

CABLE REELS

FLEXIDRUM® MEDIUM (N)TSCGEWÖU

From 3,6/6 Kv to 12/20 Kv with antitwisting protection



New version!
Reduced weight
and diameter

FLEXIDRUM® MEDIUM (N)TSCGEWÖU



| | |
|--------------------------------|---|
| Conductor: | Flexible tinned copper conductor Cl. 5, acc to IEC 60228, DIN VDE 0295 |
| Conductor screen: | semi-conducting compound |
| Insulation: | rubber EPR type 3GI3 |
| Core screen: | semi-conducting compound |
| Earth Conductor: | flexible tinned copper conductor Cl. 5, acc to IEC 60228, DIN VDE 0295 |
| Earth conductor screen: | semi-conducting compound |
| Cores color: | Power: natural color with black semi-conducting compound Earth: black semi-conducting compound |
| Stranding: | phase units laid up with earth-conductors in interstices |
| Inner sheath: | rubber PCP type 5GM3 |
| Supporting screen: | anti-twisting protection of synthetic yarns |
| Outer sheath: | red (similar to RAL 3000), rubber PCP type 5GM5 |

- Features:**
- ▶ Power supply to mobile units with high risk of mechanical damage. It is designed to work with forced guidance systems with deflection on different floors and equipment with reel axis in direction of travel
 - ▶ Possible cold version -45°C

| Technical data: | |
|--|---|
| Nominal voltages: | Uo/U Kv 3,6/6 6/10 8,7/15 12/20 |
| Max oper. voltage: | Uo/U Kv 7,2 12 18 24 |
| Test voltage: | Kv 11 17 24 29 |
| Temperature range | |
| Fixed laying: | - 40°C up to + 80°C |
| Flexible application: | - 30°C up to + 60°C |
| Max permissible temperature on conductor: | + 90°C |
| Max permissible temperature on short circuit: | + 250°C |
| Min. Bending radius: | |
| Fixed laying: | 6 x d |
| On drums: | 12 x d |
| On deflect. pulley: | 15 x d |
| Free movement: | 12 x d |
| Minimum distance for change of direction: | 20 x d |
| Max speed: | |
| Operating: | up to 180 m/min. |
| Rewinding with drum car: | 100 m/min |
| Max torsion: | ± 25°/m |
| Resistance: | Self-extinguishing and flame retardant: acc. to DIN VDE 0482 part 265-2-1 / EN 50265-2-1 / IEC 60332-1-2 Oil resistance: DIN VDE 0473 part 811-2-1, IEC EN 60811-2-1 |



Uo/U (Um) 3,6/6(7,2) kV

| Part no. | No. of cores x cross-section n x mm² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | Tensile strength N | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|--------------------------|---------------|
| 02040MR1037M63 | 3x25+3x25/3 | 40 | 960 | 2450 | 1500 | 4 |
| 02040MR1037M64 | 3x35+3x25/3 | 42,7 | 1248 | 2960 | 2100 | 2 |
| 02040MR1037M65 | 3x50+3x25/3 | 45,5 | 1680 | 3495 | 3000 | 1 |
| 02040MR1037M66 | 3x70+3x35/3 | 49,6 | 2352 | 4450 | 4200 | 2/0 |
| 02040MR1037M67 | 3x95+3x50/3 | 54,7 | 3216 | 5545 | 5700 | 3/0 |
| 02040MR1037M68 | 3x120+3x70/3 | 59 | 4128 | 6920 | 7200 | 4/0 |
| 02040MR1037M69 | 3x150+3x70/3 | 64,7 | 4992 | 8180 | 9000 | 250 MCM |
| 02040MR1037M70 | 3x185+3x95/3 | 68,8 | 6240 | 9730 | 11100 | 350 MCM |
| 02040MR1037M71 | 3x240+3x120/3 | 75,9 | 8064 | 12445 | 14400 | 450 MCM |

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

| Part no. | No. of cores x cross-section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | Tensile strength N | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|--------------------------|---------------|
| 02040QR1037M63 | 3x25+3x25/3 | 40,9 | 960 | 2520 | 1500 | 4 |
| 02040QR1037M64 | 3x35+3x25/3 | 43,5 | 1248 | 3040 | 2100 | 2 |
| 02040QR1037M65 | 3x50+3x25/3 | 46,5 | 1680 | 3570 | 3000 | 1 |
| 02040QR1037M66 | 3x70+3x35/3 | 50,4 | 2352 | 4540 | 4200 | 2/0 |
| 02040QR1037M67 | 3x95+3x50/3 | 55,5 | 3216 | 5665 | 5700 | 3/0 |
| 02040QR1037M68 | 3x120+3x70/3 | 59,8 | 4128 | 7028 | 7200 | 4/0 |
| 02040QR1037M69 | 3x150+3x70/3 | 65,5 | 4992 | 8300 | 9000 | 250 MCM |
| 02040QR1037M70 | 3x185+3x95/3 | 69,4 | 6240 | 9805 | 11100 | 350 MCM |
| 02040QR1037M71 | 3x240+3x120/3 | 76,8 | 8064 | 12590 | 14400 | 450 MCM |

