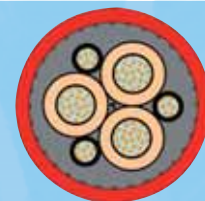
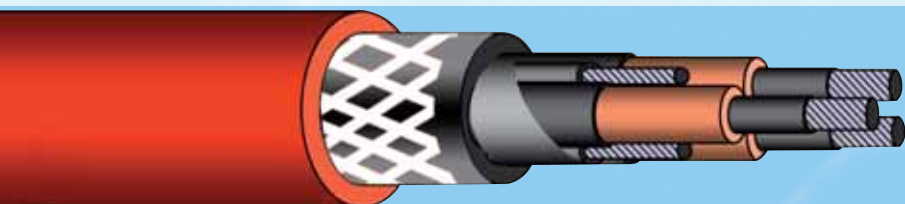




## FLEXIDRUM® MEDIUM RS (N)TSCGEWÖU

From 3,6/6 Kv to 12/20 Kv with antitwisting protection, on request 14/25 kV



### Construction:

|                            |   |
|----------------------------|---|
| <b>Power conductor:</b>    | flexible plain copper class 5, acc. to DIN VDE 0295   |
| <b>Conductor screen:</b>   | semi-conducting compound                              |
| <b>Insulation:</b>         | EPR compound 3GI3                                     |
| <b>Core screen:</b>        | semi-conducting compound                              |
| <b>Earth Conductor:</b>    | flexible red copper class 5, acc. to DIN VDE 0295     |
| <b>Conductor covering:</b> | semi-conducting compound                              |
| <b>Stranding:</b>          | Phase core placed with earth cores in the interstices |
| <b>Inner sheath:</b>       | PCP compound  |
| <b>Antitwisting braid:</b> | anti-twisting of synthetic yarns                      |
| <b>Outer sheath:</b>       | RED PCP compound                                      |

### Technical data:

|  |  |       |      |        |       |
|--|--|-------|------|--------|-------|
| <b>Rated voltage:</b>                            | U <sub>0</sub> /U <sub>k</sub> Kv                    | 3,6/6 | 6/10 | 8,7/15 | 12/20 |
| <b>Max oper. voltage:</b>                        | Kv   | 5,4   | 12   | 18     | 24    |
| <b>Test voltage:</b>                             | Kv   | 11    | 17   | 24     | 29    |
|  | on request 14/25 kV                                  |       |      |        |       |
| <b>Current carrying capacity:</b>                | DIN VDE 0298-4                                       |       |      |        |       |
| <b>Min. Bending radius:</b>                      |  |       |      |        |       |
| Fixed installation:                              | 6 x d  |       |      |        |       |
| On drums:  | 12 x d   |       |      |        |       |
| On defect. pulley:                               | 15 x d   |       |      |        |       |
| Free movement:                                   | 12 x d   |       |      |        |       |
| Min. distance for change of direction:           | 20 x d   |       |      |        |       |
| <b>Temperature range:</b>                        |  |       |      |        |       |
| Fixed installation:                              | - 40°C + 80°C  |       |      |        |       |
| Flexible application:                            | - 30°C + 80°C  |       |      |        |       |
| <b>Max temperature on conductor:</b>             | +90°C  |       |      |        |       |
| <b>Max temperature in short circuit:</b>         | +250°C   |       |      |        |       |
| <b>Tensile load:</b>                             | 20 N/mm <sup>2</sup>                                 |       |      |        |       |
| <b>Minimum distance for change of direction:</b> | 20 x d   |       |      |        |       |
| <b>Torsional stress:</b>                         | ± 25°/m  |       |      |        |       |
| <b>Max travel speed</b>                          |  |       |      |        |       |
| Operating:                                       | up to 180 m/min.                                     |       |      |        |       |
| Rewinding with drum car:                         | 120 m/min.   |       |      |        |       |
| <b>Fire performance:</b>                         | flame retardant acc. to IEC 60332-1                  |       |      |        |       |
| <b>Oil resistant:</b>                            | very good, acc. to DIN VDE 0473 part 811-2-1 par. 10 |       |      |        |       |
| <b>Athmosperic conditions resistance:</b>        | outdoor use, resistant to ozone moisture and UV rays |       |      |        |       |
| <b>Water resistance:</b>                         | very good, acc. to HD 22.16                          |       |      |        |       |
| <b>Approval on request:</b>                      | Gost-R, WUG and others                               |       |      |        |       |

### Outstanding Features:

- ▶ Double layer with anti-twisting reinforcement
- ▶ small outer diameter and light weight
- ▶ possible version without antitwisting protection
- ▶ possible version with tinned Cu-conductors

### Applications:

- ▶ Power supply cable suitable for mobile devices with high risk of mechanical damage
  - ▶ Suitable to operate with forced guidance systems with deflection on different levels and with reel axis in direction of travel.
- Cold version -50°C possible

