



## Oil & Gas - Cable Solutions

### Exploration & Production - Offshore

# VFD Cables

NEK 606 / IEC 60092-353

## F-RFOU 0,6/1 (1,8/3) kV VFD (EMC)

Low Voltage Special cables for Variable Frequency Drives application.  
Fire retardant, low smoke, halogen free. Armoured.  
Arctic Grade design option available on demand.

### APPLICATION

Special design for Variable Frequency Drives.  
VFD cables are used to control the frequency of the electrical power supplied to AC motors. Our VFD cables are designed to provide complete EMI screening and resistance to high voltage spikes to extend the operating life of the cable or motor. Prysmian offers a wide range of VFD cables with diverse design options depending on the reference standards and customer requirements.

### STANDARDS & APPROVALS

**IEC 60092-350** Design guidelines  
**IEC 60092-352** Choice and installation of electric cables  
**IEC-60092-353** Design guidelines  
**IEC 60092-360** Insulating and sheathing materials  
**IEC 60332-1-2** Flame retardance  
**IEC-60332-3-22** Fire retardance  
**IEC-60754-1** Halogen free properties  
**IEC-61034-2** Smoke emission properties  
**NEK 606** Oil and MUD resistance

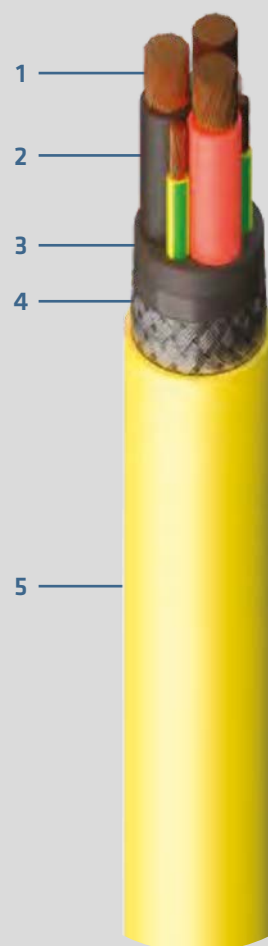
on request

**CSA 22.2** Cold bend/impact test at -40 °C / -35 °C

Det Norske Veritas-Germanischer Lloyd (DNV-GL)  
American Bureau of Shippings (ABS)  
Lloyds Register of Shipping (LRS)  
Bureau Veritas (BV)  
Russiam Maritime Register of Shipping (RMRS)  
RINa (Registro Italiano Navale)

### DESIGN & CONSTRUCTION

- 1 CONDUCTOR**  
**F**  
Tinned annealed copper conductor according to IEC 60228 cl.5 (cl.2 on request)
- 2 INSULATION**  
**R**  
HEPR according to IEC 60092-360
- 3 BEDDING/INNER COVERING**  
**F**  
Flame retardant and halogen free thermoset compound
- 4 ARMOURING / EMC SCREEN**  
**O**  
Cu/PETP tape + tinned copper wire braid (shield coverage 100 %)
- 5 OUTER SHEATH**  
**U**  
Flame retardant, halogen free thermoset compound, SHF2 (IEC 60092-360)  
or **U + MUD**  
Flame retardant, halogen free and mud resistant thermoset compound, SHF2 (NEK 606)



#### CONTACT INFO:

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## PERFORMANCES/RATINGS

### FIRE BEHAVIOUR



IEC 60332-1-2  
IEC 60332-3-22

### CHEMICAL RESISTANCE



VERY GOOD  
EXCELLENT (MUD RES)

### IMPACTS



GOOD

### SMOKE DENSITY, CORROSIVITY AND TOXICITY



LOW EMISSION

### MIN. PERMISSIBLE AMBIENT TEMPERATURE DURING LAYING



-20 °C  
(-40°C for Arctic Grade)

### MAX OPERATING TEMPERATURE



+90 °C

### SHORT CIRCUIT TEMPERATURE



+250 °C

### UV RESISTANCE



GOOD

## QUALITY & TESTING

Prysmian has a built-in multi-step quality assurance program, covering the production process from cable design and raw material purchases to final inspection and testing documentation.

The ISO 9001 quality system of Prysmian Group (together with ISO 14001 and OHSAS 18001) has been assessed, approved and is currently audited by SGS.

This product information sheet is provided for reference only.

Please consult the factory or your representative to confirm all engineering information or refer to the related catalogues available in the local countries website.

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Group