



# RFOU P101 & RFOU EMC 600/1000 (1200) V RFOU P1/P8 & RFOU EMC 600/1000 (1200) V EPR/EVA/TCWB/EVA

NEK TS 606:2016, Code P101, NEK TS 606:2009, Code P1/P8, IEC 60092-353- Design guidelines, IEC 60228 conductor, IEC 60092-360 Insulating material, IEC 60092-360 Sheathing materials, IEC 60332-1-2, IEC 60332-3-22 Flame retardant, IEC 60754-1.2 Halogen free, IEC 61034-1.2 Low Smoke

Flame retardant halogen-free power cable. Mud resistant

## 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

## 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)



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	Code letter	
Core identification		Accordance to HD308 S2 Single core - Black Two core- Blue, Brown Three cores -Brown ,Black, Grey or Green/Yellow, Blue, Brown Four cores - Blue, Brown, Black, Grey or Green/Yellow, Brown, Black, Grey Five cores - 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 color		Black

## Features

Maximum conductor operating temperature: +90°C	Flame retardant: IEC 60332-3-22 (Category A)
Maximum conductor temperature during short circuit: +250°C	Fire resistant: IEC 60331
Lowest ambient temperature for fixed installation: -40°C	Smoke emission: IEC 61034-2
Lowest installation temperature: -15°C	Corrosive gas emission: IEC 60754-1
Minimum bending radius:	Oil resistance: IEC 60092-360 SHF2, IRM 902 (100°C/24h)
Overall diameter of cable (D)	Mud resistance: NEK 606 (SHF MUD, SHF2)
< 25 mm	4 D
> 25 mm	6 D
D – overall diameter of cable	

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## Approvals

ABS Certificate No:	20-GD1953779-PDA
DNV:	TAE00001WS
Standard length cable packing	1000m 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	Approx. Outer Diameter	Approx. weight of cable
<b>N x mm<sup>2</sup></b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>kg/km</b>
1x16/2.5*	1	1.1	0.2	1.2	12.8	328
1x25/4*	1.2	1.1	0.2	1.2	14.5	454
1x35/6*	1.2	1.1	0.3	1.3	16.3	610
1x50/6*	1.4	1.1	0.3	1.4	18	753
1x70/10*	1.4	1.1	0.3	1.4	19.7	1010
1x95/10*	1.6	1.1	0.3	1.5	22.3	1312
1x120/10*	1.6	1.2	0.3	1.6	24.1	1562
1x150/10*	1.8	1.2	0.3	1.6	26.1	1871
1x185/10*	2	1.2	0.3	1.7	28.7	2286
1x240/16*	2.2	1.2	0.3	1.8	31.8	2987
1x300/16*	2.4	1.2	0.3	1.9	34.7	3544
2x1.5/4	1	1.1	0.2	1.2	12.7	263
2x2.5/4	1	1.1	0.2	1.2	13.6	299
2x4/6	1	1.1	0.3	1.3	15.5	420
2x6/6	1	1.1	0.3	1.3	16.6	485
2x10/10	1	1.1	0.3	1.4	18.6	613

# RFOU P101 & RFOU EMC RFOU P1/P8 & RFOU EMC EPR/EVA/TCWB/EVA

Size	Insulation thickness	Thickness Inner covering	Diameter of braid wire	Thickness outer sheath	Approx. Outer Diameter	Approx. weight of cable
<b>N x mm<sup>2</sup></b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>kg/km</b>
2x16/16	1	1.1	0.4	1.5	21.5	881
2x25/16*	1.2	1.2	0.4	1.6	25.4	1240
2x35/16	1.2	1.2	0.3	1.7	27.5	1510
2x50/25	1.4	1.2	0.4	1.8	31.1	1929
2x70/35	1.4	1.2	0.5	1.9	35.2	2656
2x95/50	1.6	1.4	0.5	2.1	40.7	3686
2x120/70	1.6	1.4	0.5	2.2	43.9	4441
3x1.5/4	1	1.1	0.2	1.2	13.3	267
3G1.5	1	1.1	0.2	1.2	13.3	271
3x2.5/6	1	1.1	0.3	1.3	14.8	360
3G2.5	1	1.1	0.3	1.3	14.8	356
3x4/6	1	1.1	0.3	1.3	16.2	464
3G4	1	1.1	0.3	1.3	16.2	437
3x6/6	1	1.1	0.3	1.4	17.6	555
3G6	1	1.1	0.3	1.4	17.6	536
3x10/10	1	1.1	0.3	1.4	19.5	756
3G10	1	1.1	0.3	1.4	19.5	710
3x16/16	1	1.1	0.4	1.5	22.7	1075
3G16	1	1.1	0.3	1.5	22.3	985
3x25/16	1.2	1.2	0.3	1.6	26.4	1481
3x35/16*	1.2	1.2	0.3	1.7	29.1	1847
3x50/25	1.4	1.2	0.4	1.9	33.1	2428
3x70/35	1.4	1.4	0.5	2	37.9	3300

