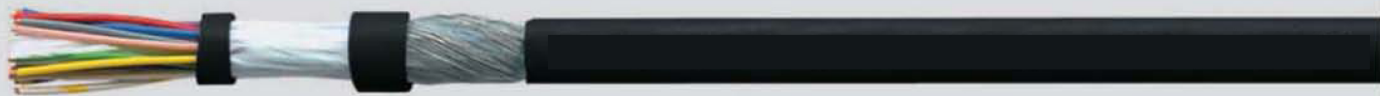


ROBOFLEX 2001 / 2001-C Robot cables screened, EMC-preferred type



Technical data

- Special TPE-E/PUR adapted to DIN VDE 0245, 0250, 0282
- **Temperature range**
flexing -30°C to +80°C
fixed installation -40°C to +80°C
- **Nominal voltage**
up to 0,34 mm² 350 V (operating peak voltage)
above 0,5 mm² U₀/U 300/500 V
- **Test voltage**
up to 0,34 mm² 1,5 kV, 5 minutes
above 0,5 mm² 3,0 kV, 5 minutes
- **Mutual capacitance**
core/core approx. 100 nF/km
core/screen approx. 120 nF/km
- **Inductance approx.**
0,69 mH/km
- **Minimum bending radius**
7,5x cabel Ø

Cable structure

- Bare copper, stranded to DIN VDE 0295 and IEC 60228, fine or extra fine wires, cl. 5 or cl. 6, BS 6360 cl. 5 or 6, up to 0,34 mm² cl. 5, above 0,5 mm² cl. 6
- Special core insulation, TPE
- Cores coded up to 0,34 mm² according DIN 47100
above 0,5 mm² black cores with continuous white numbering 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
- Special separating foil
- Cable structure C-type, cu-screen of helically wound, approx. 85-95% coverage
- Outer sheath, special polyurethane
- Colour black (RAL 9005)

Properties

- High flexibility at low temperatures
- High abrasion resistance
- Loadable under torsion stress $\pm 360^\circ$ /meter
- Low adhesion
- **Resistant to**
Microbes and rotting
Oxygene and ozone
Vibrations
UV-radiation
Oil and fats resistant
- PUR-jacket flame retardant according to DIN VDE 0482 part 265-2-1/ EN 50265-2-1/ IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)

Application

These special robotic control and signal cables specially designed for torsion and bending stresses in robots and connecting handling tools.

EMC = Electromagnetic compatibility

To optimise 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 73/23/EEC and 93/68/EEC.

