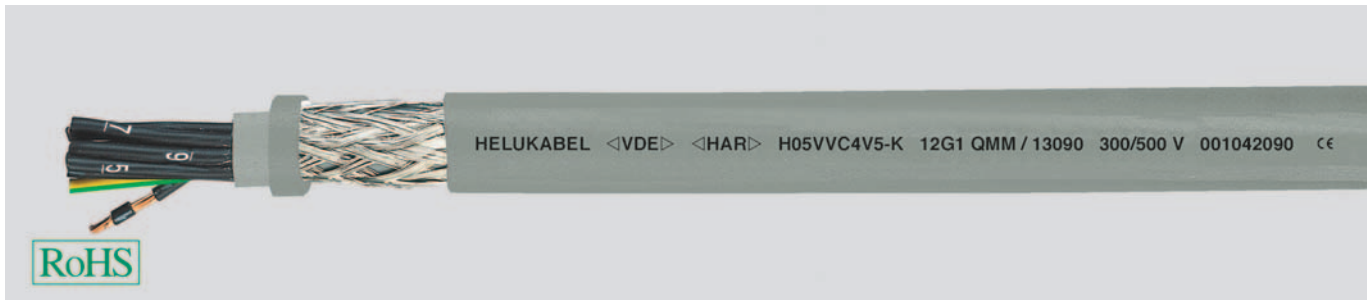


H05VVC4V5-K (NYSLYCYÖ-JZ) flexible, number coded, oil resistant, EMC-preferred type



A



Technical data

- Spezial-PVC control cable with oil resistant outer sheath acc. to DIN VDE 0285-525-2-51 / DIN EN 50525-2-51 and IEC 60227/74
- **Temperature range**
flexing -5°C to +70°C
fixed installation -40°C to +70°C
- **Nominal voltage** U_0/U 300/500 V
- **Test voltage**
core/core 2 kV, 5 minutes
core/screen 2 kV, 5 minutes
- **Breakdown voltage** min. 4000 V
- **Coupling resistance**
at 30 MHz 250 Ohm/km
- **Insulation resistance**
min. 20 MOhm x km
- **Minimum bending radius**
flexing 10x cable Ø
fixed installation 5x cable Ø
- **Radiation resistance**
up to 80×10^6 cJ/kg (up to 80 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 special PVC compound type T12 to DIN VDE 0207-363-3 / DIN EN 50363-3
- 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
- Inner sheath of special PVC compound type TM2 to DIN VDE 0207-363-4-1 / DIN EN 50363-4-1
- Tinned copper braided screening, covering approx. 85%
- Outer sheath of special PVC compound type TM5 to DIN VDE 0207-363-4-1 / DIN EN 50363-4-1
- Sheath colour grey (RAL 7001)

Properties

- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers
- ### Tests
- PVC 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)
 - Oil resistant to DIN EN 60811-404

Note

- G = with green-yellow conductor
x = without green-yellow conductor (OZ)
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
- unscreened analogue type:
H05V5-F (NYSLYÖ-JZ), confer page 35

Application

These cables are used for flexible use for medium mechanical stresses with free movement without tensile stress or forced movements in dry, moist and wet rooms but not suitable for open air. These are designed as control and connecting cables to machines, tool machineries, conveyor belts and production lines.

These cables are not effected to the chemical influences. Cables for moist and wet rooms, specially used for machines in breweries, bottling plants and car washing stations.

These cables may be allowed to move once installed provided that the cables are not mechanically stressed during movement. The interconnection of parts of machines used for manufacturing purposes including machine tools where some degree of protection against electromagnetic interference is required.

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 min. - max. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. |
|----------|--|------------------------|---------------------|------------------------|---------|
| 13951 | 2 x 0,5 | 7,7 - 9,6 | 41,0 | 92,0 | 20 |
| 13060 | 3 G 0,5 | 8,0 - 10,0 | 45,0 | 109,0 | 20 |
| 13061 | 4 G 0,5 | 8,5 - 10,7 | 54,0 | 126,0 | 20 |
| 13062 | 5 G 0,5 | 9,3 - 11,6 | 66,0 | 156,0 | 20 |
| 13063 | 6 G 0,5 | 9,9 - 12,4 | 73,0 | 176,0 | 20 |
| 13064 | 7 G 0,5 | 10,8 - 13,5 | 79,0 | 192,0 | 20 |
| 13952 | 8 G 0,5 | 11,7 - 14,5 | 82,0 | 211,0 | 20 |
| 13065 | 9 G 0,5 | 12,8 - 15,8 | 94,0 | 230,0 | 20 |
| 13066 | 12 G 0,5 | 13,3 - 16,5 | 137,0 | 280,0 | 20 |
| 13953 | 14 G 0,5 | 13,4 - 16,6 | 142,0 | 302,0 | 20 |
| 13067 | 18 G 0,5 | 15,1 - 18,6 | 156,0 | 384,0 | 20 |
| 13068 | 25 G 0,5 | 17,7 - 21,7 | 250,0 | 556,0 | 20 |
| 13954 | 27 G 0,5 | 18,0 - 22,1 | 255,0 | 599,0 | 20 |
| 13069 | 34 G 0,5 | 20,1 - 24,7 | 316,0 | 634,0 | 20 |
| 13955 | 36 G 0,5 | 20,1 - 24,7 | 320,0 | 620,0 | 20 |
| 13129 | 41 G 0,5 | 21,7 - 26,6 | 348,0 | 770,0 | 20 |
| 13070 | 50 G 0,5 | 24,0 - 29,3 | 407,0 | 970,0 | 20 |
| 13071 | 61 G 0,5 | 25,5 - 31,1 | 520,0 | 1072,0 | 20 |
| 13956 | 65 G 0,5 | 26,1 - 31,9 | 563,0 | 1198,0 | 20 |

