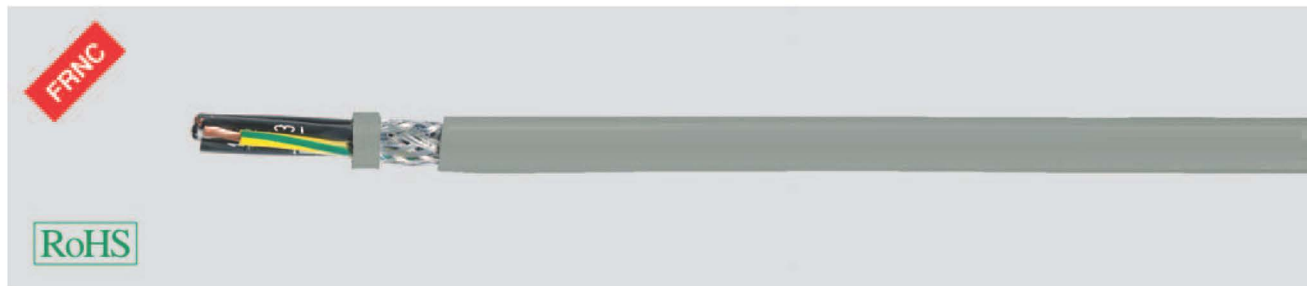




Flexible Control Cables / Halogen-free Control Cables

JZ-500 HMH-C flexible control cable, halogen-free, extremely fire resistant, oil resistant¹⁾, Cu-screened, EMC-preferred type, meter marking



Technical data

- Halogen-free core flexible control cable adapted to DIN VDE 0285-525-2-51 / DIN EN 50525-2-51 and DIN VDE 0285-525-3-11 / DIN EN 50525-3-11
- **Temperature range**
flexing -15°C to +70°C
fixed installation -40°C to +70°C
- **Nominal voltage** U₀/U 300/500 V
- **Test voltage** 2000 V
- **Coupling resistance**
max. 250 Ohm/km
- **Minimum bending radius**
flexing 12,5x cable Ø
fixed installation 4x cable Ø
- **Radiation resistance**
up to 100x10⁶ cJ/kg (up to 100 Mrad)

Cable structure

- Bare copper-conductor, to DIN VDE 0295 cl.5, fine-wire, BS 6360 cl.5, IEC 60228 cl.5
- Core insulation of halogen-free polymer compound type TI6 to DIN VDE 0207-363-7 / DIN EN 50363-7
- Core identification to DIN VDE 0293 black cores with continuous white numbering
- GN-YE conductor, 3 cores and above in the outer layer
- Cores stranded in layers with optimal lay-length
- Separating foil
- Tinned copper braided screen, approx. 85% coverage
- Outer sheath of halogen-free spolymer compound type TM7 to DIN VDE 0207-363-8 / DIN EN 50363-8
- Sheath colour grey (RAL 7001)
- with meter marking
- **LS0H**= Low Smoke Zero Halogen

Properties

- ¹⁾ We recommend you for critical applications a consultation
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

Tests

- Flame test acc. to DIN VDE 0482-332-3, BS 4066 part 3, DIN EN 60332-3, IEC 60332-3 (previously DIN VDE 0472 part 804 test method C)
- self-extinguishing and flame retardant acc. to DIN VDE 0482-332-1-2, DIN EN 60332-1-2/IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)
- Corrosiveness of combustion gases acc. to DIN VDE 0482 part 267, DIN EN 50267-2-2, IEC 60754-2 (equivalent DIN VDE 0472 part 813)
- Halogen-free acc. to DIN VDE 0482 part 267, DIN EN 50267-2-1, IEC 60754-1 (equivalent DIN VDE 0472 part 815)
- Smoke density acc. to DIN VDE 0482 part 1034-1+2, DIN EN 61034-1+2, IEC 61034-1+2, BS 7622 part 1+2 (previously DIN VDE 0472 part 816)

Note

- G = with green-yellow conductor
x = without green-yellow conductor (OZ)
- Cleanroom qualification tested with analog type. Please note "cleanroom qualified" when ordering.
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
- unscreened analogue type:
JZ-500 HMH, confer page 86

Application

Halogen-free, flame retardant control cables are used for instrumentation and control cables in tooling machinery, conveyor and transportation belts, production lines, in plant construction, air-conditioning systems as well as in iron and steel works. For fixed installation or for flexing applications, for casual, not constantly recurring free movement without forced motion and without tensile stress for medium mechanical loads. The cable is suitable for use in dry, damp and wet environments and on plaster. An interference-free transmission of signals and pulse is assured by the high degree of screening.

