

Ship's Power Cables MGCH 0,6/1 kV (MGC*)

halogen-free, according to DIN 89158/98



Technical data

- As per DIN 89160 edition 1998 and IEC 600292-353
- **Temperature range**
max. +85°C conductor temperature
- Min. **installation temperature** -10°C
- **Nominal voltage** U₀/U 0,6/1 kV
- **Bending radius** approx. 6x cable Ø
- **Approved by**
Germanischer Lloyd, Lloyd's Register of Shipping, American Bureau of Shipping, Det Norske Veritas, Bureau Veritas, Verband Deutscher Elektrotechniker, Russian Maritime Register of Shipping and Registro Italiano Navale are in preparation
- Flame retardant according to SOLAS definition (according to IEC 60332-3 category A)

Cable structure

- Stranded, bare copper conductors to DIN VDE 0295 cl. 2 and IEC 60228 cl. 2
- HEPR core insulation (Hard grade EPR)
- Cores stranded in layers with optimal lay-length
- Overall filled inner sheath, covered by filling compound
- Separator-foil
- Bare copper braided screen
- Separator-foil
- Outer sheath, Polyolefin basis-compound
- sheath colour
black up to 5 cores
grey 7 and more cores

Colour code¹⁾

- 1 core: natural colour
- 2 cores: black/blue
- 3 cores: black/blue/brown
- 4 cores: black/blue/brown/black
- 5 cores: black/blue/brown/black/black
- 6 cores and more: all cores natural coloured, printed with numbers, starting in center with number 1

Application

For stationary installation beneath the first metal deck level.

| Part No. | No. cores x cross-sec. mm ² | Outer Ø ca. mm | Cop. weight kg/km | Weight ca.kg/km | AWG-no.*) |
|----------|--|----------------|-------------------|-----------------|-----------|
| 59000 | 1x1,5 | 6,5 | 48 | 85 | 16 |
| 59001 | 1x2,5 | 7,0 | 60 | 90 | 14 |
| 59002 | 1x4 | 7,5 | 81 | 110 | 12 |
| 59003 | 1x6 | 8,5 | 104 | 140 | 10 |
| 59004 | 1x10 | 9,5 | 149 | 190 | 8 |
| 59005 | 1x16 | 10,0 | 214 | 270 | 6 |
| 59006 | 1x25 | 12,0 | 311 | 380 | 4 |
| 59007 | 1x35 | 13,0 | 416 | 480 | 2 |
| 59008 | 1x50 | 15,0 | 572 | 660 | 1 |
| 59009 | 1x70 | 17,0 | 779 | 900 | 2/0 |
| 59010 | 1x95 | 19,0 | 1034 | 1170 | 3/0 |
| 59011 | 1x120 | 21,0 | 1316 | 1410 | 4/0 |
| 59012 | 1x150 | 23,0 | 1615 | 1750 | 300 MCM |
| 59013 | 1x185 | 25,5 | 1968 | 2160 | 350 MCM |
| 59014 | 1x240 | 28,5 | 2506 | 2770 | 500 MCM |
| 59015 | 1x300 | 31,0 | 3186 | 3440 | 600 MCM |
| 59016 | 2x1,5 | 11,0 | 105 | 180 | 16 |
| 59017 | 2x2,5 | 12,0 | 132 | 220 | 14 |
| 59018 | 2x4 | 13,0 | 170 | 280 | 12 |
| 59019 | 2x6 | 14,5 | 217 | 380 | 10 |
| 59020 | 2x10 | 17,0 | 307 | 500 | 8 |
| 59021 | 2x16 | 19,5 | 471 | 710 | 6 |
| 59022 | 2x25 | 22,5 | 670 | 1020 | 4 |
| 59023 | 3x1,5 | 12,0 | 125 | 210 | 16 |
| 59024 | 3x2,5 | 12,5 | 161 | 260 | 14 |
| 59025 | 3x4 | 13,5 | 215 | 330 | 12 |
| 59026 | 3x6 | 15,5 | 282 | 450 | 10 |

* Note

AWG sizes are approximate equivalent values.
The actual cross-section is in mm² – see page T 15.

| Part No. | No. cores x cross-sec. mm ² | Outer Ø ca. mm | Cop. weight kg/km | Weight ca.kg/km | AWG-no.*) |
|----------|--|----------------|-------------------|-----------------|-----------|
| 59027 | 3x10 | 17,5 | 417 | 620 | 8 |
| 59030 | 3x16 | 19,5 | 636 | 870 | 6 |
| 59031 | 3x25 | 23,5 | 924 | 1280 | 4 |
| 59032 | 3x35 | 26,0 | 1233 | 1680 | 2 |
| 59033 | 3x50 | 29,0 | 1703 | 2180 | 1 |
| 59034 | 3x70 | 34,5 | 2413 | 3020 | 2/0 |
| 59035 | 3x95 | 39,0 | 3192 | 4050 | 3/0 |
| 59036 | 3x120 | 43,0 | 3975 | 5000 | 4/0 |
| 59037 | 4x1,5 | 12,5 | 147 | 240 | 16 |
| 59038 | 4x2,5 | 13,5 | 190 | 300 | 14 |
| 59039 | 4x4 | 15,0 | 284 | 430 | 12 |
| 59040 | 4x6 | 16,5 | 371 | 540 | 10 |
| 59041 | 4x10 | 19,0 | 545 | 780 | 8 |
| 59042 | 4x16 | 21,0 | 796 | 1090 | 6 |
| 59043 | 4x25 | 26,0 | 1170 | 1630 | 4 |
| 59044 | 4x35 | 28,5 | 1578 | 2120 | 2 |
| 59045 | 4x50 | 32,5 | 2278 | 2750 | 1 |
| 59046 | 4x70 | 38,5 | 3090 | 3900 | 2/0 |
| 59047 | 4x95 | 44,0 | 4110 | 5160 | 3/0 |
| 59048 | 5x1,5 | 13,5 | 171 | 290 | 16 |
| 59049 | 7x1,5 | 14,0 | 209 | 380 | 16 |
| 59050 | 10x1,5 | 16,5 | 318 | 450 | 16 |
| 59051 | 12x1,5 | 18,0 | 353 | 500 | 16 |
| 59052 | 14x1,5 | 18,5 | 392 | 560 | 16 |
| 59053 | 16x1,5 | 19,5 | 432 | 630 | 16 |
| 59054 | 19x1,5 | 20,5 | 486 | 710 | 16 |
| 59055 | 24x1,5 | 23,5 | 601 | 880 | 16 |

¹⁾ Halogenated type MCG will be substituted according to DIN, edition 1998 through the halogen-free type MGCH.