,5/6	7,56	9,64	0,107/0,129	9,640/9,641	21	350	639
4x 4/6	4,70	5,99	0.100/0.120	5,991/5,9912	28	560	1022
4x 6/10	3,11	3,97	0,094/0,112	3,967/3,9672	36	840	1534
4x 10/10	1.84	2.35	0.088/0.105	2.351/2.352	50	1400	2556
4x 16/16	1,16	1,46	0082/0,099	1,481/1,482	67	2240	4089
4x 25/16	0.734	0.936	0.081/	0.098	89	3500	6390
5G 6	3,11	3,97	0,094/0,112	3,967/3,9672	36	840	1534
5G 10	1.84	2.35	0.088/0.105	2.351/2.352	50	1400	2556
7x 1,5/6	12,2	15,56	0,115/0,138	15,556/15,567	12	210	383
12x 1,5/10	12,2	15,56	0,115/0,138	15,556/15,567	10	210	383
7x 2,5/6	7,56	9,64	0,107/0,129	9,640/9,641	15,5	350	639
12x 2,5/10	7,56	9,64	0,107/0,129	9,640/9,641	13	350	639
19x 2,5/16	7,56	9,64	0,107/0,129	9,640/9,641		350	639
27x 1,5/16	12,2	15,56	0,115/0,138	15,556/15,567	7,5	210	383
37x 1,5/16	12,2	15,56	0,115/0,138	15,556/15,567	7	210	383

INSTALLATION DATA

TYPE [mm^2]	Overall Diameter [mmØ]	Minimum bending radius During Installation [mm]	Minimum bending radius Fixed Installed [mm]	Maximum pulling tension [N]
		20 x D	**12 x D**	50 N x total cross section (mm^2) of conductors
1x 50/6	44,5 ± 2,5	890	534	2500
1x 70/6	47 ± 2,5	940	564	3500
1x 95/10	49,5 ± 2,5	990	594	4750
1x 120/10	52 ± 3,0	1040	624	6000
1x 150/10	54 ± 3,0	1080	648	7500
1x 185/10	56,5 ± 3,0	1130	678	9250
1x 240/16	64 ± 3,5	1280	768	12000
1x 300/16	67,5 ± 3,5	1350	810	15000
2x 1,5/4	39 ± 2,0	780	468	150
2x 2,5/6	40,5 ± 2,5	810	486	250
3G 2,5	41,5 ± 2,5	830	498	375

TYPE [mm^2]	Overall Diameter [mmØ]	Minimum bending radius [mm] During Installation	Fixed Installed	Maximum pulling tension [N]
3x 1,5/4	39.5 ± 2,0	790	474	225
3x 2,5/6	41 ± 2,5	820	492	375
3x 4/6	42,5 ± 2,5	850	510	600
3x 6/6	44,5 ± 2,0	890	534	900
3x 10/10	46,5 ± 2,5	930	558	1500
3x 16/16	49 ± 2,5	980	588	2400
3x 35/16	56 ± 3,0	1120	672	5250
3x 70/35	70,5 ± 4,0	1410	846	10500
3x 95/50	76 ± 4,0	1520	912	14250
3x 120/60	80,5 ± 4,5	1610	966	18000
3x 150/70	87 ± 4,5	1740	1044	20000
4G 2,5	43 ± 2,5	860	516	500
4G 4	43.5 ± 2.5	870	522	800
4G 6	45 ± 2.5	900	540	1200
4G 10	48 ± 2,5	960	576	2000
4G 16	51 ± 3,0	1020	612	3200
4x 2,5/6	43 ± 2,5	860	516	500
4x 4/6	43,5 ± 2,5	870	522	800
4x 6/6	45 ± 2,5	900	540	1200
4x 10/10	48 ± 2.5	960	576	2000
4x 16/16	51 ± 3,0	1020	612	3200
4x 25/16	56 ± 3.0	1120	672	5000
5G 6	48 ± 2,5	960	576	1500
5G 10	50 ± 3.0	1000	600	2500
7x 1,5/6	42,5 ± 2,5	850	510	525
12 x 1,5/10	47,5 ± 2,5	950	570	900
7x 2,5/6	44 ± 2,5	880	528	875
12x 2,5/10	51,5 ± 3	1030	618	1500
19x 2,5/16	54,5 ± 3	1090	654	2375
27x 1,5/16	55,5 ± 3	1110	666	2025
37x 1.5/16	63,5 ± 3.5	1270	762	2775

Minimum installation temperature: - 10 °C

Fire Resistant optical fibre cable, QFCI-I/O/RM-JM/-, F101

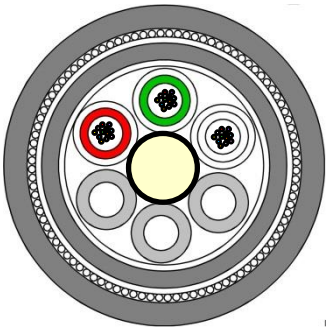
QFCI

Indoor and outdoor.
Fire resistant
Flame retardant halogen-free
Loose tube

NEK TS 606:2016 Code F101[2)]

Optical cable for indoor and outdoor use in vital communication and emergency systems that need to be operational during fire. The cable has a design that ensures operation for more than 3 hours in fires up to 1000ºC.
The unique design features eXtended Fire Resistant properties (XFR) which secure operation during fire test with bending and impact from hammer shock. In addition, also with water spray and water jet (BS 8491[1)]) during and directly after the fire. The cable is halogen free and flame retardant to protect against secondary damage to electronic equipment during and after fire. Outer sheath is made from black UV-stabilized and weather resistant material and may be exposed for shorter periods to fluids such as diesel and mineral oils. The resistance to these fluids is according to IEC60811-404. The cable is reinforced with a steel wire braiding. The fibres are protected in jelly filled loose tubes stranded around a FRP central strength member to ensure optimum performance and long life. Each fibre and loose tube is colour coded for easy identification during splicing and termination. The outer sheath is marked to show fibre type and cable type.

[1)] Simulating water fire fighting jet
[2)] Code F1 in the NEK TS 606:2009



1. FRP-central strength member
2. Fiber in filled tubes
3. Wrapping
4. Inner LSHF sheath
5. Galvanized steel wire braid(GSWB)
6. Outer sheath(SHF1)

Weight and dimensions

Number of fibres	Number of fibres in each tube	Number of tubes + fillers	Loose tube diameter (mm)	Outer diameter (mm)	Weight (kg/km)	Heat release (MJ/km)
4	4	1+5	2,2	13,5	230	1500
8	8	1+5	2,2	13,5	230	1500
12	12	1+5	2,2	13,5	230	1500
24	12	2+4	2,2	13,5	230	
36	12	3+3	2,2	13,5	230	1500
48	12	4+2	2,2	13,5	230	1500
60	12	5+1	2,2	13,5	230	1500
72	12	6+0	2,2	13,5	230	1500

Other fibre counts are available on request.

Cable properties

Tensile strength (IEC 60794-1-21, E1)		**Chemical resistance**	
Max tensile load during installation	1500 N	Mineral oils IRM 902 (IEC60811-404)	- 7 days/23°C
Max tensile load during operation	500 N		- 4 hours/70°C
		Diesel - IRM 903 (IEC60811-404)	- 7 days/23°C
			- 4 hours/70°C
Crush (IEC 60794-1-21, E3)	3000 N/10cm	**Fire and smoke classifications*)**	
Impact (IEC 60794-1-21, E4)	30J	IEC 60331-25 (750°C, 90 minutes)	<1.0 dB excess loss
Torsion (IEC 60794-1-21, E7)	±1 turn/1m	Upgraded IEC 60331-25 (1000°C, 3 hours)	<1.5 dB excess loss
Cable bending		IEC 60331-1(830°C, 120 minutes incl. hammer	<1,5 dB excess loss
Minimum bending diameter	250 mm	shock, followed by water jet acc. to BS 8491:2008)	
Cable bend (IEC 60794-1-21, E11)	<0.1dB/ ±5 turn	IEC 60331-2 (830°C, 90 minutes incl. hammer	<1,5 dB excess loss
		shock) followed by water spray acc. to EN 50200	
Temperature window(IEC 60794-1-22, F1)		IEC 60331-2 (830°C, 90 minutes incl. hammer shock)	<1,5 dB excess loss
Operation	-40°C to +70°C	IEC 61034	
Installation	-10°C to +70°C	IEC 60332-3-22 (Cat. A)	
Storage	-40°C to +70°C	IEC 60332-3-24 (Cat. C)	
		IEC 60754-1	
		IEC 60754-2	

*)-These are examples of tests performed.

Ordering information

Part no	Number of fibres	Cabe Type	Fiber type	Fiber data sheet
20184651	4	G4-9/125 QFCI-I/O/RM-JM/-	OS2 Single mode	C03e
20184655	8	G8-9/125 QFCI-I/O/RM-JM/-	OS2 Single mode	C03e
20184659	12	G12-9/125 QFCI-I/O/RM-JM/-	OS2 Single mode	C03e
20184663	24	G24-9/125 QFCI-I/O/RM-JM/-	OS2 Single mode	C03e
20184642	48	G48-9/125 QFCI-I/O/RM-JM/-	OS2 Single mode	C03e
*)	60	G60-9/125 QFCI-I/O/RM-JM/-	OS2 Single mode	C03e
20184647	72	G72-9/125 QFCI-I/O/RM-JM/-	OS2 Single mode	C03e
20184652	4	G4-50/125 QFCI-I/O/RM-JM/-	OM2 50/125 multi mode	C34
20184656	8	G8-50/125 QFCI-I/O/RM-JM/-	OM2 50/125 multi mode	C34
20184660	12	G12-50/125 QFCI-I/O/RM-JM/-	OM2 50/125 multi mode	C34
20184664	24	G24-50/125 QFCI-I/O/RM-JM/-	OM2 50/125 multi mode	C34
20184643	48	G48-50/125 QFCI-I/O/RM-JM/-	OM2 50/125 multi mode	C34
*)	60	G60-50/125 QFCI-I/O/RM-JM/-	OM2 50/125 multi mode	C34
20184648	72	G72-50/125 QFCI-I/O/RM-JM/-	OM2 50/125 multi mode	C34
20184654	4	G4-50/125OM3 QFCI-I/O/RM-JM/-	OM3 MaxCap-OM3	C31
20184658	8	G8-50/125OM3 QFCI-I/O/RM-JM/-	OM3 MaxCap-OM3	C31
20184662	12	G12-50/125OM3 QFCI-I/O/RM-JM/-	OM3 MaxCap-OM3	C31
20184641	24	G24-50/125OM3 QFCI-I/O/RM-JM/-	OM3 MaxCap-OM3	C31
20184645	48	G48-50/125OM3 QFCI-I/O/RM-JM/-	OM3 MaxCap-OM3	C31
*)	60	G60-50/125OM3 QFCI-I/O/RM-JM/-	OM3 MaxCap-OM3	C31
20184650	72	G72-50/125OM3 QFCI-I/O/RM-JM/-	OM3 MaxCap-OM3	C31
*)	4	G4-50/125OM4 QFCI-I/O/RM-JM/-	OM4 MaxCap-OM4	C32
*)	12	G12-50/125OM4 QFCI-I/O/RM-JM/-	OM4 MaxCap-OM4	C32
*)	24	G24-50/125OM4 QFCI-I/O/RM-JM/-	OM4 MaxCap-OM4	C32
20184646	48	G48-50/125OM4 QFCI-I/O/RM-JM/-	OM4 MaxCap-OM4	C32

Part no	Number of fibres	Cabe Type	Fiber type	Fiber data sheet
*)	60	G60-50/125OM4 QFCI-I/O/RM-JM/-	OM4 MaxCap-OM4	C32
*)	72	G72-50/125OM4 QFCI-I/O/RM-JM/-	OM4 MaxCap-OM4	C32
20184653	4	G4-62.5/125 QFCI-I/O/RM-JM/-	OM1 62.5/125 multi mode	C02
20184657	8	G8-62.5/125 QFCI-I/O/RM-JM/-	OM1 62.5/125 multi mode	C02
20184661	12	G12-62.5/125 QFCI-I/O/RM-JM/-	OM1 62.5/125 multi mode	C02
20184665	24	G24-62.5/125 QFCI-I/O/RM-JM/-	OM1 62.5/125 multi mode	C02
20184644	48	G48-62.5/125 QFCI-I/O/RM-JM/-	OM1 62.5/125 multi mode	C02
*)	60	G60-62.5/125 QFCI-I/O/RM-JM/-	OM1 62.5/125 multi mode	C02
20184649	72	G72-62.5/125 QFCI-I/O/RM-JM/-	OM1 62.5/125 multi mode	C02

*)-Part numbers will be given on request. When ordering, pls. refer to data sheet: D95QFCI

Colour code

Fibre no.	Colour	Fibre no.	Colour	Tube no.	Colour
1	White	7	Brown	1	Red
2	Red	8	Black	2	Green
3	Yellow	9	Violet	3	White
4	Green	10	Turquise	4	White
5	Blue	11	Orange	5	White
6	Grey	12	Pink	6	White

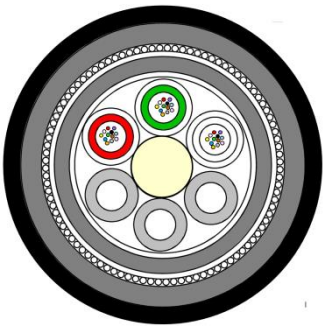
Standard colour of outer sheath is black.
Other fibre types and qualities are available on request.

