German Standard (VDE)

H05V-U / H07V-U

Application and Description

H05 V-U/(H)05 V-U

These insulated wires are determined for the installation to the inside of apparatus as well as for the protective laying to the lightings, in dry rooms, in production facilities, switch and distributor boards, in tubes, under and surface mounting of plasters.

H07 V-U/(H)07 V-U

These insulated wires are suitable for laying tubes, under and surface mounting of plasters and also in closed installation conduits. These are not allowed to install for direct laying in cable trays, channels or tanks. These types are permitted for the inner wiring of equipment, distributor and switchboards and also for protective laying to the lightings with a nominal voltage up to 1000 V alternating current or up to 750 V direct current against ground.

Standard and Approval

HD 21.3 S3, VDE-0281 Part-3, CE Low Voltage Directive 73/23/EEC and 93/68/EEC, ROHS compliant

Cable Construction

- Solid bare copper single wire
- Solid to DIN VDE 0295 cl-1 and IEC 60228 cl-1
- Special PVC TI1 core insulation
- Cores to VDE-0293 colors on chart
- H05V-U (20, 18 & 17 AWG)
- H07V-U (16 AWG and Larger)

Technical Characteristics

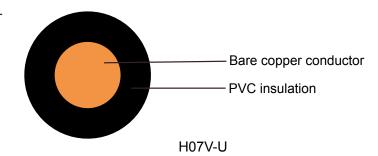
- Working voltage: 300/500v (H05V-U)
- Working voltage: 450/750v (H07V-U)
- Test voltage: 2000V(H05V-U)/2500V (H07V-U)
- Flexing bending radius: 15 x Ø
- Static bending radius: 15 x Ø

46

- Flexing temperature: -5° C to +70° C



H07V-U







- Static temperature: -30° C to +90° C
- Short circuit temperature: +160° C
- Flame retardant: IEC 60332.1
- Insulation resistance: 10 MΩ x km

Cable Parameter

AWG	No. of Cores x Nominal Cross Sectional Area # x mm ²	Nominal Thickness of Insulation <i>mm</i>	Nominal Overall Diameter <i>mm</i>	Nominal Copper Weight <i>kg/km</i>	Nominal Weight <i>kg/km</i>
20	1 x 0.5	0.6	2.1	4.8	9
18	1 x 0.75	0.6	2.2	7.2	11
17	1 x 1	0.6	2.4	9.6	14
16	1 x 1.5	0.7	2.9	14.4	21
14	1 x 2.5	0.8	3.5	24.0	33
12	1 x 4	0.8	3.9	38.0	49
10	1 x 6	0.8	4.5	58.0	69
8	1 x 10	1.0	5.7	96.0	115