

**RFOU (i) S1/S5 & RFOU (i) EMC 150/250(300)V  
EPR/EPR/TCWB/EVA**



**Flame retardant halogen-free instrumentation cable  
Mud resistant**



Picture is for information only.

**Applicable standards:**

- NEK TS 606 Code S1/S5, IEC 60092-376- Design guidelines
- IEC 60228 conductor
- IEC 60092-351 Insulating material, IEC 60092-359 Sheathing materials
- IEC 60332-1, IEC 60332-3-22 Flame retardant
- IEC 60754-1,2 Halogen free, IEC 61034-1,2 Low Smoke

| CONSTRUCTION                       |             |   |
|------------------------------------|-------------|---|
|                                    | Code Letter |   |
| <b>Conductors</b>                  |             | Tinned annealed circular stranded copper according to IEC 60228 class 2   |
| <b>Insulation</b>                  | <b>R</b>    | EP rubber thermosetting compound ,IEC 60092-351 (EPR)   |
| <b>Pair, Triple, Quad twisting</b> |             | 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 numbers printed directly on the insulated conductors. |
| <b>Lay up/ Shielding</b>           |             | Individually shielded pairs/triples/quads are laid up in concentric layers and wrapped with polyester tape.   |
| <b>Inner covering</b>              | <b>F</b>    | Flame retardand and halogen free thermosetting compound   |
| <b>Armour/screen</b>               | <b>O</b>    | Poliester or Cu/PET tape & Tinned annealed copper wire braid  |
| <b>For EMC cable</b>               |             | Cu/PET tape under the braid   |
| <b>Separator</b>                   |             | Separator, suitable tape between the braid and outer sheath   |
| <b>Outer sheath</b>                | <b>U</b>    | Flame retardand, halogen free and mud resistant thermosetting compound SHF2 (IEC 60092-359)   |
| <b>Colour of outer sheath</b>      |             | Grey or Blue  |
| <b>Standard marking</b>            |             | E.g. TF KABLE 3 RFOU (i) 250V S1/S5 2 PAIR 0,75mm <sup>2</sup> IEC 60332-3-22 IEC 60092-376   |



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## FEATURES

- **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
- **Minimum bending radius:** 6 D  
D – overall diameter of cable
- **Flame retardant:** IEC 60332-3-22 (Category A)
- **Smoke emission:** IEC 61034-2
- **Corrosive gas emission:** IEC 60754-1
- **Oil resistance:** IEC 60092-359 SHF2, IRM 902 (100°C/24h)
- **Mud resistance:** NEK 606 (SHF MUD, SHF2)

## APPLICATIONS

- Fixed installation for instrumentation, communication, control and alarm system in both EX -and safe areas
- Meets the MUD resistance requirement in NEK TS 606
- **Marine:** For fixed wiring installations on Oil and Gas Rigs, Shipboard and other marine applications requiring screened cable for EMC
- Other industrial applications

## APPROVAL

DNV GL Certificate No: E14151  
ABS 15GD1364505- PDA

|                                      |  |
|--------------------------------------|--|
| <b>Standard length cable packing</b> | 1000m on drums. Other forms of packing and delivery are available on request |
|--------------------------------------|--|