Fire Resistant optical fibre cable, QFCI M -I/O/RM/C-JM/-, MUD PROTECTED F103

QFCI

Indoor and outdoor.
Fire resistant
Flame retardant halogen-free
Loose tube

Optical cable for indoor and outdoor use in vital communication and emergency systems that need to be operational during fire. The cable has a design that ensures operation for more than 3 hours in fires up to 1000ºC.
The unique design features eXtended Fire Resistant properties(XFR) which secure operation during fire test with bending and impact from hammer shock. In addition also with water spray and water jet(BS 8491[1)]) during and directly after the fire. The cable is halogen free and flame retardant to protect against secondary damage to electronic equipment during and after fire. Outer sheath is made from black UV-stabilized and weather resistant material and may be exposed for shorter periods to fluids such as diesel and mineral oils. The resistance to these fluids is according to IEC60811-404. The cable is reinforced with a steel wire braiding. The fibres are protected in jelly filled loose tubes stranded around a central strength member to ensure optimum performance and long life. Each fibre and loose tube is colour coded for easy identification during splicing and termination. An additional outer sheath is added for improved oil- and MUD protection. The outer sheath is marked to show fibre type and cable type.



7. FRP-central strength member
8. Fiber in filled tubes
9. Wrapping
10. Inner LSHF sheath
11. Galvanized steel wire braid(GSWB)
12. Inner sheath (SHF1)
13. Outer sheath(MUD)

[1)] Simulating water fire fighting jet

Weight and dimensions

Number of fibres	Number of fibres in each tube	Number of tubes + fillers	Loose tube diameter (mm)	Outer diameter (mm)	Weight (kg/km)	Heat release (MJ/km)
4	4	1+5	2,2	15,5	330	2000
8	8	1+5	2,2	15,5	330	2000
12	12	1+5	2,2	15,5	330	2000
24	12	2+4	2,2	15,5	330	2000
36	12	3+3	2,2	15,5	330	2000
48	12	4+0	2,2	15,5	330	2000
60	12	5+1	2,2	15,5	330	2000
72	12	6+0	2,2	15,5	330	2000

Other fibre counts are available on request.

Cable properties

Tensile strength (IEC 60794-1-21,E1)		**Chemical resistance**	
Max tensile load during installation	1500 N	Mineral oils IRM 902 (IEC60811-404)	- 7 days/100°C
Max tensile load during operation	500 N	Diesel - IRM 903 (IEC60811-404)	- 7 days/100°C
Crush (IEC 60794-1-21,E3)	3000 N/10cm	**Fire and smoke classifications*)**	
Impact (IEC 60794-1-21,E4)	30J	IEC 60331-25 (750°C, 90 minutes)	<1.0 dB excess loss
Torsion (IEC 60794-1-21,E7)	±1 turn/1m	Upgraded IEC 60331-25 (1000°C, 3 hours)	<1.5 dB excess loss
Cable bending		IEC 60331-1(830°C, 120 minutes incl. hammer	<1,5 dB excess loss
Minimum bending diameter	250 mm	shock, followed by water jet acc. to BS 8491:2008)	
Cable bend (IEC 60794-1-21, E11)	<0.1dB/ ±5 turn	IEC 60331-2 (830°C, 90 minutes incl. hammer	<1,5 dB excess loss
		shock) followed by water spray acc. to EN 50200	
Temperature window(IEC60794-1-22, F1)		IEC 60331-2 (830°C, 90 minutes incl. hammer shock)	<1,5 dB excess loss
Operation	-40°C to +70°C	IEC 61034	
Installation	-10°C to +70°C	IEC 60332-3-22 (Cat. A)	
Storage	-40°C to +70°C	IEC 60332-3-24 (Cat. C)	
		IEC 60754-1	

*)-These are examples of tests performed.

Ordering information

Part no	Number of fibres	Cabe Type	Fiber type	Fiber data sheet
20193428	4	G4-9/125 QFCI-I/O/RM/C-JM/-	OS2 Single mode	C03e
20193423	8	G8-9/125 QFCI-I/O/RM/C-JM/-	OS2 Single mode	C03e
20193424	12	G12-9/125 QFCI-I/O/RM/C-JM/-	OS2 Single mode	C03e
20193425	24	G24-9/125 QFCI-I/O/RM/C-JM/-	OS2 Single mode	C03e
20193426	48	G48-9/125 QFCI-I/O/RM/C-JM/-	OS2 Single mode	C03e
*)	60	G60-9/125 QFCI-I/O/RM/C-JM/-	OS2 Single mode	C03e
20193427	72	G72-9/125 QFCI-I/O/RM/C-JM/-	OS2 Single mode	C03e
20193429	4	G4-50/125 QFCI-I/O/RM/C-JM/-	OM2 50/125 multi mode	C34
20193430	8	G8-50/125 QFCI-I/O/RM/C-JM/-	OM2 50/125 multi mode	C34
20193431	12	G12-50/125 QFCI-I/O/RM/C-JM/-	OM2 50/125 multi mode	C34
20193432	24	G24-50/125 QFCI-I/O/RM/C-JM/-	OM2 50/125 multi mode	C34
20193433	48	G48-50/125 QFCI-I/O/RM/C-JM/-	OM2 50/125 multi mode	C34
*)	60	G60-50/125 QFCI-I/O/RM/C-JM/-	OM2 50/125 multi mode	C34
20193434	72	G72-50/125 QFCI-I/O/RM/C-JM/-	OM2 50/125 multi mode	C34
20193435	4	G4-50/125OM3 QFCI-I/O/RM/C-JM/-	OM3 MaxCap-OM3	C31
20193436	8	G8-50/125OM3 QFCI-I/O/RM/C-JM/-	OM3 MaxCap-OM3	C31
20193437	12	G12-50/125OM3 QFCI-I/O/RM/C-JM/-	OM3 MaxCap-OM3	C31
20193438	24	G24-50/125OM3 QFCI-I/O/RM/C-JM/-	OM3 MaxCap-OM3	C31
20193439	48	G48-50/125OM3 QFCI-I/O/RM/C-JM/-	OM3 MaxCap-OM3	C31
*)	60	G60-50/125OM3 QFCI-I/O/RM/C-JM/-	OM3 MaxCap-OM3	C31
20193440	72	G72-50/125OM3 QFCI-I/O/RM/C-JM/-	OM3 MaxCap-OM3	C31
*)	4	G4-50/125OM4 QFCI-I/O/RM/C-JM/-	OM4 MaxCap-OM4	C32
*)	8	G8-50/125OM4 QFCI-I/O/RM/C-JM/-	OM4 MaxCap-OM4	C32
*)	12	G12-50/125OM4 QFCI-I/O/RM/C-JM/-	OM4 MaxCap-OM4	C32
*)	24	G24-50/125OM4 QFCI-I/O/RM/C-JM/-	OM4 MaxCap-OM4	C32
20193441	48	G48-50/125OM4 QFCI-I/O/RM/C-JM/-	OM4 MaxCap-OM4	C32
*)	60	G60-50/125OM4 QFCI-I/O/RM/C-JM/-	OM4 MaxCap-OM4	C32

Part no	Number of fibres	Cabe Type	Fiber type	Fiber data sheet
*)	72	G72-50/125OM4 QFCI-I/O/RM/C-JM/-	OM4 MaxCap-OM4	C32
20193442	4	G4-62.5/125 QFCI-I/O/RM/C-JM/-	OM1 62.5/125 multi mode	C02
20193443	8	G8-62.5/125 QFCI-I/O/RM/C-JM/-	OM1 62.5/125 multi mode	C02
20193444	12	G12-62.5/125 QFCI-I/O/RM/C-JM/-	OM1 62.5/125 multi mode	C02
20193445	24	G24-62.5/125 QFCI-I/O/RM/C-JM/-	OM1 62.5/125 multi mode	C02
20193446	48	G48-62.5/125 QFCI-I/O/RM/C-JM/-	OM1 62.5/125 multi mode	C02
*)	60	G60-62.5/125 QFCI-I/O/RM/C-JM/-	OM1 62.5/125 multi mode	C02
20193447	72	G72-62.5/125 QFCI-I/O/RM/C-JM/-	OM1 62.5/125 multi mode	C02

*)-Part numbers will be given on request. When ordering, pls. refer to data sheet: D951QFCI-mud_e03

Colour code

Fibre no.	Colour	Fibre no.	Colour	Tube no.	Colour
1	White	7	Brown	1	Red
2	Red	8	Black	2	Green
3	Yellow	9	Violet	3	White
4	Green	10	Turquise	4	White
5	Blue	11	Orange	5	White
6	Grey	12	Pink	6	White

Standard colour of outer sheath is dark grey(RAL7024).
Other fibre types and qualities are available on request.

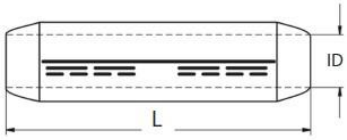
Cable Accessories

Cable Splices FLAMELINK and FIRELINK

Cu-splice Connectors

SHD

KU-H-V



End Terminations AIN

FLAMELINK 250, Flame retardant cable splice for signal cables RFOU 250V

Description
Cable splicing concept based on flame retardant, Zero-halogen heat-shrinkable tubing.

Qualifications
The concept is tested and approved
in acc. with:
IEC 60332-1 (Flame retardant)
IEC 61034-1 (Low smoke)
EN 50393:2014 (Electrical type approval)

Test reports on request.

Special features
- Quick and easy installation
- Slim and limited diameter increase
- Each kit covers several cables
- Each kit includes appropriate connectors
  in acc. with DIN 46341-1 for 0,5-2,5mm2

For selection table and product number, see next page.