| Part no. | No. cores x cross-sec. mm ² | Outer Ø min. - max. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. |
|----------|--|------------------------|---------------------|------------------------|---------|
| 13957 | 2 x 0,75 | 8,0 - 10,0 | 46,0 | 102,0 | 19 |
| 13072 | 3 G 0,75 | 8,3 - 10,4 | 57,0 | 115,0 | 19 |
| 13073 | 4 G 0,75 | 9,1 - 11,3 | 63,0 | 150,0 | 19 |
| 13074 | 5 G 0,75 | 9,7 - 12,1 | 76,0 | 173,0 | 19 |
| 13075 | 6 G 0,75 | 10,5 - 13,1 | 82,0 | 195,0 | 19 |
| 13076 | 7 G 0,75 | 11,5 - 14,3 | 100,0 | 235,0 | 19 |
| 13958 | 8 G 0,75 | 12,1 - 15,0 | 112,0 | 268,0 | 19 |
| 13077 | 9 G 0,75 | 13,3 - 16,5 | 130,0 | 285,0 | 19 |
| 13078 | 12 G 0,75 | 13,9 - 17,2 | 175,0 | 327,0 | 19 |
| 13959 | 14 G 0,75 | 14,4 - 17,7 | 190,0 | 362,0 | 19 |
| 13079 | 18 G 0,75 | 16,2 - 19,9 | 240,0 | 488,0 | 19 |
| 13080 | 25 G 0,75 | 18,7 - 22,6 | 306,0 | 654,0 | 19 |
| 13960 | 27 G 0,75 | 19,3 - 23,7 | 326,0 | 708,0 | 19 |
| 13081 | 34 G 0,75 | 21,3 - 26,2 | 346,0 | 821,0 | 19 |
| 13961 | 36 G 0,75 | 21,3 - 26,2 | 358,0 | 899,0 | 19 |
| 13130 | 41 G 0,75 | 23,1 - 28,3 | 403,0 | 970,0 | 19 |
| 13082 | 50 G 0,75 | 25,3 - 31,0 | 470,0 | 1160,0 | 19 |
| 13083 | 61 G 0,75 | 27,0 - 32,9 | 550,0 | 1402,0 | 19 |
| 13962 | 65 G 0,75 | 27,8 - 34,0 | 594,0 | 1504,0 | 19 |

Continuation ►

H05VVC4V5-K (NYSLYCYÖ-JZ) flexible, number coded, oil resistant, EMC-preferred type



| Part no. | No. cores x cross-sec. mm ² | Outer Ø min. - max. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. |
|----------|--|------------------------|---------------------|------------------------|---------|
| 13963 | 2 x 1 | 8,2 - 10,3 | 54,0 | 114,0 | 18 |
| 13084 | 3 G 1 | 8,8 - 11,0 | 64,0 | 142,0 | 18 |
| 13085 | 4 G 1 | 9,4 - 11,7 | 76,0 | 175,0 | 18 |
| 13086 | 5 G 1 | 10,3 - 12,8 | 89,0 | 205,0 | 18 |
| 13087 | 6 G 1 | 11,0 - 13,6 | 101,0 | 236,0 | 18 |
| 13088 | 7 G 1 | 12,2 - 15,1 | 114,0 | 264,0 | 18 |
| 13964 | 8 G 1 | 13,1 - 16,2 | 130,0 | 301,0 | 18 |
| 13089 | 9 G 1 | 13,9 - 17,2 | 144,0 | 335,0 | 18 |
| 13090 | 12 G 1 | 14,7 - 18,1 | 186,0 | 420,0 | 18 |
| 13965 | 14 G 1 | 15,3 - 18,8 | 198,0 | 433,0 | 18 |
| 13091 | 18 G 1 | 16,9 - 20,8 | 284,0 | 561,0 | 18 |
| 13966 | 19 G 1 | 16,9 - 20,8 | 307,0 | 584,0 | 18 |
| 13092 | 25 G 1 | 19,8 - 24,2 | 387,0 | 766,0 | 18 |
| 13967 | 27 G 1 | 20,2 - 24,7 | 410,0 | 822,0 | 18 |
| 13093 | 34 G 1 | 22,5 - 27,6 | 500,0 | 996,0 | 18 |
| 13968 | 36 G 1 | 22,5 - 27,6 | 511,0 | 1001,0 | 18 |
| 13969 | 37 G 1 | 22,5 - 27,6 | 523,0 | 1018,0 | 18 |
| 13131 | 41 G 1 | 24,7 - 30,2 | 578,0 | 1155,0 | 18 |
| 13094 | 50 G 1 | 26,8 - 32,7 | 681,0 | 1300,0 | 18 |
| 13095 | 61 G 1 | 28,5 - 34,7 | 710,0 | 1500,0 | 18 |
| 13970 | 65 G 1 | 29,4 - 35,8 | 769,0 | 1510,0 | 18 |
| 13971 | 2 x 1,5 | 9,3 - 11,6 | 64,0 | 146,0 | 16 |
| 13096 | 3 G 1,5 | 9,7 - 12,1 | 82,0 | 176,0 | 16 |
| 13097 | 4 G 1,5 | 10,7 - 13,2 | 99,0 | 207,0 | 16 |
| 13098 | 5 G 1,5 | 11,8 - 14,7 | 123,0 | 235,0 | 16 |
| 13099 | 6 G 1,5 | 12,7 - 15,7 | 125,0 | 279,0 | 16 |
| 13100 | 7 G 1,5 | 14,1 - 17,4 | 148,0 | 314,0 | 16 |
| 13972 | 8 G 1,5 | 14,9 - 18,3 | 172,0 | 345,0 | 16 |
| 13101 | 9 G 1,5 | 16,0 - 19,7 | 187,0 | 380,0 | 16 |
| 13102 | 12 G 1,5 | 16,7 - 20,5 | 274,0 | 500,0 | 16 |