# RFOU P101 & RFOU EMC RFOU P1/P8 & RFOU EMC EPR/EVA/TCWB/EVA

Size	Insulation thickness	Thickness Inner covering	Diameter of braid wire	Thickness outer sheath	Approx. Outer Diameter	Approx. weight of cable
<b>N x mm<sup>2</sup></b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>kg/km</b>
3x95/50	1.6	1.4	0.5	2.2	43.4	4524
3x120/70	1.6	1.4	0.5	2.3	46.8	5584
3x150/70	1.8	1.5	0.5	2.5	52.5	6520
3x240/120	2.2	1.6	0.4	3.1	63.9	10461
4x1.5/4	1	1.1	0.3	1.3	14.8	342
4G1.5	1	1.1	0.3	1.3	14.8	352
4x2.5/6	1	1.1	0.3	1.3	15.9	411
4G2.5	1	1.1	0.3	1.3	15.9	411
4x4/6	1	1.1	0.3	1.4	17.6	632
4G4	1	1.1	0.3	1.4	17.6	518
4x6/6	1	1.1	0.3	1.4	18.9	1217
4G6	1	1.1	0.3	1.4	18.9	632
4x10/10	1	1.1	0.3	1.5	21.3	2254
4G10	1	1.1	0.3	1.5	21.3	859
4x16/16	1	1.2	0.4	1.6	24.9	3966
4G16	1	1.2	0.4	1.6	24.5	1217
4x25/16	1.2	1.2	0.3	1.7	29	6463
4G25	1.2	1.2	0.3	1.7	29	1764
4x35/16*	1.2	1.2	0.3	1.8	31.9	2260
4G35	1.2	1.2	0.3	1.8	31.9	2254
4x50/25	1.4	1.4	0.4	2	36.8	2988
4G50	1.4	1.4	0.4	2	36.4	2885
4x70/35	1.4	1.4	0.5	2.2	41.8	4059

# RFOU P101 & RFOU EMC RFOU P1/P8 & RFOU EMC EPR/EVA/TCWB/EVA

Size	Insulation thickness	Thickness Inner covering	Diameter of braid wire	Thickness outer sheath	Approx. Outer Diameter	Approx. weight of cable
<b>N x mm<sup>2</sup></b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>kg/km</b>
4G70	1.4	1.4	0.4	2.2	41.4	3966
4x95/50	1.6	1.4	0.5	2.4	47.9	5559
4G95	1.6	1.4	0.4	2.4	47.5	5378
4x120/70	1.6	1.6	0.5	2.5	52	6876
4G120	1.6	1.6	0.4	2.5	51.6	6463
5x1.5/6	1	1.1	0.3	1.3	15.8	402
5G1.5	1	1.1	0.3	1.3	15.8	387
5x2.5/6	1	1.1	0.3	1.4	17.2	483
5G2.5	1	1.1	0.3	1.4	17.2	477
5x4/6	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	1017
5x16/16	1	1.2	0.3	1.6	26.6	1482
5G16	1	1.2	0.3	1.6	26.6	1436
5G25	1.2	1.2	0.3	1.8	31.7	2110
5G35	1.2	1.2	0.3	1.9	35	2706
5G50	1.4	1.4	0.4	2.1	40.3	3561
5x70/35	1.4	1.4	0.4	2.3	45.4	4797
5G70	1.4	1.4	0.4	2.3	45.4	4769
5G120	1.6	1.6	0.5	2.7	57.3	7966
7x1.5/6	1	1.1	0.3	1.4	18	485
7x2.5/6	1	1.1	0.3	1.4	19.6	601

# RFOU P101 & RFOU EMC RFOU P1/P8 & RFOU EMC EPR/EVA/TCWB/EVA

Size	Insulation thickness	Thickness Inner covering	Diameter of braid wire	Thickness outer sheath	Approx. Outer Diameter	Approx. weight of cable
<b>N x mm<sup>2</sup></b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>kg/km</b>
12x1.5/10	1	1.1	0.3	1.5	21.4	691
12x2.5/10	1	1.2	0.3	1.6	23.6	887
19x1.5/10	1	1.2	0.3	1.6	25.9	973
19x2.5/10	1	1.2	0.3	1.7	28.4	1247
27x1.5/16	1	1.2	0.3	1.8	29.3	1275
27x2.5/16	1	1.2	0.3	1.9	32.2	1657
37x1.5/16	1	1.2	0.3	1.9	33.6	1625
37x2.5/16	1	1.4	0.3	2	37.4	2161

\*) Braid cannot be used as protective earth conductor.