SELECTION TABLE

Flamelink 250

Cable size mm²	Product name	ProCab Product no. (EI number)	Draka Part no.
1 pair 0,75-2,5mm²	FLAMELINK 250V 1-2p 0,75-2,5	11 317 05	CNO1131705
2 pair 0,75-2,5mm²	FLAMELINK 250V 1-2p 0,75-2,5	11 317 05	CNO1131705
4-5 pair 0,75-2,5mm²	FLAMELINK 250V 4-5p 0,75-2,5	11 317 06	CNO1131706
7 pair 0,75-2,5mm²	FLAMELINK 250V 7p 0,75-2,5	11 317 07	CNO1131707
8 pair 0,75-2,5mm²	FLAMELINK 250V 8p 0,75-2,5	11 317 08	CNO1131708
12 pair 0,75-2,5mm²	FLAMELINK 250V 12-16p 0,75-2,5	11 317 09	CNO1131709
16 pair 0,75-2,5mm²	FLAMELINK 250V 12-16p 0,75-2,5	11 317 09	CNO1131709
19 pair 0,75-2,5mm²	FLAMELINK 250V 19-24p 0,75-2,5	11 317 10	CNO1131710
24 pair 0,75-2,5mm²	FLAMELINK 250V 19-24p 0,75-2,5	11 317 10	CNO1131710
32 pair 0,75-2,5mm²	FLAMELINK 250V 32p 0,75-2,5	11 317 11	CNO1131711
1 triple 0,75-2,5mm²	FLAMELINK 250V 1-2t 0,75-2,5	11 317 12	CNO1131712
2 triple 0,75-2,5mm²	FLAMELINK 250V 1-2t 0,75-2,5	11 317 12	CNO1131712
4-5 triple 0,75-2,5mm²	FLAMELINK 250V 4-5t 0,75-2,5	11 317 13	CNO1131713
7 triple 0,75-2,5mm²	FLAMELINK 250V 7-8t 0,75-2,5	11 317 14	CNO1131714
8 triple 0,75-2,5mm²	FLAMELINK 250V 7-8t 0,75-2,5	11 317 14	CNO1131714
12 triple 0,75-2,5mm²	FLAMELINK 250V 12t 0,75-2,5	11 317 15	CNO1131715
16 triple 0,75-2,5mm²	FLAMELINK 250V 16-19t 0,75-2,5	11 317 16	CNO1131716
19 triple 0,75-2,5mm²	FLAMELINK 250V 16-19t 0,75-2,5	11 317 16	CNO1131716
24 triple 0,75-2,5mm²	FLAMELINK 250V 24-32t 0,75-2,5	11 317 17	CNO1131717
32 triple 0,75-2,5mm²	FLAMELINK 250V 24-32t 0,75-2,5	11 317 17	CNO1131717

FLAMELINK 0.6/1, Flame retardant cable splice for power cables RFOU 1kV

Description
Cable splicing concept based on flame retardant, Zero-halogen heat-shrinkable tubing.

Qualifications
The concept is tested and approved
in acc. with:
IEC 60332-1 (Flame retardant)
IEC 61034-1 (Low smoke)
EN 50393:2014 (Electrical type approval)

Test reports on request.

Special features
- Quick and easy installation
- Slim and limited diameter increase
- Each kit covers several cables
- Each kit includes appropriate connectors in acc. with DIN 46341-1 for 0,5-70 mm2 and DIN 46267 for 25-300 mm²

For selection table and product number, see next page.

SELECTION TABLE

Flamelink 0.6/1

Cable size mm²	Product name	ProCab Product no. (EI number)	Draka Part no.
1x 16	FLAMELINK 0,6/1-1x16-35	11 317 18	CNO113171
1x 25	FLAMELINK 0,6/1-1x16-35	11 317 18	CNO113171
1x 35	FLAMELINK 0,6/1-1x16-35	11 317 18	CNO113171
1x 50	FLAMELINK 0,6/1-1x50-95	11 317 19	CNO113171
1x 70	FLAMELINK 0,6/1-1x50-95	11 317 19	CNO113171
1x 95	FLAMELINK 0,6/1-1x50-95	11 317 19	CNO113171
1x120	FLAMELINK 0,6/1-1x120-150	11 317 20	CNO113172
1x150	FLAMELINK 0,6/1-1x120-150	11 317 20	CNO113172
1x 185	FLAMELINK 0,6/1-1x185	11 317 21	CNO113172
1x240	FLAMELINK 0,6/1-1x240	11 317 22	CNO113172
1x300	FLAMELINK 0,6/1-1x300	11 317 23	CNO113172
2x 1,5	FLAMELINK 0,6/1-2/4x1,5-2,5	11 317 24	CNO113172
2x 2,5	FLAMELINK 0,6/1-2/4x1,5-2,5	11 317 24	CNO113172
2x 4	FLAMELINK 0,6/1-2x4-6	11 317 25	CNO113172
2x 6	FLAMELINK 0,6/1-2x4-6	11 317 25	CNO113172
2x10	FLAMELINK 0,6/1-2x10-16	11 317 26	CNO113172
2x16	FLAMELINK 0,6/1-2x10-16	11 317 26	CNO113172
3x 1,5	FLAMELINK 0,6/1-2/4x1,5-2,5	11 317 24	CNO113172
3x 2,5	FLAMELINK 0,6/1-2/4x1,5-2,5	11 317 24	CNO113172
3x 4	FLAMELINK 0,6/1-3/4x4-6	11 317 27	CNO113172
3x 6	FLAMELINK 0,6/1-3/4x4-6	11 317 27	CNO113172
3x10	FLAMELINK 0,6/1-3/4x10-16	11 317 28	CNO113172
3x16	FLAMELINK 0,6/1-3/4x10-16	11 317 28	CNO113172
3x25	FLAMELINK 0,6/1-3/4x25-35	11 317 29	CNO113172
3x35	FLAMELINK 0,6/1-3/4x25-35	11 317 29	CNO113172
3x50	FLAMELINK 0,6/1-3x50-70	11 317 30	CNO113173
3x70	FLAMELINK 0,6/1-3x50-70	11 317 30	CNO113173
3x95	FLAMELINK 0,6/1-3x95	11 317 31	CNO113173
3x120+	FLAMELINK 0,6/1-3x120-150+E	11 317 32	CNO113173
3x150+	FLAMELINK 0,6/1-3x120-150-E	11 317 32	CNO113173
3x185+	FLAMELINK 0,6/1-3x185-E	11 317 33	CNO113173
3x240+	FLAMELINK 0,6/1-3x240-E	11 317 34	CNO113173

Cable size mm²	Product name	ProCab Product no. (EI number)	Draka Part no.
4x 1,5	FLAMELINK 0,6/1-2/4x1,5-	11 317 24	CNO113172
4x 2,5	FLAMELINK 0,6/1-2/4x1,5-	11 317 24	CNO113172
4x 4	FLAMELINK 0,6/1-3/4x4-6	11 317 27	CNO113172
4x 6	FLAMELINK 0,6/1-3/4x4-6	11 317 27	CNO113172
4x10	FLAMELINK 0,6/1-3/4x10-16	11 317 28	CNO113172
4x16	FLAMELINK 0,6/1-3/4x10-16	11 317 28	CNO113172
4x25	FLAMELINK 0,6/1-3/4x25-35	11 317 29	CNO113172
4x35	FLAMELINK 0,6/1-3/4x25-35	11 317 29	CNO113172
4x50	FLAMELINK 0,6/1-4x50-70	11 317 35	CNO113173
4x70	FLAMELINK 0,6/1-4x50-70	11 317 35	CNO113173
4x95	FLAMELINK 0,6/1-4x95-120	11 317 36	CNO113173
4x120	FLAMELINK 0,6/1-4x95-120	11 317 36	CNO113173
7x 1,5	FLAMELINK 0,6/1-7x1,5-2,5	11 317 37	CNO113173
7x 2,5	FLAMELINK 0,6/1-7x1,5-2,5	11 317 37	CNO113173
12x 1,5	FLAMELINK 0,6/1-12x1,5-2,5	11 317 38	CNO113173
12x 2,5	FLAMELINK 0,6/1-12x1,5-2,5	11 317 38	CNO113173
19x 1,5	FLAMELINK 0,6/1-19x1,5-2,5	11 317 39	CNO113173
19x 2,5	FLAMELINK 0,6/1-19x1,5-2,5	11 317 39	CNO113173
27x 1,5	FLAMELINK 0,6/1-27x1,5-2,5	11 317 40	CNO113174
27x 2,5	FLAMELINK 0,6/1-27x1,5-2,5	11 317 40	CNO113174
37x 1,5	FLAMELINK 0,6/1-37x1,5-2,5	11 317 41	CNO113174
37x 2,5	FLAMELINK 0,6/1-37x1,5-2,5	11 317 41	CNO113174

FLAMELINK UX, Flame retardant cable splice for ground cables type UX

Description
Cable splicing concept based on flame retardant,
Zero-halogen heat-shrinkable tubing.

Qualifications
The concept is tested and approved
in acc. with:
IEC 60332-1 (Flame retardant)
IEC 61034-1 (Low smoke)
HD629 p.2 (Electrical type approval)

Test reports on request.

Special features
- Quick and easy installation
- Slim and limited diameter increase
- Each kit covers several cross-sections

Ferrules must be ordered separately.

For selection table and product number, see next page.

SELECTION TABLE

Flamelink P15 UX

Voltage kV	Conductor cross Section range mm²	Product name	ProCab Product no. (El number)	Draka Part no.
0,6-1	16 – 35	FLAMELINK P15UX 1x16-35	11 323 52	CNO1132352
	50 – 70	FLAMELINK P15X 1x50-150	11 323 53	CNO1132353

FLAMELINK 6-20, Flame retardant cable splice for MV power cables RFOU 6 – 20kV

Description
Cable splicing concept based on flame retardant, Zero-halogen heat-shrinkable tubing.

Qualifications
The concept is tested and approved
in acc. with:
IEC 60332-1 (Flame retardant)
IEC 61034-1 (Low smoke)
HD629-1:2014 (Electrical type approval)

Test reports on request.

Special features
- Quick and easy installation
- Slim and limited diameter increase
- Each kit covers several cross-sections

Ferrules must be ordered separately.

For selection table and product number, see next page.

ProCab as
PRODUKTER FOR KABEL

SELECTION TABLE

Flamelink 6 – 20 kV

Single core

Voltage kV	Cross section Range mm²	Product name	ProCab Product no. (El number)	Draka Part no.
3,6/6 + 6/10 + 8,7/15 + 12/20	25 - 95	FLAMELINK 6-20 – 1x25-95	11 316 65	CNO1131665
	120 - 300	FLAMELINK 6-20 – 1x120-300	11 316 66	CNO131666
	400 – 630	FLAMELINK 6-20 – 1x400-630	11 323 43	CNO1132343
	630 - 1000	FLAMELINK 6-20 – 1x630-1000	11 323 50	CNO1132350

3 and 4-core

Voltage kV	Cross section Range mm²	Product name	ProCab Product no. (El number)	Draka Part no.
3,6/6 + 6/10 + 8,7/15 + 12/20	25 - 95	FLAMELINK 6-20 – 3-4x25-95	11 316 67	CNO1131667
	120 - 150	FLAMELINK 6-20 – 3-4x120-150	11 316 68	CNO1131668

FLAMELINK 36, Flame retardant cable splice for MV power cables RFOU 36kV, 1-core

Description
Cable splicing concept based on flame retardant, Zero-halogen heat-shrinkable tubing.

Qualifications
The concept is tested and approved
in acc. with:
IEC 60332-1 (Flame retardant)
IEC 61034-1 (Low smoke)
HD629 p.2 (Electrical type approval)

Test reports on request.

Special features
- Quick and easy installation
- Slim and limited diameter increase
- Each kit covers several cross-sections

Ferrules must be ordered separately.

For selection table and product number, see next page.

SELECTION TABLE

Flamelink 36 kV

Cross section Range mm²	Product name	ProCab Product no. (El number)	Draka Part no.
35 - 95	FLAMELINK SRFOU 36 – 1x35-95	11 325 41	CNO1132541
70 - 240	FLAMELINK SRFOU 36 – 1x70-240	11 325 42	CNO1132542
185 – 500	FLAMELINK SRFOU 36 – 1x185-500	11 325 43	CNO1132543
500 - 800	FLAMELINK SRFOU 36 – 1x500-800	11 325 44	CNO1132544

FIRELINK 250, Fire resistant cable splice for signal cables BFOU 250V

Description
Cable splicing concept based on flame retardant, Zero-halogen heat-shrinkable tubing.

