F-C-PURÖ-JZ tear and coolant resistant, Cu-screened, without inner sheath,

increased oil resistant. EMC-preferred type, meter marking





HELUKABEL F-C-PURÖ-JZ 3G1,5 QMM / 21281 300/500 V 001041891

CE



Technical data

- Special polyurethane-sheathed multicore cable on the basis of DIN VDE 0245 part 201 up to 1,5 mm², on the basis of DIN VDE 0245 part 102 as of 2,5 mm²
- Temperature range flexing -5 °C to +80 °C fixed installation -40 °C to +80 °C
- Nominal voltage U₀/U 300/500 V
- Test voltage 3000 V
- Breakdown voltage min. 6000 V
- Minimum bending radius flexing 10x cable Ø fixed installation 5x cable Ø
- Radiation resistance up to 100x106 cJ/kg (up to 100 Mrad)
- Coupling resistance max. 250 Ohm/km

Cable structure

- Plain copper conductor, finely stranded, according to DIN VDE 0295 cl. 5, BS 6360 cl. 5 and IEC 60228 cl. 5
- Oil resistant PVC core insulation TI2, in adapted to DIN VDE 0281 part 1, for better sliding abilities
- Cores black with sequential numbering imprinted in white according to DIN VDE 0293
- Green-yellow earth core in the outer layer (3 cores and above)
- Cores stranded in layers with optimal lay-length
- Separating foil
- Braided screen of tinned Cu wires, coverage approx. 85%
- Fleece separator, ensure good dismantling ability
- Special full-polyurethane outer jacket TMPU, to DIN EN 50363-10-2
- Sheath colour grey (RAL 7001)
- Outer jacket also available in other colours
- with meter marking, change-over in 2011

Properties

Resistant to

UV-Radiation
Oxygene
Ozone and hydrolysis
Microbes

- self-extinguishing and flame retardant according to VDE 0482-332-1-2, DIN EN 60332-1-2/ IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

Note

- G = with green-yellow earth core;
 x = without green-yellow earth core (OZ).
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
- unscreened analogue type:

PURÖ-JZ, see page A 44

Application

Extremely robust control cable characterised by high abrasion and notch resistance properties. Used for critical areas in such applications as machinery, tooling and plant construction, in rolling mills and steel works because of the resistance to mineral oils and to coolant emulsions in particular. Rapid and safe installation assured by the good flexibility of the cable. Suitable for outdoor installation.

An interference-free transmission of signals and pulses is assured by the high screening density. The ideal interference-protected control cable for such applications as given above.

EMC = Electromagnetic compatibility

et no. No coroc v. Outor Ø. Con

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

C ← The product is conformed with the EC Low-Voltage Directive 2006/95/EG.

| Part IIO. | cross-sec. | approx. mm | weight kg/km | approx. kg / km | AWG-NO. |
|-----------|------------|------------|-----------------|--------------------|---------|
| 21200 | 2 x 0,5 | 5,7 | 35,0 | 44,0 | 20 |
| 21201 | 3 G 0,5 | 5,9 | 42,0 | 56,0 | 20 |
| 21202 | 4 G 0,5 | 6,4 | 47,0 | 60,0 | 20 |
| 21203 | 5 G 0,5 | 6,9 | 56,0 | 75,0 | 20 |
| 21205 | 7 G 0,5 | 7,6 | 69,0 | 97,0 | 20 |
| 21207 | 10 G 0,5 | 9,6 | 94,0 | 133,0 | 20 |
| 21208 | 12 G 0,5 | 9,7 | 108,0 | 158,0 | 20 |
| 21209 | 14 G 0,5 | 10,2 | 116,0 | 190,0 | 20 |
| 21211 | 18 G 0,5 | 11,5 | 145,0 | 218,0 | 20 |
| 21213 | 21 G 0,5 | 12,7 | 188,0 | 252,0 | 20 |
| 21215 | 25 G 0,5 | 13,6 | 240,0 | 315,0 | 20 |
| 21217 | 30 G 0,5 | 14,4 | 295,0 | 362,0 | 20 |
| 21220 | 36 G 0,5 | 15,6 | 318,0 | 447,0 | 20 |
| 21221 | 40 G 0,5 | 16,9 | 343,0 | 475,0 | 20 |
| 21224 | 50 G 0,5 | 18,5 | 406,0 | 572,0 | 20 |

| Part no. | No.cores x cross-sec. mm ² | Outer Ø approx. mm | Cop. weight kg/km | Weight approx. kg/km | AWG-No. |
|----------|---|-----------------------|-------------------------|----------------------------|---------|
| 21227 | 2 x 0,75 | 6,1 | 40,0 | 60,0 | 18 |
| 21228 | 3 G 0,75 | 6,3 | 52,0 | 67,0 | 18 |
| 21229 | 4 G 0,75 | 6,8 | 60,0 | 76,0 | 18 |
| 21230 | 5 G 0,75 | 7,4 | 71,0 | 92,0 | 18 |
| 21232 | 7 G 0,75 | 8,2 | 91,0 | 131,0 | 18 |
| 21234 | 10 G 0,75 | 10,3 | 137,0 | 180,0 | 18 |
| 21235 | 12 G 0,75 | 10,5 | 142,0 | 204,0 | 18 |
| 21236 | 14 G 0,75 | 11,3 | 180,0 | 226,0 | 18 |
| 21238 | 18 G 0,75 | 12,7 | 212,0 | 290,0 | 18 |
| 21240 | 21 G 0,75 | 14,0 | 246,0 | 376,0 | 18 |
| 21242 | 25 G 0,75 | 15,0 | 281,0 | 413,0 | 18 |
| 21245 | 32 G 0,75 | 16,7 | 342,0 | 485,0 | 18 |
| 21249 | 41 G 0,75 | 18,6 | 400,0 | 611,0 | 18 |
| 21251 | 50 G 0,75 | 20,3 | 461,0 | 775,0 | 18 |

