# FLEXIMINING® MEDIUM F-(N)TSCGEWÖU

Optical fiber


## Construction:

| | |
|---|---|
| **Conductor:** | flexible red copper conductor Cl. 5, acc to IEC 60228, DIN VDE 0295 |
| **Inner semi-conductive layer:** | semi-conducting rubber compound |
| **Insulation:** | rubber EPR compound |
| **Outer semi-conductive layer:** | semi-conducting compound |
| **Earth conductor:** | flexible red copper conductor Cl. 5, acc to IEC 60228, DIN VDE 0295 |
| **Earth semi-conductive layer:** | semi-conducting compound |
| **Cores color:** | **Power:** natural color with black semi-contucting compound<br>**Earth:** black semi-contucting compound |
| **Optical fibers element:** | 6 fiber-optics laying in 6 free tubes (1 fibers per tube) |
| **Stranding:** | phase units laid up with earth-conductors and fiber optics in interstices |
| **Inner sheath:** | rubber EPR compound |
| **Outer sheath:** | red (similar to RAL 3000), rubber PCP compound |

## 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 acc. to:**
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

## Technical data:

| | |
|---|---|
| **Nominal voltage:** | Uo/U 3,6/6 kV up to 20/35 kV |
| **Max. permessible operating voltage in A.C. systems:** | UoU 4,2/7,2 kV up to 24,3/42 kV |
| **Max. permessible operating voltage in D.C. systems:** | UoU 5,4/10,8 kV up to 31,5/63 kV |
| **Test voltage:** | 11 kV up to 50 kV |
| **Temperature range:** | |
| *Fixed laying:* | -40°C up to +80°C |
| *Flexible appication:* | -25 °C up to +60°C |
| **Temperature on conductor** | |
| *in service:* | up to +90°C |
| *in short-circuit:* | up to +250°C |
| **Min. bending radius:** | acc. to DIN VDE 0298, Part 3 |
| **Tensile strenght:** | 20 N/mm$^2$ |
| **Max speed (main application):** | 100 m/min |
| **Max. torsion:** | ± 100°/m |

## Features:

**conveyor belts!**

UV, ozone, and moisture resistant

outdoor use

very flexible

acc. to DIN VDE 0250 part 813

GOST-R and WUG approvals on request

for SPEEDS and MINIMUM BENDING RADIUS see pages from 2 to 8 of catalogue

## Applications:

For the conveyor and materials handling equipment

# FLEXIMINING® MEDIUM F-(N)TSCGEWÖU

Optical fiber


3,6/6 (7,2) kV F-(N)TSCGEWÖU

| 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 strengh N | AWG no.*) |
|---|---|---|---|---|---|---|
| 06080MR1037M63 | 3x25+2x25/2+6LWL | 38,2 | 960 | 2635 | 1125 | 4 |
| 06081MR1037M63 | 3x25+2x50/2+6LWL | 42,1 | 1200 | 3070 | 1125 | 4 |
| 06080MR1037M64 | 3x35+2x25/2+6LWL | 42 | 1248 | 3055 | 1575 | 2 |
| 06081MR1037M64 | 3x35+2x50/2+6LWL | 43,8 | 1488 | 3418 | 1575 | 2 |
| 06080MR1037M65 | 3x50+2x25/2+6LWL | 45,3 | 1680 | 3503 | 2250 | 1 |
| 06081MR1037M65 | 3x50+2x50/2+6LWL | 45,3 | 1920 | 3630 | 2250 | 1 |
| 06080MR1037M66 | 3x70+2x35/2+6LWL | 48,5 | 2256 | 4340 | 3150 | 2/0 |
| 06081MR1037M66 | 3x70+2x50/2+6LWL | 51,7 | 2496 | 5270 | 3150 | 2/0 |
| 06080MR1037M67 | 3x95+2x50/2+6LWL | 54,2 | 3216 | 5540 | 4275 | 3/0 |
| 06080MR1037M68 | 3x120+2x70/2+6LWL | 57,9 | 4128 | 7032 | 5400 | 4/0 |
| 06080MR1037M69 | 3x150+2x70/2+6LWL | 63 | 4992 | 8010 | 6750 | 250MCM |
| 06080MR1037M70 | 3x185+2x95/2+6LWL | 66 | 6240 | 9320 | 8325 | 350MCM |
| 06080MR1037M71 | 3x240+2x120/2+6LWL | 74,1 | 8064 | 11930 | 10800 | 450MCM |
| 06080MR1037M72 | 3x300+2x150/2+6LWL | 79,3 | 10080 | 14215 | 13500 | 550MCM |