Qualifications
The concept is tested and approved
in acc. with:
IEC 60331-1 (Fire resistant)
IEC 60332-1 (Flame retardant)
IEC 61034-1 (Low smoke)
EN 50393:2014 (Electrical type approval)

Test reports on request.

Special features
- Quick and easy installation
- Slim and limited diameter increase
- Each kit covers several cables
- Each kit includes appropriate connectors in acc. with DIN 46341-1 for 0,5-2,5mm2

For selection table and product number, see next page.

SELECTION TABLE

Firelink 250

Cable size mm²	Product name	ProCab Product no. (El number)	Draka Part n.
1 pair 0,75-2,5mm²	FIRELINK 250V 1-2p 0,75-2,5	11 316 69	CNO1131669
2 pair 0,75-2,5mm²	FIRELINK 250V 1-2p 0,75-2,5	11 316 69	CNO1131669
4-5 pair 0,75-2,5mm²	FIRELINK 250V 4-5p 0,75-2,5	11 316 70	CNO1131670
7 pair 0,75-2,5mm²	FIRELINK 250V 7p 0,75-2,5	11 316 71	CNO1131671
8 pair 0,75-2,5mm²	FIRELINK 250V 8p 0,75-2,5	11 316 72	CNO1131672
12 pair 0,75-2,5mm²	FIRELINK 250V 12-16p 0,75-2,5	11 316 73	CNO1131673
16 pair 0,75-2,5mm²	FIRELINK 250V 12-16p 0,75-2,5	11 316 73	CNO1131673
19 pair 0,75-2,5mm²	FIRELINK 250V 19-24p 0,75-2,5	11 316 74	CNO1131674
24 pair 0,75-2,5mm²	FIRELINK 250V 19-24p 0,75-2,5	11 316 74	CNO1131674
32 pair 0,75-2,5mm²	FIRELINK 250V 32p 0,75-2,5	11 316 75	CNO1131675
1 triple 0,75-2,5mm²	FIRELINK 250V 1-2t 0,75-2,5	11 316 76	CNO1131675
2 triple 0,75-2,5mm²	FIRELINK 250V 1-2t 0,75-2,5	11 316 76	CNO1131676
4-5 triple 0,75-2,5mm²	FIRELINK 250V 4-5t 0,75-2,5	11 316 77	CNO1131677
7 triple 0,75-2,5mm²	FIRELINK 250V 7t 0,75-2,5	11 316 78	CNO1131678
8 triple 0,75-2,5mm²	FIRELINK 250V 8t 0,75-2,5	11 316 78	CNO1131678
12 triple 0,75-2,5mm²	FIRELINK 250V 12-16t 0,75-2,5	11 316 79	CNO1131679
16 triple 0,75-2,5mm²	FIRELINK 250V 12-16t 0,75-2,5	11 316 80	CNO1131680
19 triple 0,75-2,5mm²	FIRELINK 250V 19-24t 0,75-2,5	11 316 80	CNO1131680
24 triple 0,75-2,5mm²	FIRELINK 250V 19-24t 0,75-2,5	11 316 81	CNO1131691
32 triple 0,75-2,5mm²	FIRELINK 250V 32t 0,75-2,5	11 316 81	CNO1131681

FIRELINK 0.6/1, Fire resistant cable splice for power cables BFOU 1kV

Description
Cable splicing concept based on flame retardant, Zero-halogen heat-shrinkable tubing.

Qualifications
The concept is tested and approved
in acc. with:
IEC 60331-1 (Fire resistant)
IEC 60332-1 (Flame retardant)
IEC 61034-1 (Low smoke)
EN 50393:2014 (Electrical type approval)

Test reports on request.

Special features
- Quick and easy installation
- Slim and limited diameter increase
- Each kit covers several cables
- Each kit includes appropriate connectors
  in acc. with DIN 46341-1 for 0,5-70 mm2 and
  DIN 46267 for 25-300 mm²

For selection table and product number, see next page.

ProCab as
PRODUKTER FOR KABEL

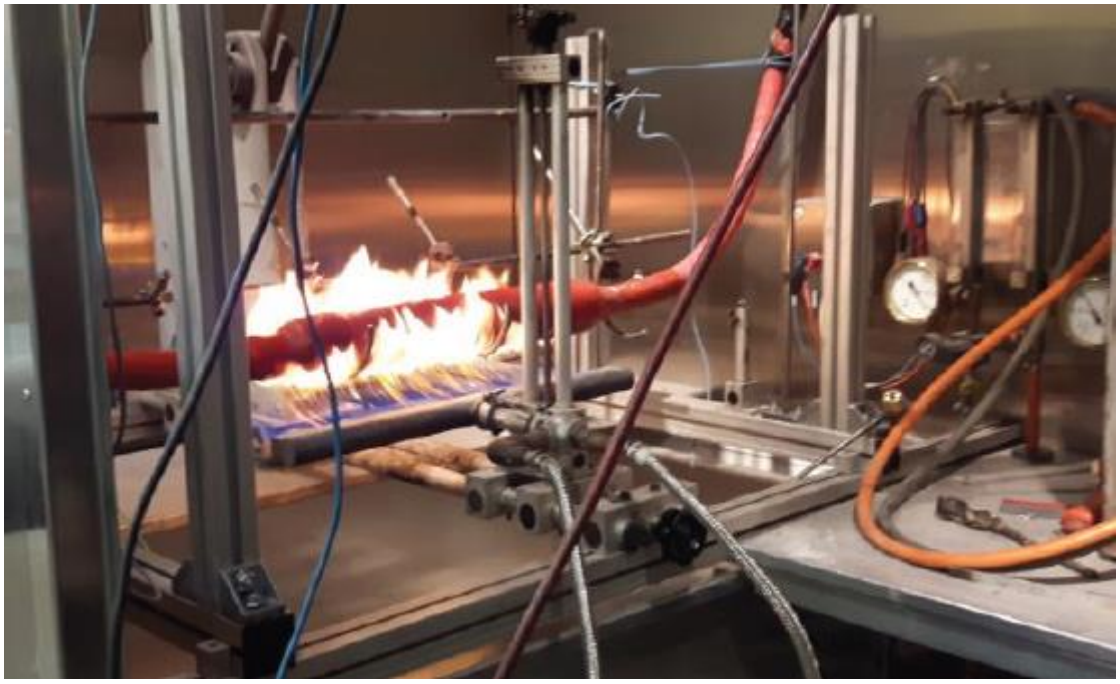
SELECTION TABLE

Firelink 0.6/1

Cable size mm²	Product name	ProCab Product no. (El number)	Draka Part no.
1x 16	FIRELINK 0,6/1-1x16-35	11 316 82	CN01131682
1x 25	FIRELINK 0,6/1-1x16-35	11 316 82	CN01131682
1x 35	FIRELINK 0,6/1-1x16-35	11 316 82	CN01131682
1x 50	FIRELINK 0,6/1-1x50-95	11 316 83	CN01131683
1x 70	FIRELINK 0,6/1-1x50-95	11 316 83	CN01131683
1x 95	FIRELINK 0,6/1-1x50-95	11 316 83	CN01131683
1x120	FIRELINK 0,6/1-1x120-150	11 316 84	CN01131684
1x150	FIRELINK 0,6/1-1x120-150	11 316 84	CN01131684
1x185	FIRELINK 0,6/1-1x185	11 316 85	CN01131685
1x240	FIRELINK 0,6/1-1x240	11 316 86	CN01131686
1x300	FIRELINK 0,6/1-1x300	11 316 87	CN01131687
2x 1,5	FIRELINK 0,6/1-2/4x1,5-2,5	11 316 88	CN01131688
2x 2,5	FIRELINK 0,6/1-2/4x1,5-2,5	11 316 88	CN01131688
2x 4	FIRELINK 0,6/1-2x4-6	11 316 89	CN01131689
2x 6	FIRELINK 0,6/1-2x4-6	11 316 89	CN01131689
2x10	FIRELINK 0,6/1-2x10-16	11 316 90	CN01131690
2x16	FIRELINK 0,6/1-2x10-16	11 316 90	CN01131690
3x 1,5	FIRELINK 0,6/1-2/4x1,5-2,5	11 316 88	CN01131688
3x 2,5	FIRELINK 0,6/1-2/4x1,5-2,5	11 316 88	CN01131688
3x 4	FIRELINK 0,6/1-3/4x4-6	11 316 91	CN01131691
3x 6	FIRELINK 0,6/1-3/4x4-6	11 316 91	CN01131691
3x10	FIRELINK 0,6/1-3/4x10-16	11 316 92	CN01131692
3x16	FIRELINK 0,6/1-3/4x10-16	11 316 92	CN01131692
3x25	FIRELINK 0,6/1-3/4x25-35	11 316 93	CN01131693
3x35	FIRELINK 0,6/1-3/4x25-35	11 316 93	CN01131693
3x50	FIRELINK 0,6/1-3x50-70	11 316 94	CN01131694
3x70	FIRELINK 0,6/1-3x50-70	11 316 94	CN01131694
3x95	FIRELINK 0,6/1-3x95-120	11 316 95	CN01131695
3x120	FIRELINK 0,6/1-3x95-120	11 316 95	CN01131695
3x150+E	FIRELINK 0,6/1-3x150-185-E	11 316 96	CN01131696
3x185+E	FIRELINK 0,6/1-3x150-185-E	11 316 96	CN01131696
3x240+E	FIRELINK 0,6/1-3x240-E	11 316 97	CN01131697

Cable size mm²	Product name	ProCab Product no. (El number)	Draka Part no.
4x 1,5	FIRELINK 0,6/1-2/4x1,5-2,5	11 316 88	CN01131688
4x 2,5	FIRELINK 0,6/1-2/4x1,5-2,5	11 316 88	CN01131688
4x 4	FIRELINK 0,6/1-3/4x4-6	11 316 91	CN01131691
4x 6	FIRELINK 0,6/1-3/4x4-6	11 316 91	CN01131691
4x10	FIRELINK 0,6/1-3/4x10-16	11 316 92	CN01131692
4x16	FIRELINK 0,6/1-3/4x10-16	11 316 92	CN01131692
4x25	FIRELINK 0,6/1-3/4x25-35	11 316 93	CN01131693
4x35	FIRELINK 0,6/1-3/4x25-35	11 316 93	CN01131692
4x50	FIRELINK 0,6/1-4x50-70	11 316 98	CN01131698
4x70	FIRELINK 0,6/1-4x50-70	11 316 98	CN01131698
4x95	FIRELINK 0,6/1-4x95-120	11 316 99	CN01131699
4x120	FIRELINK 0,6/1-4x95-120	11 316 99	CN01131699
7x 1,5	FIRELINK 0,6/1-7x1,5-2,5	11 317 00	CN01131700
7x 2,5	FIRELINK 0,6/1-7x1,5-2,5	11 317 00	CN01131700
12x 1,5	FIRELINK 0,6/1-12x1,5-2,5	11 317 01	CN01131701
12x 2,5	FIRELINK 0,6/1-12x1,5-2,5	11 317 01	CN01131701
19x 1,5	FIRELINK 0,6/1-19x1,5-2,5	11 317 02	CN01131702
19x 2,5	FIRELINK 0,6/1-19x1,5-2,5	11 317 02	CN01131702
27x 1,5	FIRELINK 0,6/1-27x1,5-2,5	11 317 03	CN01131703
27x 2,5	FIRELINK 0,6/1-27x1,5-2,5	11 317 03	CN01131703
37x 1,5	FIRELINK 0,6/1-37x1,5-2,5	11 317 04	CN01131704
37x 2,5	FIRELINK 0,6/1-37x1,5-2,5	11 317 04	CN01131704

FIRELINK 12-CS, Fire resistant cable splice for MV single core cables RFOU-FR 12kV



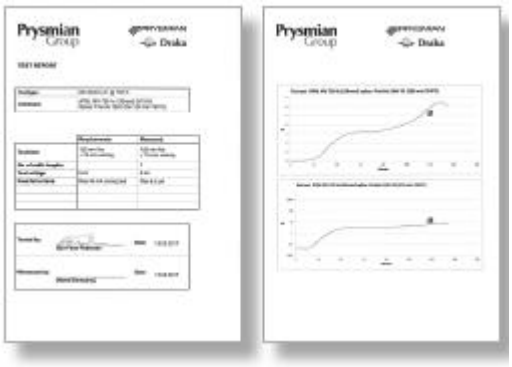
Description
Firelink 12 kV CS is a splice kit comprising silicone rubber Core splice and heat shrink outer jacket.
In between this we have a fire proofed material in order to meet the operation requirement from IEC 60331-21.

