



H05VV5-F(NYSLYÖ-JZ)

Application and Description

These cables are suitable for dry, damp and wet locations but not in the open-air. They are used as screened termination and connection cable in the control, measuring and signal technology. The copper braiding optimises protection against external interferences, like electromagnetic fields and stray frequencies. Suitable as a signal and impulse cable for control and inspection of industrial plants, machinery and working processes.

Standard and Approval

<HAR> HD 21.13 S1, VDE-0281 Part-13, EN60332-1

Cable Construction

- Fine bare copper strands
- Strands to VDE-0295 Class-5, IEC 60228 Class-5
- PVC insulation T12 to DIN VDE 0281 part 1
- Green-yellow grounding (3 conductors and above)
- Cores to VDE-0293 colors
- PVC sheath TM5 to DIN VDE 0281 part 1

Technical Characteristics

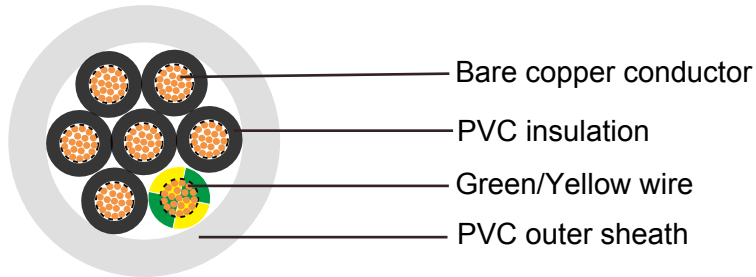
- Working voltage: 300/500v
- Test voltage: 2000volts
- Flexing bending radius: $7.5 \times \varnothing$
- Static bending radius: $4 \times \varnothing$
- Flexing temperature: -5°C to $+70^{\circ}\text{C}$
- Static temperature: -40°C to $+70^{\circ}\text{C}$
- Short circuit Temperature: $+150^{\circ}\text{C}$
- Flame retardant: IEC 60332.1
- Insulation resistance: $20\text{ M}\Omega \times \text{km}$



H05VV5-F



German Standard (VDE)



H05VV5-F

Cable Parameter

| AWG | No. of Cores x Nominal Cross Sectional Area # x mm ² | Nominal Thickness of Insulation mm | Nominal Thickness of Sheath mm | Nominal Overall Diameter mm | Nominal Copper Weight kg/km | Nominal Weight kg/km |
|-----------|--|--|---|--------------------------------------|--------------------------------------|----------------------------|
| 20(16/32) | 2x0.50 | 0.6 | 0.7 | 5.6 | 9.7 | 46 |
| 18(24/32) | 2x0.75 | 0.6 | 0.8 | 6.2 | 14.4 | 52 |
| 17(32/32) | 2x1 | 0.6 | 0.8 | 6.6 | 19.2 | 66 |
| 16(30/30) | 2x1.5 | 0.7 | 0.8 | 7.6 | 29 | 77 |
| 14(30/50) | 2x2.5 | 0.8 | 0.9 | 9.2 | 48 | 110 |
| 20(16/32) | 3x0.50 | 0.6 | 0.7 | 5.9 | 14.4 | 54 |
| 18(24/32) | 3x0.75 | 0.6 | 0.8 | 6.6 | 21.6 | 68 |
| 17(32/32) | 3x1 | 0.6 | 0.8 | 7 | 29 | 78 |
| 16(30/30) | 3x1.5 | 0.7 | 0.9 | 8.2 | 43 | 97 |
| 14(30/50) | 3x2.5 | 0.8 | 1 | 10 | 72 | 154 |
| 20(16/32) | 4x0.50 | 0.6 | 0.8 | 6.6 | 19 | 65 |
| 18(24/32) | 4x0.75 | 0.6 | 0.8 | 7.2 | 28.8 | 82 |
| 17(32/32) | 4x1 | 0.6 | 0.8 | 7.8 | 38.4 | 104 |
| 16(30/30) | 4x1.5 | 0.7 | 0.9 | 9.3 | 58 | 128 |
| 14(30/50) | 4x2.5 | 0.8 | 1.1 | 10.9 | 96 | 212 |
| 20(16/32) | 5x0.50 | 0.6 | 0.8 | 7.3 | 24 | 80 |
| 18(24/32) | 5x0.75 | 0.6 | 0.9 | 8 | 36 | 107 |
| 17(32/32) | 5x1 | 0.6 | 0.9 | 8.6 | 48 | 123 |
| 16(30/30) | 5x1.5 | 0.7 | 1 | 10.3 | 72 | 149 |
| 14(30/50) | 5x2.5 | 0.8 | 1.1 | 12.1 | 120 | 242 |
| 20(16/32) | 6x0.50 | 0.6 | 0.9 | 8.1 | 28.8 | 104 |
| 18(24/32) | 6x0.75 | 0.6 | 0.9 | 8.7 | 43.2 | 132 |
| 17(32/32) | 6x1 | 0.6 | 1 | 9.5 | 58 | 152 |
| 16(30/30) | 6x1.5 | 0.7 | 1.1 | 11.2 | 86 | 196 |



