JB-750 HMH-C flexible control cable, coloured core, halogen-free, screened, extremely fire resistant, oil resistant[1], EMC-preferred type, meter marking

Technical data

- Halogen-free core flexible control cable, adapted to E DIN VDE 0281 part 14 and DIN VDE 0281 part 13
- **Temperature range**
  flexing -15 °C to +70 °C
  fixed installation -40 °C to +70 °C
- **Nominal voltage** U_0/U 450/750 V
- **Test voltage** 3000 V
- **Minimum bending radius**
  flexing approx. 12,5x cable ø
  fixed installation approx. 4x cable ø
- **Coupling resistance**
  max. 250 Ohm/km
- **Radiation resistance**
  up to 100x10^6 cJ/kg (up to 100 Mrad)

Cable structure

- Bare copper, fine wire conductors, to DIN VDE 0295 cl. 5, BS 6360 cl. 5 and IEC 60228 cl. 5
- Core insulation of halogen-free compound TI6, to E DIN VDE 0281 part 14
- Colour coded to DIN VDE 0293-308
- Green-yellow earth core in the outer layer
- Cores laid up in layers with optimal lay-length
- Separating layer
- Screen braid of tinned copper wires, coverage approx. 85%
- Halogen-free sheath compound TM7, to E DIN VDE 0281 part 14
- Jacket colour grey (RAL 7001)
- with meter marking, change-over in 2011
- **LSOH** = Low Smoke Zero Halogen-free.

Properties

- [1]) For the critical applications we advise for 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 to DIN VDE 0482-332-3 BS 4066 part 3/ DIN EN 60332-3/IEC 60332-3 (equivalent DIN VDE 0472 part 804 test method C)
- Self-extinguishing and 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)
- Corrosiveness of combustion gases according to DIN VDE 0482 part 267/ EN 50267-2-2/ IEC 60754-2 (equivalent DIN VDE 0472 part 813)
- Halogen-free according to DIN VDE 0482 part 267/ EN 50267-2-1/ IEC 60754-1 (equivalent DIN VDE 0472 part 815)
- Smoke density according to VDE 0482 part 1034-1+2 / IEC 61034-1+2 / DIN EN 61034-1+2 / BS 7622 part 1+2 (equivalent DIN VDE 0472 part 816)

Note

- G = with green-yellow earth core
- Cleanroom qualification tested with analog type. Please note "cleanroom qualified" when ordering.
- unscreened analogue type:
  JB-750 HMH, see page A 68

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 for installation above, on, in and beneath plaster as well as in masonry and concrete walls except for direct embedding in vibrated, compacted or tamped concrete, not suitable for imbedding in solidified or compressed concrete.
An interference-free transmission of signals and pulse in assured by the high degree of screening.
EMC = Electromagnetic compatibillity
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 2006/95/EG.

Part no.	No.cores x cross-sec. mm²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
11942	3 G 1,5	7,4	80,0	125,0	16
11943	4 G 1,5	8,1	97,0	160,0	16
11944	5 G 1,5	9,0	119,0	193,0	16
11945	3 G 2,5	8,8	144,0	198,0	14
11946	4 G 2,5	9,8	148,0	240,0	14
11947	5 G 2,5	10,8	181,0	280,0	14

Part no.	No.cores x cross-sec. mm²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
11948	3 G 4	10,4	174,0	251,0	12
11949	4 G 4	11,6	230,0	315,0	12
11950	5 G 4	12,9	273,0	396,0	12
11951	4 G 6	13,8	305,0	430,0	10
11952	5 G 6	15,3	439,0	524,0	10

Continuation ▸

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Part no.	No.cores x cross-sec. mm²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
11953	4 G 10	17,1	535,0	804,0	8
11954	5 G 10	19,1	592,0	942,0	8
11955	4 G 16	20,8	740,0	1190,0	6
11956	5 G 16	23,4	895,0	1370,0	6
11957	4 G 25	25,7	1140,0	1968,0	4
11958	5 G 25	28,5	1380,0	2514,0	4

Part no.	No.cores x cross-sec. mm²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
11959	4 G 35	29,2	1576,0	2540,0	2
11960	5 G 35	32,5	1930,0	3260,0	2
11961	4 G 50	34,6	2155,0	3668,0	1
11962	4 G 70	41,1	3120,0	5076,0	2/0
11963	4 G 95	46,9	4043,0	6807,0	3/0
11964	4 G 120	52,5	5069,0	8612,0	4/0

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