The splice is halogen-free and flame retardant.
All properties are “built in” to meet the same requirement as MV cables types RFOU-FR and ATNL MV and similar.

Each kit contains all components, inclusive installations Instructions in Norwegian and English.

The connector ferrules must be specified to each Purchase order (cross-section).
The standard type is in accordance with DIN 46267
And shall ne crimped with hexagonal dies in accordance with DIN 48083.

The splice is tested in accordance with HD 629
and IEC 60331-21 and approved for 750°C in 120 minutes.



For selection table and product number, see next page.

SELECTION TABLE

Firelink 12kV - CS

Single core

Voltage kV	Cross section Range mm²	Product name	ProCab Product no. (El number)	Draka Part no.
12	1 x 70 - 300	FIRELINK 12kV CS	1131662	CNO1131662

*The connector ferrules must be specified to each purchase order (cross-section).

SHD, Cu-splice connector for 1 - 10kV

Splice connectors in accordance with DIN 46267, for Cu-conductors, 1-10 kV cables according to IEC 60228 Annex C, table C.1
Description: Tinplated surface, sleeves with mid-stop, tubular.
Tooling: To be crimped with DIN 48083 hexagonal dies.

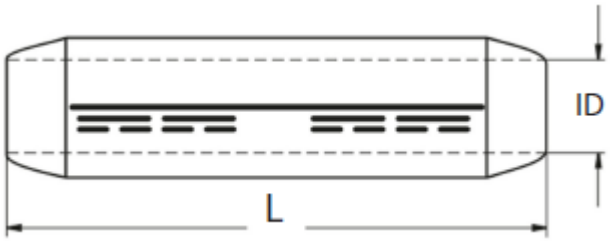
Reduction ferrules available on request.

Tools				1-3 tons	5-6 tons			
Draka Part no.	ProCab Product no. (EI number)	Product name	Cross section mm²	Comp.dies Type MK-C	Comp.dies Type MK	Dies code	ID mm	L mm
CN0201984	2019841	SHD 10	10	MK6-C	MK6-50	6	4,5	30
CN0201984	2019842	SHD 16	16	MK8-C	MK8-50	8	5,5	50
CN0201984	2019843	SHD 25	25	MK10-C	MK10-50	10	7	50
CN0201984	2019844	SHD 35	35	MK12-C	MK12-50	12	8,2	50
CN0201984	2019845	SHD 50	50	MK14-C	MK14-50	14	10	50
CN0201984	2019846	SHD 70	70	MK16-C	MK16-50	16	11,5	56
CN0201984	2019847	SHD 95	95	MK18-C	MK18-50	18	13,5	56
CN0201984	2019848	SHD 120	120	MK20-C	MK20-50	20	15,5	70
CN0201984	2019849	SHD 150	150	MK22-C	MK22-50	22	17	70
CN0201985	2019850	SHD 185	185	MK25-C	MK25-50	25	19	80
CN0201985	2019851	SHD 240	240	MK28-C	MK28-50	28	21,5	85
CN0201985	2019852	SHD 300	300	MK32-C		32	24,5	90
CN0202003	2020033	SHD 400	400	MK38-C		38	27,5	100
CN0202003	2020034	SHD 500	500	MK42-C		42	31	150
CN0202003	2020035	SHD 630	630	MK44-C		44	34,5	160
CN0202003	2020037	SHD 1000	1000			58	44	200

KU-H-V, Cu-splice connector for 10 - 30kV

Splice connectors in accordance with DIN 46267, for Cu-conductors, 10-30 kV cables according to IEC 60228 Annex C, table C.1
Description: Tinplated surface, sleeves with mid-stop, tapered ends.
Tooling: To be crimped with DIN 48083 hexagonal dies.

Reduction ferrules available on request.



Draka Part no.	ProCab Product no. (EI number)	Product name	Cross section mm²	Weitkowitz rec. compression head						Dies code	ID mm	L mm
CNO202032	2020329	KU-H-V	10		DW 6-70	Stilo 50 HP 60-3	PPI 130 HPI 130 API 130	PP 230	PP 600 max. 1600 Cu	6	4,5	30
CNO202033	2020330	KU-H-V	16							8	5,5	50
CNO202033	2020331	KU-H-V	25							10	7	50
CNO202033	2020332	KU-H-V	35							12	8,2	50
CNO202033	2020333	KU-H-V	50							14	10	50
CNO202033	2020334	KU-H-V	70							16	11,5	56
CNO202033	2020335	KU-H-V	95							18	13,5	56
CNO202033	2020336	KU-H-V	120							20	15,5	70
CNO202033	2020337	KU-H-V	150							22	17	70
CNO202033	2020338	KU-H-V	185							25	19	80
CNO202033	2020339	KU-H-V	240							28	21,5	85
CNO202034	2020340	KU-H-V	300							32	24,5	90
CNO202034	2020341	KU-H-V	400							38	26	100
CNO202034	2020342	KU-H-V	500							42	29	150
CNO202034	2020343	KU-H-V	630							44	40	160
CNO202034	2020344	KU-H-V	800							40		
CNO202034	2020345	KU-H-V	1000							58	44	200

Terminations for 1 and 3/4 core Medium Voltage cable types RFOU / RFOU-FR 10-36kV.

AIN 10/20/36 off is an end termination, type “Push on” Produced by very flexible silicone rubber and utilizing “stress kon” principle for field management.

The product has been tested and approved for use up to, and including, 36kV for IEC 60502-04 and CENELEC HD 629.1.

Each kit contains components for
3 full *) 1-core terminations with instructions.

Cable lugs must be ordered separately according to the pressure system to be used.

For more information, see instructions for AIN off.

*) Respectively conversion kit for 3 or 4-core, with instructions.

- Very easy to install
- Good cross section flexibility
- Quick installation height

For selection table and product number, see next page.

SELECTION CHART

AIN 10/20/36 off.
1-core

Voltage kV	Cross section mm²	Diam. Over Insulated core, mm	L mm	Product name	ProCab Product no. (El number)	Draka Part no.
12	25-95	12,7-21,0	150	AIN 10-1 off 3x1x25-95	1132408	CNO1132408
	120-240	19,0-28,5	150	AIN 10-2 off 3x1x120-240	1132409	CNO1132409
	300-500	27,0-37,0	150	AIN 10-3 off 3x1x300-500	1132410	CNO1132410
	630-800	34,0-46,0	225	AIN 20-4 off 3x1x630-800	1132411	CNO1132411
	1000	39,0-50,0	405	AIN 36-5 off 3x1x1000	1132459	CNO1132459
	1200	46,0-58,0	405	AIN 36-6 off 3x1x1200	1132460	CNO1132460
24	25-70	18,0-23,5	225	AIN 20-1 off 3x1x25-70	1132439	CNO1132439
	95-240	22,5-33,0	225	AIN 20-2 off 3x1x95-240	1132440	CNO1132440
	300-500	31,0-41,0	225	AIN 20-3 off 3x1x300-500	1132441	CNO1132441
	400-630	34,0-46,0	225	AIN 20-4 off 3x1x400-630	1132458	CNO 1132458
	630-800	39,0-50,0	405	AIN 36-5 off 3x1x630-800	1132459	CNO 1132459
	1000-1200	46,0-58,0	405	AIN 36-6 off 3x1x1000-1200	1132460	CNO 1132460
36	95-240	27,0-38,0	300	AIN 30-2 off 3x1x95-240	1132464	CNO 1132464
	240-400	32,0-43,0	300	AIN 30-3 off 3x1x240-400	1132465	CNO 1132465
	400-630	39,0-50,0	405	AIN 36-5 off 3x1x400-630	1132459	CNO 1132459
	630-1000	46,0-58,0	405	AIN 36-6 off 3x1x630-1000	1132460	CNO 1132460

3 and 4-core

Voltage kV	Cross section mm²	Diam. Over Insulated core, mm	L mm	Product name	ProCab Product no. (El number)	Draka Part no.
12	3 x 25-95	12,7-21,0	150	AIN 10-1 off 3x25-95	1132412	CNO1132412
	3 x 120-240	19,0-28,5	150	AIN 10-1 off 3x120-240	1132413	CNO1132413
	4 x 25-95	12,7-21,0	150	AIN 10-1 off 4x25-95	1132237	CNO1132237
	4 x 120-240	19,0-28,5	150	AIN 10-1 off 4x120-240	1132238	CNO1132238
24	3 x 25-70	18,0-23,5	225	AIN 20-1 off 3x25-70	1132442	CNO1132442
	3 x 95-240	22,5-33,0	225	AIN 20-2 off 3x95-240	1132443	CNO1132443
	4 x 25-70	18,0-23,5	225	AIN 20-1 off 4x25-70	1132444	CNO1132444
	4 x 95-240	22,5-33,0	225	AIN 20-2 off 4x95-240	1132445	CNO1132445

Approvals

Our cables carry these major approvals:

	DNV-GL	AMERICAN BUREAU OF SHIPPING	RUSSIAN MARITIME REGISTER OF SHIPPING
RFOU (c) 250V, RFOU (i) 250V	●	●	●
RFOU (c) 250V Arctic Grade RFOU (i) 250V Arctic Grade	●		
RU (c) 250V, RU (i) 250V	●		●
RFOU 0,6/1 kV	●	●	●
RFOU-VFD 0,6/1kV (3kV)	●	●	
RFOU 0,6/1 kV Arctic Grade	●		
RFOU 3,6/6(7,2)kV	●		
RFOU 6/10(12) kV	●		
RFOU 8,7/15(17,5) kV	●		
RFOU 12/20(24) kV	●		
RFOU 18/30(36) kV	●		
RU 0,6/1 kV	●	●	●
UX 1000V	●		●
BFOU (c) 250V, BFOU (i) 250V	●	●	●
BFOU (c) 250V Arctic Grade BFOU (i) 250V Arctic Grade	●		
BFOU-XFR (c) 250V, BFOU-XFR (i) 250V BFCU-XFR (c) 250V, BFCU-XFR (i) 250V	●		
BU (c) 250V, BU (i) 250V	●	●	●
BFOU 0,6/1 kV	●	●	●
BFOU-VFD 0,6/1kV (3kV)	●		
BFOU 0,6/1 kV Arctic Grade	●		
BU 0,6/1kV	●	●	
BFCU (c) 250V, BFCU (i) 250V	●	●	●
BFCU 0,6/1kV	●	●	●
RFCU (c) 250V, RFCU (i) 250V	●	●	●
RFCU 0,6/1kV	●	●	●
QFCI	●	●	
BFOU-HCF (i) 250V, BFOU-HCF(c) 250V	●		
BFOU-HCF 0,6/1kV	●		
RFOU-HCF 6/10(12)kV, 8,7/15(17,5)kV, RFOU-HCF 12/20(24)kV, 18/30(36)kV	●		
BFOU-JF 0,6/1kV	●		
RFOU-FR 6/10(12)kV	●		

All cables are designed in accordance with IEC 60092-350, IEC 60092-353, IEC 60092-354 and IEC 60092-376