ROBOFLEX 2001

| Part No. | No. cores x cross-sec. mm ² | Outer ø ca. mm | Cop. weight kg / km | Weight ca. kg / km | AWG-No. |
|----------|--|----------------|---------------------|--------------------|---------|
| 25459 | 7 G 0,25 | 5,8 | 16,8 | 48,0 | 24 |
| 25439 | 12 G 0,25 | 7,6 | 28,8 | 71,0 | 24 |
| 25460 | 25 G 0,25 | 10,6 | 60,0 | 143,0 | 24 |
| 25461 | 2 G 0,34 | 4,0 | 6,6 | 28,0 | 22 |
| 25462 | 3 G 0,34 | 4,0 | 9,8 | 34,0 | 22 |
| 25440 | 7 G 0,34 | 5,7 | 22,8 | 51,0 | 22 |
| 25449 | 12 G 0,34 | 8,3 | 39,2 | 69,0 | 22 |
| 25463 | 12 G 0,5 | 10,4 | 57,8 | 90,0 | 20 |
| 25519 | 16 G 0,5 | 11,6 | 76,8 | 277,0 | 20 |
| 25464 | 18 G 0,5 | 12,7 | 86,4 | 121,0 | 20 |
| 25465 | 25 G 0,5 | 14,2 | 120,0 | 256,0 | 20 |
| 25466 | 4 G 0,75 | 6,0 | 28,8 | 63,0 | 18 |
| 25450 | 7 G 0,75 | 7,9 | 50,4 | 96,0 | 18 |
| 25467 | 12 G 0,75 | 11,5 | 84,4 | 171,0 | 18 |
| 25468 | 14 G 0,75 | 12,8 | 100,8 | 200,0 | 18 |
| 25469 | 2 G 1 | 6,0 | 19,2 | 48,0 | 17 |
| 25470 | 3 G 1 | 6,0 | 29,0 | 60,0 | 17 |
| 25471 | 4 G 1 | 6,3 | 38,4 | 78,0 | 17 |
| 25472 | 7 G 1 | 8,5 | 67,2 | 131,0 | 17 |
| 25473 | 12 G 1 | 12,5 | 115,2 | 216,0 | 17 |
| 25474 | 18 G 1 | 15,4 | 172,8 | 306,0 | 17 |
| 25475 | 25 G 1 | 17,4 | 240,0 | 432,0 | 17 |
| 25476 | 34 G 1 | 21,3 | 326,4 | 569,0 | 17 |
| 25477 | 41 G 1 | 23,2 | 393,6 | 694,0 | 17 |
| 25520 | 3 G 1,5 | 6,9 | 43,2 | 94,0 | 16 |
| 25529 | 4 G 1,5 | 7,9 | 57,6 | 107,0 | 16 |
| 25509 | 8 G 1,5 | 11,1 | 115,2 | 292,0 | 16 |
| 25478 | 12 G 1,5 | 15,5 | 172,8 | 356,0 | 16 |
| 25479 | 18 G 1,5 | 19,3 | 259,2 | 445,0 | 16 |
| 25480 | 25 G 1,5 | 21,8 | 360,0 | 636,0 | 16 |
| 25481 | 3 G 2,5 | 8,4 | 72,0 | 156,0 | 14 |
| 25482 | 4 G 2,5 | 9,1 | 96,0 | 170,0 | 14 |
| 25483 | 3 G 4 | 10,3 | 116,0 | 227,0 | 12 |
| 25530 | 4 G 4 | 11,2 | 153,6 | 261,0 | 12 |
| 25510 | 4 G 6 | 14,1 | 230,4 | 341,0 | 10 |
| 25484 | 3 G 10 | 15,6 | 288,0 | 518,0 | 8 |
| 25485 | 3 G 16 | 18,2 | 460,8 | 722,0 | 6 |
| 25486 | 3 G 25 | 22,9 | 720,0 | 1180,0 | 4 |
| 25487 | 3 G 35 | 26,5 | 1008,0 | 1600,0 | 2 |

ROBOFLEX 2001-C

| Part No. | No. cores x cross-sec. mm ² | Outer ø ca. mm | Cop. weight kg / km | Weight ca. kg / km | AWG-No. |
|----------|--|----------------|---------------------|--------------------|---------|
| 25539 | 10 G 0,14 | 7,8 | 34,2 | 62,0 | 26 |
| 25488 | 12 G 0,14 | 7,8 | 42,1 | 95,0 | 26 |
| 25489 | 18 G 0,14 | 9,7 | 54,5 | 120,0 | 26 |
| 25490 | 25 G 0,14 | 10,9 | 69,0 | 158,0 | 26 |
| 25491 | 12 G 0,25 | 8,3 | 59,5 | 126,0 | 24 |
| 25492 | 18 G 0,25 | 10,1 | 80,0 | 164,0 | 24 |
| 25493 | 25 G 0,25 | 11,1 | 103,0 | 215,0 | 24 |
| 25494 | 12 G 0,34 | 8,8 | 78,0 | 160,0 | 22 |
| 25495 | 18 G 0,34 | 10,8 | 101,0 | 210,0 | 22 |
| 25496 | 25 G 0,34 | 12,1 | 158,0 | 305,0 | 22 |
| 25497 | 12 G 0,5 | 11,2 | 117,0 | 175,0 | 20 |
| 25498 | 18 G 0,5 | 13,6 | 160,0 | 231,0 | 20 |
| 25499 | 25 G 0,5 | 14,8 | 255,0 | 347,0 | 20 |
| 25500 | 12 G 0,75 | 11,8 | 155,0 | 220,0 | 18 |
| 25501 | 18 G 0,75 | 15,0 | 210,0 | 305,0 | 18 |
| 25502 | 25 G 0,75 | 16,6 | 275,0 | 415,0 | 18 |
| 25503 | 12 G 1 | 13,0 | 190,0 | 265,0 | 17 |
| 25504 | 18 G 1 | 16,1 | 245,0 | 390,0 | 17 |
| 25505 | 28 G 1 | 18,0 | 345,0 | 540,0 | 17 |
| 25506 | 12 G 1,5 | 16,2 | 260,0 | 345,0 | 16 |
| 25507 | 18 G 1,5 | 20,3 | 370,0 | 485,0 | 16 |
| 25508 | 25 G 1,5 | 22,5 | 498,0 | 710,0 | 16 |