



RFOU P1/P8 & RFOU EMC

0.6/1 (1.2) kV

EPR/EPR/TCWB/EVA

NEK TS 606 Code P1/P8, IEC 60092-353-Design guidelines

Flame retardant halogen-free power cable. Mud resistant

CONSTRUCTION

	Code letter	
Conductor		Tinned annealed stranded circular copper conductor. IEC 60228 class 2 or class 5
Insulation	R	EP-rubber thermosetting compound. IEC 60092-360 (EPR)
Core identification		Accordance to HD308 S2 Single core: Black 2-core: Blue, brown 3-core: Brown, black, grey or green/yellow, blue, brown 4-core: Blue, brown, black, grey or green/yellow, brown, black, grey 5-core: Blue, brown, black, grey, black or green/yellow, blue, brown, black, grey Multi-cores: White with black numbers
Lay up/Shielding		Cores laid up in concentric layers
Inner covering	F	Flame retardant and halogen-free thermosetting compound.
Armour/screen	O	Tinned annealed copper wire braid
For EMC cable		Cu/PET tape under the braid
Separator		Separator, suitable tape between the braid and outer sheath
Outer sheath	U	Flame retardant, halogen-free, heat-resistant, oil-resisting and mud-resistant thermosetting compound type SHF2 acc. to IEC 60092-360
Outer sheath colour		Black
Standard marking		TF KABLE 3 RFOU 0.6/1 KV P1/P8 (SIZE) IEC 60332-3-22



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CHARACTERISTIC

Maximum conductor operating temperature:	+90°C								
Maximum conductor temperature during short circuit:	+250°C								
Lowest ambient temperature for fixed installation:	-40°C								
Lowest installation temperature:	-15°C								
Oil resistance:	IEC 60092-360 SHF2. I RM 902 (100°C/24 h)								
Mud resistance:	NEK 606 (SHF MUD. SHF2)								
Minimum bending radius for cable with overall diameter (D):	<table><tr><th>Overall diameter of cable (D)</th><th>Minimum bending radius</th></tr><tr><td>D < 25 mm</td><td>4 D</td></tr><tr><td>D > 25 mm</td><td>6 D</td></tr><tr><td colspan="2">D – overall diameter of cable</td></tr></table>	Overall diameter of cable (D)	Minimum bending radius	D < 25 mm	4 D	D > 25 mm	6 D	D – overall diameter of cable	
Overall diameter of cable (D)	Minimum bending radius								
D < 25 mm	4 D								
D > 25 mm	6 D								
D – overall diameter of cable									

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Fire performance

Flame retardant	IEC 60332-3-22 (Category A)
Smoke emission:	IEC 61034-2
Corrosive gas emission:	IEC 60754-1

Applications

- Fixed installation for power control and lighting 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 606:2009
- For fixed wiring installations on Oil and Gas Rigs, Shipboard and other marine applications requiring screened cable for EMC
- Other industrial applications.

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Approvals

DNV-GL, ABS

Details related to particular Approvals are informative only. Please contact manufacturer to confirm whether the required cross-sections are covered by the Certificate.

Standard length cable packing:

1,000 m on drums

Other forms of packing and delivery are available on request

Size	Insulation thickness	Thickness inner covering	Diameter of braid wire	Thickness outer sheath	Approximate outer diameter	Approximate weight of cable
N × mm ²	mm	mm	mm	mm	mm	kg/km
1 × 16/2.5*	1	1.1	0.2	1.2	12.8	328
1 × 25/4*	1.2	1.1	0.2	1.2	14.5	454
1 × 35/6*	1.2	1.1	0.3	1.3	16.3	610
1 × 50/6*	1.4	1.1	0.3	1.4	18	753
1 × 70/10*	1.4	1.1	0.3	1.4	19.7	1,010
1 × 95/10*	1.6	1.1	0.3	1.5	22.3	1,312
1 × 120/10*	1.6	1.2	0.3	1.6	24.1	1,562
1 × 150/10*	1.8	1.2	0.3	1.6	26.1	1,871
1 × 185/10*	2	1.2	0.3	1.7	28.7	2,286
1 × 240/16*	2.2	1.2	0.3	1.8	31.8	2,987
1 × 300/16*	2.4	1.2	0.3	1.9	34.7	3,544
2 × 1.5/4	1	1.1	0.2	1.2	12.7	263
2 × 2.5/4	1	1.1	0.2	1.2	13.6	299
2 × 4/6	1	1.1	0.3	1.3	15.5	420
2 × 6/6	1	1.1	0.3	1.3	16.6	485
2 × 10/10	1	1.1	0.3	1.4	18.6	613
2 × 16/16	1	1.1	0.4	1.5	21.5	881
2 × 25/16*	1.2	1.2	0.4	1.6	25.4	1,240
2 × 35/16	1.2	1.2	0.3	1.7	27.5	1,510
2 × 50/25	1.4	1.2	0.4	1.8	31.1	1,929
2 × 70/35	1.4	1.2	0.5	1.9	35.2	2,656
2 × 95/50	1.6	1.4	0.5	2.1	40.7	3,686
2 × 120/70	1.6	1.4	0.5	2.2	43.9	4,441
3 × 1.5/4	1	1.1	0.2	1.2	13.3	267
3G1.5	1	1.1	0.2	1.2	13.3	271