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| Size        | Class of conductor | Insulation Thickness | Thickness of inner sheath | Diameter of braid wire | Thickness of outer sheath | Approximate overall diameter | Approximate net weight of cable |
|-------------|--------------------|----------------------|---------------------------|------------------------|---------------------------|------------------------------|---------------------------------|
| N x 2 x mm2 |                    | Inch                 | Inch                      | Inch                   | Inch                      | Inch                         | Lb/1000ft                       |
| 1x2x0,75    | 2                  | 0,024                | 0,043                     | 0,008                  | 0,043                     | 0,406                        | 99,441                          |
| 2x2x0,75    | 2                  | 0,024                | 0,043                     | 0,008                  | 0,047                     | 0,567                        | 166,631                         |
| 4x2x0,75    | 2                  | 0,024                | 0,043                     | 0,012                  | 0,051                     | 0,614                        | 238,525                         |
| 8x2x0,75    | 2                  | 0,024                | 0,043                     | 0,012                  | 0,059                     | 0,756                        | 372,233                         |
| 12x2x0,75   | 2                  | 0,024                | 0,055                     | 0,012                  | 0,063                     | 0,902                        | 520,723                         |
| 16x2x0,75   | 2                  | 0,024                | 0,075                     | 0,012                  | 0,067                     | 1,043                        | 688,026                         |
| 19x2x0,75   | 2                  | 0,024                | 0,075                     | 0,012                  | 0,067                     | 1,106                        | 774,701                         |
| 24x2x0,75   | 2                  | 0,024                | 0,083                     | 0,012                  | 0,075                     | 1,232                        | 954,770                         |
| 1x3x0,75    | 2                  | 0,024                | 0,043                     | 0,008                  | 0,043                     | 0,417                        | 108,848                         |
| 2x3x0,75    | 2                  | 0,024                | 0,043                     | 0,012                  | 0,051                     | 0,598                        | 206,945                         |
| 4x3x0,75    | 2                  | 0,024                | 0,043                     | 0,012                  | 0,055                     | 0,669                        | 288,245                         |
| 8x3x0,75    | 2                  | 0,024                | 0,043                     | 0,012                  | 0,063                     | 0,854                        | 468,986                         |
| 12x3x0,75   | 2                  | 0,024                | 0,055                     | 0,012                  | 0,067                     | 1,004                        | 653,087                         |
| 16x3x0,75   | 2                  | 0,024                | 0,083                     | 0,012                  | 0,071                     | 1,173                        | 880,189                         |
| 19x3x0,75   | 2                  | 0,024                | 0,083                     | 0,012                  | 0,071                     | 1,248                        | 995,756                         |
| 24x3x0,75   | 2                  | 0,024                | 0,098                     | 0,016                  | 0,079                     | 1,421                        | 1249,062                        |
| 1x2x1,5     | 2                  | 0,028                | 0,043                     | 0,008                  | 0,043                     | 0,457                        | 125,645                         |
| 2x2x1,5     | 2                  | 0,028                | 0,043                     | 0,012                  | 0,051                     | 0,693                        | 258,010                         |
| 4x2x1,5     | 2                  | 0,028                | 0,043                     | 0,012                  | 0,055                     | 0,787                        | 366,857                         |
| 8x2x1,5     | 2                  | 0,028                | 0,043                     | 0,012                  | 0,067                     | 0,909                        | 543,567                         |
| 12x2x1,5    | 2                  | 0,028                | 0,055                     | 0,012                  | 0,071                     | 1,094                        | 776,716                         |
| 16x2x1,5    | 2                  | 0,028                | 0,075                     | 0,012                  | 0,075                     | 1,264                        | 1023,976                        |
| 19x2x1,5    | 2                  | 0,028                | 0,075                     | 0,012                  | 0,075                     | 1,346                        | 1163,731                        |
| 24x2x1,5    | 2                  | 0,028                | 0,091                     | 0,016                  | 0,087                     | 1,539                        | 1536,635                        |
| 1x3x1,5     | 2                  | 0,028                | 0,043                     | 0,008                  | 0,043                     | 0,480                        | 145,130                         |
| 2x3x1,5     | 2                  | 0,028                | 0,043                     | 0,012                  | 0,055                     | 0,709                        | 287,573                         |
| 4x3x1,5     | 2                  | 0,028                | 0,043                     | 0,012                  | 0,059                     | 0,795                        | 417,922                         |
| 8x3x1,5     | 2                  | 0,028                | 0,043                     | 0,012                  | 0,071                     | 1,035                        | 703,479                         |
| 12x3x1,5    | 2                  | 0,028                | 0,055                     | 0,012                  | 0,075                     | 1,224                        | 999,787                         |
| 16x3x1,5    | 2                  | 0,028                | 0,091                     | 0,016                  | 0,079                     | 1,461                        | 1363,957                        |
| 24x3x1,5    | 2                  | 0,028                | 0,098                     | 0,016                  | 0,091                     | 1,736                        | 2004,278                        |



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|         |   |       |       |       |       |       |         |
|---------|---|-------|-------|-------|-------|-------|---------|
| 1x2x2,5 | 2 | 0,028 | 0,043 | 0,008 | 0,043 | 0,488 | 149,162 |
| 2x2x2,5 | 2 | 0,028 | 0,043 | 0,012 | 0,055 | 0,575 | 247,259 |
| 4x2x2,5 | 2 | 0,028 | 0,043 | 0,012 | 0,059 | 0,807 | 428,000 |

Without approvals

| Size        | Class of conductor | Insulation Thickness | Thickness of inner sheath | Diameter of braid wire | Thickness of outer sheath | Approximate overall diameter | Approximate net weight of cable |
|-------------|--------------------|----------------------|---------------------------|------------------------|---------------------------|------------------------------|---------------------------------|
| N x X x mm2 |                    | Inch                 | Inch                      | Inch                   | Inch                      | Inch                         | Lb/1000ft                       |
| 4x2x2,5     | 2                  | 0,028                | 0,043                     | 0,012                  | 0,059                     | 0,862                        | 454,876                         |
| 8x2x2,5     | 2                  | 0,028                | 0,043                     | 0,012                  | 0,067                     | 1,177                        | 784,107                         |
| 16x2x2,5    | 2                  | 0,028                | 0,043                     | 0,012                  | 0,075                     | 1,465                        | 1322,971                        |
| 24x2x2,5    | 2                  | 0,028                | 0,047                     | 0,016                  | 0,087                     | 1,839                        | 1994,199                        |
| 1x3x2,5     | 2                  | 0,028                | 0,039                     | 0,008                  | 0,047                     | 0,512                        | 178,054                         |
| 4x3x2,5     | 2                  | 0,028                | 0,043                     | 0,012                  | 0,059                     | 0,945                        | 564,396                         |
| 16x3x2,5    | 2                  | 0,028                | 0,047                     | 0,016                  | 0,083                     | 1,661                        | 1817,490                        |
| 1x4x2,5     | 2                  | 0,028                | 0,039                     | 0,008                  | 0,047                     | 0,547                        | 207,617                         |
| 4x3x1       | 2                  | 0,024                | 0,039                     | 0,012                  | 0,055                     | 0,886                        | 426,657                         |

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