Standards and tests

Standards	Designation Title
IEC 60092-350	Electrical installations in ships - Part 350: General construction and test methods of power, control and instrumentation cables for shipboard and offshore applications
IEC 60092-352	Electrical installations in ships - Part 352: Choice and installation of electrical cables
IEC 60092-353	Electrical installations in ships – Part 353: Single and multicore non-radial field power cables with extruded solid insulation for rated voltage 1 kV and 3 kV.
IEC 60092-354	Electrical installations in ships – Part 354: Single -and three-core power cables with extruded solid insulation for rated voltages 6 kV (U_m = 7,2kV) up to 30 kV (U_m = 36 kV)
IEC 60092-360	Electrical installations in ships – Part 360: Insulating and sheathing materials for shipboard and offshore units, power, control, instrumentation and telecommunication cables
IEC 60092-376	Electrical installations in ships – Part 376: Cables for control and instrumentation circuits 150/250 V (300 V)
IEC 60228	Conductors of insulated cables.
IEC 60331-1	Test method for fire with shock at a temperature of at least 830°C for cables of rated voltage up to and including 0,6/1,0 kV and with an overall diameter exceeding 20 mm
IEC 60331-2	Test method for fire with shock at a temperature of at least 830°C for cables of rated voltage up to and including 0,6/1,0 kV and with an overall diameter not exceeding 20 mm
IEC 60331-3	Test method for fire with shock at a temperature of at least 830°C for cables of rated voltage up to and including 0,6/1,0 kV tested in a metal enclosure
IEC 60331-11	Test for electric cables under fire conditions – Circuit integrity – Part 11 Apparatus – Fire alone at a flame temperature of at least 750°C
IEC 60331-21	Test for electric cables under fire conditions – Circuit integrity – Part 21 Procedures and requirements – Cables of rated voltage up to and including 0,6/1kV
IEC 60331-25	Test for electric cables under fire conditions – Circuit integrity – Part 25 Procedures and requirements – Optical fibre cables
IEC 60332-1-1	Test on electric and optical fibre cables under fire conditions. Part 1-1 Test for vertical flame propagation for a single insulated wire or cable - Apparatus
IEC 60332-1-2	Test on electric and optical fibre cables under fire conditions. Part 1-2 Test for vertical flame propagation for a single insulated wire or cable – Procedure for 1 kW pre-mixed flame
IEC 60332-1-3	Test on electric and optical fibre cables under fire conditions. Part 1-3 Test for vertical flame propagation for a single insulated wire or cable – Procedure for determination of flaming droplets/particles

Standards	Designation Title
IEC 60332-2-1	Test on electric and optical fibre cables under fire conditions. Part 2-1 Test for vertical flame propagation for a single small insulated wire or cable - Apparatus
IEC 60332-2-2	Test on electric and optical fibre cables under fire conditions. Part 2-2 Test for vertical flame propagation for a single small insulated wire or cable – Procedure for diffusion flame
IEC 60332-3-10	Tests on electric and optical fibre cables under fire conditions. Part 3-10: test for vertical flame spread of vertically-mounted bunched wires or cables – Apparatus
IEC 60332-3-21	Tests on electric cables under fire conditions. Part 3-21 Test for vertical flame spread of vertically-mounted bunched wires or cables – Category A F/R
IEC 60332-3-22	Tests on electric and optical fibre cables under fire conditions. Part 3-22: Test for vertical flame spread of vertically-mounted bunched wires or cables – Category A
IEC 60332-3-23	Tests on electric and optical fibre cables under fire conditions. Part 3-23: Test for vertical flame spread of vertically-mounted bunched wires or cables – Category B
IEC 60332-3-24	Tests on electric and optical fibre cables under fire conditions. Part 3-24: Test for vertical flame spread of vertically-mounted bunched wires or cables – Category C
IEC 60332-3-25	Tests on electric and optical fibre cables under fire conditions. Part 3-25: Test for vertical flame spread of vertically-mounted bunched wires or cables – Category D
IEC 60445	Basic and safety principles for man-machine interface, marking and identification – Identification of equipment terminals, conductor terminations and conductors
IEC 60684-2	Test on gases evolved during combustion of materials from cables Part 1: Determination of the halogen acid gas content Hydrogen Flouride
IEC 60754-1	Test on gases evolved during combustion of electrical cables. Part 1: Determination of the amount of halogen acid gas.
IEC 60754-2	Test on gases evolved during combustion of electrical cables. Part 2: Determination of degree of acidity of gases evolved during the combustion of materials taken from electric cables by measuring pH and conductivity.
IEC 60811-100	Electric and optical fibre cables – Test methods for non-metallic materials – Part 100: General
IEC 61034-1	Measurement of smoke density of cables burning under defined conditions. Part 1: Test apparatus.

Standards	Designation Title
IEC 61034-2	Measurement of smoke density of cables burning under defined conditions. Part 2: Test procedure and requirements.
IEC 61892-4	Mobile and fixed offshore units - Electrical installations – Part 4: Cables

Definition of terms

Flame retardance

The cables shall withstand the test specified in IEC 60332-3-22/-23/-24.
Single, earth and bonding wires shall withstand the test specified in IEC 60332-1-2.

Fire resistance

Fire resistant cables shall be tested in accordance with IEC 60331-1, 60331-2, 60331-21 and IEC 60331-25 (optical fibre cables).

Content of halogen

To demonstrate that the cables are halogen-free they shall be tested to IEC 60754-1;
- maximum content of halogen = 5 mg/g.

Alternatively the cables shall be tested to IEC 60754-2;
- pH value should not be less than 4,3
- The conductivity value should not exceed 10 µS/mm.

Smoke Emission

During a cable fire the smoke emission is recommended to have a minimum value of 60% when tested in accordance with IEC 61034-2

Oil resistance

For cables with thermoplastic sheath material there are no requirements for oil resistance properties.

All thermoset sheathed cables shall be suitable for an oil production installation.
The oil resistance properties shall be demonstrated by a test according to IEC 60092-360 SHF-2 with the cable immersed in IRM oil no. 902 at 100°C for 24 hours.

Mud resistance

In accordance with NEK TS 606:2016 the mud resistant cables shall have a sheath that complies with the requirements in IEC 60092-360 for SHF2 and the below specified.

Mud resistant cables shall be designed with sheathing compounds suitable for installation and operation in contact with MUD unless otherwise specified.

The MUD resistance test requirements for sheathing compounds are as follows:

Test fluid	Temperature	Duration	Tensile strength variation	Elongation at break variation	Volume swell variation	Weight increase variation
Mineral oil type IRM 903	100°C	7 d	30%	30%	30%	30%
Calcium Bromide Brine (Waterbased)	70°C	56 d	25%	25%	20%	15%
EDC-95-11 (Oil based)	70°C	56 d	30%	30%	25%	25%

Fire, flame, smoke and corrosion test methods

Cables' integrity during a fire

Fire resistance
During a fire it is vital that emergency circuits should continue to function.
This could be communication circuits, emergency lights, alarms and fire pumps, etc.

On oil rigs and platforms and other confined areas this could be a matter of life and death.

Cables that will function in a fire ensuring circuit integrity

BFOU / BFCU / BU cables

These cable types have Mica tape applied around the conductors which are then insulated with heat-resistant EPDM and have and outer sheathing of a halogen-free thermoset material. BFOU cables have metal braid armour between the insulation and outer sheathing.

Test method
IEC 60331 -21 and -25, 750°C fire for 90 minutes.

As an option we offer cables to 1000°C for 3 hours with an upgraded IEC 60331-21 and -25 test.

IEC 60331-1 or 60331-2 fire test at 830°C for 90 minutes with hammer shock

Our range of BFOU-XFR with eXtended Fire Resistant properties can also withstand the
IEC 60331-1 or 60331-2 fire test at 830°C for 90 minutes with hammer shock (every 5 minutes) followed by 90 minutes fire with waterspray in accordance with EN 50200 ANNEX E + hammershock every 5 minutes

Flame propagation

Flame retardant cables must be self-extinguishing when the source of flames dies out.

Flame retardant cables with built-in self-extinguishing properties

These cables have sheathing and bedding with hydrated flame retardants that provide resistance to ignition and flame spread.

Test methods

IEC 60332 – 1
IEC 60332 – 3 – 22/23/24 (category A, B and C, respectively)

IEC 60332 - 3 (Category)	Amount of combustible material in litres per metre of cable ladder	Burning time Minutes
- 22 (Cat. A)	7	40
- 23 (Cat. B)	3,5	40
- 24 (Cat. C)	1,5	20

Smoke risk to personnel

Smoke evolution is of major significance in situations where escape routes are limited in the event of fire.

Cables having exceptionally low smoke emission

All offshore topside cables and fire resistant cables listed in this catalogue, have sheathing and insulation based on halogen-free materials.
To minimize the risk of smoke and toxic gases, each component from conductor tapes to outer sheath has been taken into consideration.

Test method

3 m Cube Test for the measurement of smoke density.
IEC 61034 - 2

Damage to expensive equipment

Corrosion

Halogen-free cables will not cause corrosion to metals.
When halogen - containing cables burn, the gases generated in combustion of the sheathing and insulation may cause corrosion.
The secondary effects after a fire are often many times larger than the damages caused by the fire itself.

Test method

IEC 60754 - 1
IEC 60754 - 2

Installation recommendations

The following installation recommendations are in accordance with IEC regulations and practice.

Different regulations may apply in other countries.

Minimum cable bending radius.

Cables for rated voltages up to 0,6/1 kV, in accordance with IEC 60092-352.

Outer diameter of cable	Minimum bending radius when fixed installed		Minimum bending radius during installation
	Unbraided cables	Braided cables	
D < 25mm	4D	6D	8D
D > 25mm	6D	6D	8D

Medium voltage cables up to and including 12/20(24) kV:

Minimum bending radius during installation:	15D
Minimum bending radius when fixed installed:	9D

Installation temperature.

Minimum recommended installation temperature for cables of rated voltage up to 30 kV, such as:

RFOU – BFOU – RU – BU	-20°C
RFOU – BFOU Arctic Grade	-40°C

Pulling tension.

The cable pulling tension during installation can be estimated by means of the following formula:

p = 50 N × total cross section of conductors in the armoured cable

or

p = 25 N × total cross section of conductors in the unarmoured cable

Additional tension will be supplied from the braid and the insulation and sheathing compound.

Electrical data

Conductor Resistance
Resistance formula:

$$R = p \frac{L}{A}$$

R = resistance in ohm per phase

p = specific resistance $\frac{\text{Ohm} \bullet \text{mm}^2}{\text{m}}$

A = conductor area mm² L = conductor length, m

Resistance as a function of temperature:

$R = R_0 \times (1 + \alpha\ (t\text{-}20\ °C))$

R = Resistance at t=20°C, t = conductor temperature °C, α = 0,00393 for copper

Conductor resistance tinned annealed copper 250V.
In accordance with IEC 60092-376.

Nominal conductor area	No. of wires and diameter of wires	Approx. diam.	Max. resistance pr km	
			20°C	90°C
mm²	mm	mmØ	ohm	ohm
0,75	7x 0,355	1,065	26,3	33,5
1	7x 0,43	1,29	19,3	24,6
1,5	7x 0,51	1,53	12,9	16,4
2,5	7x 0,64	1,92	8,02	10,2

Conductor resistance tinned annealed copper 0,6/1kV, 1,8/3(3,6)kV.
In accordance with IEC 60228, class 2. Tinned stranded annealed copper conductors for single core and multi-core cables 0,6/1kV and 1,8/3kV

Nominal conductor area	No. of wires and diameter of wires	Approx. diam.	Max. resistance pr km	
			20°C	90°C
mm²	mm	mmØ	ohm	ohm
1	7x 0,43	1,30	18,2	23,2
1,5	7x 0,52	1,60	12,2	15,6
2,5	7x 0,66	2,00	7,56	9,64
4	7x 0,835	2,50	4,70	5,99
6	7x 1,025	3,10	3,11	3,97
10	7x 1,33	4,00	1,84	2,35
16	7x 1,68	5,05	1,16	1,48
25	7 x 2,105	6,30	0,734	0,936

Nominal conductor area	No. of wires and diameter of wires	Approx. diam.	Max. resistance pr km	
			20°C	90°C
mm²	mm	mmØ	ohm	ohm
35	7x 2,47	7,40	0,529	0,675
50	19x 1,75	8,80	0,391	0,499
70	19x 2,12	10,6	0,270	0,344
95	19x 2,47	12,40	0,195	0,249
120	37x 1,995	14,00	0,154	0,196
150	37x 2,205	15,50	0,126	0,161
185	37x 2,47	17,30	0,100	0,128
240	61x 2,205	19,90	0,0762	0,0972
300	61x 2,47	22,20	0,0607	0,0774
400	91x 2,36	26,00	0,0475	0,0596
500	91x 2,64	29,00	0,0369	0,0463
630	127x 2,52	32,80	0,0286	0,0359

Conductor resistance, tinned annealed copper conductor 3,6/6(7,2)kV, 6/10(12)kV, 8,7/15(17,5)kV, 12/20(24)kV and 18/30(36)kV.