EMC = Electromagnetic compatibility

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. mm ² | Outer Ø approx. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. |
|----------|--|--------------------|---------------------|------------------------|---------|
| 11656 | 2 x 0,5 | 5,7 | 35,0 | 46,0 | 20 |
| 11657 | 3 G 0,5 | 5,9 | 42,0 | 56,0 | 20 |
| 11342 | 3 x 0,5 | 5,9 | 42,0 | 56,0 | 20 |
| 11658 | 4 G 0,5 | 6,4 | 47,0 | 62,0 | 20 |
| 11343 | 4 x 0,5 | 6,4 | 47,0 | 62,0 | 20 |
| 11659 | 5 G 0,5 | 6,9 | 56,0 | 75,0 | 20 |
| 11660 | 7 G 0,5 | 7,6 | 69,0 | 98,0 | 20 |
| 11663 | 12 G 0,5 | 9,7 | 108,0 | 158,0 | 20 |
| 11665 | 18 G 0,5 | 11,5 | 145,0 | 216,0 | 20 |
| 11667 | 25 G 0,5 | 13,7 | 240,0 | 315,0 | 20 |

| Part no. | No. cores x cross-sec. mm ² | Outer Ø approx. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. |
|----------|--|--------------------|---------------------|------------------------|---------|
| 11678 | 2 x 0,75 | 6,1 | 40,0 | 60,0 | 19 |
| 11679 | 3 G 0,75 | 6,3 | 52,0 | 68,0 | 19 |
| 11344 | 3 x 0,75 | 6,3 | 52,0 | 68,0 | 19 |
| 11680 | 4 G 0,75 | 6,8 | 60,0 | 78,0 | 19 |
| 11345 | 4 x 0,75 | 6,8 | 60,0 | 78,0 | 19 |
| 11681 | 5 G 0,75 | 7,4 | 71,0 | 95,0 | 19 |
| 11346 | 5 x 0,75 | 7,4 | 71,0 | 95,0 | 19 |
| 11682 | 7 G 0,75 | 8,2 | 91,0 | 130,0 | 19 |
| 11347 | 7 x 0,75 | 8,2 | 91,0 | 130,0 | 19 |
| 11685 | 12 G 0,75 | 10,5 | 142,0 | 203,0 | 19 |



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| Part no. | No. cores x cross-sec. mm ² | Outer Ø approx. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. |
|----------|--|--------------------|---------------------|------------------------|---------|
| 11687 | 18 G 0,75 | 12,7 | 212,0 | 290,0 | 19 |
| 11689 | 25 G 0,75 | 15,0 | 281,0 | 413,0 | 19 |
| 11700 | 2 x 1 | 6,4 | 50,0 | 66,0 | 18 |
| 11701 | 3 G 1 | 6,7 | 60,0 | 80,0 | 18 |
| 11348 | 3 x 1 | 6,7 | 60,0 | 80,0 | 18 |
| 11702 | 4 G 1 | 7,2 | 71,0 | 100,0 | 18 |
| 11349 | 4 x 1 | 7,2 | 71,0 | 100,0 | 18 |
| 11703 | 5 G 1 | 8,0 | 88,0 | 130,0 | 18 |
| 11704 | 7 G 1 | 8,7 | 111,0 | 160,0 | 18 |
| 11707 | 12 G 1 | 11,4 | 184,0 | 260,0 | 18 |
| 11709 | 18 G 1 | 13,6 | 260,0 | 382,0 | 18 |
| 11711 | 25 G 1 | 16,2 | 349,0 | 540,0 | 18 |
| 11722 | 2 x 1,5 | 7,0 | 63,0 | 88,0 | 16 |
| 11723 | 3 G 1,5 | 7,4 | 80,0 | 100,0 | 16 |
| 11350 | 3 x 1,5 | 7,4 | 80,0 | 100,0 | 16 |
| 11724 | 4 G 1,5 | 8,1 | 97,0 | 125,0 | 16 |
| 11725 | 5 G 1,5 | 9,0 | 119,0 | 158,0 | 16 |
| 11726 | 7 G 1,5 | 9,8 | 147,0 | 210,0 | 16 |
| 11729 | 12 G 1,5 | 12,8 | 267,0 | 340,0 | 16 |
| 11731 | 18 G 1,5 | 15,6 | 374,0 | 480,0 | 16 |
| 11733 | 25 G 1,5 | 18,4 | 526,0 | 702,0 | 16 |
| 11744 | 2 x 2,5 | 8,4 | 96,0 | 132,0 | 14 |
| 11745 | 3 G 2,5 | 8,8 | 144,0 | 168,0 | 14 |
| 11746 | 4 G 2,5 | 9,8 | 148,0 | 195,0 | 14 |
| 11747 | 5 G 2,5 | 10,8 | 181,0 | 222,0 | 14 |
| 11748 | 7 G 2,5 | 11,9 | 255,0 | 345,0 | 14 |
| 11751 | 12 G 2,5 | 15,8 | 441,0 | 572,0 | 14 |
| 11766 | 2 x 4 | 10,0 | 120,0 | 184,0 | 12 |
| 11768 | 3 G 4 | 10,6 | 174,0 | 238,0 | 12 |
| 11769 | 4 G 4 | 11,6 | 230,0 | 305,0 | 12 |
| 11770 | 5 G 4 | 12,8 | 273,0 | 388,0 | 12 |
| 11771 | 7 G 4 | 14,2 | 316,0 | 504,0 | 12 |