Addison Industrial Cables

German Standard (VDE)

| AWG | No. of Cores x Nominal Cross Sectional Area # x mm ² | Nominal Thickness of Insulation mm | Nominal Thickness of Sheath mm | Nominal Overall Diameter mm | Nominal Copper Weight kg/km | Nominal Weight kg/km |
|-----------|--|--|---|--------------------------------------|--------------------------------------|----------------------------|
| 14(30/50) | 6x2.5 | 0.8 | 1.2 | 13.2 | 144 | 292 |
| 20(16/32) | 7x0.50 | 0.6 | 0.9 | 8.1 | 33.6 | 119 |
| 18(24/32) | 7x0.75 | 0.6 | 1 | 8.9 | 50.5 | 145 |
| 17(32/32) | 7x1 | 0.6 | 1 | 9.5 | 67 | 183 |
| 16(30/30) | 7x1.5 | 0.7 | 1.2 | 11.4 | 101 | 216 |
| 14(30/50) | 7x2.5 | 1.3 | 0.8 | 13.4 | 168 | 350 |
| 20(16/32) | 12x0.50 | 0.6 | 1.1 | 10.9 | 58 | 186 |
| 18(24/32) | 12x0.75 | 0.6 | 1.1 | 11.7 | 86 | 231 |
| 17(32/32) | 12x1 | 0.6 | 1.2 | 12.8 | 115 | 269 |
| 16(30/30) | 12x1.5 | 0.7 | 1.3 | 15 | 173 | 324 |
| 14(30/50) | 12x2.5 | 1.5 | 0.8 | 17.9 | 288 | 543 |
| 20(16/32) | 18x0.50 | 0.6 | 1.2 | 12.9 | 86 | 251 |
| 18(24/32) | 18x0.75 | 0.6 | 1.3 | 14.1 | 130 | 313 |
| 17(32/32) | 18x1 | 0.6 | 1.3 | 15.1 | 173 | 400 |
| 16(30/30) | 18x1.5 | 0.7 | 1.5 | 18 | 259 | 485 |
| 14(30/50) | 18x2.5 | 1.8 | 0.8 | 21.6 | 432 | 787 |
| 20(16/32) | 25x0.50 | 0.6 | 1.4 | 15.4 | 120 | 349 |
| 18(24/32) | 25x0.75 | 0.6 | 1.5 | 16.8 | 180 | 461 |
| 17(32/32) | 25x1 | 0.6 | 1.5 | 18 | 240 | 546 |
| 16(30/30) | 25x1.5 | 0.7 | 1.8 | 21.6 | 360 | 671 |
| 14(30/50) | 25x2.5 | 0.8 | 2.1 | 25.8 | 600 | 1175 |
| 20(16/32) | 36x0.50 | 0.6 | 1.5 | 17.7 | 172 | 510 |
| 18(24/32) | 36x0.75 | 0.6 | 1.6 | 19.3 | 259 | 646 |
| 17(32/32) | 36x1 | 0.6 | 1.7 | 20.9 | 346 | 775 |
| 16(30/30) | 36x1.5 | 0.7 | 2 | 25 | 518 | 905 |
| 14(30/50) | 36x2.5 | 0.8 | 2.3 | 29.8 | 864 | 1791 |
| 20(16/32) | 50x0.50 | 0.6 | 1.7 | 21.5 | 240 | 658 |
| 18(24/32) | 50x0.75 | 0.6 | 1.8 | 23.2 | 360 | 896 |
| 17(32/32) | 50x1 | 0.6 | 1.9 | 24.5 | 480 | 1052 |
| 16(30/30) | 50x1.5 | 0.7 | 2 | 28.9 | 720 | 1381 |
| 14(30/50) | 50x2.5 | 0.8 | 2.3 | 35 | 600 | 1175 |
| 20(16/32) | 61x0.50 | 0.6 | 1.8 | 23.1 | 293 | 780 |
| 18(24/32) | 61x0.75 | 0.6 | 2 | 25.8 | 439 | 1030 |
| 17(32/32) | 61x1 | 0.6 | 2.1 | 26 | 586 | 1265 |
| 16(30/30) | 61x1.5 | 0.7 | 2.4 | 30.8 | 878 | 1640 |
| 14(30/50) | 61x2.5 | 0.8 | 2.4 | 37.1 | 1464 | 2724 |