

FLEX-H

Halogen free control cable

**Technical Data:**

- **Conductor material** Bare copper
- **Conductor Class** Class 5 according VDE 0295 resp IEC 60228 resp. IEC 60228
- **Core Insulation** Halogen-free compound
- **Core identification** Acc. to DIN VDE 0293: Black cores with consecutive white numerals
- **Stranding** Cores twisted in layers
- **Outer sheath** Halogen-free compound
- **Sheath colour** Grey (RAL 7001)
- **Rated voltage [V]** 300/500
- **Testing voltage [V]** 3000
- **Conductor resistance**
- **Insulation resistance** >20MΩ x km
- **Current carrying capacity** DIN VDE (s. technical guidance)
- **Min. bending radius fixed [xd]** 5xd
- **Min. bending radius moved [xd]** 10xd
- **Working temp fixed min/max [C]** -40°C up to +80°C
- **Working temp moved min/mac [C]** -15°C up to +70°C
- **Burning behaviour** VDE 0482-332-1-1: halogen-free and highly flame-retardant; IEC 60332-1-3
- **Approvals** Halogen-free acc. to IEC 60754-1
- Corrosivity acc. to IEC 60754-2
- EN 60754-2
- EN 60332-1-2
- EN 61034-2
- **Construction:**
 - cores black with continuous white figure imprint
 - core insulation: halogen-free compound
 - stranding acc. to VDE 0295 class 5
 - fine strands of bare copper conductor
 - earth conductor green/yellow
 - cores twisted in layers
- outer sheath halogen-free compound grey. RAL 7001. largely UV resistant

Tests:

- halogen-free according to DIN VDE 0472 part 815
- behaviour in fire no flame propagation. test method to DIN VDE 0472 part 804 test method C. IEC 332-3 and HD 405.3 and as well as flame retardant and self extinguishing to IEC 332-1 and DIN VDE 0472 part 804 test method B
- corrosiveness of combustion gases (freedom from Halogen) test method to VDE 0472 part 813. IEC 754-2. HD 602 and 606
- burning behaviour according to VDE 0472 part 816 test method C. IEC 1034-1/1034-2. HD 606 and BS 7622 part 1 and 2

Application:

Halogen-free, flame-retardant power control cable with improved properties in case of fire. Suitable for fixed or flexible applications. Suitable for use as energy, power, control or connecting cable to meet stringent safety requirements. Installation in dry and moist room, also suitable for limited external application. Pronounced advantages in comparison to a PVC control cable (e.g. Flex-JZ): - low fire load, - low smoke emission - reduced fire propagation

| Part Number | No of cores x Cross section | Outer Ø ca. mm | Copper weight kg /100 | Weight 100 kg/100 |
|-------------|-----------------------------|----------------|-----------------------|-------------------|
| 100020050 | 2 x 0.50 OZ | 5.30 | 0.96 | 3.80 |
| 100030050 | 3 G 0.50 | 5.60 | 1.44 | 4.70 |
| 100040050 | 4 G 0.50 | 6.00 | 1.92 | 5.70 |
| 100050050 | 5 G 0.50 | 6.60 | 2.40 | 6.60 |
| 100070050 | 7 G 0.50 | 7.20 | 3.40 | 8.50 |
| 100120050 | 12 G 0.50 | 9.60 | 5.80 | 13.50 |
| 100180050 | 18 G 0.50 | 11.50 | 8.64 | 21.00 |
| 100250050 | 25 G 0.50 | 13.40 | 12.20 | 28.70 |
| 100020075 | 2 x 0.75 OZ | 5.40 | 1.44 | 4.35 |
| 100030075 | 3 G 0.75 | 5.90 | 2.16 | 5.50 |
| 100040075 | 4 G 0.75 | 6.40 | 2.90 | 6.70 |
| 100050075 | 5 G 0.75 | 7.10 | 3.60 | 8.30 |
| 100070075 | 7 G 0.75 | 7.70 | 5.04 | 10.02 |
| 100120075 | 12 G 0.75 | 10.30 | 8.60 | 17.60 |
| 100180075 | 18 G 0.75 | 12.30 | 13.00 | 25.40 |
| 100250075 | 25 G 0.75 | 14.60 | 18.00 | 35.50 |
| 100020100 | 2 x 1 OZ | 5.70 | 1.92 | 5.04 |
| 100030100 | 3 G 1 | 6.20 | 2.90 | 6.30 |
| 100040100 | 4 G 1 | 6.90 | 3.80 | 8.00 |
| 100050100 | 5 G 1 | 7.60 | 4.80 | 9.90 |
| 100070100 | 7 G 1 | 8.50 | 6.72 | 12.70 |
| 100120100 | 12 G 1 | 11.30 | 11.60 | 21.50 |
| 100180100 | 18 G 1 | 13.20 | 17.40 | 31.00 |
| 100250100 | 25 G 1 | 15.40 | 24.10 | 42.70 |
| 100410100 | 41 G 1 | 20.20 | 40.32 | 70.80 |
| 100020150 | 2 x 1.50 OZ | 6.50 | 2.90 | 6.70 |
| 100030150 | 3 G 1.50 | 6.80 | 4.30 | 8.20 |
| 100040150 | 4 G 1.50 | 7.60 | 5.80 | 10.80 |
| 100050150 | 5 G 1.50 | 8.40 | 7.20 | 12.60 |
| 100070150 | 7 G 1.50 | 9.20 | 10.20 | 16.20 |
| 100120150 | 12 G 1.50 | 12.40 | 17.40 | 28.00 |
| 100180150 | 18 G 1.50 | 14.70 | 25.90 | 40.20 |
| 100250150 | 25 G 1.50 | 17.30 | 36.10 | 58.90 |
| 100020250 | 2 x 2.50 OZ | 8.10 | 4.80 | 10.60 |
| 100030250 | 3 G 2.50 | 8.50 | 7.30 | 13.20 |
| 100040250 | 4 G 2.50 | 9.40 | 9.60 | 17.00 |