| Part no. | No. cores x cross-sec. mm ² | Outer Ø approx. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. |
|----------|--|--------------------|---------------------|------------------------|-----------|
| 11781 | 2 G 6 | 11,7 | 173,0 | 270,0 | 10 |
| 11782 | 3 G 6 | 12,5 | 240,0 | 328,0 | 10 |
| 11783 | 4 G 6 | 13,8 | 305,0 | 416,0 | 10 |
| 11784 | 5 G 6 | 15,4 | 439,0 | 510,0 | 10 |
| 11785 | 7 G 6 | 17,0 | 505,0 | 670,0 | 10 |
| 11786 | 2 x 10 | 14,5 | 255,0 | 420,0 | 8 |
| 11787 | 3 G 10 | 15,6 | 350,0 | 495,0 | 8 |
| 11788 | 4 G 10 | 17,2 | 535,0 | 785,0 | 8 |
| 11789 | 5 G 10 | 19,1 | 592,0 | 855,0 | 8 |
| 11790 | 7 G 10 | 21,2 | 810,0 | 1308,0 | 8 |
| 11793 | 4 G 16 | 20,3 | 740,0 | 882,0 | 6 |
| 11794 | 5 G 16 | 22,2 | 895,0 | 1293,0 | 6 |
| 11812 | 7 G 16 | 24,8 | 1282,0 | 2149,0 | 6 |
| 11795 | 3 G 25 | 22,5 | 1070,0 | 1432,0 | 4 |
| 11796 | 4 G 25 | 25,0 | 1140,0 | 1911,0 | 4 |
| 11797 | 5 G 25 | 27,5 | 1380,0 | 2414,0 | 4 |
| 11798 | 3 G 35 | 25,7 | 1240,0 | 1914,0 | 2 |
| 11799 | 4 G 35 | 28,5 | 1576,0 | 2542,0 | 2 |
| 11800 | 5 G 35 | 31,7 | 1930,0 | 3180,0 | 2 |
| 11801 | 3 G 50 | 30,8 | 1675,0 | 3080,0 | 1 |
| 11802 | 4 G 50 | 34,1 | 2155,0 | 3550,0 | 1 |
| 11803 | 5 G 50 | 38,1 | 2794,0 | 4753,0 | 1 |
| 11804 | 3 G 70 | 36,0 | 2288,0 | 3840,0 | 2/0 |
| 11805 | 4 G 70 | 40,0 | 3120,0 | 4939,0 | 2/0 |
| 11806 | 5 G 70 | 44,5 | 3705,0 | 6572,0 | 2/0 |
| 11807 | 3 G 95 | 41,1 | 3010,0 | 5651,0 | 3/0 |
| 11808 | 4 G 95 | 45,6 | 4043,0 | 6690,0 | 3/0 |
| 11809 | 5 G 95 | 50,7 | 5026,0 | 8370,0 | 3/0 |
| 11810 | 3 G 120 | 45,2 | 3812,0 | 6342,0 | 4/0 |
| 11811 | 4 G 120 | 50,1 | 5069,0 | 8453,0 | 4/0 |
| 11813 | 4 G 185 | 63,0 | 8040,0 | 10800,0 | 350 kcmil |

Dimensions and specifications may be changed without prior notice. (RA03)