In accordance with IEC 60228, class 2. Compressed tinned stranded annealed copper conductors for single core and multicore cables 3,6/6kV, 6/10kV, 8,7/15kV, 12/20(24)kV and 18/30(36)kV.

Nominal conductor area	No. of wires and diameter of wires *)	Approx. diam.	Max. resistance pr km	
			20°C	90°C
mm²	mm	mmØ	ohm	ohm
16	7x 1,71	5,2	1,16	1,48
25	7 x 2,14	6,5	0,734	0,936
35	19x 1,53	7,4	0,529	0,675
50	19x 1,80	8,8	0,391	0,499
70	19x 2,17	10,3	0,270	0,344
95	37x 1,80	12,1	0,195	0,249
120	37x 2,03	13,6	0,154	0,196
150	37x 2,27	15,1	0,126	0,161
185	37x 2,52	16,8	0,100	0,128
240	61x 2,24	19,1	0,0762	0,0972
300	61x 2,52	21,5	0,0607	0,0774

*) Diameter of wires before compressing

Wire gauge conversion table

US Standard cross-section to square millimetres

U.S. Standard	Equivalent cross-section mm²	Nearest available cross-section mm²
20 AWG	0.519	0.5 – 0.75
18	0.823	1.0
16	1.31	1.5
14	2.08	2.5
12	3.31	4
10	5.26	6
8	8.37	10
6	13.30	16
4	21.15	25
2	33.62	35
1	42.41	50
1/0	53.49	50 - 70
2/0	67.23	70
3/0	85.01	95
4/0	107.2	120
250 MCM	126.7	120 - 150
300	152.0	150
350	177.3	185
400	202.7	185
450	228.0	185-240
500	253.4	240
550	278.7	240 – 300
600	304.0	300
650	329.4	300
700	354.7	300 – 400
750	380.0	400
800	405.4	400
850	430.7	400
900	456.0	400
950	481.4	400
1000	506.7	400 – 630
1250	633.4	630
1500	760.0	800
1750	886.7	800 – 1000
2000	1013.4	1000

Current ratings for 250V and 0,6/1kV cables in fixed installations.

Current carrying capacities in continuous service at maximum rated temperature of 90°C.
In accordance with IEC 60092-352 (2005) Annex B, Table B.4. Ambient temperature 45°C

Conductor area mm²	1-core Amp	2-core Amp	3-4 core Amp
1	18	15	13
1,5	23	20	16
2,5	30	26	21
4	40	34	28
6	52	44	36
10	72	61	50
16	96	82	67
25	127	108	89
35	157	133	110
50	196	167	137
70	242	206	169
95	293	249	205
120	339	288	237
150	389	331	273
185	444	377	311
240	522	444	366
300	601	511	420
400	690 dc / 670 ac	587 dc / 570 ac	483 dc / 469 ac
500	780 dc / 720 ac	663 dc / 612 ac	546 dc / 504 ac
630	890 dc / 780 ac	757 dc / 663 ac	623 dc / 546 dc

For cables with more than 4 cores, the current ratings are given by the following formula:

$$I = \frac{I_1}{\sqrt[3]{N}}$$

I_1 = current rating for single core
N = number of cores

No. of cores	1,5 mm² Amp	2,5 mm² Amp
5	13	18
7	12	16
12	10	13
19	9	11
24	8	10
37	7	9

Current rating for 1,8/3(3,6)kV, 3,6/6(7,2)kV, 6/10(12)kV, 8,7/15(17,5)kV, 12/20(24)kV and 18/30(36)kV cables in fixed installations.

Current carrying capacities in continuous service at maximum rated temperature of 90°C.
In accordance with IEC 60092-352 (2005) Annex B, Table B.4.

Conductor area mm²	1-core Amp	2-core Amp	3-4 core Amp
16	96	82	67
25	127	108	89
35	157	133	110
50	196	167	137
70	242	206	169
95	293	249	205
120	339	288	237
150	389	331	273
185	444	377	311
240	522	444	366
300	601	511	420
400	690 dc / 670 ac	-	-
500	780 dc / 720 ac	-	-
630	890 dc / 780 ac	-	-

The tabled current ratings must be adjusted for ambient air temperatures other than 45°C.

Appropriate rating factors are:

Ambient air temp. °C	35	40	45	50	55	60	65	70	75	80
Rating factors	1,10	1,05	1,00	0,94	0,88	0,82	0,74	0,67	0,58	0,47

Short circuit ratings

The following short circuit currents are for cables normally operating at a maximum conductor temperature of 90°C.

The theoretical temperature that arises in the conductor during a short circuit, which is used as a basis of the calculation, is 250°C. EPR and XLPE insulation are capable of withstanding short term temperatures up to 250°C.The short circuit currents for copper conductors given in the table are values for one second, for other durations the current may be calculated from the following formula:

$$I_t = \frac{I}{\sqrt{t}}$$

I_t = short ciricut current for t sec. (Amp),
I = short circuit current for one sec. (Amp),
t = short circuit duration (sec.)

The duration of the short circuit based on these assumptions should be between 0,2 sec. and 5 sec.

Conductor area mm²	Current 1 second amperes	Conductor area mm²	Current 1 second amperes
1,0	140	70	9800
1,5	210	95	13300
2,5	350	120	16800
4	560	150	21000
6	840	185	25900
10	1400	240	33600
16	2240	300	42000
25	3500	400	56000
35	4900	500	70000
50	7000	630	88200

Reactance

The reactance of a cable operating in an AC system depends on many factors, including, in particular, the axial spacing between conductors and the proximity and magnetic properties of adjacent steelwork. The former is known for multicore cable, but may vary for single core cables depending upon the spacing between them and their disposition when installed. Reactance of cables in certain disposition when installed. Reactance of cables in certain dispositions remote from steelwork are calculable and are shown. The tabulated values are for cables with circular conductors. The value for a sector-shaped conductor should be taken as 90% of the calculated value.

Induction for 2-, 3- and 4- conductor cables is given by the formula:

$$L = 0{,}2 * \left(\ln \left(\frac{2a}{d} \right) + 0{,}25 \right) * 10^{-6}$$

L = Induction in H/m and phase, a = Axial space between conductors in mm.
d = conductor diameter in mm.
Reactance for 2-, 3- and 4-conductor cables is given by the formula:
$X = 2 * \pi * f * L * I$

X = Reactance in ohm pr. Phase, f = frequency in Hz, L = Induction in H/m and phase
I = Conductor length in meter.

Reactance Values for Cables

Power and control cables. RFOU 0,6/1 kV

Cross-section	2-, 3- and 4 cores ohm/km		1- core* ohm/km	
mm²	60 Hz	50 Hz	60 Hz	50 Hz
1,5	0,132	0,110		
2,5	0,123	0,103		
4	0,115	0,096		
6	0,109	0,091		
10	0,102	0,085		
16	0,096	0,080	0,141	0,117
25	0,095	0,080	0,136	0,113
35	0,092	0,077	0,130	0,108
50	0,092	0,077	0,125	0,105
70	0,089	0,074	0,122	0,102
95	0,088	0,074	0,118	0,098
120	0,087	0,072	0,114	0,095
150	0,087	0,072	0,113	0,094
185	0,087	0,072	0,111	0,093
240	0,086	0,072	0,108	0,090
300	0,086	0,072	0,106	0,088

*) Reactance for 1-conductor cables given at Three- foil formation

Power and control cables, BFOU 0,6/1 kV.

Cross- section mm²	2-, 3- and 4 core ohm/km		1- core* ohm/km	
	60 Hz	50 Hz	60 Hz	50 Hz
1,5	0,138	0,115		
2,5	0,129	0,107		
4	0,120	0,100		
6	0,113	0,094		
10	0,105	0,088		
16	0,099	0,083	0,145	0,121
25	0,098	0,082	0,137	0,114
35	0,095	0,079	0,131	0,109
50	0,094	0,078	0,127	0,106
70	0,090	0,075	0,123	0,103
95	0,090	0,075	0,119	0,099
120	0,088	0,073	0,113	0,094
150	0,088	0,073	0,115	0,095
185	0,088	0,073	0,111	0,092
240	0,087	0,073	0,110	0,092
300	0,087	0,072	0,109	0,091

*) Reactance for 1-conductor cables given at Three- foil formation

Medium Voltage Power cables. RFOU 6/10 kV

Cross-section mm²	3 core ohm/km		1- core* ohm/km	
	50 Hz	60 Hz	50 Hz	60 Hz
16	0.119	0.143	0.154	0.185
25	0.119	0.143	0.144	0.173
35	0.114	0.137	0.138	0.166
50	0.108	0.130	0.132	0.158
70	0.103	0.124	0.125	0.150
95	0.098	0.118	0.119	0.142
120	0.095	0.114	0.116	0.139
150	0.092	0.111	0.111	0.133
185	0.092	0.111	0.108	0.130
240	0.087	0.104	0.104	0.125
300	0.084	0.101	0.104	0.124
400	-	-	0.090	0.118
500	-	-	0.097	0.117
630	-	-	0.092	0.110

*) Reactance for 1-conductor cables given at Three- foil formation

Medium Voltage Power cables. RFOU 12/20(24)kV.

Cross-section mm²	3 core ohm/km 50 Hz	3 core ohm/km 60 Hz	1-core* ohm/km 50 Hz	1-core* ohm/km 60 Hz
35	0.128	0.153	0.149	0.178
50	0.121	0.145	0.140	0.169
70	0.115	0.135	0.133	0.160
95	0.109	0.131	0.127	0.152
120	0.105	0.126	0.124	0.149
150	0.102	0.122	0.119	0.142
185	0.099	0.118	0.116	0.139
240	0.095	0.114	0.112	0.134
300	-	-	0.108	0.130

*) Reactance for 1-conductor cables given at Three- foil formation

Impedance

Induction for 2-, 3- and 4- conductor cables is given by the formula:

$Z = \sqrt{(R^2 + X^2)}$

Z = Impedance in ohm pr. phase R = Resistance at operating temperature in ohm pr. phase.

X = Reactance in ohm pr. phase.

Electrical characteristics for instrumentation and telecommunication cables such as 250 V cables: RFOU and BFOU according to IEC 60092-376

Cables with collective screen

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 mm²	100	0,67	26,3	12,7
Unshielded triple 0,75 mm²	100	0,67	26,3	12,7
Unshielded pair 1,5 mm²	110	0,63	12,9	24,4
Unshielded triple 1,5 mm²	110	0,63	12,9	24,4
Unshielded pair 2,5 mm²	125	0,59	8,02	36,8
Unshielded triple 2,5 mm²	125	0,59	8,02	36,8

Cables with individually screened pair/triples

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

Material properties

Polymeric materials used in cables for ships and offshore topside installations

For more than 30 years Draka Norsk Kabel has been facing the same challenge:

The increasing severe performance criteria demands from our ship and offshore customers.