6/10 (12) kV F-(N)TSCGEWÖU

| 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 strengh N | AWG no.*) |
|---|---|---|---|---|---|---|
| 06080QR1037M63 | 3x25+2x25/2+6LWL | 42,9 | 960 | 2515 | 1125 | 4 |
| 06081QR1037M63 | 3x25+2x50/2+6LWL | 44,6 | 1200 | 2945 | 1125 | 4 |
| 06080QR1037M64 | 3x35+2x25/2+6LWL | 45,1 | 1248 | 2975 | 1575 | 2 |
| 06081QR1037M64 | 3x35+2x50/2+6LWL | 46,2 | 1488 | 3340 | 1575 | 2 |
| 06080QR1037M65 | 3x50+2x25/2+6LWL | 46,6 | 1680 | 3630 | 2250 | 1 |
| 06081QR1037M65 | 3x50+2x50/2+6LWL | 48,3 | 1920 | 3790 | 2250 | 1 |
| 06080QR1037M66 | 3x70+2x35/2+6LWL | 49,9 | 2256 | 4515 | 3150 | 2/0 |
| 06081QR1037M66 | 3x70+2x50/2+6LWL | 54,7 | 2496 | 4740 | 3150 | 2/0 |
| 06080QR1037M67 | 3x95+2x50/2+6LWL | 55,5 | 3216 | 5720 | 4275 | 3/0 |
| 06080QR1037M68 | 3x120+2x70/2+6LWL | 59,2 | 4128 | 6875 | 5400 | 4/0 |
| 06080QR1037M69 | 3x150+2x70/2+6LWL | 64,3 | 4992 | 8215 | 6750 | 250MCM |
| 06080QR1037M70 | 3x185+2x95/2+6LWL | 68,3 | 6240 | 9518 | 8325 | 350MCM |
| 06080QR1037M71 | 3x240+2x120/2+6LWL | 75,4 | 8064 | 12185 | 10800 | 450MCM |
| 06080QR1037M72 | 3x300+2x150/2+6LWL | 80,6 | 10080 | 14522 | 13500 | 550MCM |

8,7/15 (18) kV F-(N)TSCGEWÖU

| 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 strengh N | AWG no.*) |
|---|---|---|---|---|---|---|
| 06080SR1037M63 | 3x25+2x25/2+6LWL | 45,7 | 960 | 3066 | 1125 | 4 |
| 06081SR1037M63 | 3x25+2x50/2+6LWL | 46,9 | 1200 | 3339 | 1125 | 4 |
| 06080SR1037M64 | 3x35+2x25/2+6LWL | 46,8 | 1248 | 3317 | 1575 | 2 |
| 06081SR1037M64 | 3x35+2x50/2+6LWL | 48,5 | 1488 | 3718 | 1575 | 2 |
| 06080SR1037M65 | 3x50+2x25/2+6LWL | 51,4 | 1680 | 4172 | 2250 | 1 |
| 06081SR1037M65 | 3x50+2x50/2+6LWL | 53,2 | 1920 | 4595 | 2250 | 1 |
| 06080SR1037M66 | 3x70+2x35/2+6LWL | 54,7 | 2256 | 5074 | 3150 | 2/0 |
| 06081SR1037M66 | 3x70+2x50/2+6LWL | 56 | 2496 | 5651 | 3150 | 2/0 |
| 06080SR1037M67 | 3x95+2x50/2+6LWL | 59 | 3216 | 6170 | 4275 | 3/0 |
| 06080SR1037M68 | 3x120+2x70/2+6LWL | 64,1 | 4128 | 7515 | 5400 | 4/0 |
| 06080SR1037M69 | 3x150+2x70/2+6LWL | 67,7 | 4992 | 8685 | 6750 | 250 MCM |
| 06080SR1037M70 | 3x185+2x95/2+6LWL | 70,7 | 6240 | 10022 | 8325 | 350 MCM |
| 06080SR1037M71 | 3x240+2x120/2+6LWL | 78,8 | 8064 | 12741 | 10800 | 450 MCM |
| 06080SR1037M72 | 3x300+2x150/2+6LWL | 84 | 10080 | 15068 | 13500 | 550 MCM |

# FLEXIMINING® MEDIUM F-(N)TSCGEWÖU

Optical fiber


12/20 (24) kV F-(N)TSCGEWÖU

| 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 strengh N | AWG no.*) |
|---|---|---|---|---|---|---|
| 06080UR1037M63 | 3x25+2x25/2+6LWL | 47 | 960 | 3148 | 1125 | 4 |
| 06081UR1037M63 | 3x25+2x50/2+6LWL | 48,7 | 1200 | 3518 | 1125 | 4 |
| 06080UR1037M64 | 3x35+2x25/2+6LWL | 49,8 | 1248 | 3630 | 1575 | 2 |
| 06081UR1037M64 | 3x35+2x50/2+6LWL | 53 | 1488 | 4235 | 1575 | 2 |
| 06080UR1037M65 | 3x50+2x25/2+6LWL | 54,5 | 1680 | 4540 | 2250 | 1 |
| 06081UR1037M65 | 3x50+2x50/2+6LWL | 54,5 | 1920 | 4700 | 2250 | 1 |
| 06080UR1037M66 | 3x70+2x35/2+6LWL | 57,7 | 2256 | 5468 | 3150 | 2/0 |
| 06081UR1037M66 | 3x70+2x50/2+6LWL | 60 | 2496 | 6051 | 3150 | 2/0 |
| 06080UR1037M67 | 3x95+2x50/2+6LWL | 63,4 | 3216 | 6780 | 4275 | 3/0 |
| 06080UR1037M68 | 3x120+2x70/2+6LWL | 67,1 | 4128 | 7946 | 5400 | 4/0 |
| 06080UR1037M69 | 3x150+2x70/2+6LWL | 70,7 | 4992 | 9125 | 6750 | 250 MCM |
| 06080UR1037M70 | 3x185+2x95/2+6LWL | 75,2 | 6240 | 10756 | 8325 | 350 MCM |
| 06080UR1037M71 | 3x240+2x120/2+6LWL | 81,8 | 8064 | 13271 | 10800 | 450 MCM |
| 06080UR1037M72 | 3x300+2x150/2+6LWL | 88,3 | 10080 | 16036 | 13500 | 550 MCM |