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Size	Insulation thickness	Thickness inner covering	Diameter of braid wire	Thickness outer sheath	Approximate outer diameter	Approximate weight of cable
3 × 2.5/6	1	1.1	0.3	1.3	14.8	360
3G2.5	1	1.1	0.3	1.3	14.8	356
3 × 4/6	1	1.1	0.3	1.3	16.2	464
3G4	1	1.1	0.3	1.3	16.2	437
3 × 6/6	1	1.1	0.3	1.4	17.6	555
3G6	1	1.1	0.3	1.4	17.6	536
3 × 10/10	1	1.1	0.3	1.4	19.5	756
3G10	1	1.1	0.3	1.4	19.5	710
3 × 16/16	1	1.1	0.4	1.5	22.7	1,075
3G16	1	1.1	0.3	1.5	22.3	985
3 × 25/16	1.2	1.2	0.3	1.6	26.4	1,481
3 × 35/16*	1.2	1.2	0.3	1.7	29.1	1,847
3 × 50/25	1.4	1.2	0.4	1.9	33.1	2,428
3 × 70/35	1.4	1.4	0.5	2	37.9	3,300
3 × 95/50	1.6	1.4	0.5	2.2	43.4	4,524
3 × 120/70	1.6	1.4	0.5	2.3	46.8	5,584
3 × 240/120	2.2	1.6	0.4	3.1	63.9	10,461
4 × 1.5/4	1	1.1	0.3	1.3	14.8	342
4G1.5	1	1.1	0.3	1.3	14.8	352
4 × 2.5/6	1	1.1	0.3	1.3	15.9	411
4G2.5	1	1.1	0.3	1.3	15.9	411
4 × 4/6	1	1.1	0.3	1.4	17.6	632
4G4	1	1.1	0.3	1.4	17.6	518
4 × 6/6	1	1.1	0.3	1.4	18.9	1,217
4G6	1	1.1	0.3	1.4	18.9	632
4 × 10/10	1	1.1	0.3	1.5	21.3	2,254
4G10	1	1.1	0.3	1.5	21.3	859
4 × 16/16	1	1.2	0.4	1.6	24.9	3,966
4G16	1	1.2	0.4	1.6	24.5	1,217
4 × 25/16	1.2	1.2	0.3	1.7	29	6,463
4G25	1.2	1.2	0.3	1.7	29	1,764
4 × 35/16*	1.2	1.2	0.3	1.8	31.9	2,260
4G35	1.2	1.2	0.3	1.8	31.9	2,254
4 × 50/25	1.4	1.4	0.4	2	36.8	2,988
4G50	1.4	1.4	0.4	2	36.4	2,885