### U<sub>0</sub>/U (U<sub>m</sub>) 3,6/6 (7,2) kV

| Part no.  | No. of cores x cross-section n x mm <sup>2</sup> | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | Tensile strength N | AWG no. *) |
|-----------|--|----------------------|---------------------|----------------------------|--------------------|------------|
| 07950363A | 3x25+3x25/3                                      | 41,2                 | 960                 | 2535                       | 1500               | 4          |
| 07950364A | 3x35+3x25/3                                      | 43,7                 | 1248                | 3025                       | 2100               | 2          |
| 07950365A | 3x50+3x25/3                                      | 46,6                 | 1680                | 3560                       | 3000               | 1          |
| 07950366A | 3x70+3x35/3                                      | 50,7                 | 2352                | 4480                       | 4200               | 2/0        |
| 07950367A | 3x95+3x50/3                                      | 54,7                 | 3216                | 5478                       | 5700               | 3/0        |
| 07950368A | 3x120+3x70/3                                     | 58,9                 | 4128                | 6875                       | 7200               | 4/0        |
| 07950369A | 3x150+3x70/3                                     | 63,4                 | 4992                | 7920                       | 9000               | 250 MCM    |
| 07950370A | 3x185+3x95/3                                     | 66,5                 | 6240                | 9335                       | 11100              | 350 MCM    |
| 07950371A | 3x240+3x120/3                                    | 74,8                 | 8064                | 12140                      | 14400              | 450 MCM    |



# FLEXIDRUM® MEDIUM RS (N)TSCGEWÖU

From 3,6/6 Kv to 12/20 Kv with antitwisting protection, on request 14/25 kV

## Uo/U (Um) 6/10 (12) kV

Other construction and sizes are available on request

| Part no.  | No. of cores<br>x cross-section<br>n x mm <sup>2</sup> | Outer-Ø<br>ca. mm<br>± 10% | Copper<br>weight<br>kg/km | Cable<br>weight approx.<br>kg/km | Tensile<br>strength<br>N | AWG<br>no. *) |
|-----------|--|----------------------------|---------------------------|----------------------------------|--------------------------|---------------|
| 07951063A | 3x25+3x25/3  | 42,8                       | 960                       | 2667                             | 1500                     | 4             |
| 07951064A | 3x35+3x25/3  | 45,6                       | 1248                      | 3215                             | 2100                     | 2             |
| 07951065A | 3x50+3x25/3  | 51,4                       | 1680                      | 3733                             | 3000                     | 1             |
| 07951066A | 3x70+3x35/3  | 52,5                       | 2352                      | 4682                             | 4200                     | 2/0           |
| 07951067A | 3x95+3x50/3  | 56,3                       | 3216                      | 5701                             | 5700                     | 3/0           |
| 07951068A | 3x120+3x70/3   | 60,3                       | 4128                      | 7105                             | 7200                     | 4/0           |
| 07951069A | 3x150+3x70/3   | 65,1                       | 4992                      | 8128                             | 9000                     | 250 MCM       |
| 07951070A | 3x185+3x95/3   | 68,1                       | 6240                      | 9578                             | 11100                    | 350 MCM       |
| 07951071A | 3x240+3x120/3  | 75,9                       | 8064                      | 12365                            | 14400                    | 450 MCM       |

## Uo/U (Um) 8,7/15 (18) kV

| Part no.  | No. of cores<br>x cross-section<br>n x mm <sup>2</sup> | Outer-Ø<br>ca. mm<br>± 10% | Copper<br>weight<br>kg/km | Cable<br>weight approx.<br>kg/km | Tensile<br>strength<br>N | AWG<br>no. *) |
|-----------|--|----------------------------|---------------------------|----------------------------------|--------------------------|---------------|
| 07951563A | 3x25+3x25/3  | 46,2                       | 960                       | 2987                             | 1500                     | 4             |
| 07951564A | 3x35+3x25/3  | 48,9                       | 1248                      | 3530                             | 2100                     | 2             |
| 07951565A | 3x50+3x25/3  | 51,7                       | 1680                      | 4121                             | 3000                     | 1             |
| 07951566A | 3x70+3x35/3  | 55,8                       | 2352                      | 5080                             | 4200                     | 2/0           |
| 07951567A | 3x95+3x50/3  | 59,7                       | 3216                      | 6146                             | 5700                     | 3/0           |
| 07951568A | 3x120+3x70/3   | 64,7                       | 4128                      | 7590                             | 7200                     | 4/0           |
| 07951569A | 3x150+3x70/3   | 68,5                       | 4992                      | 8605                             | 9000                     | 250 MCM       |
| 07951570A | 3x185+3x95/3   | 72,9                       | 6240                      | 10305                            | 11100                    | 350 MCM       |
| 07951571A | 3x240+3x120/3  | 78,6                       | 8064                      | 12730                            | 14400                    | 450 MCM       |