14/25 (30) kV F-(N)TSCGEWÖU

| 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 strengh N | AWG no.*) |
|---|---|---|---|---|---|---|
| 06080WR1037M63 | 3x25+2x25/2+6LWL | 52,3 | 960 | 3740 | 1125 | 4 |
| 06081WR1037M63 | 3x25+2x50/2+6LWL | 52,3 | 1200 | 3900 | 1125 | 4 |
| 06080WR1037M64 | 3x35+2x25/2+6LWL | 55,1 | 1248 | 4270 | 1575 | 2 |
| 06081WR1037M64 | 3x35+2x50/2+6LWL | 55,1 | 1488 | 4440 | 1575 | 2 |
| 06080WR1037M65 | 3x50+2x25/2+6LWL | 58,3 | 1680 | 5000 | 2250 | 1 |
| 06081WR1037M65 | 3x50+2x50/2+6LWL | 58,3 | 1920 | 5160 | 2250 | 1 |
| 06080WR1037M66 | 3x70+2x35/2+6LWL | 63 | 2256 | 6190 | 3150 | 2/0 |
| 06081WR1037M66 | 3x70+2x50/2+6LWL | 63 | 2496 | 6390 | 3150 | 2/0 |
| 06080WR1037M67 | 3x95+2x50/2+6LWL | 67,3 | 3216 | 7340 | 4275 | 3/0 |
| 06080WR1037M68 | 3x120+2x70/2+6LWL | 71 | 4128 | 8550 | 5400 | 4/0 |
| 06080WR1037M69 | 3x150+2x70/2+6LWL | 76 | 4992 | 10020 | 6750 | 250MCM |
| 06080WR1037M70 | 3x185+2x95/2+6LWL | 79 | 6240 | 11410 | 8325 | 350MCM |
| 06080WR1037M71 | 3x240+2x120/2+6LWL | 87,5 | 8064 | 14380 | 10800 | 450MCM |
| 06080WR1037M72 | 3x300+2x150/2+6LWL | 92,7 | 10080 | 16820 | 13500 | 550MCM |

18/30 (36) kV F-(N)TSCGEWÖU

| 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 strengh N | AWG no.*) |
|---|---|---|---|---|---|---|
| 06080XR1037M63 | 3x25+2x25/2+6LWL | 55,7 | 960 | 4140 | 1125 | 4 |
| 06081XR1037M63 | 3x25+2x50/2+6LWL | 55,7 | 1200 | 4310 | 1125 | 4 |
| 06080XR1037M64 | 3x35+2x25/2+6LWL | 58,6 | 1248 | 4720 | 1575 | 2 |
| 06081XR1037M64 | 3x35+2x50/2+6LWL | 58,6 | 1488 | 4880 | 1575 | 2 |
| 06080XR1037M65 | 3x50+2x25/2+6LWL | 63,2 | 1680 | 5680 | 2250 | 1 |
| 06081XR1037M65 | 3x50+2x50/2+6LWL | 63,2 | 1920 | 5840 | 2250 | 1 |
| 06080XR1037M66 | 3x70+2x35/2+6LWL | 66,6 | 2256 | 6670 | 3150 | 2/0 |
| 06081XR1037M66 | 3x70+2x50/2+6LWL | 66,6 | 2496 | 6870 | 3150 | 2/0 |
| 06080XR1037M67 | 3x95+2x50/2+6LWL | 70,7 | 3216 | 7860 | 4275 | 3/0 |
| 06080XR1037M68 | 3x120+2x70/2+6LWL | 75,8 | 4128 | 9350 | 5400 | 4/0 |
| 06080XR1037M69 | 3x150+2x70/2+6LWL | 79,5 | 4992 | 10630 | 6750 | 250 MCM |
| 06080XR1037M70 | 3x185+2x95/2+6LWL | 82,5 | 6240 | 12040 | 8325 | 350 MCM |
| 06080XR1037M71 | 3x240+2x120/2+6LWL | 91 | 8064 | 15070 | 10800 | 450 MCM |
| 06080XR1037M72 | 3x300+2x150/2+6LWL | 97,2 | 10080 | 17780 | 13500 | 550 MCM |

20/35 kV (42) 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 strenght N | AWG no.*) |
|---|---|---|---|---|---|---|
| 06080YR1037M66 | 3x70+2x35/2+6LWL | 82 | 2352 | 9260 | 3150 | 2/0 |

Other dimensions and colors available on request.