Continuation •



F-C-PURÖ-JZ tear and coolant resistant, Cu-screened, without inner sheath, increased oil resistant, EMC-preferred type, meter marking



| Part no. | No.cores x cross-sec. mm² | Outer Ø approx. mm | kg / km | Weight approx. kg / km | AWG-No. | Part no. | No.cores x cross-sec. mm² | Outer Ø approx. mm | kg / km | Weight approx. kg / km | AWG-No. |
|----------|---------------------------------|-----------------------|---------|------------------------------|---------|----------|---------------------------------|-----------------------|---------|------------------------------|---------|
| 21253 | 2 x 1 | 6,4 | 50,0 | 66,0 | 17 | 21290 | 14 G 1,5 | 13,5 | 283,0 | 384,0 | 16 |
| 21254 | 3 G 1 | 6,7 | 60,0 | 82,0 | 17 | 21291 | 16 G 1,5 | 14,4 | 315,0 | 425,0 | 16 |
| 21255 | 4 G 1 | 7,2 | 71,0 | 100,0 | 17 | 21292 | 18 G 1,5 | 15,5 | 374,0 | 480,0 | 16 |
| 21256 | 5 G 1 | 8,0 | 88,0 | 128,0 | 17 | 21295 | 21 G 1,5 | 16,4 | 425,0 | 563,0 | 16 |
| 21257 | 6 G 1 | 8,7 | 97,0 | 145,0 | 17 | 21296 | 25 G 1,5 | 18,5 | 526,0 | 704,0 | 16 |
| 21258 | 7 G 1 | 8,7 | 111,0 | 157,0 | 17 | 21297 | 34 G 1,5 | 21,2 | 629,0 | 870,0 | 16 |
| 21259 | 8 G 1 | 10,1 | 127,0 | 198,0 | 17 | 21298 | 42 G 1,5 | 21,9 | 819,0 | 1040,0 | 16 |
| 21261 | 10 G 1 | 11,2 | 150,0 | 230,0 | 17 | 21299 | 50 G 1,5 | 25,0 | 885,0 | 1292,0 | 16 |
| 21262 | 12 G 1 | 11,4 | 184,0 | 262,0 | 17 | 21300 | 2 x 2,5 | 8,4 | 96,0 | 131,0 | 14 |
| 21263 | 14 G 1 | 12,0 | 196,0 | 302,0 | 17 | 21301 | 3 G 2,5 | 8,8 | 144,0 | 168,0 | 14 |
| 21264 | 16 G 1 | 12,8 | 209,0 | 345,0 | 17 | 21302 | 4 G 2,5 | 9,8 | 148,0 | 194,0 | 14 |
| 21265 | 18 G 1 | 13,5 | 260,0 | 381,0 | 17 | 21303 | 5 G 2,5 | 10,8 | 181,0 | 222,0 | 14 |
| 21267 | 21 G 1 | 14,3 | 319,0 | 480,0 | 17 | 21304 | 7 G 2,5 | 11,9 | 255,0 | 345,0 | 14 |
| 21268 | 25 G 1 | 16,2 | 349,0 | 535,0 | 17 | 21305 | 10 G 2,5 | 15,2 | 340,0 | 462,0 | 14 |
| 21273 | 34 G 1 | 18,5 | 486,0 | 740,0 | 17 | 21306 | 12 G 2,5 | 15,8 | 441,0 | 570,0 | 14 |
| 21276 | 41 G 1 | 19,9 | 531,0 | 855,0 | 17 | 21313 | 2 x 4 | 10,0 | 120,0 | 187,0 | 12 |
| 21278 | 50 G 1 | 21,8 | 625,0 | 1027,0 | 17 | 21314 | 3 G 4 | 10,7 | 174,0 | 243,0 | 12 |
| 21280 | 2 x 1,5 | 7,0 | 63,0 | 87,0 | 16 | 21315 | 4 G 4 | 11,6 | 230,0 | 310,0 | 12 |
| 21281 | 3 G 1,5 | 7,4 | 80,0 | 102,0 | 16 | 21316 | 5 G 4 | 12,9 | 273,0 | 386,0 | 12 |
| 21282 | 4 G 1,5 | 8,1 | 97,0 | 127,0 | 16 | 21317 | 7 G 4 | 14,2 | 316,0 | 498,0 | 12 |
| 21283 | 5 G 1,5 | 9,0 | 119,0 | 159,0 | 16 | 21319 | 3 G 6 | 12,6 | 240,0 | 333,0 | 10 |
| 21285 | 7 G 1,5 | 9,8 | 147,0 | 207,0 | 16 | 21320 | 4 G 6 | 13,8 | 305,0 | 414,0 | 10 |
| 21286 | 8 G 1,5 | 10,5 | 170,0 | 245,0 | 16 | 21321 | 5 G 6 | 15,3 | 439,0 | 510,0 | 10 |
| 21287 | 10 G 1,5 | 12,6 | 193,0 | 313,0 | 16 | 21322 | 7 G 6 | 16,9 | 505,0 | 673,0 | 10 |
| 21288 | 12 G 1,5 | 12,8 | 267,0 | 340,0 | 16 | | | | | | |

Dimensions and specifications may be changed without prior notice. (RA02)

