

## Application

NSGAFOEU is a flexible single-core rubber cable to DIN VDE 0250-602, rated 1.8/3 kV. The fine-wire class 5 copper conductor is insulated with EPR rubber and protected by a tough polychloroprene (PCP) outer sheath. It is used for flexible power connections under mechanical stress: switchgear and distribution boards (short-circuit- and earth-fault-proof up to 1000 V), traction and rail vehicles, buses, mobile machinery, and device and panel wiring in dry, damp and wet locations, indoors and outdoors. The cable is oil-, ozone- and weather-resistant.



## CONSTRUCTION

|                            |                                                                                                                |
|----------------------------|----------------------------------------------------------------------------------------------------------------|
| <b>Conductor</b>           | Fine-wire stranded tinned annealed copper, class 5 to IEC/EN 60228 (VDE 0295).                                 |
| <b>Insulation</b>          | EPR rubber, compound type 3GI3 (DIN VDE 0207-20).                                                              |
| <b>Outer sheath</b>        | Polychloroprene (PCP) rubber, compound type 5GM3 (DIN VDE 0207-21), round; oil-, ozone- and weather-resistant. |
| <b>Core identification</b> | Single core, black (orange on request).                                                                        |

## ELECTRICAL & THERMAL PROPERTIES

|                                                   |                                                                    |
|---------------------------------------------------|--------------------------------------------------------------------|
| <b>Rated voltage Uo/U</b>                         | 1.8/3 kV.                                                          |
| <b>Test voltage</b>                               | 6 kV.                                                              |
| <b>Standard</b>                                   | DIN VDE 0250-602.                                                  |
| <b>Conductor standard</b>                         | IEC/EN 60228 class 5.                                              |
| <b>Flame-retardant</b>                            | IEC/EN 60332-1-2.                                                  |
| <b>Oil resistance</b>                             | IEC/EN 60811-404.                                                  |
| <b>Max. conductor temperature</b>                 | +90 °C.                                                            |
| <b>Permitted outer cable temperature, fixed</b>   | -40 °C to +80 °C.                                                  |
| <b>Permitted outer cable temperature, flexing</b> | -25 °C to +80 °C.                                                  |
| <b>Min. bending radius, fixed</b>                 | 6 × outer diameter.                                                |
| <b>Min. bending radius, flexing</b>               | 10 × outer diameter.                                               |
| <b>Reaction to fire (CPR)</b>                     | Outside the scope of EN 50575 (flexible trailing / reeling cable). |

**DIMENSIONS & TECHNICAL DATA**

| Cores × mm <sup>2</sup> | Cond. R @20°C<br>(Ω/km) | Nominal O.D.<br>(mm) | Weight<br>(kg/km) |
|-------------------------|-------------------------|----------------------|-------------------|
| 1 × 1.5                 | 13.3                    | 6.3                  | 51                |
| 1 × 2.5                 | 7.98                    | 6.7                  | 63                |
| 1 × 4                   | 4.95                    | 7.4                  | 82                |
| 1 × 6                   | 3.3                     | 7.9                  | 103               |
| 1 × 10                  | 1.91                    | 9.5                  | 159               |
| 1 × 16                  | 1.21                    | 10.5                 | 219               |
| 1 × 25                  | 0.78                    | 12.8                 | 335               |
| 1 × 35                  | 0.554                   | 14.1                 | 435               |
| 1 × 50                  | 0.386                   | 15.9                 | 582               |
| 1 × 70                  | 0.272                   | 17.8                 | 757               |
| 1 × 95                  | 0.206                   | 20.1                 | 1040              |
| 1 × 120                 | 0.161                   | 22                   | 1289              |
| 1 × 150                 | 0.129                   | 24                   | 1581              |
| 1 × 185                 | 0.106                   | 26.3                 | 1895              |
| 1 × 240                 | 0.0801                  | 29.6                 | 2452              |
| 1 × 300                 | 0.0641                  | 32.2                 | 2998              |
| 1 × 400                 | 0.0486                  | 36.2                 | 3900              |

Single-core cable. Outer diameters and weights are nominal manufacturer values of the leading reference source; conductor resistance is the maximum per IEC/EN 60228 class 5. All values are indicative and non-binding.