| Part Number | No of cores x Cross section | Outer Ø ca. mm | Copper weight kg /100 | Weight 100 kg/100 |
|-------------|-----------------------------|----------------|-----------------------|-------------------|
| 100050250 | 5 G 2.50 | 10.40 | 12.10 | 20.50 |
| 100070250 | 7 G 2.50 | 11.60 | 16.80 | 26.60 |
| 100120250 | 12 G 2.50 | 15.60 | 28.80 | 46.40 |
| 100160250 | 16 G 2.50 | 17.60 | 38.40 | 57.90 |
| 100180250 | 18 G 2.50 | 18.40 | 43.20 | 67.60 |
| 100020400 | 2 x 4 OZ | 9.90 | 7.68 | 18.50 |
| 100030400 | 3 G 4 | 10.20 | 11.60 | 20.20 |
| 100040400 | 4 G 4 | 11.20 | 15.40 | 25.80 |
| 100050400 | 5 G 4 | 12.50 | 19.20 | 32.30 |
| 100020600 | 2 x 6 | 10.80 | 11.52 | 23.40 |
| 100040600 | 4 G 6 | 13.10 | 23.10 | 37.50 |
| 100050600 | 5 G 6 | 14.50 | 28.80 | 46.80 |
| 100021000 | 2 x 10 | 12.80 | 19.20 | 35.30 |
| 100041000 | 4 G 10 | 16.60 | 38.40 | 59.80 |
| 100051000 | 5 G 10 | 18.90 | 0.00 | 47.60 |
| 100041600 | 4 G 16 | 20.90 | 61.60 | 93.00 |
| 100051600 | 5 G 16 | 22.60 | 76.00 | 111.80 |
| 100052500 | 5 G 25 | 26.40 | 120.00 | 206.00 |
| 100033500 | 3 G 35 | 26.80 | 100.80 | 147.30 |
| 100043500 | 4 G 35 | 28.40 | 132.10 | 204.20 |
| 100053500 | 5 G 35 | 32.10 | 168.00 | 256.00 |
| 100035000 | 3 G 50 | 30.00 | 144.00 | 265.00 |
| 100045000 | 4 G 50 | 34.20 | 193.20 | 278.40 |
| 100055000 | 5 G 50 | 37.60 | 241.30 | 385.20 |
| 100037000 | 3 G 70 | 33.70 | 201.60 | 328.00 |
| 100047000 | 4 G 70 | 40.60 | 268.40 | 412.30 |
| 100057000 | 5 G 70 | 45.40 | 337.20 | 496.30 |
| 100039500 | 3 G 95 | 40.50 | 273.60 | 480.00 |
| 100049500 | 4 G 95 | 45.50 | 364.00 | 546.60 |
| 100059500 | 5 G 95 | 51.00 | 454.20 | 668.10 |
| 1000312000 | 3 G 120 | 44.00 | 345.60 | 540.00 |
| 1000412000 | 4 G 120 | 49.90 | 459.40 | 705.30 |