## Without approvals

Size	Insulation thickness	Thickness Inner covering	Diameter of braid wire	Thickness outer sheath	Approx. Outer Diameter	Approx. weight of cable
<b>N x mm<sup>2</sup></b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>kg/km</b>
1x400/25	2.6	1.3	0.4	2.1	39.1	4530
1x10/2.5	1.0	1.1	0.2	1.2	11.7	254
3x35RF/16	1.2	1.2	0.3	1.7	28.5	1698
3G70	1.4	1.3	0.3	2.0	37	3047
3x95RF/50	1.6	1.4	0.5	2.2	44.5	4347
3G120	1.6	1.3	0.4	2.3	46.4	5050
3G150	1.8	1.5	0.4	2.5	51.3	6301
3x150/70	1.8	1.5	0.5	2.5	51.7	6560

# RFOU P101 & RFOU EMC RFOU P1/P8 & RFOU EMC EPR/EVA/TCWB/EVA

Size	Insulation thickness	Thickness Inner covering	Diameter of braid wire	Thickness outer sheath	Approx. Outer Diameter	Approx. weight of cable
<b>N x mm<sup>2</sup></b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>kg/km</b>
3G185	2	1.5	0.4	2.7	56.5	7581
3X185/95**	2	1.5	0.5	2.7	58.9	8155
3G240	2.2	1.6	0.4	3.1	64.0	9577
3G300	2.4	1.7	0.4	3.1	70.1	11940
4x150/70	1.8	1.5	0.4	2.7	58.2	8148
4G150	1.8	1.5	0.4	2.7	56.6	7785
4G185	2	1.7	0.4	2.9	62.9	9647
4G240	2.2	1.7	0.4	3.1	70.5	12325
5x10/10	1	1.1	0.3	1.6	23.4	1055
5G95	1.6	1.5	0.4	2.5	52.3	6388
5G150	1.8	1.7	0.4	2.9	63	6941
5G185	2.0	1.7	0.4	3.1	69.4	11730
5G240	2.2	1.7	0.4	3.4	78.1	15070
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
8G1.5	1	1.1	0.3	1.4	19.4	533
9G1.5	1	1.1	0.3	1.5	20.7	653
10G1.5	1	1.1	0.3	1.5	21	633
10x1.5/10	1	1.1	0.3	1.5	21	633
10x2.5/10	1	1.1	0.3	1.6	22.9	794
12G4	1	1.1	0.3	1.7	26.3	1198
14G2.5	1	1.1	0.3	1.6	24.5	1057



# RFOU P101 & RFOU EMC RFOU P1/P8 & RFOU EMC EPR/EVA/TCWB/EVA

Size	Insulation thickness	Thickness Inner covering	Diameter of braid wire	Thickness outer sheath	Approx. Outer Diameter	Approx. weight of cable
<b>N x mm<sup>2</sup></b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>mm</b>	<b>kg/km</b>
14G4	1	1.1	0.3	1.7	27.5	1240
15x2.5/10	1	1.1	0.3	1.7	25.9	1040
16G1.5	1	1.1	0.3	1.6	23.7	832
16x2.5/10	1	1.1	0.3	1.7	25.9	1063
17G1.5	1	1.1	0.3	1.6	24.7	893
20G1.5	1	1.1	0.3	1.7	26.0	986
20G2.5	1	1.1	0.3	1.8	28.5	1266
20G4	1	1.1	0.3	1.9	32.0	1651
24G1.5	1	1.1	0.3	1.8	28.7	1157
27G2.5	1	1.3	0.3	2	37.3	2368
32G1	1	1.1	0.3	1.8	29.2	1179
33G1.5	1	1.1	0.3	1.9	31.4	1656
47G1.5	1	1.3	0.3	2.1	37.4	2283
1x2.5	1	1.1	0.2	1.1	9.4	144
1x500	2.8	1.3	0.4	2.2	43.1	5653

## Standard Print Legend

acc. to NEK TS 606:2016

TF KABLE 3 RFOU 0,6/1KV P101 (SIZE) IEC 60332-3-22

acc. to NEK TS 606:2009

TF KABLE 3 RFOU 0,6/1KV P1/P8 (SIZE) IEC 60332-3-22

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