| Part no. | No. cores x cross-sec. mm ² | Outer Ø min. - max. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. |
|----------|--|------------------------|---------------------|------------------------|---------|
| 13973 | 14 G 1,5 | 17,6 - 21,6 | 294,0 | 560,0 | 16 |
| 13103 | 18 G 1,5 | 19,6 - 24,1 | 386,0 | 707,0 | 16 |
| 13974 | 19 G 1,5 | 19,6 - 24,1 | 394,0 | 723,0 | 16 |
| 13104 | 25 G 1,5 | 22,7 - 27,8 | 531,0 | 950,0 | 16 |
| 13975 | 27 G 1,5 | 23,4 - 28,6 | 546,0 | 1014,0 | 16 |
| 13105 | 32 G 1,5 | 25,4 - 31,1 | 638,0 | 1133,0 | 16 |
| 13106 | 34 G 1,5 | 26,6 - 32,5 | 671,0 | 1204,0 | 16 |
| 13976 | 36 G 1,5 | 26,6 - 32,5 | 700,0 | 1261,0 | 16 |
| 13977 | 37 G 1,5 | 26,6 - 32,5 | 720,0 | 1300,0 | 16 |
| 13132 | 41 G 1,5 | 28,5 - 34,8 | 840,0 | 1453,0 | 16 |
| 13107 | 50 G 1,5 | 31,2 - 38,0 | 997,0 | 1663,0 | 16 |
| 13108 | 61 G 1,5 | 32,7 - 39,9 | 1120,0 | 1852,0 | 16 |
| 13978 | 65 G 1,5 | 33,4 - 40,7 | 1197,0 | 1971,0 | 16 |
| 13985 | 2 x 2,5 | 10,7 - 13,3 | 110,0 | 190,0 | 14 |
| 13109 | 3 G 2,5 | 11,3 - 14,0 | 148,0 | 243,0 | 14 |
| 13110 | 4 G 2,5 | 12,6 - 15,5 | 169,0 | 280,0 | 14 |
| 13111 | 5 G 2,5 | 13,9 - 17,2 | 220,0 | 342,0 | 14 |
| 13112 | 7 G 2,5 | 16,5 - 20,3 | 284,0 | 439,0 | 14 |
| 13979 | 8 G 2,5 | 17,7 - 21,8 | 314,0 | 489,0 | 14 |
| 13113 | 12 G 2,5 | 19,9 - 24,4 | 470,0 | 760,0 | 14 |
| 13980 | 14 G 2,5 | 20,9 - 25,6 | 504,0 | 890,0 | 14 |
| 13114 | 18 G 2,5 | 23,3 - 28,5 | 572,0 | 1052,0 | 14 |
| 13115 | 25 G 2,5 | 27,4 - 33,5 | 740,0 | 1375,0 | 14 |
| 13981 | 27 G 2,5 | 28,2 - 34,5 | 971,0 | 1507,0 | 14 |
| 13116 | 34 G 2,5 | 31,5 - 38,5 | 1179,0 | 1892,0 | 14 |
| 13982 | 36 G 2,5 | 31,5 - 38,5 | 1268,0 | 1998,0 | 14 |
| 13983 | 41 G 2,5 | 33,5 - 40,8 | 1473,0 | 2286,0 | 14 |
| 13117 | 50 G 2,5 | 36,5 - 44,4 | 1660,0 | 2673,0 | 14 |
| 13118 | 61 G 2,5 | 38,8 - 47,2 | 1992,0 | 3085,0 | 14 |

Dimensions and specifications may be changed without prior notice. (RA01)



Suitable accessories can be found in Chapter X.

- Cable Gland - HELUTOP® HT-MS-EP4