# NEO-Flat-C (MCHÖU) screened, EMC-preferred type


## Technical data

- Special-Neoprene-flat cable, screened, adapted to DIN VDE 0250 part 809
- **Temperature range**
  flexing -30°C bis +80°C
  fixed installation -40°C to +80°C
- **Nominal voltage** $U_0$/U 300/500 V
- **Test voltage** 3000 V
- **Minimum bending radius**
  15x cable thickness
- **Radiation resistance**
  up to 50x10⁶ cJ/kg (up to 50 Mrad)

## Cable structure

- Copper-conductor bare or tinned to DIN VDE 0295 cl.6, extra fine-wire, BS 6360 cl.6, IEC 60228 cl.6
- Core insulation of special rubber
- Core identification to DIN VDE 0293
  - up to 5 cores coloured
  - from 7 cores, black with continuous white numbering
- GN-YE conductor
- Cores screened individually
- Cores laying parallel
- Copper screened braiding, approx. 85% coverage
- Outer sheath of special Neoprene
- Outer sheath coulor black (RAL 9005)

## Properties

- Outer sheath cold resistant
- Extensively oil resistant
- Extremely small bending radius
- High flexibility
- Minimum waste of space
- Packeting possibility
- The high degree of screening density assures disturbance-free transmission of all signal and impulses
- Outdoor application

**Tests**

- **Behaviour in fire**
  to DIN VDE 0482-332-1-2
  DIN EN 60332-2-1, IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)

## Note

- G = with green-yellow conductor
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².

J

## Application

Neoprene screened flat cables are used mainly as trailing cable for crane installations, floor conveyer systems and shelf control units. These cables are also available for export with UL-approval on request.

**Installation notes**

Cables reels with flat cables must be transported in standing position on the flange. A bending flexibility can be achieved on a plane surface. For this purpose, the corresponding fitting instructions should be followed.

- Put the cable trolly on the guiding rail or upon carrier beam and push them together at the starting point. The distance between the bedding surface of two cable trollys must be wider than the double thickness of a cable-packet.
- During the packeting performance, it must be started with the smaller cross-section which lays on the bedding surface and will be builded successively so that the biggest cross-section is laying on the top.
- Further, be careful of a symmetrical load distribution.
- In case of multicore flat cables with small cross-section, smaller than 2,5 mm², is very critical due to its low tensile stress. In such case, you should add 10% reserve wire for calculation.

**EMC** = Electromagnetic compatibillity

To optimize the EMC features we recommend a large round contact of the copper braiding on both ends.

CE= The product is conformed with the EC Low-Voltage Directive 2006/95/EC.

| Part no. | No.cores x cross-sec. mm² | Outer dimension approx. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. |
|---|---|---|---|---|---|
| 28100 | 8 G 1,5 | 7,9 x 42,0 | 231,0 | 520,0 | 16 |
| 28101 | 12 G 1,5 | 7,9 x 61,0 | 346,0 | 790,0 | 16 |
| 28102 | 4 G 2,5 | 8,5 x 25,5 | 164,0 | 420,0 | 14 |

| Part no. | No.cores x cross-sec. mm² | Outer dimension approx. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. |
|---|---|---|---|---|---|
| 28103 | 6 G 2,5 | 8,5 x 34,5 | 247,0 | 540,0 | 14 |
| 28104 | 12 G 2,5 | 8,9 x 68,0 | 494,0 | 1000,0 | 14 |
| 28302 | 4 G 25 | 16,0 x 51,0 | 1116,0 | 1650,0 | 4 |

Dimensions and specifications may be changed without prior notice. (RJ01)

Suitable accessories can be found in Chapter X.

- Cable Gland - STK-F
- Cable Gland - STS-F