Elastomers are the major part of our cable construction.
The insulation, bedding and sheathing have been developed through intensive research and development to meet the offshore and ship industry's specific and stringent requirements.

This information is not intended to give you details of the elastomers in use.
For correct selection and application of materials our technical representatives will be pleased to provide you with more complete information.

EP - rubber (EPDM)
EPDM is a hydrocarbon rubber that combines electrical performance suitable for fire resistant offshore cables with mechanical toughness and resistance to ozone, UV light and heat.
Its wet electrical properties are unique.

Applications: Wire insulation
Bedding compounds

Flame retardant halogen-free termoset compound (EVA)

EVA, ethylene vinyl acetate, is a multi-functional elastomer,
which resists the combined deteriorating influences of heat, oil and weather.
(In accordance with IEC 60092-360, type SHF2). For offshore applications, EVA can be compounded to produce high quality cable sheathing with low smoke and flame propagation, and with no emission of halogen acids.

Applications: Cable sheathing on offshore oil platforms, ships, hotels and in rooms with expensive equipment, which must not be subjected to corrosion damage.

Low smoke, Flame retardant, Halogen-free and Thermoplastic compounds, HFFR.

When PVC is not acceptable due to the problems chlorine (halogen) containing materials present in the event of a fire HFFR must be used.
(In accordance with IEC 60092-360, type SHF1).

Our HFFR materials will not propagate a fire along a cable run, drip or give off black smoke.
No acid gases will be released during a fire that can corrode and damage expensive equipment.

Applications: Cable sheathing for
Rooms with IT equipment
High - rise buildings (hotels)
Hospitals
Telephone exchanges
Subway systems, airports and many others.

XLPE – Crosslinked Polyethylene
Polyethylene is the most used plastic material. By introducing chemical bonding between the chains in PE, we get XLPE, a thermoset type of PE.
In cable insulation, it is used for the excellent insulation properties, very good mechanical strength, low density and good thermal stability.

Applications: Wire insulations

Physical and chemical properties of Draka's sheathing compounds for use in offshore topside and shipboard cables

	Enhanced oil resistant EVA (SHF2)	NITRILE/ PVC	PVC	HFFR (SHF1)	Arctic Grade (SHF2)	Hydraulic Oil Resistant (SHF2)
Mechanical properties	3 - 4	4	4	2 - 3	3-4	4
Weathering (O_2 -O_3)	5	4	5	4 - 3	5	4-5
Heat resistance	4	3	2 - 3	4	4	4
Low temperature	3	3	2	3	5	3-4
Hydrocarbons general	3 - 4	4	2	0	3 - 4	3 - 4
Hydrocarbons high aromatic (MUD)	3 - 4 *	4	1	0	3 - 4 *	3 - 4 *
Hydraulic oils	1	1-2	1	0	2	5
Sea-water	3	4	4	3	3	3 - 4
Fire resistant	4	3	4	4	4	4
Oxygen Index	4	3	4	4	4	4
Smoke generation	5	2	1	5	4-5	4-5
Halogens	No	Cl	Cl	No	No	No

5 - Excellent, 4 - Very good, 3 - Good, 2 - Medium, 1 - Poor, 0 - Not recommended

* Drilling MUD is not one chemical, but a mix of different chemicals and each producer have their own composition. The sheathing material could be resistant to the aromatics in the MUD, but be affected by other chemicals like corrosion inhibitors. Each MUD must therefore be tested for compatibility with the cable sheathing. The test method for this MUD test is described in NEK TS 606: 2016 Fifth edition.

SHF1 versus SHF2

The table below addresses only some main characteristics differences.
For complete information see IEC 60092-360

	SHF1	SHF2
Type of material	Halogen-free Thermoplastic	Halogen-free Elastomeric or thermosetting material
Some main characteristics		
Mechanical characteristics after immersion in hot oil (IEC 60811-404)	No requirements	100 °C for 24 hours: • ±40% maximum variation in tensile strength: • ±40% maximum variation in elongation at break
Hot set test (IEC 60811-507)	No requirements	200 °C, 15 min time under load with 20 (N/mm²) mechanical stress: • 175% Maximum elongation under load • 25% Maximum permanent elongation after cooling
Pressure test at high temperature IEC 60811-508)	80 °C, 4-6 h under load depending on cable diameter: • 50% Maximum permissible deformation	No requirements
Heat shock test (IEC 60811-509)	150 °C) 1h duration:	No requirements
Ozone resistance test IEC 60811-403 (Alternative test method B may be used)	No requirements	25 ± 2°C for 24 h: • 275±25) x 10^{-4} ozone concentration (in volume)

Core colours for cables according to NEK TS 606

Please look at the actual page for each cable type.

Instrumentation and communications cable for fixed installation (conductor size from 0,75 mm² and above) such as RFOU, BFOU, RU and BU 250V.

Pair: Black -- Light blue
Triple: Black -- Light blue - Brown

Pairs and triples are identified by numbered tape with printed black numbers.

Power and control cables for fixed installation, such as RFOU, BFOU, RU and BU 0,6/1kV

One core:	Black
Two cores:	Blue – Brown
Two cores + earth	Blue – Brown – Yellow/green
Three cores:	Brown - Black – Grey
Three cores + earth	Brown - Black – Grey – Yellow/green
Four cores:	Blue - Brown - Black– Grey
Four cores + earth	Blue - Brown - Black– Grey – Yellow/green
Five cores	Blue - Brown - Black– Grey - Black

Above 5-cores: Black numbers on white base.

Colours are in accordance with IEC 60445 and Cenelec HD 308S2

Medium Voltage cables for fixed installation, RFOU

1-core: Off-white insulation + black semi-conductive layer.

3-cores: Off-white insulation + black semi-conductive layer identified by Brown - Black - Grey threads over the metallic screen on each individual core.

Separate earth conductor (if any): Yellow/green

Drum capacity in meters

Free space mm.	30	30	30	30	30	30	30	40	50	60	60	60	60	70	70	80	90	100	Free space mm
Drum No:	R5	R6	R6T	R8	R9	R10	R10A	R11	R12	R14	R14A	R16	R16A	R18	R20	R22	R24	R26	Drum No:
Overall cable diam.mm																			Overall cable diam.mm
10	360	720	850	1470															10
12	250	500	565	1020	1440														12
14	185	370	425	770	1105	1520													14
16		280		550	825	1160		1335											16
18				450	620	920	570	1010	1510										18
20				375	510	745	460	850	1100	1565	1065								20
22					420	615	380	700	885	1925	880	1645							22
24					340	515	320	580	830	1075	740	1380	870						24
26						440	270	470	685	905	630	1175	740	1485					26
28						380	235	440	555	745	540	985	635	1255	1685				28
30						330	205	345	525	705	470	930	555	1045	1375				30
32							180	330	410	560	415	755	490	980	1300	1565			32
34							160		395	545	370	735	430	825	1105	1350			34
36							140		370	420	330	580	385	765	1035	1265			36
38							130		285	405	295	560	345	630	860	1070	1570		38
40							115			390	265	445	310	605	830	1035	1355	2060	40
42										300	240	430	285	485	640	820	1255	1870	42
44										285	220	410	260	460	620	790	1065	1700	44
46											200	390	235	440	595	760	1025	1560	46
48											185	315	215	445	595	635	895	1430	48
50											170	300	200	340	460	605	855	1320	50
52											160	285	185	320	440	580	820	1220	52
54											145	285	170	320	420	550	665	1130	54
56											135		160	300	420	445	670	1050	56
58											125		150	300	420	425	635	980	58
60											120		140	215	400	425	640	915	60
62													130	215	310	400	500	860	62
64													120		290	405	500	805	64
66													115		290	380	475	755	66
68													110		275	295	475	715	68
70													100		275	275	445	675	70
72															255	275	360	635	72
74															260	275	360	600	74
76																255	335	570	76
78																255	335	540	78

Code designation for cables

A cable code of 2 - 4 letters is used to describe the construction.
Additional abbrevation for instrumentation cables: Collective screen = (c) Individual pair or triple screen = (i)
The interpretation (per letter) can be read from the table below:

1st. letter: Insulation		2nd. letter Bedding / inner sheath		3rd. letter Armouring / screen		4th. Letter Outer sheath	
A	Fibre, tight cladded	**A**	Aluminium (optional with corrosion protection)	**A**	Strength member yarn	**A**	Yarn + bitumen
B	Fire resistant tape + insulation (Halogen-free)	**B**	Corrogated aluminium (o.w.c.p.)	**B**	Steel tapes, 2 off	**B**	Hydrocarbon resistant sehath
C	Polychloroprene (Neoprene) PCP, or chlorinated polyethylene - CPE	**C**	Polychloroprene (Neoprene) PCP, or chlorinated polyethylene - CPE	**C**	Galvanized steel wire braid	**C**	Polychloroprene (Neoprene) PCP, or chlorinated polyethylene - CPE
D	Impregnated paper Drip free	**D**	Aluminium + Plastics	**D**	Oil filled cable reinforcement (Longitudinal / Transverse)	**D**	
E	Polyethylene - PE Polypropylene - PP	**E**	Polyethylene - PE Polypropylene - PP	**E**	Oil filled cable reinforcement (Transverse only)	**E**	Polyethylene - PE Polypropylene - PP
F	PE or PP + filling compound	**F**	Bedding or taping (Halogen-free)	**F**	Flat steel wire armour	**F**	Semi-conducting PE
G	Polyamid - PA	**G**		**G**		**G**	PE + PA
H	Chlorosulphonated polyethylene - CSP	**H**	Chlorosulphonated polyethylene - CSP	**H**	Steel tape + steel wires	**H**	Chlorosulphonated polyethylene - CSP
I	Thermoplastic compound (Halogen-free)	**I**	Thermoplastic compound (Halogen-free)	**I**	Steel tapes, 4 off	**I**	Thermoplastic compound (Halogen-free)
K	Paper	**K**	Lead	**K**	Steel wire, plastics or rubber coated	**K**	Lead
L	Air + plastics (Coaxial cable)	**L**	Aluminium laminate + plastics sheath	**L**	Aluminium (laminated to outer jacket)	**L**	
M	Expanded PE or PP + filling compound	**M**	Polyester	**M**		**M**	Polyester
N	Impregnated paper	**N**	Polyurethane	**N**	Steel (laminated to outer jacket)	**N**	Polyurethane
O	Impregnated paper, oilfilled cable	**O**	Lead + Plastics	**O**	Copper wire braid (Tinned or bare)	**O**	
P	Polyvinylchloride - PVC	**P**	Polyvinylchloride - PVC	**P**	Phosphorbronze wire braid	**P**	Polyvinylchloride - PVC
Q	Fibre in loose tube	**Q**		**Q**	Steel wires + counter steel tape (optional)	**Q**	
R	Ethylenepropylene rubber - EPR	**R**	Ethylenepropylene rubber - EPR	**R**	Steel wires (round) + filling compound	**R**	Ethylenepropylene rubber - EPR
S	Silicone rubber	**S**	Bedding or taping + concentric conductor	**S**	Concentric conductor (Screen)	**S**	Silicone rubber
T	Cross-linked polyethylene XLPE	**T**	PE + aluminium wire + steel tape	**T**		**T**	Cross-linked polyethylene XLPE
U	Halogen-free thermoset compound EMA or EVA	**U**	Halogen-free thermoset compound EMA or EVA	**U**		**U**	Halogen-free thermoset compound EMA or EVA
V	Fibre, slotted core	**V**	Aluminium screen	**V**	Double wire armour (two layers)	**V**	Other halogen-free thermoset materials
W	Other materials	**W**	Other materials	**W**	Catenary wire	**W**	Other materials
X	No insulation	**X**	No bedding or equivalent	**X**	No armour	**X**	No sheath
Y		**Y**	Screen	**Y**		**Y**	
Z	Flour plastics PTFE / FEP	**Z**	Flour plastics	**Z**		**Z**	Flour plastics

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