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Size	Insulation thickness	Thickness inner covering	Diameter of braid wire	Thickness outer sheath	Approximate outer diameter	Approximate weight of cable
4 × 70/35	1.4	1.4	0.5	2.2	41.8	4,059
4G70	1.4	1.4	0.4	2.2	41.4	3,966
4 × 95/50	1.6	1.4	0.5	2.4	47.9	5,559
4G95	1.6	1.4	0.4	2.4	47.5	5,378
4 × 120/70	1.6	1.6	0.5	2.5	52	6876
4G120	1.6	1.6	0.4	2.5	51.6	6463
5 × 1.5/6	1	1.1	0.3	1.3	15.8	402
5G1.5	1	1.1	0.3	1.3	15.8	387
5 × 2.5/6	1	1.1	0.3	1.4	17.2	483
5G2.5	1	1.1	0.3	1.4	17.2	477
5 × 4/6	1	1.1	0.3	1.4	18.9	596
5G4	1	1.1	0.3	1.4	18.9	596
5G6	1	1.1	0.3	1.5	20.6	742
5G10	1	1.2	0.3	1.5	23.3	1,017
5 × 16/16	1	1.2	0.3	1.6	26.6	1,482
5G16	1	1.2	0.3	1.6	26.6	1,436
5G25	1.2	1.2	0.3	1.8	31.7	2,110
5G35	1.2	1.2	0.3	1.9	35	2,706
5G50	1.4	1.4	0.4	2.1	40.3	3,561
5 × 70/35	1.4	1.4	0.4	2.3	45.4	4,797
5G70	1.4	1.4	0.4	2.3	45.4	4,769
5G120	1.6	1.6	0.5	2.7	57.3	7,966
7 × 1.5/6	1	1.1	0.3	1.4	18	485
7 × 2.5/6	1	1.1	0.3	1.4	19.6	601
12 × 1.5/10	1	1.1	0.3	1.5	21.4	691
12 × 2.5/10	1	1.2	0.3	1.6	23.6	887
19 × 1.5/10	1	1.2	0.3	1.6	25.9	973
19 × 2.5/10	1	1.2	0.3	1.7	28.4	1,247
27 × 1.5/16	1	1.2	0.3	1.8	29.3	1,275
27 × 2.5/16	1	1.2	0.3	1.9	32.2	1,657
37 × 1.5/16	1	1.2	0.3	1.9	33.6	1,625
37 × 2.5/16	1	1.4	0.3	2	37.4	2,161

* Braid cannot be used as protective earth conductor.

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Without approvals

Size	Insulation thickness	Thickness inner covering	Diameter of braid wire	Thickness outer sheath	Approximate outer diameter	Approximate weight of cable
N × mm ²	mm	mm	mm	mm	mm	kg/km
1 × 10/2.5	1.0	1.1	0.2	1.2	11.7	254
3 × 35 RF/16	1.2	1.2	0.3	1.7	28.5	1,698
3G70	1.4	1.3	0.3	2.0	37	3,047
3 × 95 RF/50	1.6	1.4	0.5	2.2	44.5	4,347
3G120	1.6	1.3	0.4	2.3	46.4	5,050
3G150	1.8	1.5	0.4	2.5	51.3	6,301
3 × 150/70	1.8	1.5	0.5	2.5	51.7	6,560
3G185	2	1.5	0.4	2.7	56.5	7,581
3 × 185/95**	2	1.5	0.5	2.7	58.9	8,155
3G240	2.2	1.6	0.4	3.1	64.0	9,577
3G300	2.4	1.7	0.4	3.1	70.1	11,940
4G150	1.8	1.5	0.4	2.7	56.6	7,785
4G185	2	1.7	0.4	2.9	62.9	9,647
4G240	2.2	1.7	0.4	3.1	70.5	12,325
5 × 10/10	1	1.1	0.3	1.6	23.4	1,055
5G95	1.6	1.5	0.4	2.5	52.3	6,388
6G2.5	1	1.1	0.3	1.4	18.5	537
7G1.5	1	1.1	0.3	1.4	18.3	484
7G4	1	1.1	0.3	1.5	22.0	807
9G1.5	1	1.1	0.3	1.5	20.7	653
10G1.5	1	1.1	0.3	1.5	21	633
10 × 1.5/10	1	1.1	0.3	1.5	21	633
10 × 2.5/10	1	1.1	0.3	1.6	22.9	794
12G4	1	1.1	0.3	1.7	26.3	1,198
14G2.5	1	1.1	0.3	1.6	24.5	1,057
14G4	1	1.1	0.3	1.7	27.5	1,240
15 × 2.5/10	1	1.1	0.3	1.7	25.9	1,040
16G1.5	1	1.1	0.3	1.6	23.7	920
16 × 2.5/10	1	1.1	0.3	1.7	25.9	1,063
17G1.5	1	1.1	0.3	1.6	24.7	1,005
20G2.5	1	1.1	0.3	1.8	28.5	1,266

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Size	Insulation thickness	Thickness inner covering	Diameter of braid wire	Thickness outer sheath	Approximate outer diameter	Approximate weight of cable
20G4	1	1.1	0.3	1.9	32.0	1,651
24G1.5	1	1.1	0.3	1.8	28.7	1,157
27G2.5	1	1.3	0.3	2	37.3	2,368
33G1.5	1	1.1	0.3	1.9	31.4	1,656
47G1.5	1	1.3	0.3	2.1	37.4	2,283
1 × 2.5	1	1.1	0.2	1.1	9.4	144
1 × 500	2.8	1.3	0.4	2.2	43.1	5,653

** Double braided