## Uo/U (Um) 12/20 (24) kV

| Part no.  | No. of cores<br>x cross-section<br>n x mm <sup>2</sup> | Outer-Ø<br>ca. mm<br>± 10% | Copper<br>weight<br>kg/km | Cable<br>weight approx.<br>kg/km | Tensile<br>strength<br>N | AWG<br>no. *) |
|-----------|--|----------------------------|---------------------------|----------------------------------|--------------------------|---------------|
| 07952063A | 3x25+3x25/3  | 50,7                       | 960                       | 3465                             | 1500                     | 4             |
| 07952064A | 3x35+3x25/3  | 53,7                       | 1248                      | 4055                             | 2100                     | 2             |
| 07952065A | 3x50+3x25/3  | 56,6                       | 1680                      | 4670                             | 3000                     | 1             |
| 07952066A | 3x70+3x35/3  | 60,6                       | 2352                      | 5685                             | 4200                     | 2/0           |
| 07952067A | 3x95+3x50/3  | 64,9                       | 3216                      | 6804                             | 5700                     | 3/0           |
| 07952068A | 3x120+3x70/3   | 69,2                       | 4128                      | 8268                             | 7200                     | 4/0           |
| 07952069A | 3x150+3x70/3   | 74,5                       | 4992                      | 9573                             | 9000                     | 250 MCM       |
| 07952070A | 3x185+3x95/3   | 78,1                       | 6240                      | 11060                            | 11100                    | 350 MCM       |
| 07952071A | 3x240+3x120/3  | -                          | 8064                      | 13215                            | 14400                    | 450 MCM       |

## Uo/U (Um) 14/25 (30) kV

| Part no.  | No. of cores<br>x cross-section<br>n x mm <sup>2</sup> | Outer-Ø<br>ca. mm<br>± 10% | Copper<br>weight<br>kg/km | Cable<br>weight approx.<br>kg/km | Tensile<br>strength<br>N | AWG<br>no. *) |
|-----------|--|----------------------------|---------------------------|----------------------------------|--------------------------|---------------|
| 07952563A | 3x25+3x25/3  | 51,6                       | 960                       | 3375                             | 1500                     | 4             |
| 07952564A | 3x35+3x25/3  | 55,7                       | 1248                      | 4038                             | 2100                     | 2             |
| 07952565A | 3x50+3x25/3  | 59,4                       | 1680                      | 4810                             | 3000                     | 1             |
| 07952566A | 3x70+3x35/3  | 63,0                       | 2352                      | 5838                             | 4200                     | 2/0           |
| 07952567A | 3x95+3x50/3  | 68,6                       | 3216                      | 7290                             | 5700                     | 3/0           |
| 07952568A | 3x120+3x70/3   | 72,3                       | 4128                      | 8510                             | 7200                     | 4/0           |
| 07952569A | 3x150+3x70/3   | 77,7                       | 4992                      | 10075                            | 9000                     | 250 MCM       |
| 07952570A | 3x185+3x95/3   | 81,5                       | 6240                      | 11620                            | 11100                    | 350 MCM       |
| 07952571A | 3x240+3x120/3  | 89,4                       | 8064                      | 14675                            | 14400                    | 450 MCM       |

| Nominal<br>cross<br>section<br>mm <sup>2</sup> | Max resistance<br>D.C. |                   | Reactance at 50 Hz<br>for nominal voltage |                |                  |                 |
|--|------------------------|-------------------|---|----------------|------------------|-----------------|
|  | at 20°C<br>Ohm/km      | at 90°C<br>Ohm/km | 3,6/6<br>Ohm/km                           | 6/10<br>Ohm/km | 8,7/15<br>Ohm/km | 12/20<br>Ohm/km |
| 25   | 0,780                  | 0,995             | 0,107                                     | 0,111          | 0,117            | 0,125           |
| 35   | 0,554                  | 0,707             | 0,075                                     | 0,104          | 0,110            | 0,117           |
| 50   | 0,386                  | 0,493             | 0,075                                     | 0,100          | 0,105            | 0,112           |
| 70   | 0,272                  | 0,348             | 0,073                                     | 0,094          | 0,099            | 0,106           |
| 95   | 0,206                  | 0,264             | 0,072                                     | 0,091          | 0,095            | 0,101           |
| 120  | 0,161                  | 0,207             | 0,071                                     | 0,087          | 0,091            | 0,097           |
| 150  | 0,129                  | 0,167             | 0,071                                     | 0,085          | 0,088            | 0,093           |
| 185  | 0,106                  | 0,139             | 0,072                                     | 0,083          | 0,087            | 0,091           |
| 240  | 0,0801                 | 0,107             | 0,072                                     | 0,082          | 0,084            | 0,089           |

Correction factors for ambient temperature other than 30°C

| °C | 20  | 25   | 30   | 40   | 45   | 50   | 55   |
|----|-----|------|------|------|------|------|------|
| K  | 1,1 | 1,05 | 0,95 | 0,89 | 0,84 | 0,77 | 0,71 |