



### (H)03 Z1Z1-F/(H)05 Z1Z1-F

#### Application and Description

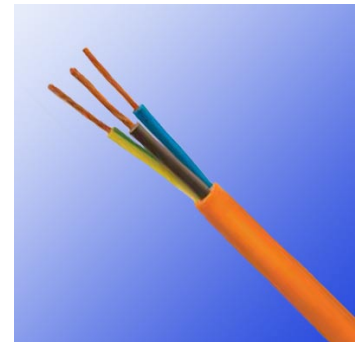
These cables may be used when halogen-free, low smoke and corrosive gas properties are required in case of fire. For moderate demands in the house, kitchen and office, for house equipment in damp rooms (for example: washing machines, dryers and refrigerators). Suitable for cooking and heating equipment, providing that the cable is not in contact with hot components or heat radiation. Not suitable for use in high temperature areas (like in lighting equipment), outside buildings, in industrial or agricultural buildings, connection of electrical power tools.

#### Standard and Approval

HD21.14 S1, VDE-0281 Part-14, VDE 0482-332-1-2, EN60332-1, EN50267, EN50363, CE low voltage directive 73/23/EEC & 93/68/EEC, ROHS compliant

#### Cable Construction

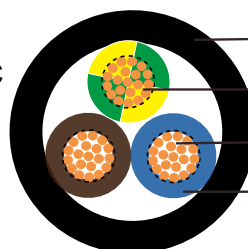
- Fine bare copper strands
- Strands to DIN VDE 0295 cl. 5, BS 6360 cl. 5, IEC 60228 cl. 5, HD 383
- Thermoplastic Tl6 core insulation
- Color code VDE-0293-308
- Green-yellow grounding (3 conductors and above)
- Halogen-free thermoplastic TM7 outer jacket
- Black (RAL 9005) or White (RAL 9003)



H05Z1Z1-F

#### Technical Characteristics

- Working voltage: 300/300 volts(H03Z1Z1-F), 300/500 volts(H05Z1Z1-F)
- Test voltage: 2000 volts(H03Z1Z1-F), 2500 volts(H05Z1Z1-F)
- Flexing bending radius:  $7.5 \times \varnothing$
- Fixed bending radius:  $4.0 \times \varnothing$
- Flexing Temperature:  $-5^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$
- Fixed Temperature:  $-40^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$
- Short circuit temperature:  $+160^{\circ}\text{C}$
- Insulation resistance:  $20\text{ M}\Omega \times \text{km}$



- Halogen-free thermoplastic outer jacket
- Green/Yellow wire
- Bare copper conductor
- Thermoplastic insulation

H05Z1Z1-F



## German Standard (VDE)

- Smoke density acc. to EN 50268 / IEC 61034
- Corrosiveness of combustion gases acc. to EN 50267-2-2, IEC 60754-2
- Flame test: flame-retardant acc. to EN 50265-2-1, IEC 60332.1

### Cable Parameter

| AWG          | No. of Cores x<br>Nominal Cross<br>Sectional Area<br># x mm <sup>2</sup> | Nominal<br>Thickness<br>of Insulation<br>mm | Nominal<br>Thickness<br>of Sheath<br>mm | Nominal<br>Overall<br>Diameter<br>mm | Nominal<br>Copper<br>Weight<br>kg/km | Nominal<br>Weight<br>kg/km |
|--------------|--|---|---|--------------------------------------|--------------------------------------|----------------------------|
| (H)03 Z1Z1-F |  |   |   |                                      |                                      |                            |
| 20(16/32)    | 2 x 0.5  | 0.5   | 0.6                                     | 5.0                                  | 9.6                                  | 39                         |
| 20(16/32)    | 3 x 0.5  | 0.5   | 0.6                                     | 5.3                                  | 14.4                                 | 46                         |
| 20(16/32)    | 4 x 0.5  | 0.5   | 0.6                                     | 5.8                                  | 19.2                                 | 56                         |
| 18(24/32)    | 2 x 0.75   | 0.5   | 0.6                                     | 5.4                                  | 14.4                                 | 47                         |
| 18(24/32)    | 3 x 0.75   | 0.5   | 0.6                                     | 5.7                                  | 21.6                                 | 55                         |
| 18(24/32)    | 4 x 0.75   | 0.5   | 0.6                                     | 6.3                                  | 29.0                                 | 69                         |
| (H)05 Z1Z1-F |  |   |   |                                      |                                      |                            |
| 18(24/32)    | 2 x 0.75   | 0.6   | 0.8                                     | 6.2                                  | 14.4                                 | 58                         |
| 18(24/32)    | 3 x 0.75   | 0.7   | 0.8                                     | 6.6                                  | 21.6                                 | 68                         |
| 18(24/32)    | 4 x 0.75   | 0.8   | 0.8                                     | 7.1                                  | 29                                   | 81                         |
| 18(24/32)    | 5 x 0.75   | 0.8   | 0.9                                     | 8                                    | 36                                   | 102                        |
| 17(32/32)    | 2 x 1  | 0.6   | 0.8                                     | 6.6                                  | 19                                   | 67                         |
| 17(32/32)    | 3 x 1  | 0.8   | 0.8                                     | 6.9                                  | 29                                   | 81                         |
| 17(32/32)    | 4 x 1  | 0.8   | 0.9                                     | 7.7                                  | 38                                   | 101                        |
| 17(32/32)    | 5 x 1  | 0.8   | 0.9                                     | 8.4                                  | 48                                   | 107                        |
| 16(30/30)    | 2 x 1.5  | 0.7   | 0.8                                     | 7.4                                  | 29                                   | 87                         |
| 16(30/30)    | 3 x 1.5  | 0.8   | 0.9                                     | 8.1                                  | 43                                   | 109                        |
| 16(30/30)    | 4 x 1.5  | 0.8   | 1.0                                     | 9                                    | 58                                   | 117                        |
| 16(30/30)    | 5 x 1.5  | 0.8   | 1.1                                     | 10                                   | 72                                   | 169                        |
| 14(50/30)    | 2 x 2.5  | 0.8   | 1.0                                     | 9.3                                  | 48                                   | 138                        |
| 14(50/30)    | 3 x 2.5  | 1.0   | 1.1                                     | 10.1                                 | 72                                   | 172                        |
| 14(50/30)    | 4 x 2.5  | 1.0   | 1.1                                     | 11                                   | 96                                   | 210                        |
| 14(50/30)    | 5 x 2.5  | 1.0   | 1.2                                     | 12.3                                 | 120                                  | 260                        |
| 12(56/28)    | 2 x 4  | 0.8   | 1.1                                     | 10.6                                 | 76.8                                 | 190                        |
| 12(56/28)    | 3 x 4  | 1.0   | 1.2                                     | 11.5                                 | 115.2                                | 242                        |
| 12(56/28)    | 4 x 4  | 1.0   | 1.4                                     | 12.5                                 | 153.6                                | 298                        |
| 12(56/28)    | 5 x 4  | 1.0   | 1.4                                     | 14.1                                 | 192                                  | 371                        |