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

| Part no. | No. of cores x cross-section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | Tensile strength N | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|--------------------------|---------------|
| 02040SR1037M63 | 3x25+3x25/3 | 44,3 | 960 | 2820 | 1500 | 4 |
| 02040SR1037M64 | 3x35+3x25/3 | 47 | 1248 | 3370 | 2100 | 2 |
| 02040SR1037M65 | 3x50+3x25/3 | 49,8 | 1680 | 3935 | 3000 | 1 |
| 02040SR1037M66 | 3x70+3x35/3 | 55,1 | 2352 | 5070 | 4200 | 2/0 |
| 02040SR1037M67 | 3x95+3x50/3 | 59 | 3216 | 6085 | 5700 | 3/0 |
| 02040SR1037M68 | 3x120+3x70/3 | 64,9 | 4128 | 7715 | 7200 | 4/0 |
| 02040SR1037M69 | 3x150+3x70/3 | 69 | 4992 | 8790 | 9000 | 250 MCM |
| 02040SR1037M70 | 3x185+3x95/3 | 72 | 6240 | 10215 | 11100 | 350 MCM |
| 02040SR1037M71 | 3x240+3x120/3 | 79,4 | 8064 | 13010 | 14400 | 450 MCM |

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

| Part no. | No. of cores x cross-section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | Tensile strength N | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|--------------------------|---------------|
| 02040UR1037M63 | 3x25+3x25/3 | 49,5 | 960 | 3340 | 1500 | 4 |
| 02040UR1037M64 | 3x35+3x25/3 | 53,4 | 1248 | 4060 | 2100 | 2 |
| 02040UR1037M65 | 3x50+3x25/3 | 56,2 | 1680 | 4650 | 3000 | 1 |
| 02040UR1037M66 | 3x70+3x35/3 | 60,3 | 2352 | 5720 | 4200 | 2/0 |
| 02040UR1037M67 | 3x95+3x50/3 | 65,7 | 3216 | 7010 | 5700 | 3/0 |
| 02040UR1037M68 | 3x120+3x70/3 | 70 | 4128 | 8460 | 7200 | 4/0 |
| 02040UR1037M69 | 3x150+3x70/3 | 75,9 | 4992 | 9880 | 9000 | 250 MCM |
| 02040UR1037M70 | 3x185+3x95/3 | 79 | 6240 | 11360 | 11100 | 350 MCM |
| 02040UR1037M71 | 3x240+3x120/3 | 84,6 | 8064 | 13870 | 14400 | 450 MCM |

Other construction and sizes are available on request

| Nominal cross section mm ² | Max resistance | | Reactance att 50 Hz for nominal voltage | | | |
|--|---------------------------|---------------------------|--|----------------|------------------|-----------------|
| | D.C. at 20°C Ohm/km | A.C. at 90°C Ohm/km | 3,6/6 Ohm/km | 6/10 Ohm/km | 8,7/15 Ohm/km | 12/20 Ohm/km |
| 25 | 0,780 | 0,995 | 0,106 | 0,107 | 0,114 | 0,123 |
| 35 | 0,554 | 0,707 | 0,100 | 0,101 | 0,107 | 0,116 |
| 50 | 0,386 | 0,493 | 0,095 | 0,097 | 0,102 | 0,110 |
| 70 | 0,272 | 0,348 | 0,090 | 0,092 | 0,097 | 0,104 |
| 95 | 0,206 | 0,264 | 0,087 | 0,088 | 0,093 | 0,099 |
| 120 | 0,161 | 0,207 | 0,084 | 0,085 | 0,089 | 0,095 |
| 150 | 0,129 | 0,167 | 0,082 | 0,083 | 0,087 | 0,092 |
| 185 | 0,106 | 0,139 | 0,080 | 0,081 | 0,085 | 0,090 |
| 240 | 0,0801 | 0,107 | 0,079 | 0,079 | 0,083 | 0,087 |

| 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 |